

1627

THE ASSIMILATION OF
LOAN WORDS IN MASALIT

John Tees Edgar

A thesis submitted for the degree of Doctor of Philosophy

University of London

1988

- 1 -



ProQuest Number: 11010338

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 11010338

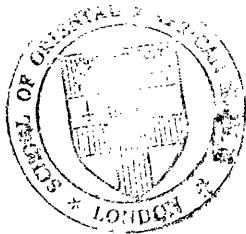
Published by ProQuest LLC (2018). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 – 1346

12/3-91



Dedication
For my mother and my sister

ABSTRACT

"The assimilation of loan words in Masalit"

This is a study of the assimilation patterns and processes of Arabic words adopted into the Masalit language.

The Masalit, a settled people numbering between one and two hundred thousand, live in Dar Masalit, the western district of Dar Fur, Sudan and in eastern Wadai, Chad. Most are peasant farmers, growing millet as their staple food and keeping goats, sheep and occasionally cows. Their language belongs to the Maba group (belonging to Greenberg's postulated Nilo-Saharan phylum. Many Masalit are bilingual in Masalit and Colloquial Arabic, some do not speak Masalit at all. There is a growing monolingual arabophone population in the region. All of the peoples of Dar Masalit are at least nominally Muslim.

Chapter 1

The history of the land of the Masalit is surveyed briefly insofar as it is relevant to the influence of Arabic on Masalit.

Chapters 2 and 3

The state of the Arabic language in the land of the Masalit is discussed, the phonologies of classical and colloquial Arabic and Masalit are laid out and Masalit morphology relevant to the processes of loan-word assimilation is described, followed by a description of the methodology involved.

Chapter 4

Arabic-Masalit phonetic changes are noted as are additions of Masalit suffixes; adoptives into the verbal system are fewer and are treated separately. Very much fewer of the putative loans are in the 'indirect' category; putative loans via Fur, Fulfulde, Kanuri, Hausa and Maba (a cognate language of Masalit) are suggested and examined. Problematic items and lexemes which have wide spreads of reflexes and 'look-alikes' in the region are also examined, followed by some putative morphological adoptions. The semantic maintenance and change of loan words is catalogued and analyzed.

CONTENTS

	page
Acknowledgements	9
MAP	10
INTRODUCTION AND BACKGROUND	
1.0 Introduction to the study	12
1.1 Sources	14
1.2 Transcription, definitions and abbreviations	14
1.3 The place of Masalit amongst the languages of the Sudan	19
1.4 The phenomenon of lexical adoption	21
1.4.1 Reasons	22
1.4.2 Vehicles	25
1.4.3 Adaptations of adoptive material and of the target language	27
1.5 Historical and cultural introduction to the Masalit	31
1.5.1 External influences	33
1.5.2 The immediate area	34
1.5.3 The broader area	37
1.5.4 The colonial period and the independent Sudan Republic	41
1.5.5 Masalit culture and Islamic practices	42
1.5.6 The advance of Islam	43
1.5.7 Conclusion	46
THE ARABIC AND MASALIT LANGUAGES	
2.0 The state of the Arabic language in Dar Masalit	51
2.1 Phonology of Arabic	54
2.2 Phonology of Masalit	58
2.3 Summary of Masalit Morphology	63
2.3.1 Verbal Morphology	63
2.3.1.1 Bases and Prefixes	64
2.3.1.2 Suffixes	69
2.3.1.3 Negative forms of verbs	70

	page
2.3.1.4 Interrogative forms of verbs	70
2.3.1.5 Nominals derived from verbs	71
2.3.1.6 Copula	74
2.3.1.7 Support verbs	75
2.3.2 Non-verbal morphology	77
2.3.2.1 Plurality-singularity	77
2.3.2.2 Nominal suffixes	81
2.3.2.3 Nominals derived from nominals	82
2.3.2.4 Adverbs	84
 METHODOLOGY	
3.0 Methodology	90
3.1 Identification of Adoptives	90
3.2 Delimitation of search for intermediaries of adoptives	92
3.3 Processing of data	92
 ANALYSIS	
4.0 Analysis of Arabic-Masalit equivalences	96
4.1 Summary table of Arabic-Masalit equivalences	97
4.2 Examples of Arabic-Masalit equivalences	100
4.2.1 Phonological changes and maintenance	100
4.2.1.1 Consonants	100
4.2.1.1.1 Bilabial	100
4.2.1.1.2 Labiodental	102
4.2.1.1.3 Dental/alveolar	102
4.2.1.1.4 Palato-alveolar and palatal	108
4.2.1.1.5 Velar	109
4.2.1.1.6 Uvular	109
4.2.1.1.7 Pharyngeal	113
4.2.1.1.8 Glottal	115
4.2.1.1.9 Semi-vowels	116
4.2.1.1.10 Simplification of geminates	117
4.2.1.1.11 Metathesis	118

	page
4.2.1.2 Vowels	119
4.2.1.2.1 Front	120
4.2.1.2.2 Central	121
4.2.1.2.3 Back	123
4.2.1.2.4 Shortening	123
4.2.1.2.5 Epithesis	124
4.2.1.2.6 Epenthesis	126
4.2.1.2.7 Diphthong simplification	127
4.2.2 Morphemic additions	128
4.2.2.1 Singular suffixes	128
4.2.2.2 Plural suffix	130
4.2.2.3 Adverbial suffixes	131
4.2.2.4 Suffixes identical with the 3S copula	131
4.2.2.5 Suffixes of undetermined morphemic and semantic value	132
4.2.3 Metanalysis	134
4.2.4 Putative adoptives in the Masalit verbal system	136
4.2.5 Putative adoptives in Masalit nominal morphology	137
4.3 Putative indirect adoptives	138
4.3.1 Putative adoptives via Fur	139
4.3.2 Putative adoptives via Fulfulde	142
4.3.3 Putative adoptives via Kanuri	144
4.3.4 Putative adoptives via Hausa	146
4.3.5 Putative adoptives via Maba	149
4.3.6 Putative adoptives via other languages	155
4.4 Lexemes which are part of wider areal spreads	156
4.5 Semantic discrepancies	161
4.5.1 Meaning maintenance	162
4.5.2 Meaning shift	162
4.5.3 Meaning contraction	163
4.5.4 Meaning extension	164
4.5.5 Synonyms	164
4.5.6 Loan translation	165

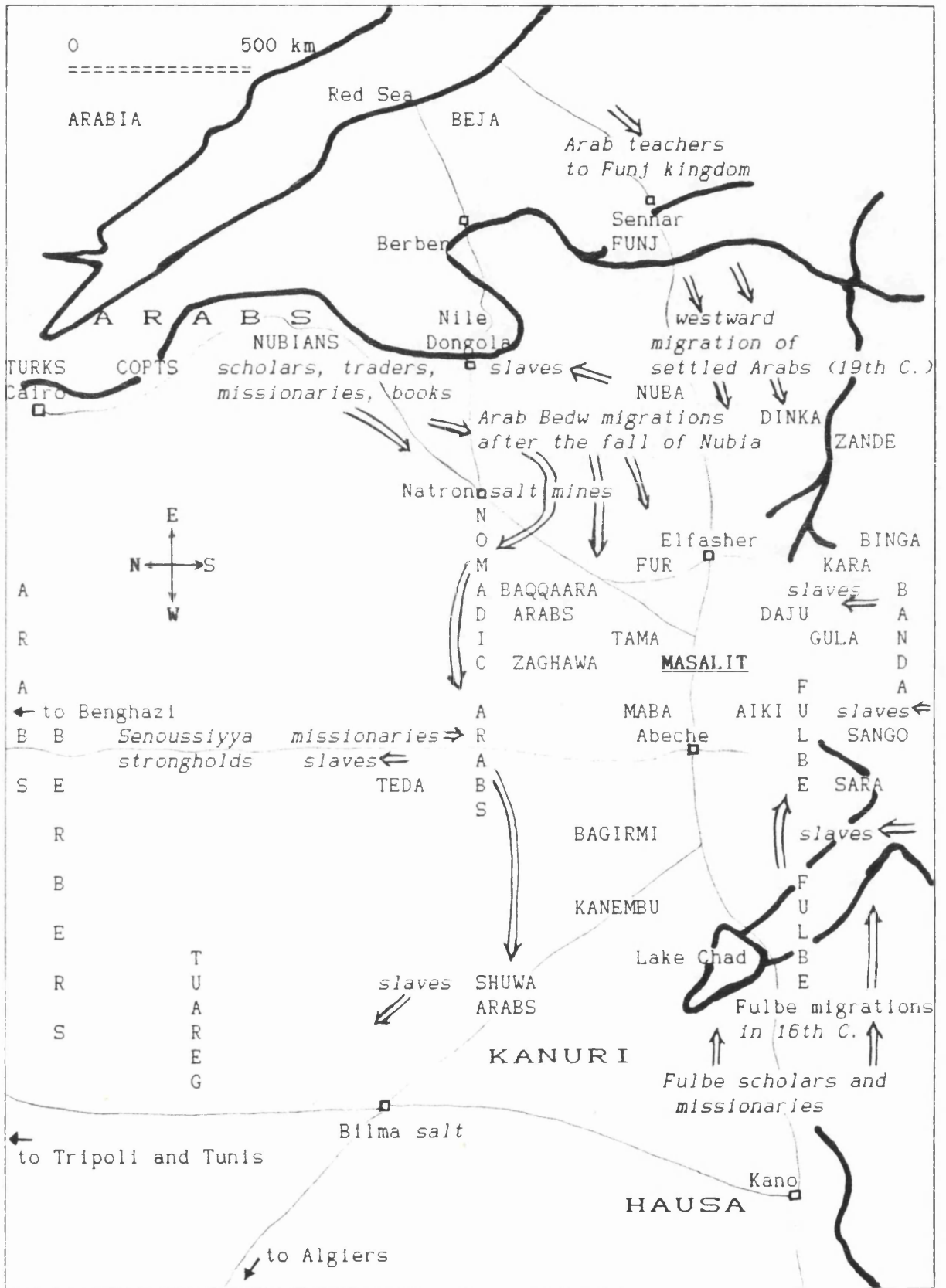
	page
4.5.7 Loan blend	166
4.6 Percentages and semantic areas of adoptives	167
CONCLUSION	
5.0 Summary and conclusion	172
5.1 Forms adopted	172
5.1.1 Forms of Arabic adopted	172
5.1.2 Forms of etyma adopted	175
5.2 Expectations	175
5.3 Strategies of assimilation	176
5.3.1 Grammatical categories to which adoptives are assimilated	176
5.3.2 Phonological assimilation	176
5.3.3 Assimilation to Masalit word patterns	178
5.4 Putative intermediaries	179
5.5 Semantics	180
APPENDICES	
Appendix A Maba group equivalents	182
Appendix B List of Masalit clans/lineages	186
Appendix C Fundamental colours in the Maba group languages	188
Appendix D Doornbos' Masalit word-lists	189
Appendix E Short lexicon of Masalit nominals	193
Appendix F Areal Spreads	214
Appendix G Phoneme tables of Fur, Fulfulde, Kanuri, Hausa and Maba	218
Appendix H Masalit personal names	220
Appendix I Arabic adoptives in Maba	221
BIBLIOGRAPHY	
General, Historical and Cultural	224
Linguistic/Languages	229

ACKNOWLEDGEMENTS

Over a period of two years (1979-80 and 1982-83) spent in Geneina, Dar Masalit, Sudan, working as a teacher, I learned the fundamentals of the Masalit language and took copious notes and wordlists from my Masalit students and friends. Most of our conversations and interviews were conducted in Arabic, which of course has a bearing on some of the grammatical interpretations I might make - especially with regard to verbal tense/aspect distinctions.

On my return to London in 1983, when I showed my notebooks to Prof. Hazel Carter (then of S.O.A.S.) she helped me to develop what I had started and encouraged me to use the material to write a thesis. I would like to thank her for that initial stimulus and all her help as Adviser since then. I would also like to express my thanks to M. Claude Gouffé of I.N.A.L.C.O., Paris for his interest and his stimulating lessons, and to Prof. Herrmann Jungraithmayr of the Afrikanische Sprachwissenschaften at Frankfurt University for all his help and interest in my various projects on Masalit and the Maba group. Finally I would like to thank Dr. Thea Bynon and Dr. Dick Hayward of S.O.A.S. for their good advice in revising the thesis and to Dr. Graham Furniss, also of S.O.A.S., for guiding me through the bureaucracy.

MAP



INTRODUCTION AND BACKGROUND

1.0 INTRODUCTION TO THE STUDY

The Masalit people live for the most part in Dar Masalit (land of the Masalit) (1) in West Sudan and in East Chad in the Sahel belt; they also live in the more prosperous east of Sudan - mainly Gedaref and Khartoum. Their land lies across one of the main overland pilgrim routes from west Africa to the Red Sea coast and the holy cities of Makka and Madina.

According to the estimate of Tucker and Bryan (1956) there are approximately 27,000 Masalit; according to the 1955-56 census as quoted in *Directions in Sudanese Linguistics and Folklore* (University of Khartoum, 1975) there are 162,524 Masalit!

The Masalit language, spoken by most of the Masalit, has never been written down, as far as I know, nor has Maba, its sibling language to the west. Many, if not most of the Masalit know some Arabic, from a simplified market patois through the colloquial Arabic of Wadai-Dar Fur to the classical Arabic of the Quran, learned and revered if not always understood by the Muslim Masalit.

This is a study of the processes and patterns involved in the assimilation of adoptive words in one language - Masalit, the *ultimate* origin of the adoptive words being, for the purposes of this study, Arabic, and the semantic and cultural significance of such items within the Masalit lexicon. To be sure there are other languages which have been sources of 'lexical adoption' by Masalit: Fur, Maba, Fulfulde, Hausa, Kanuri - but the large number of Arabic words assimilated in Masalit lends their study an advantage, as does the certainty of the direction of lexical movement - *from* Arabic *to* Masalit with or without intermediaries, and the relative ease with which most lexemes of Arabic origin may be identified, in view of the the wealth of Arabic dictionaries available, also that I learnt Masalit largely through the medium of Arabic. To be able merely to identify all the adoptives from Fur, for example, would be immeasurably more difficult as the written sources of Fur are almost as meagre as those of Masalit itself - there is no Fur dictionary (though there is one in preparation by Dr Angelika von

Funck). However, the postulation of putative intermediaries does form a part of the study - within the limits of, and hampered by, the scarcity of available material.

Masalit does share with its closest *geographical* neighbours (e.g. Tama, Miisiri, Erenga, Sungor, Zaghawa, Fur) a substantial number of lexemes both of Arabic and of non-Arabic origin. The etyma of those of non-Arabic origin are difficult to determine and it would be unwise in the absence of corroboratory historical, socio-economic or linguistic (e.g. morphological) evidence to ascribe the origin of lexemes to any one of these languages. The diffusion of lexemes of Arabic origin amongst these languages could perhaps be traced but would demand a knowledge of the morphology and phonology of all of the languages concerned; for most of them there is no detailed published material available.

As the study will be centred on words of Arabic origin, the analysis will not include any general conclusions on the genetic relationships within the Maba group but, as I have been able to gather more material for these languages than for neighbouring ones (for a future comparative lexicon project: 'The Maba Group Lexicon', henceforth referred to as the 'Lexicon'), where relevant and helpful the other Maba cognates for specific lexemes are given and their possible relationship to the Masalit form commented upon. I would like to add my opinion here that the existence of large areas of common vocabulary is not valid evidence in itself of any genetic relationship between languages and as this study deals with *lexical* movements only no conclusions whatsoever are drawn about genetic relationships. For a further discussion of this see the introduction to the Lexicon. Also there are few words so sacred in a language that they cannot be replaced by, or at least surrender part of their semantic field to, an alien form which, for whatever reason (see below 1.4), has come to be adopted into common parlance.

1.1 SOURCES

One of the limiting factors in a study such as this, encompassing a wide range of languages, most unwritten and only poorly known, having little published information, is the availability and reliability of vocabularies. Apart from well-studied languages such as Arabic, Hausa, Berber, Kanuri, many of the sources amount to no more than handwritten word-lists, some dating from more than a century ago, some within the last couple of years. Most are unmarked tonologically, while the range of phonological transcriptions, as mentioned below (1.2), is wide and far from uniform. No reliable historical perspective is possible because all the sources for Masalit and other Maba group languages are fairly recent, the oldest dating from the 1790s, and the older sources are often imprecise and may contain hapax legomena difficult to substantiate now.

1.2 TRANSCRIPTION, DEFINITIONS AND ABBREVIATIONS

As data for the less well-documented languages has been taken from a wide range of sources a uniform method of transcription has had to be adopted so as to give a consistency to comparisons. This presented some difficulties in that not all of the sources have defined precisely the values of their own phonetic transcriptions, which may vary according to the native tongue of the author, e.g. dj for [j] and tch for [č] in French sources, tsch for [č] in German sources.

I have followed Guthrie's rule (1967:11) in that, as far as practicable, given characters should always be used to represent comparable sounds, in whatever language they occur. For the most part IPA symbols are used. I have therefore taken the liberty with

some of the older sources of making minor alterations in their transcriptions in order that comparisons should be as clear as possible; where there has been doubt in specific instances I have included the original spelling in the text.

The following symbols have been used for typographic reasons instead of the IPA symbols:

Consonants:

' represents ʕ
 ɥ " " ɥ
 q " " ʔ
 ʔ " " ʔ
 ɣ " " ɣ
 \$ " " ʃ

Vowels:

ɪ represents ɪ
 ɜ " " ɜ

, " " pharyngealization, hence the Arabic ط is [t̤], ض is [d̤], ص is [ʃ̤] and ظ is [z̤].

∅ is used to denote zero (prefix or suffix)

Definitions

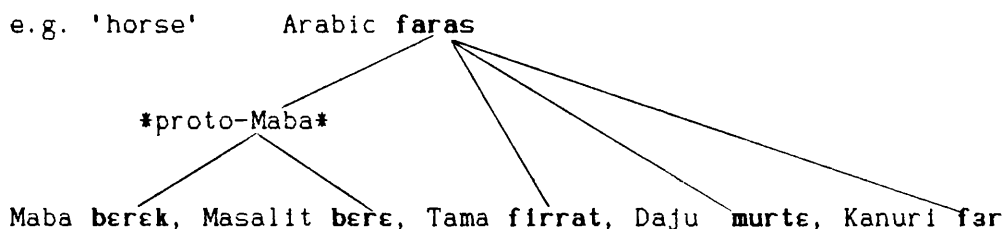
Cognates: lexemes (or morphemes) in two or more languages which are derived from common ancestral lexemes in the same proto-language and which are thus genetically related.

Adoptives: lexemes (or morphemes) which have been adopted from the lexicon of one language into the lexicon of a second language and which may or may not be felt by the speakers of the second language to be a part of its lexicon. Adoptives are, by this definition, not cognates (though the two languages involved in the adoptive process may be genetically related).

Equivalents: lexemes in two or more genetically unrelated languages which have a loan/borrowing relationship.

Etyma: the origin/source item whence equivalents are derived.

Correspondences: regular sound equivalences between **cognates** which are the continuations of common 'proto-sounds' in the proto-language.



faras is the putative etymon.

berek berε firrat murte far are all equivalents and are putative adoptives of the etymon **faras**.

berek and **berε** are possibly cognates as Masalit and Maba are genetically related, the condition for these to be *cognates* being that the item had been adopted by their common ancestor 'proto-Maba' from Arabic, or an intermediary language, and not by each language separately.

Abbreviations used to represent languages (with sources)

Unpublished sources are indicated by MS. Fuller references for published sources may be found in the bibliography.

Languages	Sources
Ak...Aiki	Nougayrol, 1985 MS; Doornbos, 1979 MS.
Bd...Birgid	Arkell, 1930s MS.
Bg...Bongo	Santandrea, 1963.
Bj...Beja	Roper, 1928.
Bk...Baka	Santandrea, 1976.
Bm...Bagirmi	Barth, 1862; Gaden, 1909; Arkell, 1930s MS.
Bn...Banda	Toque, 1905.
Bo...Bolanchi	Barth, 1850s (in Benton, 1912)
Br...Berber	Destaing, 1914.
Bt...Berti	Petraček, 1987.
Bu...Budduma	Barth, 1850s (in Benton, 1912).

By...Bidyo	Allo, 1985.
Cp...Coptic	Crum, 1939.
Dj...Daju	Thelwall, 1978 ; MacMichael, 1922.
Dn...Dinka	Nebel, 1979.
Dz...Daza	Jourdan, 1935.
En...English	
Er...Erenga	Edgar, 1983 MS.
Fc...French	
Fl...Fulfulde	Taylor, 1932; Dauzats, 1952; Arnott, 1970; Abu Manga, 1986; Stennes, 1967.
Fu...Fur	O'Fahey, 1980; Arkell, 1930s MS; Beaton, 1968.
Gk...Greek	Chartraine, 1970.
Gn...Goran	Augier, 1955 MS.
Gu...Gula	Arkell, 1930s MS.
Ha...Hausa	Bargery, 1934.
Ka...Kara	Santandrea, 1970.
Kb...Kibet	Doornbos, 1980 MS; Nougayrol, 1985 MS, 1987.
Kj...Krej/Kreish	Santandrea, 1976.
Km...Kanembu	Lukas 1931.
Kn...Kanuri	Lukas, 1937; Hutchison, 1981; Arkell, 1930s MS.
Lg...Logone	Barth, 1862.
Mb...Maba	Trenga, 1905; Lukas, 1952-3; Barth, 1862; Doornbos, 1980 MS; Edgar, 1979-83 MS.
Md...Midob	Arkell, 1930s MS; MacMichael, 1922.
Mi...Milsiri	Edgar, 1988; Doornbos 1983.
Mk...Mandinka	Bailleul, 1981.
Mm...Mimi	Jungraithmayr, 1971-2; Nachtigal, 1860s MS; Gaudefroy-Demombynes, 1906.
Ms...Masalit	Edgar, 1979-83 MS; Doornbos, 1979; Arkell, 1930s MS; MacMichael, 1922; Davies, 1957, 1920s MS; Kapteijns, 1985.
Mu...Mubi	Lukas, 1937.
Nr...Nuer	Kiggen, 1948.

Ny...Nyimang	Stevenson, 1956.
Pr...Persian	Haim, 1962.
Sg...Sungor	Lukas, 1933.
Sr...Sara	Hallaire & Robinne, 1955.
Sn...Sango	Samarin, 1967.
So...Songhai	Hacquard, 1897; Ducroz & Charles, 1978.
Ta...Tama	Arkell, 1930s MS; MacMichael, 1922; Doornbos, 1983; Edgar, 1983 MS.
Tk...Turkish	Redhouse, 1968.
Tm...Tamajaq	De Foucauld, 1918.
Wa...Wandala	Barth, 1862.
Yu...Yulu	Santandrea, 1970.
Zg...Zaghawa/BeRi	Arkell, 1930s MS; MacMichael, 1922.
Zn...Zande	Bullen, 1952.

Ar...Arabic:

CL	Classical Arabic: Wehr-Cowan, 1961.
CQ	Colloquial Arabic.
CQE	Egyptian Colloquial Arabic: Harrell, 1957; Gairdner, 1917.
CQN	Nigerian Colloquial Arabic ('Shuwa'): Kaye, 1982; Letham, 1920.
CQS	Sudanese Colloquial Arabic (of 'riverine' Sudan): Trimmingham, 1946; Hillelson, 1925; Amery, 1905; Crewe, 1973; Abu Manga, 1986.
CQW	Wadai-Dar Fur Colloquial Arabic: Roth-Laly, 1969-72; Carbou, 1913; Muraz, 1932; Faure, 1969; Décobert, 1985; Abu Absi, 1966; Kaye, 1976; Abu Manga, 1986.

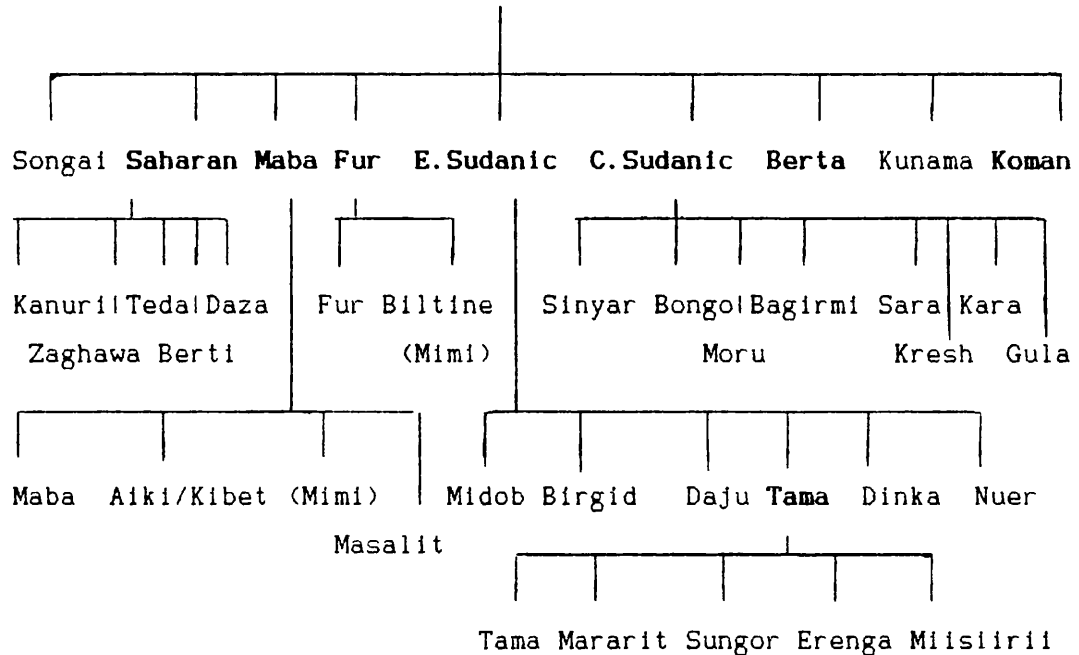
n.b. the distinction between CQN CQE CQW and CQS is quite arbitrary as they are dialects of the same linguistic continuum from the Nile to the Niger, but distinct from other colloquials. E ?

General abbreviations:

col.	collective
pl.	plural
sg.	singular
vb.	verb

1.3 THE PLACE OF MASALIT AMONGST THE LANGUAGES OF THE SUDAN

Nilo-Saharan Phylum (according to Greenberg and Bender)



For lists of Maba group lineages/clans see Appendix B

(language groupings in **bold**)

It is not within the scope of this thesis to comment upon the validity or otherwise of Greenberg's suggested Nilo-Saharan 'Phylum', however I give here a summarized version to help the reader 'place' the Masalit language and other 'minor' languages referred to. That Masalit, Maba, Aiki, Kibet and one of the languages called 'Mimi' form a genetic group seems beyond doubt on the grounds of morphological and syntactical similarities and lexical correspondences. That this Maba group may be genetically related to certain of its geographical neighbours remains to be definitively demonstrated; however, in the course of this research, some interesting similarities have come to light between Masalit and Kanuri verbs, which will be commented on below; Prof.E.Wolff (Hamburg) is also conducting a comparative research project on Fur and Maba with Dr von Funck. These, and a comparative study I am

also currently engaged in on the Tama group, do indicate some 'proximity' between these groups, though the nature of that 'proximity' remains to be elucidated in detail.

The Masalit language has three dialects (northern, southern and western) recognized by the Masalit. Fresnel noted this in 1849, and it remains true today. Davies noted in 1925 that the northern Masalit were increasingly arabicized; this appears to be accelerating today, according to all my informants. The southern dialect (spoken around Mistere and Habila Kajangise is the most prestigious (the sultan speaks it) and is also called the 'heavy language' **kana lere**. It has resisted the adoption of Arabic lexemes consciously whereas the 'light language', **kana walwala**, has absorbed large quantities of adoptives. It is not clear whether the 'light language' coincides with a geographical dialect or not. This seems to be a *diglossia*.

1.4 THE PHENOMENON OF LEXICAL ADOPTION

Moravcsik (1978:99) defines adoption ("borrowing") as "a process whereby a language acquires some structural property from another language that is contemporary to it." ² It is clear from the title the principal ultimate source language being dealt with in this study is Arabic. However, it is helpful for the purposes of categorizing and defining general trends to examine other 'source' and 'target' languages and how and why the adoption of lexical, phonological and morphological material occurs. Lexical adoption is the most common process as it involves simply the substitution of one lexeme by another or the addition of lexemes to the adopting lexicon.

Pritzwald (1938) gives a hierarchy of influence of the source language on the adopting language as (in decreasing influence): vocabulary, sound system, word-formation and compounding processes, syntax, proper names. This final item is demonstrably out of place as far as Arabic adoptives are concerned; in newly converted Muslim societies one of the *first* adoptions is that of proper personal names - Muhammad, Ahmad, Fatima etc.. Whereas it appears to be generally accepted that lexical adoption is the simplest and most common process there are conflicting views about morphological and syntactical adoptions; for instance, Schuchardt (1928:195) says, "Even closely-knit structures, like inflectional endings are not secure against invasion by foreign material..." but on the other hand Sapir (1927:217) says, "Nowhere do we find any but superficial morphological interinfluencings." Muysken (Appel and Muysken, 1987:171) gives the hierarchy for Spanish borrowings in Quechua as: nouns, adjectives, verbs, prepositions, coordinative conjunctions, quantifiers. Whitney (ibid:170) gives a more generalized hierarchy: nouns, 'other parts of speech', suffixes, inflections, sounds. Hierarchies of lexical adoption clearly will vary depending on the morphology of the 'target' language, e.g. in English the category of verb has fewer constraints on the shape of adoptives than in Turkish. Moravcsik, discussing constraints on borrowing (1978:110-111), sets out some hypothetical universal constraints: "No non-lexical language

property can be borrowed unless the borrowing language already includes borrowed lexical items from the same source language." and "No lexical item that is not a noun can belong to the class of properties borrowed from a language unless this class also includes at least one noun."

In the case of Masalit adoptions from Arabic we shall see below that these statements are borne out.

Also, if the example of Persian (and thence Arabic) adoptions in Turkish is taken, it is clear that, in contrast with the vast number of lexical adoptions into Turkish used by all social classes, only a very few morphological and syntactical adoptions occurred over a period of more than a thousand years of cultural contact and influence - and these, such as the Persian genitive (the *izafet* construction), only were truly current in the refined company of well-educated literati and have been sloughed off very quickly since the language reforms of the 1920s.

For an appreciable morphological and syntactical influence to be felt it appears that the target language speakers need to be in regular linguistic contact with the source language speakers - which is certainly the case in Dar Masalit with the nomad Arabs and the urban merchants (but not with the Persians and Turks).

1.4.1 REASONS

There may be a variety of reasons for the adoption of alien lexical items:

The need for neonyms for and precise identification of new products, plants, animals, technologies, offices, philosophical terms and notions which may be imported from the source culture - e.g. the (now out-dated) Hausa term for the colonial 'Native Administrator' was *en'èè* adopted from the English usage of the initials *N.A.*. This does not appear to be an important *motive* force in adoption as people are quite able to invent new terms using existing lexical material to describe new phenomena, e.g. Hausa *jirgi-n samàa* 'aeroplane (lit.

boat of the sky)' and **jirgi-n kasaa** 'railway train (lit. boat of the countryside)'.

More important than the practical needs above are the psychological needs and motives induced by the perception by the target language speakers that the source language represents a desired state - of military success, technological advancement, cultural sophistication or philosophical development, e.g. English and French in nineteenth and twentieth century Africa, French in eighteenth and nineteenth century Germany, Russian in nineteenth and twentieth century Central Asia. The source language, representing above all a more successful way of life, of survival, is a symbol of prestige.

The source language may also be used as a donor of \odot euphemisms, e.g. English **loo** < French **l'eau**, \odot snobbisms and modisms, e.g. the current ubiquitous use of the French definite article in British English: **le bag**, **le car** etc., \odot slang items for specific social groups, e.g. French **cool** < American English, French **spoutnik** 'motorbike' < Russian. Some of these may have unstable and ephemeral existences in the target language but some may become 'permanent' members of the lexicon understood, if not used, by all speakers, e.g. English **loo**, French **bled** 'town' < Arabic **balad**, French **klebs** 'mutt' < Arabic **kalb** 'dog'.

In monolingual societies the prestige motive may be the most important underlying factor in lexical adoption, e.g. in polite Istanbul society one uses **mersi** < French **merci** as a more genteel way of expressing thanks than **teşekkür [ederim]** the more traditional Persian < Arabic form and certainly more than the indigenous Turkish **sağol**.

In multilingual societies different circumstances obtain from those in monolingual societies. In Dar Masalit, where a number of different languages have currency in the markets (colloquial Arabic, Masalit, Maba, Fur), there appears to have been a convergence of the main languages to produce a market patois of a much simplified Arabic, stripped of inflections, with lexical accretions from

Masalit, Maba and Fur. This seems to be an unstable situation in Dar Masalit and one which is drifting towards a more standard colloquial Arabic. In the multilingual and multicultural 'artificial' societies on the Arabian side of the Persian/Arabian Gulf a similar kind of unstable patois has emerged, based on a much-simplified English with lexical material from Arabic and Hindi, also a few lexemes from Somali, Tagalog, Thai and other languages depending on the speakers. One putative product of this is the calque of Arabic equivalent morphological forms into the patois, e.g. /seimseim/ 'equal' < English **same** by analogy with the colloquial Arabic **kifkif**.

It does not seem unreasonable to postulate such patois as entry routes for lexical and morphological adoptions into the standard languages where the patois is familiar to a fairly large number of speakers (an army, for instance) or over the whole area where the standard language is spoken, although no speakers would *confuse* the patois and standard. However this, all other circumstances being equal, would mean a 'pooling' of lexical resources in equal measures by the participant languages. This is demonstrably not the case in Dar Masalit; colloquial Arabic is dominant and becoming more so, fifty years ago Arkell noted the same. The circumstance that is not equal is that classical Arabic is the sacred and liturgical language of Islam, the language of scholarship and education, the language of the court, princely culture and international relations and is written, and that colloquial Arabic is the language of commerce (to the north and east). These factors have all contributed to the advance of Arabic, in conjunction with the presence of colloquial Arabic speaking nomads, merchants and officials and the political and social turbulence of the nineteenth century - from the westward migration of riverine arabophone Sudanese under Turco-Egyptian pressure to the ravages of Rabeh's arabophone mercenaries at the end of the century.

