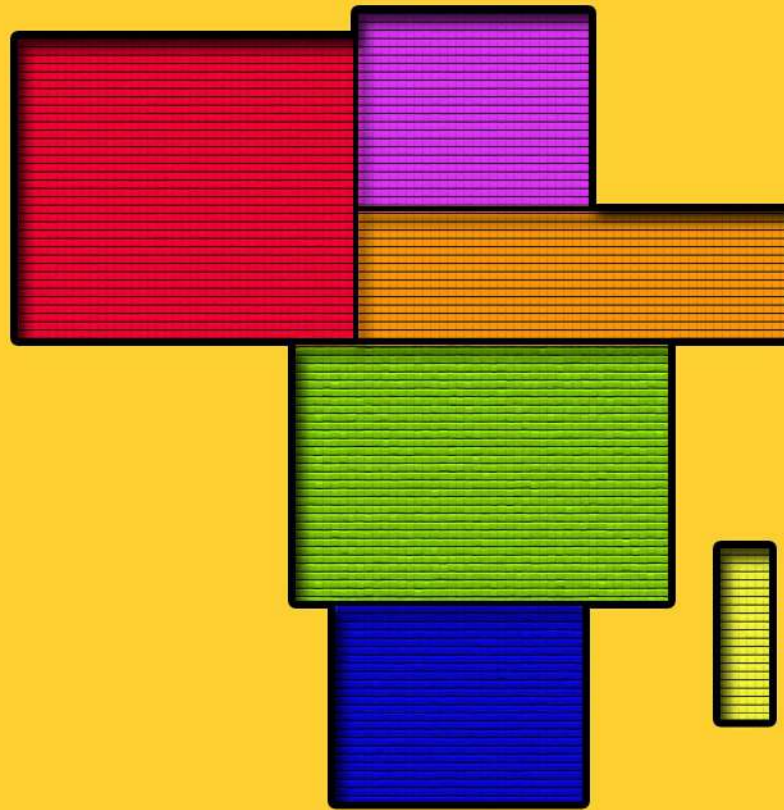


2/2021



JOURNAL OF
AFRICAN
LANGUAGES
AND LITERATURES



2/2021

JOURNAL OF AFRICAN LANGUAGES AND LITERATURES

*Department of Asian, African, and
Mediterranean Studies
University of Naples "L'Orientale"*
jalalit@unior.it

EDITOR-IN-CHIEF
Gian Claudio Batic

MANAGING EDITOR
Valentina Schiattarella

EDITORIAL BOARD
Roberto Gaudio
Emiliano Minerba
Aurore Montébran
Rosanna Tramutoli

SCIENTIFIC BOARD

Flavia Aiello (University of Naples "L'Orientale")
Giorgio Banti (University of Naples "L'Orientale")
Karin Barber (University of Birmingham)
Abdourahmane Diallo (Goethe University Frankfurt)
Zygmunt Frajzyngier (University of Colorado Boulder)
Kulikoyela Kahigi (University of Dar es Salaam)
Hafizu Miko Yakasai (Bayero University Kano)
Maarten Mous (University of Leiden)
George Mulumbwa (University of Lubumbashi)
Aldin Mutembei (University of Dar es Salaam)
Tatiana Nikitina (CNRS-LLACAN)
Farouk Topan (The Aga Khan University)
Mauro Tosco (University of Turin)
Georg Ziegelmeyer (University of Vienna)

ISSN 2723-9764

Table of Contents

Research articles

AMAZIGH BADER / LUCIE QUELLEC / LAURENCE VOELTZEL 1-29
Epenthetic glides in Taqbaylit

AMINA METTOUCHI 30-79
Negation in Kabyle (Berber)

CLEMENS J. MAYER 80-113
**Discourse organization in Gorwaa narratives:
An exploratory overview**

MARY EDWARD / GEORGE AKANLIG-PARE 114-137
**Sign language research in Ghana: An overview of indigenous
and foreign-based sign languages**

Review articles

UCHENNA OYALI 138-145
Emenyonu and the language of Igbo literature: A review



Epenthetic glides in Taqbaylit

AMAZIGH BEDAR¹ / LUCIE QUELLEC² / LAURENCE VOELTZEL³

CNRS / Université de Nantes

¹ amazigh.bedar@yahoo.fr

² lucie.quellec@etu.univ-nantes.fr

³ laurence.voeltzel@gmail.com

ABSTRACT

This paper aims to offer an extra-phonological analysis for a purely phonetic-phonological phenomenon: epenthetic glides in Taqbaylit. In this language, both epenthetic glides [j] and [w] may appear in specific contexts and are usually considered a hiatus-repairing strategy. We will discuss the different contexts where all types of glides appear and focus on the glides that are not lexically motivated. More precisely, we will discuss the epenthetic glides that surface at the junction between a noun/verb and their clitics. We aim at explaining and formalizing the distribution of epenthetic glides, whose motivation goes beyond phonology.

KEY WORDS: Taqbaylit, epenthesis, glide, boundary, morpheme





AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

1. Introduction

In this paper, we address an analysis of epenthetic glides in Taqbaylit Berber of Chemini.¹ In this language, the epenthetic glides [w] and [j] repair hiatus found either between a noun or a verb and their clitics. The challenge is to account for and predict the quality of the glide. While several studies have described or justified the need for epenthetic glides (GUERSEL 1986; LAHROUCHI 2013, *inter alia*) – in order to break hiatus –, the distribution between [j] and [w] remains unexplained.

After a detailed overview of the status of glides in some Berber languages, we will focus on their distributions in Taqbaylit Berber. We will provide rules that justify the color of the glide that appears in epenthetic contexts. We will show that the quality of glides is predictable, based on the morphosyntactic constitution of words and sentences. Our analysis is related to the boundaries between major units (verbal or nominal phrases) and their dependents/clitics. We will rely on the fact that not all verbal/nominal modifiers are equal in their proximity with their head.

The article is organized as follows: in section 2, we discuss three previous studies on Berber languages that will shed some light on the general status of glides in Taqbaylit. Epenthetic glides are distinguished from lexical glides that are also present in the language. Accordingly, we will discuss and illustrate the respective characteristics of both types of glides. Section 3 gives more general information on the Taqbaylit morphology, especially regarding nominal and verbal affixation and clitization. As previously mentioned, the internal construction of nouns and verbs will be highly relevant to our analysis as it constitutes the environment where epenthetic glides are observed. In section 4, we illustrate our proposal for the distribution of epenthetic [j, w]. Finally, section 5 concludes this paper.

2. Glides in Taqbaylit

Taqbaylit has two glides: [j] and [w]. Their origin may vary; we thus distinguish between (i) *lexical glides* that appear in roots, as in (1a),² or (ii) *epenthetic glides*

¹ Taqbaylit, so-called ‘Kabyle’, is a Berber language and belongs to the Afroasiatic phylum.

² We should also mention glides that derive from (lenified) palatal fricatives during the formation of nouns derived from verbs: *ɣrəz* ‘plough.AOR’ > *θajərza* ‘ploughing’; *ɣməs* ‘knot.AOR’ > *θawəmmust* ‘knot.SG’. It is also worth noting that Timezrit Taqbaylit has fricatives where Chemini Taqbaylit has (lexical) glides. For instance ‘rabbit’ [awθul] and ‘ant’ [θawəttufθ] are realized [ajθul]/[aɣθul], [θajəttufθ] respectively in Timezrit.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

that surface under some conditions only, as in (1b).³

- | | | | | | |
|-----|----|--------------------|---------------------|------------------------------|------------------------------------|
| (1) | a. | [j] | | [w] | |
| | | ayjul ⁴ | 'donkey' | awθul | 'rabbit' |
| | | aβəljun | 'canister' | alwəs | 'brother in law' |
| | | ʔlaj | 'be tall' | ðawi | 'cure' |
| | b. | [j] | | [w] | |
| | | θaziba = jihin | 'that necklace' | ur i-zri wara | 'he did not see' |
| | | asaru = jaki | 'this hook' | ur i-ʃəppu wara ⁵ | 'he does not remember' |
| | | j-əppi = jas | 'he brought to him' | u = s = θ = id jə-ppi wara | 'he did not bring it there to him' |

The rest of this section will precisely discuss the distinction between the two types of glides and their respective characteristics. First, we will present the lexical glides and illustrate their behavior in their alternation with high vowels. In doing so, we will establish a contrast with epenthetic glides, which cannot be linked to lexical vowels. We will then turn to two specific contexts where glides intervene and discuss their status and origin: construct state and plural formation.

2.1 Lexical (alternating) glides versus epenthetic glides

One of the first noticeable characteristics of Berber lexical glides is that they alternate with high vowels in a vast majority of words, depending on their immediate surroundings. The modification in the environment quality is induced by syntactic and morphological changes. Berber languages are templatic: grammatical information may be marked by affixation and/or by the insertion of vowels between root consonants. Regarding the vowel/glide distribution, high vowels are found adjacent to a consonant, and glides are found in the vicinity of vowels, as shown in (2) (from GUERSSEL 1986: 2). The initial segment (i, u/j, w) either indicates the third person singular or serves the construct state (more extensively described in 2.2).

³ There is another epenthetic consonant, [ð], which appears in certain specific syntactic contexts. We leave the analysis of this epenthetic element for further study as it would bring us out of the scope of the present article.

⁴ In this paper, we have opted for transcriptions using the International Phonetic Alphabet (IPA) for our data of Taqbaylit Berber. However, we did not adapt the data taken from GUERSSEL (1986) and LAHROUCHI (2013), which may cause some variation across the transcriptions.

⁵ [p] is the result of the gemination of [w] or [f] in Taqbaylit of Chemini.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

(2)	i-ru	'he cried'	is i-ru	'did he cry'
			aha j-ru	'then he cried'
	u-mazan	'messenger'	x u-mazan	'on the messenger'
			arra w-mazan	'messenger's kids'
	j-ari	'he writes'		
	w-ansa	'place'		

GUERSEL (1986), who focuses on representing high vowels in Tamazight Berber, proposes to account for this peculiar behavior with specific phonological representations. While it has been proposed that both types of segments rely on two different sets of phonological objects (PENCHOEN 1973; MAMMERI 1976), the complementary distribution between glides and high vowels seems to rather indicate that they are the same phonological objects and receive different surface realization according to the environment they surface in (APPLEGATE 1971). In other words, [i, u] are the vocalic equivalents of [j, w], respectively [i, j]/[u, w], and are made of the same 'ingredients'.

While this second hypothesis seems satisfying to account for most Berber data, it fails to explain why some vowels remain as is even though they appear in a vocalic surrounding. This is illustrated in (3) below (GUERSEL 1986: 3).⁶

(3)	arba	'boy'	arba-u	'this boy'	[arbaju] *[arbaw]
	afa	'fire'	afa-u	'this fire'	[afaju] *[afaw]
	tenna	'she says'	tenna = i	'she told me'	[tennaji] *[tennaj]
	tebgha	'she wants'	tebgha = i	'she wants me'	[tebghaji] *[tebghaj]

In (3), the demonstrative suffix *-u* and the 1SG object clitic *=i* remain vowels even though they follow another vowel. The newly created vocalic sequence triggers the insertion of a glide [j]. This is classically presented as a hiatus-repairing strategy and will be further discussed later in this section. From the previous data, we can infer that Berber has three types of segments: vowels that can alternate with glides as in (2), vowels that never alternate with glides, as in (3), and glides that never alternate with vowels, but serve the purpose of breaking vocalic sequences, also illustrated in (3).

With his hypothesis, GUERSEL (1986) accounts for the three types of segments:

⁶ Throughout this article, we use "-" to indicate affix boundaries and "=" to indicate clitics boundaries. Clitics pronouns will be further developed in section 3. The abbreviations used for the glosses are: 1, 2, 3 = person, ACC = accusative, AOR = aorist, COMP = complementizer, COP = copula, CS = construct state, DAT = dative, DEM = demonstrative, DET = determiner, DIR = directional, F = feminine, FS = free state, GEN = genitive, INT = intensive, IPFV = imperfective, M = masculine, NEG = negation, PFV = perfective, PL = plural, POSS = possessive, SG = singular, t = trace.

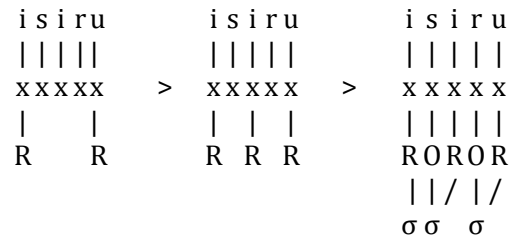


AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

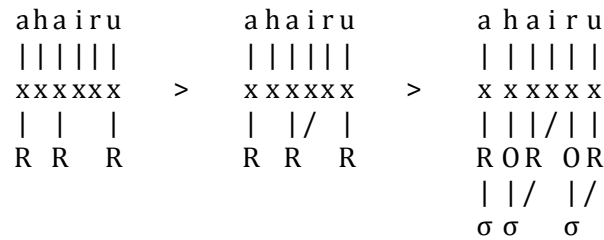
Epenthetic glides in Taqbaylit

he proposes to distinguish between alternating vowels/glides and ‘true’ vowels based on a phonological discrepancy. While they all bear resemblance in their content (the same phonological primes can characterize them), they differ in their association to the syllabic tier. While true vowels are lexically connected to a rime head through the skeletal tier, alternating vowels are only connected to the skeletal tier. This gives the representations in (4):

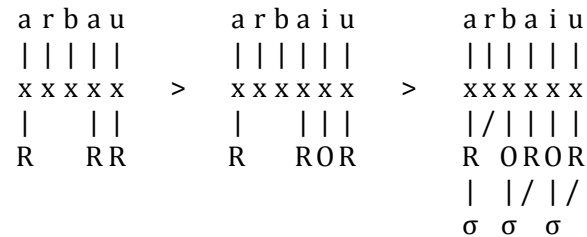
(4) a. **is i-ru** ‘did he cry’ [isiru]



b. **aha i-ru** ‘then he cried’ [ahajru]



c. **arba-u** ‘this boy’ [arbaju]



In (4a), in **i-ru**, the second vowel – which does not alternate with a glide – is attached to the skeletal tier and a syllabic position (a rime). It corresponds to the representation of ‘true’ vowels. However, the first segment in **i-ru** may alternate ([i, j]) depending on its environment. In this specific case, it is adjacent to two consonants; one is from the prefix, and one belongs to the root. Accordingly, nothing prevents it from connecting to a rime position and surface as a vowel. However, in (4b), the same root is preceded by a prefix ending in a vowel **aha i-ru**. Two options are theoretically possible: (i) the high segment connects to its own rime position and surfaces as a vowel, which yields an illicit configuration



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

for Berber (i.e., a hiatus *[a.i]) or (ii) it connects to the preexisting rime position already occupied by /a/. Accordingly, it surfaces as a glide, yielding the sequence [aj], and the constraint of vocalic sequences is satisfied.

In (4c), the fact that the high segment in **arba-u** surfaces as a vowel, even though a vowel precedes it, indicates that it must receive the same representation as a ‘true’ vowel. It is thus lexically attached to its own rime position. To satisfy the constraint on vocalic sequences, which would otherwise be violated, an onset must be inserted between /a/ and /u/. GUERSEL (1986) gives this segment a different representation than the surface glide in **aha i-ru**: it comes lexically attached to an onset position, meaning that it can never alternate with a vowel.

Tashlhiyt Berber – another Berber language – exhibits challenging data with respect to GUERSEL’s (1986) analysis. In (5), we present two types of derivations on the verbs **gru** ‘pick up’ and **bri** ‘crush’ (from LAHROUCHI 2013): in (5a), a noun is derived from the verb. More specifically, /a/ vowels are inserted between the root consonants, creating a noun with the same semantics as the equivalent verb. In (5b), a clitic is added to the verb. Here the clitic is the 3SG person dative.

- | | | | | | |
|-----|----|-----------------|------------|---------------|-----------------------|
| (5) | a. | gru | ‘pick up!’ | agraw | ‘assembly’ |
| | | bri | ‘crush!’ | abraj | ‘crushing’ |
| | b. | gru = as | | grujas | *grwas |
| | | pick.up=3SG.DAT | | | ‘pick it up for him!’ |
| | | bri = as | | brijas | *brjas |
| | | crush=3SG.DAT | | | ‘crush it for him!’ |

On the one hand, during nominalization, the final vowel of the verb alternates with a glide to avoid hiatus. On the other hand, the same verb-final vowel remains vocalic after cliticization, and an external/epenthetic glide has to be inserted to make the surface form licit. Representing these vowels that may or may not alternate with glides is particularly challenging in GUERSEL’s (1986) representations.

LAHROUCHI (2013), who focuses on Tashlhiyt Berber, proposed an analysis of the data in (5) based on morphosyntactic phases (PIGGOTT and NEWELL 2006; NEWELL 2008). In other words, the behaviors observed on the same root are not due to the phonological representation of vowels but result from morphosyntactic frontiers or phases. Phases (CHOMSKY 1999, 2005) and phase derivation imply that nouns, adjectives, and verbs – which constitute phrases – form a structure connecting a root to an element providing it with a syntactic function. Each element inserted in the course of nominal/adjectival/verbal derivation is enclosed within the same phase as the root. Once the derivation is licit and satisfies the phonotactics rules of a given language, a new phase may begin. For



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

instance, PIGGOTT and NEWELL (2006: 8) show that the formation of the English noun **twinkling** [twɪŋklɪŋ], derived from the verb **twinkle**, implies a different phase configuration than the noun **twinkling** [twɪŋkliŋ]. The noun **twinkling** [twɪŋklɪŋ] would correspond to the representation [[twɪŋklØ_{NP}ɪŋ_{VP}]] where the verbal phrase (*vP*) contains the lexeme /twɪŋkl/, which is the root, and a verbalizer, (*v*), phonetically unexpressed. The verbal syntagm is included in a nominal syntagm (*nP*). In other words, it is a noun derived from a verb. In the second phase, the verb acquires a nominator (*n*), which receives a phonetic expression: /ɪŋ/. LOWENSTAMM (2007) described *n* as the functional head comprising the essence of nominality and which provides the constituent *nP* with the characteristics allowing it to function as a name. On the other hand, the noun **twinkling** [twɪŋkliŋ], which is not derived from the verb but is a noun directly derived from the lexeme /twɪŋkl/, would receive the following representation: [twɪŋkliŋ_{NP}]. This underlying difference between both nouns is directly observable through the presence versus the absence of schwa: [ə] is inserted between /k/ and /l/ inside the *vP* because English would not allow such a cluster in final position. The phase would not be licit as such, and the derivation could not pursue.

This is the direction that LAHROUCHI (2013) takes to account for the Tashlhiyt data in (5). In (5.a), he considers that the vowel /a/ is the spell out of the nominalizer and is, therefore, included in the same phase as the root. In (5.b), however, the clitic intervenes outside the *vP* – which contains the root and the verbalizer. In **grujas** and **brijas** the vowel from the clitic and the vowel from the root are separated by a phase boundary. His vowels analysis is as follows: high vowels are subject to alternation with glides if they are in a vocalic environment within a phase. If a high vowel comes in contact with another vowel through a different phase, an epenthetic glide is inserted. This is motivated by *phase impenetrability* (CHOMSKY 1999), which states that once a phase is ‘closed’, the elements inside of it cannot be modified and are – to a certain extent – not subjected to the influence of the following phases.

While this analysis motivates the insertion of the glide [j] in Tashlhiyt Berber, we propose to extend it to Taqbaylit Berber where [w] can also be inserted. The main aspect that we want to discuss in this paper (especially in section 4) is the conditions of alternation between [j] and [w] in Taqbaylit.

The analysis of this present article focuses on true epenthetic glides. It excludes glides resulting from a lexical (alternating) vowel⁷ and, also, glides that may

⁷ Taqbaylit lexical glides display a similar behavior as the other previously mentioned Berber languages. For instance, when forming the intensive aorist theme of causative verbs, one inserts



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

never surface as a vowel, which are also considered lexical. Accordingly, we will not look at data like those in (2), but will focus on data similar to (3) and (5.b).

In the next section, we will present two contexts where glides appear to further elaborate on the distinction between lexical and epenthetic glides.

2.2 The construct state

In Taqbaylit Berber, nouns have two possible forms: free state (FS) and construct state (CS). The former corresponds to the default form of nouns when used in isolation or a non-specific syntactic structure. The latter is used in specific constructions: when a noun is a possessor in a genitive construction as in (6a', 7a'), or when the subject is post-verbal (as in 6b', 7b'). Note that the verb-subject inversion may yield pragmatic changes.⁸

- | | | | | | | | |
|-----|----|--------------------|-----------------|-----|-----------------------|-----|---------------|
| (6) | a. | <u>ayjul</u> | <u>aməqqran</u> | a'. | <u>θaβarða</u> | n | <u>wəyjul</u> |
| | | FS.donkey | FS.great | | FS.saddle | GEN | CS.donkey |
| | | 'The big donkey' | | | 'The donkey's saddle' | | |
| | b. | <u>ayjul</u> | <u>jə-ttʃa</u> | b'. | <u>jə-ttʃa</u> | | <u>wəyjul</u> |
| | | FS.donkey | 3MS-eat.PFV | | 3MS-eat.PFV | | CS.donkey |
| | | 'The donkey ate' | | | 'The donkey ate' | | |
| (7) | a. | <u>ifkər</u> | <u>aməqqran</u> | a'. | <u>θ-aqəʒʒar-θ</u> | n | <u>jəfkər</u> |
| | | FS.tortoise | FS.great | | FS.leg | GEN | CS.tortoise |
| | | 'The big tortoise' | | | 'The tortoise's leg' | | |
| | b. | <u>ifkər</u> | <u>jə-ttʃa</u> | b'. | <u>jə-ttʃa</u> | | <u>jəfkər</u> |
| | | FS.tortoise | 3MS-eat.PFV | | 3MS-eat.PFV | | CS.tortoise |
| | | 'The tortoise ate' | | | 'The tortoise ate' | | |

FS is not explicitly marked on the noun, as it is its default form. On the other hand, the formation of CS implies the reduction of the initial vowel and the addition of an initial glide. The quality of the glide depends on the noun initial lexical vowel: nouns that begin with [a, u] will have [w] in the construct state, as in ayjul - wəyjul 'donkey'. Nouns that begin with [i], will take [j] in the construct state, as in ifkər - jəfkər 'tortoise'.

In order to understand the mechanisms at play here, we will use the CV framework as initiated in GUERSEL (1992a) and LOWENSTAMM (1996). In this framework, sequences of CV positions – domains – are associated with

an [a] in the penultimate position, and the last vowel of the root becomes a glide: ss-ali 'make rise.IPFV' > ss-alaj 'make rise.INT'; ssə-ddu 'make walk.IPFV' > ssə-ddaw 'make walk.INT'.

⁸ Several syntactic analyses of *Construct State* and *Free State* in Berber languages can be found in GUERSEL (1992b), OUHALLA (1996), EL MOUJAHID (1997), ENNAJI (2001), ACHAB (2003), METTOUCHI and FRAJZYNGIER (2013), METTOUCHI (2014).



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

morphosemantic values like case, determiner, etc. (McCARTHY 1979, 1982, 1983). Moreover, morphological features have a dedicated room to express within a CV template. Following BENDJABALLAH (2005), we will also consider that in Taqbaylit, /i, a, u/ vowels are virtually long, which means that they occupy two V positions, while schwa is phonologically short.⁹

As illustrated in (8), the elements |A|, |I| and |U| (KAYE, LOWENSTAMM, and VERGNAUD 1985; HARRIS 1994; BACKLEY 2011) correspond to [a, i, u], respectively, when they are associated to two adjacent V positions. Whenever a full vowel is associated with a single V, it is realized as a schwa according to the phonotactic rules of Taqbaylit (BENJABALLAH 2005: 54).

(8)	C	V	C	V	C	V	C	V	C	V	C	V	C	V
		\	/		\	/		\	/					
		A			I			U			A			
		[a]			[i]			[u]			[ə]			

In this framework, vowel reduction (e.g. [a] > [ə]) can be interpreted as the loss of a domain: a CV slot. BENDJABALLAH and HAIDEN (2008), following GUERSSEL (1992b), propose that the initial vowel of a noun in free state is linked to two CV units in the template, which are K(ase) and D(eterminer). Hence the representation of the noun 'donkey' in the free state given in (9a), where the material responsible for the articulation of [a] is linked to both domains. In the construct state, the initial vowel is reduced to schwa due to the loss of space. More specifically, the vowel serves the expression of the determiner only, and a glide is inserted in the first C position. The same goes for 'crooked' in (9b), where the initial vowel, [u], is reduced to schwa, and 'houses' in (9c), where the initial vowel [i] reduces to schwa. The only difference in (9c) is the quality of the inserted glide: [j]. Note that in the construct state, the CV initially labeled as K may accommodate *light* prepositions, i.e., prepositions that consist of one segment like *f'on* and *g'in* (BENJABALLAH and HAIDEN 2008, 2013).

⁹ In this context, phonological length is not interpreted as phonetic quantity, but as quality (HAMMOND 1997; BUCCI 2013; LOWENSTAMM 1991).

- We infer from this data that the default glide is /w/, that is [U]. However, if the initial vowel contains [I], it is maintained and overwrites the [U] in the inserted glide, which results in [j].¹⁰

(iii) mixed plural, which consists of both previous strategies simultaneously (**azal** ~ **izilan** ‘daylight’).

10



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

The plural suffix that we previously referred to as “-n suffix” has, in reality, several possible realizations. The table in (10) illustrates them.

(10)	SINGULAR	PLURAL	SUFFIX
	i-θβir	i-θβir-n	-n ‘pigeon’
	a-βəqqa	i-βəqqa-jən	-jən ‘slap’
	aɣərða	iɣərða-jən	-jən ‘mouse’
	alma	alma-θən	-θən ‘meadow’
	izəm	izm-awən	-awən ‘lion’
	aməçsa	iməçsa-wən	-wən ‘shepherd’
	ifər	afr-iwən	-iwən ‘wing’

CHAKER (1983) interprets this surface variation as allomorphy of the plural suffix: all the segments that constitute the suffix are, therefore, specific to the plural form. In this approach, glides that may surface in the plural suffixes are epenthetic.

BEN SI SAID (2014, 2020) proposes an alternate analysis based on the templatic structure of roots in a CV perspective. His main claim is that the plural suffix is regular and unique (-n), and the external plural formation is, in fact, only one strategy. The presence of segments between the root and -n is a consequence of the suffixation of -n. These segments are not part of the suffix *per se*. We present in (11) the examples previously given in (10) with a new segmentation.

(11)	SINGULAR	PLURAL	APPARENT EPENTHESIS	SUFFIX
	i-θβir	i-θβir-n		-n ‘pigeon’
	a-βəqqa	i-βəqqa-j-n	j	-n ‘slap’
	a-ɟawa	i-ɟawa-w-n	w	-n ‘person from Djurdjura’
	alma	alma-θ-n	θ	-n ‘meadow’
	izəm	izm-aw-n	aw	-n ‘lion’
	ifər	afr-iw-n	iw	-n ‘wing’

Contrary to CHAKER (1983: 90), who treats the segments between the root and -n as epenthetic, BEN SI SAID (2014, 2020) claims that they belong to the root and remain silent on the surface in the singular. More specifically, they are floating in the singular form: the singular template does not provide them with enough space to connect to the temporal/syllabic tier. This proposal is congruent with the unpredictability of the so-called epenthetic segments surfacing in the course of plural formation. Nouns belonging to the same template and displaying the same phonological environment in the singular form do not present the same epenthetic segments in the plural form.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

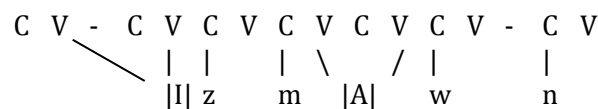
BEN SI SAID's (2014, 2020) analysis is couched within the CV framework (LOWENSTAMM 1996; SCHEER 2004). Given the vocalic behavior inside the roots in plural formation, BEN SI SAID proposes that the template of plural has five CVs in total, regardless of the initial amount of CV domains a word makes use of in the singular. We will illustrate this proposal below in (12-14) and show how it unifies the plural data given earlier in (10-11). More precisely, we will show the derivations successively from singular to plural for nouns with three CVs in the singular (*izəm* ~ *izmaw-n* 'lion'), for nouns with four CVs, such as (*urgəl* ~ *urgal-n* 'early fig') and nouns with five CVs (*a-zuliy* ~ *i-zuliy-n* 'mud').

In (12.a), the singular form template contains three CVs, which does not allow the final consonant *w* to be associated and realized. It thus remains floating. In (12.b), the template is increased to five CVs. The final glide can now be associated with the syllabic tier and thus be realized. Also, note that the vowel schwa from the singular surfaces as /a/ in the plural. This is made possible by the association of |A| to a second V position – the one provided by the plural template. Additionally, the plural suffix *-n*, which comes with its own CV, is also attached to the root.

(12) a. *izəm* (SG)



b. *izmaw-n* (PL)



In (13), the singular template contains four CVs. In the plural template, which is larger and contains more room, the schwa has, once again, the possibility to spread and surface as [a]. No additional consonant surfaces in the root (as opposed to the previous example in (12)). However, the *-n* suffix comes at the end of the root with its own CV.

¹¹ This first CV is devoted to the determiner. The initial radical vowel is associated with the first V position of the root or template and the V position of the determiner (cf. BENDJABALLAH 2011).



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

(13) a. **urgəl** (SG)

C V - C V C V C V C V
| | | |
|U|r g |A|l

b. **urgəl-n** (PL)

C V - C V C V C V C V C V - C V
| | | | \ / |
|U|r g |A| l n

Finally, in (14), the singular template contains five CVs, which also corresponds to the structure of the plural template. No noticeable change occurs in the root, as the organization of the material remains the same. Only the **-n** marker appears at the end of the root.

(14) a. **a-zuliy** (SG)

C V C V - C V C V C V C V C V
\ / | \ / | \ / |
|A| z |U| l |I| ɣ

b. **i-zuliy-n** (PL)

C V C V - C V C V C V C V C V - C V
\ / | \ / | \ / |
|I| z |U| l |I| ɣ n

While this analysis satisfyingly unifies the plural formation in Taqbaylit, it also sheds some light on the more general picture of glides: the [j, w] segments that may appear before the **-n** suffix (**izəm** ~ **izmaw-n** 'lion', **a-βəqqə** ~ **i-βəqqə-j-n** 'slap') are not predictable and not regular, because they are most likely not epenthetic.

The lexical status of glides in the previous examples is further reinforced by the fact that [j, w] can sometimes appear in the feminine singular form, in the absence of the plural feature. In the examples in (15), the feminization of both nouns 'mouse' and 'shepherd' leads to the surfacing of a glide, which is identical to the glide triggered by the presence of the plural marker in (11). Also, note that the need for a hiatus-repairing segment is hard to justify here, as the feminine circumfix corresponds to consonants (**θ-** **-θ**). It implies that the feminine template contains more CV domains and allows the expression of a floating consonant.

(15) **ayərðə** 'mouse.M.SG' **θ-ayərðaj-θ** 'mouse.F.SG'
aməçsa 'sheperd.M.SG' **θ-aməçsaw-θ** 'sheperd.F.SG'



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

In this section, we have discussed the properties of lexical glides versus epenthetic glides, and we have seen several contexts involving glides. As previously mentioned, we will dedicate the rest of this paper to glides that are not lexically motivated. This will bring us to specifically look at clitics, whose boundaries with nouns and verbs often trigger the surfacing of [j, w]. In the next section, we detail the clitic system of Taqbaylit.

3. Overview of verbal and nominal morphemes

Before starting our discussion on boundaries and morphemes, we want to define and distinguish two types of morphemes: affixes and clitics. An affix can be defined as a morpheme attached to a stem to form a new word or new form. It may be derivational or inflectional. On the other hand, the clitic is a morpheme of second position: it depends on another word or host (HALPERN 1998).

We start our overview with verbal morphemes, and then we will focus on nominal morphemes. Finally, we will turn to clitic movement.

3.1 Verbal morphemes

This section will present two types of verbal morphemes in Taqbaylit: (i) inflectional affixes, which are called agreement markers, and (ii) verbal clitics that mark phi-features of direct and indirect object, and directional. There is another type of verbal prefixes that mark changes in diathesis (causative,¹² reciprocal...) that will not be discussed here as they will not be relevant to our analysis.

3.1.1 Inflectional affixes

Agreement markers are attached to the verbal stem. They can be suffixed, prefixed, or circumfixed, as shown in (16).

(16)

	SG	PL
1.	-y	n-
2.M	θ- -ð	θ- -m
2.F	θ- -ð	θ- -mt
3.M	i-/jə-	-n
3.F	θ-	-nt

Note that the 3.M.SG has two forms: [jə] appears before two consonants, while [i]

¹² The causative prefix is (s)s- : xðəm 'work' > ssə-xðəm 'make work'. The prefix of reciprocal is m(j)-: həmməl 'to love' > mjə- hmal 'to love reciprocally'.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

appears before a consonant followed by a vowel. For instance, **jə-xðəm** 'he worked' versus **i-nuða** 'he searched'.

3.1.2 Verbal clitics

Taqbaylit has three sets of morphemes that enclitics a verb: (i) dative clitics (DAT), which mark the indirect object, (ii) accusative clitics (ACC), which mark the direct object, and (iii) directional clitics (DIR), which mark the directionality of the action (towards the speaker with /=d/ or towards the listener with /=n/). The complete paradigm of the first two sets of verbal clitics is given in the following table.

(17)	a. DATIVE CLITICS		b. ACCUSATIVE CLITICS	
	SG	PL	SG	PL
1.	= (i)ji	= aɣ	= (i)ji	= aɣ
2.M	= aɟ	= awən	= (i)k	= (i)k ^w ən
2.F	= am	= aɟ ^w ənt	= (i)kəm	= (i)k ^w ənt
3.M	= as	= asən	= (i)θ	= (i)θən
3.F	= as	= asənt	= (i)t ^s	= (i)θənt

The sentence in (18a) illustrates the DAT clitic of the first singular person, and the sentence in (18b) shows the ACC clitic of the second singular person in the feminine.

- (18) a. **jə- ddəm =iji θaqərɣunt**
 3.M.SG. take.PFV =DAT.1SG FS.bottle
 'He took a bottle from me'
- b. **jə- ddəm =ik wərgaz =ənni**
 3.M.SG. take.PFV =ACC.2SG.F CS.man =DET
 'The man took you'

The three sentences in (19) illustrate the two different directional clitics used in Taqbaylit. The sentence in (19a) does not give the directionality of the action. The sentence in (19b) shows that the action is directed towards the speaker, while in (19c), the action is directed towards the listener.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

- (19) a. **jə- rwəl wərgaz = nni**
3.M.SG flee.PFV CS.man =DET
'The man fled'
- b. **i- rəwl =əd wərgaz = nni**
3.M.SG flee.PFV =DIR CS.man =DET
'The man fled here'
- c. **i- rəwl =ən wərgaz = nni**
3.M.SG take.PFV =DIR CS.man =DET
'The man fled to you'

In the next section we will present the nominal morphemes of Taqbaylit.

3.2 Nominal morphemes

Similar to what we have presented earlier for verbs, we start this section on nouns by giving an overview of the affixes that can be attached to nouns, and then we will show the nominal clitics.

3.2.1 Nominal affixes

Taqbaylit noun has three affixes that mark number, gender, and state (case). Number is marked by the suffix **-n**, as shown in (20) and as explained in section 2.3. The feminine form is marked by the circumfix [**θ- -θ**], as shown in (21). Construct state is marked by the alteration of the initial vowel of the word. When the word begins with [a] or [u], [w] appears, but when the word begins with [i], [j] is selected as illustrated in (22) and as explained in section 2.2.

- (20) SG PL
axxam **ixxam-ən** 'house'
aʃəkkaɾ **iʃəkkaɾ-ən** 'bag'

- (21) M F
amʃiʃ **θ-amʃiʃ-θ** 'cat'
afrux **θ-afrux-θ** 'bird'

- (22) FS CS
aβrid **wə-βrið** 'road'
ul **w-ul** 'heart'
ijənni **j-ijənni** 'sky'

After this brief overview of the nominal affixes, we now turn to nominal clitics.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

3.2.2 Nominal clitics

There are two types of nominal clitics in Taqbaylit: possessive clitics and demonstrative clitics. The complete paradigm of possessive clitics is given in table (23).

(23)	SG	PL
1.	= jnu	= nnəy
2.M	= jnəç	= ntəy
2.F	= jnəṃ	= nç^wənt
3.M	= jnəs	= nsən
3.F	= jnəs	= nsənt

The examples in (24) illustrate the demonstrative clitics = **aki**, = **ihin**, = **ənni** and = **ənnajəð**.

(24)	axxam = aki	'this house'
	axxam = ihin	'this house there'
	axxam = ənni	'the house'
	axxam = ənnajəð	'another house'

Following the analysis of BENJABALLAH and HAIDEN (2013), the last demonstrative = **nnajəð** is formed from the genitive -**n** plus -**ajəð**. We will come back to this demonstrative in the next section.

3.3 Clitic movement

This section is devoted to the movement of verbal and nominal clitics in certain syntactic contexts. We will begin with verbal clitics movement and then turn to nominal clitics movement.

3.3.1 Verbal clitics movement

Verbal clitics undergo movement in certain well-defined contexts (GUERSEL 1983; OUHALLA 1988; OUALI 2011; BENDJABALLAH and HAIDEN 2013, among others). As an example, we will take the DIR clitic (illustrated in (19)). However, note that all verbal clitics behave the same.

In the sentence (25a) the DIR enclitics the verb, but it may be attracted towards the following elements :

- (i) negation particle, as in (25b). Note that negation is expressed with a preverbal and a post-verbal particle as follows: **u(r)** Verb **ara**.
- (ii) aspectual particles **a(ð)**- for aorist (25.c) and **la**- for intensive (25d)



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

(iii) complementizer (25e).

- (25) a. **i-ruḥ** = **d** **ar** **θəβhirθ**
3M.SG-go.PFV =DIR to CS.garden
'He came to the garden'
- b. **ur** = **d** **i-ruḥ** **ara** **ar** **θəβhirθ**
NEG1 =DIR 3M.SG-go.PFV NEG2 to CS.garden
'He did not come to the garden'
- c. **a** = **d** **i-ruḥ** **ar** **θəβhirθ**
AOR =DIR 3M.SG-go.PFV to CS.garden
'He will come to the garden'
- d. **la** = **d** **i-t^s-ruḥu** **ar** **θəβhirθ**
INT =DIR 3M.SG-INT-go to CS.garden
'He comes to the garden (regularly)'
- e. **ar** **θəβhirθ** **i** = **d** **i-ruḥ**
to CS.garden COMP =DIR 3M.SG-go.PFV
'To the garden he came'

We now turn to nominal clitics.

3.3.2 Nominal clitics movement

Unlike verbal clitics that are always bound to stems or attracted to certain particles, nominal clitics have an independent form. They may be free morphemes in the sentence. We repeat in (26-28a) the examples given earlier in section 3.2.2 and, as a comparison, we show in (26-28b) how the demonstrative clitics behave in focus.

- (26) a. **axxam** = **aki**
FS.house =DEM
'This house'
[axxamaki]
- b. **waki** **ð** **axxam**
DEM COP FS.house
'This one is a house'
[wakiðaxxam]
- (27) a. **axxam** = **ihin**
FS.house =DEM
'This house there'
[axxamihin]
- b. **wihin** **ð** **axxam**
DEM COP FS.house
'That one there is a house'
[wihinðaxxam]
- (28) a. **axxam** = **nnajəð**
FS.house =DEM
'Another house'
[axxamnnajəð]
- b. **wajəð** **ð** **axxam**
DEM COP FS.house
'The other is a house'
[wajəððaxxam]

In this section, we have discussed the different morphemes that verbs and nouns can take in Taqbaylit. These elements may be affixes or clitics. The junction



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

between noun/verb and their dependents is where glides may be inserted if morphology creates a vocalic sequence: if one of the dependents starts with a vowel and is attached to a root ending in a vowel. The following section is dedicated to this type of situation.

4. Glides and boundaries

The present section is dedicated to epenthetic glides that may appear between verbal/nominal roots and their clitics. Recall that the glide may be [j] or [w]. We aim to provide a unified analysis that will correctly explain (and predict) why glides are inserted and why they take an anterior or a posterior articulation.

In the following data in (29), we have a series of nouns followed by a demonstrative: =aki 'this one' or =ihin 'that one'. In (29a), nouns end in a consonant, and the demonstrative – which is postponed – is directly attached to the stem. In (29b), the nouns end in a vowel, and, as we can see, a glide has been inserted between the stem and the clitic. This glide, [j], is not related to the stem, nor the demonstrative. It is classically analyzed as a hiatus-breaking strategy (GUERSSEL 1986).

- (29) a. **axxam** =aki **isla-n** =aki **ayjul** =aki
house =DEM groom-PL =DEM donkey =DEM
'this house' 'these grooms' 'this donkey'
[axxamaki] [islanaki] [ayjulaki]
- axxam** =ihin **isla-n** =ihin **ayjul** =ihin
house =DEM groom-PL =DEM donkey =DEM
'that house' 'these grooms' 'that donkey'
[axxamihin] [islanihin] [ayjulihin]
- b. **θaziba** =aki **isli** =aki **asaru** =aki
necklace =DEM groom =DEM hook =DEM
'this necklace' 'this groom' 'this hook'
[θazibajaki] [islijaki] [asarujaki]
- θaziba** =ihin **isli** =ihin **asaru** =ihin
necklace =DEM groom =DEM hook =DEM
'that necklace' 'that groom' 'that hook'
[θazibajihin] [islijihin] [asarujihin]

The glide [j] is inserted between the nominal base and =aki or =ihin, regardless of the quality of the vowel at the end of the noun.

If we now look at the verbal constructions including a negation in (30), a glide appears in the same condition as previously illustrated. Negation consists of two particles: **ur** is added before the inflected verb and **ara** after the inflected verb.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

Additionally, the vowel [i] is inserted in the penultimate position in the verbal base. If the verb ends in a consonant, then the second particle **ara** is directly adjacent to the root (30a). However, if the verb ends in a vowel, then [w] is inserted before the negation suffix (30b).

- (30) a. **i- xðəm** **ur i- xðim ara**
 3M.SG- work.PFV NEG1 3M.SG- work.PFV.NEG NEG2
 ‘He did’ ‘He did not do’
 [ixðəm] [urixðimara]
- jə- rwəl** **ur jə- rwil ara**
 3M.SG- flee.PFV NEG1 3M.SG- flee.PFV.NEG NEG2
 ‘He flew’ ‘He did not flew’
 [jərwəl] [urjərwilara]
- b. **i- zra** **ur i- zri ara**
 3M.SG- see.PFV NEG1 3M.SG- see.PFV.NEG NEG2
 ‘He flew’ ‘He did not flew’
 [izra] [urizriwara]
- i- ʃəffu** **ur i- ʃəffu ara**
 3M.SG- remember.IPFV NEG1 3M.SG- remember.IPFV.NEG NEG2
 ‘He remembered’ ‘He does not remember’
 [iʃəppu] [uriʃəppuwara]

Once again, the quality of the glide is not related to the vocalic environment, as [w] is attested after [i, u]. Note that there is an alternate strategy to avoid hiatus: dropping the verb last vowel (31).

- (31) **ur i- zri ara**
 NEG1 3M.SG- see.PFV.NEG NEG2
 ‘He did not see’
 [urizrara]
- ur i- ʃəffu ara**
 NEG1 3M.SG- remember.INTNEG2
 ‘He does not remember’
 [uriʃəppara]

In the following sections, we present three hypotheses that may be retained in order to explain the appearance of glides. We will illustrate each one in detail and show why we are in favor of the third one.

4.1 First hypothesis: nominal versus verbal root

The phonological environment is identical in the cases of nominal and verbal constructions (29b) and (30b): the base ends in a vowel [a], [i] or [u] and the suffix starts with the vowel [a] or [i] – yet the inserted glide varies. One could



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

posit that the grammatical nature of the base constrains the quality of the glide: [j] intervenes after a noun, [w] after a verb.

However, if we look at the extra data given in (32), we see that [j] can also be inserted in a verbal construction.

- (32) a. **xəðm = as** **səl = as**
 work =3SG.DAT listen =3SG.DAT
 ‘Work for him!’ ‘Listen to him!’
 [xəðmas] [slas]
- b. **jə- nna = as** **jə- ppi = as**
 3M.SG- say.PFV =3SG.DAT 3M.SG- bring.PFV =3SG.DAT
 ‘He said to him’ ‘He brought to him’
 [jənnajas] [jəppijas]
- ɲu = as**
 sing =3SG.DAT
 ‘Sing to him!’
 [ɲujas]

More precisely, the verb can have three complements, which function as clitics: indirect object, direct object, and directional particle – in that specific order. We will take the example of the indirect object masculine 3SG, which starts with a vowel **-as**. In the same manner as in (29) and (30), if the verb ends in a consonant, the indirect object surfaces directly adjacent to the verb (32.a). However, if the verb ends in a vowel, then the glide [j] is inserted (32.b). Once again, the surrounding vocalic identity does not seem to play any role.

Both glides are attested after nominal and verbal roots. Therefore, the nature of the root does not seem to provide an explanation as to when [j] versus [w] is inserted. We turn to our second hypothesis.

4.2 Second hypothesis: demonstratives as independent words

In the same fashion as plural formation (see part 2.3), which leads to the surfacing of a lexical glide that has been ‘hiding’ in the singular, one could posit that the [j] segment that surfaces before **=aki** and **=ihin** is lexically present in the demonstrative. In the specific context of postposition after a noun, this lexical glide would have room to surface.

However, when demonstratives are used as independent words – not as clitics –, they take an initial glide: [w] in (33).¹³ In other words, **=aki** and **=ihin** do not

¹³ The exact status/nature of the glide [w] in **waki/wihin/wajeð** is arguable. GALAND (2010) posits that [w] marks masculine, given that the feminine forms of the demonstratives are



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

seem to be lexically determined to function with any specific glide and can alternatively take [j] or [w].

(33) waki	waki	ǫ	ahəffaf
DEM	DEM	COP	FS.hairdresser
'this one'	'This one is a hairdresser'		
[waki]	[wakiǫahəffaf]		
wihin	wihin	ǫ	aʃənnaj
DEM	DEM	COP	FS.singer
'that one'	'That one is a singer'		
[wihin]	[wihinǫaʃənnaj]		

In this case, the nature of the clitic could have been a potential factor to determine which glide should be inserted. Clitics could be determined to have a specific glide that would surface when they need one. However, in the specific case of demonstratives, we have just seen that both glides may surface. We, therefore, turn to our third and last hypothesis.

4.3 Third hypothesis: the strength of boundaries

Both glides appear in the same vocalic environment. They do not seem to be lexically conditioned. We propose to analyze the distribution of [j, w] as follows: the glides are indeed sensitive to morphosyntactic boundaries: some trigger [j], some trigger [w]. However, the question is not about the nominal versus verbal nature of the boundary but rather about how many boundaries separate the basis from the clitic. We argue that the boundary that separates the verb from the negation particle is stronger than the boundary between the verb and the indirect object.

An inflected noun can be followed by two kinds of clitics: a demonstrative (as illustrated in (29)) and/or a possessive pronoun (e.g., **jnu** 1sg.poss). If they appear simultaneously, the order is fixed. We give in (34) examples of nouns with both suffixes.

θaki/θihin/θajəǫ. On the other hand, CHAKER (1983) defends that feminine is marked by a dental while masculine is unmarked (as shown by the opposition of the two nouns **awθul** 'rabbit.m' vs **θ-awθul-t** 'rabbit.f'). While we agree with both authors regarding /θ/ as the feminine marker, in this paper, we follow Chaker's analysis and consider [w] as an epenthetic segment.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

- | | |
|--|--|
| <p>(34) axxam = jnu
 home =1SG.POSS
 ‘My house’
 [axxamjnu]
 θaziba = jnu
 necklace =1SG.POSS
 ‘My necklace’
 [θazibajnu]
 isli = jnu
 groom =1SG.POSS
 ‘My groom’
 [islijnu]
 asaru = jnu
 hook =1SG.POSS
 ‘My hook’
 [asaru jnu]</p> | <p>axxam = aki = jnu
 home =DEM =1SG.POSS
 ‘This house of mine’
 [axxamakijnu]
 θaziba = aki = jnu
 necklace =DEM =1SG.POSS
 ‘This necklace of mine’
 [θazibajakijnu]
 isli = ihin = jnu
 groom =DEM =1SG.POSS
 ‘That groom of mine’
 [islijihinjnu]
 asaru = ihin = jnu
 hook =DEM =1SG.POSS
 ‘That hook of mine’
 [asaru jihinjnu]</p> |
|--|--|

Regarding nominal inflection, it is usually admitted that nominal templates include initial and final CVs to host agreement, that is gender and number (ACHAB 2005; BENDJABALLAH and HAIDEN 2008). The full representation of the underlying noun structure can be summarized as follows:

- (35) 2[1[AGR – N root – AGR]1 =DEM =POSS]2

Everything between the boundaries bearing the number 1 corresponds to the noun root: here are inserted the gender and number markers– this can be considered as the core domain. Demonstrative and possessive clitics, which are closely related to the noun, are included in a bigger nominal domain, marked with number 2. Any lexical elements inserted before the first frontier bearing a number 2 or after the last frontier bearing a number 2 will be considered outside the nominal domain.

A verb root can host subject agreement, and the inflected verb can take three clitics: dative clitics, accusative clitics and directional, in that particular order. The representation in (36) illustrates the full verbal domain. As for the noun in (35), it is classically admitted that a verbal root includes space to host the subject markers, the agreement – more specifically in an initial and a final domain (GUERSSEL 1992a). Outside the core domain, between the boundaries bearing the number 1 in our representation, we find a bigger verbal domain, where the verbal clitics are hosted. Once we have reached the boundaries marked with number 2, we are outside the verbal domain.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

(36) 2[1[AGR – V root – AGR]1 =DAT =ACC =DIR]2

Negation should be inserted outside the frontiers bearing the number 2. Negation is not considered as a clitic nor a dependent of the verb – it is closer to the adverbial status. Consequently, it should not appear in the close verbal domain and hold the same relationship with the root as the verb dependents do. The representation in (37) illustrates the verbal domain configuration when negation is present. Note that verbal clitics move to the left of the inflected verb. The traces mark the initial position of the clitics before they move outside the verbal domain. Even though the clitics moved, they are still included in the bigger verbal domain: linearity changed, but the hierarchical relations are maintained.

(37) NEG 2[=DAT_i =ACC_j =DIR_k] 1[AGR – V root – AGR]1 t_i t_j t_k]2 NEG

Following the inner organization of verbal and nominal domains, we argue that the quality of the inserted glide depends on the type of boundary which is at its left. If a hiatus is created between the core and dependent domains – the separation corresponding to number 1 – then [j] is inserted. However, when a hiatus intervenes at the outside boundary of the verbal/nominal domain – which corresponds to the boundary bearing the number 2 – then [w] is inserted. This is what the examples in (38) illustrate.

- (38) a. 2[1[AGR- V root -AGR]1 =DAT =ACC =DIR]2
 jə- ppi =as =θ =id
 3M.SG- bring.PFV =3.SG.DAT =3M.SG.ACC =DIR
 ‘He brought it there to him’
 [jəppijasθid]
- b. 2[1[AGR- N root -AGR]1 =DEM =POSS]2
 asaru =aki =jnu
 hook =DEM =1SG.POSS
 ‘This hook of mine’
 [asarujakijnu]
- c. [NEG =DAT =ACC =DIR] 2[1[AGR- V root -AGR]1]2 NEG
 ur =s =θ =id jə- ppi ara
 NEG =3.SG.DAT =3M.SG.ACC =DIR 3M. SG- bring.PFV NEG
 ‘He did not bring it there to him’
 [usθidjəppiwara]

In (38a), we have an inflected verb followed by three clitics. As the first clitic – the indirect object – starts with a vowel, it creates a hiatus situation with the preceding verb that ends in a vowel. This hiatus straddles a boundary that



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

separates the core domain from the larger domain (a frontier marked with the number 1). Accordingly, [j] is inserted.

In (38b), the situation is similar even though we are dealing with a noun and not a verb. The noun **asaru** ends in a vowel. The closest clitic, here the demonstrative =**aki**, starts with a vowel. The hiatus corresponds to the boundary between the core domain and the larger nominal domain. Accordingly, [j] is inserted.

In (38c), however, the hiatus newly created by the adjunction of the negation particle **ara** after the verb **jə-ppi**, corresponds to a boundary numbered 2. This time, [w] is inserted. Note that clitics are attracted towards the negation. They move to the left of the verbal domain, outside the boundaries bearing the number 2.

5. Conclusion

In this paper, we have discussed the distribution of glides in Taqbaylit. We have illustrated several situations where glides appear.

First, we have distinguished between lexical and epenthetic glides and illustrated their respective behavior in relation to high vowels. The former may alternate with their vocalic equivalent – according to the phonological environment – and may also mark specific morphosyntactic features, such as the construct state. In doing so, we have also discussed glide insertion in the construct state, where the quality of the glide was [w] by default, and [j] if the |I| element was already present in the phonological chain. Besides lexical glides that are stable in the roots, we have seen cases of lexical glides that may disappear and reappear due to templatic constraints – as illustrated with the plural formation. The latter are not associated with any meaning and serve the sole purpose of breaking hiatus.

Then, we presented an overview of verbal and nominal morphemes. We more specifically detailed the affixes and the clitics that verbs and nouns can bear. We also presented clitic movements that are highly relevant to our analysis of the epenthetic glides, as they appear between verbal/nominal roots and their clitics.

Finally, we have discussed glide insertion in the verbal and nominal constructions and the distribution of [j, w]. We have shown that, in this context, glides are not lexically determined. Their distribution does not fall under a phonological constraint (the vocalic environment is not pertinent) or a syntactic categorization constraint (both glides may intervene in a verbal and a nominal construction). We proposed to put the quality of the glide and the underlying morphosyntactic structure in perspective. In other words, the glide color is to be



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

seen as the expression of the morphological boundaries. The glide [j] appears at the boundary between the verbal/nominal root and the clitics – which we refer to as a *weak* boundary –, and [w] appears outside the core domain, that is, outside the phrase containing the root and its direct dependents. We refer to this type of boundary – for example, between the verb and the particle of negation **ara** – as *strong* boundary. Thus, the quality of glides depends on a set of phonological, morphological, and syntactic constraints and not on the purely phonological environment.

Acknowledgment

We would like to thank our colleagues of the LLING for their fruitful feedback on this paper. We are also very grateful to our anonymous reviewers for their insightful comments. All remaining errors are ours.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

References

- ACHAB, Karim (2003). "Alternation of state in Berber", in Jacqueline LECAME (ed.), *Research in Afroasiatic Grammar II: Selected papers from the Fifth Conference on Afroasiatic Languages*, Amsterdam and Philadelphia: John Benjamins, 1-20.
- ACHAB, Karim (2005). "Le système de genre et son origine en berbère et en chamito-sémitique", *Faits de langues* 26: 97-128.
- APPLEGATE, Joseph R. (1971). "The Berber languages", in Carleton T. HODGE (ed.) *Afroasiatic: A Survey*, The Hague and Paris: Mouton, 96-118.
- BACKLEY, Phillip (2011). *An Introduction to Element Theory*, Edinburgh: Edinburgh University Press.
- BEN SI SAID, Samir (2014). De la nature de la variation diatopique en kabyle : étude de la formation des singulier et pluriel nominaux, PhD thesis, University of Nice.
- BEN SI SAID, Samir (2020). "La voyelle initiale des noms et l'état d'annexion en kabyle (berbère)", *Canadian Journal of Linguistics/Revue Canadienne de Linguistique* 65 (2): 155-180.
- BENDJABALLAH, Sabrina (2005). "Longueur phonologique des voyelles en kabyle", *Études et Documents Berbères* 22: 47-69.
- BENDJABALLAH, Sabrina (2011). "Note sur les noms à voyelle initiale stable en kabyle", in Amina METTOUCHI (ed.) *Parcours berbères, Mélanges offerts à Paulette Galand-Pernet et Lionel Galand pour leur 90e anniversaire*, Köln: Rüdiger Köppe, 417-434.
- BENDJABALLAH, Sabrina, and Martin HAIDEN (2008). "A typology of emptiness in templates", in Jutta HARTMANN, Veronika HEGEDUS, and Henk VAN RIEMSDIJK (eds.), *The sounds of silence: empty elements in syntax and phonology*, Amsterdam: Elsevier, 21-57.
- BENDJABALLAH, Sabrina, and Martin HAIDEN (2013). "La représentation syntaxique des prépositions faibles du berbère de Chemini", in Jesse TSENG (ed.), *Prépositions et postpositions - approches typologiques et formelles*, Paris: Hermès Science-Lavoisier, 87-123.
- BUCCI, Jonathan (2013). "Voyelles longues virtuelles et réduction vocalique en coratin", *Canadian Journal of Linguistics/Revue canadienne de linguistique* 58 (3): 397-414.
- CHAKER, Salem (1983). *Un parler berbère d'Algérie (Kabylie)*, Université de Provence.
- CHOMSKY, Noam (1999). "Derivation by phase", *MIT Working Papers in Linguistics: MIT Occasional Papers in Linguistics* 18.
- CHOMSKY, Noam (2005). *On phases*, ms.
- EL MOUJAHID, El Houssaïn (1997). *Grammaire générative du berbère: morphologie et syntaxe du nom en Tachelhit*, PhD thesis, Mohammed V University.
- ENNAJI, Moha (2001). "The construct state in Berber", *Studies in the Linguistic Sciences* 31 (2), 55-72.
- GALAND, Lionel (2010). *Regards sur le berbère*, Milano: Centro Studi Camito-Semitici.
- GUERSSEL, Mohamed (1983). "A Phonological Analysis of the Construct State in Berber", *Linguistic Analysis* 11 (3): 309-330.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

- GUERSSEL, Mohamed (1986). "Glides in Berber and syllabicity", *Linguistic Inquiry* 17 (1): 1-12.
- GUERSSEL, Mohamed (1992a). "The phonology of Berber derivational morphology by affixation", *Linguistic Analysis* 22 (1-2): 3-60.
- GUERSSEL, Mohamed (1992b). "On the case system of Berber", *Canadian Journal of Linguistics/Revue canadienne de linguistique* 37 (2): 175-196.
- HALPERN, Aaron L. (1998). "Clitics", in Andrew SPENCER and Arnold M. ZWICKY (eds.), *The Handbook of Morphology*, Oxford: Blackwell, 101-123.
- HAMMOND, Michael (1997). "Vowel quantity and syllabification in English", *Language* 73 (1): 1-17.
- HARRIS, John (1994). *English Sound Structure*, Cambridge: Blackwell.
- KAYE, Jonathan, Jean LOWENSTAMM, and Jean-Roger VERGNAUD (1985). "The internal structure of phonological elements: a theory of charm and government", *Phonology Yearbook* 2 (1): 305-328.
- LAHROUCHI, Mohamed (2013). "A propos de I et de U en berbère : de la phonologie, de la morphologie et des phases", in Ali TIFRIT (ed.), *Phonologie, morphologie, syntaxe : mélanges offerts à Jean-Pierre Angoujard*, Rennes: Presses Universitaires de Rennes, 21-30.
- LOWENSTAMM, Jean (1991). "Vocalic length and syllable structure in Semitic", in Alan L. Kaye (ed.), *Semitic Studies in Honor of Wolf Leslau on the Occasion of His 85th Birthday*, Wiesbaden: Otto Harrassowitz: 949-965.
- LOWENSTAMM, Jean (1996). "CV as the Only Syllable Type." In Jacques DURAND and Bernard LAKS (eds.), *Current Trends in Phonology. Models and Methods*, Manchester: ESRI, University of Salford: 419-442.
- LOWENSTAMM, Jean (2007). "Little n, ROOT, and Types of Nouns", in Jutta HARTMANN, Veronika HEGEDUS, and Henk VAN RIEMSDIJK (eds.), *The sounds of silence: empty elements in syntax and phonology*, Amsterdam: Elsevier, 105-143.
- MAMMERI, Mouloud. 1976. *Tajerrumt n tmaziyt*, Paris: Maspéro.
- METTOUCHI, Amina (2014). "Foundations for a typology of the annexed/absolute state systems in Berber", *STUF-Language Typology and Universals* 67 (1): 47-61.
- METTOUCHI, Amina, and Zygmunt FRAJZYNGIER (2013). "A previously unrecognized typological category: The state distinction in Kabyle (Berber)", *Linguistic Typology* 17 (1): 1-20.
- MCCARTHY, John J. (1979). *Formal problems in Semitic phonology and morphology*, London: Routledge.
- MCCARTHY, John J. (1982). "Prosodic templates, morphemic templates, and morphemic tiers", in Harry VAN DER HULST and Norval SMITH (eds.), *The Structure of Phonological Representations*, Dordrecht: Foris, 191-223.
- MCCARTHY, John J. (1983). "Consonantal morphology in the Chaha verb", in Michael BARLOW, Daniel P. FLICKINGER and Michael T. WESCOAT (eds.), *Proceedings of the West Coast Conference on Formal Linguistics*, Stanford: University of Stanford, 176-188.



AMAZIGH BEDAR, LUCIE QUELLAC, AND LAURENCE VOELTZEL

Epenthetic glides in Taqbaylit

- NEWELL, Heather (2008). *Aspects of the morphology and phonology of phases*, PhD thesis, McGill University.
- OUALI, Hamid (2011). *Agreement, pronominal clitics and negation in tamazight berber: a unified analysis*, London and New York: Continuum International.
- OUHALLA, Jamal (1988). *The syntax of head movement: a study of Berber*, PhD thesis, University of London.
- OUHALLA, Jamal (1996). "The construct state in Berber", in Jacqueline LECARME, Jean LOWENSTAMM, and Ur SHLONSKY (eds.), *Studies in Afroasiatic grammar*, The Hague: HAG, 278-301.
- PENCHOEN, Thomas G. (1973). *Tamazight of the Ayt Ndhir*. Los Angeles: Uneda.
- PIGGOTT, Glyne, and Heather NEWELL (2006). "Syllabification, stress and derivation by phase in Ojibwa", *McGill Working Papers in Linguistics* 20 (2): 39-64.
- PÖCHTRAGER, Markus, A. (2010). "Does Turkish diss harmony?", *Acta Linguistica Hungarica* 57: 458-473.
- SCHEER, Tobias (2004). *A lateral theory of phonology: what is CVCV, and why should it be?*, Berlin: De Gruyter Mouton.



Negation in Kabyle (Berber)

AMINA METTOUCHI

EPHE-PSL / CNRS-LLACAN

amina.mettouchi@ephe.psl.eu

ABSTRACT

Berber languages display a number of characteristic asymmetries in negative utterances as compared to positive ones. This paper focuses on Kabyle, and analyzes its main typological characteristics concerning negation, namely an asymmetry at the level of the aspect-mood system, a binary distinction between two non-verbal negative predications (existential-locative and attributive-equative), as well as a postverbal 'reinforcement' strategy whose grammaticalization and prosody will be analyzed in detail. Other dimensions of negation are presented, in order to give an overview of the system as a whole. The synthesis puts the Kabyle system of negation into perspective within the Berber language family.

KEY WORDS: negation, Berber, Kabyle, typology, aspect-mood





AMINA METTOUCHI

Negation in Kabyle (Berber)

1. Introduction¹

Berber languages display a number of characteristic asymmetries in negative utterances as compared to positive ones. This paper will focus on Kabyle, more precisely Central Kabyle, its main² dialect, and will analyze its main typological characteristics concerning negation, namely an A-Cat-TAM asymmetry, a binary distinction between two non-verbal negative predications (existential-locative and attributive-equative), as well as a postverbal 'reinforcement' strategy whose grammaticalization and prosody will be analyzed in detail. Other dimensions of negation will be presented, in order to give an overview of the system as a whole.

The synthesis will also place the Kabyle system of negation in perspective within Berber, a language family with considerable variation in that respect, from quasi-symmetrical systems (e.g. Siwi) to strongly asymmetrical ones (e.g. Tuareg varieties).

Throughout the paper, I will not only present the morphosyntactic features of Kabyle negation, but also comment on their semantic aspects. As stated by CONTINI-MORAVA (1989: 179): "negative-affirmative asymmetry is a natural consequence of the pragmatic function of negative sentences in ordinary discourse. [...] Since negated events are always potential rather than actual, there is no reason to assume that speakers need to convey the same information about them as they would in reporting actual occurrences". This has been typologically generalized by MIESTAMO (2005: 237): "Symmetric negation is based on language-internal analogy and motivated by the pressure for cohesion in the system, whereas the different subtypes of asymmetric negation are motivated by language-external analogy from different aspects of the functional symmetry found between affirmation and negation".

While those remarks are certainly accurate as generalizations, they do not fully account for the language-internal configuration of the system of negation in Kabyle. An analysis of its semantic organization points to an underlying opposition between factual/locative/existential on the one hand, and interpretive/evaluative/attributive on the other hand (METTOUCHI 1995), a semantic/pragmatic opposition which may also have been grammaticalized in

¹ Many thanks to colleagues who have read and appreciated this paper, and have discussed it with me (Martine Vanhove, Ljuba Veselinova, Matti Miestamo, as well as anonymous reviewers). Many thanks also to the audience of the Syntax of the World's Languages SWL8 Conference in Paris (2018), where it was originally presented. My utmost gratitude goes to all the speakers I have recorded over the years, for their generosity and kindness. My admiration for their oral skills is renewed each time I work on their recordings.

² In terms of number of speakers and published references.



AMINA METTOUCHI

Negation in Kabyle (Berber)

the negative subsystems of other languages of the world (cf. METTOUCHI 2003, 2006).

2. The language

2.1 General information on Kabyle

Kabyle is a language spoken by more than three million speakers in the north of Algeria (about five if we include speakers of the diaspora, in France and Canada, where language maintenance is high). It belongs to the Northern branch of Berber languages, themselves a family within the Afroasiatic phylum.

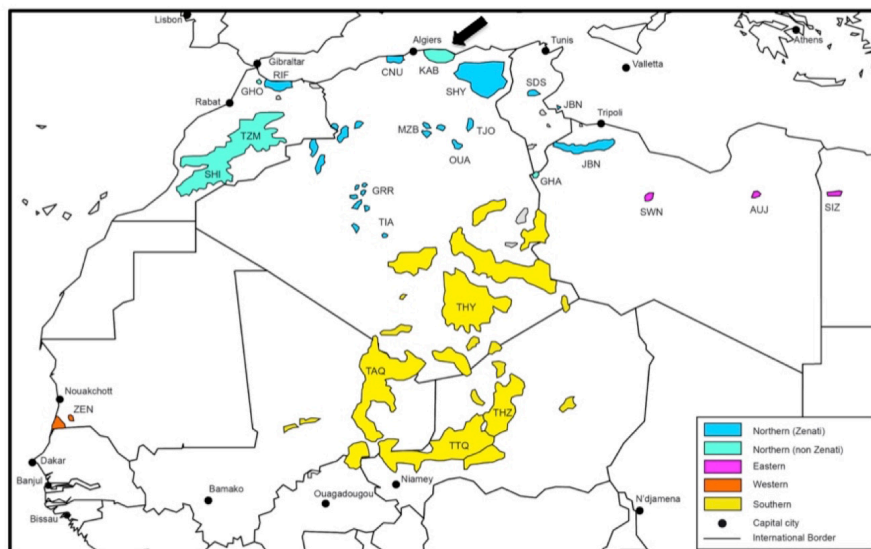


Figure 1 – Contemporary Berber-speaking zones

It is generally considered to be distinguishable into five (NÄIT-ZERRAD 2005, GUERRAB 2014) dialectal subgroups, the fifth (Tasahlit, 2.2 on map below, Figure 2) being now considered as a different language within the Northern Berber group. Bordering the zone in the north is the Mediterranean sea, and everywhere else, Arabic-speaking zones (where Berber used to be spoken, as shown by toponymy, among other evidence).



AMINA METTOUCHI

Negation in Kabyle (Berber)

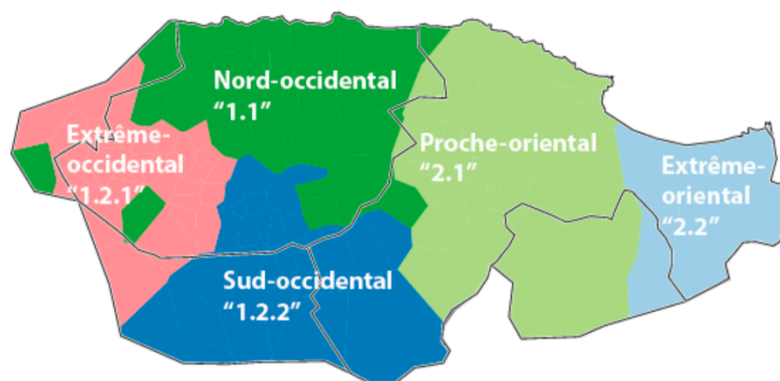


Figure 119 : carte des cinq zones infradialectales. Classification retenue.

Figure 2 – Dialectal map of the Kabyle region (GUERRAB 2014)

The variety from which examples are taken here belongs to the 1.1. dialectal zone (North-Western). The glottolog code corresponding to the whole Western zone (1.1, 1.2.1 and 1.2.2 on the map above, Figure 2) is *gre1281*, and the ISO code for Kabyle as a whole is KAB (*kaby1243* for glottolog). Central Kabylie (zone 1.1.) is remarkable within the Kabyle zone and among Berber-speaking regions for the fact that except for some suburbs of its capital (Tizi-Ouzou), Central Kabyle is spoken the whole zone, in all circumstances of life, by all generations, within and outside the home. Standard Arabic is limited to the classroom, TV, and written administrative documents; spoken Maghreban Arabic (Darja) is used alongside Central Kabyle by men when travelling outside of Kabylie. French is used alongside Central Kabyle by older generations, when interacting with French speakers, or among educated people of those generations. Kabyle people are very much involved in the promotion and defense of their language, which they consider an essential part of their identity.

I collected all the data on fieldwork between 1992 and 2019.³ The speakers are monolingual Kabyle women aged between 45 and 90 at the time of the recordings. Among that generation, few women have been to school, and

³ In the zone circled in white in the map (Figure 3). A few Central Kabyle examples are from other sources than my recorded corpus: the mention 'field notes' means that the sequence has been uttered by a Kabyle speaker but not recorded in audio or video; the mention 'elicited' means that the sequence has been uttered by a Kabyle speaker during an experiment or following a question, in the context of systematic verification or exploration of language data. Other types of sources are mentioned at the end of the relevant examples.



AMINA METTOUCHI

Negation in Kabyle (Berber)

although most men are multilingual (in Kabyle and spoken Arabic and/or French), this is not the case for those women. Women born after 1962 have massively had primary school education, and those born after 1972 have been highly exposed to standard Arabic which was promoted to sole language in school education after 1978 (before that, primary school was bilingual in French and standard Arabic). The generations born after 1962 are not included in my corpus data.

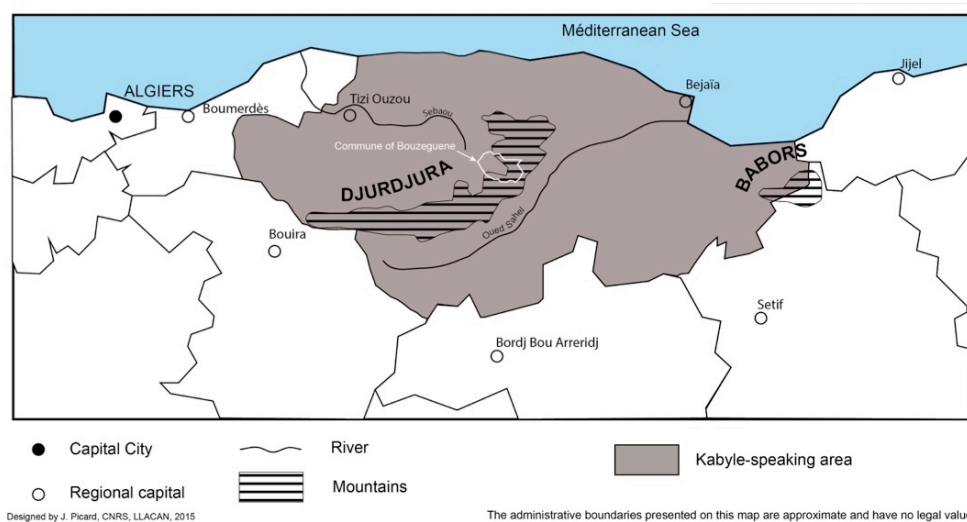


Figure 3 – Map of Kabylie (Berber-speaking area)

In Kabyle, as in all Berber languages, a minimal predication consists of a predicate and its main pronominal argument. The predicate can either be a verb, in this case it hosts a bound personal pronoun(s) as its argument(s), or it can be a non-verbal predicate of a copular or prepositional/adverbial nature. The latter type of non-verbal predicate hosts bound pronouns belonging to various argumental paradigms, depending on the nature of the non-verbal predicate (CHAKER 1983, METTOUCHI 2017a).

In addition to this core, the clause may contain noun phrases (all of them except the nominal direct object being co-referential lexical-referential expansions of the argumental pronouns bound to the predicate), and prepositional phrases, as well as adverbs. Kabyle has few conjunctions and usually expresses dependency through word order, prosody, and mood-aspect sequences, as well as by morphology (state, subject relativization affixing).



AMINA METTOUCHI

Negation in Kabyle (Berber)

Within noun phrases, modifiers follow the modified constituent. The language has two genders (masculine and feminine) and two numbers (singular and plural), marked on adjectives, on nouns, and on pronominal affixes and clitics hosted by verbs, nouns and prepositions. It also has two states (absolute and annexed), marked on nouns.⁴

2.2 Types of predications in positive contexts

2.2.1 Positive verbal clauses

As minimal predications can be verbal or non-verbal, so therefore can be clauses. Verbal clauses are organized around a verbal predicate containing a verbal lexeme necessarily inflected for aspect-mood, and has an obligatory pronominal affix (bound pronoun) belonging to the subject paradigm⁵. The following examples are in the perfective (1), imperfective (2) aorist (3), and negative perfective (4), the four MAN stems in Central Kabyle. Those terms refer to the forms themselves, not their semantics or functions (for that, see Tables 3 and 4). The terms used in the berberologist tradition for Berber MAN stems are the following:

TERMINOLOGY IN THIS PAPER (AND IN ENGLISH IN GENERAL)	OTHER TERMINOLOGY (A. BASSET ETC.)	OTHER TERMINOLOGY (L. GALAND ETC.)
perfective	prétérit	accompli
negative perfective	prétérit négatif	accompli négatif
aorist	aoriste	aoriste
imperfective	aoriste intensif	inaccompli

Table 1 – Main terminological equivalences for MAN forms in Berberologist studies

- (1) **i-dda** **baba-tsnt**
 SBJ3.SG.M-accompany:PFV father:ANN.SG.M-KIN3.PL.F
 ‘Their father accompanied them’ (KAB_AM_NARR01_0244)⁶

⁴ For a synthesis on the state opposition in Berber, and analyses of its function in Kabyle, see METTOUCHI and FRAJZYNGIER 2013, METTOUCHI 2014b.

⁵ See METTOUCHI 2017a for the full paradigms.

⁶ Examples from the online Kabyle Corpus (<https://corpafras.huma-num.fr/>) are referred to by the ISO-code, followed by my initials, the type of recording (narrative or conversational), its number, and the number of the intonation unit in which the form appears within the recording. Other sources are specified, including when they are taken from my field notes, or have been elicited.



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (2) **ttəddu-y** **d** **stti**
accompany:IPFV-SBJ.1SG *COM* *grandmother:ANN.SG.F:KIN1SG*
 'I used to accompany my grandmother' (KAB_AM_NARR03_0153)
- (3) **ad** **ddu-y** **d** **stti**
POT *accompany:AOR-SBJ.1SG* *COM* *grandmother:ANN.SG.F:KIN1SG*
 'I would accompany my grandmother' (KAB_AM_NARR03_0487)
- (4) **lukan**⁷ **i** **s = t-ffim-d^s** **ssər**
if *rel* *DAT3.SG.F=SBJ2-understand:PFVNEG-SBJ2.SG* *charm:ABSL.SG.M*
 'if you had understood her secret charm'
- zhu** **jid-s** **a** **gma** **s^sahha**
enjoy:AOR.IMP *with-PREP3SG* *VOC* *brother:ABSL.SG.M* *happiness:ABSL.SG.F*
 'you would happily enjoy the moment with her, o my brother'
- s** **ssxab** **d** **rriha**
INSTR *clove_necklace:ANN.SG.M* *ASSOC* *perfume:ANN.SG.F*
 'in the clovey perfume of her bridal necklace'
 (A Lemri (O mirror) Poem by Cherif Kheddami)

Subject bound pronouns can be separated into two paradigms, one imperative, the other used both in indicative and non-indicative moods – it will be labelled 'standard' in Table 2 below.⁸

STANDARD (ST) SUBJECT PARADIGM					
Person	1	2		3	
Gender		M	F	M	F
SG	stem-y	t-stem-d ^s		i-stem	t-stem
PL	n-stem	t-stem-m	t-stem-mt	stem-n	stem-nt

IMPERATIVE (IMP) PARADIGM		
Person	2	
Gender	M	F
SG	stem-Ø	
PL	stem-(w)t	stem-mt

Table 2 – Subject (standard) and imperative bound pronoun paradigms in Central Kabyle

⁷ **Lukan** 'if' can be followed by the perfective, imperfective and **ad** + *aorist* (see examples in NAÏT-ZERRAD 2001: 146), it is not necessarily followed by the negative perfective in Kabyle, which shows that the use of the negative perfective here is not conditioned, but functional. It is also evidence for the fact that conjunction **lukan** is not inherently 'negative'.

⁸ In the interlinear glosses of the examples, standard subject bound pronouns are labelled SBJ, imperatives ones IMP. The list of abbreviations is after the conclusion and before the References section.



AMINA METTOUCHI

Negation in Kabyle (Berber)

The verb stem itself can be in the aorist (e.g. **-ddu-** ‘accompany’), imperfective (**-ttaddu-** ‘accompany’), negative perfective (**-ddi-** ‘accompany’) or positive perfective (**-dda-** ‘accompany’). Those MAN forms are not linked to a specific *realis/irrealis*, or mood distinction. See (METTOUCHI 2002) for a survey of the aorist’s uses, METTOUCHI 2000 for the perfective and negative perfective, and METTOUCHI 1992 and 1998 for the imperfective, in Central Kabyle. Those MAN forms have different functional values in different Berber languages (METTOUCHI 2009c), even if their morphology is very similar.