1.4.2 VEHICLES

An additional factor in the advancement of Arabic influence is the institution of pilgrimage to Makka which is not much practised by the Masalit but has led to the establishment of West African communities in Dar Masalit to provide comfort and mercantile stations for their compatriots en route to Makka. As we shall see in 4.4 however, the linguistic influence of these on the Masalit language has been marginal in comparison with that of Arabic; it is worth bearing in mind too that many of the Quran teachers in Dar Masalit were (and are) Fulbe and Kanuri who have been bearers of Islam in the region much as the Mandinka were further west.

Last but not least are the 'Sudanization' and 'Arabization' policies of successive Khartoum governments which have favoured the sole use of Arabic in officialdom and schools in the north of the Sudan Republic in order to promote a homogeneous united Sudanese society.

Malherbe (1969:42, quoted in Abu Manga, 1986) points out, "The existence of literary traditions permits influence without contact between speech communities." This has taken place throughout the Islamic world - and it would be perfectly reasonable to suppose that it had happened in Dar Masalit as well. The corollary of this, in the case of Masalit, is that adoptives from the unwritten colloquial Arabic language necessitates the physical presence of Arabic speakers.

Education and religion, bound together in the traditional Islamic context, would seem to be the most likely vehicles for the direct importation of Arabic words. Education in Dar Masalit, up until very recently, has meant the Quran school alone and, for a few, some years spent at the Azhar University in Cairo or in Khartoum (fewer go to Kano, Madina and other centres of Islamic learning). The language of instruction is the liturgical language: Quranic (or classical) Arabic. Arabic is the only written language current in the Dar and none of the indigenous languages, to my knowledge, has ever been

systematically written by the speakers. When I suggested writing their native languages down (in Arabic script), the students at the school where I was teaching and my other informants expressed surprise or indifference. All the local languages are referred to in a pejorative sense as 'dialects' rather than 'languages' comparable with Arabic, a possibility not admitted to (only two of my informants - students, after many months of work with me on Masalit's complex morphology, were prepared to state their recognition that Masalit was a language (luya, لغة) rather than a mere dialect (ruuṭaana روطانة or lahja, لهجة). This is merely one indicator of the immense prestige classical Arabic enjoys as the language of learning, culture, sophistication, trade and religion. This is also one reason given by Wexler (1980:547) to support his hypothesis that words of Arabic origin in West African languages were largely adopted from the classical language, not the colloquial. In Dar Masalit up until the last century the largest number of native speakers of Arabic has been among the cattle-herding nomads who have a low social status and whose economic importance for the settled peoples is limited. However, unlike the situation further west, in Dar Masalit there has been a community of arabophone immigrants from the Nile valley which has been growing since the Turco-Egyptian occupation of the 1820s. This community consists largely of merchants and government officials who have exercised greater influence and have maintained firmer commercial and social links with their riverine families than their co-linguists in West Africa where a different economic set-up prevails. Hunwick, writing about the spread of Arabic in West Africa, gives education and the superiority of Islamic 'magic' as two principal factors encouraging the extension of Arabic: education at schools established for the children of merchants at trading posts (and the development of correspondence and interest in written knowledge thus engendered), and the magical efficacy of the written word - powerful in a non-literate society (2).

It is of interest to note here what the other lingua francas of Central Africa are and have been; according to Delafosse (1914) the international languages of commerce and communication of the Sahel

were Arabic, Mandinka, Songai, Hausa and Sango; according to Heine (1968) the trade languages, *Verkehrssprachen*, of the central Sudan are Arabic, Kanuri, Sara, Maba and Zande, those of west-central Africa are Adamawa Fulfulde, Sango, Pidgin A70, Bali, Yaunde, Duala and Bulu, those of the western Sudan are Hausa, Songai, Mandinka and Mossi.

In summary, all the possible vehicles of transmission of Arabic into Masalit are:

- 1) Religion, education, literacy, use in officialdom and court.
- 2) Commerce (to the east and north).
- 3) Social mingling with Arab nomads, merchants and officials.
- 4) The arabophone armies of the nineteenth century.
- 5) Growing bilingualism of the Masalit (and even arabophone Masalit who do not speak their parents' language), increased by the increasing mobility of the people within the arabophone world.

The question of which factors have been more important in the influence of Arabic on Masalit will be discussed further in the summary with reference to the linguistic evidence presented in Chapter Four and in particular to the colloquial-classical diglossia of Arabic.

1.4.3 ADAPTATIONS OF ADOPTIVE MATERIAL AND OF THE TARGET LANGUAGE

Hock (1986:390) states: "the major difficulty with foreign language borrowing is that the linguistic structures of different languages may diverge considerably, necessitating in most cases at least some adjustment of loan words to the native structure of the borrowing language."

If adoptive lexemes do not, in their original state, conform to the phonology of the target language then either the lexeme is altered to conform or the phonology is altered to include the features presented by the lexeme. Most frequently it is the lexeme that conforms, though phonologies may change to absorb new features -

e.g. the creation of a distinct *phoneme* /z/ (ज़) in Hindi from two phonetic realizations of /j/ (ज) [j] and [z].

All etyma are adopted from their surface phonetic form, i.e. the form that is actually heard.

The phonological alterations that may occur in the adopted item will be determined by the phonology of the adopting language. Features which are common to both phonologies - phones, tones, consonant clusters, geminates, vowel length, limitations on word-shape (e.g. with initial V exclusion), usually remain the same. Features which are not present in the adopting language are altered so that they may conform to its phonological rules as follows:

(i) substitution of alien phones by indigenous phones according to regular phonetic equivalences, e.g. Turkish *zeki* (man's name) < Arabic *ḍakīī*, (Turkish /z/ < Arabic /ḍ/ is a regular equivalence), Hausa *ʔumarù* (man's name) < Arabic *'umar* (Arabic voiced pharyngeal fricative → Hausa glottal stop).

(ii) addition of epenthetic, epithetic or anaptyctic vowels to avoid consonant clusters which are not part of the adopting language's set, e.g. Turkish *iskele* 'landing-place, quay' < Italian *scala* 'stairs' as there are no initial consonant clusters in Turkish.

(iii) morphemic affixes may be added to integrate the lexeme into the adopting language, e.g. Masalit *katib-te* 'clerk' < Arabic *kaatib*.

(iv) metathesis may also occur, e.g. Fulfulde (of Sudan) *liko* 'kola nut' < colloquial Arabic *kola*; however, this need not be a function of an adoption process as it occurs with indigenous items also, e.g. English *ask* < *aks*, the French slang language *verlin* - *meuf* 'woman' < *femme*.

There may be metanalysis of the form or sense of the adoptive by the adopting speakers, e.g. Arabic *walad* 'boy' pl. *awlaad* > Turkish *evlat* pl. *evlatlar*, or Arabic *ḥay* pl. *aḥya* 'thing' > Turkish *ḥey* pl. *ḥeyler* 'thing', *eḥya* pl. *eḥyalar* 'affair', where the Arabic plurals have been metanalysed as the Turkish singulars; French T.I.R. (Transport Internationale Routière) > colloquial Turkish *tır* 'large

truck', where the TIR sign on the mudflaps of trucks has been read and metanalysed as the generic name of the vehicle!

As stated above, most lexical adoptions are *into* the category of nominals and other non-verbals. Less common are adoptions into the category of verbs as verbs usually have a much wider semantic base and, in some languages (Masalit being one), verbal morphology is complex and imposes very strict constraints on the shape of lexeme that may function as a verb. A rare example in colloquial Arabic is the verb **faat~yi-fuut** 'score a goal' < English **shoot**. The few very tentative examples in Masalit are given below in 4.3.4 and represent less than one percent of the total number of adoptives from Arabic. Many adoptives into the nominal category whose models are verbs are used in Masalit with an indigenous 'support verb' (see Verbal Morphology, 2.3.1.7) such as **ig~an**, D, g, 'do', e.g. **fakar t-ig-e** 's/he thinks' (lit. s/he does thinking). Similar processes obtain in other languages with strict verbal morphology constraints - such as Enga (Moravcsik, 1978:111) or Turkish.

Morphemic adoptions (the adoption of affixes and parts of words) also occur but much less frequently than in lexical adoptions. It appears that bilingual situations favour adoptions of morphemes *into* a language, e.g. the local adoption of the Turkish verbal morpheme -**miş** (denoting that the speaker was not a witness to the action) by non-Turkish children in a school in Harringey, London, where there was a large proportion of Turkish-speaking children; it is significant that the meaning expressed by -**miş** is not easily translated into English.

Most adoptives retain at least a part of their original sense but frequently may acquire an extended, narrowed or shifted sense in the adopting language, e.g. Arabic **muhammad** 'praised one (man's name)' → Masalit **muhammad** (man's name); Persian numerals 1-6 have been adopted into Turkish but are used only when playing games such as **tavola** 'backgammon'; Arabic **muhaajir** 'emigrant' → Fur **muhaajir** 'Quran-school pupil'; French **visiter** 'visit' → colloquial Turkish **vizite** 'visit to a

brothel'. As well as the adoption of lexemes with all of their original meaning there may be adoption of meaning alone (calquing) or of a mixture of the two (what Appel and Muysken (1987:165) refer to as 'loan-shifts' and 'loan-blends' respectively); e.g. Masalit **kujo-juṅa** 'head-strong' is a putative calque of Arabic **raas qa'wii** 'head strong' (= stubborn), Masalit **taṅa-murasila** 'official-send' (envoy) is a blend of Masalit **taṅa** 'official' and Arabic **murāsila** 'sender'.

In many languages where there has been a large influx of adoptive material there has been a reaction by speakers against the perceived alien threat to their language, i.e. linguistic purism movements institutionalized in academies such as the Türk Dil Kurumu in Turkey or the Académie Française in France. The popular support given to such reactions depends on non-linguistic factors, nationalist sentiment and identity being two. Masalit speakers are quite aware of the linguistic penetration of their language by Arabic: one of the criteria of distinction between 'heavy' and 'light' Masalit language is the amount of (identifiable) Arabic adoptives used. Whether or not that consciousness will have any effect in retarding the advance of Arabic remains to be seen.

1.5 HISTORICAL AND CULTURAL INTRODUCTION TO THE MASALIT PEOPLE

The Masalit are for the most part settled peasant farmers, raising sorghum and millet as their staples, cultivating small irrigated vegetable gardens along the wadi-sides and keeping small numbers of goats, sheep and cattle - largely for domestic consumption and milk production. During the past years of famine and with the increasing desiccation of the Sahel the Masalit have suffered along with the other peoples of the region but would seem to have coped with the crisis better - Masalit women are proud of their local reputation for being able to prepare for eating scrub plants which other tribes regard as inedible.

All the usual 'traditional' trades of the region are plied by the Masalit - leather tanning, cotton weaving, smithery and pot making - the blacksmiths and their wives the potters forming here, as elsewhere in the Sahel, an 'out-caste' within the tribe.

Huts are constructed entirely of wood and reeds unlike the mud-walled huts of the Maba and Fur, their closest (linguistic) relatives to the west and neighbours to the east respectively.

During the Nimeri régime, politically Dar Masalit was officially the same as any other constituency in Sudan, returning an M.P. to the Khartoum parliament and having a local council. However, as the local M.P. was the nephew of the Sultan and the Sultan himself and two of his Masalit subjects occupied three of the five council seats, there is little doubt where the real executive power lay (3).

On a village level power lies in the hands of the local lord, a direct descendant of the precolonial **dala** but who, instead of raising levies of fighting men for the Sultan, now restricts himself to helping in tax-collecting and arbitrating in petty disputes.

The Masalit are divided into a number of 'clans' (Ar. **xaḥm al-buyuut**) of which the most important are the **Girnyuḥ** and the

Anyemuṅ. The sultan belongs to the **Girnyuṅ** clan (see Appendix B for a list of clans and lineages).

As for their origins, the Masalit themselves are as one in claiming descent from an Arab people who migrated south across the desert (from a 'green land' that a few identify as Tunisia) under some kind of population pressure. This may be a folk-memory of the ravages of the Bani Hilaal migrations across north Africa or may be confused with the many migrations from west Africa or the bleak northern Nilotic Sudan (4) to the area of Dar Fur. However, it is a claim common to many non-Arab peoples of the region and lacks available substantiating evidence.

Julien, a French military administrator in Chad in the first quarter of this century, placed the original Masalit in Jebel Marra, coming down from the mountains to the plains to the west, their king already a muslim, and submitting to the Fur Sultan **Suleyman Solon** around 1445 (5). This location is not unreasonable, since Masalit communities exist in south Dar Fur also, but the date is very suspect as the reign of the Fur Sultan Suleyman Solon is estimated to have been around 1660-80.

The **Mussulat** are mentioned as being a tributary country to a state with its capital at Uri (in Jebel Marra) - possibly the Tunjur state which preceded the Fur sultanate - in **L'Universale Fabrica** (1582), a geographical compendium compiled by Lorenzo d'Anania (6).

Nachtigal (1879) asserted that the Masalit had been forced into their **Dar** (land) by the (first) Wadai sultan, Abdalkariim, 1635-55, perhaps to act as an eastern buffer. Kapteijns (1985:15-20) writes that current oral traditions support this, that the Masalit were included in Wadai from its inception, their loyalties later drifting to Dar Fur as the Wadai taxes increased. Their main claim to outside fame was as raiders of caravans.

Before attaining independent statehood in the 1880s Dar Masalit, lying on the frontier between its two powerful rival neighbours - Dar Fur and Dar Maba/Wadai, oscillated between a disorganized independence and tributary status to one or the other

of its neighbours.

Like many other areas in the Sahel region Dar Masalit is very heterogeneous ethnically and linguistically, containing within its borders (7) elements of many different tribes as well as the majority Masalit: nomadic Arabs, riverine (Nile) Arabs, Fur, Maba, Tama, Erenga, Miisirii, Daju, Bagirmi, Sinyar, Zaghawa and smaller numbers of others, e.g. Kanuri, Hausa, Fulbe, Dongolawi and a few communities of ex-slaves from the south, mainly Dinka.

Whatever their geographical origin, the name **Masaaliit** (Ar: **مساليت** Ms: **masara**) is sometimes associated with the word for thunder, Ms: **masalgi/masalngi**, and sometimes with the word for dancing, Ms: **misarin** 'dance/game/play', by the people themselves. However, these ascriptions seem somewhat fanciful and need further evidence.

1.5.1 EXTERNAL INFLUENCES

Dar Masalit not only lies across one of the main pilgrim routes from West Africa to Arabia but also was, for a brief while a century ago, a terminus for caravans coming south from Cyrenaica and Tripoli, especially during the Mahdiyya when the Dar Fur-Egypt route was unsafe. Prior to that period, and since, contact with and merchandise from the outside world has been routed via either Abeche (Wara in former times), the Maba capital to the west, or al-Fashir or other Dar Fur towns to the east. The Masalit are not and never were a mercantile people and so external commerce has been and remains today in the hands of colonies of foreign merchants: the Jellaaba Arabs from Dunaqula on the Nile, Hausa and Kanuri immigrants from west Africa and some few north Africans, Maghrebi Arabs and Berbers. Smaller numbers of Fulbe and Zaghawa merchants are present also.

The principal traditional exports from the Wadai/Dar Fur area to the north and east were slaves from the pagan tribes of the south (8), ivory, camels and leather goods. Today the district of Dar Masalit boasts only one major export - oil from a peanut-oil

factory, owned by a Magrebi Arab, a descendant of immigrants of the Sanoussi era.

Cloth, paper, books, firearms, spices, beads and other luxury articles such as perfumes, silk, kohl, soap and looking-glasses were the main imports (9), coming largely from the north and north-east (Egypt and the Mediterranean littoral); much cloth was also imported from the west, along with occasional immigrant Bagirmi indigo dyers famed for their skills (10). Salt, the other vital import, came from Natron in the desert to the north of Dar Fur (whence it was also exported to Egypt) and other mid-Saharan salt pans (11). However the single most significant import was Islam and the notions of literate Arabic culture that went with it. Cowries and Austrian Thalers served as units of exchange, and still do.

The foci of radiation of Arabic scholarship in north and east Africa were Tunis, Cairo, Timbuktu, Kano, Khartoum and Mombasa. However, the Azhar university in Cairo was, and still is, pre-eminent and is the centre of studies most in demand by Masalit men seeking to study abroad; critical works and commentaries by Azhari scholars are amongst the most popular in the eastern Sudan, e.g. the *tafsir* of as-Suyuti and his other works. Nonetheless, native Cairene Egyptian scholars did not migrate to preach in the Sudan in large numbers; it was the Kanuri and Fulbe peoples of the west who supplied scholars for export to the eastern Sahel. Even today the Bornu (Kanuri) and Fallaata (Fulbe) (12) communities resident in Dar Masalit have a reputation for piety and produce numbers of Islamic scholars vastly out of proportion to the small percentage of the population they represent.

1.5.2 THE IMMEDIATE AREA

Insofar as Dar Masalit functioned as a buffer zone between two fairly evenly matched rival political entities, Dar Fur and Wadaï, for over two centuries, one could reasonably expect to find traces of the impact of both, above all in the political and economic vocabulary of the Masalit. In fact the *political* structure of the

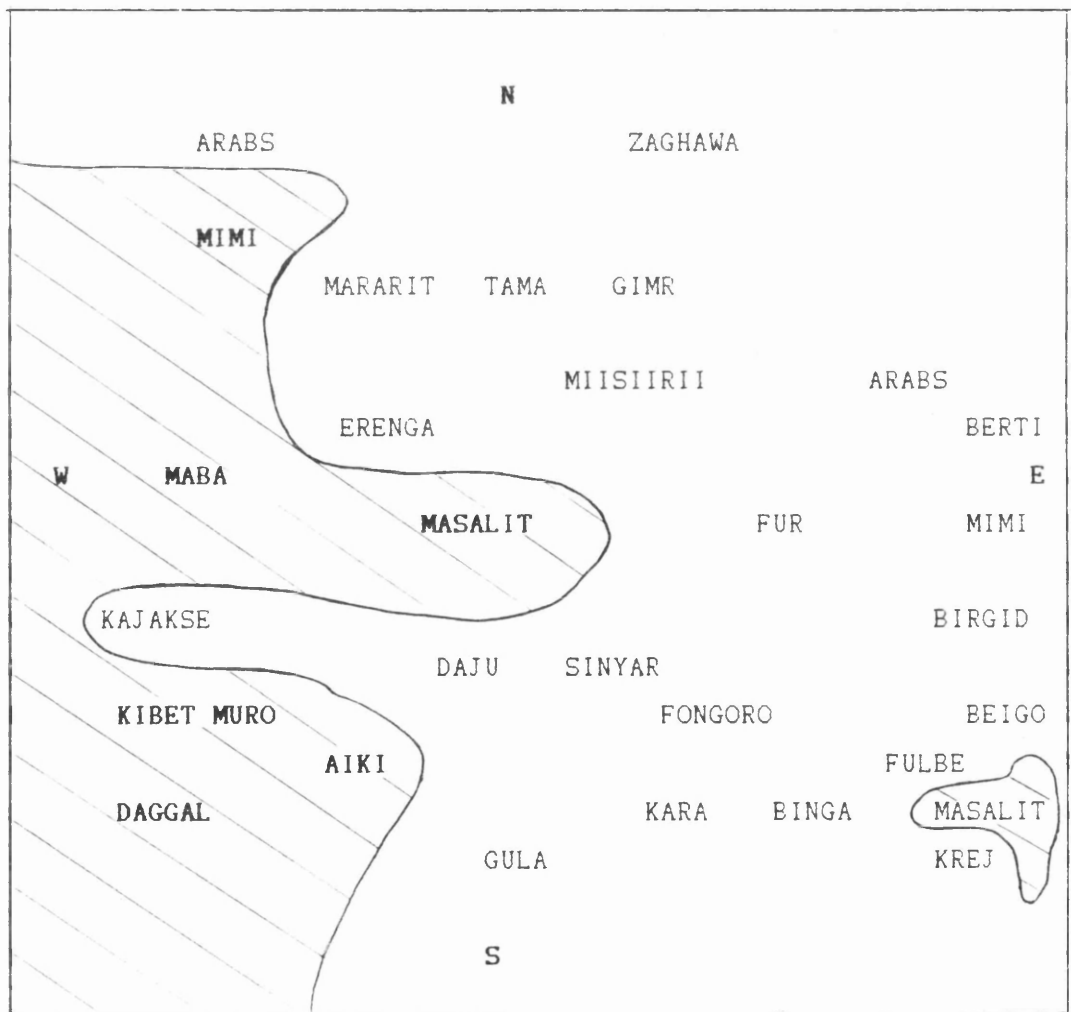
sultanate set up in the 1880s appears to have adopted more terms from Fur than from Maba, e.g. Fu: **baasinga** > Ms: **basenga** 'nobles, royalty', possibly because the Fur were more often in at least nominal control of the Dar with whatever prestige that entailed. There is a large number of political terms of Arabic origin common to both Maba and Fur also in Masalit, e.g. Ar: **maqduum** > Ms: **makdum** 'noble of the rank of **basenga**, but not of the royal clan', and some that are found in Maba alone, e.g. Mb: **kamkolak** 'governor (lit. 'big man')'.


Thus it would appear that the Fur sultanate exerted a greater political gravity than the Maba on the Masalit. What relics of the previous régimes of the Tunjur and the pagan Daju there are is difficult to assess as it is over three centuries since the extinction of the former and more since the demise of the latter. Added to this is the almost total lack of any linguistic information about the Tunjur and possible errors in ascription of terms to the Daju, who have been neighbours of the Masalit for centuries. The 'Zaghawa' (Beri) have also been northern neighbours for many centuries and are mentioned by the Arab geographers Yaqut and alYa'qubi as forming a *'great kingdom among the kingdoms of the Sudan. On their eastern boundary the kingdom of the Nubians who are above upper Egypt.'* (Yaqut). *'The first of the Sudanese kingdoms is that of the Zaghawa who settled at a place which is called Kanem.'* (alYa'qubi) (13). That the Zaghawa mentioned by Yaqut were the ancestors of the people who live north of the Masalit now is possible, but alYa'qubi evidently means the Kanembu-Kanuri (who also speak languages of the Saharan group).

While it may be reasonable to assert that the Fur and Maba exerted influence on the Masalit and their vocabulary - and not vice versa, as the Masalit were very much on the periphery both physically and politically in relation to both states - the same could not be assumed for the other ethnic groups that surround and intermingle with the Masalit: mainly the Tama group and Zaghawa to the north and the Daju, Sinyar and Kajakse to the south (see the schematic plan below).

The question of their influence must remain an imponderable

insofar as none of these, other than the Daju in the distant past, has been in any position where their power and prestige would have been pre-eminent with regard to political influence in Dar Masalit. That the various peoples of the region do mix is clear from the polylingualism of the markets by day and the mixed nature of dances by night. Several of my Masalit informants stated that they had 'ancestors' or relatives belonging to one or other of the neighbouring tribes. Intermarriage, as far as the Masalit are concerned, although not encouraged, is not subject to a serious taboo.



 = peoples speaking languages of the Maba family

1.5.3 THE BROADER AREA

According to Hasan (1971:20), "...despite the proximity of Daar Fuur to the Nile, initially the region fell under the cultural impact of central Bilaad al Suudaan and the Magrib. Islamic influences were felt in Kanem, which wielded great influence all over the region, well before the 11th century." This, when taken in conjunction with Holt's statement (1970:332) that "Waday was the cultural watershed between the eastern and western parts of Bilaad al Suudaan." suggests that the area of Dar Fur, after initially being influenced by states to its west, turned to the east no later than the 17th century (overlooking any previous Funj or Christian Nubian influences prior to this). This is particularly pertinent to Dar Masalit, lying as it does between Wadai and Dar Fur; thus in searching for possible external influences on the Masalit one must look both east and west, and in so seeking bear in mind that "the mobility of men and ideas within the Islamic world, across the Sahara or within the Sudan, founded upon trade but stimulated by religious duties, is the most important geographical fact of African Islamic history." (Holt, 1970:345).

To the north lies Borkou and the Fezzan. The Fezzan has been a scene of Islamic activity since the first century A.H., with the arrival and installation of members of the ~~Kharijii~~ ^{Khariji} sect in the mid-eighth century A.D. (737-757), closely followed by its annexation by the 'orthodox' Arabs, forcing the kharijites further south (761) - the latter perhaps involved in the later foundation of the state of Kanem, mentioned above, on the banks of Lake Chad (850) and perhaps supplying that state's first Muslim king, Hunc (1086). In the last century Fezzan also became an area of contest with the Egyptian conquest (1821), the return of the Turks (1835) and the foundation of the Sanussi 'state' later on, followed by the partition of the area between France and Italy, northern Tibesti remaining the subject of dispute between Chad and Libya today (14).

To the east lies the middle Nile, the site of the Funj and Sennar kingdoms and the earlier Christian Nubian states; to the north-east along the 40 days road lies Egypt. Communications along

the pilgrim route with the former have been regular at least since Islam first took root in west and central Sudan. Documented relations with the latter are older, going back at least to the first Turkish military slave régime of the Tulunids at the end of the ninth century in Egypt when contingents of 'Zaghawa' formed an important part of the ranks of the Egyptian army (15). In more recent times there have been regular commercial links with Egypt and north Nilotic Sudan mediated by the Dunqulawi and Ja'ali Jellaba Arabs, who established mercantile colonies along the Sahel as far as Chad. These links survive today; though the mode of transport has changed from camel caravans to Bedford lorries, they are still in the hands of the Jellaba. With the Turkish invasion and occupation of the upper Nile valley after 1820, the high rates of taxation imposed by the occupiers and commercial monopolies operated by them, many riverine Sudanese migrated to the southern and western 'marches' beyond the control of Khartoum, bringing with them their political and religious ideas and religious brotherhoods (16).

To the west lies lake Chad and beyond that the Niger, the sites of states where Arabic, despite its great religious and scholarly prestige, has never succeeded in becoming the undisputed commercial lingua franca that it has in east Sudan - a process that continues today with state support in the republics of Sudan and Chad (see below), contrasting with the modern promotion of Bambara in Mali and Hausa in Niger and Nigeria as national and literary languages. The Chad states, being physically closer, had more influence than the Niger riverine states, whose trade patterns were predicated largely on trans-Saharan commerce with Morocco and the north rather than dealing along the Sahelian 'corridor' as the Chad states did to a greater extent. The state of Kanem, from which Bornu later sprang, was the first historically documented entity of importance in the central Sudan; Kanem-Bornu was *véritablement au moyen-âge le 'foyer civilisateur'* of central Sudan as Mali, following Ghana's demise, was for West Sudan (17). Its rulers adopted Islam in the 11th century and reached the peak of their power in the 16th century, their slow decline thereafter being accompanied by the

rise of the Hausa city states, the latter much influenced politically by Bornu (also, but less so, by Songai) and pervaded by the Islamic proselytization of the Fulbe, Kanuri and Berber scholars. Between Bornu and Waday the state of Bagirmi emerged at the end of the 16th century with its capital at Massenya, in opposition to Bornu as Waday was to Dar Fur, and at about the same time that the Maba speaking rulers of Waday overthrew their predecessors, the Tunjur, who had also been overthrown shortly before in Dar Fur. The Bagirmi tended to look west for scholars - particularly the ubiquitous Fulbe, but also Hausa and refugee Kanuri (18). There has been a continual stream of migrants from the West to the East along the Sahel by these groups (also some Songai and others), prompted by politico-religious turbulence in West Africa, such as the devastating Moroccan invasion and occupation of Timbuktu and the Songai empire at the end of the sixteenth century.

It would appear that the east provided a more profound linguistic influence than the west, with Sudanese Arabic and not the dialects of Arabic spoken by the nomadic Baqqara or Shuwa Arabs, becoming increasingly the lingua franca, and the descendant of this colloquial Arabic replacing the indigenous languages. This may be due in no small part to the migrations to the West in the nineteenth century of the riverine arabized Sudanese, as mentioned above. Such a situation has not obtained in West Sudan, where Arabic was limited to its liturgical uses but the languages of commerce remained Kanuri, Hausa, Bambara and Berber in addition to Arabic. This suggests that religious indoctrination, such as may be found everywhere in the Islamic world, in classical Arabic, the liturgical language of Islam, has only a limited effect in everyday language usage. In Sudan, as in the rest of the Islamic world, traditional Quran schools teach young children to recite the Quran by rote, even though they may not understand the meaning of what they recite; recitation is in itself meritorious. Therefore one would expect to find, in Masalit, or other languages of the region, in effect two vocabularies adopted from Arabic: a religious, scholarly one from the classical language of the Mosque and Quran school, and a market/commercial one from the colloquial language of

East Sudan, spoken by traders from the east. Whether or not this is the case will be shown below in Chapter Four. This is in marked contrast with, but complementary to, Wexler's findings and contentions concerning Arabic lexemes in West African languages: that the classical language provided most of the adopted vocabulary and that colloquial Arabic has played a minor role in the exportation of Arabic lexemes (19). It is interesting in this context to note that Abu Manga (1986) demonstrates clearly how *classical* Arabic has been the source of Arabic adoptives in West African Fulfulde, but that *colloquial Sudanese* Arabic has been the source of Arabic adoptives in the dialect of Fulfulde spoken in the Sudan. However, the Sahel does not present the conditions of a language laboratory and the continuous comings and goings eastwards, westwards and northwards are all dynamic and sometimes conflicting factors; the only apparent constant is the steady pressure of Islam from west, east and indeed north as well.

To the north of Dar Masalit and its immediate northern neighbours, the Zaghawa, Tama, Erenga and Miisiirii, lies the Sahara - like an ocean, traversible only by camel caravan up until this century. Caravans from Dar Fur to the north-east went to arabophone and 'coptophone' Egypt and the Nile valley; caravans from Wadai to the north (in the 19th century) went to Tripoli and Benghazi, along which route the Sanoussiya penetrated Wadai; caravans from Wadai to the north-west, or west-then-north, went to the Maghreb. These routes are indicated on the map (p.10) they passed through Berber and Tuareg controlled territory, both groups taking a lively interest in the trade (slaves, leather goods and exotica being the main exports), and formed conduits for communications between the Sudanese states and the Mediterranean littoral and even beyond. Bovill (1933:24) notes that in the 1530s Bornu had diplomatic relations with Spain. Tuareg influence was particularly keen in Wadai where the monarch maintained a Tuareg cavalry and camel corps (20).

1.5.4 THE COLONIAL PERIOD AND THE INDEPENDENT SUDAN REPUBLIC

As far as the Masalit are concerned the 'colonial' period began with the influx of riverine Sudanese fleeing from the oppressive taxation of the Turco-Egyptian régime (1821-1885). Then, with the weakening of that régime, came the military domination of Dar Fur and Dar Masalit by Zubayr Paşa (1874), a commander nominally subordinate to the Turco-Egyptian government. With the foundation of the Mahdist state (1881) Dar Masalit took its own short-lived independence, surviving Mahdist, Fur and French military assaults, giving in gracefully to a nominal British occupation in 1920, following the British conquest of Dar Fur, and being the first experiment by the British in 'native administration'. There was only a 'resident' installed in Geneina by the British administration in Khartoum to advise the Sultan in administrative matters, e.g. the introduction of monetary taxation which led to the debasement of traditional market barter values (see Kapteijns, Chapter 7).

The British presence in Sudan merely had a retarding effect on the spread of Arabic as the lingua franca and the retreat of the indigenous languages, insofar as arabophone traders from the Nile valley were subject to stringent restrictions in their access to the relatively less developed markets of the west and south (21); it also interfered with commercial links with western Sudan, by the setting up of the Chad-Sudan frontier (22). This effect was enhanced in Dar Masalit by the administration's maintenance of frontier posts between the Dar and the rest of the Sudan. Following Sudanese independence in 1956 all such restrictions on trade within the Sudan were lifted and Arabic has been increasingly encouraged as the sole medium of expression, at least in the north of the Sudan Republic, to the accelerating detriment of local languages like Masalit. As an example: in primary schools the pupils are punished for speaking their own languages (reminiscent of Welsh or Breton schools not so long ago). The idea that there might be an indigenous culture of value worth

supporting is constantly disparaged both in schools and in the mosques, to the point that local languages are not conceived as 'languages' at all, as has been mentioned above (p. 26), another step in their psychological devaluation. Added to this is the greatly increased mobility of the male population - Masalit men migrating to the Nile in search of work and riverine Arabs being sent to Dar Masalit to administrative and educational posts: postings, I was assured by an Omdurmani civil servant in Geneina, they deem comparable to a spell in Siberia for a Russian.

The product of these changes has been a massive recent influx of Arabic words into Masalit, and the other local languages. My own data is without doubt greatly affected by this: most of my informants were male high school students who were hoping to go on to university in Khartoum or Cairo and who held their mother tongue in low esteem (at least that is the information that I, as a foreign infidel, was given) (23).

1.5.5 MASALIT CULTURE AND NON-ISLAMIC PRACTICES

The Masalit enjoy a reputation for being, at the very least, unorthodox in their Islamic religious practices. This is denied strenuously by themselves, but borne out by the testimony of other ethnic groups and, more pertinently, by the attempts of the present Masalit Sultan's father to stamp out some of the more obviously unislamic practices.

They are renowned and feared for their powers of metamorphosis and former practice of cannibalism. According to the traveller Tunisi (1845:355), '*tous les Fôriens assurent que les Maçâlyt et les Témourkeh ont la puissance de se metamorphoser en diverses espèces d'animaux; que les Maçâlyt peuvent se transformer en hyènes, en chats et en chiens.*' Arkell (MS, Box 5, f.19:21) writes, '*some Masalit and Gimr can let their spirits rise at night and go out and suck people's blood*'. Nachtigal, in Sahara and Sudan, mentions their reputation for anthropophagy, as does Arkell

(MS, Box 3, f.12:22), 'The Masalit are cannibals, and so perhaps of Zande origin... (?)'

The Masalit continue to share many unislamic beliefs and practices with their Fur, Maba and other neighbours (and probably other peoples farther afield):

kangi kamarko tene 'rainmaker' (lit. 'the one who holds the staff'); when he wants to summon or dismiss the rain he sits on the top of an ants' nest and blows into his (cow's) horn which is packed full of roots and magic items. Tubiana (1964) notes a rainmaker amongst the Zaghawa who performs similar practices. Lewis (MS, 600/6/33) gives **kamarka** as the name of the root-doctor in Masalit and Fur.

koma (lit. 'stone/hill/mountain') and **ijaba** (< Ar: **hijaab**) are charms and amulets, and, by extension cures. The Shia in eastern Arabia have an analagous association of 'stone' and 'amulet', some carry a stone around with them which they place on the ground when praying and touch it with their foreheads.

1.5.6 THE ADVANCE OF ISLAM

Islamic practice in Dar Masalit

The presence of 'saints' in Islam has been taken up with zeal all over the Sudan, using as legitimation the Quranic quotation 'Indeed the Friends of God neither fear nor sorrow' **ʔalaa ʔinna ʔawliyaaʔ all^āhi laa ʔawfun ʔalaihim wa laa hum yahzanuun** (Surat Yunus, v. 62). The Masalit have taken it up too and under its guise have continued their older practices.

Saints possess innate **baraka** (Ms: **barak**, charisma, the blessing of God, God's favour) and by this 'miracles' **karaama** (Ms: **karama**) are performed by God on their behalf. Living holy men also exist: **ʔaiḡs** and **ʔaḡihs** (CQS: **faki**, Ms: **faki**) who make protective amulets (Ms: **ijaba**), make incantations (of the Quran) into leather water-bottles (24) and write out certain sections of the Quran onto slates, **lḡuh** (Ms: **lo**) (25). In most markets in the Sudan

fakis can be found selling books of Quranic exegesis, Hadith and amulets of their own manufacture. In many ways the **faki** has replaced the pagan **kujur** of eastern Sudan and assimilated the **kujur's** rôles and functions. (In Masalit **kujur** has come to mean the place of ritual practices rather than the holy person who performs them).

Amongst the Masalit of the five 'pillars' of Islam (**ŷahaada**, profession of faith; **zak^aat**, alms; **ŷalāa**, prayer; **ŷūm**, fasting in **Ramaḡaan**; **hajj**, pilgrimage to Makka) only the first: the saying of the **ŷahaada**, is performed by everyone. Prayer and fasting have become more general in this century (the older generation quite openly admit the laxity of the preceding generations). The various interdictions and behavioural edicts of orthodox Islam (forbidding the imbibing of intoxicants, promoting 'modest' female attire, limiting the number of meats that may be eaten) have not been adopted into Masalit life too rigidly: **marissa** (millet beer) is still drunk by all - women and men, adults and children; the limit of 'modest' attire for most women is a sleeveless dress, an east Sudanese **ḡawb** (similar to an Indian sari) by the more Islamized town-dwellers which is more of a status symbol than a piece of cloth for concealing naked flesh, but for many women in the countryside knee-length skirts remain their only covering; despite interdictions, locusts, lizards and other **har^aam** (unclean) meats are still commonly eaten. The night-time dances also thrive, despite the disapproval of the orthodox.

Up until recently, the only education available has been at the Quran school where the young boys learn the Quran by rote from a master at his home. More advanced pupils will travel away from home to the place of a master of repute (and so are called **muhaajiriin** (Ar: emigrants, those whose migrated with Muhammad from Makka) → Masalit: **muhajiriinta**, Fu: **muhaajirin**, but, Mb: **hiráánik** (< **Quran**), denoting the pupil who learns at home).

The arrival of Islam in Dar Masalit.

The fall in the 14th century of Christian Nubia which had also hitherto blocked the advance of muslim traders and missionaries up

the Nile and into the eastern Sudan, allowed an eastern 'pincer' of Islam to move west to meet in Wadai/Dar Fur a western 'pincer' coming in the opposite direction from the well-established muslim states of the west and central Sudan. The first move of this pincer was the conversion of the Fung rulers on the Nile in the sixteenth century AD. The Fung probably spoke a Nuba language but, after conversion to Islam, the upper classes used Arabic and encouraged **faqih**s from Arabia to come and teach Islam.

After this the final conjunction of the 'pincers' occurred peacefully and rather quickly: the supplanting of the Tunjur kingdom (which had encompassed the region of Wadai/Dar Fur) by Suleyman Solon, the first Fur ruler of the Keira dynasty at the beginning of the 17th century, in the east (Dar Fur) who adopted Islam and encouraged trade with the east but whose successors encouraged the immigration of Kanuri and Bagirmi settlers, and Abdalkariim, the first Maba ruler of the Abbasid dynasty of Wadai about twenty years after the accession of the Keira sultans, who also adopted Islam.

Lying between Wadai and Dar Fur and usually being tributary to one of them the Masalit could hardly avoid ultimately being influenced by Islam. Most contemporary sources in the Dar claim that they have been Muslim for two or three centuries. This may well be true though, as noted above, the Islam practised by the mass of people would probably have been very superficial. That this was the case is supported by the efforts of the Masalit Sultans at the turn of the century to suppress the 'traditional' rituals at the **kujur** and the reputed practice of cannibalism.

The big advance in terms of Islam was in the nineteenth century with the expansion of the influence of the sufi/dervish orders, the conquest in the west of pagan tribes by the Fulbe **jihad** with its reverberations throughout the Sahel and Sudan, and the arrival of the émigrés from Turkish-occupied riverine Sudan. Mahdism was most important in the 'psychic assimilation' of Islam. It spread rapidly amongst the Masalit, led by the Sultan and his family; though Sultan Endoka later forsook Mahdism (1910) for the Tijaniyya order, all his brothers and **faqih**s remained Mahdists.

In 1921, after the British 'occupation' of Dar Masalit, a Masalit **faqih** in Nyala, south Dar Fur, announced himself to be the **ḫaliifa** (one who follows/deputizes for) of God on earth and proclaimed a **jihaad** against the infidel British in the tradition of the **jihaads** of the West Sudan. It should be noted that the direction in which 'Mahdism' (a messianic belief in the second coming of the **mahdi**) came was from the west, with the Fulbe, Hausa and Kanuri immigrants, along the pilgrim route from west Africa which had experienced the **jihaads** earlier in the century. Indeed the Mahdi of Aba Island himself drew inspiration from the religious upheavals going on in West Africa that were largely instigated by the Fulbe.

1.5.7 CONCLUSION

In conclusion it may be noted that, up until the beginning of the nineteenth century, the major foreign influences on Masalit culture and language were those of its two powerful neighbours: the Maba and the Fur. Any Arabic influences up until then would most probably have been filtered through one or the other or both of them.

With the arrival of arabophone émigrés from the Nile and increasing islamization during the period of the Turkiyya, the horizons of the Masalit expanded beyond Dar Maba and Dar Fur to encompass the wider arabophone and muslim world to the East. Increasingly from this period on, contacts and links with the arabophone East have strengthened while those with the non-arabophone West have diminished. This trend was encouraged by the British occupation of Sudan and French occupation of Chad and has accelerated since the formation of the Sudan Republic in 1956.

ENDNOTES

1 Although Dar Masalit is merely the western district of north Dar Fur province, according to the Khartoum administration, its extremely isolated position has allowed its ethno-political identity to survive (see J. Edgar, *Africa Now*, 2 & 6, 1983).

2 J.O. Hunwick, *The influence of Arabic in West Africa*, *Transactions of the historical society of Ghana*, 7, 1964, pp.24-41.

3 J. Edgar, *op.cit.*, 6, pp. 27-28.

4 R.S. O'Fahey & J. Spaulding, *Kingdoms of the Sudan*, 1974, p.3.

5 Col. Julien, *Rapport Julien*, MS, 1910, p.184, " Quant aux Masalits, ils seraient nés dans le sud du fameux massif qui a donné naissance aux Foriens, non loin des Borgus..." "Les Massalits ou Massalates originaires comme il a été dit de la partie sud du massif montagneux forien, sont descendus dans les plaines alluvionnaires qui s'étendent au sud de Dara...Vers 1445 de l'ère chrétienne, les Massalates ou Massalits étaient groupés, et leur roi ou melek, était un des 20 rois musulmans soumis à Soleiman Ier Souloun, sultan du Dar For et chef de la dynastie actuelle."

6 R.S. O'Fahey & J. Spaulding *op.cit.*

7 These are now the 'district' (Ar. *minṭaqa*) borders, formerly the sultanate borders.

8 Non-muslims are still referred to as "slaves" (Ar. *'abīd*) by the Muslims. The north/south aspect of the Chad civil war was described to me by Masalit students and friends as a struggle between the Muslims and the slaves.

9 L. Kapteijns, *op.cit.*, p.15, asserts that the impact of long distance trade on the Masalit was very limited; the "Masalit participated in this trade only by raiding the caravans - often with considerable success." Also W.G. Browne, *Travels in Africa*, 1798, pp.302-4. Lt.Col. Desteneuve, *La Région du Tchad*, 1904: at the turn of the 20th century Wadai's trade "...avec le monde civilisé est tout entier aux mains des Fezzanis, dont les caravanes sont entièrement soumises au contrôle des Senoussiya.

Les marchandises d'importation sont: le sucre, le thé, les bougies, les allumettes, les vêtements et les tapis arabes. Les principales marchandises d'exportation sont les peaux tannées, les plumes d'autriche et l'ivoire...Le commerce local avec le Tchad comprend, comme importation: le fer, les étoffes, le sel de Bilma, les dattes, l'indigo, l'oignon, etc. et comme exportation: le mil, les boeufs et les chèvres. Nous ne parlons que par mémoire du commerce des armes et des captifs, qui règne un peu partout."

10 Many Bagirmi were brought to Wara, the first capital of Wadai after a Wadai-Bagirmi war in the first half of the 19th century (as captives); J.L. Burckhardt (1819:487) states that, "others remained voluntarily at Borgo (Wadai), where they continue to earn a good livelihood by their art of giving the blue dye to cottons.." Some Bagirmi moved further east to Dar Masalit where there remains a small community today.

11 See K.S. Vikør, *The Salt trade of Kavar*, African Economic History, 1982

12 The Masalit term for the Fulbe people is *fellaata*, adopted from the Kanuri term; it may include other western immigrants within its scope.

The Fulbe, along with the Mandinka, also brought Islam to the Hausa and other peoples in the Chad-Wadai region.

13 Saburi Birbaku and Muhammad alHajj in *Islam in Tropical Africa*, I.M. Lewis, (1966:429).

14 G. Nicolas, *Dynamisme de l'Islam au Sud du Sahara*, 1981, Paris.

15 M.A. Shaban, *Islamic History*, II, (1976:110-114).

16 R.S. O'Fahey and J. Spaulding, *op.cit.* p.185.

17 Y. Mahamet-Saleh, *Les populations musulmanes du Tchad oriental et leur évolution dans un Ouaddaï statique*, thèse de doctorat de 3ème cycle, Paris IV, 1983.

18 *ibid.* and P.M. Holt (1970:359) "Waday looked east [whereas Bagirmi looked west] teachers and traders came there from the Funj kingdom of Sennar, and pupils went to the Nile from Waday."

M.B. Moukhtar (1982) states, "Les Peuls en tant que véhicules de l'Islam -'sous le puissant empire du Mali'- jouaient déjà un certain rôle de conseillers et d'ambassadeurs au près des rois."

19 P Wexler (1980:527).

20 A sense of historical continuity was conveyed to me by a Maba informant commenting on the war in Chad that the 'wild northern tribes', by which he meant the Goran and Tuareg, had traditionally been the fiercest fighters and were fighting the war against the southern pagans for the muslims of the north.

21 There was a political motive involved here as well as the professed objective of protecting the vulnerable economies of the west and south; this was the interruption of the flow and communication of anti-government political propaganda - especially Mahdist - as the west witnessed many messianic-inspired uprisings led by faqihs (Islamic 'holy men') in the early years of the Condominium.

22 See J Works, Pilgrims in a Strange Land, Hausa Communities in Chad, 1976.

23 For a further discussion of this phenomenon in Wadai and Dar Fur, see P. Doornbos, Languages of Wadai and Dar Fur, in M.L. Bender (ed.) Nilo-Saharan Language Studies, 1983, pp. 43-79.

24 I witnessed a similar procedure by a Christian priest at the monastery of Debre Libanos, Ethiopia, where the priest recited verses of the Bible and at intervals blew into a glass bottle containing a little water, unstoppering and stoppering the bottle each time.

25 J.S. Trimmingham, Islam in the Sudan, 1949, pp. 81-89, 105 et passim.

This procedure is common throughout the Islamic world and is used as a prophylactic and a cure: for a severe case of sunstroke a Borgu faki resident in Geneina consulted his book of cures, found the appropriate Quranic verses etc. and wrote them out on a wooden, a brass and a silver-plated slate; the ink from these was washed carefully into a bowl, mixed with certain resins and frankincense and given to the patient to drink; this service cost £5 Sudanese in 1982 (it worked).

THE ARABIC AND MASALIT LANGUAGES

2.0 THE STATE OF THE ARABIC LANGUAGE IN DAR MASALIT

Arabic Diglossia

Ferguson (1959') notes that Arabic, like some other languages, exists all over the arabophone world in two forms: a 'high/literary/educated/ classical' form and a 'low/usually unwritten/colloquial' form, distinguished by the speakers themselves. It has been noted above that Masalit also falls into this category, having a 'heavy speech' **kana lere** and a 'light speech' **kana walwala**, the distinction being made by the Masalit themselves. Literacy, or its absence - which is the case for the Masalit language - appears to be irrelevant to the *existence* of a diglossia; the classical/colloquial Arabic distinction is primarily a spoken one, however the fact that the classical is the form that is traditionally written down no doubt reinforces its value in the eyes and ears of the speakers, the written word being a very potent symbol. Further social dialects of the language could perhaps be distinguished on the grounds of age, gender, familial status, but that goes beyond the scope of this work and there is little recorded data to support or disprove the existence of such divisions. Usage in Arabic not only differs as between the 'high' and 'low' forms but also geographically between the 'lows' of different arabophone regions (e.g. 'he wants', classical: **yuriidu**; Sudanese: (huw) **dā'ir**; Egyptian: (huwwa) **'āiz**; Hijaazi: **yabya**), i.e. there is no uniform 'low' form as there is a single standard 'high' form, but rather a number of geographical dialects.

dā'ir

The 'high' form of Arabic (classical, **fuṣṣḥa** **فصحى**) is what is written (except in modern fiction), preached in mosques, used in political speeches, news broadcasts and education; the 'low' form is used in everyday familiar conversation, instructions to workers and some oral traditions. The 'high' form is perceived as more difficult (its grammatical rules have been analysed and fixed for over a thousand years) (1); the 'low' form is perceived as simple and it, since it has not until recently been fixed as a written form, has been evolving continuously. There are four areas of

difference between the 'low' dialects and the 'high' form: phonology, morphology, syntax and lexical usage.

As for phonological differences, Ferguson writes about languages which feature diglossia: "The sound systems of [high] and [low] constitute a single phonological structure of which the [low] phonology is the basic system and the divergent features of [high] phonology are either a subsystem or a parasystem."..."If 'pure' [high] items have phonemes not found in 'pure' [low] items, [low] phonemes frequently substitute for these in oral use of [high] and regularly replace them in **tatsamas**." (Ferguson uses the term *tatsama* to mean phonemic equivalence, e.g. /θ/ of classical Arabic is realized as /t/ in colloquial Syrian in lexemes which form part of the Syrian lexicon, but as /s/ in the *spoken* form of the classical language in Syria).

In Dar Masalit therefore, as in the rest of the arabophone world, there are two distinct varieties of Arabic to deal with: the classical language of the mosque, and the colloquial of Wadai-Dar Fur. Reference has been made above to Wexler's thesis that the classical language was the major source of lexical material adopted by West African languages (cf. Hiskett (1965) and Greenberg (1947) on Hausa); this, as will be demonstrated below, is not the case for Masalit or, one may reasonably expect, for other Wadai-Dar Fur languages. Food vocabulary, for example, has been adopted from the colloquial, e.g. Ms: **ababata** < Wadai-Dar Fur Arabic: **abuu batta** 'maize', cf. Mb: **abaat**, Ta: **ababati**). To better demonstrate this, I have employed the spelling of classical Arabic in transliteration throughout, and give the colloquial form where phonological differences are relevant, since not only the colloquial of Wadai-Dar Fur, but that of the riverine Sudan and even Egypt and the Magreb may have been sources of lexemes (2).

In addition to these, and at a yet 'lower' socio-linguistic level, there is the pidgin Arabic which may still be heard in remote markets. Muraz (1932) writing about the Arabic spoken in Chad calls this the **patois arabe-tchadien** or **tourkou**. Lethem (1920) writing about the state of Arabic spoken in Chad and North Nigeria, states the following:

"The conquest of Bornu by Rabeh, coming from the Egyptian Sudan in 1892, while it introduced a large number of Egyptian words and phrases and extended the general use of Arabic, has probably on the whole vulgarized the standard of Shuwa (Arabic). Words and phrases from this origin are known as *turuk*, this being the term applied in Bornu to Rabeh's non-Arabic Sudanese troops, but indicating further east in the Sudan the "Turkicisms" of Egyptian Arabic.

"Another influence and one likely to have an increasingly rapid effect on Bornu Arabic is that [owing] to the growing facilities of communication with the eastern Sudan. Jellaba merchants from Kordofan and natives of Dar Fur and Wadai are already [a] common [sight] in Bornu towns and are likely to become numerous."

2.1 PHONOLOGY OF ARABIC

As information on the colloquial Arabic spoken in the Dar Masalit area is scarce I give my own, supported by sources on the colloquials of northern Nigeria or 'Shuwa' (CQN), of the Wadai-Dar Fur region (CQW) and of riverine Sudan (CQS). CQW is the closest to the colloquial spoken in Dar Masalit, as, apart from some local lexical differences, the same dialect is spoken throughout the region. As mentioned on p.18, CQN, CQW and CQS appear to be continuations of a common colloquial ancestor which spread westwards from the Nile with the nomad migrations. Kaye (1976:177) contends that the 'Sudanese' colloquial is a continuation of a colloquial spoken in Egypt; the phonology of present-day Sudanese does not appear to support this:

e.g.: CL /j/ ≡ CQE /g/ but ≡ CQS /j/;
 CL /q/ ≡ CQE /ʔ/ but ≡ CQS /g/.

CLASSICAL ARABIC TABLE OF PHONEMES

Consonants:

plosive	b	t	d		k	q+	ʔ
(pharyngealized)		ṭ*	ḍ*				
fricative	f	θ*	ð*	s	z	ʃ	χ
(pharyngealized)		ṯ*	ḏ*				ħ*
affricate							ʕ*
nasal	m	n					
lateral		l	[l]				
trill		r					
semivowel	w				y		

* CQW does not possess these phonemes, CQS only lacks /θ/, /ð/ and /ʕ/.

+ [g] is the equivalent of /q/ in CQW.

Consonant clusters:

CQW has initial 'clusters' the second element of which is a semi-vowel (as do some other colloquials), e.g.: **fwayya** 'a little', **nyakororiya** 'kind of **faqih**/holy man. Other than these there are no initial C clusters in CL or CQW.

As stated above, there are no restrictions on medial or final (2-)consonant clusters or geminates in CL. There is a tendency to break up these medial and final clusters in CQW and CQS with epenthetic vowels. This forms an important piece of evidence in favour of a colloquial source of adoptives in Masalit, as will be shown in Chapter Four (see 4.2.1.2.6).

Vowels:

i/iɪ u/uu
 [e/ee] [o/oo]
 a/aa

The few sources on CQS and CQW phonology do not always agree on the correspondences of CL phonemes in CQS and CQW, e.g.:

	Crewe (1973)		Trimmingham (1946)	Abu Manga (1986)		Kaye (1976)
CL	CQS	CQE	CQS	CQS	CQW	CQW
/t̥/			/t/	/t̥/	/t/	/t/
/d̥/			/d/	/d̥/	/d/	/d/
/θ/	/t, s/		/t, s/	/t, s/		
/ð/	/d, z/		/z/	/d̥, z, d/		
/s̥/			/s/	/s̥/	/s/	/s/
/z̥/			/z/	/d̥/	/z/	/z/
/j/	/j/	/g/	/d/ (?)	/j, d/	/j/	/j/
/q/	/g/	/ʔ/	/k/	/g, γ/	/g/	/g/
/γ/			/χ/	/γ/	/χ, g/	
/h/			/h/	/h/	/h/	

Abu Manga (1986:27) states that 'The Western Sudan dialect in Kordofan and Dar Fur... fails to realize the Arabic emphatic

[pharyngeal] sounds.' However he states that the emphatics ARE present in Khartoum Arabic, which I confirm.

The colloquial forms given throughout are in phonemic orthography and are independent of the classical except where otherwise stated.

As etyma are adopted in their phonetic form - i.e. what is *heard* is adopted (as mentioned above, p.28), and as no detailed knowledge of the morphology of the source language by the speakers of the target language can be assumed, a detailed summary of Arabic morphology is irrelevant here. However it should be noted that the dissimilarity between the morphologies of Arabic and Masalit is a factor which has discouraged the adoption of items into morphological categories other than that of nominals: Arabic morphology is non-concatenative and has the root structure constraints of a prosodic template, consonantal melody and vocalic melody; Masalit is concatenative (i.e. agglutinative) and does not have a template-melody system.

As mentioned on p.29, most adoptives from Arabic whose models are verbs pass into the category of nominal in Masalit and are used with an indigenous 'support verb'. The form of the Arabic verb used as a model is the 'non-inflected' form of the masculine third person singular perfect, *fa'al(a)*.

2.2 PHONOLOGY OF MASALIT

MASALIT TABLE OF PHONEMES

Consonants:

plosives	(p) b	t d	*ty k g	(q) [ʔ]
fricatives	f (v)	s (z)	ʃ c (x)	h
affricates			ʃ	
nasals	m	n	ɲ ŋ	
prenasals	mb	nd	ny nj	ɲg
laterals		l		
trills		r		
semivowels	w		y (ɥ)	

* ty = palatal voiceless stop

Notes:

1. /h/ and /f/ are rare in indigenous Masalit lexemes. /p,q,v,ɥ,ty/ occur very rarely indeed in my data, e.g. **pirayo** saddle, **ndoq** sucking noise made by infant at its mother's breast, **gerivi** stranger, **ɥui** thing, **tyom** one (numeral).
2. /x/ and /z/ occur only in words of Arabic origin, i.e. are 'extraneous' sounds.
3. The glottal stop is non-phonemic in Masalit and occurs systematically before lexemes which would otherwise be V initial.
4. In my data /p/, /ty/ and /ɥ/ appear initially only, /h/ appears initially and medially only, /q/ appears finally only. All other consonants occur in initial, medial and final positions.
5. /k,m,n,ŋ,r/ are the Cs which occur in final position most frequently; /b,t,s,l,f/ occur very rarely in final position in indigenous Masalit.
6. Nasal-initial C clusters are counted as single consonants as they are homorganic and may be classed as 'prenasalized' Cs. They are all voiced and occur initially and medially but not finally.

Consonant clusters:

INITIAL

Initial consonant clusters appear to be excluded.

MEDIAL

There does not appear to be any phonological rule *excluding* any medial (2-)consonant clusters.

Medial clusters the first element of which is a nasal and which contain a voiceless C as the second consonant are few and appear to be the result of the juxtapositioning of separate morphemes in most cases (cf. initial clusters). This appears to be a general trend amongst the Maba group languages.

FINAL

Final consonant clusters appear to be excluded.

Geminates:

Geminates are infrequent and examples recorded so far are restricted to /ll, mm, rr, kk/; e.g. **kulle** 'blacksmith', **summo** 'to market', **lirra** 'heavy', **sabakko** 'race, competition'.

Vowels:

i ɪ u

e [ɜ] * [ʌ] * o

ɛ ɔ

a * given by Doornbos in his word-lists of Masalit

Diphthongs:

ai, ao, au, ɔi, ei

There are many examples of vowel length, though whether it is lexically significant remains to be demonstrated (I have found no

minimal pairs distinguished by vowel length alone).

There are two common assimilations of semi-vowels in inter-consonantal positions:

/C-wa-C/ →→ [C-oo-C] and /C-wu-C/ →→ [C-uu-C]

but /V-wa-C/ →→ [V-wa-C] and /V-wu-C/ →→ [V-wu-C]

Masalit (non-verbal) word schemes:

	C final		V final	
C initial	CVC (28) CVCVC (83) CVCVCVC (18) CVCVCCVC (2) CVCVCCVCVC (2) CVCCVC (19)	16%	CV (40) CVCV (256) CVCVCV (136) CVCVCVCV (17) CVCVCCV (69) CVCCV (95) CVCCVCV (44)	68%
V initial	VCCVC (3) VCVC (17)	3%	VCV (40) VCVCV (36) VCVCCV (18) VCCV (11)	13%

The above data was taken from a sample of 1005 non-verbal lexemes in their singular forms; the numbers in parentheses are the total number of lexemes of each syllabic scheme (the less common schemes have not been included). Vowels may be long or short, but short vowels are more numerous.

From the same sample it was found that half of the C final lexemes were of alien origin (mainly Arabic) and of the half that were (apparently) indigenous the Cs that occurred most frequently in final position were /ŋ/ (23/92), /r/ (18/92), /n/ (16/92), /k/ (15/92), /m/ (12/92): i.e. the nasals, /r/ and /k/. Most of the plural suffixes have final V, however, there are plural suffixes with final /ŋ/ (common), /s/ and /r/ (uncommon).

Syllabic units: CV(V)(C), e.g. *sa* 'water', *kaŋ* 'three', *ndũ* 'body'; VC, e.g. *as* 'four'; V(V), e.g. *ii* 'they'.

Compare the above with a similar analysis of word structure in the dialect of Maba spoken in Dar Masalit:

	C final	V final
C initial	46%	37%
V initial	8%	9%

Examples of some common Masalit nominal word patterns:

(C = C/NC, R = r/l, D = t/d)

CVRDi: *kurti* 'water-well', *laldi* 'boundary'

CVCVRDi: *sugorti* 'rope', *madaldi* 'water-course'

CVRgi: *margi* 'bull', *gurgi* 'monkey'

CVCV: *kami* 'horn', *tifa* 'hair', *mbara* 'two', *konji* 'bone'

CVCVCV: *tarangi* 'snake', *kicimi* 'charcoal'

CVCCVCV: *gelmedi* 'tongue', *karkara* 'pretence'

-CVla: (diminutive) *anjela* 'puppy', *jakala* 'kid'

Verbal patterns are much more restricted than those of nominals because of the complexity of Masalit verbal morphophonology (see below, 2.3.1). According to my data all verb bases have an initial V (long, short or a glide wa/wu) followed by C, CC, CVC, CVC--C.

TONE

According to the evidence to date the languages of the Maba group would appear to have at least two tonemes. This seems to be true for Masalit (high tone, low tone and also a falling tone and downsteps are present). In Maba the situation appears to be more complex with several pitch levels, though whether all are significant in terms of tonemic distinction or not is not at present clear (3); the same holds true for Aiki (4).

From the small amount of data at hand it appears that tone plays a lexically and morphologically significant rôle:

- In the lexicon:

kwóyè	there is not	kwóyè	ear, leaf
kàrá	bed	kàrá	girl
ndû	leprosy	ndû	body
ùtúk	ten		
ùtúk ùtúk	ten each	ùtúk ùtúk	twenty

- In nominal singular/plural distinction: in general singular nominals are characterized by a final low tone, plurals by a final high:

house, hut	tàni	pl. tàní
ear, leaf	kwóyè	pl. kwóyé

As I have tone marked in on only part of the data, it will not be marked in except where relevant to an argument and where adequate data is available.

2.3 SUMMARY OF MASALIT MORPHOLOGY

As mentioned above (ps.20, 51) Masalit has two levels: **kana lere** and **kana walwala** ('heavy' and 'light' language), and at least three dialects of the light language. The dialect dealt with here is that of northern Dar Masalit. Essentials that are relevant to this study are given below; for fuller information see my forthcoming Masalit Grammar.

Masalit has no grammatical gender; it has a basic syntactic arrangement Subject-Object-Verb or Subject-Predicate, e.g. **kima jaya tanara** = child tea brought; **maŋ kaŋgi jek biye-l-ε** = you man very bad-you-are. Qualifiers follow the item qualified, e.g. **berε furngi** = horse red.

Nominal and verbal morphological structures are agglutinative in character (by compound suffixation for the greater part - similar to Turkish).

2.3.1 VERBAL MORPHOLOGY

Every meaningful 'verbal unit' consists of three morphemes: an obligatory subject (optional object) prefix, a verb base, and tense/mood/voice suffixes.

All verbs contain at least two critical variant features by which they may be classified or categorized (5).

1) the 7 allomorphic prefixes signifying the second person singular (hereinafter '2S'), see 2.3.1.1 below.

2) the alternation patterns of the two affix-bearing bases of each verb, see 2.3.1.1 below.

Other criteria for categorization the employment of which has not yet been satisfactorily systematized are:

3) the use of allomorphs **-ε** or **-i** as the 'present simple' tense suffix, e.g.

m-oor-i we cry
m-oyos-ε we climb
m-uuk-ε we become.

4) the use of allomorphs **-ti** or **-ki** as the 'general/broad future' tense suffix, e.g.

a-wacun-ki I will tie
a-leŋ-ki I will leave
a-wasiŋ-ti I will know
a-yon-ti I will climb

There is no correlation between 1) and 2), and the allomorphic distributions are not phonologically conditioned, at least according to any current (i.e. synchronic) rules. Nor does either coincide with 3) or 4) to any significant extent. 3) and 4) may have had a phonological basis from which they have drifted (or the precise rules of which are not at present clear). 4) may have a dialectal basis.

2.3.1.1 BASES AND PREFIXES

Each verb has two bases which have a set of suffixes specific to each base. The two bases may be identical (e.g. **wak~wak** 'become') or may be related according to one of a number of patterns (e.g. **was~was-iŋ** 'know', where **-Vŋ** is added to the base which carries the present tense marker (henceforth referred to as 'base 1') to form the base that carries the simple past and future markers (henceforth 'base 2') (6), or they may be difficult to relate in phonological terms (e.g. **iser~ikel** 'see' (possibly suppletion), **ig~an** 'work'). The first two groups are the most common. The labelling 'base 1' and 'base 2' is for convenience and should not be construed as necessarily implying the 'primacy' of

one form or the derivative nature of the other, which still remain to be demonstrated.

List of the most common base 1~base 2 relationships:

BASE 1	BASE 2	examples	gloss
----	----N	icokor~icokor-n	cough
----	----VN	ɔim~ɔim-en	build
----	----NVN	iniŋ~iniŋ-ŋen	forget
----	----len	inder~inder-len	choose
----C	----n *	oyo-s~oyo-n	climb
----t	----	isel-t~isel	precede
---VC	---- **	wurc-ic~wurc	cover
		uul-ar~uul	take
----r	----l	icoko-r~icoko-l	carpenter

* C here = /s, j, k, g/

** C here = /k, s, ʃ, t, c, r/

Some of the base 1~base 2 relationships that are difficult to explain in phonological terms:

BASE 1	BASE 2	gloss
idor	irofol	hit
wacic	wasol	stand
iyaw	iwi	kill
icum	arc(ε)	throw
ireir	ideillar	build
iser	ikel	see (7)
lg	an	do (base 2 an < lg-an perhaps)

In the analysis which I have adopted to permit the most orderly description, verb bases are quoted with an initial element which takes three forms: **V-**, **VV-** or **wa-/wu-**, which have various realizations according to the person (ɔi- is classed as **V-**). The base may surface unaltered according to the prefix, or may not surface at all - in all cases the base is hypothetical and cannot

stand without affixes (and retain meaning) but is the most convenient form which can be used to systematize the observed differences in phonological structure from person to person (and in particular the first two persons). 'V- bases', 'VV- bases' and 'wa/wu- bases' shall refer to verbs classed according to this criterion. **VV** tends to contract with persons other than 1S.

For lexical purposes the initial **V-**, **VV-**, **wa-/wu-** may be eliminated: the 'lexical root' starts from the first C. I have included the initial V etc. in annotation of verb bases as they are not at present predictable from the rest of the base.

The prefixes, which are phonologically related to the independent personal pronouns, are:

person	IPP	prefix
1S	ama	a, -
2S	maŋ	g, n, l, r, d, j, D (where D represents deletion of the initial V of the base and voicing of the following C depending on the value of that C) (8)
3S	tii	t
1P	mii	m
2P	kii	k
3P	(w)ii	w, V

'g- verbs', 'l- verbs' etc. shall refer to verbs classed according to the criterion of their 2S prefix as this varies.

D- and g- are the most frequently occurring 2S prefixes.

1S a: /a/ replaces V- in V- and VV- bases (a + iselt → aselt-ε 'I precede'; a + iifef → aifef-ε 'I bite')
/a/ is prefixed in wa/wu- bases (a + wafif → awafif-ε 'I stab'), if the base is of the shape waCVC/wuCVC then V is deleted (a + wurus → awurs-ε 'I wait')

1S ø: /ø/ in bases where V is the diphthong ɔi (ø + ɔim → ɔim-i 'I build')

2S **D**: in V- and wa/wu- bases, V, wa, wu are dropped; when this creates a situation where there would be an initial C cluster that is not in the set of Masalit initial clusters (see above), then an anaptyctic V is interposed between the Cs (the V quality varying according to no obviously apparent rule: perhaps it is a survivor of a previous form of the base). (D + idir → dir-ε 'you meet', D + ark → rok-ε 'you find', D + wurc → ruc-ε 'you carve'). Where the initial C is /s/ or /c/ it is voiced as /j/ (D + iselt → felt-ε 'you precede', D + icokor → jokor-ε 'you carpenter') (9)

2S **g, l, n, d, r, j**: these all are simply prefixed to V- and VV- bases (there is a tendency for VV to shorten); with wa/wu bases: wa → o(o), wu → u(u)/o(o) (n + en → nen-ε 'you have', l + uutur → luutur-ε 'you open', g + was → go(o)s-ε 'you know')

3S **t**:)
 1P **m**:) as 2S g, l etc.
 2P **k**:)
 3P **w, V**:)

n.b. Verbs will be referred to below in the form of base 1~base 2,2S, or base 1~base 2,2S,2S where the 2S prefix is not the same for both bases, e.g. was~wasin,g 'know', icokor~icokol,D 'carpenter', iser~ikel,D,j 'see'.

Observations on the allomorphs of the 2S and their occurrence with bases:

2S prefix	initial VC of base	remarks
g-	Vd Vg Vk Vn Vs Vr Vl Vc Vm Vj Vb Vf ik is waC > iC-----	2 way correlation
D-	wuC----- Vd Vg Vk Vn Vs(→j) Vc(→j) ik iy Vw Vm Vl	2 way correlation
j-	ik ind iy	
l-	Vd Vk Vn Vs Vm Vt Vl Vr iy	
n-	Vn	n- prefix occurs only with nasal initial bases, but there is no 2 way correlation
d-	in	2 verbs only
r-	Vd Vg Vk Vn	

A possible explanation for the lack of clear correlations in the above observations is that there may have been a systematic correlation of 2S prefixes and bases (according to phonological or semantic criteria) but that D- and g- became dominant, drawing in bases from other classes. No clear correlation is apparent between verbs classed according to their base 1~base 2 relationships and verbs classed according to their 2S prefixes (10).