PNG PARADIGM	MAN FORM	POSITIVE CONSTRUCTION	FUNCTION	INDICATIVE FREQUENCY
standard (ST)	aorist	aorist	after another verb in the perfective or ad + aorist or imperative: linked/ consecutive action	<1%
imperative (IMP)	aorist	aorist-IMP	command (imperative)	between 2% and 3%
imperative (IMP) & standard (ST)	aorist	ad +aorist-IMP+ST	hortative	<1%
standard (ST)	aorist	ad + aorist-ST	irrealis/dependency: potential, future, subjunctive, conditional, oath, optative, complement clause...	between 15% and 30%
standard (ST)	imperfective	ad + imperfective-ST	irrealis/dependency + activity: same as above, underlining Aktionsart	<1%
imperative (IMP)	imperfective	imperfective-IMP	intensive imperative (politeness, insistence)	<1%
standard (ST)	imperfective	imperfective-ST	progressive, habitual, conative, intensive...	between 10% and 16%
standard (ST)	perfective	perfective-ST	factual: state or situation is/was/has/had been the case	between 50% and 70%
standard (ST)	negative perfective	lukan or mazal + negative perfective-ST	counterfactual: if state or situation had been the case (lukan); state or situation not yet the case (mazal).	<1%

Table 3 – Positive constructions involving verbal predicates, with indicative frequencies (among positive verbal clauses) in recorded corpora (variable depending on genre)



AMINA METTOUCHI

Negation in Kabyle (Berber)

2.2.2 Positive non-verbal clauses

Non-verbal clauses are of various types (see METTOUCHI 2017a for more details): some are organized around a predicate whose origin is prepositional (5 and 6), adverbial (7) or locative (8), and some are composed of an invariable copula and an adjective or noun (9). The former type is characterized by the fact that the predicate has an obligatory pronominal affix belonging to various paradigms (METTOUCHI 2017a for details) that are distinct from the subject verbal paradigms. The copular type (9) does not involve bound pronouns, its arguments are nominals, or independent pronouns.

- (5) **ləhʃif-inm** **dg-s** **ddwa**
herb:ABSL.SG.M-POSS2.SG.F *STATLOC-PREP3.SG* medicine:ABSL.SG.M
'In your vegetation there is medicine'
Djerdjera by Cherif Kheddam (song about the Djerdjera mountain which he addresses)
- (6) **yur^f-i** **aqzun** **d** **amllal**
AT.HUM-PREP1.SG dog:ABSL.SG.M COP white:ABSL.SG.M
'I have a dog who's white' (DALLET (1982: 124) 'j'ai un chien blanc')
- (7) **tigi** **kifkif-itnt**
these:PL.F *same-ABSV3PL.F*
'These (spoons) are alike' (field notes)
- (8) **anda = tnt** **tqʃifin-nni?**
where=ABSV3.PL.F girl:ANN.PL.F-SHAREDREF
'Where are they, those girls?' (field notes)
- (9) **aʃ** **d** **wltma-s //**
INTJ COP sister:ABSL.SG.F-KIN.3.SG //
'Ah she was his sister!' (KAB_AM_CONV01_SP2_166)

Negation of verbal predicates will be analyzed in part 2, and negation of non-verbal predicates in part 3.

3. Clausal negation (verbal predicates)

3.1 Standard negation

Standard negation, understood as the basic way Central Kabyle has for negating verbal declarative main clauses, involves preverbal negator **ur**, and possibly the postverbal marker **ara** (see part 4 for a study of the conditions of presence/absence of the postverbal 'reinforcement'). The verb must be in the imperfective, or the negative perfective. Not all verbs have a negative perfective that is morphologically distinct from the perfective, but if they do, then it is that



AMINA METTOUCHI

Negation in Kabyle (Berber)

form which is used. Unlike some other Berber languages, Central Kabyle does not have a negative imperfective distinct from the positive one, it is the general imperfective which is used in negative contexts.

The range of meanings/functions in the negative is not the same as in the positive domain: whereas the positive domain is mostly about asserting or construing situations or events under the angle of their (actual or imagined) realization, the negative domain is about situations or events that have failed to occur, have been imagined but not realized, or are contrary to expectations.

Table 4 below summarizes the main functional values associated with the forms that can be found in the negative domain.

PNG paradigm	MAN form	negative construction	function	Indicative Frequency
standard (ST)	aorist	awər + aorist-ST	negative optative (ex.21)	<1%
imperative (IMP)	imperfective	ur + imperfective-IMP	prohibitive (exs.16, 17)	between 4% and 5%
imperative (IMP) & standard (ST)	imperfective	ur + imperfective-IMP+ST	negative hortative (ex.19)	< 1%
standard (ST)	imperfective	ur + imperfective-ST	rejection of a potential situation or habit (ex.12), rejection of the characterization of a situation (ex.13), negative oath.	between 30% and 40%
standard (ST)	negative perfective	ur + negative perfective-ST	negative statement (stative or dynamic: 'situation X is not the case') (ex.10), negative oath (ex.11).	between 60% and 70%
standard (ST)	positive perfective	ma + perfective-ST	negative oath (ex.23)	<1%

Table 4 – Standard negative constructions involving verbal predicates, with indicative frequencies (among negative verbal clauses) in recorded corpora (variable depending on genre)

- (10) **ur** **t-zwič** **ara** /
 NEG SBJ3.SG.F-marry:PFVNEG POSTNEG /
 'She was not married' (KAB_AM_NARR01_0034)



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (11) **wəllaɸi a jssi / ur=dd zwiɣ-y /**
by_God VOC daughter:ABSL.PL.F NEG=PROX marry:PFVNEG-SBJ.1SG /
alamma t-əkks=dd / fat^sima tuhr^sift /
until SBJ.3SG.F-remove:PFV=PROX / Fatima clever /
ayrum g udkk^wan //
bread:ABSL.SG.M LOC shelf:ANN.SG.M //
'I swear I won't marry until Clever Fatima grabs the bread on the shelf'
(KAB_AM_NARR_01_0086-91)
- (12) **a::: nna-n=as nkk^wni ur n-ttəddu ara //**
HESIT say:PFV-SBJ.3PL.M=DAT.3SG IDP.1PL NEG SBJ.1PL-accompany:IPFV POSTNEG
'Oh, they said, as for us we won't go.' (KAB_AM_NARR02_307)
- (13) **ur zəwwəɣ-n ara mddən i lantarnat /**
NEG marry:IPFV-SBJ.3PL.M POSTNEG people:ANN.PL.M LOC internet:ANN.SG.M /
'People didn't use to get married on the internet' (KAB_AM_NARR_03_0556)

The system of standard negation in Central Kabyle is therefore characterized by an A-Cat-TAM asymmetry: in asymmetric negation there are structural differences between affirmatives and negatives in addition to the presence of the negative marker. "In symmetric paradigms one finds a one-to-one correspondence between the members of affirmative and negative paradigms, whereas in asymmetric paradigms there is no such one-to-one correspondence" (MIESTAMO 2005: 52). The A-Cat type is an asymmetry where negatives differ from affirmatives in how grammatical categories are marked, A-Cat-TAM indicates that the marking differences occur in tense-aspect-mood (MIESTAMO 2005).

3.2 Negation in non-declaratives

Some non-declaratives (such as questions) use the same negator as declaratives, **ur**, some don't: the negative optative has a compound negator, **awər**, probably grammaticalized from the potential preverb **ad** and the negator **ur** (CHAKER 1983: 242), and some negative oaths are formed with the conjunction **ma** 'if' and the positive perfective, others with **ur** and the negative perfective. Interaction of mood and negation is intricate and involves morphemes, prosody, as well as MAN stem alternations.

Imperatives in Kabyle have an aorist (14) or imperfective (15) stem and an imperative pronominal paradigm (IMP).



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (14) **t-nna = jas** *ini-mt = as /*
 SBJ3.SG.F-say:PFV=DAT3.SG *say:AOR-IMP.2PL.F=DAT.3.SG*
 'She said "tell him"' (KAB_AM_NARR01_0135)

The use of an imperfective imperative expresses nuances of intensivity, with either insistence, solicitude or politeness effects, similar to the 'do-imperative' in English.

- (15) **yur-m** *tthadar-Ø* **iman-im**
 AT.HUM-PREP2SG.F *take_care:IPFV-IMP2SG* self:ABSL.SG.M-POSS2SG.F
 'Beware, do take care of yourself' (field notes)

Prohibitives (see also 7.1.3) use the same imperative pronominal paradigm, but the stem must be in the imperfective, it cannot be in the aorist.

- (16) **ur** **ug#** **ur** *ttugad-mt* **ara //**
 NEG FS NEG *be_afraid:IPFV-IMP.2PL.F* POSTNEG //
 'Don't be afraid.' (KAB_AM_NARR_01_0750)

- (17) **t-nna = jas** **mɣna** **ur = s** *qqar-mt* **ara /**
 SBJ3.SG.F-say:PFV=DAT3.SG but NEG=DAT3.SG *tell:IPFV-IMP2PL.F* POSTNEG /
 'She said "however don't tell (your father)..." (KAB_AM_NARR01_0132)

Positive hortatives are a complex construction involving both the **ad** + aorist form in the first plural subject bound pronoun (ST) and the second person plural imperative suffix (IMP).

- (18) **kkar-mt** **ad** *n-qq^wl-mt* **ar**
 stand:AOR-IMP2.PL.F POT *SBJ1.PL-come_anew:AOR-IMP2.PL.F* until
ansi = dd **n-kka //**
 from_where=PROX SBJ1.PL-originate:PFV //
 'Wake up and let's go back to where we started' (KAB_AM_NARR01_0881)

The negative hortative is expressed by the preverbal negator and an imperfective stem, with the standard first person plural bound pronoun and the imperative plural suffix:

- (19) **ur** *n-ttuyal-mt* **ara!**
 NEG *SBJ1.PL-come_anew:IPFV-IMP2.PL.F* POSTNEG
 "Let's not go back!!" (elicitation)

The positive optative has the same form as a general potential: preverb **ad** followed by an aorist stem, and the third person singular masculine pronoun. In



AMINA METTOUCHI

Negation in Kabyle (Berber)

its most frequent contexts (religious expressions), the subject pronoun is expanded through the use of the noun **R^ʕɛbbi** ‘God’ in postverbal position.

- (20) **i-mmūt** **ad = t** **i-rħəm** **R^ʕɛbbi**
 SBJ3.SG.M-die:PFV POT=ABSV.3SG.M SBJ3.SG.M-bless:AOR God:ANN.SG.M
 ‘He died, may God have mercy on him’ (KAB_AM_CONV01_SP1_224)

The negative optative is a special dedicated construction involving the compound negator **awər**, and the aorist stem with standard subject bound pronouns. It is the only negative context where the aorist is possible in Central Kabyle.

- (21) **awər** **t-ʕəʃq-d^ʕ** **dg** **wzru**
 NEGOPT SBJ2-fall_in_love:AOR-2SG STATLOC rock:ANN.SG.M
mulaʃ **ad = t** **t-bibb-d^ʕ**
 otherwise POT=ABSV.3SG.M SBJ2-carry_on_back:AOR-2SG
 ‘may you not fall in love with a rock: you might have to carry it’
 (from a novel by S. Sadi, Askuti, p.113)

Negative oaths, when they are in the negative perfective with **ur**, have a special intonation profile (an extra-high F0 and Intensity peak on the negator), and lack a postverbal ‘reinforcement’ (see part 5.1.1.). They can be interpreted as an oath that a given situation is/was not the case, or an oath that a situation will not be the case.

- (22) **wəllaʃ** **a** **jssi /** **ur = dd** **zwiɣ-y /**
 by_God VOC daughter:ABSL.PL.F NEG=PROX marry:PFVNEG-SBJ.1SG /
alamma **t-əkks = dd /** **fat^ʕima tuhr^ʕift /**
 until SBJ.3SG.F-remove:PFV=PROX / Fatima clever /
ayrum **g** **udkk^wan //**
 bread:ABSL.SG.M LOC shelf:ANN.SG.M //
 ‘I swear I won’t marry until Clever Fatima grabs the bread on the shelf’
 (KAB_AM_NARR_01_0086-91)

The same interpretations are valid for another construction involving the use of a hypothetical, **ma** ‘if’, followed by the positive perfective. In this case, the structure works like the apodosis-less protasis of a conditional clause: “if P happens/is the case (then I be damned)”. The ‘negative’ interpretation is a pragmatic inference, sustained by the prosodic profile of the utterance, rather than a semantic value. This construction tends to be the most frequent in everyday interactions.



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (23) **ahqqa** **Rʔbbi** **ma** **ssn-y = t //**
truth:ABSL.SG.M God:ANN.SG.M if know:PFV-SBJ1.SG=ABSV3.SG.M //
‘Truth be to God I don’t know him’ (KAB_AM_CONV01_SP2_080)

3.3 Configuration of the A-Cat-TAm asymmetry and semantics of the MAN system of Central Kabyle

In sum, while the aorist and the positive perfective are frequently used in positive contexts, they are excluded from negative ones in declarative sentences. Only in the (very unfrequent) negative optative can the aorist appear, with a dedicated negator (adding a constructional asymmetry to the paradigmatic one). On the other hand, the ‘negative perfective’ can be used in positive (hypothetical or persistive) contexts as a counterfactual.

Although all MAN stems can therefore, in principle, appear in positive as well as in negative contexts (there are no specifically ‘negative’ or ‘positive’ aspect-mood stems in Central Kabyle despite the misleading label ‘negative’), not all MAN constructions can: **ad + aorist** can only be used in positive contexts. Moreover, the function and discourse frequencies of each construction differ widely in negative as opposed to positive contexts (compare Tables 3 and 4). We therefore have a paradigmatic asymmetry that can be interpreted, in terms of frequency, as opposing mainly a tripartite subsystem in the positive (perfective, **ad + aorist**, imperfective) to a bipartite one in the negative (negative perfective, imperfective), with a number of modal values of the **ad + aorist** form (future, potential, tendencial...) being taken over by the imperfective in negative contexts.

An explanation for this situation is that in asymmetrical systems such as the Central Kabyle one, MAN stems have abstract semantics that preexist to their use in positive vs negative contexts, and are shaped by their contexts of use (METTOUCHI 1995).

In that perspective, the semantics of the imperfective are not “habitual” or “progressive”, since those readings are already informed by their occurrence in positive (actual) contexts (indeed, “habitual” or “progressive” imply the repeated or ongoing realization of an activity). Instead, the abstract semantics of the imperfective, before the stem enters into a positive or negative construction, can be expressed as “non-attainment of a construed representation of a situation”. In a positive construction, this translates as “the activity is under way but not completed” (e.g. ‘he is drawing a’ means that the person is drawing something which he intends to be a circle, but that the circle is not completed). In a negative construction, this translates as “an activity is under way, but it is not the one we had in mind” (e.g. ‘he’s not drawing a circle, he’s lazily doodling’), or as “an activity is considered, but rejected as not wished for” (e.g. “No way! He’s not



AMINA METTOUCHI

Negation in Kabyle (Berber)

drawing a circle! We had agreed on keeping this page blank”). Negative imperfective constructions involve competing viewpoints/representations about an activity, while positive imperfective constructions are about the degree or mode of correspondence between the targeted activity, and actual reality, and they take on various shades of contextual meaning: incompleteness, progressivity, conativity, iterativity or habituality.

Similarly, interpreting the ‘negative perfective’ as a counterfactual (i.e. “the construed situation is the exact opposite of what is actually the case”) and the ‘perfective’ as a factual (i.e. “the construed situation perfectly fits what is actually the case”) helps understand their different readings in an asymmetrical system.

If we adopt this perspective, we can then explain the fact that the *ad + aorist* form is not allowed in negative contexts in Central Kabyle (although it is, in other Berber languages). What both the negative perfective and the imperfective possess that *ad + aorist* lacks in Central Kabyle, is the possibility of construing, at the same time, two competing representations of the situation.

The *ad + aorist* form focusses on the potential or tendency to occur of a situation, in the past, present or future, without considering its actual occurrence or non-occurrence. There is no other option or alternative, it is a “flat”, monovalent construal. On the contrary, both the negative perfective (as a counterfactual) and the imperfective (as a ‘non-attained construed situation’) have that property, of keeping an alternative <P vs. non-P> at the core of their semantics. This possibility of holding together what might be and what actually is makes the negative perfective and the imperfective the natural aspect-mood stems for combination with negation, in an asymmetrical system like the one of Central Kabyle.

There is no reason to suppose that all A-Cat-TAM asymmetries are governed by the same functional features. The semantic configuration presented above (see also METTOUCHI 1995, 2009a) is language-internal: it is the result of diachronical processes that take on synchronic values, based on the resulting systemic oppositions. Other Berber languages, despite having similar MAN forms, have different MAN asymmetries with respect to negation, arising from internal innovations and innovations resulting from contact with other languages (see part 6); they each have to be explained in their own right, and their MAN forms have to be analyzed within their own systems of opposition. The fact that the *ad + aorist* construction is possible in negative contexts in Tashelhit (Northern Berber, South Morocco) points to a different function of that form in that language (despite some shared semantic features with the Kabyle construction). This is supported by the fact that Tashelhit extensively uses the unpreverbed



AMINA METTOUCHI

Negation in Kabyle (Berber)

aorist as a sequential or dependent form in narratives, a function that is only micro-residual in Central Kabyle.

3.4 Negation in dependent clauses: (restrictive) subject relativization

Whereas complement clauses and reported speech involve no special dedicated verb form in negative contexts, restrictive relative clauses (for subject relativization) do. Descriptive relativization is mainly marked by an appositive construction (GALAND 1988). A survey of relativization strategies across Berber can be found in METTOUCHI (2017b).

In Kabyle, restrictive negative relativisation of all roles except the subject role involves the use of standard preverbal negation **ur**, with no relativizer in the case of direct objects (indirect object relativizations, as well as locative ones involve a relativizer).

Restrictive subject relativization has an invariable form in Central Kabyle, for both genders and both numbers.

Positive restrictive subject relativization is marked by an invariable circumfix, **i/Ø-stem-n** (a form based on the third person masculine of the verb **i-stem** (or **Ø-stem** for quality (=adjectival) verbs)), suffixed with **-n**):

- (24) **jrna** **n-ħwəɖ** **tamtʰtʰut**
 moreover SBJ1.PL-need:PFV woman:ABSL.SG.M
ara = aɣ **iwansn //**
 REL.IRR=ABSV1.PL keep_company:AOR:RELSBJPOS
 'Moreover, we need a woman who will keep us company' (KAB_AM_NARR01_0054)

Negative restrictive subject relativization is marked by a different invariable prefix, **n-stem**:

- (25) **i** **wmyar** **ur** **nsfi** **ara /**
 DAT old_person:ANN.SG.M NEG possess:PFVNEG:RELSBJNEG POSTNEG /
ur **nɜfiid** **ara /**
 NEG be_strong:PFVNEG:RELSBJNEG POSTNEG
 'To a poor and feeble old' (KAB_AM_NARR03_1064-65) (lit. to an old man who doesn't own a thing, who isn't strong)



AMINA METTOUCHI

Negation in Kabyle (Berber)

POSITIVE RESTRICTIVE SUBJECT RELATIVIZATION	NEGATIVE RESTRICTIVE SUBJECT RELATIVIZATION
i-stem-n	n-stem
awtul/iwtal/tawtult/tiwtal izədyn rabbit:SG.M (PL.M/SG.F/PL.F) live:PFV:RELSBJ.POS	awtul/iwtal/tawtult/tiwtal ur nzdiy rabbit:SG.M (PL.M/SG.F/PL.F) NEG live:PFVNEG:RELSBJ.NEG
dinna there 'the (male/female) rabbit(s) who live(s) there'	dinna there 'the (male/female) rabbit(s) who doesn't/don't live there'

Table 5 – Subject restrictive relativization forms in Kabyle

This constructional asymmetry between positive and negative restrictive subject relativization is due to the reanalysis as a main verb prefix, of the suffixed **-n** of the negative stative verb ***wər** (PRASSE 1972: 244). The preverbal negator indeed still functions as a verb in Southern and Eastern Berber, as shown by a Zenaga example⁹ from TAINE-CHEIKH (2011: 541)

- (26) **tānmäräg** **əd** **tmint**
resemble:PFV:3.SG.F COM someone:F
- (a) **täkkunfä-n** (b) **wär-än** **tukkunfih**
be_rested:PFV:RELSBJ:3.SG.F NEG:RELSBJ be_rested:PFVNEG:3.SG.F
- 'She looks like someone (a) who is rested / (b) who is not rested'

Each Berber language has its own configuration for restrictive subject relativization. Kabyle is the most radical system as it only has one form of restrictive subject relativization regardless of number and gender in the positive domain, and one as well in the negative domain. Other languages show more variation according to gender and/or number, such as Adagh Tuareg (Mali) in which the oppositions are the following:

GENDER-NUMBER	POSITIVE	NEGATIVE
F.SG	t-stem-ät	wär ät-stem
M.SG	stem-än	wär än-stem
PL	stem-nin	

Table 6 – Subject relativization forms in Adagh Tuareg

This constructional asymmetry, even if it is the product of a reanalysis, nevertheless underlines the general tendency of several Berber languages to synchronically treat negative utterances differently from positive ones.

⁹ Glosses translated from French.



AMINA METTOUCHI

Negation in Kabyle (Berber)

The distinction between specific and non-specific restrictive negative relative clause, which depends on the presence or absence of postverbal marker **ara**, is analyzed in 5.1.5.

3.5 Negation and clitic climbing

Another constructional asymmetry in verbal clauses is created by clitic climbing. The default position of the string of clitics¹⁰ in Central Kabyle is as enclitics to the verb. When the verbal negator **ur** appears, the string of clitics attaches as an enclitic to that new host.

- (27) **i-nna = jas** **nkk** **win-iw**
 SBJ.3SG.M-say:PFV=DAT.3SG IDP1SG the_one.SG.M-POSS1.SG
wwi-y = as = dd **g** **wəxxam //**
 bring:PFV-SBJ.1SG=DAT.3SG=PROX LOC house:ANN.SG.M //
ur = as **ttak-Ø** **ara //**
 NEG=DAT.3SG give:IPFV-IMP2SG POSTNEG
 'He said "mine (=my mule), I brought (fodder) for her at home (= I fed her myself).
 Don't feed her"'. (KAB_AM_NARR02_352-53)

Clitic climbing is also triggered by potential (mood-aspect) preverb **ad**,¹¹ and by cleft pronouns, and relativizers (relative clauses can modify nouns but they also complement indefinites in interrogative clauses). There is no clitic climbing after **ma** 'if', even when used in negative oaths. Clitic-climbing is linked to the head status of the host: the verb is the default head of the clause, but its head status is superseded in Central Kabyle by the MAN and Dependency markers just listed above.

Here again, the existence of clitic climbing depends on the Berber language: some have lost it completely, others show partial climbing.

4. Negative lexicalizations and stative predications

Negative lexicalizations cover in great part the negation of non-verbal predicates. The positive non-verbal predicates have been presented in 2.2.2. Non-verbal predicates are varied and frequently used in Central Kabyle. In the negative domain, two main negators are used, **matʃi** and **ulaʃ**. The first one is used for

¹⁰ In the invariable order: 1-indirect object, 2-direct object, 3-proximal or distal particle.

¹¹ As well as by some other mood-aspects preverbs (such as simultaneous preverb **la**) in some Central Kabyle varieties.



AMINA METTOUCHI

Negation in Kabyle (Berber)

equation, inclusion, attribution, the second one is used for existential, locative and possessive predications.

As an indication of the relative frequencies of verbal and non-verbal negations in connected speech, two homogeneous samples, one conversational (30 minutes) and the other narrative (40 minutes), show the following proportions:

	ur (verbal)	maɣɣi (ascriptive)	ulaɣ (existential)
Conversation 30mn	60 (65.2%)	17 (18.5%)	15 (16.3%)
Narratives 40mn	85 (56.7%)	23 (15.3%)	42 (28%)

Table 7 – Indicative frequencies of verbal and non-verbal negations in two sample recordings

4.1 maɣɣi

This negator is borrowed from the Arabic circumfix **ma---fi**, which can be used in front of nouns and adjectives under the form **mafi** (see HEATH 2013: 248 for its form in Moroccan Arabic). Kabyle has geminated affricates **ɣɣ** instead of fricative **ɣ**, showing the insertion of that negator in the system of Kabyle, where it is not considered as an Arabic loanword, and is extensively used by Kabyle monolinguals.

4.1.1 Stative predication

Negation of equation/attribution/inclusion is marked by **maɣɣi**, followed by copula **d** if the following element is nominal (28) or adjectival (29).

(28) ɣalɣija-nni / **maɣɣi d jmma-s ##**
Aldjiya-SHAREDREF / NEG.ATTR COP mother:ABSL.SG.F-KIN3.SG ##
'This Aldjiya, she was not his mother ...' (KAB_AM_CONV_01_SP3_04-05)

(29) **ma d aqdim ny maɣɣi d aqdim**
if COP old:ABSL.SG.M or NEG.ATTR COP old:ABSL.SG.M
'Whether it be old or not' (KAB_AM_NARR03_0789)

If the negated element is adverbial, then it immediately follows **maɣɣi**:



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (30) $\int fi - \gamma = dd$ $at^s as$ *matfifi* $\int it^s uh$ /
remember:PFV-SBJ.1SG=PROX a_lot NEG.ATTR a_little /
'I remember a lot of things, indeed' (lit. I remember a lot, not a little) (Recorded conversation)

- (31) *matfifi* **akk-agi** **zik-nni** /
NEG.ATTR thus-DEICT long_ago-SHAREDREF /
'It wasn't like this in the past' (KAB_AM_NARR_03_0562)

This is also the case when *matfifi* introduces a correction:

- (32) **fk = as** **ayrum** / *matfifi* **lgat^so** //
give:AOR.IMP2SG=DAT3.SG bread:ABSL.SG.M / NEG.ATTR cake:ABSL.SG.M
'Give her bread, not' (field notes)

4.1.2 Clefts

Most of the occurrences of *matfifi* in discourse are actually in the context of negative clefting, where the choice of the "semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition" (definition of focus, by LAMBRECHT 1994: 213) is rejected by the speaker.

- (33) *matfifi* **d** **baba** **afli** **i = tt**
NEG.ATTR COP father:ABSL.SG.M Afli REL.REAL=ABSV.3SG.F
juyn //
take:PFV:RELSBJ.POS //
'It's not father Ali who married her'. (KAB_AM_CONV_01_SP1_131)

The positive 'equivalent' of this cleft is:

- (33') **d** **baba** **afli** **i = tt** **juyn** //
COP father:ABSL.SG.M Afli REL.REAL=ABSV.3SG.F take:PFV:RELSBJ.POS
'It's father Ali who married her'. (elicitation)

4.1.3 Metalinguistic negation

Metalinguistic negation is expressed by the non-verbal ascriptive negation:

- (34) *matfifi* **nk** **ad** **xddm-γ**, **nitnti** **ad** **smuqul-nt**
NEG.ATTR IDP1SG POT do:IPFV-SBJ1.SG, IDP3.PL.F POT watch:CAUS:IPFV-SBJ3.PL.F
'No way it's going to be me working and them watching' (example from CHAKER (1983: 240))



AMINA METTOUCHI

Negation in Kabyle (Berber)

Matɣfi typically rejects a presupposition concerning identity, class inclusion and property attribution, with a noun (or an adjective) in its scope. It also typically rejects a presupposition concerning the choice of a characterization in terms of quantity, time, manner, and rejects the association of a focus to a presupposition in negative clefts.

It's a contradictory judgement (in the sense that it involves competing viewpoints on a referent, situation, etc.). In this sense, it is semantically close to the negation of imperfectives as described in 3.3 (see also METTOUCHI 1995, 2003, 2006 and 2009a for a development on the link between attribution and imperfective in negative contexts).

4.2 *ulaɣ*

This marker is composed of the standard negator **ur** and a collocate meaning 'be' or 'exist', like the majority of negative existentials in VESELINOVA's language sample (2013:139). KAHLUCHE (2000) and BRUGNATELLI (2010), have decomposed it into **ur - illi - ɣa** (NEG - exist(PFVNEG) - thing).

4.2.1. Negative existential predication

The construction involves the existential negator **ulaɣ**, with the referent of the inexistent element being a noun in the absolute state, generally following the existential negator (but sometimes preceding it):

- (35) **ulaɣ aybɪ**
 NEG.EXS problem:ABSL.SG.M
 'no problem!' (KAB_AM_NARR02_511)

The positive 'counterpart' of negative existentials is a fully verbal predicate, with verbe **ili** 'exist', and the argument referring to the existing element in the annexed state:

- (35') **i-lla uybɪ**
 SBJ3.SG.M-exist:PFV problem:ANN.SG.M
 'There is a problem' (elicitation)

Depending on the noun phrase, all types of referents can be predicated as inexistent (here an indefinite noun grammaticalized as interrogative pronoun, followed by an *irrealis* relative clause):



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (36) **nna-nt = as** **a** **wltma** **ulaɣ**
say:PFV-SBJ3.PL.F=DAT3.SG VOC sister:ABSL.SG.F NEG.EXS
aɣu **ara** **n-əɣɣ**
what REL.IRR SBJ1.PL-eat:AOR
‘They said “O sister there’s nothing for us to eat”’ (KAB_AM_NARR01_0321)

The negative existential is formally and constructionally different from standard negation, as in the majority of languages in VESELINOVA’s sample (2013: 116).

4.2.2 Negative locative predication

Negative locative predication is distinct from negative existential in that the construction obligatorily takes a referential bound pronoun belonging to the absolutive paradigm, as the argument representing the absent referent (as opposed to the inexistent referent in 4.2.1).

- (37) **i-kkr = dd** **j-uɣa = dd** **jssi-s**
SBJ3SG.M-stand:PFV=PROX SBJ3SG.M-find:PFV=PROX daughter:ABSL.PL.F-KIN.3SG
ulaɣ = itnt
NEG.EXS=ABSV.3PL.F
‘He woke up and found that his daughters were not there (had disappeared)’
(KAB_AM_NARR01_0901)

The negative locative predication doesn’t express the inexistence of a referent (as the negative existential predication in 4.2.1 does), but it predicates absence in a given location (here the house), of a referent whose existence is presupposed (the man’s seven daughters), and represented by the absolutive pronoun **-(i)tnt**.

4.2.3 Negation of possessive predication

Negation of possessive predication is composed of **ulaɣ** followed by the prepositional predicate **dg** (from stative-locative preposition ‘inside’) suffixed with a bound pronoun belonging to the prepositional paradigm,¹² and a noun in the absolute state. The pronoun represents the possessor (actually the ‘locator’) relative to which the noun in the absolute state is situated.

¹² See METTOUCHI 2017a for the list of pronominal paradigms.



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (38) **Az^ʔawan** **n** **id^ʔbbaln** **i-s^ʔfa**
 music_type:ABSL.SG.M GEN ceremonial_musician:ANN.PL.M SBJ3.SG.M-be_pure:PFV
am **waman,** **ula^ʔ** **dg-s** **imslajn**
 like water:ANN.PL.M, NEG.EXS STAT.LOC-3SG word:ABSL.PL.M
 'The Azawan type of music played by festive bands is pure like water, it
 lacks/doesn't have lyrics' (lit. there are no lyrics inside it)
 (Newspaper article from the Dépêche de Kabylie - 10 August 2015, transcription
 adapted)

The positive 'counterpart' of the possessive locator predication is the prepositional predicate **dg** suffixed with a bound pronoun belonging to the prepositional paradigm, and a noun in the absolute state:

- (38') **Urar,** **dg-s** **imslajn**
 festive_song:ABSL.SG.M, STAT.LOC-3SG word:ABSL.PL.M
 'As for *urar* (the festive song type), it has lyrics'. (elicitation)

In sum, **ula^ʔ** typically asserts the absence of a referent: its absolute inexistence, as well as its absence at a given location (like 50% of languages in VESELINOVA 2013), and the lack of something inside the referent, interpreted as possessive negation (like 84% of the languages in VESELINOVA 2013). Like 33% of the languages in that same sample, it is not marked for tense, and it can be used as a negative reply for emphatic rejection (cf. part 5) like 16% of the languages of the sample.

Existential negation is semantically close to the negation of perfectives ('situation X is not the case') as described in 3.3, which can be paraphrased as 'absence of an expected situation' (see also METTOUCHI 1995, 2003, 2006 and 2009a for a development on the link between existential and perfective in negative contexts).

4.2.4. Other compounds involving **ula-**

These compounds are:

- ula^ʔħədd** 'there's no one' (**ħədd**: one (Arabic loanword))
- ula^ʔjər** 'there's no reason/point' (**ajər**: why)
- ula^ʔmək** 'there's no way/means' (**amək**: how)
- ula^ʔansi** 'there's no path/way' (**ansi**: through/from where)
- ula^ʔanda** 'there's no place' (**anda**: where)
- ula^ʔwumi** 'there's no goal' (**umi**: to what/whom)



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (39) **t-zzi** **i** **wɔyay-nni**
 SBJ3.SG.F-circle:PFV LOC rock:ANN.SG.M-SHAREDREF
ulansi = s **t-kk** **t-r^huħ //**
 exist_no_way=3.SG SBJ3.SG.F-penetrate:PFV SBJ3.SG.F-leave:PFV
 'She circled around the rock, there was no way through, so she left' (oral folktale told by T. Rabia)

Another frequent compound involving **ulaɣ** is **mulaɣ** 'otherwise' (<ma 'if' + **ulaɣ**), used as a conjunction:

- (40) **ad** **t-ddu** **jid-i** **a::: /**
 POT SBJ3.SG.F-accompany:AOR COM-1SG HESIT /
ad **ks-y** **aɣmmaɣ /**
 POT pasture:AOR-SBJ1SG herd:ABSL.SG.M /
mulaɣ **ad = iji = t** **j-awi** **wuɣɣn //**
 otherwise POT=DAT1.SG=ABSV.3SG.M SBJ3.SG.M-carry:AOR jackal:ANN.SG.M //
 'She can come with me, I'll take the sheep to pasture, otherwise the jackal may kill some of them' (KAB_AM_NARR03_0482-0484)

4.3 Attribution, existence and the semantic space of negation in Kabyle

The way a system is deployed in a particular language in synchrony is the temporary result of competing diachronic forces (internal innovation, sociolinguistics, contact etc.). However, once this is stabilized into a system of oppositions, it is relevant and important to study its organization in a language-internal perspective, in this case in Central Kabyle, which represents one among many configurational possibilities arising from the complex network of cognitive operations underlying negation.

The system of negation in Central Kabyle, manifested by a binary distinction between refusal of attribution (**maɣɣi**) and denial of existence (**ulaɣ**) in non-verbal predicates, and a binary distinction between rejection of a characterization (**ur** + *imperfective*) and denial of the occurrence of an event or situation (**ur** + *negative perfective*) in verbal predicates, is the linguistic configuration through which the cognitive operation of negation is grammaticalized in this particular language (and some other languages in the world, cf. METTOUCHI 2006 and 2009a).

It reflects two aspects of negation that have long been discussed in philosophical literature (by KANT (around *Widerschreit*, 1795, 1798), HEGEL (around *Aufhebung*, 1817), FREUD (around *Verneinung*, 1925)), among others), and that



AMINA METTOUCHI

Negation in Kabyle (Berber)

one can summarize with FREUD (1925)¹³ in the following way: "The judgment function basically has two decisions to make. It must verbally assign or remove a property to a thing, and it must grant or challenge the existence of a representation in reality". This opposition has been commented on by HIPPOLYTE (1966 (1954)) as involving a "judgement of attribution" and a "judgement of existence", and further developed in linguistics by CULIOLI (1990) and DANON-BOILEAU (1994).

"1. There is a primitive operation of negation linked on the one side to subjective evaluation (good/bad, hence rejection, refusal) and on the other to spatio-temporal location (presence/absence, emptiness, appearance/disappearance, iteration). [...]

2. Derived from that primitive negation by a process of complexification, there is an operation of negation, here called elaborate negation, linked to the construction of categorial representation systems known as notional domains. " CULIOLI (1990: 112)¹⁴

This elaboration of the semantics of negation stems from a different tradition than the developments found in HORN (1989), which are mostly based on propositional logics. The logical approach to negation reflects symmetrical negation systems, but viewed from the perspective of an asymmetrical negation system, it greatly reduces the complexity underlying linguistic negation. Freud's approach and its adaptation to linguistic perspectives develop aspects of negation which are more relevant to asymmetric systems.

Not all languages grammaticalize (i.e. encode in their grammar) all the potentialities of the complex cognitive operation of negation and all its related features. In the case of Kabyle, the semantic features grammaticalized in the system through the articulated opposition (attribution-imperfective) vs. (existence-perfective) are the dimensions that Culioli calls "subjective evaluation" and "spatio-temporal location".

¹³ English translation by A. Mettouchi, from original text: "Die Urteilsfunktion hat im wesentlichen zwei Entscheidungen zu treffen. Sie soll einem Ding eine Eigenschaft zu- oder absprechen, und sie soll einer Vorstellung die Existenz in der Realität zugestehen oder bestreiten".

¹⁴ English translation by A. Mettouchi, from original text: "1. Il existe une opération primitive de négation liée d'un côté à la valuation subjective (bon/mauvais d'où rejet, refus) et de l'autre à la localisation spatio-temporelle (présence/absence; vide; apparition/disparition; itération) [...] 2. Dérivée de cette négation primitive par un processus de complexification, il existe une opération de négation, appelée ici négation construite, liée à la construction de systèmes de représentation catégorielle dit domaines notionnels [...]".



AMINA METTOUCHI

Negation in Kabyle (Berber)

4.4 mazal

This lexicalization (cf. VESELINOVA 2015) comes from Classical Arabic **ma-zaal** (lit. 'not-cease', decomposable into negative **ma** and an inflected perfective triliteral verb **zal** (**zaal**)) (cf. HEATH 2013:248)).

In positive utterances, followed by a perfective, imperfective or the **ad** + *aorist* form, it is interpreted as a persistive (METTOUCHI 2017a).

- (41) **yas akkn abrid mazal-it i-d^sul!**
even thus path:ABSL.SG.M not_cease-ABSV.3SG.M SBJ3.SG.M-be_long:PFV!
'even if the path is still long' (even if it's still a long way)
(Newspaper article from the Dépêche de Kabylie - 10 August 2015, transcription adapted)

- (42) **nk^wni mazal n-ttyaffar**
IDP1.PL not_cease SBJ1PL-visit:IPFV
'As for us, we still practise the ritual family visit' (conversation in 1992 corpus)

- (43) **mazal ad t-rnu-d^s?**
not_cease POT SBJ2-add:AOR-2SG?
'Are you going to continue like this?' (field notes)

However, when followed by a negative perfective, it can take on an antiresultative meaning of the "not yet" type:

- (44) **mazal i-rkid wallay-is**
not_cease SBJ3SG.M-be_calm:PFVNEG brain:ANN.SG.M-POSS3.SG
'Her brain wasn't settled yet' (S. SADI, *Askuti* (novel), p.128)

This "not yet" antiresultative reading also applies when **mazal** is followed by negator **ur**:

- (45) **mazal ur = dd i-kjim ara //**
not_cease NEG=PROX SBJ3SG.M-enter:PFVNEG POSTNEG
'He's not back home yet' (KAB_AM_NARR01_0464)

But if it is **mazal** itself which is negated with the standard negator **ur**, it takes on an antiresultative meaning of the 'no longer' type:



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (46) *ur mazal ara ad = tt s-ḥəddi-n*
 NEG not_cease POSTNEG POT=ABSL.3.SG.F CAUS-pass:AOR-SBJ3.PL.M
fəll-ay am zik.
 on-1PL like early

'They will no longer trick us like they used to before' (S. SADI, *Askuti* (novel) p. 73)

5. Other aspects of negation: negative reinforcement, grammaticalization, and status of the negative statement

Negation in Kabyle is often presented as a "discontinuous morpheme" (CHAKER 1983, NAÏT-ZERRAD 2001), whereas actually, only the preverbal element is the proper negation, the postverbal one being a former nominal in the process of grammaticalization, but not compulsory. The contexts in which it doesn't appear are marked ones, a fact that contributes to the perception of its presence as the 'default' situation. Studying the contexts of occurrence and absence of the postverbal marker *ara* is crucial in order to better understand its value. The following development is expanded from METTOUCHI 1996, 2001, 2006 and 2009a.