2.3.1.2 SUFFIXES

As mentioned above there is a set of suffixes specific to each of the two verb bases (1 and 2), the most common suffixes being the 'present' -ε/-i, suffixed to base 1, the 'past' -a and 'future' -ti/-ki, suffixed to base 2 (11).

There are fourteen other suffixes which are all more or less to do with the 'present' tense^{and} may attach to base 1, and thirty suffixes which cover everything *but* the present, including some which would translate English future and past tenses, passive voice, subjunctive and optative moods, attach to base 2. This may be a realis/irrealis dichotomy. It remains to be investigated in depth.

It should be noted in passing that, as in any language, the precise shade of meaning in the usage of some verbal structures, especially those with more than one suffix, may not conform to what one would have predicted from the sum of the meanings of the component morphemes (in this case suffixes) and have grown away from the former semantic area of their constituents just as in English 'to be going to (+ verb)' does not necessarily mean that there is physical movement involved although that is the basic sense of the verb 'go'.

e.g. **was~wasin,g** 'know' (all in 2S)

base 1:	g-oos-ε	you know
	g-oos-ε-nise	you sometimes know
	g-oos-iken	if you know
base 2:	g-oosin!	know! (imperative)
	g-oosin-ti	you will know
	g-oosin-a	you knew
	g-oosin-juri	you are known
	g-oosin-ni	you will know (near future)

2.3.1.3 NEGATIVE FORM OF VERBS

Negation is indicated by the presence of base suffixes (mainly in addition to tense/mood suffixes but occasionally replacing them). These suffixes may be divided into four classes according to their phonological shape (-Gede, -dI(ye), -G(I), -IndI), where G = g/k, I = i/ε, according to no clear phonological rule though /ŋ-k/ and /s-g/ are exclusive). There is no immediately apparent morphological or phonological correlation between the negative suffix 'classes' and the tense/mood suffixes to which they are added in specific and exclusive relationships (12).

e.g.

you knew	goosiŋ-a	→	goosiŋ-de	you did not know
you know	goos-ε	→	goos-inde	you do not know
you will know	goosiŋ-ti	→	goosiŋ-diye	you will not know

2.3.1.4 INTERROGATIVE FORM OF VERBS

Verbal interrogation is expressed by the addition of the suffix -uŋ (or -om) to the final suffix of the verb or its auxiliaries. -uŋ is invariable and may be regarded as independent (similar to the Turkish particle **mi**) rather than a suffix morphologically integral to the verb.

It is simply added to suffixes with final -tei, -te, -i (except for the base 1 present tense) and to the auxiliary verbs **ig~an, D, g** 'do' and **ind~ind, n** 'want' in all their forms. It replaces the final V of suffixes with final -a, -re, -ye, -se, -ε, -e, -i (only in the base 1 present tense) (13).

e.g. you knew	goosiŋ-a	→	goosiŋ-uŋ	did you know?
you know	goos-ε	→	goos-uŋ	do you know?
you will know	goosiŋ-ti	→	goosiŋ-ti-uŋ	will you know?

2.3.1.5 NOMINALS DERIVED FROM VERBS

There are a number of participles which are impersonal, taking the prefix n- instead of a pronominal marker. They are formed from base 1 and base 2 and form a substantial section of the Masalit vocabulary. Although some are fixed by usage to specific meanings which do not correspond precisely to the semantic areas covered by the conjugable verbs, the process of formation appears to be productive now (14):

n-base 1-ε/i	n-oos-ε	the knower (who knows)
n-base 2-a	n-oosiη-a	the knower (who knew)
n-base 2-u	n-oosiη-u	knowingly, while knowing (adverb)
n-base 2-jurn▷	n-oosiη-jurn▷	the 'known thing' (now)

There are also four 'relatives' which take the n- prefix and are followed by a conjugable pronominal suffix (P):

n-base 2-i-P	n-oosiη-i-le	you who will know
n-base 2-ta-P	n-oosiη-ta-le	you who want to know
n-base 2-jur-ni-P	n-oosiη-jur-ni-le	you who will be known
n-base 2-jur-na-P	n-oosiη-jur-na-le	you who want to be known

These suffixes are similar to the copula suffixes (see p.74):

	1S	2S	3S	1P	2P	3P
present	-ye	-le	-r/ye	-me	-ke	-we
past	-yare	-lare	-rare	-mare	-kare	-ware
future	-yeti	-leti	-reti	-meti	-keti	-weti

n-oosiη-a, knower	kiyeje n-iyar-i, shooting stars
n-eselt-ε, preceding	guri n-er-εk, guide *
n-enenir-i, stupid	n-eniη-εk, thief *
n-ikel-a, seer	n-ar-a, comer
tikelni n-ar-a, visitor **	motorokta n-en-ε, whip-holder

nyori n-arcic-ek, spear thrower * n-urk-u(n) n-iy-e-gi, scout
(hiding-goer)

* the -k suffix seems not to have any morphological value in this context - though it is surely related to the Maba definitive suffix -k and Masalit -gu/-go. I have been unable to isolate any common morphophonological thread here: my informants insisted that one should say **nyori narcicek** and not *nyori narcice* 'the one who throws the spear', and that one should say **motorokta nene** and not *motorokta nenek* 'the one who holds the whip'.

** t-ikel-ni n-ar-a 'the one who came to see/visit' (s/he-see-
(subordinate marker) n-come-past)

The 3S person of the 'simple present' -ε/-i or 'past' -a may also function as a nominal, though it is unclear whether the derivation of nominals in this way is as productive or free as with the n- group.

t-oos-ε, experience (it knows)
t-ooran-a, fear (it feared)
ano t-am-i, liar (it picks lies)
t-ijiir-i, conscious
t-nyen-a, birth (it was born)
t-iy-a, death (it died)
t-uy-a, murderer (it killed)
kaa jεk t-ɔib-i, burr (it catches people a lot)
gunyiti t-ɔibin-a, malarial fever (it caught the abdomen)
nyori t-ogul-a, spear holder
t-oman-i, suitable (it ripened)
t-oman-de, unsuitable
ndu t-εn-ε, leper (it has leprosy)
t-uk-a, amount (it became)
kangi kamarko t-εn-ε, rainmaker (the man (who) has the wand)
bundukko t-εn-ε, rifleman (he has the rifle)
kujo nyembo t-iy-ε, meningitis (the head dies from heat)
kunyi t-iy-ε, dysentery (the guts die)

The number of abstract and 'agent' nominals produced by this process is large; pairs of opposites exist where the negative verbal suffix is used, e.g.: **toman-i** 'suitable', **tomanɔ** 'unsuitable'.

Derived nominals may also be formed with the 2S prefix and base 2 either with or without a suffix -a, also 2S and base 1 with suffix -a:

What is identified here as 2S may be a homophonous - but not synonymous - derivational morpheme identical with the 2S prefix; similarly below where the prefixes are identical with 1P and 2P prefixes respectively. One possible interpretation of this is that it is the remnant of a class system.

2S-base 2 (participle)

l-ukan washing girfe cacin Venus (untied waterbag)

2S-base 2-a

g-ooran-a, fear
amin aɛ g-uul-a harvest day

2S-base 1-a (functions as a gerund)

g-iy-a rubbing jari-a playing
jingɛ-a pulling nony-a love

n.b. In the examples given above where 2S is D (deletion of the initial vowel) no prefix is marked).

A small number of nominals are formed with prefix **m-** (whether or not this is the 1P prefix is not at present clear) (15):

m-base 2-a

m-oosen-a the known thing

m-base 2

m-isarin game

2.3.1.6 COPULA

Predication of identity in the present tense is expressed using a copula with the following personal pronominal suffixes:

1S	2S	3S	1P	2P	3P
-r/-t/-y	-l/-y	-r/-t/-y/-ø	-m	-k	-i

To these may be suffixed any of the following markers:

present	-ε
past	-ερε
future	-eti
negative (present)	-iande
conditional (present)	-iken
conditional (non-present)	-en
interrogative	-om/-uη

The independent pronouns may or may not be present.

e.g.s:

(ama)	saraf-t-ε	I am an accountant
(maη)	saraf-l-ε	you are " "
(tii)	saraf-t-ε	s/he is " "
(mii)	sarafa-m-ε	we are accountants
(kii)	sarafa-k-ε	you are " "
(ii)	sarafa-i-ε	they are " "
(mii)	sarafa-m-ερε	we were accountants
(maη)	saraf-l-eti	you S shall be an accountant
(ama)	saraf-t-iande	I am not an accountant
(maη)	saraf-l-uη?	are you " " " ?

The 1S and 3S suffixes are homophonous in most cases, their variation between [r] [t] and [y] (and [ø] for 3S) seems to be phonologically conditioned:

nominals with final -C	[t]
" " " -i/o	[ø] ('zero' suffix)
" " " -V (not i/o)	[r],[y]

There are exceptions however, so these cannot be taken as definitive 'rules', [r] and [y] in particular varying according to no presently obvious rule. The l/y alternation for 2S is also not clear at present. e.g.s:

(maŋ) biye-l-ε you are bad
 (maŋ) lira-y-ε you are heavy
 (maŋ) juŋa-y-ε you are strong

(tii) wasxan-t-ε it/s/he is dirty kala-r-ε it/s/he is good
 (tii) tajir-t-ε s/he is a trader biye-r-ε it/s/he is bad
 (tii) ajib-t-ε it is a surprise jo kaŋgita-r-ε it is a
 footprint

but (tii) kuri-t-ε s/he is angry, and rakab-r-ε s/he is a rider

(tii) ganambo-ø-ε how much is it?
 (tii) wiciti-ø-ε (it is) hunger
 (tii) ŋguri-ø-ε where is it?

Copula may also be expressed in other than the present tense by the verbs *iy~ey,j* 'be, dwell, stay' or *wak-wa(k),g* 'become'. These are occasionally used to express predication in the present as well (16). e.g.s:

(maŋ) saraf jeyti you (S) shall be an accountant
 (ama) tajir awaka I was a merchant
 (tii) biye tooka s/he was bad

2.3.1.7 SUPPORT VERBS

The 'verbalization' of two categories of nominals takes place in Masalit: 1) of alien lexemes (which would otherwise present much difficulty to assimilate into the Masalit verbal system - most lexemes identified as alien are Arabic - verbal nouns, 3S perfect verbs, nouns), and 2) of (apparently) indigenous nominals in 'idiomatic usage' - i.e. where the nominal-verb combination may

have a semantic value not predictable from its constituents ('predictable' here is of course subjective and is related to socio-cultural expectations).

The 'verbalization' process is not morphological - it is the simple juxtapositioning of the nominal lexeme and the verb: e.g. **guru** (<Ar. **qara** 'read, recite') + **ig~an, D, g** 'do, make' → **guru m-ig-ε** 'we read', or + **indig~indigan, n** 'make do, make make' → **guru m-indig-ε** 'we teach, make read'.

This is analogous to a device in Turkish using verbs such as **et-**, **ol-** and **kil-** (for Persian and Arabic adoptives).

The verb most commonly used to 'verbalize' nominals is **ig~an, D, g** 'do, make'. The nominals it verbalizes include:

guru	read (Ar. qara ?)	sullo	pray (Ar. ṣāllaa)
katab	write (Ar. katab)	duri	cook
jerbu	try (Ar. jarrab)	guro	hunt (far from home)
fit	turn (Ar. lafat)	marañ	hunt (near to home)
nakar	deny (Ar. nakar)	dunger	bend down
xadam	work (Ar. ḡadam)	aguri	blow (wind)
nyam	be warm/warm oneself	faham	understand (Ar. fahm)
deyo	sacrifice (Ar. ḡahiya)	unyi	defecate
ndoq	suck	karkara	pretend
fakar	think (Ar. fakar)	kulukulu	mould (with clay)
atif	sneeze (Ar. 'aṭṭ)	wis	cook (with oil)
muri	sweat		

Other verbs that function as 'verbalizers' of nominals include:

er~irnaṅ, D 'say'

ia	refuse (Ar. 'āyaa)	salamko	greet (Ar. salaam)
kurta	snore	injer	spit

uular~uul, g 'take'

raha	rest (Ar. raaha)
-------------	--------------------------

2.3.2 NON-VERBAL MORPHOLOGY

Included in the 'non-verbal' group are:

- nominals (what may be translated into English as independent nouns (including nominals derived from verbs), adjectives, interrogative nominals, numbers, non-numerical quantity specifiers, pronouns).

- 'adverbs' (which describe and qualify actions and which are not included in the definition of nominals as set out below).

Nominal lexemes in Masalit may be defined as (i) those lexemes which have a singular/plural suffix pattern according to one of a certain set of patterns and (ii) those lexemes to which may be suffixed a certain set of suffixes - including possessives. This definition largely encompasses the equivalents of English nouns and adjectives; Masalit does not distinguish between these in morphological terms (both share the same set of singular/plural suffix patterns and nominal suffixes), qualifiers and nouns may only be defined relative to one another by their syntactic relationship.

2.3.2.1 PLURALITY/SINGULARITY

There is no grammatical gender distinction amongst Masalit nominals. The array of singular/plural suffix patterns presents what could be interpreted as the relic of a nominal 'class' system. However, when grouped according to these patterns, nominals display no other common morphological features.

The plurality/singularity of nominal lexemes is distinguished by the tonal and/or the morphological pattern of the word. About a quarter of all singular/plural suffix patterns are distinguishable according to the tonal pattern alone. These all appear to be indigenous Masalit words.

In general it seems that singular forms are marked with a final

low tone and plurals with a final high (see above p.62) (17). The remainder may be classed according to their singular/plural suffix patterns. There appears to be no sure way to be able to predict which plural suffix is used with which singular suffix for any specific word, though some patterns are much more common than others.

SINGULAR suffixes		PLURAL suffixes (18)
∅	∅	∅
V	V	V
C		r
CV	di rV	rV
CV	ti ko (ŋ)gi	ta jε sI* yu
CCV	rdi ldi	
VC		iŋ (V)s
(C)CVC		ldiŋ dur ter cor kar

V = i/ε/ɔ * I = i/ε

Notes:

(i) Over half of all plural-forming nominals have -∅ as their singular suffix. All other singular suffixes have a final vowel; plural suffixes have a final vowel or final -ŋ (frequent) or final -r, -s (infrequent).

(ii) -ta and -iŋ are the most common plural suffixes, commonly used with alien words, especially Arabic loans (possibly related to the common Arabic plural suffixes -aat and -iin or to the common Fur plural suffixes -ta and -(ŋ)a, see section 4.3.1); e.g. **dakakin-ta** 'shops' < Arabic **dakaakiin**, **azuma-iŋ** 'parties' < Arabic **'uzuuma**

(iii) the singular/plural suffix pattern is fixed for each nominal. Some semantically related nominals (e.g. the colours: **furŋgi/furni** 'red', **dunŋgi/duni** 'black') may share the same pattern, but most nominals grouped according to their singular/plural patterns appear to be semantically random mixtures at present.

(iv) -∅, -V, -rV occur as both singular and plural suffixes.

Singular/plural suffix combinations (the more common are given in bold) (19):

o/ta	o/iŋ	o/jɛ	o/(V)s	o/r	o/sI	o/V
mama/-ta	azuma/-iŋ	mama/-je	asro/-s	maji/-r	da/-si	kumbor/-i
mat. uncle	party	rabbit	shade	slave	mother	penis

o/cor	o/ldiŋ	o/ɣu
kudi/-cor	mirsi/-ldiŋ	amunte/-ɣu
noble	name	peace

di/V	ti/V
siren-di/siren-i	bur-ti/bur-i
cooking-place	path

rV/kar	rdi/dur	ldi/rV	ldi/o
ama-ra/ama-kar	ku-rdi/ku-dur	mada-ldi/mada-ri	arce(ldi)
lion	nest	wadi, garden	pole

ko/ta
mal-ko/mal-ta
chattels(wealth)

gi/o	gi/ter	gi/V	gi/sI	gi/jɛ
anyiŋ(gi)	sar-gi/sar-ter	furn-gi/furn-i	mar-gi/mar-se	muŋ-gi/muŋ-je
fly	back (anat.)	red	bull	elephant

ŋgi/o
ka(ŋgi)
man/people

V/o	V/V
barjaŋ(i)	kur-o/kur-ɛ
shoe	gum-arabic bush

Of a sample of 209 singular/plural pairs:

- 1) 18% were phonologically identical and were distinguished by tone differences alone.
- 2) 52% had sing. suffix **-o**.
- 3) 14% of all plurals were formed with suffix **-ta**.
- 4) 13% of all plurals were formed with suffix **-V**.
- 5) 9% had plural suffix **-o**.
- 6) 12% of all sing. were formed with suffix **-(N)GV** (**-ko**, **-gi**, **-ŋgi**).
- 7) Most obviously alien words conform to the sing/pl patterns: **o/ta**, **o/iŋ**, **o/jɛ**, **ko/ta**.

There are also some odd singular/plural patterns which do not fit into the above schema:

Suppletions:

- **jawi/guci** ewe (**joci** is the collective word for sheep of both sexes, it has no singular form).
- **imo/miarim** queen, powerful woman.

- **warnuŋ/waraniŋ** officer (adoptive, the form of this plural recalls to mind an Arabic 'broken' plural and was certainly adopted along with the singular).

- **wajara/wajirken** splinter.

- **jakala/jekel** young goat.
- **celta/arcel** melon, pumpkin.

The plurals of certain nominals derived from verbs are formed by prefix alteration: e.g. **alo tays/alo ways** 'traveller', **duri time/duri ime** 'potter', these are in fact 3S/3P verbal pronominal prefixes and their behaviour in this respect (singularity/plurality) follows the morphology of verbs as they may be analyzed as verbs, but taken within the syntactic context of a sentence where they function as nominal subject/object their grammatical rôle is redefined and they function as do nominals insofar as they may take nominal suffixes - i.e. they are nomino-verbals: e.g.:

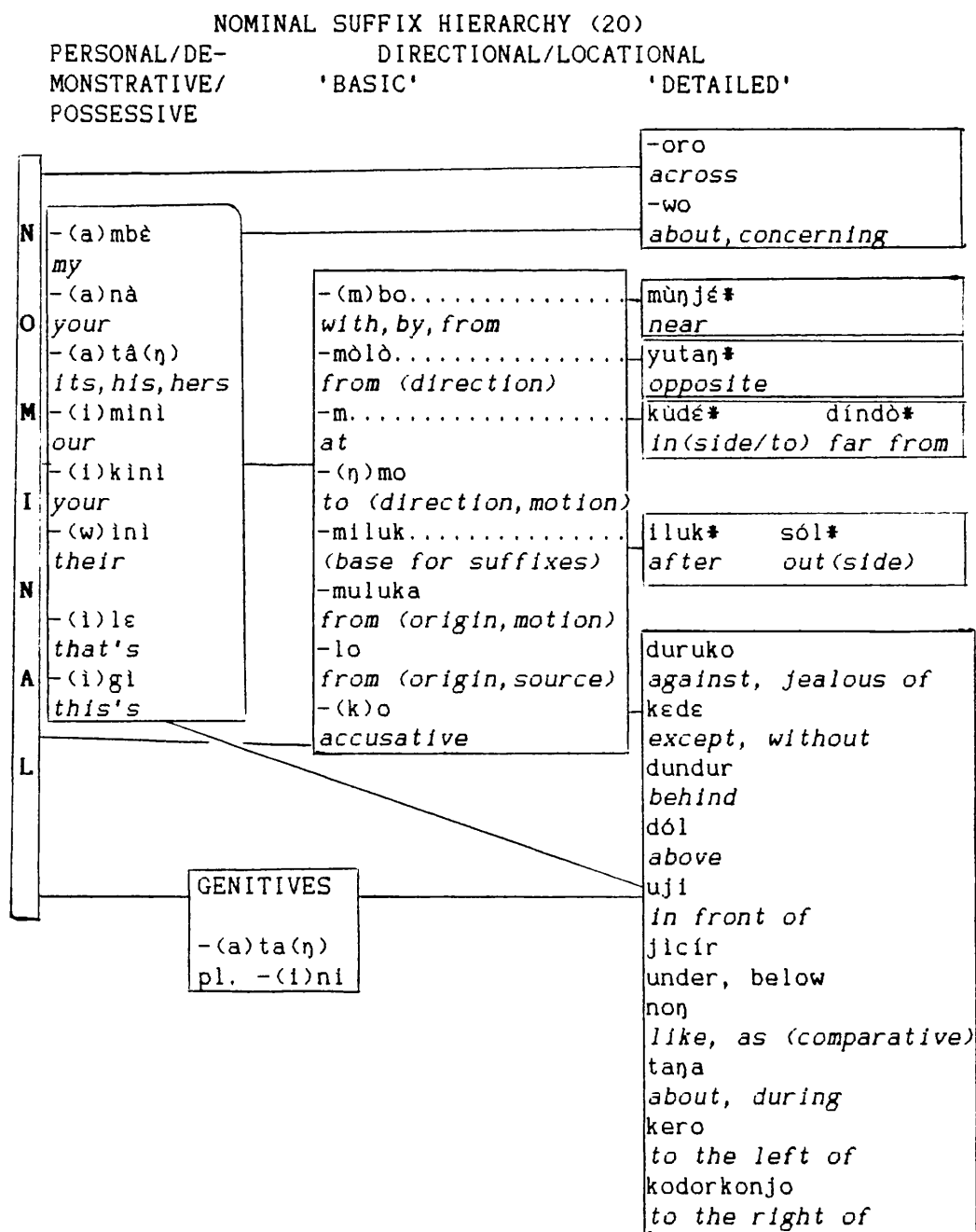
ano t-am-i	s/he (tells) lies
ano-tami t-ar-a	the liar came
ano-wami w-ar-a	the liars came
kujo ano-tami-taŋ a-dor-ε	I hit the head of the liar

When a quantitative specifier (which follows the nominal qualified) is used the plural forms are used. e.g.:

buri kaŋ	three roads	amakar baka	some lions
anyin bakena	a few flies	marse kwoy	every bull

2.3.2.2 NOMINAL SUFFIXES

Nominal suffixes define the absolute and relative status of nominals and their relations to other nominals. The 'order of attachment' of nominal suffixes is fixed in a hierarchy as is illustrated in the table below.



* These detail particles must be preceded by the case suffixes indicated, the others may follow any case or possessives directly,

-oro and -wo may be suffixed directly to the nominal; -duruko, -kede, -dundur, -dól, -uji, -jicír, -noŋ and -taña may not be suffixed directly to the nominal, if no other suffix intervenes the 'genitive' suffix will precede them.

e.g. tañi-mini-miluk-sol outside our house
koma-gi-dundur behind this mountain
bahar-lo from the river

2.3.2.3 NOMINALS DERIVED FROM NOMINALS

There are certain groups of nominals which may be categorized according to a combination of common semantic principles and affixes which are phonologically similar, though the precise and original morphological values of which are not always readily identifiable.

Prefixes:

nyer- (diminutive)

nyer-ko small boy

nyer-mi small box

(cf. monyorko 'small', as in kiyεje monyorko 'Pleiades/small stars')

NVgV- (part of the human body)

naga-ram finger

ñege-damu tongue (synonymous with gelmedi, cf. Maba delmik)

ñege-gemi chin (cf. Maba kam-ur and Aiki gàm-si 'beard')

Suffixes:

-ŋgi (pl. -ni) (colours)

du-ŋgi black, dull, dark blue

fur-ŋgi red

ra-ŋgi green

ko-ŋgi brown, yellow

cf. also of the same pattern:

uru-ŋgi smoke
sala-ŋgi clean

-(C)-Vla (diminutive)

ar-mb-ala lamb (< ari 'ram')
anj-ela puppy (< inje 'dog')
ber-t-ala colt (< bere 'horse')
da-h-ala calf (< de 'cow')
ja-k-ala young goat (cf. si (pl. tice) 'female goat')
nyant-ela small axe

(compare with the Maba diminutive suffix **-kalak** (Trenga, 1947:46))

-uŋ/-eŋ (pertaining to the clan of, belonging to the land of)

fukuny-uŋ the Fukuŋ folk (clan)
nyern-eŋ the Nyerne folk (clan)
mister-eŋ the Mistere folk (clan and village in Dar Masalit)

-kandu/-kandi (abstract)

kamba-s-kandu manliness
muco-kandu womanliness
kuru-kandu bitterness

-kwe (abstract (??))

amaŋ-kwe happiness (< Ar. amaan 'safety')
hu-kwe almost
je-kwe few, certainly
tiilo-kwe each (< Kanuri tiilo)
nara-kwe each (< nara 'comer, the one who came')

-laŋa (ordinal)

as-laŋa fourth
iti-laŋa sixth

Conglomerate nominals

A 'conglomerate' nominal is formed by the combination of at least

two morphologically independent lexemes, it functions as a morpho-syntactic nominal unit, covering a more specific semantic area than its constituents.

Nominal-nominal conglomerates

kujo-juṅa stubborn
(head-strong, cf. Ar. **raas'** **qā'wii** 'head-strong')

Nominal-verb conglomerates

nyori-togula spear-holder
(spear-it holds)

bundukko-tene rifleman
(gun-he has)

kaa-jek-toibi burr
(people-many-it catches)

kokori-kimin-ta-mbo Milky Way (the hen with her chicks)
(hen-children-hers-with)

2.3.2.4 ADVERBS

I use 'adverb' here to signify particles which describe the action of a verb in a sentence. Adverbs always immediately precede the verbs they qualify. They may be formed from verbs themselves or have a non-verbal origin.

Formed from verbs:

-go/-ko (pl. **-gono/-kono**), suffixed to the past tense suffix e.g.s:
osona-gono waye they go with their heads bent
goosiṅa-go (you) knowingly

-u/-o, suffixed to the non-personal 'participle' form (prefix **n-**):
noosiṅ-u while knowing
nark-o while finding

Formed from nominals:

-**kena/-gena** suffixed to adoptive lexemes:

asir-kena/asir-gena	quickly (Ar. asra')
axir-kena	late (Ar. axiir)
gudur-ken(a)	possibly (Ar. qudr)

-**ko/-go** suffixed to indigenous or adoptive lexemes:

nyerem-ko	in the evening
du-go	alone, by oneself (< ndũ 'body')
fujur-go	in the morning (Ar. fajr)
(fujur-go goosiŋa = you knew in the morning (finished))	

-**loka** suffixed to adoptives:

fujur-loka	in the morning (Ar. fajr)
(fujur-loka goosiŋjenise = you knew in the morning (habitual))	

-**de** suffixed to indigenous or adoptives:

celcelo-de	quick-ly
malembu-de	slow-ly
ale-de	early
tiile-de	alone (< Kanuri tilo) (→ tele 'once')
konuŋ-de	shameful-ly
inko-de	often (followed by present 'simple' only)

Of diverse lexical origin:

kamiyela	perhaps (with far future only, < Ar. kamaa yali' ?).
laazim	necessary (with far future only, < Ar. laazim).
tototo	each other (implies reciprocity; with any tense, < tiiilò tiiilò tiiilò ?).
du	self (implies reflexivity; with any tense < ndũ 'body').
sanen	possible, able (with far future only, < asan~asanaŋ, D 'be able') (= gudurken).

ENDNOTES

1 Ferguson (1959¹) states, "if a non-speaker of Arabic asks an educated Arab for help in learning to speak Arabic the Arab will normally try to teach him H forms, insisting that these are the only ones to use." I found this myself while trying to learn to speak Sudanese Arabic from the Sudanese: eliciting the 'low' form was usually met with discouragement, even though the 'high' form was useless for buying daily necessities in the market.

2 Ferguson (1959²) has suggested that the various colloquial dialects of Arabic form a **koiné**: "most modern [Arabic] dialects, especially those outside Arabia...are continuations of a relatively homogeneous **koiné** - a **koiné** which differed in many significant respects from Classical Arabic but was used side by side with the Classical language during the early centuries of the Muslim era. Classical Arabic (now become Modern Standard Arabic) was based on a standard poetic language not necessarily identical with any one dialect, but in oral use by poets and orators of many dialects and known to us fairly directly from the remnants of pre-Islamic poetry and from the Qur'an."

Not all authorities accept this - some point out the plausibility of the different dialects developing in parallel.

3 Jean-Pierre Caprile, p.c.

4 Pierre Nougayrol, p.c.

5 Similar classifications may be made in Maba as well as an additional one of variant past tense suffixes (Trenka, 1947).

6 The base 1~base 2 distinction in Masalit corresponds to the perfect~imperfect in Aiki and, in many cases, to the 'base~infinite' in Maba (the 'infinite' form -'verbindende Form' according to Lukas - is marked by -Vn suffix). However, the relationship between the two forms in those languages appears to be considerably simpler than in Masalit.

The Masalit base 1~base 2 relationships (other than --~-Vn) bear some very striking resemblances to Lukas' **Wurzelerweiternde Affixe** (1952): e.g. Masalit **iiʃeʃ~iiʃ,g** 'bite', Maba **ʃis,g** 'bite' and Maba **iʃis,g** 'bite many'. In Maba these are two semantically distinct

verbs to both of which may be suffixed all verbal tense/mood/aspect markers. In Masalit this is one verb with one semantic area, each base taking mutually exclusive sets of suffixes.

7 The *iser~ikel* base 1~base 2 alternance in Masalit finds a curious echo in the Kanuri verb 'see': *súri(n)* (imp. aspect), *kùrû* (seeing) (Hutchison).

8 The same diversity of 2S prefixes is present in Maba, Aiki and Kibet: Maba has (D, d-, g-, l-, n-, z-); Aiki has (D, g-, j-); Kibet has (D, g-, j-, d-).

9 In Maba and Aiki voicing applies to other initial Cs: in Maba t→d, k→g, s→z; in Aiki t→d, s→j.

10 There are similar morphological 'classes' which cut across each other in Maba: the 2S prefixes and the past tense suffixes (-a/-o/-ri) (Trenga).

11 Compare with Maba 'present tense' suffixes (-i, -ε), past, and future (-tεt (Trenga), -tε (Lukas))

12 Davies gives -de, -nde, -d as negative marker suffixes.

In Maba Trenga gives -andi, -tan, -an as negative marker suffixes.

13 In Maba Trenga writes that intonation is adequate to render the interrogative but adds that a final suffix -a has an interrogative effect as well. Both Trenga and Lukas give examples of an interrogative particle -gin.

14 Trenga gives many examples of an analogous derivation in Maba: *nieik* 'traveller', *nitek* 'cultivator', *nosoik* 'deserter'.

15 The formation of some derived nominals in 'Afro-Asiatic' languages employs m-/n- prefixes (Arabic mV-, Tamahaq (a)m-/(a)n-, Hausa m-) as do Bantu languages (Lingala mo-).

16 Davies gives a similar present tense copula (-ei, -l-ei, -r-ei/t-ei, -m-ei, -k-ei, -ei).

In Maba Trenga gives a predicative verb i, l, g which is not copulative and conjugates as other verbs, also mentioning that *ind, g* 'exist, stay' may be used to express predication.

17 In both Masalit and Maba the material of Lukas, Doornbos and Stevenson concurs in the final syllable singular-low/plural-high alternation, particularly where there is no other means of differentiating between the forms (i.e. by suffixes).

18 In Maba Trenga gives **-k** as the most common singular suffix (apparently cognate of the Masalit **-o**, e.g. Maba: **dèk** (Lukas), Masalit **dè** 'cow'). Otherwise Maba appears to be structurally similar.

19 In addition to the singular/plural suffix patterns listed Stevenson also gives **a/iny: kim-á/kim-iny** 'child'; Doornbos also gives **di/o: kèrfèl-dí/kèrfél** 'tree bark', **ttí/r: ábyé-ttí/ábyé-r** 'cloud', **ngi/m: kédè-ngi/kédè-m** 'egg', also an apparently unique form: **j-íçir/d-íçir** 'down'.

20 Davies gives the following nominal suffixes: **-u/-o** (accusative), **-m(o)** (dative, 'to'), **-ta/-tunga** (pl. **-ni/-ninga**) (genitives), **-mbo** (with), **-muluk** (from), **-im** (on, at), **-im kudei** (inside), **-imuluk solei** (outside), **-tung uyoom** (in front of), **-nung** (like, similar to), **-(n)ung** (all of, pertaining to), **-luk** (from).

Arkell gives **-wo** (accusative), **-m** (locative), **-mbo** (with, by), **-molo** (from), **-ta/-tun** (genitive).

Trenga states that there are no case inflections in Maba but goes on to give the following suffixes: **-go** (accusative), **-na/-ng** (genitive), **-ner** (from), **-gin** (to), **-nuun** (at).

Lukas gives these last three and also **-kan** (with) and **-ka** (and).

METHODOLOGY

3.0 METHODOLOGY

In the process of comparison of two languages in a search for adoptives from one to the other there are two variables that need to be taken into account:

- (i) the shapes of the words,
- (ii) the meanings of the words.

For the purposes of simplicity of *presentation* of phonological data, I have chosen to take the second area as a comparative constant, while at the same time keeping a check on the alternative array of the first, as lexemes may change in travelling from one language to another either in their shape or their meaning or both. In the Analysis (Chapter 4), sections 4.1 to 4.4 deal with word-shape equivalences and sections 4.5 and 4.6 deal with semantics.

3.1 IDENTIFICATION OF ADOPTIVES

The majority of lexemes adopted from Arabic were identified in the following ways:

1) by the informants themselves, all of whom were arabophone. In most of these cases the phonological differences between Arabic and Masalit are not great, e.g. Ms: *jama-to* 'people' < Ar: *jamaa'a* 'gathering', Ms: *sawa* < Ar: *sawaa?* 'equal, same'. There are other cases where the resemblance is not so obvious, e.g. Ms: *erīn-gī* < Ar: 'arab. Some non-verbal and all verbal adoptives were left unidentified as having Arabic etyma by informants.

2) by myself, using three criteria, two of which had to be fulfilled in order for the lexeme to be considered as a putative adoptive; namely that the Arabic etymon and putative Masalit adoptive should:

- (i) be 'lookalikes',
- (ii) show sound correspondences which are part of regular sets of Arabic/Masalit phonological correspondences or
- (iii) have the same, similar or related semantic field.

'Lookalikes' could be fortuitous and unrelated, genuine adoptives from Arabic or cognates within the Maba group, having derived from an ancestral adoptive in proto-Maba, e.g. (the example quoted above in 1.2) 'horse' fits this category for Maba and Masalit languages: Ar: **faras** > Mb: **bere-k**, Ms: **bere**.