The source of preverbal negator *ur* is debated, the most widely accepted hypothesis, dating back from LOUBIGNAC (1924) is that it originally was a verb, no longer used in Kabyle but found in residual contexts in Tamazight (Northern Berber, Central Morocco) under the form *uɫ*, meaning 'be empty, be desert'. Another hypothesis, developed by GALAND (2010), is that the original verb was in fact *iri* 'want, desire'.

As for *ara*, most studies consider it as a cognate of Ahaggar Tuareg *hərāt* 'thing' (CHAKER 1996), while BRUGNATELLI (2006) links it to preposition *ar*, 'until', and GALAND (2010) proposes the verb *iri* 'want, desire' as a source for *ara*, thus relating the preverbal and postverbal markers of negation as stages in a grammaticalization process.

For a survey of various hypotheses on negators in Berber, with references, see METTOUCHI (2012a and 2014a).

5.1 *Ur only*

5.1.1 Oaths and absolute (/hyperbolic) negations

The most salient contexts for negations with only the preverbal negator are oaths and absolute negations. They have an extra-high pitch (F0 peak) on *ur*.

Oaths have been presented in 3.2, the following example (47) is in the perfective, with *ur*. *Ara* is possible in utterances containing *wəlləfi* 'by God' (47), but in



AMINA METTOUCHI

Negation in Kabyle (Berber)

that case the clause is in a separate intonation unit, and the oath cannot refer to rejection in the future: **ara** anchors the negative utterance, it selects the *realis* dimension of the negative perfective (what is actually the case in the counterfactual construal of the situation). **Ur** alone allows the negative perfective to remain unanchored to a specific moment in time.

- (47) **wəlləf ur swi-y! //**
by_God NEG drink:PFVNEG-SBJ1SG
'I swear I didn't drink! / I swear I won't drink!' (elicitation)
- (47') **wəlləf / ur swi-y ara! //**
by_God NEG drink:PFVNEG-SBJ1SG POSTNEG
'I swear I didn't drink!' (elicitation)

Other types of absolute negations are expressed by **ur** alone, they typically contain a fronted adverbial complement allowing the scanning of a period of time for which the construed representation (<we/go outside> in example (48)) has not occurred.

- (48) **dgwasmi = dd kəf-m-y ar dagi ur n-ffiy**
from_day=PROX enter:PFV-SBJ1.SG to here NEG SBJ1.PL-exit:PFVNEG
'From the moment I entered this place here, we never went outside'
(oral folktale told by T. Rabia)

5.1.2 Indefinite nouns

Another context where **ur** appears on its own is when indefinite nouns are subjects or objects of the predication.¹⁵ As there are no dedicated negative indefinites such as English 'nobody/nothing', and no positive ones of the 'something/someone' type either, Central Kabyle uses weakly grammaticalized non-specific nouns or numerals, such as **jiwən/ jiwət** ('one'), or **kra**¹⁶ ('thing', 'small amount'):

- (49) **jiwn ur = k = t = idd i-kkis /**
one:ABSL.M NEG=DAT2SG.M=ABSV3.SG.M=PROX SBJ3.SG.M-take_off:PFVNEG /
'No one will take it off from you' (Oral folktale told by T. Rabia)
- (50) **aq3ir^f-is akkn kra ur = t j-uy //**
leg:ABSL.SG.M-POSS3.SG thus little NEG=ABSV3SG.M SBJ3.SG.M-seize:PFVNEG //
'His leg was as if nothing had happened to it' (his leg was unscathed) (Oral folktale told by T. Rabia)

¹⁵ With other arguments, **ara** can appear, showing that it is indeed grammaticalizing fast as a quasi-obligatory postverbal reinforcement of negation.

¹⁶ Another (with **ara**) probable cognate of Ahaggar Tuareg **hārāt** 'thing' (BRUGNATELLI 2006).



AMINA METTOUCHI

Negation in Kabyle (Berber)

Kabyle also uses prototypical nouns representing small (construed as 'negligible') quantities, objects or beings, as reinforcements, typically related semantically to the type of verb in the clause (here 'drop' with 'drink').

- (51) **ur** **t-swi** **tiqit^f**
 NEG SBJ3.SG.F-drink:PFVNEG drop:ABSL.SG.F
 'She didn't drink a drop' (elicitation)

However, the preferred word order is here again the fronting of the indefinite nominal (52), even if with the word order in (51), the obligatory F0 peak on **tiqit^f** highlights the prototypicality of that term in this context.

- (52) **tiqit^f** **ur = tt** **i-swi**
 drop:ABSL.SG.F NEG=ABSV3.SG.F SBJ3.SG.M-drink:PFVNEG
 'She didn't even drink a drop' (field notes)

Addition of **ara** radically changes the interpretation, from indefinite representative of a class, to specific, referential member of that class. The default reading of (52') is definite ("she didn't drink the drop"), but the interpretation can also be metalinguistic, with the proper intonation ("she didn't drink (just) a drop, she drank the (whole) jug").

- (52') **ur** **t-swi** **ara** **tiqit^f,**
 NEG SBJ3.SG.F-drink:PFVNEG POSTNEG drop:ABSL.SG.F
 (**t-swa** **lbila** (**mər^fr^fa**)!)
 (SBJ3.SG.F-drink:PFV jug:ABSL.SG.F (all)!)
 'She didn't drink a drop, she drank the whole jug!' (elicitation)

In principle, any subject or object referring to a unit representing a class can be interpreted as an indefinite in the context of negation, provided that **ara** be absent:

- (53) **tawt^ft^fuft** **ur = tt** **nyⁱ-y!**
 ant:ABSL.SG.F NEG=ABSV3.SG.F kill:PFVNEG-SBJ1.SG
 'I wouldn't kill (even) an ant! (field notes)'

Example (53) above, due to the fronting of the object in the context of **ur**-only negation, with an extra high F0 and intensity peak on the second syllable of **tawt^ft^fuft**, is interpreted as referring to a potential situation: the speaker expresses his inability to kill even a tiny and supposedly unimportant being, implying his own inoffensive nature.



AMINA METTOUCHI

Negation in Kabyle (Berber)

With **ara**, as in example (53') and (53'') below, the meaning of the utterance drastically changes, reference now being to a specific, *realis* situation with an identifiable object:

(53') **tawt^tu^tft** **ur=tt** **nyi-y** **ara!**
ant:ABSL.SG.F NEG=ABSV3.SG.F kill:PFVNEG-SBJ1.SG POSTNEG
'(As for) the ant, I didn't kill it!' (elicitation)

(53'') **ur** **nyi-y** **ara** **tawt^tu^tft**
NEG kill:PFVNEG-SBJ1.SG POSTNEG ant:ABSL.SG.F
'I didn't kill the ant!' (elicitation)

The combination of prosody and word order is essential to the interpretation of the semantic and referential properties of negative utterances in Kabyle (see METTOUCHI 2009b for a detailed prosodic study of negative utterances).

5.1.3 Negative clause coordination

Positive clause coordination is done through intonation only, there being no associative clause coordinator in Central Kabyle (only the phrase coordinator **d**, which is a comitative-associative preposition). Negative coordination also requires a special prosodic pattern based on a series of rise-fall contours with a high onset on **ur**, a rising boundary tone on the penultimate coordinated clause, and a falling tone on the last clause. But contrary to what happens with uncoordinated clauses, the postverbal morpheme **ara** cannot appear, otherwise coordination is lost, and the clauses are only serially juxtaposed (intonation is then different, becoming a list intonation: each clause with a rising boundary tone, all with similar contours, the last one with a falling tone).

(54) **jrna** **lqut-nni /** **ur=km** **i-fillək**
moreover food:ABSL.SG.M-SHAREDREF / NEG=ABSV2.SG.F SBJ3.SG.M-be_ill:IPFV
ur=km **j-wqim //**
NEG=ABSV2.SG.F SBJ3.SG.M-exhaust:PFVNEG
'Moreover that food, it neither ails you, nor is insufficient for you'.
(KAB_AM_NARR03_0890-91)

This underlines, again, the anchoring value of **ara**, which gives the clause independent status as regards the preceding and following clauses. In this case, lack of **ara** allows the clauses to be interpreted in relation to each other, more than in relation to each referential situation, as is the case for the following series of negative clauses, whose pragmatic effect is more additive, reinforcing each statement with the next.



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (55) **tura** **ur** **t-zmir-d^s** **ara**
 now NEG SBJ2-be_able:PFVNEG-SBJ2.SG POSTNEG
ad **t-kf̣m-d^s** **ar** **jiwn /**
 POT SBJ2-enter:AOR-SBJ2.SG to to one:ANN.SG.M /
ur **t-zmir-d^s** **ara**
 NEG SBJ2-be_able:PFVNEG-SBJ2.SG POSTNEG
ad **t-qqim-d^s** **d** **jiwn /**
 POT SBJ2-stay:AOR-SBJ2.SG COM one:ANN.SG.M /
ur **t-zmir-d^s** **ara**
 NEG SBJ2-be_able:PFVNEG-SBJ2.SG POSTNEG
ad **t-q̣s^sṛ-d^s** **d** **jiwn /**
 POT SBJ2-discuss:AOR-SBJ2.SG COM one:ANN.SG.M /
 'Now you cannot enter someone's house, you cannot stay at someone's place, you cannot converse with anyone' (KAB_AM_NARR03_0456-0458)

Compare with (56), where the absence of **ara** creates a much more integrated view of the two predicates.

- (56) **ur = ay** **t-ttq̣r^sṛ^sh** **ṭfbbut^s-nny /**
 NEG=DAT1.PL SBJ3.SG.f-hurt:IPFV belly:ANN.SG.F-POSS1PL
ur = ay **i-ttq̣r^sṛ^sh** **uqr^sṛ^suj-nny /**
 NEG=DAT1.PL SBJ3.SG.M-hurt:IPFV head:ANN.SG.M-POSS1PL
 'Neither our bellies nor our heads would hurt' (KAB_AM_NARR03_0817-18)

Negative coordination can even occur within the same intonation unit, as in (54), which is not the case for a series of negation containing **ara**.

5.1.4 Negative subordination

The same potential for clause linking is at play in negative subordination, where the lack of **ara**, together with prosodic liaison within the same F0 contour, allows the clause to be interpreted as dependent in relation to the preceding one:

- (57) **ttm̄slaj-y** **ur** **faq-y**
 talk:IPFV-SBJ.1SG NEG realize:PFVNEG-SBJ.1SG
d **n̄ttat** **i** **illan** **d̄əffir-i**
 COP IDP.3SG.F REL.REAL exist:PFV:RELSBJPOS behind-PREP1.SG
 'I talked without realizing that it was her who was behind me' (field notes)

This again is a contrario evidence for the anchoring role of **ara**, which would give independent status to the clause.



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (57') **ttməslaj-y / ur faq-y ara**
 talk:IPFV-SBJ.1SG / NEG realize:PFVNEG-SBJ.1SG POSTNEG
d nəttat i illan dəffir-i
 COP IDP.3SG.F REL.REAL exist:PFV:RELSBJPOS behind-PREP1.SG
 'I talked, I hadn't realized that it was her who was behind me' (elicitation)

5.1.5 Non-specific restrictive negative relativization

I have already presented (3.3) the two forms of restrictive subject relativization of kabyle, one positive and the other negative. Those forms are obligatory when the subject is relativized. For other roles, word order and dedicated relativizers encode restrictive relativization. For negative restrictive relative clauses, the negator is the same as in standard verbal negation, but presence vs. absence of **ara** change the interpretation of the referentiality of the antecedent.

Absence of **ara** tightens the dependency between the relative clause and its antecedent, and allows an interpretation of the antecedent as non-specific:

- (58) **n-ħfd^s ajn ur n-ssin /**
 SBJ.1PL-learn:PFV what NEG SBJ.1PL-know:PFVNEG
n-xdm ajn ur=ay n-ʔzib /
 SBJ.1PL-do:PFV what NEG=DAT1PL RELSBJNEG-please:PFVNEG
 'We learnt what we didn't know, we did things we didn't like'
 (recorded conversation 1992)

Compare with (59), from the same conversation (and speaker), with **ara**:

- (59) **n-ttmənni nʃal^sl^saf^s araw-nny**
 SBJ1.PL-hope:IPFV God_willing offspring:ABSL.SG.M-POSS1PL
ur=dd ttaf-n ara ddunit am tagi //
 NEG=PROX find:IPFV-SBJ3.PL.M POSTNEG existence:ABSL.SG.F like this:F
 (...) **ad=dd af-n ajn i bya-n /**
 (...) POT=PROX find:AOR-SBJ3.PL.M what REL.REAL want:PFV-SBJ3.PL.M
ad=dd af-n ak^w
 POT=PROX find:AOR-SBJ3.PL.M all
ajn ur=dd n-ufi ara nk^wni zik-nni
 what NEG=PROX SBJ1.PL-find:PFVNEG POSTNEG IDP.1PL long_ago-SHAREDREF
 "We hope, God willing, that our children won't find a life like this one (=won't live a life like ours), (...) that they will find what they want, that they will find everything we didn't find ourselves in the past (=everything we weren't able to enjoy)".
 (recorded conversation 1992)



AMINA METTOUCHI

Negation in Kabyle (Berber)

In that case, the speaker doesn't mention which things they weren't able to enjoy in the past, but those things are nevertheless understood to be specific and referential, even if they remain undefined, implicit.

Non-specific restrictive relative clauses are particularly frequent in proverbs:

- (60) **win** **ur** **n-sfi** **lwali**
 who:SG.M NEG RELSBJNEG-possess:PFVNEG guardian:ABSL.SG.M
i-ttgalla **s** **xwali**
 SBJ3.SG.M-swear:IPFV INSTR uncle:ABSL.SG.M
 'He who has no father or brother (=close family) swears by his uncles'
- (61) **ulaʃ** **tirʃt** **ur** **n-sfi** **ak^wrfa**
 NEG.EXS cereal_mound:ABSL.SG.F NEG RELSBJNEG-possess:PFVNEG chaff:ABSL.SG
 'There's no (edible) grain mound without chaff'

Without **ara**, the existence of the referent of the noun is not required, the focus is on its characterization. For the first proverb, addition of **ara** would be acceptable, but would imply that the speaker is referring to an actual orphan, the philosophical dimension of the proverb would be somewhat lost. For the second proverb, **ara** would not be possible, because the negative existential **ulaʃ**, in whose scope the noun **tirʃt** is, implies that the referent does not exist, which is incompatible with the anchoring value of **ara**.

5.2 Ur ... Ara

In contrast with all the cases analyzed in 5.1, negations involving postverbal **ara** are typically factual and referential, rather than absolute or hyperbolic. The contexts where **ara** is obligatory are particularly clear in that respect.

5.2.1 Negative conditional clause

Complex clauses involving a negative condition introduced by hypothetical **ma** 'if', and a consequence represented by another clause, must contain postverbal **ara**.

- (62) (...) **ma j-bya //** **ma** **ur** **j-byi** **ara**
 (...) if SBJ3.SG.M-want:PFV // if NEG SBJ3.SG.M-want:PFVNEG POSTNEG
diyⁿni / **ur** **t-sfi-d^s** **ara** **ldrwa //**
 moreover / NEG SBJ2-possess:PFVNEG-2SG POSTNEG right:ABSL.SG.M
 "(if you wanted something, it was your husband who gave it to you) if he wanted to;
 if not, then you would not be allowed (to buy it yourself (being a woman))".
 (KAB_AM_NARR03_0323-0327)



AMINA METTOUCHI

Negation in Kabyle (Berber)

An explanation for this construction is that **ara** provides a stable starting point, a given (even if hypothetical) condition, for the construal of the consequence. It is impossible to have **ur** only, in that morphosyntactic context.

5.2.2 Deontic complement clause

Another dependent clause where **ara** is obligatory is the complement clause of deontic verb **ilaq**, 'it is necessary'.

The deontic verb **ilaq** (<i-ilaq SBJ3.SG.M-be_necessary:PFV>) is grammaticalizing as a deontic modal (see METTOUCHI 2009c). In positive utterances it is naturally followed by an **ad** + *aorist* form, but when the situation that is targeted is construed negatively (i.e. as a disfavoured option), the verb of the complement clause contains the negator **ur** and the postverbal element **ara**.

- (63) **ilaq ur t-tətsu-mt ara**
 DEON NEG SBJ2-forget:IPFV-2.PL.F POSTNEG
 "it's necessary that you should not forget (traditional cooking)" (= you must remember it)
 (YouTube cooking video on *abazin* <https://youtu.be/nNZ290Yoe18>)

The negative dependent clause must contain the postverbal negator **ara**. This can be interpreted in a similar way as for hypothetical **ma** 'if' in (5.2.1): the contents of the clause targeted by a deontic modal (involving a clearcut alternative between P and not-P) must be construed as a stable negative content.

The negation can be raised to the main clause:

- (63') **ur ilaq ara ad t-tətsu-mt**
 NEG DEON POSTNEG POT SBJ2-forget:AOR-2.PL.F
 'you shouldn't/musn't forget (it)' (elicitation)

This shows that negative transport (neg-raising) occurs in Kabyle – it is actually more frequent as a construction than having the negation in the dependent clause.

- (64) **lfadda mr's'umn ur ilaq ara**
 tradition:ABSL.SG.F establish:PFV:QLT:RELSBJPOS NEG DEON POSTNEG
ad = tt n-kkəs
 POT=ABSV3.SG.F SBJ1.PL-remove:AOR
 'Established traditions should not be altered' (DALLEY 1982: 735)

Negative transport occurs with verbs of volition and hope, as well as deontic verbs.



AMINA METTOUCHI

Negation in Kabyle (Berber)

5.2.3 Negative informative answers/statements

Similarly, but this time at the level of interaction, **ara** stabilizes the proposition, presents it as a factual statement, something that can/might be independently verified:

- (65) SP1: nna-n=dd kan j-uy sbfa //
say:PFV-SBJ3.PL.M=PROX only SBJ3.SG.M-take:PFV seven
- SP2: Lhadɣ Tʰaħarʰ **ur** j-uy **ara** sbfa //
Hajj Tahar NEG SBJ3.SG.M-take:PFVNEG POSTNEG seven
- SP1: sbfa //
seven
- SP1: it is said that he married seven women
SP2: Hajj Tahar didn't marry seven women!
SP1: he did! (KAB_AM_CONV01_SP1/SP2_040-045)

This doesn't mean that a negation containing **ara** is necessarily consensual. But its polemical charge is different from the hyperbolic dimension of **ur**-only negations: despite the disagreement, the two speakers have set up the topic of that conversation (Hajj Tahar's number of wives) as common ground.

But when the stance of the speaker is clearly grounded in the speaker's will, intention, involvement, and removed from any negotiation with the co-speaker, then **ara** is not used, as in the following declaration by the father of the seven girls, who is stating the conditions under which he considers remarrying after the loss of his first wife:

- (66) wəllaħ a jssi / **ur**=dd **zwiɣ-y** /
by_God VOC daughter:ABSL.PL.F NEG=PROX marry:PFVNEG-SBJ.1SG /
- alamma** **t-əkks=dd** / **fatʰima tuħrʰift** /
until SBJ.3SG.F-remove:PFV=PROX / Fatima clever /
- ayrum** **g** **shelf:ANN.SG.M //**
bread:ABSL.SG.M LOC shelf:ANN.SG.M //
- 'I swear I won't marry until Clever Fatima grabs the bread on the shelf'
(KAB_AM_NARR_01_0086-91)

Ara anchors the negative statement in interaction, it makes the negative statement 'negotiable'. It is a 'common ground' marker. This might be due to the nominal origin of **ara** (*'thing'), probably an ancient indefinite, cognate to Ahaggar Tuareg **ħārāt** 'thing' (CHAKER 1996), in the process of grammaticalization as postverbal negator. Its nominal dimension is still palpable in Kabyle, as shown for instance by the residual use of its annexed state form in ritual salutations:



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (67) **ur= km j-uɣ wara?**
 NEG=ABSV:2SG.F SBJ3.SG.M-take:PFVNEG thing:ANN.SG.M
 'Nothing ails you?' ('are you in good health?', lit. 'THING didn't seize you?') (field notes)

In fine, the study of the contexts of occurrence of **ur**-only versus **ur-ara** shows that **ara** is neither the suffix or enclitic of a discontinuous negative morpheme (as is the case in synchrony for *f* in spoken Maghreban Arabic varieties) nor a simple 'negative reinforcement'. It anchors the negative judgement referentially or interactionally (in a given situation, as a factual proposition), or syntactically (as an independent clause). Its use in Central Kabyle is governed by subtle, and nevertheless consistent, semantic and syntactic factors.

6. Non-clausal negation: negative replies

The neutral negative reply is **aha**, 'no', accompanied either by the negated predicate or a focussed rectification (as in example (65) above with **səbfa** 'seven'), or for stronger rejection, by a polemical/absolute negative reply: **xat^fi**, **ulaɣ** (negative existential) or **zami** (< French *jamais* 'never'). Those polemical/absolute negative replies can also be used on their own.

- (68) SP3: **nna-n= dd maɣɣi d jmma-s ə:: /**
 ɣaldɣija-nni / NEGATT COP mother-KIN3SG HESIT
urzqi-agi at mħnd //
 Arzqi:ANN-PROX son_of Mħnd
 SP1: **xat^fi // tinna / d baba aɣli i /**
 NEG++ // that_one:SG.F.DIST / COP father Ali:ABSL REL.REAL
d dadɗa waɣli i= tt= idd juɣn //
 COP elder_brother Ali:ANN REL.REAL=ABSV3.SG.F=PROX RELSBJPOS:take:PFV
 SP3: That Aljiya, isn't she his mother - Arzqi son of Mhend's mother?
 SP1: Absolutely not! That Aljiya, it's father Ali who... it's uncle Ali who married her.
 (KAB_AM_CONV01_sp3_04-06, sp1_111-120)

7. Central Kabyle negation within Berber

This analysis of the properties of negation in Central Kabyle can usefully be put into perspective by a brief survey of its position within the whole of the Berber family, whose internal variation is comparable to that within Germanic or Romance, and which is characterized by various levels and types of A-Cat-TAM asymmetry.



AMINA METTOUCHI

Negation in Kabyle (Berber)

7.1 A-Cat-TAM asymmetry

7.1.1 Systemic oppositions

Details on the various asymmetries among Berber languages can be found in METTOUCHI (2003, 2004, 2006, 2009a, and 2012a). What characterizes Berber languages is mainly the reduction and/or asymmetry of aspect-mood forms in the negative domain as compared to the positive one.

While the stems themselves (Aorist, Perfective, Negative Perfective, Perfect, Imperfective, Negative Imperfective) are morphologically very similar across Berber, their constructions, values and systems of opposition, as well as their relative frequencies in discourse, are varied. Each system should therefore be studied in itself. Below are two tables presenting the variation and common features between Aspect-Mood systems in two languages belonging to different subbranches of Berber, Central Kabyle (Northern Berber, Algeria) and Ayr Tuareg (Southern Berber, Niger).

AORIST	PERFECTIVE	NEGATIVE PERFECTIVE	IMPERFECTIVE ¹⁷
-ddu-	-dda-	-ddi-	-ttəddu-
-krz-	-krz-	-kriz-	-kərrəz-

Table 8 – Kabyle aspect-mood stems (roots **DD** ‘accompany’ and **KRZ** ‘plough’)

AORIST	PERFECTIVE	NEGATIVE PERFECTIVE	PERFECT	IMPERFECTIVE	NEGATIVE IMPERFECTIVE
-rtək-	-rtak-	-rtek-	-rtaak-	-raattək-	-rəttək-
-gu-	-ge/a/ə- ¹⁸	-ge/a/e-	-gee/aa-	-taaggu-	-təggu-

Table 9 – Ayr Tuareg aspect-mood stems (roots **RTK**, ‘fall’ and **G** ‘do’) (GALAND 1974 (2002: 126-127))

While they don’t represent all the attested systemic possibilities, the following three summaries give an idea of the variation across Berber.

In Tashelhit (Northern Berber, Morocco, GALAND 1994), *ad ur + aorist* is the negative ‘corresponding opposite’ of the optative (*ad + aorist*), the potential (*ad + aorist* or *ad + imperfective*), and the aorist imperative. *Ur rad + aorist* is the ‘corresponding opposite’ of the future (*rad + aorist*). The imperfective, with or without preverbal particles, has *ur (a) + imperfective* as a ‘corresponding opposite’, while the perfective’s ‘corresponding opposite’ is the negative

¹⁷ Historically, the imperfective is derived from the aorist either by prefixation of **tt-**, or by gemination of the second consonant of the root, as well as by infixation of **-a-** (especially for derived forms marking various types of valency).

¹⁸ e/a/ə or ee/aa alternate depending on the PNG affix (GALAND 1974(2002:127)).



AMINA METTOUCHI

Negation in Kabyle (Berber)

perfective (when this form, which has almost disappeared, is still in use - otherwise, the general perfective is used after **ur**).

In the Tamashek (Southern Berber) varieties of Mali studied by HEATH (2005, 330-340), the prohibitive is either marked by a specific 'prohibitive stem' (very similar to the negative imperfective), bearing imperative affixes, and preceded by negator **wär**, or by **wär** followed by the negative perfective, with standard affixes (the latter construction being identical to the second person perfective negative). Commands are marked by the aorist or imperfective imperatives. The negative hortative is marked by **wär** + *prohibitive* stem, prefixed by the standard first plural morpheme, and suffixed by the hortative **-et/-het**. The negative perfective after negator **wär** is the 'corresponding opposite' of both the perfective and the perfect, while the negative imperfective is the 'corresponding opposite' of the imperfective. The **ad** + *aorist* form's 'corresponding opposite' is the form **u-mar** + *aorist* (**u-** being the reduced form of standard negator **ur**).

In Zenaga (Western Berber, Mauritania, TAINE-CHEIKH 2011), commands are expressed by the aorist stem bearing imperative affixes, while prohibitives have two constructions: one with negator **wär** followed by the regular imperfective bearing imperative affixes; the other with the construction **äd** + **wär** + *aorist*, with standard second person affixes. The negative perfective is the 'corresponding opposite' of the perfective, and the negative imperfective that of the regular imperfective, of the aorist, and of **äd** + *aorist* in main and independent clauses: in dependent clauses, **äd** + **wär** + *aorist* is the 'corresponding opposite' of positive **äd** + *aorist*.

7.1.2 'Negative' stems in Berber

The developments above, as well as the analysis of the A-Cat-TAM asymmetry of Central Kabyle, have underlined the presence of 'negative' aspect-mood forms in a number of Berber languages. A few words are needed here. In general, two forms are labelled 'negative' in Berber studies: the 'negative perfective' and the 'negative imperfective'.

The 'negative perfective' can be found in almost all¹⁹ Berber languages in the four subbranches, it is marked by an **-i-** vocalic alternation in the stem, and clearly belongs to the group of morphologically primary aspect-mood stems. There is consensus on its being an ancient form. Based on its uses in positive contexts, PICARD (1957) considers it as a former 'intensive' form whose use in negative contexts can be explained by those 'intensive' semantics, while

¹⁹ When it is not found its residual traces show that it has disappeared.



AMINA METTOUCHI

Negation in Kabyle (Berber)

BRUGNATELLI (2002) considers that it is derived from a positive perfective by infixation of a postverbal negator *i/aj*,²⁰ and that its uses in positive contexts always have an underlying negative component. The Central Kabyle data supports PICARD (1957)'s hypothesis, of a non-inherently negative form belonging to the most ancient layer of Berber (a retention rather than an innovation). I have analyzed it, not as an 'intensive', but as a counterfactual, within a proto-Berber system which I claim was tripartite, originally opposing factual ('perfective'), counterfactual ('negative perfective') and non-factual ('aorist').

The imperfective is an ancient 'intensive' form, derived from the aorist stem through several morphological processes. A former cluster of Aktionsart forms, it has entered the aspect-mood system (BASSET 1929) at a later stage of the evolution of proto-Berber. The 'negative imperfective', which can be found in Tuareg (Southern Berber), Ghadamsi (Northern Berber, non-Zenati), Zenaga (Western Berber), and most (but not all) the Northern Berber languages belonging to the Zenati subbranch, is considered by some (BASSET 1952: 14) as an innovation, and by others (KOSSMANN 1989) as belonging to proto-Berber. In both cases, it is more recent than the Aorist/Perfective/Negative Perfective triad, and is either morphologically derived from the positive imperfective, or (as for Ayr Tuareg in Table 9 above) it is a former positive imperfective retained in (conservative) negative contexts while a newly derived positive imperfective is used in positive contexts.

7.1.3 The Prohibitive

7.1.3.1 The typology of prohibitives

Van der AUWERA and LEJEUNE (2005 (2013)) propose a four-type typology for prohibitives in the world's languages:

Type 1: The prohibitive uses the verbal construction of the second singular imperative and a sentential negative strategy found in (indicative) declaratives.

Type 2. The prohibitive uses the verbal construction of the second singular imperative and a sentential negative strategy not found in (indicative) declaratives.

²⁰ This hypothesis has recently been reactivated and developed in LAFKIOUI and BRUGNATELLI (2020).



AMINA METTOUCHI

Negation in Kabyle (Berber)

Type 3. The prohibitive uses a verbal construction other than the second singular imperative and a sentential negative strategy found in (indicative) declaratives.

Type 4. The prohibitive uses a verbal construction other than the second singular imperative and a sentential negative strategy not found in (indicative) declaratives

7.1.3.2 Prohibitive types in Berber

In Central Kabyle, the prohibitive uses the verbal construction of the second singular imperative and a sentential negative strategy found in (indicative) declaratives (Type 1).

(69) **kḳr-Ø!**

stand:AOR-IMP2SG!

'Stand up!' (field notes)

(70) **ur ttnkar-Ø ara!**

NEG stand:IPFV-IMP2SG POSTNEG!

'Don't stand up!' (elicitation)

However, the stem cannot be in the aorist (as in the positive command construction), it must be in the imperfective.

In Tashelhit (Northern Berber, Morocco, GALAND (1994)), the prohibitive uses a verbal construction other than the second singular imperative (namely **ad** + aorist with standard PNG affixes) and a sentential negative strategy found in (indicative) declaratives (Type 3).

(71) **als-Ø!**²¹

do_again:AOR-IMP2SG!

'Do it again!'

(72) **ad ur t-als-t!**

POT NEG SBJ2-do_again:AOR-2SG!

'Don't do it again!'

However, the negator is between the preverb and the aorist stem, whereas preverb **ad** normally directly precedes the verbal stem in positive contexts.

²¹ Tashelhit examples are from GALAND (1994: 182-183), translated "recommence!" and "ne recommence pas!" by Galand.



AMINA METTOUCHI

Negation in Kabyle (Berber)

In the Tamashek (Southern Berber) of Mali (HEATH 2005), there are two strategies for the prohibitive, both “widely distributed in Tamashek dialects” (HEATH 2005: 338). One is similar to the Kabyle one and involves the verbal construction of the second singular imperative and a sentential negative strategy found in (indicative) declaratives (Type 1).

- (73) **wær** **tællæz-Ø**
NEG insert:NEGIPFV-IMP2SG²²
‘Do it again!’

The other involves the negative perfective and standard bound pronouns: a verbal construction other than the second singular imperative and a sentential negative strategy found in (indicative) declaratives (Type 3).

- (74) **wær** **t-əlləz-æd**
NEG SBJ2-insert.PFVNEG-2SG
‘Don’t insert!’ (or ‘you didn’t insert’)

In Zenaga (Western Berber, Mauritania, TAINE-CHEIKH 2011) there are also two prohibitive strategies. One involves the verbal construction of the second singular imperative and the standard negator **wär** (Type 1).

- (75) **wär** **žässä**
NEG drink:IPFV:IMP2SG
‘Don’t drink!’

The other involves the verbal construction of the general irrealis **ad + aorist**, with standard bound pronouns, and the negator **wär** between the preverb and the verb (Type 3).

- (76) **äd** **wär** **t-axtiša-d** **ağmä-n-k**
POT NEG SBJ2-cut:AOR-2SG brother:SG.M-GEN-2SG.M
‘Don’t cut your brother!’

According to the typology, Kabyle, Tamashek and Zenaga belong to Type 1, because in all of them the prohibitive uses the verbal construction of the second singular imperative and a sentential negative strategy found in (indicative) declaratives. But it is the imperfective rather than the aorist stem which is used.

Tashelhit, Tamashek and Zenaga belong to Type 3, since in all of them the prohibitive uses a verbal construction other than the second singular imperative

²² Examples are from HEATH (2005), with adapted glosses.



AMINA METTOUCHI

Negation in Kabyle (Berber)

and a sentential negative strategy found in (indicative) declaratives. But those constructions are different: Tamashek uses the negative perfective, whereas Tashelhit and Zenaga use *ad + aorist*, with the standard negator inserted between the preverb and the verb.

Not only do Tamashek and Zenaga (as well as other Berber languages) have two types of prohibitives in the typology, but when the constructions are analyzed in more details, it appears that several features makes the prohibitive strategy/ies distinct in each language, even within the same type:

- Either the aspect-mood stem is different
- Or the order of negative and preverb is different
- And/or the person paradigm is different (standard vs imperative)

A more precise typology of the prohibitive in Berber is presented in Table 10 below. It would need to be completed by a thorough study of the prohibitive in all Berber languages.

FEATURES	LANGUAGES					
	Central Kabyle	Tashelhit	Tamashek		Zenaga	
Negator	ur	ur	wær	wær	wär	wär
Stem	IPFV	AOR	NEG.PFV	NEG.IPFV	IPFV	AOR
PNG affix paradigm	imperative	standard	standard	imperative	imperative	standard
Preverb	no	yes	no	no	no	yes
Order Neg-Preverb	-	ad < NEG	-	-	-	äd < NEG
Typology	Type 1	Type 3	Type 3	Type 1	Type 1	Type 3

Table 10 – Prohibitive constructions in four Berber languages

7.2 Negative morphemes

Apart from the cognates of **wr/ur** (the most widespread preverbal negator), negative markers vary according to the syntactic or pragmatic status of the clause. For instance, Ghadamsi has two negators, **ak** and **wel** (LANFRY 1968), **ak** being, according to GALAND (2010: 280) a variant of adverb **ak**, **akw**, **akk** ‘totally, all’.



AMINA METTOUCHI

Negation in Kabyle (Berber)

- (77) **taləqqi-y-i** **ak** **tet** **ibri**
poor:SG.F-EPENTH-ANAPH NEG1 OBJ3:SG:F SBJ3.SG.M:desire:PFVNEG
'The poor one (among his two wives), he didn't love her.' (LANFRY 1968: 32))²³

- (78) **iden-ədd,** **wel** **yufi** **ħabba.**
SBJ3.SG.M:turn:PFV-PROX, NEG2 SBJ3.SG.M:find:PFVNEG thing:SG.F
'He turned round and found nothing.' (LANFRY 1968: 38))

KOSSMANN (2013) presents that distinction as opposing **ak** 'for non-subordinated and non-prohibitive clauses' to **wäl**: '1. in subordinated clauses (...) 2. as a sequential, marking that the different clauses are temporarily and informationally connected (...) 3. as a prohibitive' (KOSSMANN 2013: 178-9).

In Tashawit (Northern Berber, Zenati), the standard negator is **ud**, but for the prohibitive, it is **la**, and negative oaths are introduced by **ma** (PENCHOEN 1973).

- (79) **la** **hən-dd-ttuḥat**
NEG OBJ3M.PL-PROX-bring:IPFV.2PL
'Don't bring them back' (PENCHOEN 1973: 56)

In Eastern Kabyle (Northern Berber, zone 2.1. in the map of Kabylie in Figure 2) (RABDI 2004), the preverbal negator is either **ur** or **it^sħa**. In Tasahlit (Northern Berber zone 3.2 in the map of Kabylie in Figure 2), the preverbal negator is **ul**, and coexists with several forms, **attha ittha itha aha**, **ħa**, **tṭħa** (< Arabic **tṭħu** 'become'), and **xa**, **axa** (< Arabic **xaṭ** 'not') (GARAOUN 2019)

- (80) **xa** **cca-y** **aṭella**
NEG eat:PFV-SBJ1SG yesterday
'I didn't eat yesterday' (Aït Laâlam (Tamridjet) (Garaoun p.c))

- (81) **u** **tt = i-neal** **u** **tt = i-fa**
NEG OD3SG.F=SBJ3SG.M-search:PFV NEG OD3SG.F=SBJ3SG.M-find:PFV
'He didn't look for neither found it' (Aït Bouyseh (Tamridjet) (Garaoun p.c))

Postverbal reinforcements are sometimes almost fully grammaticalized as in Central Kabyle, sometimes less so, such as in Eastern Kabyle and Tasahlit (zones 2.1 and 2.2 in the map of Kabylie in Figure 2), where various postverbal reinforcements (**ani**, **ula**...) are used (RABHI 1992, GARAOUN 2019).

There are also negators which are strictly postverbal without a preverbal negator: **ka/kīra** in Augila (BRUGNATELLI 1987: 53-55), **š/ši** in Sened (PROVOTELLE 1911: 73). They are most probably postverbal reinforcements which have taken

²³ Glossing and translations by A. Mettouchi.



AMINA METTOUCHI

Negation in Kabyle (Berber)

on a full negative function with the disappearance of the preverbal negator, following Jespersen's Cycle.

In non-verbal predications, there are specific negators for existential negation (**ulaʃ** in kabyle, **aba** in Ahaggar Tuareg, **ba** in Ayr Tuareg, **laḥ** in Tashelhit, etc.) and for ascriptive-attributive negation (**maʃʃi** in Kabyle, **awas** in Ghadames, **lišid** in Tashawit, etc.). Some lexicalizations involve the standard negator together with other elements, others don't (see METTOUCHI 2006, 2009a and 2012a for more details on those lexicalizations).

7.3 Types of asymmetries and contact with Arabic

The limited presentation in part 6. above shows that negative A-Cat-TAM asymmetries are not the same across the whole of Berber. Some of them concern the core MAN forms, i.e. the stems themselves. This is the case for Kabyle (where the aorist is excluded from negative contexts, and where the negative perfective is extensively used) or various Tuareg varieties (with their dedicated negative perfective and negative imperfective forms, and the exclusion of the perfect from negative contexts). Other asymmetries concern the MAN constructions, i.e. the presence and order of preverbs relative to the negator and the aorist stem. This is the case for Tashelhit, which has lost the morphological distinction between the negative and positive perfective and does not have a negative imperfective. The whole system is symmetrical (GALAND 1994) except for the order of negator and preverb for non-declarative modal predications: **ad + ur + aorist** and not ***ur + ad + aorist** is the 'corresponding opposite' of **ad + aorist**, whereas **ur + rad + aorist** is the corresponding opposite of **rad + aorist**, **ur + perfective** (not **ur + negative perfective**) that of the perfective, and **ur + imperfective** that of the imperfective. Among the most symmetrical systems as far as MAN forms and constructions are concerned, we find Siwi (SCHIATTARELLA 2017 and forthcoming).

The most symmetrical Berber languages are also the ones that are in most intense contact with Arabic, in the sense that speakers are all bilingual in the two languages, in the home and outside. It is interesting to note that standard Arabic opposes prohibitive/negative optative negator (**la**), and non-past negator (**la**) to a declarative/past negator (**ma**), and that Maghreban Arabic varieties, which have retained only **la** and **ma**, use negator **la** only with the prefixal conjugation in prohibitive/negative optative clauses, whereas **ma** (or the circumfix **ma...ʃ**) is generalized to all other contexts (CAUBET 1996). The asymmetry is constructional and limited to marked non-declarative modal contexts (prohibitive, oaths, warnings). This might explain as convergence phenomena the profile of Berber languages such as Tashelhit, which have only retained a constructional asymmetry at the level of mood/modal forms.



AMINA METTOUCHI

Negation in Kabyle (Berber)

More work on the role of contact in the reshaping of negative/positive asymmetries in Berber would be needed.