3) secondary criteria were:

(i) by 'elimination': by sifting data from the languages genetically related to Masalit - Maba, Aiki and Kibet, for clues as to which lexemes in Masalit have cognates in those languages (i.e. are continuations of single proto-lexemes) and which have not (one reason for which may be the adoption of loan lexemes), e.g.:

'fish' Ms: **kúnyò** Mb: **kufio** Ak: **kùñún** Kb: **kuñan**
 'bone' Ms: **kónji** Mb: **kanji-k** Ak: **jingà-r** Kb: **njeke-dí**
 'body' Ms: **ndũ** Mb: **nduu** Ak: **ndù-k** Kb: **ndu-k**

in all of these examples it is clear that all of the languages have forms which are continuations of a proto-Maba source item;

'road' Ms: **burti** Mb: **liṅa-k** Ak: **ḥṅgweye** Kb: **ḥṅgṅe**

?< Fl: **burtol** ?< Sn: **legue**

the Aiki and Kibet forms may be the continuations of the proto-Maba form in this case;

'wadi' Ms: **madaldi** Mb: **bita-k** Ak: **tà-k** Kb: **ta**

?< Fu: **madil**

the Maba, Aiki and Kibet forms may be the continuations of the proto-Maba form in this case;

'good' Ms: **kala** Mb: **namara-k** Ak: **jár** Kb: **sám**

?< Ar: **halaal**

?< Ar: **samiḥ**

the Maba or Aiki forms may be the continuations of proto-Maba in this case.

(see Appendix A for a fuller comparative list of Maba group cognates).

(ii) the presence of anomalous or extraneous phonological features, e.g.:

Ms: **muwazaf** 'official' < Ar: **muwazzaf** (CQW) **muwaẓẓaf** (CL), /z/ is extraneous in Masalit, occurring only in Arabic adoptives; also /f/ is very rare in final position in indigenous lexemes.

Ms: **xarifu** 'rainy season/autumn' < Ar: **ḫariif** (CQW,CL), /x/ is extraneous in Masalit, occurring only in Arabic adoptives.

(iii) the presence of certain morphological markers: singular/plural suffixes **-ko**, **-ta** and **-in**, copula suffixes and other markers of less clear value. The distribution of these strongly suggests that *all* nominals with singular/plural suffix patterns are adoptives, while indigenous nominals have singular/plural distinguished by tone differences alone.

3.2 DELIMITATION OF SEARCH FOR INTERMEDIARIES OF ADOPTIVES

The principles by which I have attempted to limit the number of languages in the search have been linguistic, historical and geographical - linguistic in so far as all the Maba-group languages are included; historical in so far as the known population movements, political influences and trading routes have been taken into account (hence the inclusion of the commercial languages of West-Central Africa: e.g. Hausa, Kanuri, Fulfulde and of North and East Africa - e.g. Berber); geographical in so far as the languages surrounding Dar Masalit have been included (e.g. Fur, Zaghawa, Tama). A large number of rather peripheral languages (e.g. Beja, Banda) are included in the source-key list above as, in occasional cases, they appeared to have a relevance, but they have not been systematically treated. Where it emerged early on in the research that there was clearly no linguistic evidence for a particular language having intermediary status I have not continued to take account of it; this has been the case with Berber, Tama and Zaghawa).

3.3 PROCESSING OF DATA

The first step in the analysis of data, after card-indexing trilingually (English/Masalit/Arabic), was to build up a list of phonological equivalences between putative Arabic source items and

their Masalit equivalents. Not all of these source items had the same meaning as their Masalit equivalents (i.e. some semantic shift had occurred during or after adoption into Masalit), Thus the search had to be two-pronged:

(i) for Arabic lexemes having the same meaning as the equivalent Masalit lexemes, e.g. 'moustache' Ms: \int enab < Ar: \int anab;

(ii) for 'lookalikes' of Masalit lexemes in the Arabic lexicon which do not have meanings identical to those of their putative Arabic source, e.g. Ms: **gihawante** 'lazy (person)' < Ar: qahwa 'coffee' (n.b. the medial /h/ in the Masalit term immediately indicates an alien origin).

As the assimilation patterns are not completely regular, this list was then divided into two sections - those changes that were frequent, e.g. f → f, Ar: \int ijil → Ms: \int ijil 'turnip', and those that were not, e.g. f → b, Ar: faras → Ms: bere 'horse'. These variants, listed in the sound substitution table in 4.1 below, may have been due to:

- (i) the process of assimilation being incomplete,
- (ii) words being adopted by different routes,
- (iii) the phonological environments within which the changes occurred being different.
- (iv) the existence of free variants at the time of adoption (which may not be so now),
- (v) the adoption of lexemes from different kinds of Arabic.

By reference to the other languages mentioned above, where the Arabic/Masalit correspondences were not simple, a picture of putative intermediaries was built up. These were more difficult to detect as a much smaller body of words formed the data base, and for a phonological change to be granted the status of a 'rule' there should be no less than three attestations of that change in similar phonetic environments (after Guthrie's rule, 1967:18).

Lists of Maba/Masalit cognates and putative Hausa/Masalit, Fur/ Masalit, Fulfulde/Masalit and Kanuri/Masalit equivalents were also drawn up, both of ultimate Arabic and non-Arabic origin.

Those of non-Arabic origin were included in an effort to identify regular phonological equivalences between the various languages and Masalit to help clarify explanations of irregularities of phonological correspondences between Arabic and Masalit. These languages and others were searched for possible intermediaries for adoptives from Arabic in Masalit; other languages were also searched but not as systematically, for the reasons given above.

From these tables, patterns of phonological assimilation of Arabic adoptives in Masalit were formulated, and where the data showed variations hypotheses to explain the variations were made - sometimes involving adoption via an intermediary language. These are set out in sections 4.2 and 4.3, giving representative examples of each phonological equivalence with numerical references to other examples listed in the short lexicon in Appendix E - to give an idea of the relative frequency of equivalences where there are variations.

Also, by comparisons of the material in the tables of singular/plural suffixes (p.78), predicative copulas (p.74), and adverbs (p.84) with suffixed material given below (summarized in section 4.1), it was possible to identify adoptives which have phonological differences only and those with both phonological differences and additional Masalit morphological suffixes.

Quantitative statistics were drawn up for:

- (i) the percentage formed by Arabic adoptives of the total Masalit lexicon and in selected basic word-lists;
- (ii) semantic zones.

They were used, in the light of information given in the Introduction and Background, to speculate on the comparative importance of cultural, economic and political aspects of the adoption of Arabic lexemes into Masalit.

ANALYSIS

4.0 ANALYSIS OF ARABIC-MASALIT EQUIVALENCES

Following the principles set out above, I made a rough division of the data into lexemes assumed to have been adopted directly and those adopted indirectly from Arabic, which is the basis for section 4.3. The corpus of data is given in Appendix E. Direct adoptives are characterized by the maintenance of word-shape apart from the change of non-Masalit to Masalit sounds according to regular equivalences and the addition of one of a number of Masalit suffixes. Assumed indirect adoptives are characterized by irregular sound substitutions and phonological changes that cannot be explained in the light of synchronic Arabic and Masalit phonology (outlined above, 2.1 and 2.2), but which may be so by adoption via intermediary languages or possibly by diachronic phonological changes. Direct adoptives are far the larger group and as there have been native Arabic speakers of considerable economic and social significance (other than the nomadic Baggara) in Dar Masalit for over one hundred and fifty years this should not be surprising. Indirect adoptives are fewer and appear to be more irregular, as they have passed through more than one phonological system. Further, as there are so few examples, it is difficult to isolate any individual language as an intermediary as has been done for Bidyo adoptives from Arabic via Daju (Alio, 1985).

To summarize, from the point of view of the different sound changes that occur three categories may be distinguished:

- 1) No changes, i.e. the sound is indigenous or an 'extraneous' imported phoneme in Masalit.

- 2) Regular changes, i.e. that may be explained on the grounds of Masalit and Arabic phonology.

- 3) Irregular changes, i.e. either not explicable by direct adoption from the Arabic etyma or explicable by different Masalit solutions to the same phonological problem or by intermediate phonological systems.

4.1 SUMMARY TABLE OF ARABIC-MASALIT EQUIVALENCES

Below is the list of observed phonological maintenance and changes and morphemic additions for both direct and indirect adoptives based on a corpus of lexical data (given in Appendix E). Where there is more than one sound in Masalit corresponding to a CL.Arabic sound these are given separated by / (and are often the same as CQ.Arabic variant sounds). Where there is a variant sound that occurs in only a few uncommon examples it is given in parentheses following the common variant(s), e.g. for Arabic /b/, (F m) in the Masalit column indicates that /m/ is an uncommon equivalence of Arabic /b/ in final position in Masalit; many indirect adoptives are in these groups.

I, M, F = word-initial, -medial, -final respectively.

Phonological correspondences in Arabic and Masalit

(using *Classical* Arabic as the reference - to demonstrate whether Masalit has adopted from the classical or colloquial language)

Consonants:

	CL.Arabic	CQ.Arabic	Masalit			
			I	M	F	
bilabial	b	b	b	b	b	(I w) (M f) (F m/n/ø)
	m	m (b)	m	m	m	(b)* *= CQ.Arabic
labio-dental	f	f	f	f	f	(I b/p) (M b)
dental/ alveolar	t	t	t	t	t	
	ṭ	t	t	t	(d)*	*only one example
	d	d	d	d	d	(IMF t)
	ḍ	d	d	d	d	
	n	n	n	n	n	
	l	l	l	l	l	(? M r) (F ø)
	r	r	r	r	r	(M l)
	ḍ	d*/z	-	z	-	*no examples
	θ	t/s*	t	d	-	*no examples
	s	s	s	s	s	(IF ø)
	ṣ	s	s	s	s	
	z	z	z	z	z	(IM s) (I j)
	ẓ	z/d	z/d/s	z/d	-	(I nj)
palatal/ p.-alveolar	ʃ	ʃ	ʃ	ʃ	ʃ	(M j)
	j	j (k)	j	j	j	(F g)

	CL. Arabic	CQ. Arabic	Masalit			
			I	M	F	
velar	k	k	k	k	k	
uvular	q	g (ja)	g	g	k	(IM k) (F ja)*
	χ	χ (ja)	x/h/k	x/h/k	x	(ja)* *= CQ Arabic
	γ	g/χ	x/g/k	ø	k	(few examples)
pharyngeal	h	h	h	h	ø	(IM ø) (IM k)
	'	ø/?	?	ø	ø	(IM h)
glottal	h	h	h	h/ø	ø	(I ø)
	?	?	?	ø	ø	
semi-vowels	w	w	w	w	w	(I m)
	y	y	y	y	y	

There are examples of simplification of the following medial geminates: bb tt dd ss zz ll rr yy; there is only one example of medial geminate maintenance: ll. No final geminates are maintained.

Vowels:

	CL. Arabic	CQ. Arabic	Masalit			
			I	M	F	
Front	i	i	i	i	i	(M a/e/o/u) (F ø)
Central	a	e a	- a	e a/e	- a/o	(M i/u/εi)
Back	u	o u	- -	o u/o	- -	(M i/e)

There are many examples of contraction of the following long vowels: aa, ii, oo, uu; there are a very few examples of maintenance of medial ii and aa.

There are three other phenomena in addition to the correspondences and contractions listed above:

Epithesis: addition of -o, -a, -i in Masalit (not in CQW)

Epenthesis: insertion of a, e, i, u (in CQW as well as Masalit)

Diphthong simplification: only for aw → o

Morphemic additions (these are all suffixes and are apparently idiosyncratic):

singular suffixes: -ko (-go), -gi, -ti, -kV-di, -ldi

plural suffixes: -ta

adverbial suffixes: -ken(a), -loka

copula suffixes: -te, -re, -iyε

undetermined: -to, -kwe, -anu, -ma, -k

General patterns

1) Taking *classical* Arabic as the source reference, the following larger Arabic/Masalit phonological patterns are discernible:

(i) the pharyngealized series of consonants are lost and merge with their plain counterparts.

(ii) Arabic uvular consonants are lost and merge with their velar counterparts.

(iii) Arabic pharyngeal consonants are lost and merge with their glottal counterparts or are deleted.

(iv) Ar /a/ → Ms /a,e/ and Ar /u/ → Ms /u,o/

2) Taking *colloquial* Arabic as the source reference no larger Arabic/Masalit phonological patterns were discernible, i.e. the patterns set out in 1) occur between CL and CQW as well as between CL and Masalit, strongly implying that CQW is the source of Arabic adoptives in Masalit.

4.2 EXAMPLES OF ARABIC-MASALIT EQUIVALENCES

Below are set out examples illustrating maintenance or change from Arabic to Masalit as summarized in 4.1. Following each group there is a brief commentary as to whether the changes that occur may have been between classical Arabic or the colloquial and Masalit. Where the etymology seems clear this is indicated. Equivalents in other languages may also be given where a putative indirect route is involved and a forward reference made (to Fur 4.3.1, Kanuri 4.3.2, Fulfulde 4.3.3, Hausa 4.3.4, Maba 4.3.5).

As listing complete sets of examples for each change or maintenance would be tedious I give representative examples illustrating equivalences, followed by lists of the numbers of further items that may be found in Appendix E. Where *no* list of numbers is given, the examples set out are the *only* ones available.

I, M and F refer to initial, medial and final position respectively.

4.2.1 PHONOLOGICAL CHANGES AND MAINTENANCE

4.2.1.1 CONSONANTS

4.2.1.1.1 BILABIAL

	CL.Arabic	CQ.Arabic	Masalit		
b→b					
I	sweet-potato	bembe	bembe	sweet-potato	
	7, 92, 149, 212, 277,	406, 422,	492, 566	et al.	
M	drum	tabl dabal	dabala	dancing place	
	18, 48, 77, 133, 134,	148, 214,	224, 265,	267, 280, 304 et al.	
F	moustache	ʃanab	ʃenab	ʃenab	moustache
	near	qarab	garab	garab	near
	37, 96, 99, 175, 215,	239, 349,	350, 547,	582, 591 et al.	
b→f	waterbag	qirba	girba	girfe	waterbag (Ha 4.3.4)
				karfa-to	"

	CL. Arabic	CQ. Arabic	Masalit	
b→m Arab	'arab	arab	aram-ta	Arab-s (cf. Tama arman)
b→n Arab	'arab	arab	erin-gi	Arab (cf. Goran arun)
b→w lightning	barq	barag	walak	lightning (Ha 4.3.4)
b→ø crow	yuraab	guraab	agura	crow (Mb 4.3.5)
chameleon	alhirba	alhirba	lera	chameleon (Mb 4.3.5)
bed	- -	angariib	kara	bed (Mb 4.3.5)

It appears clear that, as /b/ is common to both Masalit and Arabic, it is maintained in direct adoptives. The other instances appear to be all indirect and are discussed further in the section on indirect adoptives.

	CL. Arabic	CQ. Arabic	Masalit	
m→m				
I wealth	maal	maal	mal-ko	wealth, animals 23, 55, 109, 110, 123, 239, 384, 435, 460, 470, 475, 482 et al.
M number	nimra	nimara	nimara	number 16, 60, 133, 199, 213, 227, 251, 388, 418, 455, 490, 535 et al.
F necessary	laazim	laazim	laazim	necessary 192, 308, 371, 395, 559, 774 et al.
m→b mirror	miraaya	biraya	biraye	mirror

As for /b/, with one exception /m/ is maintained in all instances; as the m→b change has already occurred between CL and CQW in that exception it is reasonable to suppose that it was adopted by Masalit from CQW.

4.2.1.1.2 LABIO-DENTAL

CL.Arabic CQ.Arabic Masalit

f→f

I	turnip	fijil	fijil	fijil	turnip
	understanding	faahim	faahim	fohimte	clever
		68, 95, 162, 245, 479, 574, 575, 661, 704, 936, 974, 975, 990			
M	key	miftaah	miftaah	mufta	key
		2, 59, 116, 143, 189, 374, 399, 428, 475, 535, 791, 921			
F	clean	naziif	naziif	nadiif	clean
		5, 41, 173, 305, 403, 450, 621, 630, 780, 798, 862			

f→b	peasant	fallaah	fallaah	bala	peasant (Ha 4.3.4)
	horse	faras	faras	bere	horse (see 4.4)
	mat	firaaf	birif	baji	mat (Fl 4.3.2 Kn 4.3.3)
f→p	saddle cushion	firaaya	firaaya	pirayo	saddle cushion
	autumn	ẖariif	ẖariif	kariip	autumn (Yahya)

As for /b/ and /m/, /f/ is maintained in most instances. Where there is change to /b/ it appears that the examples are indirect. The change to /p/ is less clear, there is no complementary distribution according to this data: these are the only examples. There may be dialectal variation involved as *kariip* is given in Yahya's data for 'autumn', whereas my own data has *xarifu* and that of Arkell has *harifo*.

4.2.1.1.3 DENTAL/ALVEOLAR

CL.Arabic CQ.Arabic Masalit

t→t

I	tobacco	taabaa	taabaa	taba	tobacco
		170, 393, 405, 450, 558, 569, 596 et al.			
M	maize	- -	abuu batta	ababata	maize
			2, 175, 239, 405, 419, 422, 475, 482 et al.		
F	time	waqt	wagit	wakit	time
		18, 374, 406, 881			

CL.Arabic CQ.Arabic Masalit

t→t

I	divorce	ṭḥlaaq	tulaag	tulak	divorce
					814, 917
M	red pepper	ṣaṭṭa	ṣatta	ṣeto	red pepper
					53, 110, 240, 832, 899, 1010

ṭ→d

	simple	basiiṭ	basiiṭ	basida	simple
--	--------	--------	--------	--------	--------

d→d

I	cock	diik	diik	dikko	cock
					16, 61, 104, 105, 197, 215, 216, 224, 225, 234, 256, 261 et al.
M	hunting	ṣayd	sayda	seidagi	(wild) animal
					8, 24, 77, 123, 218, 277, 312, 378, 443, 542, 569 et al.
F	slave	'abd	abid	abid	slave
					292, 293, 443, 464, 634, 851

d→t

	stupid	baliid	baliid	balit	stupid
	lake	rahad	rahad	ret	lake
	enclosure	- -	darduur	tartar-ko	enclosure

d→d

I	guest	ḍaif	daif	dəif	guest
					96, 514, 589, 747
M	muscles	'aḍalaat	adalaat	adalat	muscle
					64, 481
F	illness	marḍ	mar(a)d	marad	illness
					279

CL pharyngealized /ṭ/ and /ḍ/ merge with their plain counterparts in both CQW and Masalit, /t/ is maintained in all cases and /d/ in most cases. The three cases where /d/→/t/ do not appear to be phonologically conditioned (e.g. by the presence of non-back vowels), I have been unable to find intermediaries to explain them. Similarly for /ṭ/→/d/, a unique case.

CL. Arabic CQ. Arabic Masalit

n→n

I	breath	naf ^a s	nefes	nefes	breath
					37, 173, 237, 259, 266, 477, 563, 627 et al.
M	hat	- -	burneita	burneita	hat
					53, 55, 105, 123, 143, 256, 265, 323, 357 et al.
F	lime	liimuun	liimuun	liimon	lime
					22, 188, 189, 225, 234, 240, 242, 265, 418, 432, 434 et al.

l→l

I	saddle- Alt	libd.	libda	libda	saddle
					138, 155, 188, 229, 490, 519, 733, 815
M	cupboard	duulaab	duulaab	dolab	cupboard
					39, 205, 229, 244, 261, 297, 368, 385, 395, 450 et al.
F	gravy	kawaal	kawaal	kawal	gravy
					12, 23, 68, 214, 224, 245, 303, 413, 445 et al.

l→r

shade	zill	dull	asro	shade (?Mb 4.3.5)
				(or < *aşr afternoon)

l→ø

lawful	halaal	halaal	kala	good (Fl 4.3.2, Mb 4.3.5)
--------	--------	--------	------	------------------------------

r→r

I	20 piastres	- -	riyaal	riyal	twenty
					489, 559, 615, 714, 736, 797, 823, 845, 849, 979
M	number	nimra	nimara	nimara	number
					2, 5, 33, 34, 41, 59, 60, 92, 96, 110, 133, 134, 148 et al.
F	zero	şifr	sifir	sifir	zero
					7, 50, 64, 83, 139, 170, 174, 212, 213, 227, 237, 256 et al.

r→l

lightning	barq	barag	walak	lightning (Ha 4.3.4)
-----------	------	-------	-------	-------------------------

The dental nasal /n/ is maintained in all cases. In most cases /l/ and /r/ are maintained. The /l/→/ø/ example is unique and may be explained by a Fulfulde or a Maba intermediary. The /l/→/r/ example is more tentative - possibly via Maba, or possibly an equivalent of Banda **kuzro** 'shade' (and so not an Arabic adoptive at all). Of the /r/→/l/ examples one may be explained by a Hausa intermediary, two are dubious.

		CL.Arabic	CQ.Arabic	Masalit	
θ→t	garlic	θuum	tuum	tom	garlic
	ice, snow	θal ^h	telij	telij	ice, snow
θ→d	many	kaθiir	katiir	kadur/kodir	many
ð→z	permission	iðn	izin	izinko	permission
	seed	bððr	bizer	bizera	seed
s→s					
I	hammer	sindaal	sindaal	sindala	small hammer
		65, 280, 395, 456, 549, 595, 685, 698, 748, 757, 760 et al.			
M	school	madrasa	madrasa	madrasa	school
		154, 242, 252, 293, 357, 597, 609, 625, 636, 720, 763 et al.			
F	copper	nahaas	nahaas	nahas	drum
		116 149			
s→ø	horse	faras	faras	berε	horse (see 4.4)
	six	sitta	sitta	iti	six (Mb 4.3.5)
ʃ→s					
I	morning, dawn	ʃab ^a ah	sabaah	saba	east
		5, 24, 105, 308, 464, 663, 706, 901			
M	warning	naʃiiha	nasiha	nuso	warning
		7, 245, 349, 445, 449, 648, 804			
F	no examples				

The few CL examples with /θ/ and /ð/ show maintenance of the CQW /t/ and /d/ reflexes in Masalit except for CQW /t/→Masalit /d/ in intervocalic position (similar to the exceptional /t/→/d/ above). Perhaps this voicing is due to being in intervocalic position; however, this is not a regular process and there are counter examples (see above, t→t). CL pharyngealized /s/ merges with its plain counterpart in all cases and /s/ is maintained in most cases. The two examples of deletion of /s/ may be explained by the presence of Maba intermediaries.

		CL.Arabic	CQ.Arabic	Masalit	
z→z					
I	adultery	zinaa?	zinaa?	zina	adultery
		369, 551, 791, 1006			
M	bachelor	a'zab	azaabii	azabi	bachelor
	bottle	(zujaaja)	gazaaza	gazaza	bottle
	butcher	jazāar	jezaar	jezar-ti	butcher
		100, 139, 379, 547, 592, 660, 711, 912, 914			
F	cache-sexe	- -	kanfuuz	kunfuz	cache-sexe
z→s					
I	cultivation	ziraa'a	ziraa	asur-ti	farm (Mb 4.3.5)
M	winner	faa?iz	faa?iz	fais-te	winner
	inactive	'ajz	ajez	ajes-ta	lazy
	marriage	(zawaaj)	jawaaz	jise	marriage
	sandy plain		gooz	kase	country, bush (Ha 4.3.4)
z→j					
I	nosering	zumaam	zumaam	jumam-ko	nosering
I	stockade,	zariiba	zariiba	jerbe	family (?)
z→d					
I	noon	zühr	zuhur	duhur-ko	noon (prayer)
	noon	zühr	zuhur	durɔ	noon (time)
M	view, mirror	manzara	mandara	mandara	mirror
	clean	naziif	nadiif	nadiif	clean

		CL. Arabic	CQ. Arabic	Masalit	
z→z	clear	z ^a ahir	z ^a hir	zahir-te	clear
I	noon	zuhr	zuhur	zuhur-ko	noon (prayer)
M	official	muwazzaf	muwazzaf	muwazaf	official
z→s	back (anat.)	zahr	dahr	sar-gi-ko	back (Fu 4.3.1)
I	shadow	zill	dull CQN	asro	shadow (Mb 4.3.5)
z→nj	shadow	zill	dull CQN	anjilo	shadow (Mb 4.3.5)

The phoneme /z/ is extraneous in Masalit and only occurs in lexemes of Arabic origin. Initially and medially it appears to be maintained (the exception 'cultivation', may be explained by a Maba intermediary).

The other exceptions - where initial /z/→/j/ are perhaps older adoptives, adopted when /z/ was not one of the Masalit set of phonemes (and /j/ would have been the nearest similar *voiced* sound). There is an interesting analogy with the voicing of /s/ initial verb bases, where /s/→/j/ when rendered initial by the deletion of the initial vowel of the base; e.g. (see p.67)

m-isere 'we see' **jere** 'you S see' **t-isere** 's/he sees'

Perhaps this is an indication of the existence of a proto-phoneme /s/ with realizations [j] initial, [s] non-initial, and later [z] - this is no longer the case in Masalit, but it could explain the /z/→/j/ equivalents: i.e. Arabic initial /z/ would have been heard as initial /s/ and realized as [j], which form became fixed in the lexicon.

There is only one example of maintenance where /z/ is final in Arabic, the other examples all show devoicing and the addition of an epithetic -ε or a -ta/-te suffix - perhaps indicating a trend to intolerance of final /z/.

CL pharyngealized /z/ merges with its plain counterpart /z/ and also /d/ in CQW. These are maintained in Masalit with three exceptions ('back, shadow, shadow') explicable by Fur and Maba intermediaries and two other exceptions one of which appears to exhibit a z/d free variation: **zuhurko/duhurko** 'noon (prayer)', and the other, **dur** may be derived from **duhurko**. there are few other examples of Arabic fricatives corresponding to Masalit plosives (see 4.2.1.1.6, Uvular).

4.2.1.1.4 PALATO-ALVEOLAR AND PALATAL

CL. Arabic CQ. Arabic Masalit

ʃ→ʃ

I	moustache	ʃanab	ʃanab	ʃenab	moustache
		53, 189, 213, 240, 475, 568, 621, 670, 731, 847, 920			
M	lungs	- -	amfaʃfaʃ	amfeʃfeʃ	lungs
		37, 709, 980			
F	tweezers	mɪnqaʃ	mungaʃ	mungaʃ	tweezers
		81, 289, 535, 567, 832			

ʃ→j

	mat	firaaʃ	birɪʃ	bajɪ	mat
--	-----	--------	-------	------	-----

j→j

I	smallpox	jadari	jadari	ʃedari-kodi	smallpox
		441, 570, 678, 725, 983, 1009			
M	wheel	'ajala	ajala	ajela	wheel
		18, 22, 163, 265, 398, 405, 444, 545, 558, 574, 628 et al.			
F	ice, snow	θal j	telij	telij	ice, snow

j→g bracelet dumɫuj dumɫuj dimɫig official (Fu 4.3.1)

/ʃ/ is maintained in all examples with two exceptions which exhibit /ʃ/→/j/ correspondence; 'mat' may be explained by a Fulfulde or Kanuri intermediary, 'instinct' is dubious (it is included in the list as my informants noted it as of 'Arabic origin').

With one exception /j/ is maintained in all examples. The exception may be explained by a Fur intermediary.

4.2.1.1.5 VELAR

CL.Arabic CQ.Arabic Masalit

k→k

I	gravy	- -	kaawal	kawal	gravy
	12, 99, 143, 154, 175, 342, 444, 455, 543, 545, 609 et al.				
M	but	laakin	laakin	lakin	but
	225, 237, 239, 261, 388, 698, 709, 741, 785, 790 et al.				
F	snake (sp.)	- -	abuu juuluk	abujuluk	snake (sp.)
	92, 1041				

/k/ is maintained in all cases.

4.2.1.1.6 UVULAR

q→g

I	ugly	qabi ^h h	gabli ^h h	gebli	ugliness
	81, 100, 104, 312, 481, 547, 567, 591, 691, 705, 730 et al.				
M	shield	dar ^ā /qa	darga	darga	shield
	83, 189, 256, 259, 369, 512, 634, 669, 704, 786, 814 et al.				

q→k

I	acceptance	qabuul	gabuul	kabul-to	cup (cf. CQN: kabeeto 'gourd')
	hospitality				country (Ha 4.3.4)
	sandy plain	-	gooz	kase	bark
	tree-bark	qirfa	girfa	kérfé-ldi	waterbag (Ha 4.3.4)
	waterbag	qirba	girba	karfa-to	'must'
	definite	qaṭ'ii	gatʔii	kate	cold (Mb 4.3.5)
	cold (adj.)	qirra	girra	keri-ma	time
M	time	waqt	wagit	wakit	official
	official	maqduum	magduum	makdum	islamic holy man
	legist	faqi ^h h	fagi ^h h	faki	orange
	orange	burtuqaan	burtugaan	bortokan	divorce
F	divorce	ṭḍlaaq	tulaag	tulak	
	105, 110, 184, 205, 516, 549, 575, 589, 726				

	CL.Arabic	CQ.Arabic	Masalit	
q→ja plum CQE	albarquuq	ambarguuja	amborkuja	quince
χ→ja chicken	firaax	faruuja	feruja	chicken
				(cf. Mb: ferx)

The equivalents of Arabic /q/ in Masalit are /k/ and /g/. Judging by the *frequencies* of occurrence there appears to be a complementary distribution pattern with /g/ in initial and medial position, /k/ in final position. There are, however, a number of examples of /k/ in initial and medial positions. This situation is reminiscent of the j-z/s situation discussed in 4.2.1.1.3 and might be part of a larger trend of 'initial voicing'. However, it does not appear to be clear and there are many exceptions with conflicting correspondences, e.g. CQW gat?il → Ms kate 'must', but CQW gabiih → Ms gebi 'ugly'.

The CL /q/ → CQW /ja/ → Ms /ja/ equivalences show unequivocally the source to be colloquial rather than classical. It is interesting to note on the other hand that the Maba equivalent appears to have classical as its source.

χ→h

I	autumn	χariif	χariif	harifo	autumn (Arkell)
	prostitute		χajala	hajala	prostitute
	creation	χal q	χalag	halak	creation
	better	χair	χair	hor-ti	good (cf. Mb: xerte 'better')
M	miser	baxiil	baxiil	behil-te	miser (Arkell)

χ→x

I	autumn	χariif	χariif	xarifu	autumn (Edgar)
	better	χair	χair	xor-ti	good
					378, 449, 1052, 1055
M	dirty	wasχaan	wasχaan	wasxan-te	dirty
	pillow	miχadda	maxadda	maxada	pillow
					497, 604
F	brain	mux ^χ	mux ^χ	mux	brain
	paper	far ^χ	farax	farax	paper

CL.Arabic CQ.Arabic Masalit

 $\chi \rightarrow k$

I	autumn	χ ariif	χ ariif	kərip	autumn (Yahya) (cf. Ak: kərip)
	aunt (mat.)	χ aala	χ aala	kala	aunt (mat.)
	hermitage	χ alwa	χ alwa	kalawa(na)	religious wake
	bead	χ adur	χ adur	kodir	bead
M	incense pot	m χ bara	m χ abar	mukabar	incense pot
	my brother	a χ ii	a χ uui	ikwi	friend
	smoke	du χ aan	du χ aan	dokonta	herbs

The equivalents of Arabic / χ / in Masalit are /h/, /x/ and /k/ in fairly even proportion in initial and medial positions. There are only two examples for final position and both of these are Masalit /x/. /x/, like /z/, is extraneous in Masalit and occurs only in words of Arabic origin. /h/ occurs in indigenous lexemes but is uncommon and occurs mainly in initial and never in final position. /k/ is a common phoneme in all positions. It seems clear that, unlike in the case of /q/, there is no complementary distribution here, rather a possible free variation in some cases, e.g. **xorti/horti** 'good' were quoted to me as free variants and the three variant forms of 'autumn', **harifo/xarifu/kərip** support this. It should however be noted that the three are from three different sources - Arkell, Yahya and one of my own informants, whereas 'good' was from the same informant. There appears to be no phonological conditioning determining the selection of /x/, /h/ or /k/. There is another example of a free variation between a plosive and a fricative, **zuhurko/duhurko** 'noon-prayer' (see 4.2.1.1.3), however, that is the exception and not the rule. Apparently for the equivalents of Arabic / χ / there is a free variation. This might be explained by the recentness of the acquisition of /x/ as a phoneme in Masalit (perhaps it was formerly an allophone both of /h/ and of /k/). See 5.3.2 (p.177) for further discussion of this phenomenon in the context of phonological assimilation.

CL. Arabic CQ. Arabic Masalit

γ→x

I	negligence	γafal	χafal	xafal	confounding (Davies)
	extortion	γaṣb	χasab	xasab	force

γ→g

I	dust	γubaar	gubaar	gubarta	dust
	west	γarb	garb	garbi	west
	210, 350, 399				

γ→k

I	sheath	γilaaf	gilaaf	kalfi	sheath
F	maturity	buluuy	buluug	balak	suitable, ripe

γ→ø

M	work	ʃuyl	ʃuul	ʃul	work
---	------	------	------	-----	------

/γ/, the voiced counterpart of /χ/, has a range of four equivalents in Masalit. The most plausible explanation for this is that as CL /γ/ either merges with /χ/ into CQW /χ/ or is equivalent to CQW /g/, or intervocalic /ø/, that CQW was the source of Arabic adoptives. CQW /g/, as has been shown above, has equivalents /g/ and /k/ in Masalit.

4.2.1.1.7 PHARYNGEAL

CL. Arabic CQ. Arabic Masalit

'→ø

I	twenty	'iʃriin	?iʃriin	iʃrin	twenty
	gruel	'ajiina	?ajiina	ajiina	gruel
		7, 33, 34, 48, 77, 148, 218, 305, 374, 427, 432, 443 et al.			
M	cure	da waa'	da waa	dawa	cure
	spoon	mi'laqa	maʔalaga	maalaga	spoon
		8, 265, 307, 456, 855, 917			
F	mint	na'na'	naʔnaʔ	nana	mint
	week	usbuu'	usbuuʔ	subo	week
'→h	basket	'umra	?umra	humura	basket
	angry	za'jaan	zaʔjaan	zahjante	angry (Arkell)

The deletion of /ʔ/ is regular in any position in the word. /ʔ/ is not a Masalit phoneme and has no close equivalent apart from glottal fricative /h/ and prevocalic initial glottal stop, which is a phone but not a phoneme in Masalit. As all initial vowels in Masalit are preceded by glottal stop (which is hence not marked), one could say that the replacement of /ʔV/ by /?V/ is simply the predictable condition of vowels made initial by the deletion of /ʔ/, rather than any inherent equivalence of the Arabic phoneme /ʔ/ and the Masalit phone /?/. This point is supported by the absence of the glottal stop in the place of deleted /ʔ/ in medial and final positions. **humura** 'basket' however is problematic; Arkell however gives **umur** or **omra** instead of **humura**. Perhaps the latter is an intermediary step (in a hypothetical scheme **'umra**→**humura**→**umura**) with initial /h/ being deleted. However this must be considered unlikely as there is only one other instance of initial /h/ deletion (which is itself subject to contradictory attestations, see below p.114 'amulet'). The replacement of /ʔ/ by /h/ in **za'jaan** (Masalit: **zahjante**) 'angry' presents a problem similar to that posed by **'umra**→**humura**; it appears to go against the system as medial /h/ is rare in indigenous Masalit lexemes, either as an intervocalic consonant or in a cluster. However, like **humura**, it might represent an intermediate form; such a

hypothesis is supported by the attestation of the form *zaj* 'anger' < Ar: *za'j* by Doornbos.