8. Conclusion

Negation in Central Kabyle is characterized by a preverbal negator **ur**, with a postverbal element in the process of grammaticalization, **ara**, whose presence or absence modulates the negative statement, referentially and interactionally. The language features an A-Cat-TAM asymmetry which opposes two aspect-mood forms in the negative domain (imperfective, and negative perfective) whose semantics imply holding together what might be and what actually is, to a series of aspect-mood forms in positive contexts, some of which share those semantics, while others imply only one perspective (*realis* or *irrealis*) on the situation. The forms that semantically construe only one perspective are excluded from the negative domain (except for the negative optative) in Central Kabyle.

The prohibitive shows constructional symmetry but paradigmatic A-Cat-TAM asymmetry, while the negative hortative shows both constructional and paradigmatic Cat-TAM asymmetry. Central Kabyle has dedicated lexicalizations for existential and attributive-equative negations that are distinct from the standard negator. Their frequency in conversation, and the semantic features they respectively share with the two verbal negative constructions (**ur** + *negative perfective* and **ur** + *imperfective*) allows a semantic analysis of the domain of negation, in Central Kabyle, as opposing an evaluative perspective (with competing viewpoints on a situation or a referent) to a referential perspective (with a focus on the non-occurrence of a situation, or the absence or inexistence of a referent).

Beside morphosyntactic descriptions of the forms themselves and their possible combinations, detailed studies of discourse contexts, textual frequencies, and prosodic features have been conducted in this paper.

The short development on negation in other Berber languages shows how varied the configurations are with respect to negation, and how inaccurate it would be to take one single language as a “representative” of the language family. One can see however that some features are shared - namely an A-Cat-TAM asymmetry, and a binary distinction between equative-attributive negation and existential negation for negative lexicalizations. Long-term contact with Arabic has resulted in a number of morpheme borrowings, as well as systemic convergence phenomena which it would be interesting to study in more details. Contact of Berber languages spoken in the Sahara with various sub-Saharan languages



AMINA METTOUCHI

Negation in Kabyle (Berber)

belonging to other Afroasiatic branches (Chadic) or to other phyla (Niger-Congo, Nilo-Saharan) is also a rich area of potential discoveries concerning negation.

Abbreviations

ABSL: absolute state; ABSV: absolutive bound pronoun; ANN: annexed state; AOR: aorist; AT.HUM: human locative ; COM: comitative; COP: copula; DAT: dative; DEICT: deictic demonstrative; F: feminine; FS: false start; GEN: genitive; HESIT: hesitation; IDP: independent; IMP: imperative; INTJ: interjection; IPFV: imperfective; KIN: kinship; M: masculine; NEG: standard negator; NEG.ATTR: attributive negator; NEG.EXS: existential negator; NEG.OPT: optative negator; PFV: perfective; PFVNEG: negative perfective; PL: plural; POSS: possessive; POSTNEG: postverbal reinforcement of negation ; POT: potential preverb; PREP: bound pronoun paradigm hosted by prepositions; PROX: proximal verbal clitic ; DIST: distal; REL.IRR: *irrealis* relativizer; REL.REAL: *realis* relativizer; RELSBJ: subject relativization; SBJ: subject; SG: singular; SHAREDREF: shared reference demonstrative; STATLOC: stative-locative preposition; VOC: vocative.



AMINA METTOUCHI

Negation in Kabyle (Berber)

References

- AUWERA, Johan van der, and Ludo LEJEUNE. (2013). "The prohibitive", in Matthew DRYER and Martin HASPELMATH (eds.), *World atlas of language structures online*, Leipzig: Max Planck Institute for Evolutionary Anthropology. [First published OUP, 2005]
- BASSET, André (1929). *La Langue berbère: Morphologie. Le verbe: Étude de thèmes*, Paris: Leroux.
- BASSET, André (1952). *La Langue berbère*, London-New-York-Toronto: Oxford University Press.
- BRUGNATELLI, Vermondo (1987). "La negazione discontinua in berbero e in arabo-magrebino", in Giuliano BERNINI and Vermondo BRUGNATELLI (eds.), *Atti della IV Giornata di Studi Camito-semitici e Indoeuropei (Bergamo 28.11.1985)*, Milano: Unicopli, 53-62.
- BRUGNATELLI, Vermondo (2002). "Les thèmes verbaux négatifs du berbère", in Kamal NAÏT-ZERRAD (éd.), *Articles de linguistique berbère. Méorial Werner Vycichl*, Paris: L'Harmattan, 165-180.
- BRUGNATELLI, Vermondo (2006). "La négation berbère dans le contexte chamito-sémitique", *Faits de Langue - Revue de linguistique* 27 [Antoine LONNET and Amina METTOUCHI (eds.), *Les langues chamito-sémitiques (afro-asiatiques)* vol. II]: 65-72.
- BRUGNATELLI, Vermondo (2010). "Problème de la négation en berbère: à propos de l'origine d'ulac, ula, ula d.", in Frederick Mario FALES and Giulia Francesca GRASSI (eds.), *Cam-semud 2007. Proceedings of the 13th Italian Meeting of Afro-Asiatic Linguistics held in Udine, May 21st-24th, 2007*, Padova: Sargon, 401-405.
- CAUBET, Dominique (1996). "La négation arabe maghrébin", in Salem CHAKER et Dominique CAUBET (eds.), *La négation en berbère et en arabe maghrébin*, Paris, L'Harmattan, 79-97.
- CHAKER, Salem (1983). *Un parler berbère d'Algérie (Kabylie): syntaxe*, (Thèse Université de Paris V, le décembre 1978), Aix en Provence: Publications de l'Université de Provence.
- CHAKER, Salem (1996). "Quelques remarques préliminaires sur la négation en berbère", in Salem CHAKER and Dominique CAUBET (eds.), *La négation en berbère et en arabe maghrébin*, Paris-Montréal: L'Harmattan, 9-22.
- CONTINI-MORAVA, Ellen (1989). *Discourse-Pragmatics and semantic Categorization: the case of Negation and tense-Aspect with special reference to Swahili*, Berlin, New York: Mouton de Gruyter.
- CULIOLI, Antoine 1990 [1988]. "La négation, marqueurs et opérations. Pour une linguistique de l'énonciation", Gap-Paris: Ophrys, 91-114.
- DALLET, Jean-Marie (1982). *Dictionnaire kabyle-français, parler des At Mangellat, Algérie*, Paris: SELAF.
- DANON-BOILEAU, Laurent (1994). "La négation, de l'absence au refus et du refus à l'absence", in Pierre ATTAL (ed.), *La Négation, Lynx*, 177-189.
- FREUD, Sigmund (1925). "La Dénégation (Die Verneinung)", in *Résultats, idées, problèmes*, Paris: PUF.



AMINA METTOUCHI

Negation in Kabyle (Berber)

- GALAND, Lionel (1974). "Introduction linguistique", in *Petites Soeurs de Jésus, Contes touarègues de l'Air*, Paris: Société d'Études Linguistiques et Anthropologiques de France, 15-41.
- GALAND, Lionel (1988). "Typologie des propositions relatives: la place du berbère", *LALIES, Actes des sessions de linguistique et de littérature*. 6. Aussois 1984, Paris: Université de la Sorbonne Nouvelle Paris III, 81-101.
- GALAND, Lionel (1994) [2002]. "La négation en berbère", *Matériaux arabes et sudarabiques (GELLAS)* 6 (nouvelle série), 169-181.
- GALAND, Lionel (2010). *Regards sur le berbère*, Milano: Centro Studi Camito-Semitici.
- GARAOUN, Massinissa (2019). "Variation et classification en Berbère-Nord: Le cas des parlers tasahlit", *Actes des 19èmes Rencontres Jeunes Chercheurs en Sciences du Langage*, Paris: Sorbonne Nouvelle.
- GUERRAB, Saïd (2014). *Analyse dialectométrique des parlers berbères de Kabylie*, PhD dissertation, INALCO.
- HEATH, Jeffrey (2005). *A Grammar of Tamashek (Tuareg of Mali)*, Berlin: Mouton de Gruyter.
- HEATH, Jeffrey (2013). *Jewish and Muslim dialects of Moroccan Arabic*, London: Routledge.
- HEGEL, Georg Wilhelm Friedrich (1817). *Enzyklopädie der philosophischen Wissenschaften*.
- HORN, Laurence (1989). *A Natural History of Negation*, Chicago: University of Chicago Press.
- HYPPOLITE, Jean (1966). "Commentaire parlé sur la Verneinung de Freud (1925) par Jean Hyppolite (1954)", in *Écrits*, Paris: Seuil.
- KAHLOUCHE, Rabah (2000). "Le présentatif négatif ulac 'il n'y a pas', est-il de souche berbère ou un emprunt à l'arabe?", in Andrzej ZABORSKI and Salem CHAKER (eds.), *Études berbères et chamito-sémitiques. Mélanges offerts à Karl-G. Prasse*, Paris and Louvain: Peeters, 233-236.
- KANT, Immanuel (1795). *Die Metaphysik der Sitten*.
- KANT, Immanuel (1798). *Anthropologie in pragmatischer Hinsicht: Naturlehre des Menschen*.
- KOSSMANN, Marteen (1989). "L'inaccompli négatif en berbère", *Études et Documents Berbères* 6: 19-29.
- KOSSMANN, Marteen (2013). *A Grammatical Sketch of Ghadames Berber (Libya)*, Köln: Rüdiger Köppe.
- LAFKIOUI, Mena, and Vermondo BRUGNATELLI (2020). "Negation in Berber: variation, evolution, and typology", *Linguistics* 58 (4): 967-1008.
- LAMBRECHT, Knud (1994). *Information structure and sentence form*, Cambridge: Cambridge University Press.
- LANFRY, Jacques (1968). *Ghadamès I: Textes, notes philologiques et ethnographiques*, Fort-National (Algérie): FDB.



AMINA METTOUCHI

Negation in Kabyle (Berber)

- LOUBIGNAC, Victorien (1924). *Étude sur le dialecte berbère des Zaïan et Aït Sgougou*, Paris: Leroux.
- METTOUCHI, Amina (1992). "Pour une réévaluation de la valeur de l'aoriste intensif dans le système verbal kabyle", *Études et Documents Berbères* 9: 55-71.
- METTOUCHI, Amina. (1995). *Aspect et négation: recherche d'invariants et étude énonciative de l'incidence de la modalité négative sur l'aspect en berbère (kabyle)*, PhD dissertation, Université de Paris 3.
- METTOUCHI, Amina (1996). "La négation dans les langues du Maghreb, Synthèse", in Salem Chaker and Dominique Caubet (eds.), *La Négation en berbère et en arabe maghrébin*, Paris: L'Harmattan, 177-195.
- METTOUCHI, Amina (1998). "Aspect et négation: remarques sur l'inaccompli et la négation en anglais et en berbère (kabyle)", in A. BORILLO A., C. VETTERS and M. VUILLAUME (eds.), *Regards sur l'Aspect*, Amsterdam-Atlanta: Rodopi, 191-205.
- METTOUCHI, Amina (2000). "Accompli et négation en kabyle", in Andrzej ZABORSKI and Salem CHAKER (eds.), *Études berbères et chamito-sémitiques. Mélanges offerts à Karl-G. Prasse*, Paris and Louvain: Peeters, 281-293.
- METTOUCHI, Amina (2001). "La grammaticalisation de *ara* en kabyle, négation et subordination relative", in Gilles COL et Daniel ROULLAND (eds.), *Travaux du CerLiCO* n°14, P. U. Rennes, 215-235.
- METTOUCHI, Amina (2002). "La Forme ad+aoriste en berbère (kabyle)", in Kamal NAÏT-ZERRAD (ed.), *Articles de Linguistique Berbère – Mémorial*, Paris: L'Harmattan: 335-347.
- METTOUCHI, Amina (2003). "Négations non-verbales et asymétrie aspectuelle au regard de la négation: unité d'un système?", *Comptes-Rendus du GLECS tome XXXIV (1998-2002)*, Paris: Publications des LANGUES'O, 179-196.
- METTOUCHI, Amina (2004). "Les négations non-verbales en kabyle (berbère)", in Florence LEFEUVRE (ed.), *La phrase averbale: délimitations et caractéristiques*, Verbum tome XXVI n°3: 269-280.
- METTOUCHI, Amina (2006). "Nonverbal and Verbal Negations in Kabyle (Berber): A typological perspective", in F. K. Erhard VOELTZ (ed.), *Studies in African Linguistic Typology*, Amsterdam: Benjamins, 263-276.
- METTOUCHI, Amina (2009a). "The System of Negation in Berber", in Norbert CYFFER, Erwin EBERMANN, and Georg ZIEGELMEYER (eds.), *Negation Patterns In West African Languages and Beyond*, Amsterdam: Benjamins, 287-306.
- METTOUCHI, Amina (2009b). "Négation et intonation en kabyle", in Salem CHAKER, Amina METTOUCHI and Gérard PHILIPPSON (eds.), *Études de phonétique et de linguistique berbères. Hommage à Naïma Louali (1961-2005)*, Paris-Louvain: Peeters, 123-140.
- METTOUCHI, Amina (2009c). "Mood and Modality in Berber", in Björn HANSEN, Ferdinand DE HAAN and Johan van der AUWERA (eds.), *Modals in the Languages of Europe*, Berlin-New York: Mouton de Gruyter, 431-456.
- METTOUCHI, Amina (2012a) "Négation", in *Encyclopédie berbère vol.XXXIII (N-Nektiberes)*, Paris-Louvain: Peeters, 5392-5399.



AMINA METTOUCHI

Negation in Kabyle (Berber)

- METTOUCHI, Amina (2012b). *Kabyle Corpus*, Corpus recorded, transcribed, annotated and translated (into English) by Amina Mettouchi, ANR CorpAfroAs: A Corpus for Afroasiatic Languages, <<https://corpafroas.huma-num.fr/Archives/corpus.php>>.
- METTOUCHI, Amina (2014a). "Negation in Berber", invited talk at the workshop on Negation in Ancient Egyptian (11-13 December 2014, INALCO, Paris) <<http://bit.ly/Mettouchi2014NegationBerber>>.
- METTOUCHI, Amina (2014b). "Foundations for a typology of the annexed/absolute state systems in Berber", *STUF* 67 (1): 47-61.
- METTOUCHI, Amina (2017a). "Predication in Kabyle (Berber)", in Amina METTOUCHI, Zygmunt FRAJZYNGIER and Christian CHANARD (eds.), *Corpus-based cross-linguistic studies on Predication (CorTypo)*, <<http://bit.ly/Mettouchi2017Predication>>.
- METTOUCHI, Amina (2017b). "Relative (Proposition - Syntaxe) (R10)", *Encyclopédie berbère vol. XL (Rabah-Rhinocéros)*, Paris-Louvain: Peeters, 6815-6825.
- METTOUCHI, Amina, and Zygmunt FRAJZYNGIER (2013). "A previously unrecognized typological category: The state distinction in Kabyle (Berber)", *Linguistic Typology* 17 (1): 1-30.
- MIESTAMO, Matti (2005). *Standard negation: The negation of declarative verbal main clauses in a typological perspective*, Berlin: Mouton de Gruyter.
- NAÏT-ZERRAD, Kamal (2001). *Grammaire moderne du kabyle*, Paris: Karthala.
- NAÏT-ZERRAD, Kamal (2005). "Kabylie: Dialectologie", in *Encyclopédie berbère XXVI*, Aix-en-Provence: Edisud, 4067-4070.
- PENCHOEN, Thomas (1973). *Étude syntaxique d'un parler berbère (Aït Frah de l'Aurès)*, Napoli: Istituto Universitario Orientale.
- PICARD, André (1957). "Du prétérit intensif en berbère", in COMITÉ ANDRÉ BASSET (ed.), *Mémorial André Basset (1895-1956)*, Paris: Adrien Maisonneuve, 107-120.
- PRASSE, Karl-Gustave (1972-1974). *Manuel de grammaire touarègue*, Copenhagen: Akademisk Forlag.
- PROVOTELLE, Dr. (1911). *Etude sur la tamazir't ou zénatia de Qalaât es-Sened (Tunisie)*, Paris: Ernest Leroux.
- RABDI, Larbi (2004). *Le parler d'Ihbaden (Kabylie Orientale - Algérie)*, Köln: Rüdiger Köppe.
- RABHI, Allaoua (1992). "Les particules de négation dans la Kabylie de l'est", *Études et documents berbères, La boîte à documents*, 139-145.
- SADI, Said (1983). *Askuti*, Paris: Imedyazen.
- SCHIATTARELLA, Valentina (2017). *Berber Texts from Siwa (Egypt) – Including a Grammatical Sketch*, Köln: Rüdiger Köppe.
- SCHIATTARELLA, Valentina (forthcoming). "Negation in Siwi (Berber, Egypt)", in Matti MIESTAMO and Ljuba VESELINOVA (eds.), *Negation in the languages of the world*, Berlin: Language Science Press.



AMINA METTOUCHI

Negation in Kabyle (Berber)

- TAINE-CHEIKH (2011). "L'énoncé négatif en berbère zénaga. In Amina Mettouchi (éd.), « Parcours berbères », *Mélanges offerts à Paulette Galand-Pernet et Lionel Galand pour leur 90e anniversaire*, Köln: Rüdiger Köppe, 533-551.
- VESELINOVA, Ljuba (2015). "Not-yet expressions in the languages of the world: a special negator or a separate cross-linguistic category?", talk at the MPI - *Diversity Linguistics: Retrospect and Prospect* (1-3 May 2015, Max Planck Institute for Evolutionary Anthropology, Leipzig).
- VESELINOVA, Ljuba (2013). "Negative existentials: A cross-linguistic study", *Rivista di linguistica* 25 (1): 107-145.



Discourse organization in Gorwaa narratives: An exploratory overview

CLEMENS J. MAYER

Leiden University
clemensjmayer@gmail.com

ABSTRACT

There are many ways in which a story can be told, and languages throughout time and across the world have developed strategies that work in tandem with their respective linguistic structure to create organized, coherent narratives. Gorwaa, a South Cushitic language spoken by around 133,000 people in the Tanzanian Rift Valley, also has a number of strategies included in a narrative structure, ranging from interjections, to complex referent tracking over long stretches of narrative, to discourse organization. In this article I will be specifically focusing on discourse organization, by which I mean the structuring of events as to create a coherent, understandable, sequence in a narrative using organizational tools such as interjections, discourse managing markers, and speaker-hearer interaction. All of these tools are employed frequently and in a plethora of different ways, creating an interesting narrational landscape while at the same time making sure the information flow remains coherent to the hearer. Additionally, Gorwaa shows a remarkable interconnection between lower-level discourse organizational elements, such as interjections and rhetorical questions, and the organization of a narrative as a whole – showcasing the importance of a broad perspective when analyzing narrative structures. The article first looks at the discourse organizing markers, interjections and conjunctions, and then looks at the construction of narratives in three major parts: introduction, intermediate speaker-hearer contact, and conclusions.

KEY WORDS: descriptive linguistics, Cushitic languages, discourse organization, discourse markers, pragmatics





CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

1. Introduction¹

This article discusses the ways in which discourse is organized in Gorwaa narratives. That is to say, which strategies, lexical and/or formalized or not, are applied in the speech of speaker and hearer to create a fully coherent narrative. The arrangement of the narrative is a highly complex network of strategies, ranging from the use of function words to the interaction of speaker and hearer, each of which requires extensive and scrupulous study. Therefore, the goal of this article is an exploration of some of the elements in this network, rather than a complete, overarching analysis. In other words, it aims to describe what the uses of the different elements are and the contexts in which they occur, rather than give an explanation of *why* this is the case.

Gorwaa is a South Cushitic language spoken by around 133,000² speakers in the Rift Valley area of northern Tanzania (HARVEY 2019: 139-41; see figure 1). Virtually all speakers of Gorwaa are at least bilingual speakers of Swahili, and in certain areas such as Babati Town Swahili serves as the lingua franca in each context outside of the home (HARVEY 2017: 40-41).

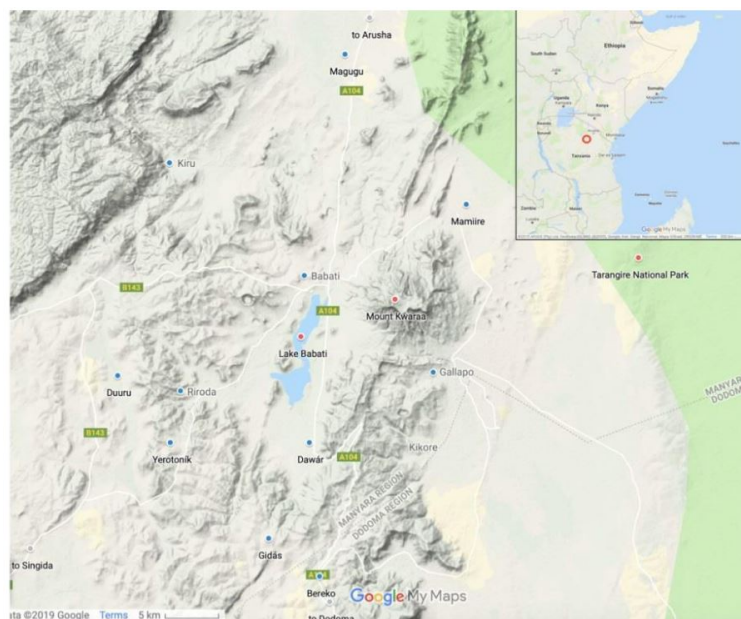


Figure 1 – Map of Gorwaaland (HARVEY 2019: 131). Gorwaa-speaking settlements are marked with blue circles.

¹ I sincerely thank the editors and two anonymous reviewers as well as Dr Harvey, Dr Griscom, and Prof. Mous for their helpful and valuable comments.

² The estimated number of Gorwaa speakers varies quite widely. For an extended overview of speakers see HARVEY (2018a: 37-40).



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

Gorwaa is a pro-drop language, meaning that agents and/or patients are not required to be overtly expressed when the verbal encoding and the discourse indicate who are meant. Thus, independent pronouns explicitly mentioned have a more pragmatic function of focusing or contrasting (HARVEY 2018a: 164), typical of pro-drop languages (AZAR, BACKUS, and ÖZYÜREK 2019). This means that in a narrative it can be expected to find strings of actions that show agent solely through verbal encoding or context, and that a change in verbal encoding (e.g., in number) can be the only thing indicating change in agent, given that all agents were previously established in the narrative or otherwise accessible for the hearer. Indeed, especially in the historical narratives, referents, once established are rarely repeated explicitly and if they are, it is often with a general noun, such as *ga* ‘thing’, suffixed with a demonstrative marker.

The data used for the analysis come from the Gorwaa deposit in the Endangered Languages Archive (ELAR) from the Endangered Language Documentation Programme (ELDP) hosted at SOAS, University of London (HARVEY 2017). A total of eight texts have been analyzed, which consist of four conversational narratives, two monological narratives, and one instructional and autobiographical monologue. Table 1 presents the text identification numbers in the archive, a title, as well as their respective genres.

ID	TITLE	TYPE
20131027_20150725c	Life Story 2	Autobiographical monologue
20150808a	Honey Hunting 2	Instructional
20151125i	History 1-A	Conversational narrative
20151125j	History 1-B	Conversational narrative
20151202d	Durbo 1	Monologue narrative
20151223b	Description of Trees 11	Conversational narrative
20151202e	Pakani Story	Monologue narrative
20160219h	Justice 5	Conversational narrative

Table 1 – Texts used in this paper’s analysis.

These texts are the total number of texts that have been fully transcribed and translated in the Gorwaa archive, allowing for a discourse-level analysis. Additionally, because of the context-dependent nature of discourse analysis, I have not looked for examples of occurrences of the analyzed linguistic elements outside of these texts. In this article, examples from the narratives will be tagged with the narrative ID, as well as the relevant timestamps.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

2. Discourse organization

There are many ways in which a story can be told, and languages throughout time and across the world have developed strategies that work in tandem with the linguistic structure to create organized narratives. There are several strategies included in a narrative structure, but in this paper I will be focusing on one important element: discourse organization. By this I mean the structuring of events as to create a coherent, understandable, sequence in a narrative using organizational tools such as interjections, discourse managing markers, and speaker-hearer interaction. All of these together, from a single interjection to codified speaker-hearer interaction, are what entails the discourse organization of a narrative. In the following section I will establish and operationalize the notions used in this article, such as sentence, paragraph, and discourse organizing markers.

Discourse organization is crucial not only in creating a narrative that makes sense from a temporal perspective, i.e., a coherent chronology of events, but also in creating narrative chunks that are easily identified and processed by listeners. There are several discourse organizing strategies, for example discourse organizing markers such as affixes and particles (1), the latter of which can be (function) words of many types, such as conjunctions, interjections, or specifically pragmatic words. Some constructions can also have a highly pragmatic function (2), which can crystallize over time to be fixed into general introductory formulas, e.g., “A long time ago, in a land far far away...”.

- (1) NAMIA (Sepik)
- | | | | |
|--------------------------------|----------------|----------------|-----------------------------------|
| <i>i</i> | mokuran | pitjaki | <i>pe-yak-yarəm-le-le.</i> |
| <i>and</i> | some | first | <i>SEQ-first-UR-RED-go-RED</i> |
| <i>pe-yaki-rr-e</i> | | e, | Norombalip |
| <i>SEQ-go.upriver-BRF-REAL</i> | | until | Norombalip |
- “...and some first travelled upriver. (Our group) went upriver until we got to Norombalip” (TUPPER 2019: 131-32)
- (2) ENGLISH (Indo-European)
- “*In the latter days of July in the year 185–*, a most important question was for ten days hourly asked in the cathedral city of Barchester...” (TROLLOPE 1857: 17)

Since there are many ways to subdivide and organize discourse in languages, it is important to look at and define the way discourse is subdivided in Gorwaa. The main two ways of subdividing narratives into chunks found in the texts are the sentence and the paragraph.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

The notion of sentence, specifically prosodical sentence, for this article is defined as a breath group, i.e., the words articulated within a single exhalation, together with intonational contours and pauses (usually 0,5-1 sec.). While there is often an overlap between prosodical sentences and grammatical sentences, i.e., where all necessary syntactical slots are filled and appropriately configured, the notion of prosodical sentence is broader. A prosodical sentence is not bound by grammaticality of the sentence, and thus sentences that trail off or are cut off, have incongruent person marking, or are otherwise grammatically not well-formed are considered valid prosodic sentences as long as they contain the intonational contours appropriate to the language. This means that prosodic sentences are relatively independent of the discourse, even though the lexical contents may not be. It also means that a sentence here can consist of a single lexical word or even a sound with highly pragmatic functions, such as *mh* in English

In the case of Gorwaa, which features grammatical as well as pragmatic/prosodic intonational tone contours (HARVEY 2018a: 76), a distinction must be made between the two. While the two grammatical tone contours, level pitch accent and rising pitch accent, are applied on the lexical and morphological level, the other three, non-grammatical, tone contours function on the level of the sentence, and can thus supersede and neutralize the grammatical tone contours. The three ‘pragmatic’ contours are vocative pitch accent (3a),³ falling pitch accent (3b) to indicate contrast or emphasis, and rising-falling pitch accent (3c) to indicate polar questions.

- | | | |
|-----|----|---|
| (3) | a. | VOCATIVE PITCH ACCENT
[dési] desi! “Girl!” |
| | b. | FALLING PITCH ACCENT
[ʔaga gù:ʔ] aga guù’ “He slept” (finally, or as opposed to something else) |
| | c. | RISING-FALLING PITCH ACCENT
[aga gû:ʔi] aga guu’î “Has he slept?” (HARVEY 2018a: 78) |

Additionally, Gorwaa also features downdrift in which high and low grammatical tones become lower, as well as a decrease in difference between the two, which

³ In this paper, following the convention for writing Gorwaa set forth by Andrew Harvey, (e.g., HARVEY 2018) is as follows: q = [q’], ts = [ts’], tl = [tʰ], x = [χ], ‘ = [ʔ], / = [ʃ], hh = [h], sl = [ʃ], qw = [qw’], xw = [χw]. A doubled vowel (e.g. aa) indicates a long vowel, a vowel with an acute accent (e.g., á) indicates rising pitch accent, and a vowel with a circumflex accent (e.g., ô) represents rising- falling pitch accent. If the vowel is long, the diacritic is written on the second character (e.g. aa, aá, aâ).



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

is reset at the beginning of a new sentence. Thus, there are several indicators to demarcate prosodic sentences: intonational contour, downdrift, and pauses. While intonational contours are specific to the situations given in (3), downdrift and especially pauses of about 0,5 to 1 second, e.g., (4), are present in and between each sentence, and are thus the main markers for prosodic sentences.

- (4) **Sigeé a wawutumó Gorwaa**
“Sigeéd is the Gorwaa chief.” (20151123b, 00:13,50-15,18)
- Gidahoonda a wawutumó Taraa**
“Gidahoonda is the Datooga chief.” (20151123b, 00:15,73-17,57)

The more complex notion of paragraph will be discussed and defined in the following section.

2.1 The Paragraph

In analyzing the chunking of a narrative, we must also take into consideration divisions on a higher level, as well as looking at possibly fixed expressions that indicate certain passages in a narrative or serve as opening and closing formulae. The main of the higher-level notions, and the one discussed at length here, is the paragraph: In many narrative structures, a full narrative is divided into smaller chunks, which usually form a coherent body with a more or less unified purpose. This means that a paragraph can serve as a story arc, character introduction, historic or geographic setting or background information, or for meta-commentary on the narrative.

In literary studies, specifically English literature, a paragraph is usually defined as a “...purely ‘logical’ unit of discourse” or a “distinct unit of thought” (STERN 1976: 253). Research has shown that, if strong cues, such as topic shift, are present, paragraphs can accurately be determined in text, showing that they are an integral part of discourse (KOEN, BECKER, and YOUNG 1969) but when the cues are weaker, they become more difficult to determine (BOND and HAYES 1984), especially when there are no overt (stylistic) markers indicating the boundaries (RODGERS 1966; STERN 1976). In contrast, these divisions are generally more easily recognizable in spoken language (Ji 2008). However, as implied above, the notion of paragraph has more often than not been employed exclusively for written language, rather than referring to the more pertinent higher-level chunking in both spoken and written narratives. To emphasize the existence of paragraph in spoken language, Discourse Analysis gives a somewhat more extended definition: “Roughly speaking, paragraphs... are characterized as coherent sequences of sentences of a discourse, linguistically marked for



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

beginning and/or end, and further defined in terms of some kind of ‘thematic unity.’” (TANNEN 1982: 177). This definition is better suited for spoken narratives, as it is dependent on the more-or-less tightness of information and the organization of narrative flow. Of course, I take ‘linguistically marked’ to include prosody and, for possible future research, even para- or extralinguistic signs, such as gestures, eye contact, and sighs. The question remains whether ‘linguistically marked’ means that this notion of paragraph requires an overt paragraph-demarcating word or constructions, or that the demarcation can also occur as a lack of marking. For example, Eipo, a Papuan language, paragraphs are created by stringing together short noun phrases mainly by switch-reference marking (HEESCHEN 1994). The start of a new string of noun phrases indicates the start of a new paragraph. Thus, it is the lack of discourse organizing elements that mark the boundaries of paragraphs, instead of the implied overt marking strategies. Similarly, Kambaata, a Cushitic language, generally constructs sentences in “paragraph-like units” using a type of switch-reference (TREIS 2012: 86), which means that in this case it is also the internal cohesion that indicates its status as a paragraph, rather than overt paragraph marking.

Although the above definitions are not exact enough to function within an analysis of discourse organization, they can function as a good starting point. A ‘logical’ unit means that the pieces of information given in the unit are somehow coherent to each other, and, importantly, more tightly connected to each other than to the overarching narrative structure, i.e., a sub-story within the story. However, because paragraphs can be tighter or looser, especially when lower-level discourse organization may fray their beginnings and ends, the exact demarcation will differ hugely from language to language. Thus, as said, if a paragraph is a coherent unit, you would never expect a reference chain spilling over from the previous paragraph in a switch-reference language, like the aforementioned Kambaata. On the other hand, discourse organizing particles formally linking units are generally expected in English narratives. Thus, the chunking of paragraph units is dependent on the types, functions and (grammatical) restrictions of the discourse organization strategies in a language, and the specific notion of paragraph must be developed for each language or group of languages.

2.1.1 Functional aspects of a paragraph

Besides their use in the establishment of paragraphs, it is also important to note their function, notably from the standpoints of both speaker and listener. Chunking is always a means to facilitate processing and retrieval of information, in the case of the speaker the information cohesions of the paragraph chunk



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

helps in remembering the content and organizing the information flow, and in the case of the listener the internal cohesion as well as the demarcation (and the pause or slow-down in presented information) facilitates the required processing. In languages that have long chains of short phrases forming a paragraph, which are thus informationally dense, the need for processing time can be encoded in the discourse organization. For example, Korowai, a Papuan language, demarcates and links different paragraphs by using recapitulative linkage in addition to (extended) breaks in speech (DE VRIES 2018). Based on this, I believe this may influence how a paragraph is shaped in a language, e.g., one would expect a shorter length and a more extensive break marking different paragraphs in a language that tends towards high information density (i.e., a high verb-to-argument ratio; see for example DE VRIES 2018, 189ff) in narratives, and vice versa.

Taking all of this in mind, for Gorwaa, I define a paragraph as a cluster of utterings that are connected thematically, some tighter than others, and are linguistically marked either by a discourse organizing particle or construction, and/or by pauses and/or intonation contour.

From the short section above, it is already clear that discourse organization is a very broad subject as it is not bound to a small set of (grammatical) features in storytelling, but is rather a general tool for creating coherent narratives. However, each different way of discourse organization within a language has a specific meaning attached to it, and is used in a specific circumstance. Thus, if one analyzes the translations of the discourse organizing elements, and the environments in which they occur, it is possible to fine-tune their exact meanings and uses, which gives an indication of how speakers of a language organize a narrative world, and in turn the world around them. Therefore, looking at discourse organizational strategies is crucial in gaining a better understanding of the profiles of different languages, and in turn can show how speakers organize and process information.

3. Discourse organizing markers

As alluded to above, there is a number of markers in Gorwaa narrative that seem to have a primarily discourse organizing function. These discourse organization markers can be divided into two main functions: interjection and discourse management. Interjections, in Gorwaa a mix of both primary and secondary interjections (see AMEKA 1992), are highly frequent and employed by both speaker and hearer, as embellishments to the narrative by the former and as back-channel by the latter. The markers whose primary function is discourse



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

management are used to link clauses and sentences, but also to indicate paragraph breaks and for emphatic purposes. Table 2 shows all the discourse organization makers. The two main groups discussed are interjections and conjunctions, with the smaller group of Swahili loans, whose members can be subsumed under the former main groups, being discussed individually because of their peculiar status. Several other complex ‘markers’ and formulaic interactions are discussed in chapter 4.2. This table gives an exhaustive list of what I have identified as discourse organization markers, excluding hapaxes, since their function could not be accurately determined. Note that each marker has one English translation, which is the one that is generally the most accurate in the free translation; as we shall see below, however, these translations do not fully cover the breadth of their meaning and functions.

TYPE	MARKERS
Interjections	xay EMPH, bare ‘whyever’, gitláy ‘hey’, kara ‘lo!’, naxés ‘lo!’, ee ‘yes’, mm ‘yes’, da ‘hey’, bu EMPH, hhe’ee ‘hey’, hayya ‘okay’, ge EMPH
Conjunctions	aluwo ‘and then’, nee CONJ, hindi ‘now’, alkwí ‘now’, ya ‘thus’
Swahili loans	alafu ‘and then’, mpaka ‘until’, basi ‘so’

Table 2 – Gorwaa discourse organization markers.

Although noted in the table above, not all markers occurred frequently enough to be discussed individually and their exact functions remain to be seen. The makers not further discussed here are **bare** ‘whyever’, **da** ‘hey’, **bu** EMPH, **alkwi** ‘now’, **naxés** ‘lo!’, and **hindi** ‘now’.

3.1 Interjections

The main function of the interjections is organizing the conversation; they either indicate that the speaker is taking, holding, or re-taking the conversational floor, or emphasize the importance, and thus the required extra attention by the hearer, of a sentence. Although there are many interjections that have the same translation given in English, they are not necessarily substitutable. Here I will discuss the semantics of the interjections and their distribution, as well as analyze their function within the larger structures of discourse organization.

Across all narratives, **hhe’ee** ‘hey’ is the most frequent interjection. At the same time, however, its distribution is the most skewed as well; all instances of the interjection occur in History 1-A and History 1-B, with one speaker being responsible for the majority of the total occurrences. Although, admittedly, the corpus is relatively small, of all the interjections, it is interesting that this



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

interjection occurs mainly with only one speaker. It is possible that there is some room for personal preference in selecting interjections in Gorwaa, and that one speaker's preference may influence the selection of interjections of the other speakers as well. Note, however, that in History 1-A and History 1-B, other interjections are also used.

The function of **hhe'ee** 'hey' is clearly related to the organization of conversational turns (see NORRICK 2009), almost always occurring at the beginning of a sentence. In the many of the instances where **hhe'ee** occurs, when the speaker who previously held the speech turn (5a)⁴ is interrupted or asked for clarification, or their (rhetorical) question is answered (5b-c), they use the interjection to subsequently retake the turn (5d).

- (5) a. **te'eé' ka boo/eekeê**
"Mine isn't it black?"
- b. **ee**
"Yes."
- c. **ee**
"Yes."
- d. **hhe'ee Bu'u tós tin /awaakw**
"Hey, didn't Bu'ú know that this here is white?" (20151125i, 02:04-07)

In addition to this, its other main functions are as a general emphatic particle (6),⁵ as well as minor functions in self-repair and holding the floor. The interjection's occurrence in rhetorical questions (7) is most likely an extension of its emphatic use.

⁴ Examples in this article are organized according to the following conventions: the first line gives the surface form as it would appear in regular speech/writing, the second line gives the underlying morphology, with sequential affixation indicated by '-', infixation by '~', and non-configurational operations indicated by '\'; '\$A' and '\$B' indicate the morphophonological operation on a verb for 2nd person subject and 3rd person, and for 3rd person masculine subject, respectively. Lastly, the translation equivalent of individual/isolated noun phrases is indicated with single inverted commas, while a free translation of (part of) a sentence is indicated with double inverted commas.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

- (6) **hhe'ee** **bar** **xweerawoo**
hhe'ee bar xweera ~~~
hey if evening~L.F0
- kwa** **aga** **mak**
t-ng-u-Ø-wa Ø-a-Ø-(g)a mak
MP-A.3-P.M-AUX-BACK A.P-P.F-AUX-PERF somewhat
- fa/aarók** **/aaymarók**
fa/aa-r'-ók aayma-r'-ók
ugali-L.Fr-POSS.2SG eating-L.Fr-POSS.2SG
- a** **dát** **a**
Ø-Ø-(g)a dát~\$A~-i' Ø-Ø-(g)a
A.P-AUX-PERF come.in~2~-PST A.P-AUX-PERF
- morohhót**
morohhoót~\$A~-i'
sneak~2~-PST
“Hey, if in the evening you went in to see how your meal was coming.”
(20151125j, 06:51-54)
- (7) **hhe'ee** **Ganay** **a** **u'uu'í**
hhe'ee Ganay-ó i-Ø-(g)a u'uu'~\$B~-i'~^~
hey Ganay-L.Mo S.3-AUX-PERF cry.out~M~-PST-Q
“Hey, if in the evening you went in to see how your meal was coming.”
(20151125j, 06:51-54)

Thus, it may also be possible that its frequency in the two texts is due to their genre; being a conversation-style narrative rather than a monologue, interruptions are much more frequent. On the other hand, in the other conversation-style narrative, although only featuring one speaker and one listener rather than two, **hhe'ee** does not occur. Additional evidence for speaker preference may be the occurrence of another interjection, **hay(y)a** ‘okay’ (8), which seems to have the same function as **hhe'ee**, and could arguably be construed as a variant of it. However, both markers, or forms, are used by both speakers, meaning that there could apparently be other, less obvious factors conditioning the variation, the disentanglement of which I leave open for further research.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

- (8) **hayya** **idodá'** **a** **idorí**
haya ido-r'-dá' Ø ido-r'-í
okay manner-L.Fr-DEM4 AUX manner-L.Fr-DEM1
 "Okay, it was this way" (20151125i, 02:11-13)

It is important to note that the translations as 'hey' and 'okay' in this case refer to the secondary functions of the English words, namely those described above. The markers in Gorwaa do not hold any other functions, or at least not one of or as part of a greeting or affirmation as they do in English (Andrew Harvey, pers. comm.). Thus, whether or not the broader definition of general 'attention getter' is applicable remains to be seen, as I am currently unaware of its functions outside of narratives and two-person conversation. It is possible that the marker is connected to **hhe'eés** 'finish.PST', older texts show the frequent occurrence of "**he'eés**" at the beginning of paragraphs or sentences, translated as 'and then' or a variation thereof (HEEPE 1930). It is possible that this use of the verb has lexicalized in the past century, with the phonological erosion as a result of the fossilization.

Another interjection, **gitláy** 'hey', which occurs 9 times, seems to be employed with the same function of conversational organization as the main function of **hhe'ee**; holding or taking the conversational floor. This interjection occurs in five of the eight texts, but over half of its occurrences are in Pakani Story.

- (9) **gitláy** **aree** **ge** **wawitumo**
gitláy ár-ee ge wawitumo-ó
hey see-IMP.SG.O EMPH chief-L.Mo
- awu** **ngu** **hariís**
awu-ó ng=u=Ø hariís~'~
bull-L.Mo A.3=P.M=AUX give~PST
- na/ay'é'** **ma** **daqay**
na/ay-ó='é' m=a daqáw~LPA~
child-L.Mo=POSS.1SG PROHIB=AUX1 attend~SUBJ~
 "<look, leader, I will bring you a bull (that) my child doesn't go>" (20151202e, 01:57-02:00)

The last interjection, **xay**, marks emphasis. It occurs sentence-initially (10) and sentence-finally (11). Although similar in discourse organizational function to **hhe'ee** and **hayya** above, **xay** has additional functions that are more grammatical in nature.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

- (10) **xay** **giyee** **na**
xay giyee(d)ar ni=(g)a
EMPH famine.LFr AUX.VENT=PERF
- tleér** **kureerí** **tám**
tláw~'~ kureerí-' tám
go~PST~ year.PL-L.NØ three
"Hey famine came for three years." (201512902e, 04:51-4)

- (11) **dó'** **Ngawdá'** **nguna** **káy** **xay**
do'-ó Ngawdá' ng=u=Ø=na káw~'~ *xay*
house-L.Mo Ngawdá' A.3=P.M=AUX=IMPF go~PST~ *EMPH*
"He went to the house of Ngawdá' hey." (201512902e, 04:37-40)

For example, **xay** often occurs in question sentences. In some cases it is the presence of the marker indicating its status as a question (12), but in other cases it seems to be more peripheral (13). The last consonant of **xay** can also be lengthened, comparable to the optionally lengthened English tag question 'or'.

- (12) **qwaslarumó** **do'inee** **xay**
qwaslarumo-ó do'-ó-'ín~'~ *xay*
doctor-L.Mo house-L.Mo-POSS.3PL~EMPH~ *EMPH*
"Their traditional doctor, hey?"
- (13) **hee** **idór** **/iìs** **xay**
hee-ó ido-r' /íís ~\$B~'~'~ *xay*
person-L.Mo manner-L.Fr do~M~EMPH~ *EMPH*
"What is a person to do? Hey" (20151125i, 05:37-40)

xay can also be combined with **ge** *EMPH* (14). This is most likely because **xay** cannot have both the question and emphatic purpose simultaneously, meaning that an additional marker is required. As **ge** always occurs after that which is emphasized, in the case of (14) it is the question status of the sentence that is emphasized.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

(14) aní	tók	masa	
aní	tí-ók	m-s-Ø-a-Ø-(g)a	
PRO:1SG	DEM.F-POSS.2SG	PROHIB-REASON-A.P-P.F-AUX-PERF	
i'a	qamiim	xáy	ge
i'a-r'	qamiim~LPA~	xáy	ge
ear-L.Fr	put~SUBJ~	EMPH	EMPH
"Why did I listen to yours?" (20151125j, 16:19-20)			

A similar form, **xáy**, is given by HARVEY (2018a: 184) as the polar question marker. As both words are phonologically very similar, only differing in their tone, and are both involved in the formation of several types of question sentences, it is more than likely that these, at least originally, stem from the same marker, with different morphophonological processes affecting the individual forms, or, alternatively, the high tone on **xáy** is the (lexicalized) result of the sentence-level rising-falling pitch accent used in polar questions (HARVEY 2018a: 77).

Further research could delve into the interaction of these markers with information structure, as well as their interaction with other emphasizing elements.

This section has shown that, although they may be formally quite simple, the interjections play a major functional role in the organization of narratives, as well as being involved in pragmatic operations such as the relation between speaker and hearer. Similar markers, although somewhat more embedded in the formal syntax, are conjunctions, which are discussed in the following section.

3.2 Conjunctions

It comes as no surprise that conjunctions are quite common in the data. As their name suggests, their basic function is to conjoin two elements. However, the elements that are conjoined, e.g., phrases or paragraphs, as well as the ways in which they are conjoined semantically, e.g., sequentially or causally, varies greatly. Here I present the four conjunctions used in descending order of frequency, starting with **aluwo** '(and) then'.

Aluwo seems to have a relatively straight-forward meaning, indicating a tight connection with the previous sentence(s) and indicating that the narrative is continuing in the expected direction, i.e., that the following will closely follow in the lines of what has previously been discussed. The marker mainly occurs at the beginning of a sentence, and can be combined with **kara** 'so', which precedes it.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

- (15) **aluwo** **disí** **na** **xeér**
aluwo di-r'-sí Ø-(g)a xáw~\$A~-i'
then place-L.Fr-DEM2 AUX-PERF come~F~-PST
- baqayoo** **ikwahhaás**
baqayoo-r' ikwahhaás~\$B~-i'
outside.meeting.place-L.Fr approach~M~-PST
"And so the place he went, he went to the outside meeting place." (20151223b, 02:00-4)

When occurring sentence-medially, it is either part of recapitulative linkage (16a), or as a conjunction conjoining phrases within one sentence (16b). Additionally, the marker is sometimes repeated as a filler, giving the speaker some time to think of what comes next. It remains to be seen whether this is part of the lexical semantics of **aluwo** or rather stems from its relatively frequent position at the beginning of a sentence.

- (16) a. **muukí** **aluwo** **alkwí** **ari**
muu-kú-í aluwo alkwí ari
people.L.Mk-DEM1 *then* now isn't.it
- idór** **ina**
ido-r' i-Ø-na
manner-L.Fr S.3-AUX-IMPF
- tlehhiit** **doosla**
tleéhh~\$B~-íft~\$B~-i'~LPA~ doosla-r'
make~M~-MID~M~-PST~SUBJ~ farming-L.Fr
"These people, the way in which they did, farming was started." (20151125j, 03:30-35)

- b. **kasír** **ta** **tleéhh** **aáng**
kasi-r' t=Ø=(g)a tleéhh~'~ aáng
work-L.Fr M.P=AUX=PRF make~PST~ in.the.past
- a** **tí** **kara** **aluwo**
Ø tí kara aluwo
AUX DEM.F so *then*
- iimi** **a** **axwés**
iimi-r' =a axweés~'~
people-L.Fr =PERF speak~PST~
This is how they did the work in the past, so then the people talked."
[discussing traditional solutions for famine] (201512902e, 06:56-7:00)



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

The recapitulative nature of the marker can also be attested in the origin of the marker: Although lexicalized now, **aluwo** historically consists of ‘**alu** ‘back, rear, after, behind’ and the topic marker⁶ =**oo** TOP. Therefore, the historical interpretation, if taken literally, of **aluwo** is something along the lines of ‘on the back of this’, which highlights the tightness, or even a reduced form of recapitulative linkage, between the previous and the following information.

The subsequent marker, **ya** ‘thus’, indicates that what follows is the description of a scene either not immediately present, sensory and/or temporally (17), or of a change in state (18).

- (17) **gár** **afkudá'** **ya** **a** **afkudá'**
ga afa=dá' ya a afa=dá'
thing mouth=DEM4 thus COP mouth=DEM4
- ya** **kawa** **loori**
ya t=ng=a=Ø=wa loori
thus M.P=A.3=P.F=AUX=back lorry
- “If it is about what we said when the vehicles carried (us).” (201512902e, 05:37-40)

A change of state here means that some dynamic event occurs that changes features or the degree of the features in a referent. **Ya** emphasizes the dynamicity and connects either the referent to the event, or connects the two events involved in the change of state, for example the causative connection in (18).

- (18) **kar** **aluwo** **muuki** **i**
kara aluwo muu-kú-i i-Ø
so then people-L.Mk-DEM1 S.3-AUX
- hhay** **leehhowari** **ngawaa**
hhay~\$B~-a leehhowa-r'-í ng-a-Ø-wa
arrive~M~FV good.condition-L.Fr-DEM1 A.3-P.F-AUX-back
- eer** **ya** **iwa**
áw~\$A~-a~LPA~ ya i-Ø-wa
go~2~-P.PRES~SUBJ thus S.3-AUX-Back
- fuduu'iyî**
fuduú'~\$B~-iyá'-i'~^~
be.proud~M~N.PRES-PST~Q~
“And so then these people, when they got to this good state it was thus, did they get proud?” (20151125i, 03:14-17)

⁶ For a discussion of the actual status of this marker, see Wiegertjes (2020) and Kerr (in prep.).



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

Note that in (18), what follows is a rhetorical question. There are very common in Gorwaa discourse (see section 4.2), occurring often to emphasize certain characteristics of a character, or to emphasize some important event that is driving the narrative forward; it is in this case thus **ya** that functions as an emphatic marker within the discourse and information flow, rather than on a sentential or phrasal level.

Ya can also be used to predict a certain change in state or state of events in the future, implicating ‘it will be thus’:

- (19) a. **aamarós** **ina** **ó'**
aama-r'-ós i-Ø-na ó'
grandmother-L.Fr-POSS.3SG S.3-AUX-IMPERF say
daqaywí **ya** **daqaywí**
daqay-í ya daqay-í
boys\LF-DEM1 thus boys\LF-DEM1
“His wife said <these boys, thus:>”
- b. **ino'ín** **slami** **Taraarí**
ino'ín slami Taraar-í
PRO:PERS.3PL moreover Datooga.person-DEM1
birnga **tu/iyí'**
bar-ng-a-Ø tuú/ ~'~ -iyá' -i
if-A.3-P.F-AUX slaughter~PST~-N-FV.PST
lawulú **Taraa**
lawulu~'~ Tarmo-r'
spears~L.N0~ Datooga.person-L.Fr
ngin **waatliyá'**
ng-i-Ø-n waatl- iyá'
A.3-P.N-AUX-EXPECT return-PRES
“<They, moreover, if these Datooga people are killed, they return the spears of the Datooga people home.>” (20151125i, 15:09-14)

(19b) showcases how **ya** functions on the level of discourse, since what is being conjoined and emphasized can be several sentences long and may consist of several events.

The next marker, **kara**⁷ ‘so, then’ indicates that the narrative is moving forward, possibly after a caveat or an interruption. For example, when in History 1-A there is an interruption in the narrative where the speaker checks the attentiveness of the listener (see chapter 4.2), the speaker indicates the

⁷ **kara** appears as <kara>, <karra>, and <kar>; the spelling ‘kara’ is used to cover all three variants in this article.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

continuation of the narrative with **kara**. The information presented after **kara** is not tightly related as with **aluwo** (see 3.2), and it is clear that the next piece of information is in direct connection to the previous information, but driving the plot forwards, without anything unexpected happening. For example:

- (20) a. **na** /ét **nee** **lawulu**
ni-(g)a /eét~\$A~-i' nee lawulu~'~
VENT-PERF go.down~F~-PST and spears~L.N0
"They came down with spears."
- b. **karra** **tindiwa** **hardáh**
kara ta-ni-wa hardáh~\$B~-i'
so TEMP-VENT-BACK arrive~M~-PST
- amorí** **tawa**
amoo-r'-í t-Ø-wa
place-L.FR-DEM1 MP-AUX-BACK
"And so when they arrived here..." (20151223b, 00:58-01:04)

Therefore, it not only indicates that the two pieces of information on either side of the marker are connected to each other, although weaker than with **aluwo**, but that the latter follows logically from the former, whether temporally, as in (20a-b), or as a conclusion (21).

- (21) **karra** **an** **tleera'**
kara Ø-Ø-n tláw~\$A~-á'-a~LPA~
so S.P-AUX-EXPECT go~2~-2PL-P.PRES~SUBJ~
- umó** **heewoo** **na/aywós**
umó hee-ó=oo na/ay-ó-ós
every person-L.Mo=TOP child-L.Mo-POSS.3SG
- ngin** **ileehh**
ng-i-Ø-n ileéhh~\$B~-a~LPA~
A.3-P.N-AUX-EXPECT fetch~M~-P.PRES~SUBJ~
"And so you (pl.) would go out, everyone would fetch their child." (20151125i, 01:24-26)

The most basic in function of the conjunctions is **nee** 'and'. It occurs scattered throughout the narratives, but is by far the most frequent in Life Story 2, an autobiographical monologue that employs a relatively small number of organizational strategies. As it seems to be the marker that carries the least amount of semantic or information structural meaning, this marker is used to simply conjoin two noun phrases (22), or verb phrases (23) within a sentence, to indicate their connection.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

(22) **tunáy**

tunáy
dried.honey

ngu	lowá	kón	garí
ng=u=Ø	lowá	kón	gar=í
A.3=P.M=AUX	much	have.M.PRES	thing\L.F=DEM

tunáy	nee	naanigí
tunáy-ó	nee	naanigí-tá
dried.honey-L.Mo	and	larvae-L.Ft

Dried honey – it has lots of dried honey and larvae.” (20150808a, 05:58-06:01)

(23) **heé** **ta** **báy** **Irqutu** **nee**

hee-ó	t-Ø	báy	Irqutu.LMo	nee
person-L.Mo	MP-AUX	say	Iraqw.person	and

heé	ta	báy	Gormo
hee-ó	t-Ø	báy	Gormo-ó
person-L.Mo	MP-AUX	say	Gorwaa.person

“The person called Iraqw and the person called Gorwaa.” (20151125i, 10:10-3)

Alternatively, it is also used in creating complex number constructions (24).

(24) **kurkú** **mibeerí** **tsár** **nee** **kurkú** **mibeerí** **tsár**

kurkú	mibeerí	tsár	nee	kurkú	mibeerí	tsár
year\L.F	tens\L.F	two	and	year\L.F	tens\L.F	two

‘the twenty second year’ (20131027_20150725c, 14:10-4)

However, **nee** is also used in ways which may be unexpected for a simple conjunction. For example, in (25) **nee** indicates causation and (26) shows a comitative reading.

(25) **ka** **tsuúnq** **nee** **Haymú**

t-ng-a-Ø	tsuunq~’~	nee	Haymú
MP-A.3-P.F-AUX	bless.3~PST~	and	Haymú

“It was bewitched by Haymú.” (20151125i, 08:54-6)

(26) **tana** **oó'** **muukudá'** **nee**

t-Ø-na	oó'~’~	muu-kú-dá'	nee
MP-AUX-IMPF	say~PST~	people-L.Mk-DEM4	and

atén	ta	neetaan
atén	ta-u-Ø-(g)a	neét-aán~LPA~
PRO:PERS.1PL	MP.1PL-P.M-AUX-PERF	play-1PL~SUBJ~



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

uga *sleerî*
 Ø-u-Ø-(g)a sláw~\$B~-í
 A.P-P.M-AUX-PRF get~2SG~-PST
 "They said <did you get those people to play with us?>" (20151125i, 07:55-57)

In the narratives, however, **nee** is not necessarily either a conjunction, or a comitative, or causative marker. Rather, the semantics can be somewhere in between or across those functions, as (27) shows.

- (27) **hhe'e** **Gora** **kodá'**
 hhe'e Gora ko-dá'
 hey Gorwaa.person INDEF.M-DEM4
- tindina** **digir-delaali** **nee**
 t-ni-na digir-delaali nee
 MP-VENT-IMPF footprint-?? and
- Taraa**
 Tarmo-r'
 Datooga.person-L.Fr
 "Hey, the Gorwaa people were followed by the Datooga people." (20151125i, 10:03-5)

In this example, the function of **nee** in the impersonal construction can be both construed as causative, the Datooga being the causing the following, but also as a comitative, as the construction of the 'following' event is created by the verb complex **digir-delaali**⁸ 'follow'.

HARVEY (2018a: 91) analyzes **nee** in this type of construction as an 'agentive preposition', separating conjunctive **nee** and causative **nee**. However, analyzing **nee** as a comitative marker can easily subsume both the conjunctive and causative-impersonal uses of the marker. Supporting this is the marker **neer** 'with (something/someone)' (28), which is likely to be a fossilized combination of **nee** and the instrumental marker **-r** INSTR: neither the conjunctive function, nor the causative function fits into the combinatory meaning of **nee** + **-r**, whereas comitative as a base meaning can easily lead to the current semantics of a linking element.

⁸ It is currently unknown to me what the exact meaning of the second element of this verb (complex) is.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

(28) [...]	nguna	saga-taáhh	
	ng-u-Ø-na	saga-taáhh	
	A.3-OBJ.M-AUX-IMPF	head-hit.M.PST	
	neer	na/áy	deti
	neer	na/áy	deti
	with	child.LNØ	<deti>tree
“[...] he smashed him on the head with the seed pod of the <deti> tree.” (HARVEY 2018a: 393)			

Note that the construction type in both (27) and (28) are the same, both employing noun incorporation and using the marker to flag the instrument or impersonal agent, again emphasizing their common origin.

3.3 Swahili loans

Since all Gorwaa speakers are also fluent in Swahili (HARVEY 2019: 141-42), it is difficult, and quite possibly futile to disentangle and analyze the status and use of Swahili words in Gorwaa discourse, synchronically; I will therefore not further attempt to distinguish them as either loans or a code-switch from Swahili. However, none of the phonological changes possible and expected when loaning words from Swahili into Gorwaa (HARVEY and MRETA 2017) are present: All loans retain the same or almost the same form, meaning that, if they are loans, they must have been borrowed quite recently,⁹ especially **mpaka** (Alessandro FONTANA, pers. comm.). Additionally, none of them occur in older Gorwaa texts (HEEPE 1930), although, of course, these early texts are likely not a fully accurate representation of natural speech.

In any case, it has been shown that discourse markers, or other linguistic features that have mainly pragmatical functions are easily borrowed and are generally very prominent in bilinguals' speech in a contact-heavy situation (Auer 2014), but their enigmatic status within the linguistic systems often been discussed (e.g., MATRAS and SAKEL 2008; SAKEL and MATRAS 2008; MATRAS 2016).

The reason they are discussed separately is because, whatever their exact status, their use and function can easily be compared to their respective Swahili markers, which may give some exposition on primary and secondary, or at least most prominent, function and if and how the markers are integrated into Gorwaa discourse.

⁹ Note, however, instances of 're-borrowing' of earlier loans, e.g., **chupa** 'bottle' was recently re-borrowed as **tupa**, from the Swahili **chupa** 'bottle' (Maarten MOUS, pers. comm.).



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

The first discussed discourse marker is **alafu** ‘then’, which is frequently used by Gorwaa speakers in everyday conversation (Andrew HARVEY, pers. comm.), although not appearing very frequently in the data. In Swahili, **halafu** is a commonly used¹⁰ adverb meaning ‘and then’ (WAWIRE 2017), it is mainly used as a discourse marker conjoining sentences and paragraphs, but can also be used to connect noun phrases. Additionally, it can be used in questions when pressing for more information, such as in **halafu akasemaje?** ‘(and) then what did he say?’ or **halafu iweje** ‘(and) then what?’ (HURSKAINEN and DEPARTMENT OF WORLD CULTURES 2016).

In Gorwaa it seems that **alafu** is only used for marking and conjoining paragraphs, although this function is multifaceted: it indicates the end of the previous paragraph, introduces a new paragraph, and establishes a link between the two. **Alafu** may occur on its own, i.e., as the single member of a breath group, or at the beginning of the first sentence of the new paragraph. Whether it occurs alone or not, **alafu** usually occurs with a medium (0,5 sec) to long (>1 sec) pause on either side, which leads to a relatively long break in information flow. This gives the hearer some time to process the previously presented information, and it may also be an indicator of the change in narrative structure in the following paragraph. Using discourse organizing elements such as particles in order to facilitate is something has been found in other languages as well (see, e.g., DE VRIES 2018). Further data, especially on ‘everyday’ speech and conversation, could shed light on further and more detailed functions of **alafu**.

The other two Swahili markers that occur in the data are **basi** and **mpaka**. Either marker is not very frequent, occurring 7 and 4 times, respectively. However, in each occurrence the marker is fully integrated in the discourse, meaning that they do not occur in isolation or with pauses in speech, as with **alafu** above, or are restricted in their position at the start of a sentence (29). However, there is no collocation with any other Swahili words or phrases, which shows they are likely to be well-integrated into Gorwaa (MATRAS 2016), regardless of their status in the Gorwaa lexicon. This is supported by MOUS (2019), which shows that **mpaka** has spread throughout languages in East Africa.

¹⁰ **Halafu** occurs 5145 times in the Helsinki Corpus of Swahili 2.0 (HURSKAINEN and DEPARTMENT OF WORLD CULTURES 2016). Alternatively, **alafu** occurs a handful of times in the corpus as well, with the same meaning.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

(29) <i>mpaka</i> <i>mpaka</i> <i>until</i>	<i>ire</i> i-Ø-re S.3-AUX-CONSEC	<i>amorqa'i</i> amoo-r'-qá'=i place-L.Fr-DEM3=VENT
<i>amorqa'i</i> amoo-r'-qá'=i place-L.Fr-DEM3=VENT	<i>ki/iyá'</i> kií/~\$B~-iyá'-a return.(intr.)~3~-N.PRES-P.PRES	
<i>aqo</i> Ø AUX	<i>idorí</i> ido-r'-í manner-L.Fr-DEM1	<i>mpaka</i> <i>mpaka</i> <i>until</i>
<i>ire</i> i-Ø-re S.3-AUX-CONSEC	<i>aaxiyí'</i> aáx~\$B~-iyá'-i' be.satisfied~M~N.PRES-PST	
"And they returned to there, it was this way until they were full." (20151125i, 01:12-14)		

Whatever the position of these words in the Gorwaa lexicon, they fit into the broader category of discourse organizing markers in Gorwaa, which the above section has shown perform several functions and are complex and multifaceted, even at the surface level.

4. Organizing discourse on the narrative level

This section analyzes discourse organization on the level of the narrative, or how speakers and hearers structure a narrative into its main parts. Using WEDEKIND'S (2013) framework for narrative construction in Cushitic languages, the section will discuss introductory strategies (4.1), intermittent speaker-hearer contact (4.2) and conclusions (4.3). Note that, although Wedekind's framework is used as a baseline, the exact subject matter differs considerably, meaning that a comparison to the framework or a closer investigation of its applicability to Gorwaa remains open for future research.

4.1 Introductions

There is not an explicit introduction to a narrative in every case. However, there is always an initialization – which can then optionally be followed by an introduction. For example, the Pakani narrative starts with **aree ya** 'look here', which functions as the 'attention-getter', indicating that the speaker will start a speech turn (the narrative). In the instance of the Pakani narrative, what immediately follows shows that the speaker will use their speech turn to start the construction a narrative, i.e., tell a story:



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

- (30) a. **aáng** **pakani** **bará** **Gorwaawoo**
aáng pakani-r' bará Gorwaaw=oo
in.the.past borderland-L.Fr in Gorwaaland=TOP
"In the past, the borderland in Gorwaaland"
- b. **Gorwaa** **kina** **ohín**
Gormo t=ng=i=Ø=na óh-íím~'~
Gorwaa.person MP=A.3=P.N=AUX=IMPRF catch.EXT~PST~
- masoombár** **Gorwaa**
masoomba-r' Gormo
youth-L.Fr Gorwaa
"Gorwaa were arrested, Gorwaa youth" (201512902e, 00:02-08)

Although the usage of **aáng** 'in the past' is not restricted to introductions in other contexts, it is very clear that the speaker is setting the stage for their narrative in the above examples: In (30a) they give the time and place of the narrative, and in (30b) they give the main characters, the Gorwaa youth, and a very brief context of what the narrative entails. Thus, the Pakani narrative gives a very clear example of some of the strategies of opening a narrative: a highly pragmatic opening, indicating that the speaker is taking the floor, and a short description of the setting and context of the narrative, as in (31).

- (31) a. **ansiimaak aso díř qalalandirí gardá' oo amilá dirí qalalandirí**
B: "Let's start it at this [qalalandi] (tree), what is there about this [qalalandi]?"
- b. **qalalandirí aáng kana nanaáq heé ta báy Gidahoonda nee Sigeéd**
A: "This <qalalandi>, in the past, was contested, a person called Gidahoonda and Sigeéd." (20151223b, 00:01-13)

In another narrative, Life Story 2, the speaker introduces the topic simply by identifying themselves: **aníng a Raheli Lawi** 'I am Raheli Lawi'. In the highly marked context of an autobiographical monologue, where the entirety of the narrative can be seen as an introduction of sorts, it is somewhat more difficult to determine what exactly constitutes the introduction. Intuitively, I would say that in the case of the monologue described here, the extended identification, i.e., name, birth year and birth place, serves as the introduction (or title), as there is a temporal shift afterwards to the speaker as a youth.

- (32) a. **aníng a Raheli Lawi**
"I am Raheli Lawi."
- b. **aní ta laqwaál kurkó kumó wák tsiréré gwaleél nee mibeerí tsiyéhh nee faanqw**
bará kijjír Rírod wa.alé
"I was born in the year 1947 in the village of Riroda." (20131027_20150725c, 00:28-39)



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

In the case of Honey Hunting 2 instructional narrative, the introduction consists of explaining what the speaker will do and why and how they will use the attributes, ending with the sentence¹¹ **a faák diri** 'I am done here'.

For the historical narrative that have speaker-hearer interaction, History 1-A, History 1-B, Description of Trees 11, and Justice 5, the speaker linguistically opens the narrative in a similar way as in a monological historical narrative: by grabbing the attention of the hearer(s) and thereby taking the floor. In this case, however, a reply from the hearer is required: for example, asking **axamisâ** 'are you listening?', paired with the desired response of **ee** 'yes', before starting the narrative proper. A variation of this is a conversational start where the speaker and hearer discuss and establish the topic of the narrative, by, for example, asking about a certain object or plant in the vicinity:

- (33) B: **ansiimaak aso díř qalalandirí gardá' oo amilá diri qalalandirí**
"Let's start it at this [qalalandi] (tree), what is there about this [qalalandi]?"
20151223b, 00:01-5)

The reply to this repeats the topic and gives an initial glimpse into what the narrative will entail, in the same way as is done in the monological narrative:

- (34) A: **qalalandirí aáng kana nanaáq heé ta báy Gidahoonda nee Sigeéd**
"This <qalalandi>, in the past, was contested, a person called Gidahoonda and Sigeéd." (20151223b, 00:01-13)

In other instances, the speaker gives some meta-commentary about the narrative, for example (35), indicating that this is a continuation of a previous narrative, or (36ab) which explicitly gives the conversation topic.

- | | | | | |
|------|-----------|-------------|----------------|-----------------------|
| (35) | ee | gwéh | didá' | kay |
| | ee | gwéh | di-r'-dá' | t-ng-a-Ø-ay |
| | yes | let's.go | place-L.Fr-DEM | MP-A.3-P.F-AUX-CONSEC |

geexeer

geexáw~\$A~-i'~LPA~

leave~2~-PST

"Let's go – that place that you left off." (20151125j, 00:00-05)

- | | | | | | |
|------|----|--|-------------------|-----------|------------------|
| (36) | a. | ee | axweesantá | ta | axweesaan |
| | | ee | axweesani-tá | t-Ø | axweés~LPA~ |
| | | yes | utterance-L.Ft | MP-AUX | speak~SUBJ~ |
| | | The conversation that we will have..." (20160219h, 00:04-07) | | | |

¹¹ This sentence does not occur elsewhere in the data, but since there is only one instructional narrative, we cannot say if this a formulaic expression used in instructional settings.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

b. an Ø-Ø-n A.P-AUX-EXPECT	baraqi bara-qá'-i side-DEM3-LAT	dahasár dahasa-r' entering-L.Fr
slaa'aan slaá'-aá~LPA~ want-1PL-SUBJ "Gorwaa were arrested, Gorwaa youth" (201512902e, 00:02-08)		

4.2 Intermittent speaker-hearer contact

Throughout the entire narrative, in a situation where there are multiple speakers present, speaker-hearer contact occurs. Although back-channeling, or what WEDEKIND (2013: 133) calls 'formalised or phatic replies', are very frequent throughout, more complex interactions also occur. Back-channeling consists of simple discourse markers or function words, such as **ee** or **mm** 'yes' (see chapter 3.1).

Whereas some of the speaker-hearer contact is pragmatic in nature, such as establishing continued attention from the hearer in (37), content-based speaker-hearer contact also occurs (38). In case of the former, it is generally the speaker that initiates the contact, whereas in the latter it is the hearer that initiates.

- (37) a. **na/áy Haymú kuna luú/ aga axasí**
"Haymú's child was hidden, have you heard?"
- b. **aga axaás**
"I have heard." (20151125i, 05:08-13)
- c. **a axamiís**
"I am listening." (20151125i, 00:40-1)
- d. **ee**
"Yes." (20151125i, 04:52-3)

(37b-d) showcase the multitude of answers that can be given by the listener to the posed (rhetorical) question. This means that, although there is some formalization, e.g., the majority of the answers employing the same verb used in the question, there is no strict question-answer pair formalization. It is important to note here that there is likely to be some pairing of para-linguistic or extra-linguistic features with these interactions, especially eye-contact or positioning the body relative to the speaker, but I leave it up to future research to analyze these.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

- (38) a. **dír nga ay a dilâ gaari**
“Where did the car come from?”
- b. **gaari aáng káhh amosí aáng, inós nina xaxáy neer farasi**
“Cars in the past were not present, here in the past, he was coming by horse.”
(20151223b, 04:46-51)

Contra to (37), (38a-b) are not formalized in this sense; the hearer initiates a content question when the speaker takes a small pause and thus interrupts the flow of the narrative by indicating a need for clarification. It must be emphatically noted that this type of clarificational speaker-hearer contact is most likely highly dependent on genre, as in the case of (38a-b) the narrative is meant as a sort of history lesson, where the hearer does not (fully) know the contents of the narrative being told. In other genres, such as (formalized) oral tradition narratives, it is likely that this type of interaction is reduced to a minimum, if present at all. Additionally, all narratives used in this study consist either of a single speaker or of a speaker-duo and one hearer: It is probable that the type and scope of speaker-hearer interaction changes, possibly becoming more formalized when the hearer-to-speaker ratio increases, as this means an increase in factors the speaker has to track. It is also possible that in situations where there are more hearers than speakers, only one of the hearers fulfills the linguistic ‘role’ of listener, i.e., interacts with the speaker, as occurs in Iraqw (Maarten MOUS, pers. comm.).

WEDEKIND (2013) states that the questions from the speaker are rhetorical questions posed grammatically in the negative. Although obviously not exclusively or even in a majority, these do also occur in the Gorwaa narratives (39), where a simple back-channel, **ee** ‘yes’, from the hearer suffices. In this sense, the structure deviates from Wedekind’s model, since he posits them as formalized question-answer pairs, and the Gorwaa structure is more variable.

- (39) a. **te'eé' ka boo/eekeê**
“Mine isn’t it black?”
- b. **ee**
“Yes.” (20151125i, 02:04-5)

The most frequent markers initiating speaker-hearer contact from the speaker’s perspective are: **aga axasî** “did you hear?”, **axaasee** ‘listen’ and **karra idoriheek** “isn’t it so(?)”. It can thus be expected that these are formalized, at least in a stylistic manner, within the discourse. As mentioned above, the reply is rather less formalized, meaning that the above markers are not paired with a predetermined response.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

What is interesting to note, however, is the length between each speaker-hearer interaction: In the History 1-A text, there are close to ninety questions asked, rhetorical or not, in the span of just under twenty minutes. There are an additional few speaker-hearer interactions not based around questions, simple back-channels, bringing the number of interactions to over a hundred. Since the rest of the rhetorical questions that are answered in a rather formalized way, repeating the sentence in the affirmative or negative, depending on the context, I pose that every rhetorical question initiates speaker-hearer contact, but in some cases the hearer(s) decide(s) not to engage in this contact, leaving the question unanswered. Therefore, the unanswered rhetorical questions are still counted as initiation of speaker-hearer contact. About a fifth of the questions asked in the text are **aga axasî** 'have you heard', which has the purely pragmatic function of initiating speaker-hearer contact without any (other) lexical or contextual information

When the hearer asks a (content) question, they are answered in every instance. The speaker, however, receives a response, whether content-related or a back-channel, to about half of their questions. Note however that the speaker asks the vast majority of all the questions, and for a speaker asking a question does not necessarily interrupt the narrative flow, whereas a hearer asking a question halts the narrative until any confusion is cleared up. There are also some instances where a string of rhetorical questions is used as a narrative device to build up tension (40). In these cases, most or all of the questions asked by the speaker are given an answer, pointing to a, at least somewhat, formalized narrative device, in the case of (40) to ascertain whether the hearer has followed and understood the narrative.

- (40) A: **tindiwa guús ii'a'-qaase'**
"They were chased away, listen up."
- B: **mm**
"Yes."
- A: **hhe'e alkwí Goraa slee i deeroô**
"Hey, now the Gorwaa people, cow is there?"
- B: **káhh**
"(they are) absent."
- A: **gár /aayiya' i deeroô**
"A thing to eat is there?"
- B: **káhh**
"(they are) absent."



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

A: **hhe'e ta dooslikeê**
"Isn't it that the person doesn't farm?"

B: **ee**
"Yes." (20151125i, 13:01-8)

Although back-channeling or interaction doesn't seem to be bound to a strict framework, some observations about their spread throughout the narrative can be made: The average distance between questions is around 13 seconds, depending on the content within the narrative. However, the maximum time that can pass between them seems to be around 30-35 seconds, after which the speaker often asks a question that demands a response. This distance is only exceeded in three instances, up to almost a minute, but in these cases the narrative flow was disrupted in some other way, generally the speaker stopping to remember something or struggling with finding the right words or wording.

It must be noted that there are also instances of back-channeling or verbal responses from the hearer not instigated by the speaker, which further deepens the complexity of the speaker-hearer contact. I leave it up to further research to fully disentangle and expose the system.

4.3 Conclusions of narratives

The most common way to indicate that a narrative is at its end is 'I have finished' or a variation thereupon, e.g., 'the story' or 'it' has finished.

Note that the verb most frequently used in the formula, **faák**, often occurs with a figurative meaning or metaphorical extension, i.e., 'die, end, leave, be gone.', meaning that there is room for a figurative interpretation in the formula as well.

(41) gimáy	a	idorí	axwantee
gimay	∅	idór-r'=í	axwantee-r'
okay	AUX	manner-L.Fr=DEM1	conversation-L.Fr

a	idorí	faák
faák~'~	tí	alkwí
finish.PST	DEM.F	now

"Okay, that's it, talk of this has finished now." (201512902e, 07:50-3)

(42) Gawá	daandó	hoota'é'	nee
gawá	daandó	hoota='é'	nee
on	back\L.F	life\L.F=POSS.1SG	and

alki/iito	hoota'é'	nee
alki/iito- r'	hoota-ó='é'	nee
story-L.Fr	life-L.Mo=POSS.1SG	and



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

aga	faák
Ø=Ø=(g)a	faák
A.P=AUX=PRF	finish\1SG.PST

"On the evidence of my life I have finished testifying." (20131027_20150725c, 15:16-21)

Note that **gawá daandó** 'on top' can figuratively be used as 'about', and consists of the lexemes **gawa** 'top' and **daanda** 'back' (HARVEY 2018a: 104). This means the translation of (42) above, could also be given as "about my life and my life story [i.e., the story told], I have finished." This formula may be part of a more general convention of ending narratives, since in one narrative, Justice 5, the closing words are Swahili **basi tumemaliza** 'so we have finished'.

Another possible ending, found in the conversational narrative History 1-B, gives an explicit conclusion, summarizing the lesson taught in the narrative:

- (43) **Gorwaa** **gadá'**
 Gormo~'~ ga-r'-dá'
 Gorwaa.person~L.N0~ thing-L.Fr-DEM4
- tlahhay'in** **kus**
 tlahhay-ó-'in t-ng-u-Ø-s
 patriclan-L.Mo-POSS.3PL MP-A.3-P.M-AUX-REASON
- | | | | |
|-------------|--------------|------------|-------------------|
| lowa | ninaw | an | tleehheema |
| lowa | ninaw | Ø-n | tleehh-eema |
| very | small | AUX-EXPECT | making |
- tlakweerós**
 tlakwee-r'-ós
 evil-L.Fr-POSS.3SG
 "This is the reason why the line of the Gorwaa people is very small, it was the making of his evil." (20151125j, 18:22-25)

Towards the end of the narrative, this sentiment is repeated in several different ways in order to indicate what the conclusion, or 'lesson' from the narrative has been. Note, however, that because of the frequent speaker-hearer interaction, the 'wrap-up' of a narrative is not as clear-cut as it is in a monologue, and it is generally a back-and-forth question and answer style in which the main speaker reiterates the 'lesson' of the story, as is to be expected in this narrative style (WEDEKIND 2013: 130). Although the corpus is currently too small to show whether this is a reoccurring, formalized, type of interaction, it is quite possible. Future research could determine whether this is the case, and whether the position at the end, rather than at the start of a narrative is cross-linguistically common and/or can influence the construction of the narrative.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

- (44) a. **nee kuú storisí aga sleér a dilâ**
“And you, where did you get this story?”
- b. **aní ana dír bariseéráw ar**
“I got it from the elders of this place.”
- c. **awa**
“Where?”
- d. **imir aáng aní aqo axumamiís qalalandi imir tindiwa niinaáw imir atén tawa Endamaqee**
“Since long ago I have been hearing (of) the [qalalandi] tree, since I was little, since we were at Endamaqee.” (20151223b, 07:05-9)

5. Concluding remarks

Using the basic notions of discourse organization and a small corpus of narratives, I have given an exploratory overview of the different elements employed in organizing discourse in Gorwaa in this article. Briefly summarized, the elements of discourse organization explored here are: Discourse organizing markers, such interjections and conjunctions, introductory and concluding formulas of narratives, and conventionalized speaker-hearer contact throughout discourse.

Although analyzing discourse in less-studied languages is often seen as somewhat of a final frontier, I have shown here that there is a wealth of information that can be analyzed with a relatively simple set of operationalized terms. The formally mostly invariable discourse organizing markers each fulfill several functions depending on the context, both within the discourse and the narrative itself, leading to an array of multi-applicable markers. On the other hand, the highly variable nature of explicitly structuring the narrative, as in introducing and concluding topics, as well as the, in Gorwaa, essential shaping speaker-hearer interactions throughout, show the other end of the spectrum of form-to-function, albeit that both function within the larger purpose of shaping narratives.