The deletion of /' / in medial position is accompanied by a contraction of V lengths (except in *ba'adu* → *baadu* 'afterwards') - in itself a characteristic of Masalit equivalents of Arabic lexemes (see below section 4.2.1.2.4).

	CL.Arabic	CQ.Arabic	Masalit	
h→ø				
I	amulet	<i>hijaab</i>	<i>hijaab</i>	<i>ijaba</i> amulet
M	lake, pool	<i>rahad</i>	<i>rahad</i>	<i>ret</i> pool
	sacrifice	<i>ḡahiya</i>	<i>dahiya</i>	<i>dəio/dəyo</i> sacrifice
F	morning	<i>ṣabaah</i>	<i>sabaah</i>	<i>saba</i> east
	wind	<i>riih</i>	<i>riih</i>	<i>ri</i> north (Fu 4.3.1)
	104, 199, 479, 482, 665, 747, 815, 845, 984, 1016			
h→h				
I	amulets	<i>hijaabaat</i>	<i>hijaabaat</i>	<i>hijabat</i> amulet (Doornbos)
	enclosure	<i>hawf</i>	<i>hoof</i>	<i>hojko</i> enclosure
	134, 251, 292, 293, 356, 388, 680, 930, 994, 1003, 1007, 1010			
M	river, sea	<i>baħr</i>	<i>bahar</i>	<i>bahar</i> river
	nomads	<i>ruhaal</i>	<i>ruhaal</i>	<i>ruhal</i> nomad
	260, 419, 685, 716			
h→k				
	lawful	<i>halaal</i>	<i>halaal</i>	<i>kala</i> good (Fl 4.3.2)
	cf rabid		<i>jahmaan</i>	<i>jakumun</i> rabid

Pharyngeal CL /ħ/ merges with glottal /h/ in CQW (see below). There appears to be a complementary distribution of the equivalents of CL /ħ/ - with initial and medial CL /ħ/ equivalent to Masalit /h/ and final CL /ħ/ deleted in Masalit. The final deletion is without exception, but there are two examples of medial deletion and 'amulet' appears to have two discrete forms (derived from the Arabic singular and plural). Of the irregular /ħ/→/k/ equivalences, 'lawful' may be explained by a Fulfulde intermediary, however, I have been unable to find any intermediary for 'rabid'.

4.2.1.1.8 GLOTTAL

	CL.Arabic	CQ.Arabic	Masalit	
h→h				
I now	haḍihi ssaa'a	haasaa	hasa	now
	826, 916, 1022, 1023			
M noon	ẓuhr	zuhur	duhurko	noon prayer
family	ahl	ahil	ahil-ta	family
	174, 192, 502, 990			
h→∅				
I barbarian	hamajii	hamaajii	maji	slave (Fl 4.3.2)
M noon	ẓuhr	zuhur	durɔ	noon-time
back anat.	ẓahr	dahr	sar-gi(-ko)	back (Fu 4.3.1)
circumcision	ṭahaara	tahaara	taar	circumcision (Doornbos)
F pound (£)	jinaih	jineih	jine	pound (£)
ʔ→∅				
M winner	faaʔiz	faʔiiz	fais-te	winner
	16, 81, 443, 477, 589, 720			
F adultery	zinaaʔ	zinaaʔ	zina	adultery
	95, 514, 704, 730, 757, 812, 999, 1053			

The distribution of Masalit equivalents of Arabic /h/ is similar to that of CL /h/ (not surprising, as mentioned above CL /h/ merges with /h/ in CQW). The deletions of initial and medial /h/ may be explained by intermediaries for 'slave' and 'back'.

The consistent deletion of glottal stop in medial and final positions is expected since, as mentioned above, [ʔ] is non-phonemic and restricted to being initial and prevocalic.

The three equivalents of ẓuhr 'noon': durɔ 'middle of the day, daytime' and zuhurko/duhurko 'midday, midday prayer' appear to have been derived separately, possibly along the following lines:

(i) ẓuhr →(→duhr→)→durɔ (cf. Ta: dirro 'day')

(ii) ẓuhr →(→duhr→)→duhur→)→ duhurko +*

(iii) ẓuhr →(→zuhr→)→zuhur→)→ zuhurko +* * free variants

The order of changes cannot strictly be verified in a synchronic study. However, it does seem reasonable to place the $z \rightarrow d$ change first as it is common to both (i) and (ii) and /z/ is not in the phoneme inventory of Masalit. In (ii) $Vh \rightarrow VhV$ seems a reasonable second step as the $CVhVC$ pattern is attested elsewhere (*bahar, ruhal*) and this avoids the creation of a C cluster /hrk/. In (i) $Vhr \rightarrow Vr$ also seems a reasonable possible second step as the $CVh(V)C \rightarrow CVC$ pattern is attested elsewhere (*rahad \rightarrow ret, \text{ṭahaara} \rightarrow \text{taar}*). A similar process might have been passed through by the word for 'back (anat.)':

$zahr \rightarrow (\rightarrow zahr \rightarrow \rightarrow sahr \rightarrow \rightarrow sar \rightarrow) \rightarrow sar-gi \rightarrow sar-gi-ko +$
 + **-ko** and **-gi** are nominal singular suffixes.

It is worth noting that the Maba cognate for 'back' is *derin*, also apparently of the same Arabic origin, but by some different process (e.g. $zahr \rightarrow (\rightarrow dahr \rightarrow dar \rightarrow) \rightarrow derin$; **-in** being a separate suffix in Maba of uncertain meaning).

It is interesting to compare similar processes in Fulfulde of the Sudan (Abu Manga, 1986):

CL. Arabic	CQ. Arabic	Fulfulde	
zahrīyyah	ḡahrīyyah	duuriyya	late afternoon time/activity
zahrīyyah	ḡahrīyyah	daariyya	back of seat in the cab of a lorry

4.2.1.1.9 SEMI-VOWELS

	CL. Arabic	CQ. Arabic	Masalit		
w → w					
I	wide	waasi'	waasi	wasi	wide
	242, 635, 650, 946,		1038, 1053		
M	gravy	- -	kawaal	kawal	gravy
	216, 502, 551, 630,		757, 943, 970, 1022, 1023		
F	or	aw	aw	aw	or
w → m					
	south	waaṭa	waata	mota/muuta	south
	the well-trodden path	muwaṭṭ̣a	mowta*		* Baggara form

CL.Arabic CQ.Arabic Masalit

y→y

I	day	yawm	yawm	iyoom	future
	day	yawm	yawm	u yomko	one day
M	world	dunya	dunya	dinya	world
		148, 464, 564, 747,	750, 826,	851, 920,	979

Apart from one exception, the integration of /w/ and /y/ is straightforward. One point of interest is that although the CQW equivalent of CL **waaṭa** 'south' is **waata**, Masalit has adopted the Baggara Arabic form **mowta**, referred to by Asher (1984:87) as the name of the annual migration to the south of the nomadic Baggara Arabs.

4.2.1.1.10 SIMPLIFICATION OF GEMINATES

Simplification (degemination) of the following geminates has occurred:

	CL.Arabic	CQ.Arabic	Masalit		
bb	race	s.ḥbaaq	s.ḥbaag	sabak-ko	race (competition)
	millet beer	- -	qum zibb	gumzib	millet beer
tt	inspector	mufattiḥ	mufattiḥ	mufatiḥ	inspector
	maize	- -	abuu batta	ababata	maize
	red pepper	ṣaṭṭa	ṣatta	ṣeto	red pepper
	six	sitta	sitta	iti	six
dd	limit	ḥadd	ḥadd	ḥadi	enough
zz	official	muwaḏḏaf	muwazzaf	muwazaf	official
ll	peasant	fallaaḥ	fallah	bala	peasant
	all	kull	kull(i)	kuli	all
rr	free(dom)	ḥurr	ḥurr	hurto	free (person)
	land	barr	barr	buro	cultivable land
	accountant	ṣarraaf	sarraaf	saraf	accountant
yy	hunter	ṣayyaad	sayyaad	sayad-te	hunter
	smooth	ḥayyin	ḥayyin	ḥayin	smooth
	south	ṣayyid	sayyid	sayid	south
but:	village	ḥilla	ḥilla	ḥille	village

As with long vowels there appears to be a tendency for geminate liquids: /rr/ and /ll/ to simplify. However not all lexemes of Arabic origin are thus reduced (e.g. *hilla*→*hille*). Also as there are indigenous Masalit words with geminate /ll/ /rr/ /mm/ and /kk/ (e.g. *kulle* 'blacksmith, *lirra* 'heavy', see p.59), it could be a reflection of the phonological systems of intermediary languages (though such a hypothesis needs further evidence).

4.2.1.1.11 METATHESIS

Only three putative Arabic→Masalit metatheses were found and two of these are rather dubious:

	CL.Arabic	CQ.Arabic	Masalit	
name	is ^h m	isim	sami	namesake
			mirsi	name
for the sake of	min ja ^h n	min ja ^h an	janim	because *
week	usbuu ^h	usbuu?	subo	week

* An alternative etymology of *janim* could be the Arabic ja^hn + Masalit locative suffix -Vm.

Trenga (1947:35) notes the following metatheses of Arabic words in Maba used by *bilingual* Maba-speakers (i.e. the metatheses may occur in the colloquial Arabic itself and not be a function of any adoptive process):

I give Trenga's transcription of the Arabic, sometimes CQE or CQS.

Arabic	Maba
ḥadi	diit (breast)
jeḥḥaab	jebbaad (hook)
jeḥḥba	jebda (stage)
dejaaja	jedaada (chicken)
rehek	herek (grind, verb)
mirhak	mihrak (grinding stone)
neḥej	nejeḥ (ripen, verb)
ṣeḥa	ḥeṣa (awaken, verb)

4.2.1.2 VOWELS

Vowel change and maintenance between Arabic and Masalit equivalents is somewhat less regular than consonant change and maintenance. One aspect of vowel change is the addition of epenthetic and epithetic vowels. Most epenthetic vowels that occur in adoptives from Arabic in Masalit are already present in CQW Arabic - the strong implication of this being that Masalit has adopted from CQW Arabic. There is no such correlation for epithetic vowels however, the values of which appear not to be governed by any presently discernible phonological rules; there is a possibility that they are morphemic and have some semantic effect - as, like the suffixes listed under Morphemic Additions (4.2.2) they form a fairly small corpus which is apparently idiosyncratic.

The general pattern is one of maintenance of CQW phones in Masalit; however, there are numerous exceptions, many of which do not appear to be phonologically conditioned.

There are three vowel phonemes in both CL and CQW Arabic: /i/ /a/ /u/. In CQW there are five vowel phones: [i] [e] [a] [o] [u].

In Masalit, according to my data, there are eight vowel phones: [i] [e] [ɛ] [a] [ɪ] [ɔ] [o] [u]. Of these [ɔ] and [ɪ] occur infrequently and may be allophones of /o/ and /a/. According to Arkell's and Davies' data there are only five phones: [i] [e] [a] [o] [u]. According to Doornbos' and Yahya's data there are ten phones: [ɜ] and [ʌ] in addition to the eight listed for my data. Except where otherwise stated, Masalit data given is that collected by myself.

There are strictly no initial vowels in Masalit as all words that would otherwise be V initial have a preceding glottal stop. As this is non-phonemic it is unmarked and is disregarded for the purposes of position classification.

4.2.1.2.1 FRONT

	CL.Arabic	CQ.Arabic	Masalit	
i→i				
I family	'irf	?irif	irif	family
	77, 297, 419			
M arrow	niʃaab	niʃaab	niʃabko	arrow
	6, 18, 41, 65, 99, 138, 149, 174, 175, 184 et al.			
i→a dark	daakin	daakin	dukana	dark
i→e definite	qaʃʔii	gatʔii	kate	must
tree bark	qirfa	girfa	kerfeldi	tree bark
cold	qirra	girra	kerima	cold (Mb 4.3.5)
	CL.Arabic	CQ.Arabic	Masalit	
i→o dungbeetle	- -	abunjiʔraan	abunjoran	dung-beetle
health	'afii	?afii	afo/afi	health
i→u key	miftah	miftaah	mufta	key
many	kaθiir	katiir	kadur	many
cultivation	ziraa'a	ziraaʔa	asurti	farm, field (Mb 4.3.5)
coin	sikka	suksuk	suksukta	cowrie shells
e→e bending	- -	dunger	dunger	bending
	M 2, 199, 422, 432, 441			

In most cases /i/ is maintained in Masalit, in all cases [e] is maintained. Some irregularities are explicable by Maba intermediaries ('cold, farm') or by the CQW equivalent ('cowries'). There are some examples of likely phonologically conditioned equivalences; e.g. in 'dungbeetle' /i/→/o/ may have been conditioned by the back influence of the adjacent glottal stop, similarly for 'must' /i/→/e/. The other irregular equivalences show no clear phonological pattern.

4.2.1.2.2 CENTRAL

CL.Arabic CQ.Arabic Masalit

a→a

I	yellow	aşfar	asfar	asfar	yellow
		7, 33, 48, 265, 279, 303, 427, 432 et al.			
M	fate	qadar	gadar	gadar	fate
		5, 8, 22, 24, 33, 41, 50, 92, 100, 173 et al.			
F	lamp	lamba	lamba	lamba	lamp
		39, 53, 60, 100, 104, 134, 148, 162, 456, 460 et al.			


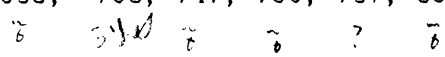
a→e

I	shawl	araaqiyya	araagiya	eragi	dress
	Arab	'arab	?arab	eringi	Arab
M	red pepper	ʃaʃʃa	ʃatta	ʃeto	red pepper
	moustache	ʃanab	ʃenab	ʃenab	moustache
		53, 59, 116, 123, 139, 229, 234, 252, 350, 475 et al.			
F	irrigation	zaqa	zaga	zage	garden
	mirror	miraaya	biraya	biraye	mirror

a→i

M	coffee	qahwa	gahawa	gihawante	lazy
	homosexual	xaşii	xaşii	xista	homosexual
	nosering	ʃanf	ʃenaf	ʃinifko	nosering
F	six	sitta	sitta	iti	six (Mb 4.3.5)

a→o

M	bead	xaður	xadur	kodir	bead
	understanding	faahim	faahim	fohimte	conscious
	smoke	duxaan	duxaan	dokonta	herbs
		64, 110, 188, 543, 850. 			
F	red pepper	ʃaʃʃa	ʃatta	ʃeto	red pepper
	soup	ʃurba	ʃurba	ʃurbo	soup
	intention	niiʔa	niiʔa	nio	intention
		598, 706, 747, 750, 797, 855			
					

(cf. epithetic vowel /o/ in Epithesis, below)

CL.Arabic CQ.Arabic Masalit

a→u

M	cache-sexe	- -	kanfuuz	kunfuz	cache-sexe
	dark	daakin	daakin	dukana	dark
	warning	naṣiiḥa	naṣiiḥa	nuso	warning
	land	barr	barr	buro	cultivable land
	impotent	talaf	talaf	tulfo	homosexual (man)
F	read	qara?	gara?	guru	reading

a→ei coffee-pot - - kafeterii keifeteri ablution vessel

In most examples initial /a/ is maintained. The two exceptions, /a/→/e/, 'shawl, Arab', both have /r/ following. Perhaps this is the determining condition as there are no examples of initial /a/→/a/ with /r/ following. However, it is dubious.

The largest number of examples of equivalents of Arabic medial /a/ exhibit maintenance or fronting to /e/ (the fronting occurs in CQW also). However, there are many examples of /a/→/o/, also of /a/→/u/ and /a/→/i/. There are no conclusive patterns here - all have examples of similar environments, e.g. preceding velar. Perhaps the epithetic -o has had a regressive assimilative effect in some cases of /a/→/u/, e.g. **buro** 'cultivable land' < **barr**. /a/→/ei/ is curious and **keifeteri** 'ablution vessel' is a unique example; it has an equivalent in Aiki, **kaptɛɛra**, their ultimate etymon being French *cafetière*.

Final /a/ appears to be more restricted in its equivalents. In most examples it is maintained. The /a/→/o/ examples may in fact be deletion of /a/ with /o/ epithesis (see 4.2.1.2.5), they do not appear to be phonologically conditioned. The /a/→/i/ example, 'six' may be explained by a Maba intermediary. The two /a/→/e/ examples may perhaps be explained by the influence of the CQ Arabic of northern Sudan (around Dunqula) where final /a/ is systematically realized as [e]; there is a community of Dunqulaawii merchants in Geneina and some of the larger villages of Dar Masalit.

4.2.1.2.3 BACK

	CL.Arabic	CQ.Arabic	Masalit	
o→o shoe	- -	zoriifa	zorifa	shoe
u→u poor people	fuqurā?	fugurā?	fugura	poor man
M	12, 60, 83, 96, 109,	154, 265, 378,	388, 393,	444 et al.

u→o smoke	duḡaan	duḡaan	dokonta	herbs
bustard	hubaara	hobaara	hobara	bustard
	215, 342, 371, 434,	519, 628, 653		

	CL.Arabic	CQ.Arabic	Masalit	
u→i cheese	jubna	jibna	jibna	cheese
	64, 68, 638			

u→e light	ḡúu?	duu?	de-kadi	light (of day)
u→ei Saudi	su'uudii	suwudii	suweidi	Saudi

Most examples of Arabic /u/ are maintained or opened to /o/ in Masalit (the opening occurs in CQW also). The /u/→/i/ example may be explained by the shape of the CQW form. The /u/→/e/ and /u/→/ei/ examples are more problematic, 'light' might be explained by the regressive effect of the morphemic suffix *-kadi*.

4.2.1.2.4 SHORTENING

	CL.Arabic	CQ.Arabic	Masalit	
ii→i				
M	fig	tiin	tiin	tini
	saddle	sar...j	sariij	serij
		123, 398, 399, 460,	566, 823, 893,	903
F	early	- -	badrii	bedri
			2, 154, 427, 479,	481, 628, 760, 822, 930, 943

CL. Arabic CQ. Arabic Masalit

aa→a

M	property	maal	maal	malko	cattle, wealth
	but	laakin	laakin	lakin	but
	dust	γubaa	gubaa	gubarta	dust
		5, 18, 22, 23, 37,	39, 48, 77,	81, 100,	134, 139 et al.
F	adultery	zinaa?	zinaa?	zina	adultery
		280, 297			

oo→o basket - - dooma doma basket

uu→u box ṣḥnduuq sanduug sandukko box
market suuq suug suk market

Vowel length is *maintained* in the following examples:

aa:	necklace	- -	tagaag	tagaaga	necklace
	afterwards	ba' da	ba? da	baadu	afterwards
ii:	lime	liimuun	liimuun	liimon	lime
	official	'aqiid	?agiid	agiid	official
		173, 374, 984			

There appears to be a general tendency for long vowels to be replaced by short vowels passing from Arabic to Masalit, long vowels being much more frequent in Arabic than in indigenous Masalit words. However this does not seem to be so regular a tendency for long /ii/ as other vowels. Whether or not this is related to stress is unclear at present.

4.2.1.2.5 EPITHESES (in Masalit)

CL. Arabic CQ. Arabic Masalit

-i	west	γarb	garb	garbi	west
	all	kull	kull	kuli	all
		188, 292, 323, 350,	780, 836		

		CL.Arabic	CQ.Arabic	Masalit	
-a	seed	bāḍr	bizer	bizera	seed
	drum	- -	dabal	dabala	dancing-place
	hammer	sindaal	sindaal	sindala	small hammer
	simple	basiiṭ	basiiṭ	basida	simple
-o	land	barr	barr	buro	cultivable land
	autumn	ḫariif	ḫariif	harifo	rainy season/autumn
	paper	waraq	warag	warago	letter/paper
	184, 450, 617, 775				
-u	try	jarrab	jarrab	jerbu	trying

There appears to be no overall phonological pattern to explain the quality of the epithetic vowels suffixed to adoptives. It is possible that they may have had some morphemic value at the time of adoption (which is lost now).

-i The most common epithetic vowel. In the case of **garbi** 'west' the etymon may have been **yarbii** 'western'.

-a In the case of 'hammer' there is a good semantic reason to explain the epithesis by analogy with the Masalit diminutive suffix **-(C)Vla** (see p.83), as **sindala** means 'small hammer' in Masalit. The same reasoning cannot be applied to **dabala** (if it were, it would mean 'small drum' in Masalit).

-o No phonological rules appear to condition its quality: preceding Vs may be /i/ /a/ or /u/.

The deletion of the final /a/ of **baraka** 'blessing' leaves a final /k/, the most common final C in indigenous Masalit word phonology. This is the sole example of such a deletion, and constitutes a reversal of the more common V epithesis.

-a blessing baraka baraka barak blessing (cf. Swahili)

4.2.1.2.6 EPENTHESIS (in CQ. Arabic)

	CL. Arabic	CQ. Arabic	Masalit		
-i-	slave	'abd	?abid	abid	slave
	family,	'irf	?irif	irif	family
	zero	şifr	sifir	sifir	zero
	303, 679, 721, 832, 881, 946				
-e-	seed	biðr	bizer	bizera	seed
	breath	nafs	nefes	nefes	breath
	help	'awn	?awen	awen	help
	inactive	'əajiz	ajez	ajesta	lazy
-a-	mercy	rahm	raham	raham	mercy
	onion	başl	basal	basal	onion
	sea, river	bahr	bahar	bahar	river
	237, 245, 349, 470, 627, 661, 990				
-u-	afternoon	'aşr	?asur	asur	afternoon
	patience	şabr	sabur	sabur	patience
	date	θamr	tamur	tamurta	dates (fruit)
	noon	zuhr	zuhur	zuhurko	noon
	60, 96, 664, 691, 705				

CL Arabic final consonant clusters are broken up by epenthetic vowels in CQW, and the quality of such vowels maintained in Masalit - evidence that those lexemes came from the colloquial and not the classical language. CQW maintains the medial consonant clusters of classical lexemes but some of these, even though they may belong to the Masalit set of medial consonant clusters, have been broken up by epenthetic vowels in their Masalit equivalents, e.g. CL: **χidma** > CQW: **χidima** > Ms: **xidime**, where there is no reason why the CL consonant cluster should not be maintained in Masalit. However, cf. CL/CQW **turba** 'grave' which passes without any change into Ms: **turba**. The explanation for this appears to be clearly once again that CQW has been the source of Arabic adoptives into Masalit.

4.2.1.2.7 DIPHTHONG SIMPLIFICATION

There is one diphthong simplification from Arabic to Masalit: aw > o:

	CL.Arabic	CQ.Arabic	Masalit	
God	mawla	mawla	mola	God
day	yawm	yawm	yomko	(one) day
season	mawsim	mawsim	mosim	season

(</CwaC/→/CooC/ is a common assimilation in Masalit verbal morphology, see pp. 60, 67).

Note also the apparently free variants: **warago/orogo** 'letter' and **warnuṅ/ornuṅ** 'official'.

4.2.2 MORPHEMIC ADDITIONS

Adoptives from Arabic in Masalit, in addition to phonetic adaptation, may have Masalit affixes added to them. These 'additions' are suffixes and occur with indigenous Masalit lexemes as well (with one exception) - as singular, plural, adverbial, copula and abstract markers. The Masalit suffixes do not relate to grammatical gender in Arabic and are not (as far as a synchronic analysis may ascertain) remnants of a nominal class system, such as that of Fulfulde. Whereas phonological correspondences are generally regular - or at least have explicable irregularities, the occurrence or non-occurrence of these suffixes does not appear to be systematic with regard to phonetic or semantic facts; i.e. it is idiosyncratic.

In this section, as the alteration of the phonetic structure of lexemes is not under examination but rather the addition of Masalit morphemic elements, I give only one Arabic etymon: classical except where otherwise stated.

4.2.2.1 SINGULAR SUFFIXES (see 2.3.2.1)

		Arabic	Masalit	
-ko	peace	salaam	salamko	greeting
	permission	iḥn	izinko	permission
	race	s-i.baaq	sabakko	race (competition)
	majesty	jalaal	jelelko	wake (40 days after death)
		23, 37, 50, 234, 256, 288, 445, 616, 621, 622, 646, 798, 899, 970		
-go	morning	fujur	fujurgo	morning (time) (Doornbos)
-gi	back (anat)	ḡahr	sargi(ko)	back (anat)
	hunting	ḡayda	seidagi	wild animal
-ti	butcher	jazzar ^d	jezarti	butcher
	smell	riiḥa	riyeti	smell
	better	ḡair	horti/xorti	good
	cultivation	ziraa'a	asurti	farm, field (cf. Mb asur)

	Arabic	Masalit	
-kV-di	smallpox	jadari	jederiko-di smallpox
	light	quu	deka-di daylight (cf. Mb: dalka)
-ldi	tree-bark	qirfa	kérfèldi tree-bark (Doornbos)

This is the most numerous group of suffixes added to Arabic lexemes and their function appears to be one of assimilation of Arabic lexemes to Masalit nominal word patterns, e.g. **ẓahr** → **sargi**, **az-ziraa'a** → **asurti**: -Vrgi/Vrti are common final shapes (see above p.61).

-ko is a very frequent final singulative morpheme which sometimes, but not always, includes a definitive implication, cf. the Maba singulative/definitive suffix added to some adopted Arabic lexemes, e.g. Ar: **hilla** > Mb: **hille-k** 'village', Ar: **jazā'ir** > Mb: **jezaar-ek** 'butcher', Ar: **dalaal** > Mb: **delaal-ek** 'guide'. I include -go here as this is the only instance of its occurrence, it is from Doornbos' data and may reflect a dialectal variation. There does not appear to be a phonologically conditioned complementary distribution of -ko/-go suffixes (cf. **fujurgo** 'morning', **nyerko** 'baby').

-gi may also be related to -ko, or may be a distinct suffix.

-ti may be derived from the predicative copula suffix -te (see below p.131) though it is no longer consciously recognized as such (by my informants). In two of the examples it has formed part of the very common final shape -rti (cf. **surti** 'plate', **durti** 'cooking place', **turti** 'cliff') which allows them to assimilate to a group of lexemes which are markedly 'Masalit'. **asurti** 'farm/field' may not be a direct adoption but may have been imported via a cognate in Maba, **asur/ᶇsur**.

-kVdi. This appears to be the amalgamation of two distinct suffixes: -kV and -di. As there are only two examples it is hard to detect a common semantic or other thread. An analogy could be drawn with **sargiko** (an alternative of **sargi**) where two suffixes have been added to the original Arabic root **ẓahr**→**sar**.

4.2.2.2 PLURAL SUFFIX (see 2.3.2.1)

	Arabic	Masalit	
-ta			sing./-pl. suffix
money (col)	qirʃ (pl quruuf)	guruʃ/-ta	money (col) +
emigrant,	muhaajir	muhajiriin/-ta	Quran-school
refugee	(pl muhaajiriin)		pupil
neighbour	jaarii	jiran/-ta	neighbour, the people
	(pl jiiraan)		around
shop	dukkaan	dakakin/-ta	shop (brick or tin
	(pl dakaakiin)		built, not straw
			shack or stalls)
pagan	kaafir	kufur/-ta	pagan
	(pl kufura)		
coin, die	sikka	suksuk/-ta	cowrie shell
news	xabr (pl axbaar)	axbera/-ta,	news
		ahbera/-ta	

68, 213, 267, 303, 434, 435, 443, 953

(the following examples have no Masalit singular form)

baggage	muuna	mointa	baggage
corn	qamh	gemeita	corn (Arkell)
fasting	ṣiyaam	siyamta	fasting (Doornbos)
Arabs (col)	'arab	aramta	Arabs (cf. Ta: arman)

449, 503, 790

As might have been anticipated, the Masalit, in incorporating Arabic plural nouns, have sometimes metanalyzed the Arabic and, in most cases, added the Masalit plural suffix -ta. This suffix could itself be an adoptive item: from the common Arabic plural suffix -aat, as it is frequently associated with lexemes of Arabic origin (see the section on Metanalysis, 4.2.3).

+ Arabic qirʃ itself is an Arabized singular of Turkish kuruş (pl. kuruşlar), which is in turn, ultimately, an adoption from German groschen (the final -en being metanalyzed as the Turkish possessive suffix -in).

4.2.2.3 ADVERBIAL SUFFIXES (see 2.3.2.4)

	Arabic	Masalit	
-ken(a) +			
capacity/ capability	qudra	gudur ken(a)	possibly
quick/fast	sarii'/asra'	asir ken(a)	quickly
late	axiir	axir kena	late
 -loka			
morning	fajr	fujur loka	in the morning (habitually) (cf. fujurgo , 4.2.2.1 above)

I include this suffix to compare the (only) examples of alien words to which it is suffixed. Ms: **asir**, 'quick', exists independently in Masalit alongside the indigenous synonym **celcelo**; however no such form as ***gudur*** is attested now in Masalit - while, paradoxically I have been unable to find any Masalit word which would provide its semantic equivalent (the closest, in usage, being **dura** 'force' S). There is an indigenous synonym for **axirkena** namely, **waraŋ** 'late'.

+ as in **gindi-ken**, 'yesterday (adverb)' > **gende-gu** 'yesterday (nom)' S possibly from the verb **idor~irofol**, D 'to hit, force', or an equivalent of the Fur word **duru** 'force'.

4.2.2.4 SUFFIXES IDENTICAL WITH THE 3S COPULA (see above 2.3.1.6)

	Arabic	Masalit	
-te			
miser	baxiil	behil te	miser
straight, just	'adi l	adil te	straight
dirty	wasxaan	wasxan te	dirty
coffee	qahwa	gihawan te	lazy
clerk, writer	kaatib	katib te	clerk
22, 174, 189, 192, 293, 399, 464, 664, 1044			

cf. the Maba suffix **-te** added to adoptives from Arabic, e.g. Ar: **faahim** > Mb: **fahem-te** 'clever', Ar: **'ajjib** > Mb: **ajeb-te** 'wonderful', Ar: **kariim** > Mb: **kerek-te** 'generous'.

	Arabic	Masalit	
			-re
rider	rakaab	rakabre	rider
widow	'azaaba	azabare	widow
			-(1)ye
earth	ard	ardiye	earth, ground
limit	hadd	hadiye	enough

218, 914

This is one of the most common alien-word suffixes in Masalit - perhaps by virtue of its original semantic function (as a copula). The lexemes with **-te** and **-re** suffixed all form qualifiers and active participles, lexemes with **-iye** suffixed include abstracts as well. **-te -re -ye** are allomorphs of the 3S/1S present suffix (see above p.74).

4.2.2.5 SUFFIXES OF UNDETERMINED MORPHEMIC AND SEMANTIC VALUE

-to (of undetermined semantic value, perhaps related to **to** 'only, single').

	Arabic	Masalit	
			-to
free, noble	hurr	hurto	free person
welcome	qabuul	kabulto	cup
group	jamaa'a	jamato	people

-to presents an enigma - neither belonging to a singular/plural suffix pair (neither example forms a singular or plural) nor being productive, i.e. it does not otherwise exist in Masalit (as far as my data shows). Its semantic field is unclear from these examples. One might speculate that it may be (1) an allomorph of suffixes **-ti** or

-te (above), (ii) an independent but rare suffix, perhaps with a specific semantic value to do with humans and their status, (iii) the suffix -o added to the Arabic word with its final /t/ pronounced: in Arabic the feminine singular suffix /-ah/ (written *ā*, *taa marbuūṭa*) is realized as /-at/ when not in final position in a phrase or clause; so the phrase "the freedom of the group of emigrants" would be realized as *hurriyat jamaa'at al-muhaajiriin*. However, as can be seen from the list of examples given above for the suffix -o, this would not be a rule. In any case, as there are only two examples one dare not draw hard and fast conclusions.

It is uncertain whether Ms: *karfato* 'skin water-bag', should be included in this category, ascribing its origin to Arabic *qirba* 'waterskin', from which there is another more certain Masalit adoptive, *girfe* 'waterskin (smaller than the *karfato*)' and also the Hausa equivalents: *kurfa*, '*grande botte fabriqué en filali souple*' (Prost), and *gufata/agoofata* 'basket' (Skinner); also the putative Bagirmi equivalent, *garapa* 'large leather bag for grain'. A possible alternative etymon for *karfato* is the CQW *kefawa*, '*sac de chargement pour les chameaux*' (Carbou). In the absence of more supporting evidence I prefer not to place *karfato* in this category.

Other suffixes:

	Arabic	Masalit	
-kwe	safety, peace	amaan	amankwe happiness (abstract ?)

cf. indigenous *narakwe* 'each', *hukwe* 'again', *jekwe* 'very', and *tiilokwe* 'each' < Kanuri *tiló* 'one'; presumably this suffixation is simply by chance as there is no obvious semantic connection between these examples and 'happiness'.

-anu	summer	sayf	seifanu	summer
-ma	cold	qirra	kerima	cold (cf. Maba kera)
-k	weather	hawaa?	hawuk	weather

There are no indigenous lexemes in my data with these suffixes and their semantic value is unclear - as the Masalit adoptives all have the same meanings as their Arabic etyma.

4.2.3 METANALYSIS

Metanalysis occurs when the adopting language reanalyzes adoptive material according to its own morphophonological rules.

Most examples given here have been referred to above in the context of other changes.