In this article I have also shown that the highly variable nature of both discourse organizing markers and structural narrative organization still lend themselves to description; their variable nature opens up the possibility for multi-functional analyses, allowing for functions of linguistic elements to be described without the possibly futile endeavor of defining their ‘essential’ or ‘fundamental’ semantics and functions.

Above all, while being only a first exploration of the topic in the language, this article shows several interesting strategies of creating narratives that are



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

coherent and cohesive narratives in Gorwaa, and how its speakers can employ these strategies.

Glosses and abbreviations¹²

< >	direct quotative speech	MP	mediopassive
\	non-concatenative configuration	N	agent voice prefix
´	rising pitch accent	N0, Na,	neuter gender,
`	falling pitch accent	NØ	a-type, Ø-type subgender
^	rising-falling pitch accent	NEG	negative
1, 2, 3	first, second and third person	NF	non-finite
A	agent	OBJ	object
ADJ	adjective	P	patient
AUX	auxiliary	PERF	perfective
BACK	background ‘tense’	PERS	personal
BRF	brief interval before following event	PL	plural
CAUS	causative	PN	proper noun
CONN	connective	POSS	possessive
CONSEC	consecutive ‘tense’	PRES	present tense
COP	copula	PRO	independent pronoun
DECL	declarative	PROHIB	prohibitive mood
DEM1,2,3,4	demonstrative, different deices	PTCP	participle
DET	determiner	PST	past tense
DIM	diminutive	Q	question marker
DIR	directional	QUOTE	quotative
DIST	distal	REAL	realis
DS	different subject	REASON	reason
EMPH	emphatic	RED	reduplication
EXPECT	expectative aspect	RES	resumptive
F, Fr, Ft	feminine gender, r-type, t-type subgender	S	subject
IMP	imperative	SEQ	sequential
IMPF	imperfect	SG	singular
INDEF	indefinite	SM	specific referent marker
IZ	Izafe (linking element)	SS	same subject
L	linker	SUBJ	subjunctive mood
LAT	lative	TEMP	temporal
LPA	level pitch accent	TR	transitive
M, Mk, Mo	masculine gender, k-type, o-type subgender	UR	upriver
MID	middle	VENT	ventive

¹² All glosses have been taken from their respective authors and modified only stylistically for consistency.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

References

- AMEKA, Felix (1992). "Interjections: The universal yet neglected part of speech", *Journal of Pragmatics* 18 (2-3): 101-18.
- AUER, Peter (2014). "Language mixing and language fusion: When bilingual talk becomes monolingual", in Juliane BESTERS-DILGER, Cynthia DERMARKAR, Stefan PFÄNDER and Achim RABUS (eds.), *Congruence in Contact-Induced Language Change*, Berlin/Boston: De Gruyter, 294-334.
- AZAR, Zeynep, Ad BACKUS, and Aslı ÖZYÜREK (2019). "General- and language-specific factors influence reference tracking in speech and gesture in discourse", *Discourse Processes* 56 (7): 553-574.
- BOND, Sandra J., and John R. HAYES (1984). "Cues people use to paragraph text." *Research in the Teaching of English* 18 (2): 147-67.
- HARVEY, Andrew David (2017). "Gorwaa: An Archive of Language and Cultural Material from the Gorwaa People of Babati (Manyara Region, Tanzania)", London: SOAS, Endangered Languages Archive.
- HARVEY, Andrew David (2018a). "The Gorwaa Noun: Toward a Description of the Gorwaa Language", doctoral dissertation, SOAS, University of London.
- HARVEY, Andrew David (2018b). "Word-markers: Toward a morphosyntactic description of the Gorwaa noun", *SOAS Working Papers in Linguistics* 19: 1-39.
- HARVEY, Andrew David. 2019. "Gorwaa (Tanzania) - Language Contexts", in Peter K. Austin (ed.), *Language documentation and description*, vol 16. London: EL Publishing, 127-168.
- HARVEY, Andrew David, and Abel Yamwaka MRETA (2017). "Swahili loanwords in Gorwaa and Iraqw: Phonological and morphological observations", *Jarida La Kiswahili La TATAKI* 201 (79): 156-177.
- HEEPE, Martin. (1930). "Hamitica I: Fiome-Texte", *Mitteilungen Des Seminars Für Orientalische Sprachen (III Abt.)* 32: 158-202.
- HEESCHEN, Volker (1994). "How long are clauses and sentences in a Papuan language like Eipo", *Topics in Descriptive Papuan Linguistics, Semaian* 10: 50-74.
- HURSKAINEN, A., and DEPARTMENT OF WORLD CULTURES (2016). "Helsinki Corpus of Swahili 2.0 (HCS 2.0) Annotated Version", Helsinki: University of Helsinki, accessed on 28/8/2020, <<http://urn.fi/urn:nbn:fi:lb-2016011301>>.
- Ji, Shaojun (2008). "What do paragraph divisions indicate in narrative texts?", *Journal of Pragmatics* 40 (10): 1719-1730.
- KOEN, Frank, Alton BECKER, and Richard YOUNG (1969). "The Psychological Reality of the Paragraph", *Journal of Verbal Learning and Verbal Behavior* 8 (1): 49-53.
- MATRAS, Yaron (2016). "Fusion and the Cognitive Basis", *The International Journal of Bilingualism* 4 (4): 505-28.
- MATRAS, Yaron, and Jeanette SAKEL (2008). *Grammatical Borrowing in Cross-Linguistic Perspective*, Berlin and New York: De Gruyter Mouton.



CLEMENS J. MAYER

Discourse organization in Gorwaa narratives: An exploratory overview

- MOUS, Maarten (2019). "A thousand years of Bantu-Cushitic contact", talk given at the *International Workshop "Bantu in Contact with Non-Bantu"* (Tokyo University of Foreign Studies, 27 July 2019).
- NORRICK, Neal R. (2009). "Interjections as pragmatic markers", *Journal of Pragmatics* 41 (5): 866-91.
- RODGERS, Paul C. (1966). "A discourse-centered rhetoric of the paragraph", *College Composition and Communication* 17 (1): 2.
- SAKEL, Jeanette, and Yaron MATRAS (2008). "Modelling contact-induced change in grammar", *Empirical Approaches to Linguistic Typology* 35:63.
- STERN, Arthur A. (1976). "When is a paragraph?", *College Composition and Communication* 27 (3): 253.
- TANNEN, Deborah (1982). *Analyzing Discourse: Text and Talk*, Washington D.C.: Georgetown University Press.
- TREIS, Yvonne (2012). "Switch-reference and Omotic-Cushitic language contact in southwest Ethiopia", *Journal of Language Contact* 5 (1): 80-116.
- TROLLOPE, Anthony (1857). *Barchester Towers*. edited by S. Lesberg, London: Peebles Press International Inc.
- TUPPER, Ian (2019). "Sequence and salience in Namia discourse", *Language & Linguistics in Melanesia* 37: 127-53.
- DE VRIES, Lourens (2018). "Online and offline bridging constructions in Korowai", in Valérie Guérin (ed.), *Bridging Constructions*, Berlin: Language Science Press, 31-52.
- WAWIRE, Gorrety Nafula (2017). "English-Swahili code switching: An intersection between stance and identity", MA Thesis. Electronic Theses and Dissertations 1238. University of Mississippi.
- WEDEKIND, Klaus (2013). *Generating Narratives: Interrelations of Knowledge, Text Variants and Cushitic Focus Strategies*, Berlin, New York: Mouton de Gruyter.
- WIEGERTJES, Jurriaan (2020). "The Syntax of =oo in Gorwaa", talk given at the *Gorwaa Symposium* (Leiden University, 27 August 2020).



Sign language research in Ghana: An overview of indigenous and foreign-based sign languages

MARY EDWARD¹ / GEORGE AKANLIG-PARE²

¹ University of Brighton
maamedward@gmail.com

² University of Ghana, Legon
gakaling-pare@ug.edu.gh

ABSTRACT

The recognition of sign language as a full-fledged human language with linguistics description has led to several research works in both theoretical and applied linguistics considering different aspects. The present study extends this research to the Ghanaian context, with the aim of providing an overview of past and current research on indigenous and foreign-based sign languages in Ghana. We considered published and unpublished works from Ghanaian and foreign researchers and synthesized these to know the areas that have been covered. We specifically explored research on indigenous sign languages in Ghana; the contributions of Dr Andrew Foster in sign language literacy; research on foreign-based sign languages in Ghana; language contact, language vitality, language documentation and other sociological issues. We discussed our findings with respect to the descriptive analysis of sign languages in Ghana: vitality and vulnerability of different sign languages in Ghana. Relevant to our paper is the vulnerability and the possible endangerment of indigenous sign languages in Ghana. We argue that indigenous sign languages in Ghana risk endangerment, whereas foreign-based sign languages have potential for development. We suggest the involvement of local linguists in documentation, research, and the analysis of SLs in Ghana to ensure the survival of indigenous SLs and increased research on SLs in Ghana.

KEY WORDS: sign language, Ghana, indigenous, foreign-based, overview





MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

1. Introduction¹

The recognition of sign languages as a full-fledged human language with linguistics description (STOKOE 1960) has led to several research works in both theoretical and applied linguistics considering different aspects. Prior to the 1960's there were varied opinions on the acceptability of sign languages as full-fledged human languages. There were attempts to educate deaf students with speech and the mode of education relied on the oral approach (or oralism). The Milan Conference in 1880 brought on board Deaf educators from different countries. The resolution of the Conference was that oral education was better than manual (sign) education. The President of the Milan Conference, Giulio Tarra quoted that "[g]esture is not the true language of man which suits the dignity of his nature" (LANE 1984: 393, cf. WILCOX 2004: 121). The infamous Milan Conference of 1880 on Deaf education concluded that oralism (speech) was better than manualism (signs) and banned the use of sign languages in schools. The battle for the acceptability of sign languages as the languages of instruction for Deaf education proved futile. In the early 20th century, psychologists, educators, and some linguists maintained that sign language is "harmful for intellectual and educational development" (WILCOX 2015: 667). Other discussions at the Milan Conference made claim such as "[o]ral speech is the sole power that can rekindle the light God breathed into man" (LANE 1984: 393, cf. WILCOX 2004: 121).

The acceptance of sign languages as a medium of education in America and most European nations came in the late 20th century. Meanwhile indigenous Deaf communities in Africa used local sign languages for intra-community communication even when Europe and America still battled with the acceptance of sign languages in schools. The years after Stokoe's monograph, several linguists, anthropologist etc. have conducted other research on the internal structure of sign languages of the world, the sociolinguistics of Deaf cultures and the socio-dynamics of Deaf lives. For example, VALLI et al., (2011), JOHNSON and SCHEMBRI (2007) and SUTTON-SPENCE and WOLL (1999) have done intensive studies on the linguistic structure of American Sign Language (ASL), Australian Sign Language (Auslan), and British Sign Language (BSL). Other works on sociolinguistics of the Deaf community and sign language include, among others, LUCAS (2001a, 2001b), SCHEMBRI and LUCAS (2015), METZGER (2000) on bilingualism and identity, and PADDEN and HUMPHRIES (2009) on Deaf culture. Sign languages share the major linguistics features with spoken languages across

¹ Some sections of the introduction, section 5 and section 6 were adapted from EDWARD's PhD dissertation (2021b).



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

the main linguistic levels of analysis. In other words, both signed and spoken languages exhibit similar properties of language structure, i.e. both have phonology, morphology, semantics, syntax etc. (SANDLER and LILLO-MARTIN 2006; PFAU, STEINBACH, and WOLL 2012).

Other research on sign languages have identified typological differences at distinct levels of linguistic analysis including number/counting, kinship terms, colour, negation, iconicity, simultaneous constructions, sign space etc. (ZESHAN 2006; PERNISS, PFAU, and STEINBACH 2007; ZESHAN and PERNISS 2008; DE VOS and PFAU 2015). For example, urban and rural dichotomies are based on specific features of the sign languages (see ZESHAN 2006; DE VOS and PFAU 2015). Urban sign languages refer to national sign languages and sign languages of education. Rural sign languages refer to sign languages that are used in communities with high incidences of genetic deafness and are typically used for communication between deaf people and between deaf and hearing people. One major difference between urban and rural sign languages is the size of the signing community; urban sign languages have quite large communities of use compared to rural sign languages. Cross-linguistic studies on rural sign languages have identified some lexical and grammatical variations among rural sign languages and these mirror to a large extent what has been identified in urban sign languages (DE VOS and PFAU 2015).

In Sub-Saharan Africa, Deaf education has been closely linked to the arrival of Rev. Dr Andrew Foster (KIYAGA and MOORES 2003). Further, African sign languages are grouped into indigenous, foreign-based, and foreign sign languages (NYST 2010). Whereas indigenous African sign languages are native to African communities, foreign-based African sign languages started mostly with Andrew Foster's sign language educational tours in Africa. Most foreign-based sign languages used across Africa are believed to be offshoot of ASL. On the other hand, NYST (2010) mentions that ASL and French Sign Language (LSF) are used in different parts of West Africa. These are categorized as foreign sign languages.

Indigenous Deaf communities in Africa represent a diverse meeting of individuals who come together for many purposes. The priorities of such Deaf communities include Deaf identity, Deaf customs, dissemination of information (politics to religion) and more recently the advocacy for Deaf-centred education in an accessible language (i.e. signed language) and the campaign for the inclusion of signed languages as part of the national languages (EDWARD 2021a). Furthermore, Deaf cultures in Africa are defined by shared beliefs, values, customs, behaviours, and shared institutions of communities that are influenced by deafness and which use sign languages as the main means of communication. Foreign-based and foreign sign languages were gradually introduced into sub-



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

Saharan Africa communities mainly through evangelization. Although religion has played a major role in the evangelization of Deaf communities and the gradual introduction of foreign-based sign languages in most Sub-Saharan African communities (KIYAGA and MOORES 2003; MILES 2005; EDWARD 2015b;) most “indigenous African sign languages have escaped the infiltration of foreign sign languages and have survived with little or no exposure to foreign sign systems” (EDWARD 2021a: 2). Most of these indigenous sign languages that escaped the infiltration of foreign systems are mostly used in villages or rural communities and/or until recently were unknown to the urban Deaf communities and researchers (e.g. Magajingari Sign Language, MgSL in Kaduna, Nigeria).

Contrastively, the internal battles with urban (foreign-based) African sign languages continue and in Nigeria, the school-based sign is referred to as ASL by most Deaf and hearing users (ASONYE, EMMA-ASONYE, and EDWARD 2018). Furthermore, foreign-based sign languages across Africa seem to influence some indigenous sign languages. For example, EDWARD (2015b) comments on the gradual but forceful baptism of Adamorobe Sign Language (AdaSL) signers into Ghanaian Sign Language (GSL). Amid these internal and external battles between foreign-based sign languages and some indigenous sign languages, there remain few (if not more) indigenous African sign languages that are yet to be “discovered”. The recent “discovery” of Magajingari Sign Language (MgSL) in Magajingari community in Kaduna North, Nigeria (ASONYE and EDWARD, forthcoming) shows that there are probably more indigenous sign languages in Africa that are still unknown to linguists. There is the tendency for some sign languages to receive more attention than others. Sign languages used in homes and villages stand the risk of endangerment because of the following reasons: lack of users, gradual decline in their domains of use, lack of documentation, etc. The dearth of linguistic research and language revitalisation programmes in most indigenous African sign languages have caused these languages to be moribund (EDWARD 2021b). The lack of academic research on several indigenous African sign languages has also made it difficult to compare the linguistic structures of these sign languages.

The present study extends this narrative to the Ghanaian context, with the aim of providing an overview of past and current research on indigenous and foreign-based sign languages in Ghana. We considered published and unpublished works from Ghanaian and foreign researchers and synthesized these to know the areas that have been covered. We specifically explored research on indigenous sign languages in Ghana (FRISHBERG 1987; NYST 2007a; KUSTERS 2014a; EDWARD 2015a, 2015b, 2021b); the contributions of Dr Andrew Foster in sign language literacy



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

in Ghana (KIYAGA and MOORES 2003; RUNNELS 2017; AMOAKO 2019); research on foreign-based sign language in Ghana (EDWARD 2014, 2021b; AKANLIG-PARE 2013, 2014; MACHADJAH 2016); language contact, language documentation and other sociological issues (EDWARD 2015b, 2018a; AKANLIG-PARE 2018; KUSTERS 2019; AKANLIG-PARE and EDWARD 2020).

2. Purpose of the overview

The purpose of this review is to provide an overview on past and current research on indigenous and foreign-based SLs in Ghana focusing on both linguistics and sociolinguistics research. We considered both peer reviewed research works, theses, books, conference presentation and other unpublished documents on linguistic research on sign languages in Ghana, Deaf culture, Deaf community. We systematically provide a review of the works that have shaped the narratives of Deaf communities in Ghana and their languages.

3. Method

We used several methods for including the materials and information used in this research work. Most importantly, all works considered for inclusion in the review were either Ghana centred or makes mention of a Ghanaian sign language, Andrew Foster's contribution to Deaf education and sign languages in Ghana, sociolinguistics of Deaf communities in Ghana, teaching, and interpreting sign languages in Ghana. We excluded works that focused *only*² on any of the following: financial problems of deaf people, sexual and reproductive health, eye problems in Deaf people, marriage patterns/problems of Deaf people, Deaf-blind education, and parental experiences of raising deaf children.

The criteria for inclusion include the following:

- I. Peer reviewed research works on sign language linguistics, sociolinguistics, and socio-cultural and demographic issues of Deaf people and the Deaf communities in Ghana.
- II. Theses focused on sign language linguistics and sociolinguistics.
- III. Published and unpublished conference presentations and research works presented to both academic and non-academic audiences focusing on sign language linguistics and sociolinguistics issue in the Deaf communities in Ghana.

² If a work combines any of the excluded topics together with language or linguistic implications, it was considered in the review.



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

- IV. Forthcoming papers and chapters on sign language linguistics and the sociolinguistics of Deaf people in Ghana.

4. Andrew Foster

Andrew Forster (1927-1987), a pioneering deaf African American missionary, is believed to have provided the single and the most important contributions to the education of deaf Africans in the colonial and postcolonial periods (KIYAGA and MOORES 2003; RUNNELS 2017). However, this act of Andrew Foster has also led to the assumption that African sign languages which emerged out of Foster's sign language classes are variants of American Sign Language (NYST 2010). According to RUNNELS (2017), Andrew Foster has become a legend in the Deaf African history.

From the detailed research of MILES (2004, 2005) we have come to know that indigenous Africans had a vibrant *Deaf culture* with the use of sign languages for communication. These indigenous *Deaf communities* were not influenced by the Americanization of African sign languages and although most stand at the brink of endangerment (EDWARD 2015b), their unique features that distinguish them from the foreign-based African sign languages cannot be overemphasized (EDWARD 2021b). Andrew Foster established 31 schools for the Deaf across Africa, trained deaf leaders, and introduced Total Communication, which embraced both American and indigenous signs (KIYAGA and MOORES 2003). Many researchers believe that Foster introduced ASL during his missionary work in Africa (KIYAGA and MOORES, 2003; NYST 2007a).

Reviewing the work of Andrew Foster in Africa, RUNNELS writes that "the literature overwhelmingly suggests that Foster was drawn to serve in Africa as a missionary, though some authors insinuate that Pan-Africanism guided Foster to Africa" (2017: 246). The literature heralds Andrew Foster as more interested in the "souls of men" (RUNNELS 2017). Foster is believed to be the pioneer of Deaf education in Ghana as there was no known record of any institutions focused on Deaf education in Ghana before his arrival (KIYAGA and MOORES 2003). OKYERE and ADDO (1999) write that in 1957 Foster found that "unknown numbers of deaf children were illiterate, languageless, and isolated" in Ghana (cf. RUNNELS 2017: 246). Although OKYERE and ADDO (1999) claim that there was no sign language in Ghana before Foster arrived in Ghana (cf. RUNNELS 2017), we know from other researchers (MILES 2005) that AdaSL was in existence before the arrival of Foster in Ghana. Ghanaian Sign Language (GSL) developed from the sign language introduced by Andrew Foster in 1957 and it is representative of Ghanaian society and Ghanaian culture. According to AMOAKO, Foster's contribution to deaf



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

education in Ghana cannot be overemphasized and suggested “the need to eulogize him to inspire the upcoming future generation of the youth” (2019: 9).

5. Indigenous sign languages in Ghana

Research on indigenous sign language in Ghana started in the 1980s and earnest research begun in the 2000s as both local and foreign linguists got involved in the description of these indigenous sign languages and their linguistic features. FRISHBERG (1987) was the earliest linguistic research on an indigenous Ghanaian sign language. She was the first to coin the term AdaSL for Adamorobe Sign Language. Indigenous sign languages in Ghana have distinct *Deaf Cultures* and *Deaf Communities*.

Deaf Culture is defined as a system of shared beliefs, values, customs, behaviours, and shared institutions of communities that are influenced by deafness and which use sign languages as the main means of communication. Deaf Community represent a diverse meeting of individuals who come together for many purposes but who share some basics of experience, communication and commitment and communicate in signed language with a commitment to support other deaf people and to have a place to meet (see HOLCOMB 2012).

5.1 Adamorobe Sign Language (AdaSL)

AdaSL is an indigenous village sign language used in the Adamorobe community in the Eastern Region of Ghana and believed to have existed as far back as 1733 as a language used by both hearing and deaf people in Adamorobe (OKYERE and ADDO 1994). The community is noted for its unusually high incidence of hereditary deafness. NYST categorize Adamorobe as a shared signing community with “incidence of deafness that is several times higher than 0.1%” (2012: 553). NYST (2007a) identified the incidence of deafness in Adamorobe as 2% of the total population. However, EDWARD (2018a) identified the reduction in the number of Deaf individuals in the community.

The reason for the reduction has been attributed to the law instituted by their former chief that prohibited marriage between two deaf people (NYST 2007a; KUSTERS 2012a) and the migration of different people into the community (EDWARD 2018a). NYST quoted that “former chief Nana Kwaakwa Asiampong II prohibited marriage between two deaf persons” (2007: 28). Currently, AdaSL is used by around 40 deaf people (adults and youngsters) in a community of about 3000 people representing 1.3% of the total population (EDWARD 2021b). AdaSL is independent of GSL and of the surrounding spoken language, the Akuapem Twi



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

dialect of Akan (an indigenous Ghanaian language), though there is some influence of the Akuapem Twi on AdaSL structure (NYST 2007a).

MILES (2004, 2005) reports that deaf people in Adamorobe were the first substantial historical group of African people known to have used a formal sign language and the record dated as far back as the 18th century. Other researchers have cited different historical accounts on the co-existence of deaf and hearing people in Adamorobe (NYST 2007a; KUSTERS 2012a, 2012b; OKYERE and ADDO 1994). All researchers working on AdaSL have cited the old age of the sign language in comparison with GSL. AdaSL also has a long tradition of usage by both deaf and hearing people. Earlier research done in Adamorobe discovered that almost everybody in the village could communicate in the sign language (FRISHBERG 1987). However, current research on AdaSL indicates a decline in the numbers of hearing signers. (EDWARD 2018a).

The most detailed linguistic research on AdaSL was done by NYST (2007a). Since 2004, Nyst has made an enormous contribution to the linguistic research done on AdaSL, focusing on the general description of AdaSL to specific details like the expression of size and shape, iconicity, simultaneity and possession (NYST 2007a, 2007b, 2008, 2016). Nyst's PhD dissertation describes in detail the phonology, semantics, expression of size and shape, expression of motion, kinship terms etc. Nyst (2007a, 2007b) identified the absence of entity classifiers for motion events in AdaSL, the absence of observer perspective, and the very little simultaneous packaging in AdaSL. For example, on entity classifiers, NYST quoted that "AdaSL does not use a system of entity classifiers to express motion in space" (2007a: 195). Concerning simultaneous constructions (SC), NYST was of the view that AdaSL has less frequent SCs "than in the signed languages studied so far on this topic" (2007b: 142). Her study on AdaSL also identified that "[n]ot only are fewer instances found", but "also the types of simultaneous constructions used in AdaSL appear to be limited" (NYST 2007b: 142). Furthermore, NYST identified that in AdaSL, there is a restriction to real-size signing and the "absence of object or entity classifier predicates expressing motion or location in space" (2007b: 142) as well as the "absence of entity classifier expressing motion in simultaneous constructions" (NYST 2007b: 143). NYST (2008) also identified and described different structures used to express existence and possession in AdaSL.

EDWARD (2015a) investigated iconicity in AdaSL focusing on the expression of time, size and shape, directional verbs, emotive and cognitive signs. Edward concluded that different resemblance mappings exist in AdaSL. Edward's PhD focused on investigating iconicity (form-meaning resemblance mappings) in AdaSL and GSL and compares AdaSL with GSL focusing on the following domains: lexical items, spatial representation, and simultaneous constructions



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

(EDWARD 2021b). She identified different types of simultaneous constructions (SC) in AdaSL, the presence of entity classifiers in SC and the use of observer perspective in AdaSL (EDWARD and PERNISS 2019; EDWARD 2021b). These new findings do not corroborate with some of the results found by NYST (2007a, 2007b) and Edward attributes these to the possible language contact between AdaSL and GSL.

Other research on AdaSL considered language contact, language vitality, language documentation and other sociolinguistics issues (Kusters 2012b, 2014b, 2019; EDWARD 2015b, 2018a, 2018b;). Annelies Kusters' work on AdaSL presents anthropological and sociolinguistic perspectives. Unlike NYST (2007a) and EDWARD (2015a, 2015b) who perceive AdaSL as an endangered language, KUSTERS (2012a) is of the view that AdaSL is a thriving language because the users have positive views towards their language. KUSTERS (2012a, 2012b, 2014a, 2019) and EDWARD (2015b, 2018a, 2018b) are important to the general understanding of the societal depiction of AdaSL especially from the sociolinguistic perspective.³

5.2 Nanabin Sign Language (NanaSL)

Another indigenous sign language in Ghana that has received some attention is Nanabin Sign Language (NanaSL). NanaSL emerged within a family with a high incidence of hereditary deafness in Ekumfi in the Central region of Ghana (NYST 2010). NanaSL is believed to be the first language of about 25-30 users. Nyst also noted that some members of the second-generation users of NanaSL have received formal education in GSL and are bilinguals in NanaSL and GSL. NanaSL and AdaSL are not mutually intelligible but have similar articulatory features and use of sign space (NYST 2010). According to Nyst, the similarities in lexicon result from similarities in the conventional gestures for these concepts in the Akan culture and other iconic motivations. According to Nyst, NanaSL hardly seems to make any use of observer perspective.⁴

³ Other research on AdaSL include an undergraduate thesis presented to the University of Ghana's Department of Linguistics in 2012 that compared certain aspects of AdaSL and GSL (written by Yoni Paa Kwesi Howard).

⁴ An undergraduate thesis presented to the University of Ghana's Department of Linguistics in 2018 focused on kinship terms in Adamorobe, Nanabin and Ghanaian Sign Languages (written by Daisy Naa Ayorko Tagoe)



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

5.3 Home sign systems in Ghana

Home sign systems are developed based on gestures in the homes of deaf people and are only used within the family for communication (TORIGOE and TAKEI 2002; COPPOLA and NEWPORT 2005). COPPOLA and NEWPORT define home sign system as the gestural communication that often arises spontaneously when a profoundly deaf child grows up within a hearing family where none of the family members knows a conventional sign language and the deaf person is not in contact with other deaf people who use sign language. Although there have been no detailed studies on home sign systems in Ghana, several encounters with deaf people who grew up in predominantly hearing homes indicates that different gestural communications are used in homes.

6. Foreign-based and foreign sign languages in Ghana

Through the effort of Andrew Foster, Deaf education begun in earnest in some African countries including Ghana. The language of education in Foster's schools is believed to be ASL and indigenous signs (KIYAGA and MOORES 2003). The sign languages that emerged out of these lessons have been identified as foreign (NYST 2010) as compared to the indigenous sign languages in Africa. In this section we shall consider research on Ghanaian Sign Language (GSL) which emerged out of Foster's deaf schools and literacy tours, and ASL which is used subtly in some places in Ghana.

6.1 Ghanaian Sign Language (GSL)

GSL is the sign language of the urban deaf community and the language used in Deaf education in Ghana. Deaf people who have not gained formal education or Deaf students who attend mainstream schools (without sign language interpretation) are only introduced to GSL by other GSL users in the community. The number of people who use GSL as either a first or second language in Ghana is unknown. Linguistically, GSL is distinct from AdaSL, NanaSL and other home sign systems used in Ghana. GSL developed from the sign language introduced by Andrew Foster in 1957 and it is representative of Ghanaian society and Ghanaian culture. Although GSL is yet to receive official status (AKANLIG-PARE 2019), it is currently used in education, mass media and urban religious meetings in Ghana that incorporate sign language interpretation.

GSL has an elaborate grammar just like any developed sign language. It is an urban sign language with an alphabet system. GSL and ASL use the same one-handed alphabet system. GSL also shares similarities with other urban sign languages like Nigerian Sign Language (NSL). Andrew Foster's engagement with



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

Deaf education in Africa has contributed to some of the similarities shared by GSL, NSL and ASL. The national television in Ghana uses GSL to interpret to deaf people and other users of GSL. Linguistic research on GSL is recent. It is the first and only sign language in Ghana to have a fully developed dictionary (OKYERE and BOISON 2001; OPPONG 2007; MCGUIRE and DEUTSCH 2015). OPPONG (2007) and MCGUIRE and DEUTSCH (2015) include information on description of the signs.

Different researchers have investigated different computer assisted models to aid the learning of GSL (OSEI 2012; AZUTIGA, BAMIE, and DANSIEH 2015; ODARTEY, HUANG, ASANTEWAA, and AGBEDANU 2019). Some institutions have also developed app and web-based repositories for GSL for the easy learning by both Deaf and hearing people (AyeleFoundation, n.d; HANDS!Lab 2020). The HANDS!Lab dictionary and the AyeleFoundation dictionary are available online for free. The phone version of the HAND!LAB's GSL dictionary works both with and without internet and therefore the best GSL "on-the-go" dictionary for Ghanaians without access to internet.⁵ In addition to computer assisted projects, collaborations have been made to enrich the interpreter and professional development programs (MARONEY et al. 2018) for GSL interpreters.

In 2010, through funding received from the British government, the first linguistic GSL curriculum was developed for use in the Department of Linguistics at the University of Ghana. A series of video lessons on aspects of the phonology, morphology, and syntax of GSL were developed by a team led by Zeshan Ulrike at the University of Central Lancashire, and George Akanlig-Pare, Francis Boison and Marco Nyarko Stanley of the Department of Linguistics, University of Ghana. Several bachelor and master's theses have been produced through this program to date.

Other research on aspects of the phonology, morphology syntax of GSL have been done by Edward (2014) and Akanlig-Pare (2013, 2014).⁶ These works developed a comprehensive document on the phonology, morphology, and syntax of GSL. For example, the phonological description looked at the Articulatory Parameters (Handshape, Orientation, Location and Movement), Nonmanual markers, Minimal pairs and Free variation based on recorded data taken from GSL signers. The morphological aspects that were described were the simultaneous morphology of classifiers and verb agreement, and the sequential morphology of affixation and reduplication. On syntax, different sentence types

⁵ Internet is needed to install the app but not for using the app. The app operates on smartphones.

⁶ An undergraduate thesis presented to the Department of Linguistics at the University of Ghana in 2012 considered some aspects of GSL morphophonology (written by Mary Edward).



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

are determined by the signer's facial, eye, head, and shoulder movements. MACHADJAH (2016) described number marking in GSL and working with students from a nearby School for the Deaf, he collected data from students representing ten regions of Ghana. MacHadjah's research identified several strategies that signers used to mark singular, plural, dual, paucal etc.

An investigation of iconicity in GSL in lexical item, spatial relationships and simultaneous constructions has revealed interesting similarities and differences between GSL and AdaSL (EDWARD 2020, 2021b). Edward identified that GSL's influence on AdaSL through the possible contact of the two languages has caused AdaSL signers to use structures belonging to GSL (EDWARD and PERNISS 2019; EDWARD 2021b).

6.2 American Sign Language

Although not much has been done on the nature of ASL as used by some deaf signers in Ghana, researchers have identified its infiltrating effect. NYST (2010) is of the view that ASL is used in the West African countries of Ghana, Benin, Burkina Faso, Cote d'Ivoire, Liberia, Mauritania, Mali, Nigeria, and Togo. This assertion by Nyst is supported by EDWARD (2015b) who identified that certain religious meetings in Ghana are conducted in ASL as compared to GSL because the interpreters are trained in ASL. More recently, EDWARD (2021b) identified that some GSL signers used lexical signs borrowed from ASL to name household tools and objects in GSL. Furthermore, the availability of ASL materials has made it accessible to many religious groups that teach sign language in their meetings (EDWARD 2015b).

7. Sociolinguistic issues

This section explores the sociolinguistics of sign languages in Ghana. These sign languages include mainly the native sign languages, namely Ghanaian Sign Language (GSL) and Adamorobe Sign Language (AdaSL) as well the American Sign Language (ASL) which undoubtedly is the root of GSL. The sociolinguistic issues discussed in these literature cover socio-cultural and demographic issues, and language contact and its ramifications which may lead to language endangerment. The literature also include language documentation in both print and electronic.

7.1 Socio-cultural and demographic issues

The bulk of the literature on sign language in Ghana is devoted to the socio-cultural reconstruction of deafness, mostly with regard to the deaf in



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

Adamorobe, a village at the foot of the Akwapem ridge in Eastern Region of Ghana. Adamorobe presents a good scenario for doing this because of its proportionately high numbers of deaf people living side by side with hearing people, who wield more economic and social power over the deaf. Adamorobe is a multilingual community where in addition to the native Adamorobe Sign language, GSL is also used. Some members of the Hearing community in Adamorobe also sign. However, the siblings and the children of the Deaf individuals are more proficient in signing. Other languages, predominantly Akwapem Twi (Akan) and English are also used by the Hearing people in Adamorobe.

A sharp contrast can be seen between the social and economic situations of deaf people and the hearing in Ghana. Even among the deaf, there are differences between the status of those who live in the cities and those in the village. Due to obvious reasons, the Deaf are marginalized in all spheres of life. They are predominantly nonliterate, or barely have education usually not beyond basic education. As a result, they are barely equipped with any employable skills, and consequently are not gainfully employed. The misery borne out of poverty facing them is recounted in EDWARD (2018a). In this article, the author makes a comparison between the status of two hearing impaired couples, one living in Adamorobe, a rural setting, and the other in Accra the capital city of Ghana. Due to communication barriers, and lack of good quality education, both couples are disadvantaged in a predominantly speaking community. But the weight of this marginalization is more on the rural couple who live in abject poverty, where negative societal norms do not allow them to have access to basic amenities such as good housing, health facilities, and education. This situation, the author blames on absence of progressive governmental policies on disability, and on deafness in particular.

KUSTERS (2015) presents an ethnographic study on *Deaf Spaces* in Adamorobe. The study details the history of the origins of deafness in Adamorobe. These were referred to as the six legends about the origin of deafness in Adamorobe. NYST (2012) and KUSTERS (2015) describe Adamorobe as a “shared signing community” where deaf and hearing people live together. KUSTERS (2015) describes vividly the dynamics in the shared signing community and explain that the Deaf do not live in a social paradise as they have to strategize to be able to cope up with the exigencies of life by creating their own physical space, and network among themselves.

The obnoxious law banning deaf-deaf marriages promulgated in 1975, ostensibly to reduce the rate at which deaf children were born to such couples, is discussed by NYST (2007a), KUSTERS (2012a, 2015) and EDWARD (2018a). The downside of



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

this law is that a hitherto rich deaf culture and a thriving sign language is endangered (KUSTERS 2015; EDWARD 2015b). The integration of deaf people in the shared community of Adamorobe, and their participation in the economic and political lives of the village, have caused the Deaf people to create their own spaces to be able to exist (KUSTERS 2015). Furthermore, due to their lack of education and employable skills (KUSTERS 2015; EDWARD 2018a; EDWARD and AKANLIG-PARE, forthcoming) deaf people in Adamorobe have naturally created their own spaces to be able to exist.

7.2 Language contact

Ghana is a multilingual society and apart from spoken languages being in contact, the sign languages also interact among themselves as well as the over 50 indigenous spoken languages and English, the official language of Ghana. GSL which is the national sign language of Ghana interacts with AdaSL in the Adamorobe setting (NYST 2007a). AdaSL also is in contact with the indigenous spoken language of Adamorobe, which is Akwapem Twi (NYST 2007a; EDWARD 2015a). There are other minority languages in the Adamorobe village whose speakers interact with the deaf signers. These include Ga, Ewe, and Dangme. In such an intense contact situation, code-mixing and lexical borrowing are common (EDWARD 2015b, 2021b). This may involve GSL and AdaSL. Pidgin AdaSL may also evolve where the hearing people may transfer features of their spoken language into the sign language (EDWARD 2015b). NYST (2007a) gives such examples as the presence of causative serial constructions in AdaSL as originating from the native dominant Akwapem Twi language used by the hearing inhabitants of the village.

Considering the unavoidable language contact in multilingual Ghana, different researchers have undertaken explorative studies on the language ideologies of Deaf people. GILLEN et al. (2020: 183) explored deaf people's "existing practices with English literacy" and stated that when participants use English online, the practices of "reading and writing do not usually directly involve sign language use and where in literacy practices deafness may potentially be unmarked." They suggested the exploration of communication technologies as avenues to support the English language and literacy development. Recently, Kusters has explored the language ideological assemblage in Adamorobe focusing on the signers' use of GSL together with AdaSL in Adamorobe (KUSTERS 2014b, 2019). Kusters explained that GSL is used mid-clause by both the adults and the young signers of AdaSL. EDWARD (2015b) also attests to the use of such lexical items in AdaSL discourses. Kusters and Edward list GSL signs such as ANGRY, KNOW, TIRED etc., to be used in AdaSL conversations.



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

Researchers working on AdaSL have mentioned the infiltrating effect of the contact between AdaSL and GSL (NYST 2007a, 2019; EDWARD 2015b; EDWARD 2021b). Even more alarming is the possible endangerment of AdaSL which is anticipated as a result of this situation (NYST 2007a; EDWARD, 2015b). On the other hand, KUSTERS (2014b) is of the view that AdaSL signers are just using GSL for “practical reasons” and therefore not endangering AdaSL. The obvious result of the contact between GSL and AdaSL is visible as “some deaf people found it pleasant to be able to use another language than AdaSL” (KUSTERS 2014b: 152). The practical use of GSL among AdaSL signers includes gossiping about hearing people (KUSTERS 2014b; EDWARD 2015a) and the desire to be able to use another sign language as noted by KUSTERS (2014b). GSL use in Adamorobe is not limited to the young and educated signers but also to the adults. One interesting comment made by most of the adult signers is the fact that AdaSL signs are hard and difficult to be understood by outsiders (KUSTERS 2014b, 2019). Thus, GSL serves as an alternate language to bridge the linguistic barrier between AdaSL users and the general Deaf community in Ghana (EDWARD 2021b).

7.3 Language endangerment

One of the imminent things that happen when languages are in contact is that dominant ones tend to be used more to the detriment of the lesser ones. Dominant languages are ones that are perceived to be prestigious and preferred to be associated with by people. In the sign language context, the dominant sign language is GSL. It is the language used in education, the media, and other social engagements. It is arguably the national sign language due to its spread and scope of usage. Apart from being the first language of many Ghanaian deaf people, GSL is also the second language of many bilingual educated Ghanaian deaf people. As a result of the pervasive use of GSL, local sign languages like AdaSL are losing their circulation. This is especially true among the young people who are in Deaf schools. EDWARD (2018b) in her paper discusses this in detail. She argues that as deaf children leave home to go to live in the boarding school for the Deaf in Mampong-Akwapem, they lose touch with their parents and their first sign language, AdaSL. Due to protracted non-usage of the AdaSL, the children are bound to lose it if this trend continues. This is compounded by the fact that at school, the children are taught GSL, and some English literacy. NYST (2007a) notes that the children’s education could keep them at school for up to a period of 14 years. During these 14 year of their formative age, a complete language, and cultural shift from AdaSL to GSL is a highly likely possibility.