1- In many cases the Arabic form adopted is the plural which becomes the Masalit singular form to which in turn the Masalit plural suffix is added to form a plural:

	Arabic		Masalit	
	Sg	Pl	Sg	Pl
migrant	muhaajir	muhaajiriin	muhajiriin	muhajiriinta (pupils)
amulet	hijaab	hijaabaat	hijabat	hijabatta (Doornbos)
pagan	kaafir	kuffaar	kufur	kufurta (Doornbos)
poor man	faqiir	fuqura?	fugura	fugurata
shop	dukkaan	dakaakiin	dakakin	dakakinta
neighbour	jaar	jiiraan	jiran	jiranta
money	qirʃ	quruuʃ	guruʃ	guruʃta
nomad	raahil	ru ^h haal	ruhal	- -

The process is not common - in the data available there are only these examples. The same process has occurred with adoptives from other languages, e.g. Fulfulde **burtol** pl. **burti** 'cattle track' has been adopted into Masalit as **burti** pl. **huri** 'path' (with a reflex in Hausa which clearly has been adopted from the Fulfulde singular: **burtàlii**). In contrast there has been no such metanalysis in the adoption of some Fur lexemes (see below 4.3.1), e.g. Fu: **ɗɔrmi** pl. **kɔrmi** > Ms: **durmi** pl. **durmin** 'nose' (but it is possible that these are cognates).

2- Metanalysis of the Arabic definite article **al-**. By comparison with some of the other languages which have adopted lexemes from

Arabic (Bambara, Hausa, Kanuri, Tamajaq, Turkish, Spanish) Masalit has only a few examples of this. However, the other changes to the few examples that there are also suggest that this group was not adopted directly from Arabic, hence the metanalysis is not Masalit, e.g.

	Arabic	Masalit
quince	ambarguuja (CQ)	amborkuja quince
lungs	am-fajfaʃ (CQ)	amfeʃfeʃ lungs
cultivation	az-ziraa'a	asurti farm (Mb 4.3.5)
shadow	aʒ-ʒill	anjilo shadow (Mb 4.3.5)

It is possible that at least a part of this metanalysis took place in the proto-Maba language as Maba and Aiki have close cognates to the Masalit forms.

3- There has been a metanalysis of Arabic *sindaal* 'hammer' as the diminutive of a 'root' **sind** giving Masalit *sindala* 'small hammer' (though **sind** is not attested independently as 'hammer'). -C-*ala* is a Masalit nominal suffix carrying a 'diminutive' sense (see 2.3.2.3) - cf. *bertala* 'colt', < *bere* 'horse'.

4.2.4 PUTATIVE ADOPTIVES IN THE MASALIT VERBAL SYSTEM

There are only three putative adoptives from Arabic which have been integrated into the Masalit verbal system. Two have cognates in other Maba group languages which suggests that the items may have been adopted by the proto-language. They are tentative and it *is* possible that they are mere coincidental lookalikes and that there are no Arabic adoptives in the Masalit verbal system at all.

'sacrifice' Ms: idib~idiban,D

Mb: dábàa ir,z

Ak: dàbà iir,z

Ar: ṣabaha

In this case the Maba and Aiki forms are probably cognates, or they have followed very similar processes of adoption, as both use cognate 'support' verbs with the adoptive lexeme categorized as a nominal. The Masalit form however, is categorized as a verb, with the most common 2S allomorph, D (deletion, see p.67).

'divorce' Ms: Ⓞ fasal ig~an,D,g

Ⓞ abas~abasiṅ,D (fasiṅ, divorce n.)

Mb: àbbàan,D

Ar: faṣal (split vb.)

In this case there are two Masalit synonyms, one which is clearly of Arabic origin, a 'support' verb with the adoptive lexeme which is categorized as a nominal, and one which is more dubious and which has a Maba cognate. This may be a case of double adoption (or the more dubious form could just be a chance lookalike).

'pound vb.' Ms: iduk~idun,D

Mb: uddung,D 'beat,flog'

Ak: dɔɔk,D

Ar: daqqa

In this case there is clearly a set of Maba group cognates; whether the proto-item was adopted from Arabic or whether it is simply a coincidental look-alike is impossible to determine without further evidence.

4.2.5 PUTATIVE ADOPTIVES IN MASALIT NOMINAL MORPHOLOGY

My comments on adoptives into the nominal suffix sets of Masalit are considerably more tentative than those on lexical adoptions, the latter being merely the naming or re-naming of an item, the former involving a systematic adoption of an alien morpheme.

The only putative morphemic adoptives that I have identified are the plural suffixes: **-ta** < Ar: **-aat** (cf. Fu: **-ta**), **-(i)ŋ** < Ar: **-iin** (cf. Fu: **-(ŋ)a**). There is no way to disprove the possibility that the similarity of these suffixes is simply coincidental. However, **-ta**, **-iŋ** are frequently used plural suffixes for adoptive Arabic and **-ta** for adoptive non-Arabic lexemes and, as mentioned above (p.77) that all lexemes having a simple and regular singular/plural tonal distinction (final low singular-final high plural) are indigenous, it is possible that all singular/plural pairs distinguished by morphemic suffixes are adoptives by origin. This requires much further investigation, involving as it does adoptives from languages other than Arabic. **-ta** is productive in that it occurs as the plural suffix of nominals that are not adoptives of Arabic origin. I have found no examples with **-iŋ** occurring as such.

e.g.	sing.	pl.	Arabic etymon
'party'	azuma	azuma-iŋ	'ḥzuuma
'difficult'	gasi	gasi-ŋ	qaasii (Davies)
'pat. aunt'	kala	kala-ta	ḡaala
'money'	guruʃ	guruʃ-ta	quruuʃ (sg. qirʃ)
'book'	kitab	kitab-ta	kitaab
'finger'	nagaram	nagaram-ta	- -
'mat. uncle'	mama	mama-ta	- -

It is interesting to note also a unique (according to my data) example of adoption of both the singular and plural Arabic forms of a lexeme: **warnuŋ/waranuŋ** 'official' (see p.80).

4.3 PUTATIVE INDIRECT ADOPTIVES

On comparing lists of Masalit words with those of languages other than Arabic or those of the Maba group, few regular patterns are easily identifiable amongst the equivalents of both ultimate Arabic and non-Arabic origin. The overall picture is very complex as may be seen from the observations below.

Whereas there can be little doubt as to the *ultimate* origin of Masalit equivalents of Arabic etyma, i.e. Arabic, the etyma of lexemes of non-Arabic origin which are shared by Masalit with other languages with which Masalit has been in contact - such as Fur, Hausa, Kanuri, Fulfulde (see immediately below), or the ultimate etymology of lexemes with cognates in the other Maba-group languages (see below 4.3.5) is more difficult to determine. Beyond that there are the problems of determining etymologies for 'wandering' words, variant forms of which are widespread across vast geographical areas and amongst differing language families (see below 4.4). Tables of the phonemes of Fur, Fulfulde, Kanuri, Hausa and Maba are given as references in Appendix G.

There is insufficient evidence to suggest that there have been any more than occasional adoptions of Arabic lexemes via intermediate languages, unlike the intermediate position of Daju between Bidyo and Arabic as mentioned above. However, as Moravcsik states (1978:111), 'Phenomena that are in need of explanations are those that are counter to one's expectations,' the occurrence of lexemes of Arabic origin that display phonological changes not belonging to the major patterns set out in the summary table in 4.1 merit deeper investigation. Some may be due to adoption via intermediate languages (see 4.3.1-4.3.5) or to borrowing at different points in time - there is some evidence that at least a few Arabic adoptives in Masalit entered via proto-Maba (see 4.3.5), i.e. before Masalit and Maba became separate languages (not less than two to three hundred years ago).

4.3.1 PUTATIVE ADOPTIVES VIA FUR

As mentioned in the historical introduction (1.5.2) the Fur sultanate exercised political influence over the Masalit over a period of about three hundred years, up until the 1920s. Fur influence on the Masalit language is evident from numerous adoptives from Fur in the Masalit lexicon. These fall into two categories: 'politico-cultural' and 'basic'. If the hypothesis that there is a Nilo-Saharan phylum is correct, the 'basic' items may in fact be cognates rather than adoptives. This remains to be proven, though a putative genetic link between Fur and the Maba group languages is supported further by the existence of a personal prefix allomorphy in the Fur verbal system similar to that exhibited by the 2S prefix in all the Maba group languages (see above 2.3.1.1), but in Fur it is the 3S prefix which exhibits allomorphy.

It is clear from the list below that Fur and Masalit share a number of lexemes, some very basic vocabulary, e.g. 'hut', 'stone', which also lends support to the existence of a genetic link.

'Politico-cultural' items

	Fur	Masalit	
noble	baasii	basenga	noble/notable
	pl. baasíinga	pl. basengata	
noble	abbo	abo	member of sultan's
	pl. abboŋa	pl. abo-in/aboje	clan
official	daalii	dala	govt official/toe
		pl. dala-je	(cf. Ka: dala 'Fur')
rainmaker	kamarga	kamarko	rainmaker's wand
horn	kamne	kami	horn
wand	dumbari	dàmbári	locust-magician
	pl. dumbaria	pl. dàmbária	
hoe	turi	turi-yu	hoe

'Basic' items

	Fur	Masalit	
stone	diito	ditera	stone/pebble (cf. Ak: deta)
stone	taru	ditera	stone (?)
garden	madil	madal-di	garden, wadi (cf. Bj: malaal)
hut	ton	tani	hut
ram	uri	ari	ram
shut	urisi	wurs~wursuŋ,D	shut (cf. Mb: ils,D)

There is no evidence for Fur having been a *regular* intermediary for Arabic etyma; there appear to have been only occasional and rather uncertain adoptions by this route.

Putative adoptives from Arabic via Fur are:

	Arabic	Fur	Masalit	
nose	muxurr (CQW)	d→rmi pl. k→rmi	durmi pl. durmi-ŋ	nose
back	zahr	s→r	sargi(ko)	back (anat.)
land	barr	baaru	buro	cultivable land (cf. Mb: bar ; Bj: burr)
bracelet	dumluj pl. damaalij	dimlong pl. dimlonga	dimlig pl. dimligta	tax-collector, tribe inspector
wind	riih	ri	ri	north

cf. 'bracelet', Mb: **demlik**, Sr: **dember**, Ak: **semer**, CQE: **dumlug** (CL /j/ is equivalent to /g/ in CQE as shown on p.54); Tunisi (1845) notes that copper bracelets are used as money amongst the Tama and other peoples of the area, hence a possible semantic connexion between Arabic 'bracelet' and Fur and Masalit 'tax-collector'.

There are not enough examples to allow generalizations about Fur-Masalit phonological correspondences. However, there are examples, 'hut' and 'locust-magician', which have a Fur back vowel (u/o) and Masalit central open vowel (a) coorespondence which supports the pathway of 'back'. This is also supported by the initial /s/ in Fur - this could explain the initial /s/ in Masalit, which otherwise would

be anomalous (< CL.Arabic *zahr*, CQW.Arabic *dahr*).

A Fur intermediary *dimlong* for 'tax-collector', reasonable in the light of history, also may be a more likely explanation of the irregularity of Arabic /j/ corresponding to Masalit /g/ than a CQE etymon.

The example of 'nose' is considerably more tentative: the Masalit form *durmi* is clearly an equivalent of the Fur singular form *dɔrmi*. The Fur plural form *kɔrmi** may have adopted and metanalyzed a metathesis of the CQW form *muxurr* - or perhaps the CL form *χarṭuum*. There are other possible equivalents in the region, Mb: *xarsuma*, Mm: *hur*, Sr: *hur*. Arabic /χ/ → Fur /k/ may be observed in other adoptives as /χ/ does not exist in Fur; e.g. 'maternal aunt': Fu: *kaala* < Ar: *χaala*.

* This is one of a number of Fur nominal singular/plural patterns; Fur plurals are distinguished from singulars by the addition of suffixes, alteration of prefixes or both of these: e.g. *abbo/abbo-ŋa* 'noble', *d-iwil/k-iwil-ta* 'thigh', *d-ɔrte/k-ɔrte* 'cooking-pot'.

A semantic argument may be used to support the putative adoption via Fur of the Masalit term for 'north', *ri*, which might as well have been adopted directly from Arabic *riih* 'wind' as it fits quite neatly into the phonological criteria set out in 4.1 (deletion of /h/, contraction of /ii/). However, it seems more likely, on semantic grounds, to have been adopted from the Fur *ri* 'north', itself from the name of the northern province of Dar Fur: *dar ar-riih* 'land of the wind', as the association of 'north' and 'wind' is clearly a local one (but cf. also Hausa *árèwáa* 'north').

As referred to above (p.137), there is a resemblance between Fur plural suffixes *-ta* and *-ŋa* and Masalit plural suffixes *-ta* and *-iŋ*. Although there is one example, 'member of sultan's clan', Ms: *abo* pl. *abo-iŋ* < Fu: *abbo* pl. *abbo-ŋa* it is far from clear whether the suffixes are equivalents; cf. also 'locust-magician', where the Fur and Masalit plural suffixes are the same, *-a*.

4.3.2 PUTATIVE ADOPTIVES VIA FULFULDE

Whereas the Fur have been on intimate political and socio-economic terms with the Masalit for centuries, the Fulbe are present in only small numbers in Dar Masalit as merchants and cattle herders. The Fulbe also have a reputation for piety and many are preachers and teachers (see the Maba fable of the pious origin of the Fulbe in Lukas, 1953:55-57). They maintain communication with other Fulbe both to the east and west. They are referred to as 'Fallaata' by the indigenous peoples, which term may refer to all West Africans, Hausa and Kanuri included.

As with Fur, there are not enough examples to allow any generalizations about Fulfulde-Masalit phonological correspondences. However, putative Fulfulde intermediaries *do* explain some irregularities in the Arabic-Masalit correspondence tables:

	Arabic	Fulfulde	Masalit	
barbarian	hamajii	macii-do	maji	slave
			pl. majir	
lawful	halaal	halal	kala	good
mat CQ	birif	bajol	baji	mat (see Kn: baji)
		pl. bajl	pl. bajl	
cow-path CQN turbo		burtol	burti	path, road (cf. Ha:
		pl. burti	pl. buri	búrtáíí , cow-path; Mu: bòdòl)
teacher	muu?adab	moodibbo	miidibabi	spellcaster (cf. Mb:
				miidobbi ; Ha: madùubii 'seer')

The deletion of the initial /ha/ of **hamajii** 'barbarian' to give Masalit **maji** 'slave' might be explained by a Fulfulde intermediary **macii-do**. There is a d/r alternation in some Fulfulde class suffixes, whether this may be the case for **macii-do** in the dialect of Fulfulde spoken in Dar Masalit is not known at present; Abu Manga (1986) does not list this amongst his examples for Sudanese Fulfulde. An alternative etymology could be via Maba **maju-k** 'female slave' from

Arabic **maajuus** 'idolator'.

There appears to be a possible metanalysis of Fulfulde plural forms as Masalit singular forms - as in 'good', 'mat' and 'path'; although final /l/ is possible in Masalit it is rare, e.g. **-dol** 'above'. Thus a Fulfulde intermediary would explain the irregularity of final /l/ deletion in Arabic-Masalit correspondences.

The transformation of Fulfulde /h/ to Masalit /k/ seems unlikely in **kala** 'good': by analogy with the treatment of Arabic /h/ one would expect deletion or maintenance. However, in Adamawa Fulfulde itself there is a regular singular/plural alternation pattern of initial h/k (e.g. **hamfurde/kamfurde** 'duiker', **halagaare/kalagaaje** 'ring' < Ar: **halaqa**) which may explain the initial /k/ in Masalit - especially in view of the fact that in both other examples it is the Fulfulde plural form that Masalit has adopted.

The pathway for 'mat' is more tentative: a metathesis from CQ. Arabic **birif** to Fulfulde **bajol** followed by the metanalysis of the Fulfulde plural **baji** by Masalit.

More likely is the pathway for 'spellcaster' from Arabic 'teacher' via Fulfulde and Maba. The only oddity is that geminate /bb/ in Maba was not just simplified in Masalit. There are no other examples of this in my data.

'Path' appears to be a straightforward example of metanalysis of Fulfulde by Masalit. It is unclear whether CQN **turbo** is itself an metathesized adoptive *from* Fulfulde or vice versa, or derived from CL. Arabic **darb** 'road'.

4.3.3 PUTATIVE ADOPTIVES VIA KANURI

There are a number of Kanuri immigrants settled in Dar Masalit working mainly as merchants in the towns, some also working as teachers.

As with Fur and Fulfulde there are not enough examples to allow generalizations about Kanuri-Masalit correspondences, and although Masalit has some nominal and verbal lexemes which have Kanuri equivalents, it appears that very few Arabic words have entered Masalit via Kanuri - I have only been able to find Kanuri equivalents of items given in the Fulfulde list above:

	Arabic	Fulfulde	Kanuri	Masalit	
mat	CQ biriʃ	bajol	báji	baji	mat
	CL firaaf	pl. baji			
lawful	ħalaal	halal	ŋgela	kala	good

Both of these examples may present possible alternative routes for the adoption of the Arabic forms via Fulfulde and Kanuri.

Bagirmi **nela** 'good' provides a possible further intermediary between **ŋgela** and **kala**, though there is no other evidence for denasalization of adoptives from Bagirmi in Masalit.

'Mat' appears to be a possible adoption from either Kanuri or Fulfulde, but certainly an adoption from the west as there is a spread of this item in the Chad area (cf. Budduma **booji**), whereas the Tama to the north and the Midob to the east of the Masalit have the equivalent **birʃ** < CQS **biriʃ**.

In addition to the lexemes that might have been adopted from Arabic via Kanuri there are a number of putative cognates of Kanuri in Masalit - I use the term 'cognate' here as both Kanuri and Masalit have been assigned to the postulated Nilo-Saharan genetic phylum. The Kanuri-Masalit link is supported by the evidence given below. Their suggested position in the wider Nilo-Saharan phylum is beyond the scope of this study.

	Kanuri	Masalit	
one	tíló	tíilò	one
man	kambe	kamba	man (cf. Mb: kamba-k)
hand	kara-dí	koro	hand, arm (cf. Mb: kara)
big	kùrà	guri	old (cf. Mb: kula-k)
fly vb.	fàr	fir ig~an,D,g	fly vb. (cf. Mb: ber ir,D)
give	njò	inj~iny,g	give (cf. Mb: unj,g)
see	súri(n)~kùrû	iser~ikel,D,j	see
	(impf.~gerund)		

Since few, if any, Arabic lexemes have been adopted by Masalit via Kanuri (according to existing data and phonological facts), one might expect that correspondingly few non-Arabic equivalents would be present. Therefore the only explanation why there should be basic items resembling each other in the two languages - especially verbs, is that they have not been adopted at all but are cognates derived from common ancestral forms. This is supported by the presence of Maba cognates. Alternatively they might have been adopted before there was any appreciable Arabic influence on Kanuri over more than five hundred years ago, or via Fulfulde - but there is no evidence for that, for most non-Arabic items there is no Fulfulde equivalent.

4.3.4 PUTATIVE ADOPTIVES VIA HAUSA

The Hausa, like the Fulbe and Kanuri live as an immigrant community in Dar Masalit and are present in small numbers making a living largely as merchants, maintaining links with other Hausa communities to the east and west. There are a few rather tentative adoptives from Arabic via Hausa, but no patterns have emerged (like the metanalysis of Fulfulde plural forms).

	Arabic	Hausa	Masalit	
sandy plain	CL quuz	kasaa	kase	country (cf. Ak: kàsè)
	CQ gooz			
waterbag	qirba	kurfa	karfa-to	waterbag
			(cf. girfe	waterbag)
lightning	barq	walkiya	walak	lightning (cf. Mb: wolda/ muoldak)
cultivation	zira'aa	sàwraa	asurti	farm/field (cf. Mb: asur)
		(disused farm)		

Hausa intermediaries might help to explain the Arabic-Masalit initial /q/-/k/ correspondence (most initial Arabic /q/ correspond to /g/ in Masalit, e.g. **girfe** 'waterbag'). A Hausa intermediary might also explain the unique Arabic-Masalit /b/-/w/ correspondence. However, **walak** is perhaps more likely to be an adoptive from Hausa, as such a direct Arabic-Hausa /b/-/w/ correspondence in initial position has not been observed elsewhere (but note that there *is* such a correspondence in syllable final position, e.g. Hausa: **?alluràa** (< **?alliura**) < Arabic: **?alibra**, 'needle' (Greenberg, 1947:92)).

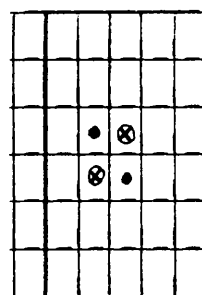
There are also items which are equivalents of the same Arabic source lexeme but which have clearly been adopted independently; e.g.:

	Arabic	Hausa	Masalit	
game *	CQ daala	dára	dala	game
news	al-ḡabar pl. al-aḡbaar	làabaarilì	axberata	news
slate	al-luuh	àlloo	lo	slate (cf. Mb: loho)

It is clear in 'news' and 'slate' that different processes of adoption have applied in Hausa and in Masalit: Hausa has systematically metanalyzed the Arabic definite article as a part of the lexeme, Masalit has not.

* A kind of chequers played in the sand by two players. There are 36 squares (6x6), 12 white pebbles for one player and 12 black ones for the other. The game commences with two pebbles of each placed in the centre:

then the players take it in turns to put down their pebbles in empty squares (one per square), the object being to form rows of 3 by moving the pebbles around the board - each time a row is formed one of the pebbles of the opponent may be removed from play and so on until one of the players no longer has enough pebbles to continue playing (Davies, 1926:139).



There are also a very few items of non-Arabic origin which may have been adopted by Masalit from Hausa.

	Hausa	Masalit	
desire	guri	ngura	desire/need
cucumber	goji	gonjo	cucumber
be sure	tabbàtaa	tebet	certainly (cf. Ar: ṭab'aan)
sour	s'ami	juma	sour (see section 4.4)

Hausa **tabbàtaa** may be a *cognate* of Arabic **ṭab'aan** (if one accepts the premise of an 'Afro-asiatic phylum') and would appear to have a more certain cognate in Tamajaq **etbet**. Indeed it is not impossible that the Masalit form was adopted from the Tamajaq rather than the Hausa etymon (which is feasible as the sultans of Wadai kept a Tuareg camel corps and there are a few adoptives from Tamajaq in Maba, e.g. Mb: **kélèé** 'race' < Tm: **kel** 'people'). Another possible adoptive from or via Hausa or Tamajaq is 'peasant', which would explain the irregular Arabic-Masalit /f/-/b/ correspondence.

Arabic	Hausa	Tamajaq	Masalit
fallaah	bara	bella	bala
	(client)	(vassal)	

4.3.5 PUTATIVE ADOPTIVES VIA MABA

As illustrated by the table set out on p.19, Masalit is a member of the Maba group of languages, which includes Maba to the West of Masalit and Aiki and Kibet to its South. That these languages are descended from a common ancestor is shown by:

(i) a corpus of of lexical cognates (over half of the list of 107 items in Appendix A (Maba group equivalents) have cognates in *all* four languages; cf. also fundamental colours in Appendix C).

(ii) similar morphological elements in similar morphological structures, e.g the distinctive feature of allomorphy exhibited by the 2S personal prefix (see above pp. 66-7 and Trenga (1947:89)).

Where there is an equivalent of an Arabic etymon in Masalit and in Maba, Aiki or Kibet there are the possibilities that:

(i) it was adopted by Masalit from Maba, or vice versa though the latter is less likely in view of the historical circumstance that Dar Masalit was tributary to Wadai on and off for three centuries. It is *much* less likely that Masalit should adopt any items from Aiki or Kibet as, unlike Maba, these are non-prestigious languages spoken by fewer people who have not been in intimate political and cultural contact with the Masalit (as the Maba have been) *.

(ii) it was adopted by Masalit and by Maba (and the others) independently of each other (i.e. *after* proto-Maba had split into the present languages), either directly from Arabic or via another intermediary language, e.g.

CL: **zahr**, CQW: **dahr** 'back (anatomical)' > Mb: **derin**

> Ms: **sargi** (cf. Fu: **sɔr**)

* *Caprile, in Barreteau (1978), estimates the Maba population to be about 335,000; Nougayrol (1988) estimates the Aiki to number about 20,000 and the Kibet about 4,000. Although these are only estimates, they give an idea of the relative order of populations. Neither source makes it clear whether their figures refer to speakers of the language or members of the tribe.*

(iii) it was adopted by proto-Maba and so the Masalit and Maba forms are truly cognates as well as equivalents of the Arabic, e.g. Ar: *az-ziraa'a* 'the cultivation' > proto-Mb: **asur** > Mb: *asur*, Ms: *asurti*, Ak: *asur*.

In (i) and (ii) the Masalit and Maba items would not be cognates as they would not be continuations of a single item in the proto-Maba lexicon, though ultimately derived from the same Arabic etymon.

For those items that may fall into one of the above categories a relative chronology of adoption may be established - i.e. those originally adopted by proto-Maba being older, not less than two to three hundred years old, the age of the oldest word-lists and information, and those adopted independently or via Maba by Masalit being more recent (160 years or less).

Examples of Maba group languages' sharing the same adoptive Arabic lexemes:

	Arabic	Maba	Masalit	Aiki	Kibet
world	<i>dunyaa</i>	<i>dunya</i>	<i>dinya</i>	<i>dúnía</i>	- -
trousers	<i>sarwaal</i>	<i>serwal</i>	<i>sirwalko</i>	<i>sòrwál</i>	- -
year	<i>sana</i>	<i>sana</i>	<i>sene</i>	<i>sáné</i>	- -
pound vb.	<i>daqqa</i>	<i>uddung, D</i>	<i>iduk~idun, D</i>	<i>dakk, D</i>	

These examples illustrate the difficulty of categorization of adoption. All may fit into any of the three possible categories, there is no evidence favouring any one. These examples are drawn from the short list of Maba group equivalents given in Appendix A.

Examples where different Arabic source items have been adopted by different languages:

	Arabic	Maba	Masalit	Aiki	Kibet
sky	samaa?	samaa	sama	- -	sámà
"	saḥab (cloud)	- -	- -	sáap	sahap
good	halaal	- -	kala	- -	- -
	samiih	- -	- -	sam	- -
hunter	ṣayyaad	- -	sayadte	- -	- -
" "	qaanis	- -	- -	ganis	ganis

These examples illustrate the adoption of different source items by different languages for the same meanings - underlining the difficulty of categorization.

Examples where Arabic lexemes might have come via proto-Maba into Masalit:

	Arabic	Maba	Masalit	Aiki	Kibet
shadow	az-ẓill	onjulo-k*	anjilo	ànjiè	- -
		- -	asro (?)		- -
farming	az-ziraa'a	ḥsur	asurti	(sḥḥrḥ)	- -
	CQW: zar				
six	sitta	sittaa-l	iti	issei	iss^l §
crow	al-ḡuraab	agura-k	agura	- -	(cf. Fu: kurḥ)

* -(V)k is an extremely common suffix with a definitive value in Maba corresponding to -o in Masalit, e.g. Mb: aya-k, Ms: aye 'moon'

§ -l is a suffix found in other Maba and Kibet numerals corresponding regularly to -o in their Masalit and Aiki cognates (cf. 'three, four' in Appendix A); the Mb Ms /t/ - Ak Kb /s/ correspondence is also regular (cf. 'four, rain, know' in Appendix A).

One feature that sets these examples apart from the others is the occurrence of an initial a- in three of them. One possible explanation of this phenomenon could be the metanalysis in proto-

Maba of the Arabic definite prefix /al-/ (which might indicate a classical etymon rather than a colloquial one - this would fit into the rough time scale given above). As the great majority of Arabic words have been adopted *without* /al-/ it may be assumed that this category (i.e. classical) is marginal to the mainstream of influx. As mentioned above (p.26) Wexler and others contend that most Arabic adoptives in West African languages are from classical Arabic; this is borne out by the quantity of examples with metanalyzed /al-/ in Hausa etc.. e.g.

Ar: al-*ḫair* 'well' → Ha: *ālheerli* 'kindness' (cf. CQW: *ḫair* → Ms: *horti* 'good');

Ar: al-*qamih* 'corn' → Km: *elgame* (cf. CQW: *gamih* → Ms: *gemeita*).

In 'shadow' and 'cultivation' the /l/ of al- is phonetically assimilated in Arabic to the following C - it is a phonological rule of Arabic that the /l/ of the definite article be assimilated to the following consonant if it is one of the 'sun' consonants: dentals, alveolars and palatal-alveolars: /l, l̥, r, n, d, d̥, t, t̥, z, ʒ, s, ʃ, ʒ̄, θ, ʃ/. Thus the Arabic → proto-Maba process entailed simplification of the geminates thus produced:

zz̄ → nj/s; zz → s; γγ → g

For 'cultivation' and 'shadow' the processes hypothesized in the Arabic → proto-Maba adoption are:

(i) simplification (cf. p.117) and devoicing of Arabic geminate zz/zz̄ → s:

	'cultivation'	az-ziraa'a	→ * asur
	'shadow'	az-zill	→ * asil

* asur appears more likely to be an equivalent of CQW: zar than CL: ziraa'a (cf. also Ha: saura 'disused farm').

(ii) addition of Masalit suffix -ti to proto-Maba form,

* asur → asurti.

(iii) the splitting of 'shadow' into two items with distinct meanings (**asro** is the shadow of a human, **anjilo** the shadow of anything else):

1) in one of these a /l/ → /r/ substitution occurred,

* **asil** → * **asir**

(Ms /r/: Mb /l/ is a regular correspondence pattern:

	Masalit	Maba
wind	aguri	auli-k
heart	kuri	kuli-k

2) in the other of these prenasalization occurred,

* **asil** → * **ansil**

and, as mentioned above (pp.58-59), prenasalized voiceless consonants are excluded in Masalit so,

* **ansil** → * **anjil**

(This exclusion is illustrated by the voicing of /s/ that accompanies metathesis in 'fingernail':

Ms: **kinjimi** Ak: **singimi**)

3) in both equivalents epithetic -o was suffixed

Alternatively, **asro** could be an equivalent of Banda **kúzro**, though Aiki **ànjíè**, which one could expect to present some kind of intermediate form given its geographical position, does not support this hypothesis. **ànjíè** is in fact a cognate of Ms: **anjilo**, Mb: **onjulok** - there is a regular correspondence pattern to support this:

	Maba	Masalit	Kibet	Aiki
	l	l	l	y/ø
'tongue'	dilmí-k	(gelmedi)	àdélám	àdi(y)ím

(cf. also a wide spread of putative equivalents in surrounding languages, e.g. Bm: **njili**, Wa: **cilkoo**, Bg: **dil**, Ka: **ndjili**, Yu: **jili**, Bk: **lili**).

For 'crow' the processes hypothesized are:

- (i) deletion of medial /l/ (before /ɣ/).
- (ii) deletion of final bilabial plosive.

(i) is not attested elsewhere and there is no assimilation of /l/ to /ɣ/ in Arabic (but the $\gamma \rightarrow g$ change Arabic \rightarrow Masalit is attested in initial position (p.112)).

Bilabial plosive deletion occurs in only two other tentative examples, leading one to suppose that perhaps these were processes in the adoption of words into proto-Maba but no longer function in Masalit. Non-initial /b/ deletion is also observed in 'chameleon' (Ar: **al-hirba** > Ms: **lera**, cf. Mb: **hirbe**) though this is a rather dubious example. A more convincing case is 'bed (a wooden frame with a lattice of leather strips)' Ms: **kara** from CQW: **angariib** (cf. Mb: **angareb**) (there is a phonologically feasible adoption via Kb: **agera** or Ak: **gḳḳr**, but this is historically unlikely).

n.b. **anqariib** is a colloquial Sudanese word apparently of Beja origin: **angare-b** (b is the Beja masculine accusative/nominative indefinite suffix), possibly ultimately deriving from Greek: **κραββατος** .

4.3.6 PUTATIVE ADOPTIVES VIA OTHER LANGUAGES

There are two adoptive items which exhibit irregularities which may be explained by putative Tama and Goran intermediaries. These are the lexemes meaning 'Arab'. The Masalit singular and collective/plural of this word appear to have come via different intermediaries.

The Masalit collective **aram-ta** 'Arabs' appears to have a putative equivalent in Tama **arma-ŋ** 'Arabs'. This is feasible as the *nomadic* Arabs (the Baggara), who were the first Arabs to appear in Dar Masalit arrived from the North and East (the Tama and their close relations the Erenga, Gimr and Miisirii are the neighbours of the Masalit in those directions). Masalit shares a few other putative equivalents with languages of the Tama group (though, as information on this group is even more scanty than on the Maba group, I have been unable to do a thorough study of these). e.g.

	Masalit	Tama
moon	aye	ayi-t (cf. Erenga ai)
fire	wasu	uu (cf. Miisirii oos)
fat (noun)	nyomor	nyima
grass	tari	tiri
camel	diri	dor (cf. Erenga dur)
millet	kornyan	kariŋ
two	mbara	wari

The Masalit singular form **eriŋ-gi** 'Arab' appears to have a putative equivalent in Goran **aruŋ** 'Arab'. Information on Goran being yet more scanty than that on Tama, this must remain tentative. However, a Goran intermediary does explain the unique Ar /b/ → Ms /n/ correspondence, as the Tama intermediary explains the unique Ar /b/ → Ms /m/ correspondence.

4.4 LEXEMES WHICH ARE PART OF WIDER AREAL SPREADS

There are a number of words in Masalit which have putative equivalents in a large spread of languages in the region of Wadai-Dar Fur and further afield (i.e. are 'Shared Areal (vocabulary) Items' of obscure etyma). Although these words look as if they can *ultimately* be traced to a single source item (in this case Arabic), the pathways that they have followed are not often very clear. For some examples of 'S.A.I.'s with non-Arabic putative sources see Appendix F.

In an effort to clarify putative pathways, lexical equivalents are set out in the following way:

- 1) Masalit lexeme
- 2) Maba-group cognates or equivalents (Maba, Aiki, Kibet)
- 3) Equivalents of geographically adjacent languages (e.g. Tama)
- 4) Equivalents of geographically distant languages (e.g. Hausa)
- 5) Putative source item (Arabic)

HORSE:

- 1) **berɛ** ('colt', **ber-t-ala**).
- 2) Mb: **bere-k**; Ak: **fila**; Kb: **fia**.
- 3) Bt: **burto**; Md: **porrnyi**; Ta: **firat**; Dj: **murte**; Fu: **murta**;
Ka: **mutta**; Zg: **hirrte**.
- 4) Bn: **berta**; Kn: **fâr**; So: **bari**.
- 5) Ar: **faras** (cf. Br: **beri**).

It appears that most of the Dar Fur/Wadai languages (and all of the Maba-group languages) have cognates or equivalents of **berɛ**. There appear to be two possible ultimate sources: Arabic or Berber (as the horse was first introduced by the hamito-semites into North Africa). Final Arabic voiceless alveolar fricative /s/ may be equivalent to the stop /t/ in the languages adjacent to Masalit; however, it remains to be demonstrated that Arabic, and not Berber is the ultimate source.