EDWARD (2018b), KUSTERS (2012a) and NYST (2007a) all note that the ban on deaf-deaf marriages also contributed to the possible endangerment of AdaSL, by



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

virtue of the fact that it ensured that the possibility of procreation of deaf offspring who would continue to use the language as first language, was truncated. They all agree that the influx of strangers into Adamorobe contributes to the endangerment of the sign language. As adult learners of the sign language, the tendency to transfer elements of the spoken language into the sign language is imminent. The deaf may also use a reduced form of the sign language when interacting with such people. The consequences of such contact phenomena are obvious; the native sign language is bound to suffer; however resilient it is due to the fact that it is affected adversely by the spoken language of the hearing people.

7.4 Language documentation

It is not a desirable thing to witness the demise of languages but given the pervasive instances of language contact and the debilitating effect that dominant languages have on minority ones, this is a logical sequel. The consequence of language death is inimical to the maintenance and growth of civilization since the death of the language goes along with the loss of cultures and the knowledge that are embedded in the cultures. For these reasons, languages that are endangered need to be documented so even when they die, the knowledge embedded in them are preserved.

EDWARD (2018b) sheds light on strategies on sign language documentation processes. These include linguists working together with native deaf signers who provide signed data that are videoed as signs in isolation, storytelling sessions, narratives, and video retelling. These data are then annotated and made available via online sign databases and resources to serve as teaching material or be sources for future research into the languages.

All the works on ethnographic works described in the preceding sections also serve a complementary documentation purpose. Not only do they narrate sociocultural and demographic information, but they also open a window into the linguistic awareness of the users of the sign languages.

8. Discussion

Deaf education in Ghana is attributed to the arrival of Andrew Foster in 1957. Some of the literature on Foster's contribution to Deaf education in Ghana and the development of GSL herald Foster as the "originator" of sign language to the "languageless" Deaf community. This claim is totally wrong and undermines the indigenous sign languages used in Ghana before the arrival of Andrew Foster. For example, AdaSL's history is older than that of GSL making it the oldest known indigenous sign language in Africa. In as much as we commend Andrew Foster



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

for the very important roles he contributed to Deaf education in Ghana, we should not undermine the indigenous sign languages used by the first cohort of Andrew Foster's classes.

Considering the literature on sign languages in Ghana and the sociolinguistic research done, we can identify a heightened interest in the research on linguistic descriptions and sociolinguistic discussions. The discussion on the linguistics of sign languages in Ghana have involved the works of foreign linguists like FRISHBERG (1987) and NYST (2007a). Currently, some Ghanaian linguists have gained interest in GSL and some linguistic research has been done in the phonology and morphology (EDWARD 2014; AKANLIG-PARE 2014), number marking (MACHADJAH 2016), and iconicity (EDWARD 2020, 2021b).

AdaSL research started in the early 1980s and has seen several attempts to describe the language and give sociolinguistics information about the users (FRISHBERG 1987; NYST 2007a, 2010, 2016; KUSTERS 2012a, 2012b; EDWARD 2015a, 2018a). However, as the research base of AdaSL increases, the more researchers identify the vulnerability of the language (NYST 2007a; EDWARD 2015a, 2015b) or the vulnerability of the users of the language (KUSTERS 2012a, 2019; EDWARD 2018a; AKANLIG-PARE and EDWARD 2020). Several comments are made by researchers in relation to AdaSL; (1) AdaSL is difficult to learn (KUSTERS 2011), (2) AdaSL signing is hard (KUSTERS 2019, 2014b), (3) AdaSL signers love their language (KUSTERS 2012a), (4) some AdaSL signers will choose GSL over AdaSL (KUSTERS 2019) and (5) AdaSL is at risk of being endangered (NYST 2007a; EDWARD 2015a).

The relationship between GSL and AdaSL and the possible language contact between the two sign languages (EDWARD 2021b) cannot be overemphasised. The "purity" of AdaSL has gradually been diluted by this language contact and novel structures have been introduced in AdaSL. In other words, documenting AdaSL now has become more challenging as it is more difficult to get the "pure form" of the language. Signers are gradually code-mixing with GSL signs (EDWARD 2021b). As AdaSL struggles under the linguistic domination of GSL through language contact initiated by Deaf education (Deaf Adamorobeans use GSL in education), GSL on the other hand, remains at the "mercies" of ASL. Edward found that some people and religious groups propagate ASL materials in their bid to train people to sign (EDWARD 2015b). In a recent documentation project, Edward identified specific ASL signs (with entirely different signs in GSL) used by adult signers of GSL.

The major contributing factors to the gradual endangerment of AdaSL are the education of young Adamorobe signers in GSL, the death of older users of the



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

language, and the high rate of immigrants to the community (NYST 2007a; EDWARD 2015a, 2015b; KUSTERS 2012a). These factors are exacerbated by the marriage law which for a long time prevented marriage between two deaf people and which ultimately led to many childless marriages among Deaf couples (NYST 2007a; KUSTERS 2012a; EDWARD 2018a). Although some Deaf people defied the marriage law, they avoided having children after marriage. Again, migration of deaf people into different communities in search of work or for marriage (NYST 2007a; KUSTERS 2012a, 2014a; EDWARD 2015b) and formal education of the young deaf people into GSL have led to a gradual decline in AdaSL use. Finally, religious activities have contributed to the gradual shift to GSL (EDWARD 2015b).

The literature on sign languages in Ghana collectively point to the fact that linguistic and sociolinguistic research have focused mainly on GSL and AdaSL. Whereas the research on the linguistic of GSL has been mainly done by Ghanaians, research on the (socio)linguistics of AdaSL is mostly done by foreign linguists. Home sign systems are yet to receive detailed linguistic investigations. Since the scope of our review was limited to the areas raised in section 3, we did not consider works that did not fall within the scope of our research.

9. Conclusion

The overview of the different research on indigenous and foreign-based sign languages in Ghana and their sociolinguistics interaction has demonstrated the different research works that have been done on sign languages in Ghana. Whereas the overview has demonstrated the different domains of use for the indigenous and the foreign-based sign languages, a language's ability to thrive is largely dependent on the users of the language. That is, the constant use of a language will ensure the language's survival, whereas the gradual decline in the use of a language will also mark the language as a possible candidate for endangerment. In the overview, the research on GSL and its dynamics of use has shown its vitality to survive as a language used by the Deaf community in Ghana. For example, we have identified that it has varied domains of use including education and mass media.

Contrastively, AdaSL is used only in Adamorobe and is unknown to the wider Deaf community outside Adamorobe. Although AdaSL has been researched more than any sign language in Ghana, we also identify its vulnerability considering the comments made by researchers working on AdaSL. Further, ASL is used in certain places in Ghana as an alternative to GSL because of the accessibility of materials.



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

Although the review has presented diverse research on both indigenous and foreign-based sign languages in Ghana, there is still more areas to be covered. The lack of interest in sign language linguistics by local Ghanaian linguists, the absence of sign language linguistics in the curriculum of many Ghanaian Universities and general stigmatization of Deaf individuals in most parts of Ghana have been major hindrances to an advancement in research in sign language and Deaf studies. We suggest the involvement of local linguists in documentation, research, and the analysis of sign languages in Ghana to ensure the survival of indigenous sign languages and increased research on sign languages and Deaf studies in Ghana.



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

References

- AKANLIG-PARE, George (2013). "Talking Hands, Listening Eyes: Explaining the Nature, Structure and Status of GSL", Inter-Faculty Lecture, University of Ghana, Legon.
- AKANLIG-PARE, George (2014). "A Phono-syntax of Ghanaian Sign Language", *New Perspectives on Humanity: Beliefs, Values and Artistic Expressions*, Accra: Adwinsa Publications, 135-150.
- AKANLIG-PARE, George (2018). *The Language in Education Policy of Ghana: a Dilemma of Deaf Education*. Johannesburg, South Africa, ESRC DFID Raising Learning Outcomes in Education Systems Research Programme, Africa Symposium.
- AKANLIG-PARE, George (2019). "The status of Ghanaian Sign Language". *National Consultative Forum on the Recognition of, and Enacting into Law, Ghanaian Sign Language as the Official/National Language of Deaf People in Ghana*.
- AKANLIG-PARE, George, and Mary EDWARD (2020). "Societal perception of hearing impairment in Ghana: A report on Adamorobe", *Lancaster University Ghana Journal of Disability* 2: 62-84.
- AMOAKO, Samuel Frimpong (2019). "Sixty Years of Deaf Education in Ghana (1957-2017)", *Journal of Communication Disorders, Deaf Studies and Hearing Aids* 7(1): 1-11.
- ASONYE, Emmanuel Ihechi, and Mary EDWARD (forthcoming). "Deaf Education and signed language situation in Ghana and Nigeria: Six Decades after Andrew Foster", in Elisa MARONEY and Yaw N. OFFEI (eds.), *Signed languages, interpreting, and the Deaf Community in Ghana*.
- ASONYE, Emmanuel Ihechi, Ezinne EMMA-ASONYE, and Mary EDWARD (2018). "Deaf in Nigeria: a preliminary survey of isolated deaf communities", *SAGE Open* 8(2).
- AYELEFOUNDATION, *GSL Dictionary*, accessed on 26/4/2021, <<http://www.ayelefoundation.org/dictionary/>>
- AZUTIGA, Rashid, Mubashir Ahmed Iddrisu BAMIE, and Solomon Ali DANSIEH (2015). "A Self-Instructional Desktop Application for Learning Ghanaian Sign Language", *Africa Development and Resources Research Institute Journal* 22(2): 1-16.
- COPPOLA, Marie, and Elissa L. NEWPORT (2005). "Grammatical subjects in home sign: Abstract linguistic structure in adult primary gesture systems without linguistic input", *Proceedings of the National Academy of Sciences of the United States of America*, 102 (52): 192.
- DE VOS, Connie, and Roland PFAU (2015). "Sign language typology: the contribution of rural sign languages", *Annual Review Linguist* 1(1): 265-288.
- EDWARD, Mary (2014). "The phonology and the morphology of the Ghanaian Sign Language", paper presented at the *ATELIER International Conference* (Abidjan, Cote d'Ivoire, 24 July 2014).
- EDWARD, Mary (2015a). *We speak with our hands and voices: Iconicity in Adamorobe Sign Language and Akuapem Twi (ideophones)*, MPhil thesis, Bergen: University of Bergen.
- EDWARD, Mary (2015b). "Signing out: Linguistic contact and possible endangerment of the Adamorobe Sign Language", paper presented at the BAAL language in Africa SIG annual meeting (Aston University, Birmingham, 22 May 2015).



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

- EDWARD, Mary (2018a). "Behind the veil: The impact of deafness on rural livelihoods in Ghana (Case study of a Deaf couple in Adamorobe)", *Lancaster University Ghana Journal of Disability (LUGJD)* 1: 126-148.
- EDWARD, Mary (2018b). Our Signs Matter: Protecting sign language in Adamorobe (Ghana). *Literature and Communication in Human Societies, Papers in Honour of Late Dr (Mrs) Elisabeth Amagah De Campos*. Pan African University Institute, pp. 277-288.
- EDWARD, Mary (2020). "Lexical iconicity in Adamorobe Sign Language (AdaSL) and Ghanaian Sign Language (GSL)", in Nina PAWLAK and Izabela WILL (eds.) *Languages of West Africa. Linguistic Theory and Communication*, Warsaw: Wydawnictwa Uniwersytetu Warszawskiego, 230-251.
- EDWARD, Mary (2021a). "African sign languages are not American product: Indigenous African Deaf People and indigenous African Sign Languages", *Academia Letters*, article 426: 1-4.
- EDWARD, Mary (2021b). *Iconicity as a pervasive force in language: Evidence from Ghanaian Sign Language and Adamorobe Sign Language*, doctoral dissertation, Brighton: University of Brighton.
- EDWARD, Mary, and AKANLIG-PARE, George (forthcoming). "Education and language: A case study of deaf persons in Adamorobe", in Elisa MARONEY and Yaw N. OFFEI (eds.), *Signed languages, Interpreting, and the Deaf Community in Ghana*, Oregon: Open Oregon Educational Resources.
- EDWARD, Mary, and Pamela PERNISS (2019). "Encoding spatial information in two sign languages: A Comparison of Ghanaian (GSL) and Adamorobe (AdaSL) Sign Languages", paper presented at the *13th Theoretical Issues in Sign Language Research Conference* (Hamburg, 27 September 2019).
- FRISHBERG, Nancy (1987). "Ghanaian sign language", *Gallaudet encyclopedia of deaf people and deafness*, Volume 3: 778-79.
- GILLEN, Julia, Noha AHEREZA, and Marco NYARKO (2020). "An exploration of language ideologies across English literacy and sign languages in multiple modes in Uganda and Ghana", in Annelies KUSTERS, Mara GREEN, Erin MORIARTY and Kristin SNODDON (eds.), *Sign Language Ideologies in Practice*, Berlin, Boston: De Gruyter Mouton, 185-200.
- HANDS!LAB (2020). *Ghanaian Sign Language*, accessed on 26/4/2021, <https://play.google.com/store/apps/details?id=com.ljsharp.gsldictionary&hl=en_CA&gl=US>
- HOLCOMB, Thomas K. (2012). *Introduction to American deaf culture*, Oxford: Oxford University Press.
- JOHNSTON, Trevor Alexander and Adam SCHEMBRI (2007). *Australian Sign Language (Auslan): An introduction to sign language linguistics*, Cambridge: Cambridge University Press.
- KIYAGA, Nassozi B., and Donald F. MOORES (2003). "Deafness in Sub-Saharan Africa", *American Annals of the Deaf* 148(1): 18-24.



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

- KUSTERS, Annelies (2011). "Ghanaian signs are soft and Adamorobe signs are hard: Language use and language attitudes in Adamorobe", paper presented at the *Applied Sign Linguistics Symposium* (Bristol, 2 July 2011).
- KUSTERS, Annelies (2012a). "'The Gong Gong Was Beaten' – Adamorobe: A 'Deaf Village' in Ghana and Its Marriage Prohibition for Deaf Partners", *Sustainability* 4(10): 2765-2784.
- KUSTERS, Annelies (2012b). "Adamorobe: A demographic, sociolinguistic and sociocultural profile", in Ulrike ZESHAN and Connie DE VOS (eds.), *Sign languages in village communities: Anthropological and linguistic insights*, Boston, Berlin: De Gruyter: 347-352.
- KUSTERS, Annelies (2014a). "Deaf Sociality and the Deaf Lutheran Church in Adamorobe, Ghana", *Sign Language Studies* 14(4): 466-487.
- KUSTERS, Annelies (2014b). "Language ideologies in the shared signing community of Adamorobe", *Language in Society* 43(2): 139-158.
- KUSTERS, Annelies (2015). *Deaf space in Adamorobe: An ethnographic study of a village in Ghana*, Washington, D.C.: Gallaudet University Press.
- KUSTERS, Annelies (2019). "One village, two sign languages: Qualia, intergenerational relationships and the language ideological assemblage in Adamorobe, Ghana", *Journal of Linguistic Anthropology*, 30(1): 1-20.
- LUCAS, Ceil (2001a). *The sociolinguistics of sign languages*, Cambridge: Cambridge University Press.
- LUCAS, Ceil (2001b). *Multicultural aspects of sociolinguistics in deaf communities*, Washington, D.C.: Gallaudet University Press.
- LUCAS, Ceil (2014). *The sociolinguistics of the deaf community*, San Diego: Academic Press.
- MACHADJAH, Timothy (2016). *Number marking in Ghanaian Sign Language*, MPhil Thesis, University of Ghana, Legon.
- MARONEY, Elisa, Danile FOBI, Vicki DARDEN, Brenda PUHLMAN, Royce CARPENTER, Halle HAMILTON, Patrick GRAHAM, Phinehas DZEANI, and Virginia Dugo-MAJOLEJO (2018). "Reaching Ghanaian Interpreters". Proceedings of the 2018 Biennial Conference *Reaching New Heights in Interpreter Education: Mentoring, Teaching & Leadership*, 276-286.
- MCGUIRE, Caitlin, and Casey DEUTSCH (2015). *Ghanaian Sign Language Dictionary*, 2nd edition, Our Talking Hands.
- METZGER, Melanie (ed.) (2000). *Bilingualism and identity in deaf communities*, Washington, D.C.: Gallaudet University Press.
- MILES, Mark (2004). "Locating deaf people, gesture and sign in African histories, 1450s–1950s", *Disability & Society* 19 (5): 531-545.
- MILES, Mark (2005). "Deaf People Living and Communicating in African Histories, c. 960s-1960s", *Independent Living Institute*, accessed on 25/8/2020, <www.independentliving.org/docs7/miles2005a.html>
- NYST, Victoria (2007a). *A Descriptive analysis of the Adamorobe Sign Language (Ghana)*, doctoral dissertation, Amsterdam: University of Amsterdam.



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

- NYST, Victoria (2007b). "Simultaneous constructions in Adamorobe", in Myriam VERMEERBERGEN, Lorraine LEESON, and Onno A. CRASBORN (eds.), *Simultaneity in signed languages: Form and function*, Amsterdam: John Benjamins: 127-125.
- NYST, Victoria (2008). "Pointing out possession and existence in Adamorobe Sign Language", in Ulrike ZESHAN and Pamela PERNISS (eds.), *Possessive and existential constructions in sign languages*, Nijmegen: Ishara, 235-251.
- NYST, Victoria (2010). "Sign language varieties in West Africa", in Diane BRENTARI (ed.), *Sign languages*, Cambridge: Cambridge University: 405-432.
- NYST, Victoria (2012). "Shared sign languages", in Roland Pfau, Marcus Steinbach, and Bencie Woll (eds.), *Sign Language. An International Handbook*, Berlin: De Gruyter Mouton: 552-574.
- NYST, Victoria (2016). "Size and shape depictions in the manual modality: A taxonomy of iconic devices in Adamorobe Sign Language", *Semiotica* 210: 75-104.
- ODARTEY, Lamptey K., Yonfeng HUANG, Effah E. ASANTEWAA, and Promise R. AGBEDANU (2019). "Ghanaian Sign Language Recognition Using Deep Learning", *Proceedings of the 2019 the International Conference on Pattern Recognition and Artificial Intelligence*, 81-86.
- OKYERE, Alexander Daniel, and Mary ADDO (1994). "Deaf Culture in Ghana", in Carol J. ERTING, Robert C. JOHNSON, Dorothy L. SMITH, and Bruce D. SNIDER (eds.), *The Deaf Way; Perspectives from the International Conference on the Deaf Culture*, Washington, D.C.: Gallaudet University Press.
- OKYERE, Alexander Daniel, and Francis Kwame BOISON (2001). *Ghanaian Sign Language*. 1st ed. Accra-North, Ghana: Ghana National Association of the Deaf.
- OPPONG, Alexander (2007). *Fundamentals of Sign Language*, Volume 1, Winneba: Department of Special Education, University of Education Winneba.
- OSEI, Diana Dayaka (2012). *Enabling sign language instruction with technology: the case of developing a computerized learning tool for Ghanaian Sign Language (GhSL)*, bachelor thesis, Accra: Ashesi University College.
- PADDEN, Carol, and Humphries, Tom (2009). *Inside deaf culture*, Massachusetts: Harvard University Press.
- PADDEN, Carol, Irit MEIR, So-One HWANG, Ryan LEPIC, Sharon SEEGER, and Tory SAMPSON (2013). "Patterned iconicity in sign language lexicons", *Gesture* 13 (3): 287-308.
- PERNISS, Pamela, Roland PFAU, and Markus STEINBACH (eds.) (2007). *Visible Variation: Comparative Studies on Sign Language Structure*, Berlin, Boston: de Gruyter Mouton.
- PFAU, Roland, Markus STEINBACH, and Bencie WOLL (2012). *Sign Language: An International Handbook*, Berlin, Boston: de Gruyter Mouton.
- RUNNELS, Joel (2017). "Dr. Andrew Foster: A literature review", *American annals of the Deaf* 162 (3): 243-252.
- SANDLER, Wendy, and Diane LILLO-MARTIN (2006). *Sign Language and Linguistic Universals*, Cambridge: Cambridge University Press.
- SCHEMBRI, Adam, and Ceil LUCAS (eds.) (2015). *Sociolinguistics and Deaf Communities*, Cambridge: Cambridge University Press.



MARY EDWARD AND GEORGE AKANLIG-PARE

Sign language research in Ghana

- STOKOE, William C. (1960). "Sign language structure: An outline of the visual communication system of the American deaf", *Studies in linguistics Occasional Papers* 8, Buffalo: University of Buffalo Press [Re-issued 2005, *Journal of Deaf Studies and Deaf Education* 10: 3-37]
- SUTTON-SPENCE, Rachel, and Bencie WOLL (1999). *The linguistics of British Sign Language: an introduction*, Cambridge: Cambridge University Press.
- TORIGOE, Takashi, and Wataru TAKEI (2002). "A descriptive analysis of pointing and oral movements in a home sign system", *Sign Language Studies* 2 (3): 281-295.
- VALLI, Clayton, Ceil LUCAS, Kristin J. MULROONEY, and Miako RANKIN (2011). *Linguistics of American Sign Language: An Introduction*, Washington, D.C.: Gallaudet University Press.
- WILCOX, Sherman (2004). "Cognitive iconicity: Conceptual spaces, meaning, and gesture in signed language", *Cognitive Linguistics* 15 (2): 119-148.
- WILCOX, Sherman (2015). "Signed languages", in Ewa DABROWSKA and Dagmar DIVJAK (eds.), *Handbook of Cognitive Linguistics*, Berlin: de Gruyter, 668-689.
- WILCOX, Sherman, and Phyllis Perrin WILCOX (1995). "The gestural expression of modality in ASL", in Joan L. BYBEE and Suzanne FLEISCHMAN (eds.) *Modality in grammar and discourse*, Amsterdam: John Benjamins, 135-162.
- ZESHAN, Ulrike (2006). *Interrogative and Negative Constructions in Sign Language*, Nijmegen: Ishara Press..
- ZESHAN, Ulrike, and Pamela PERNISS (2008). "Possessive and existential constructions in sign languages", in Ulrike ZESHAN and Pamela PERNISS (eds.), *Possessive and Existential Constructions in Sign Languages*, Nijmegen: Ishara Press, 1-31.



Emenyonu and the language of Igbo literature: A review

UCHENNA OYALI

Department of English
University of Abuja
uoyali@yahoo.com / uchenna.oyali@uniabuja.edu.ng

In *The Literary History of the Igbo Novel: African Literature in African Languages* (2020), Ernest N. EMENYONU presents how his perception of what constitutes Igbo literature has evolved overtime. For instance, in *The Rise of the Igbo Novel* (1978), a publication that resulted from his doctoral thesis at the University of Wisconsin, Madison, he defined the Igbo novel as “any novel written in English or the Igbo language by people of Igbo origin or ancestry” (quoted in EMENYONU 2020: 1). By this definition, novels written by Chinua Achebe, Chukwuemeka Ike, John Munonye, Flora Nwapa, Buchi Emecheta, Elechi Amadi and a host of others novelists of Igbo origin who wrote in English fell under this definition of the Igbo novel. The same goes for novels written by Pita Nwana, D. N. Achara, Tony Ubesie and others who wrote in Igbo. This definition, however, excludes novels written in French or German by writers of Igbo origin, even if the novels express an Igbo worldview. Be that as it may, EMENYONU explains that at the time he wrote his doctoral thesis in the 1970s,

“there were in circulation fewer than six novels published in Igbo language and just as fewer well-known Igbo novelists. But names of Igbo writers dominated the list of the authors of about eighty novels published in English by West Africans at the end of the first decade of Nigerian Independence (1960s).” (2020: 3)

In other words, the novels written in Igbo at the time were so few to constitute enough data for an extensive study of Igbo ethnic literature. It then became convenient for him to extend the language of the Igbo novel to include novels written in English by writers of Igbo origin. However, decades later, after a series of intensive studies of Igbo literature, the outcomes of which he presented at various literary forums, seminars and conferences, he realized that “the language





UCHENNA OYALI

Emenyonu and the language of Igbo literature: A review

of expression was central to a valid and authentic definition of any literature or its genre" (EMENYONU 2020: 2). Consequently, he redefined the Igbo novel as "a novel written first and foremost in Igbo language, depicting Igbo worldview (a race with a population of more than 25 million), wholly or in part, and written by an Igbo person" (EMENYONU 2020: 2). When he presented this revised definition of what constitutes the Igbo novel at the 2003 annual conference of the African Studies Association held at Boston, Massachusetts, many of the Igbo scholars at the conference opposed it. Emenyonu does not provide the arguments of the Igbo scholars against his REVISED definition of the Igbo novel. However, he dismissed their view as "sentimental" and their approach as being "more political than literary" (p. 2). The young scholars in this group received a heavier blow:

"The young literary scholars present who objected to my new definition apparently did so for some purely personal concerns. Having adopted my original definition, they had in the course of their undergraduate and graduate studies published term papers, theses, dissertations, articles, and other works in which they had classified and analyzed novels written in English by such writers as Chinua Achebe, Cyprian Ekwensi, Chukwuemeka Ike, John Munonye, Elechi Amadi, E. C. Uzodimma, Buchi Emecheta, and Ifeoma Okoye, as Igbo novels. Their reputations (if not intellectual integrity) were at stake! Therefore, they 'vowed' to continue to define the Igbo novel to include any novel in English written by a person of Igbo origin." (EMENYONU 2020: 2)

This patronizing stance is disrespectful of the scholars so dismissed, and somewhat distracting. On the one hand, it suggests that these scholars are not willing to grow intellectually, stubbornly holding on to a view that is no longer tenable, despite the fact that he himself, the authority on which they based their position, who had the same view in his doctoral studies days, had matured overtime. On the other hand, it is a tenuous attempt at diverting attention from the valid questions that his revised definition of the Igbo novel raises.

Emenyonu's definition of the Igbo novel bases it on three criteria: 1) it must be written first in the Igbo language, 2) it must depict an Igbo worldview, wholly or in part, and 3) it must be written by an Igbo person. What are the real and hypothetical issues embedded in these parameters, and how successful has Emenyonu been in applying these parameters?

The first parameter inevitably excludes novels originally written in English (or other languages) and then translated into Igbo, irrespective of whether the other two criteria are met. For instance, Chukwuemeka IKE originally wrote *The Potter's Wheel* (1973) in English and then translated the text himself into Igbo as



UCHENNA OYALI

Emenyonu and the language of Igbo literature: A review

Anụ Ebu Nwa (1999); Chinua ACHEBE's *Things Fall Apart* (1958) has two translations into Igbo, namely *Ihe Aghasaa* (2008) by Izuu NWANKWO and *Agharata* (2009) by P. A. EZIKEOJIAKU. Going by Emenyonu's revised definition of the Igbo novel, these novels do not qualify as Igbo novels. Surprisingly, in his list of Igbo language novels (see Appendix, pp. 139-141), Emenyonu includes *Anụ Ebu Nwa* and *Agharata*. *Ihe Aghasaa*, the translation of *Things Fall Apart* done by Izuu Nwankwo was not part of the list. One then wonders why Emenyonu would go against the first parameter he gave for defining the Igbo novel; for these novels were originally written in English before they were translated into Igbo. What is more, in an interview with me on June 6, 2015 in Bayreuth, I asked Prof. Emenyonu whether the translation of *Ọmenụkọ* from Igbo into English would still count as Igbo literature. His response was that "*Macbeth, Julius Caesar* – works by Shakespeare – have been translated into other languages. They still remain British literature". By extension, the translation into Igbo of Achebe's *Things Fall Apart* and Ike's *The Potter's Wheel*, novels which no longer count as Igbo literature, going by Emenyonu's first yardstick for defining Igbo literature, cannot be counted as part of the corpus of Igbo literature. Why then were translations of texts that are no longer considered to be part of Igbo literature listed as such? Does translating a non-Igbo literary work into Igbo change the status of the text? Would a translation of Shakespeare's *Julius Caesar* into Igbo also qualify as Igbo literature? EMENYONU (2020) does not seem to agree with EMENYONU (2015); he does not seem to be consistent in his application of this parameter of the first language in which a literary work is written.

The requirement that the literary work have an Igbo worldview, Emenyonu's second yardstick for defining Igbo literature, may not be so problematic considering that it is difficult to have a novel-length piece of writing in Igbo that is bereft of Igbo proverbs and idioms. This is more so considering that Emenyonu gives the caveat that the worldview so presented may be "wholly or in part" (p. 2). As such, this criterion may not be belaboured here.

On the contrary, the third criterion on the ancestry of the author of an authentic Igbo novel is very problematic: it means that a writer who is born and raised in Igboland and probably taught Igbo in the secondary school, who decides to write a novel in Igbo may not have their novel recognized as authentic Igbo novel because the author's ancestors were not Igbo. The fact that their proficiency in the Igbo language is same as that of persons of Igbo ancestry is immaterial. The fact that their novel is first written in Igbo and also saturated with Igbo idioms and proverbs is of no consequence. Granted that there may not be such a writer yet, one cannot write off the possibility of such arising in some future period. What is more, many scholars who have championed the study and promotion of



UCHENNA OYALI

Emenyonu and the language of Igbo literature: A review

Igbo language, literature and culture are not of Igbo ancestry. Kay Williamson and Frances W. Pritchett come to mind in this regard. Kay Williamson was a British linguist who did a lot of seminal linguistic studies of Igbo. On her part, Frances W. Pritchett was a New Yorker who did many translations of texts from Igbo to English. Had these Igbo enthusiasts written novels in Igbo, Emenyonu would not recognize them as authentic Igbo novels because the authors' ancestry is not Igbo.

Perhaps this explains why Emenyonu does not make a single mention of Frances W. Pritchett and her translations from Igbo into English of all the novels he analysed in Chapter 5 of the book entitled "Early Fiction in Igbo – The Pioneers". Indeed, no human being, living or dead, has translated and published more works – critical and literary (prose, poetry, drama) – from Igbo to English than Ms Pritchett has done. The works she translated and published before her death include Pita NWANA's *Omenuko* (1933), D. N. ACHARA's *Ala Bingo* (1963), Betram Iwunwa Nkemgemedi OSUAGWU's *Egwuregwu Igbo Abuo: Akwuwa na Uka A Kpara Akpa* (1977), Chike Osita GBUJIE's *Oguamalam* (1979), J. U. T. NZEAKO's *Chi Ewere Ehihie Jie* (n.d.) and Chinua ACHEBE's Odenigbo lecture *Taa Bu Gboo: Echi Di Ime* (1999). Other works translated by Ms Pritchett but published posthumously include Leopold BELL-GAM's *Ije Odumodu Jere* (1963), J. U. Tagbo NZEAKO's *Erimma* (1973), R. M. EKECHUKWU's *Akpa Uche: Akwukwo Okwu Nkiri na Mbem Igbo* (1975), Enyinna AKOMA's *Obidiya* (1977), Mmuetulumanya OKAFQ's *Onye Oma Emeka* (n.d.), Betram Iwunwa Nkemgemedi OSUAGWU's *Nwa Ngwii Pue Eze* (1977), *Ndi Igbo na Omenala ha* (1979) and *Nkem Ejee America* (2001), Walter C. ENEORE's *Echi Di Ime* (1979), and Ihechukwu MADUBUIKE's *Ighota Abu Igbo* (1981). Indeed, all her translations alongside their Igbo source texts are published open access online,¹ which makes these texts, some of which have gone off-print, readily and easily accessible. In effect, without her efforts, the texts in Igbo would not reach a wider Igbo audience, and her translations into English have extended the readership of the texts beyond linguistic boundaries. Indeed, some studies of these texts are based on Pritchett's translation (cf. UGOCHUKWU's 2011 and HODGES' 2013 studies of *Omenuko*). Emenyonu made no mention of any of these translations by Frances W. Pritchett, yet he mentions his translations of *Omenuko* (published in 2014) and *Ala Bingo* (unpublished). Can this omission be interpreted as "literary" and not "political"?

What the foregoing indicates is that it is yet too early to celebrate Emenyonu's revised definition of what constitutes Igbo literature. The fact that he himself

¹ http://www.columbia.edu/itc/mealac/pritchett/00fwp/igbo_index.html



UCHENNA OYALI

Emenyonu and the language of Igbo literature: A review

could not maintain some consistency is his application of his revised definition indicates that his critics are not being merely sentimental as he suggests.

Indeed, Emenyonu's essentialist definition of Igbo literature is reminiscent of the argument that raged in the 1960s about the language of African literature (see WALI 1963 and ACHEBE [1965] 1997). While WALI (1963), like Emenyonu, insists that African literature must be written in African languages and not in the languages of the former colonial powers, Achebe ([1965] 1997) maintains that African literature could be written in African languages or in the former colonial languages. Achebe's argument is hinged on the impact of the colonial experience on Africans which has made the colonial languages an integral part of the repertoire of the African writer: "Any attempt to define African literature in terms that overlook the complexities of the African scene is doomed to failure (ACHEBE [1965] 1997: 343). Emenyonu is not ignorant of the complexity of the Igbo scene. Chapter 1 of the book discusses in part the linguistic situation in Nigeria where English is the language of instruction in schools. The Nigerian government's policy statements in the *National Policy on Education* (2014) which make indigenous Nigerian languages the languages of instructions in early childhood are not enforced. So, the average Nigerian (including the Igbo) child who has had some western education has English as the language of instruction at almost all the levels of education. They are thus more disposed to be proficient in English than in Igbo or other Nigerian languages. English is a major part of their lived experiences. They could be proficient to varying degrees in spoken Igbo; but only a few manage to master the art of writing in Igbo. And if they have to write about their Igbo experience, they are more inclined to do so in English than in Igbo. In other words, the essentialist definition by Emenyonu would translate to denying a higher percentage of Igbo writers a claim to having contributed to Igbo literature irrespective of the worldview expressed in the literary work. It would mean living in denial of the history of the Igbo people. It would mean not acknowledging the present realities of the Igbo society.

The key impetus for Emenyonu's revised definition of what constitutes Igbo literature is the fact that more literary works have been written in Igbo since the publication of his doctoral thesis in 1978. When the thesis was written, he did not consider the language of the literary work important in defining the text because there were not more than six novels published in Igbo at the time and most of the authors of the about eighty novels in English by West Africans were of Igbo origin (EMENYONU 2020: 3). Today, the fewer than six novels written in Igbo has increased to more than a hundred. This is commendable. But does that suggest that writers of Igbo ancestry have stopped producing literary works in English and other foreign languages? Does it mean that during this period more



UCHENNA OYALI

Emenyonu and the language of Igbo literature: A review

literary works have been written in Igbo than in English by writers of Igbo origin such that the works in English are now in the periphery while those in Igbo now have centre stage in the Igbo literary polysystem (cf. EVEN-ZOHAR 1990) to justify the revised definition? Emenyonu's revised definition is premature and would hope to become tenable when these questions are answered in the affirmative. Until then, his revised definition of Igbo literature requires further revision on arrival. It needs to articulate the place of translation within the Igbo literary polysystem. It also needs to problematize the concept of who an Igbo author is.



UCHENNA OYALI

Emenyonu and the language of Igbo literature: A review

References

- ACHARA, D. N. (1963). *Ala Bingo: Akuko Aroro Aro*, Ikeja: Longman.
- ACHARA, D. N. (unpublished). *Ala Bingo*. Translated by Ernest N. Emenyonu.
- ACHEBE, Chinua (1958). *Things Fall Apart*. London: Heinemann, 1958.
- ACHEBE, Chinua ([1965] 1997). "English and the African writer", *Transition* 75/76: 342-49.
- ACHEBE, Chinua (1999). *Echi Di Ime: Taa Bụ Gboo*, Owerri: Catholic Archdiocese of Owerri.
- ACHEBE, Chinua (2008). *Ihe Aghasaa*. Translated by Izuu E. NWANKWO, Awka: Valid.
- ACHEBE, Chinua (2009). *Agharata*. Translated by P. A. EZIKEOJIAKU, Umuahia: Ark.
- AKOMA, Enyinna (1977). *Obidiya*, Ibadan: University Press.
- BELL-GAM, Leopold (1963). *Ije Odumodu Jere*, Ikeja: Longman.
- EKECHUKWU, R. M (1975). *Akpa Uche: Akwukwọ Okwu Nkiri Na Mbem Igbo*, Ibadan: Oxford UP.
- EMENYONU, Ernest N. (1978). *The Rise of the Igbo Novel*, New York: Oxford UP.
- EMENYONU, Ernest N. (2015). Personal interview. 6 June.
- EMENYONU, Ernest N. (2020). *The Literary History of the Igbo Novel: African Literature in African Languages*, London: Routledge Taylor & Francis.
- ENEORE, Walter C. (1979). *Echi Di Ime*, Ikeja: Macmillan.
- EVEN-ZOHAR, Itamar (1990). "The position of translated literature within the literary polysystem", *Poetics Today* 11 (1): 45-51.
- FEDERAL REPUBLIC OF NIGERIA (2014). *National Policy on Education*. 4th ed. Yaba: NERDC.
- GBUIJE, Chike Osita (1979). *Oguamalam*, Yaba: Macmillan.
- HODGES, Hugh (2013). "Beasts and abominations in *Things Fall Apart* and *Omenuko*", *Ariel: A Review of International English Literature* 43 (4): 49-68.
- IKE, Vincent Chukwuemeka (1973). *The Potter's Wheel*, London: Fontana.
- IKE, Vincent Chukwuemeka (1999). *Anụ Ebu Nwa*, Ibadan: University Press.
- MADUBUIKE, Ihechukwu (1981). *Ighota Abụ Igbo*. Ibadan
- NWANA, Pita (1933). *Omenuko*, London: Longman.
- NWANA, Pita (2014). *Omenuko*. Translated by Ernest N. EMENYONU, New York: African Heritage.
- NZEAKO, J. U. Tagbo (1973). *Erimma*, Apapa: Thomas Nelson.
- NZEAKO, J. U. Tagbo (n.d.). *Chi Ewere Ehihie Jie*. Ed. F. Chidozie Ogbalu. Onitsha: Varsity.
- OSUAGWU, Betram Iwunwa Nkemgemedi (1977). *Nwa Ngwii Pue Eze*, Onitsha: Varsity.
- OSUAGWU, Betram Iwunwa Nkemgemedi (1977). *Egwuregwu Igbo Abụ: Akụwụwa Na Ụka A Kpara Akpa*, Ibadan: Macmillan.
- OSUAGWU, Betram Iwunwa Nkemgemedi (1979). *Ndi Igbo Na Omenana Ha*, Yaba: Macmillan.
- OSUAGWU, Betram Iwunwa Nkemgemedi (2001). *Nkem Ejee America*, Umuahia: Ark.



UCHENNA OYALI

Emenyonu and the language of Igbo literature: A review

PRITCHETT, Frances W. *About the Igbo Language: Materials compiled by Frances W. Pritchett*, accessed on 6/9/2020,

<http://www.columbia.edu/itc/mealac/pritchett/00fwp/igbo_index.html>

UGOCHUKWU, Françoise (2011). "Exile in early Nigerian literature: A comparative study of Nwana's *Omenuko* and Achebe's *Things Fall Apart*", in Yilma Tafere TASEW (ed.), *OUTCAST: The Plight of Black African Refugees*, Trenton, New Jersey: Red Sea, 101-15.

WALI, Obiajunwa (1963). "The dead end of African literature", *Transition* 10: 13-16.

OKAFO, Mmụotụlụmanyà J. (n.d.). *Onye Oma Emeka*, Onitsha: Varsity.