COTTON:

- 1) **angnyirri/anyirri** (Arkell).
- 2) Ak: **nyirwo**.
- 3) Fu: **nyiri** (cotton cloth); Dj: **nirie**; By: **ñirya**.
- 4) Bm: **n'ere**; Bu: **ngeriya** (cotton cloth); Ha: **angurya** (cotton seeds).
- 5) Ar: **al-quur** (new cotton) (cf. Mk: **kòori**).

Although clearly unrelated to the Arabic lexeme **quṭn** 'cotton', it appears likely that Masalit and languages adjacent to it adopted their equivalents for 'cotton' from the West, from Bagirmi or Hausa (perhaps indicating that the cultivation of cotton spread from Chad east to Wadai/Dar Fur). The ultimate source of the Hausa equivalent may be Arabic (the definite article of which Hausa has metanalyzed) which also, by a separate pathway, appears to be the source of the Mandinka form **kòori**.

CAMEL:

- 1) **diri** (pl. **diri-je**).
- 2) Mb: **tarimbo-k**; Ak: **yegoma**.
- 3) Zg: **di**; Er: **dur**; Bt: **deri**; Ta: **dor**.
- 4) Tm: **t-alem-t**.
- 5) Ar: **jamal** (cf. Br: **talghemts**).

There are four putative equivalents of **diri** in the languages adjacent to Masalit, however, these form a distinct group apart from the mass of Sahelian equivalents (e.g. Fu: **kamal**; Bd: **kamala**; Dj: **kamélli**; Gu: **kimlaaka**; Bm: **lúguma**; Ha: **raakúmi**; Kn: **kargimmo**; Fl: **ngelooba**) and the rest of the Maba-group. This disparity could be explained by the adoption of the Maba word by Masalit, the loss of the final **-k** (a regular process, see above, 4.3.5) and also the loss of final **-mbo** (which could have been metanalyzed as the **-mbo** directional suffix, 'from, by' in Masalit (see p.81)). This must remain strictly hypothetical as it is the only example I have found of metanalysis and deletion of final **-mbo** in Masalit. If

this derivation is correct then clearly *Masalit* has been the intermediary for the introduction of this equivalent to Erenga, Tama, Berti and (less certainly) Zaghawa. Maba **tarimbok** could have been adopted from Tamajaq **talemt** into Maba (the royal mounted guard of the Wadai sultan was largely Tuareg (see p.40)). The ultimate etymology is probably Afro-asiatic (Br: **talghemts**; Ar: **jamal**, CQEAR: **gamal**; Cp: **gamol**) as the animal was originally introduced by Copts or Berbers (ironically the Arabic word **jamal** appears to be of Semitic origin but not derived from an originally Arabic root).

n.b. Aiki **yegoma** seems to have its origin not with the other Maba-group languages but with the Banda equivalent **yagama**. This is very plausible as the Banda are a powerful people to the south of the Aiki (there are very few camels in Aiki-land: it is mosquito- and tsetse-ridden and few camels, horses or donkeys survive).

BLACKSMITH/POTTER:

- 1) **kulle** (pl. **kulle-je**). (cf. **kulukulu ig-an, D, g**, 'to mould').
- 2) Mb: **kula-k**; Ak: **màigi** (pl. **màigi-t**).
- 3) (see n.b. below)
- 4) Ha: **feeràa** ('to forge'); Fl: **kila-jo**; Km: **kuri** (the blacks around Lake Chad, cf. CQW: **kirdi** 'slave').
- 5) Ar: **kuur** 'forge', **kiir** 'bellows'. +

There appear to be no equivalents of the Masalit form in adjacent languages other than the Maba cognate (though this could simply be due to the lack of information). It appears, as with 'cotton', that the word (and technology?) has come from the West - Hausa or Fulfulde, and might have an ultimate etymological origin in an Afro-Asiatic radical ***kir**.

+ Blacksmiths are referred to as **naafix al-kiir** 'blower of the bellows' in the canonical Arabic **hadith** literature (see Wensinck, I **haddaad**, VI **nafax**, VI **nafii**).

n.b. There is, however, a spread of putative equivalents for the Aiki form amongst the adjacent languages (Ta: **miat**; Dj: **miir**; Fu: **miir**; Bt: **mir**; Zg: **mei**) which might have an ultimate source in the Hausa 'active participle' **mafeerii** (blacksmith).

HOUSE:

- 1) **taŋi** (straw-built hut).
- 2) Mb: **taŋ**; Kb: **tòngó**; Ak: **tòŋ** (village).
- 3) Fu: **toŋ**; Zg: **danga**.
- 4) Ha: **ḍaakii**; Sn: **da**
- 5) CQW: **dangaaya** CQN: **danga** (mud tower)

There is a clear set of Maba-group cognates for the Masalit form, the Zaghawa and Fur (see p.139-40) equivalents are the only ones amongst the adjacent languages. The Hausa and Sango forms are less likely. Colloquial Arabic may provide an etymon in **dangaaya** (also adopted more certainly into Maba: **dangaya** 'mud tower'). Masalit huts are traditionally built with straw, whereas Maba huts are built with mud (resembling more closely the architecture further West); the Arabic form could have been twice borrowed into Maba, giving two distinct lexemes **dangaya** and **taŋ**, the latter adopted by Masalit and Aiki (alternatively, and more likely, the borrowing from Arabic could have been made by proto-Maba, and thence into the present-day languages).

BITTER/SOUR:

- 1) **juma**.
- 2) Mb: **kámá-k**; Ak: **káyám.***
- 3) -
- 4) Kn: **com**; Ha: **s'aamii**.
- 5) Ar: **haamuḍ/jamad** (cf. Bj: **hami**).

The Masalit form has certain cognates in the other Maba-group languages (see the note below). The other putative equivalents are less certain. There is a second Aiki word for 'bitter', **cimoa**, which is used in describing 'bitter' manioc and, by extension some

other vegetables. However, the etymology of this *is* certain, from French **six mois** (as the 'bitter' manioc grows to fruitition in six months)!

* There are other instances of Masalit palatal and alveolar fricatives /j,s,c/ corresponding to Maba, Aiki and Kibet velar plosive /k/, though they have not yet been systematized; e.g.

	Masalit	Maba	Aiki	Kibet
charcoal	kicimi	kikimi-k	- -	- -
name	mirsi	- -	miki	milki

(see above pp. 67 and 107 for other notes on the /s/-/j/ relationship in Masalit)

4.5 SEMANTIC DISCREPANCIES

When studying the semantic aspects of lexical adoption it must be borne in mind that the hearers and speakers of the adopting language may not always be bilingual (although that is now increasingly the case for the Masalit), and so may not understand the 'underlying' morphological structures in the source language adoptives, but understand them principally on the 'surface' lexical plane - hence the phenomenon of metanalysis described above (see 4.2.3). This morphological reanalysis may result in the narrowing of the meaning of that lexeme especially if, in the source language, its meanings are various. Alternatively the range of an adoptive lexeme may widen as it is extended to cover meanings other than those of the etymon in the source language, or the range may remain the same or shift altogether. Finally, the range may be shared by synonyms, one indigenous, one adoptive; how stable this situation is may vary from pair to pair and it is a moot point how synonymous synonyms may be. In the Masalit examples in 4.5.5 below I have given pairs which I was told by my informants "have the same meaning" ("?ind al-kelimatein ma?_na wahida"). This may be deceptive as may be illustrated by the example given above (p.23) of three synonyms meaning 'thank you' in Turkish: **mersi**, **teşekkür ederim** and **sağol** which have different social implications concerning the speaker and hearer.

Of Arabic adoptives in Masalit an overwhelming majority (278/346) maintained their original meaning while about twelve percent (42/346) exhibited shifts in meaning and half that number (20/346) exhibited meaning contraction. Only six examples exhibited an extension of meaning. None of these categories is coterminous with any semantic grouping, though most of the maintenance examples are straightforward names of objects and ideas, e.g. 'onion, gruel, gunpowder, circumcision'. The processes of shift, contraction and extension appear to be idiosyncratic and follow no clear pattern.

4.5.1 MEANING MAINTENANCE

Meaning maintenance: the use of a word within what are referred to as 'its inherent general semantic limits' by Abu Manga (1986).

Examples of meaning maintenance (total 278)

	Arabic	Masalit	
year	sana	sene	year
baobab	tabaldi	tebeldi	baobab
cumin	ʃamaar	ʃemarta	cumin
gravy	kawaal	kawal	gravy
always	daʔiman	daima	always

5, 6, 7, 8, 12, 22, 33, 34, 37, 39, 41, 53, 59, 60, 61, 64, 65, 81, 83, 96, 99, 100, 104, 105, 109, 133, 134, 138, 139, et al.

4.5.2 MEANING SHIFT

Meaning shift: the use of a word in a sense other than and not including that defined by its inherent general semantic limits.

Examples of meaning shift (total 42)

	Arabic	Masalit	
smoke	duʔaan	dokonta	odiferous herbs
coffee	qahwa	gihawante	lazy
wind	riih	ri	north

2, 15, 24, 55, 96, 202, 214, 224, 255, 261, 280, 292, 304, 307, 357, 358, 369, 385, 387, 395, 418, 443, 444, 497, 585, 621 et al.

Arabic **riih** 'wind' has come into Masalit via Fur (see above p.141) meaning 'north', as the northern district of Dar Fur used to be called **dar ar-riih** 'land of the wind', hence the Fur term **ri** for 'north', hence the Masalit term (the Masalit have been subject to the Fur on and off for three hundred years until the British occupation).

Coffee is an item of extreme luxury in Dar Masalit, affordable

only by the wealthiest people. One measure of a person's wealth is how much time they spend idling (this is one rationale why well-to-do Sudanese women make henna patterns on their hands and feet - it shows clearly that they are able to afford to spend the long periods of time necessary doing nothing with their hands and feet)!

The smouldering of certain odiferous herbs in small clay pots inside Masalit huts is a common custom to sweeten the air (and may have some other significance of which I am unaware). It appears that the Masalit have understood Arabic **duḡaan** 'smoke' to mean 'that which makes sweet smoke', i.e. 'odiferous herbs'.

4.5.3 MEANING CONTRACTION

Meaning contraction: the use of a word in a narrower sense than its inherent general semantic limits.

Examples of meaning contraction (total 20)

	Arabic	Masalit	
amulet, screen	hijaab	ijaba	amulet
spirit, breath	nafs	nefes	breath
arise penis, beer	qum zibb	gumzib	beer
noon	zuhr	durɔ	noon time
"	"	duhurko	noon prayer

50, 77, 123, 175, 212, 245, 279, 342, 384, 413, 615, 946, 979, 1039, 1040

Arabic **hijaab** 'amulet, screen, veil' has come to mean simply 'amulet' in Masalit (and is thereby an apparent synonym of **koma**, see below (4.5.5)).

Arabic **nafs** 'spirit, breath, self' has been adopted into Masalit using only the sense of physical breath (this is also an apparent synonym of **nduna**).

The Arabic term **qum zibb** 'arise penis' (imperative) has been given to a type of millet beer brewed in the Dar Fur-Wadai area (presumably for its aphrodisiac qualities). Masalit has adopted

the term as the name of the beer only.

Arabic **zuhr** is an example of double-borrowing of one word to give two adoptive forms with distinct (though close) meanings. The Arabic term may be used for both the time and the prayer.

4.5.4 MEANING EXTENSION

Meaning extension: the use of a word beyond the limits of its precise inherent meaning by association with additional and more general semantic features.

Examples of meaning extension (total 6)

	Arabic	Masalit	
impotent	talaf	tulufo	impotent, homosexual (male)
legal majority	buluuy	balak	legal majority, suitable, ripe

192, 512, 661, 773

Arabic **talaf** 'impotent (man)' has come to mean by extension 'male homosexual' in Masalit. There does not appear to be an indigenous term for homosexual (the other term **xista** is also an adoptive from Arabic). This may be an example of a taboo working, my informants may have felt obliged to use a euphemism.

In Arabic **buluuy** means simply 'legal majority' (with reference to girls and boy of marriageable age); in Masalit the adoptive has acquired the more general sense of 'suitable' (someone or something in its prime, at their best) and 'ripe' (of fruit or vegetables).

4.5.5 SYNONYMS

As Weinrich states (1953, quoted in Appel and Muysken, 1987:166), there is a constant need for synonyms of affective words that have lost their expressive force. There are several examples of the creation of apparent synonyms in Masalit by the

adoption of Arabic words with the same meaning as indigenous words.

Examples of 'synonyms' created by adoption:

	Ms indigenous	Ms adoptive	Arabic
circumcision	tendela	taar	ṭahar
breath	nduna	nefes	nafs
shoulder	amurti	katafko	katf
amulet	koma	ijaba	ḥijaab
twenty	utukutuk	iḥrin	'iḥriin
possible	sanen	gudurken	qudr

See also 36 37, 152 153, 162 163, 172 173, 185 186, 218 219, 225 226, 266 267, 276 277, 278 279, 348 349, 385 386, 470 471 et al.

As mentioned above (4.5), although informants might state that two words are 'synonyms', this may be deceptive and it is difficult, in the absence of extensive contextual evidence, to verify whether or not the limits of the precise inherent meanings of two putative synonyms are coterminous. e.g. **amurti** and **katafko** 'shoulder' apparently share the same limits of meaning: both may refer to either human or animal shoulders, both may refer to the boney joint as well as the flesh that covers it; whether or not they have different idiomatic usage is not clear at present.

Words which have the same general meaning but differ in their detailed specification are not included in the list above, e.g.

	Ms indigenous	Ms adoptive
smell n.	tuya (rotten smell)	riyeti (smell (generic))
lamp	sinyar (clay lamp)	lamba (hurricane lamp)

4.5.6 LOAN TRANSLATION

Loan translation (or loan shift) occurs when only a meaning is imported but the but the form representing that meaning is indigenous (Appel and Muysken, 1987:165). I have been able to

identify only three rather tentative putative loan translations from Arabic into Masalit:

(i) in the idiom meaning 'stubborn', Ar: **raas qa.wii** may have been translated into Ms: **kujo juṇa**, both literally mean 'strong head' (but cf. English **strong-headed**).

(ii) in the extension of the meaning of Ms: **dusuṇo taṇi-taṇ** 'hut door' to include 'clan, lineage' by analogy with Ar: **ḡaḡm albait** 'door of the house, lineage'.

(iii) in the extension of the use of the Masalit (far) deictic, **illi**, to function as a relative particle by analogy with the relative particle in CQW: **illi** (< CL: **allaḏii**). In this example the analogy is encouraged by the phonetic similarity of the Arabic and Masalit forms (the other Masalit (near) deictic, **igi**, functions merely as deictic).

4.5.7 LOAN BLEND

Loan blend occurs when a loan form is adopted and combined with an indigenous form to give a hybrid (Appel and Muysken, *ibid.*). I have been able to identify only one example of this in my data: Ms: **taṇa murasila** 'envoy' < Ms: **taṇa** 'official, strong-arm man'* and Ar: **murassil** 'sender'.

* According to Kapteijns (1985:42) the **taṇa** was the strong-arm man of the village administration, fulfilling the functions of policeman, bailiff and assistant tax-collector.

4.6 PERCENTAGES AND SEMANTIC AREAS OF ADOPTIVES

Percentages:

Of Doornbos' lists of two hundred semantically basic *nominal and verbal* Masalit lexemes (see Appendix D), less than ten percent were of ultimate Arabic origin:

6/100 of the hundred most basic lexemes, i.e. 6%;

17/200 of the two hundred (first hundred included), i.e. 8.5%.

Of my own list of one hundred semantically basic nominal and verbal lexemes (not the same as Doornbos' list, see Appendix A) slightly more than ten percent were of Arabic origin:

12/100, i.e. 12%

Of a list of 1076 *nominals* (see Appendix E), which were not semantically 'selected' as basic or otherwise, 346 were of ultimate Arabic origin (of which 15 were dubious), i.e. 32%. This excluded verbals which, as stated above (4.2.4), contain only three putative Arabic adoptives.

It is difficult to make any but rather general observations about the above statistics as 'semantically basic' may be interpreted very subjectively. However most of the items on the semantically basic lists of both Doornbos and myself cover those areas in which fewest Arabic adoptives were found in the longer list of 1076 nominals: fauna, flora, body parts and products and physical phenomena. Also, as verbal lexemes are included, only one of which contains adoptive material in Doornbos' lists, the difference in results is complementary rather than contradictory: about 10% of semantically basic nominals are of Arabic origin, about 30% of all nominals are of Arabic origin.

The principal semantic categories broke down into the following figures:

semantic category	Arabic/Total	Percentage of Arabic
education/learning	5/5	100
money/tax	7/8	87.5
seasons	4/5	80
tribe/nation names	3/5	60
all manufactures	60/114	52.5 (includes cloth, musical instruments, metalwork etc.)
human relations & status	53/108	49 (includes occupations and religious terms)
time (duration/concept)	11/23	48
directions	5/11	45.5
emotions	3/8	37.5
food/drink	17/47	36
medicine/disease	5/15	33
numeration	6/19	31.5
housing/huts/community	8/27	29.5
kinship	3/11	27
colours	2/8	25
abstracts/adjectives	46/204	22.5
fauna	10/61	16
physical phenomena	9/71	12.5 (includes weather)
body parts and products	8/81	10
flora (also see food)	4/42	9.5

The differences in my own longer list between the percentages of Arabic adoptives in different semantic categories gives some general indication of the areas of greatest and least penetration by Arabic language and culture.

It is not surprising that education/learning (teacher, school, paper etc.) comes top of the list as Arabic is acknowledged as the 'language of learning by the Masalit and other muslims. It is unfortunate that the total of the sample is so small.

Money and manufactures are also areas of heavy Arabic

influence, possibly indicating the importation of new vocabulary with new technology, e.g. **guruŋ** 'money', **ibro** 'needle'

As the governance of human relations and status are central to Islam (and any other religion), it is also to be expected that a large part of the vocabulary pertaining to these should comprise Arabic adoptives, e.g. **zina** 'adultery', **azabi** 'bachelor', **gadi** 'judge'.

It is interesting to note that food and drink vocabulary has been so heavily influenced, indicating the adoption of foodstuffs and methods of preparation formerly alien to the Masalit, e.g. **basal** 'onion', **ajina** 'gruel'.

As mentioned above, the areas least affected by Arabic: fauna, flora, body parts and physical phenomena, are those unlikely to be affected by Islam, cultural or technological innovations. The adoptions in these areas are more sporadic and possibly older, e.g. **bære** 'horse', **sargi** 'back'.

There are few semantic areas which have remained untouched by Arabic; clearly some have been more deeply influenced than others, for cultural and technological reasons, but few areas appear to exclude adoptives. The precise motives involved in adoption cannot be known, however the necessity to name new technologies, foods and cultural and philosophical concepts does not explain all of the adoptions, e.g. those which have apparent synonyms in the 'indigenous' lexicon - **katafko/amurti** 'shoulder' (Ar: **katf**) (see 4.5.5). These may be due to fashions and prestige or homonymy. What seems clear now is that the rate of adoption of lexemes has increased in the past hundred years; it would be interesting to take down Doornbos' lists fifty years hence, if Masalit is still current then, to see how much further Arabic penetration of the lexicon has gone.

The areas which have excluded Arabic adoptives up till now are the pronouns and the interrogative nominals. As stated above, the three putative adoptives in the Masalit verbal system are dubious. The excluding or limiting factor here appears to be

morphological: the complexity of verbal inflection, the association of pronouns with pronominal prefixes, the prefix **ng-** common to nominal interrogatives (possibly related to the verbal interrogative suffix **-ŋ**). This conforms to the hierarchical constraints of Moravcsik (1978:110-111) quoted in the Introduction (pp.21-22) that lexical items are adopted before any other items and that 'non-nouns' are only adopted into a language if nouns have already been adopted into it.

Personal names have also been adopted and most 'official' names (those used in schools and government offices) are Arabic now. To what extent Masalit names are kept as nicknames I do not know (see Appendix H).

There appear to be three fundamental colours for the Maba group languages (see Appendix C) which fit into a morphological pattern; these are red/brown, green and black/dark. These have been maintained in Masalit, with 'yellow' being adopted from Arabic (Ms: **asfar** < Ar: **aşfar**) and an adoptive synonym imported for 'black' (Ms: **dukana** < Ar: **daakin**).

CONCLUSION

5.0 SUMMARY AND CONCLUSION

Hock (1986:36) states that "real language is far from regular." In this study we have seen that statement borne out by the numerous minor irregularities in Arabic-Masalit equivalences. Although some of these irregularities may be explained by the presence of intermediaries in Arabic-Masalit adoption, as noted in the text, some unexplained exceptions remain (such as the 'untidiness' of the correspondences of Arabic /χ/). The overall patterns, however, are regular and are an important piece of evidence in deciding which form of Arabic has been the principal donor (colloquial).

5.1 FORMS ADOPTED

5.1.1 FORM OF ARABIC ADOPTED

While I have made no 'a priori' assumption as to which Arabic has been the source of adoptive material in Masalit (classical or colloquial Arabic), it has become clear in the course of analysis that the situation, though far from simple or clear-cut either way, due in large part to the geographical location of the Masalit, favours colloquial Arabic as the language of origin of the larger number of Arabic adoptives in Masalit.

The further implication of this is that the large majority of adoptives have entered Masalit during the last 150-200 years from colloquial Arabic, following the pattern of other languages of the area and to the east such as Tama and Fur, and that Masalit phonology itself has altered within that period to include the extraneous phonemes /x/ and /z/. Older adoptives are fewer and hence their patterns of adoption are less clear, some being indirect - e.g. via **Fulfulde**, some being continuations of adoptives in the **proto-Maba** lexicon. In the absence of documentary evidence one may only make a conjecture as to when proto-Maba split into its descendant languages: the oldest word-lists of Maba

and Aiki date from just under 200 years ago (Browne's list of Aiki in the 1790s and Seetzen's list of Maba in the 1800s). A reasonable conjecture for this would be between two and six hundred years ago: not more than six hundred as Arabic influence would not have been felt before then, not less than two hundred as the divergences in verb base morphology between Maba and Masalit (see note 6, p.86), for example, are quite distinct and, of a list of 107 basic lexical items (Appendix A), only 62 had Masalit and Maba cognates. Without more concrete historical data than is available, it is impossible to make more precise estimates (as does Gregersen, 1967, using linguistic seriation with historical facts).

The older adoptives via proto-Maba, having maintained and adopted the Arabic definite article, would probably have CL.Arabic etyma (CL.Arabic tends to use the definite article in naming, CQW does not), following the pattern of languages to the west such as Kanuri and Hausa. Hiskett, 1965, and Wexler, 1980, give evidence that classical Arabic has been the source of basic adoptives in Hausa and West African languages; Greenberg, 1947, however suggests North African colloquial sources for adoptives in Hausa, and Abu Manga, 1986, gives clear phonological evidence that colloquial Sudanese Arabic is the source of adoptives in the Fulfulde dialects spoken in Nilotic Sudan.

As mentioned above, historical and social factors may provide the reasons for this situation: the Fulbe of Sudan live amongst a largely arabophone population whose lingua franca is colloquial Sudanese Arabic; the Hausa and other West African groups do not as a whole live in arabophone areas (though the Hausa do have contact with the 'Shuwa' Arabs) and their main source of Arabic has been from the Islamic literati who were not necessarily Arabs but often Mandinka, Fulbe or Berber.

The Masalit live in an area where the lingua franca is colloquial 'Dar Fur-Wadai' Arabic, which differs slightly from 'riverine' Sudanese (see 2.0 and 2.1 above). It seems quite likely that the lingua franca status of this colloquial Arabic is a

fairly recent phenomenon, linked to the political events of the last couple of centuries: the westward advance of arabophone settlers, traders and soldiers from the Nile during the turbulent Turkiyya and Mahdiyya periods (and continuing ever since). That *classical* Arabic was the *courtly* language of the Maba and Fur neighbours of the Masalit since the expulsion of the pagan Tunjur and their islamization in the seventeenth century is clear from political and court correspondence. It is not justifiable, however, in historical terms, to assume that colloquial Arabic was adopted as a lingua franca at this time. Before the arrival of the riverine arabophone settlers in large numbers in the nineteenth century the nomadic Baggara Arabs were the only mother-tongue speakers of Arabic in the region and, by analogy with the similar situation in Hausaland, it is reasonable to suppose that their linguistic impact was limited; this is borne out by the fact that there is only one *clear* adoptive from Baggara colloquial Arabic in Masalit, **owta** 'south'. Thus one *could* expect to find two sets of adoptives from Arabic in Masalit and neighbouring languages: an older set from classical Arabic via Maba and Fur and a newer set (from the 1820s onwards) from the colloquial.

This duality of Arabic etyma may also be explained by the alteration of the linguistic situation in Dar Masalit itself in the last 200 years in that it has changed from being a land where classical Arabic was the language of religion, education and the court but Maba, Fur and Masalit were the market languages, to being a land where, as well as the prestigious pre-eminence of classical Arabic, colloquial Arabic is the principal lingua franca and is at least the first language of most of the inhabitants of the area in whose hands power and wealth is concentrated.

Maba appears to be at the 'watershed' of Arabic linguistic influence in the Sahel, the languages to its east (of which Masalit is one) adopting largely from the colloquial Arabic of Nilotic Sudan, the languages to its west adopting more from classical Arabic and possibly the colloquial of the Maghreb (there is orthographic evidence for this also, see Appendix I).

5.1.2 FORMS OF ETYMA ADOPTED

As stated above (1.4) the surface phonetic forms, i.e. what is *heard* are those that are usually the basis for adoption by the hearer. The morphological assimilation patterns of the adopted lexemes vary. Metanalysis has occurred in 13 examples (see p.134), e.g. an Arabic plural form may be metanalyzed to become the Masalit singular form, however, most adoptives are integrated without metanalysis. Most frequently the etyma are Arabic nominals, nouns or nominals derived from verbs (e.g. *nifaab* 'arrow', *muwazzaf* 'official'); the only verbs adopted appear to have been taken in their 3S perfect 'uninflected form' (e.g. *nakar* 'he denied'). The Masalit morphological category into which most adoptives have been assimilated is that of nominals. This is discussed further in 5.3 below.

5.2 EXPECTATIONS

Hock (1986:395) notes that non-permissible structures are eliminated by the application of synchronically productive rules of the borrowing language. Thus, comparing the phonologies of Arabic and Masalit, one could reasonably expect a certain minimum of changes in lexemes adopted by Masalit from Arabic: assimilation to the Masalit phonological and morphological systems. This would entail the elimination of Arabic phones and phonetic features which are not present in Masalit (e.g. the pharyngealized alveolar consonants /ḍ ṣ ṭ ḏ/, dental fricatives /θ ð/, uvular and pharyngeal fricatives /χ ʁ h ' / and uvular voiceless stop /q/). We have seen in the analysis that this occurs (e.g. the simplification of geminates, the elimination of all uvular and pharyngeal phones and also the restriction of glottal stop to (non-phonemic) initial position).

5.3 STRATEGIES FOR ASSIMILATION

5.3.1 GRAMMATICAL CATEGORIES INTO WHICH ADOPTIVES ARE ASSIMILATED

The vast majority of the material adopted has been assimilated into non-verbal categories in Masalit, only three Masalit verb bases are putative Arabic adoptives - and these are rather dubious. A major factor involved here is the complexity of Masalit verbal conjugation. Almost all adoptives have been integrated into the category of nominal; there are ~~10~~ ten examples of integration of adoptives into the category of adverb (e.g. **abadan** 'never', **asirkena** 'quickly'). Within the category of nominal (defined in terms of Masalit morphology on p.77), most adoptives have been assimilated as the equivalents of English 'nouns' (271/346) (e.g. **basal** 'onion', **kursi** 'chair', **xasab** 'force'), fewer (43/346) as adjectives (e.g. **zahjante** 'angry', **nadiif** 'clean') and fourteen as 'partners' of indigenous 'support verbs' (e.g. **nakar ig~an,D,g** 'deny', see p.76). However, the distinction between these categories of nominal is a function of syntax, not of morphology, and all nominals may behave as nouns. There are also eight examples of adoptives in the category of 'conjunction' (e.g. **lakin** 'but'); as there are no indigenous Masalit conjunctions they may present a new category of lexeme (as Arabic adoptive conjunctions in Turkish do, e.g. Ar: **wa** Tk: **ve** 'and').

5.3.2 PHONOLOGICAL ASSIMILATION

The integration of phonemes, in the large majority of examples where equivalent phonemes exist, has been straightforward (e.g. there is 100% maintenance of Arabic /k/ to Masalit /k/ and of Arabic /t/ to Masalit /t/).

CLArabic-only phonemes have been replaced by indigenous Masalit phonemes, which correspond in most cases to the CQW equivalents; thus the patterns of substitution imply strongly that most lexemes were adopted from the colloquial _k than from the

rather

classical language, using CL as the initial referent has highlighted this (e.g. the epenthetic vowels which break up C clusters in classical Arabic lexemes in the colloquial Arabic correspond in almost all cases to their Masalit equivalents:

'mercy' CL: **rahm** CQW: **raham** Ms: **raham**)

The phonemes /x/ and /z/ are not originally indigenous in Masalit (I make this assertion as neither appears in indigenous lexemes even as allophones of /k/ or /s/ for example) - but since they *do* occur in adoptives they must be considered as Masalit phonemes. In some equivalents there are regular correspondences between Arabic /χ/ and /z/ and Masalit /h/ or /k/ and /s/, in others /x/ and /z/ persist - perhaps as an indication of the 'recentness' of the acquisition. Gregersen (1967:103), drawing examples from Kanuri, Hausa and Nupe, states that '*if new phonemes are introduced in foreign words, they probably represent in most instances the phonemicization of already existing allophones.*' However, there is no evidence to support this in Masalit: I have been unable to find any lexemes containing /x/ and /z/ that are not identifiable as of Arabic origin (the /x/ and /z/ phonemes *do* exist as indigenous Maba phonemes, though not in Aiki and Kibet). There is, however, some evidence to suggest that [x] may be treated as a conditioned allophone/free variant of /h/ and /k/, though the phonological conditions determining this are not clear - e.g. the varying versions of 'rainy season' according to different sources (illustrating incidentally the problem of having so few sources): Ar: **χariif**, Ms: **xarifu** [Edgar, 1979], **xariifu** [Doornbos, 1979], **kɔrip** [Yahya, 1980], **harifo** [Arkell, 1930s]; also the free variant noted by myself, 'good', Ar: **χayr**, Ms: **xorti/horti**. /z/ appears to be more 'settled' than /x/ in contemporary Masalit phonology - it is maintained in most examples, there are only five examples where /z/ → /s/ (two of which have putative intermediaries) and two where /z/ → /j/ (older adoptives possibly, see p.107).

This raises a doubt as to whether lexemes containing /x/ or /z/ can be truly regarded as 'assimilated', as they contain clearly 'alien' structures. It also raises a question of speaker

awareness: most of my personal research was conducted through the medium of Arabic with informants who were Arabic-Masalit bilinguals (and who clearly would be aware of many Arabic lexemes in use in Masalit). For them perhaps some Arabic words would be more fashionable or in vogue than their Masalit synonyms, articulating them à l'arabe could be a symbol (?) of prestige and erudition and hence those lexemes would be less 'assimilated' than others not so consciously adopted (compare the variant pronunciations of 'garage' and 'envelope' in R.P.English). The only check would have been to talk with a non-arabophone Masalit (which I did not have the opportunity to do). In any case, given the overwhelming presence of Arabic and its gradual replacement of the indigenous languages, few Masalit can be totally ignorant of Arabic sounds and basic Arabic vocabulary.

5.3.3 ASSIMILATION TO MASALIT WORD PATTERNS

There is a clearly demonstrable trend towards assimilation to Masalit word patterns (see table of Masalit word schemes, p.60). However, this is not as regular a process as sound substitution or maintenance and appears to be largely unpredictable and idiosyncratic, related to neither the phonological structure nor in many cases to the semantic value of the lexeme. Two trends (one morphological and one phonological) are discernible:

(i) addition of suffixes, this occurs in (82/346) adoptives. The most common suffixes are the plural suffix **-ta** (23/82), the singular suffix **-ko** (18/82); e.g. CQW: **izin** → Ms: **izinko** 'permission' (cf. indigenous Ms: **nyerko** 'baby'), CQW: **arab** → Ms: **aramta** (col.) 'Arabs' (cf. indigenous Ms: **jukuta** 'bee hive'). These appear to retain their semantic function; the semantic function of other suffixes is less clear, e.g. **-ti**, Ar: **jazaar** → Ms: **jezarti** 'butcher' (cf. indigenous Ms: **turti** 'cliff'). Here there appears to be simply an irregular assimilation to common Masalit nominal word patterns such as final **-rti** (see p.61).

(ii) epithesis, this occurs in (20/346) adoptives. **-i** (8/20) and

-o (7/20) are the more common epithetic vowels. They appear to have no semantic function and appear to be an irregular assimilation pattern to a major Masalit word scheme (over 80% of Masalit nominals are vowel final, see p.60); e.g. CQW: **barr** → Ms: **buro** 'cultivable land', CQW: **kull** → Ms: **kuli** 'all', CQW: **bizer** → Ms: **bizera** 'seed'.

5.4 PUTATIVE INTERMEDIARIES

Of the various languages investigated as putative intermediaries of adoptives from Arabic none exhibited any clear or frequent phonological patterns in comparisons with Arabic and Masalit which would indicate any *regular* relationship as intermediary. One must conclude that CQW Arabic has, in large part, been adopted directly by Masalit - which is reasonable in historical terms as the two speech communities have been in contact for over 150 years. However, some of the irregularities observed in the Arabic-Masalit equivalences may be explained by the presence of intermediary languages.

Some secondary conclusions arise from the treatment of the putative intermediaries:

(i) that Fur had an influence on the politico-cultural vocabulary of Masalit (supported by their historical tributary relationship) and it also shares some basic vocabulary with Masalit - possibly an indication of a genetic link, especially in view of an unusual shared morphological feature (a verb-base personal prefix allomorphy).

(ii) that Fulfulde has had little influence on Masalit other than a very few putative loans.

(iii) that although Kanuri has clearly not been an intermediary for Arabic loans it has a number of putative equivalents of basic vocabulary, which suggest a possible genetic relationship predating the advent of Arabic to the region (otherwise one could reasonably expect some Arabic adoptives in Kanuri, which are numerous, to be included).

(iv) the intermediary status of Maba remains uncertain because of the sibling relationship of the languages - in many cases there is no way of distinguishing between loans adopted separately into each and those adopted into proto-Maba (which are therefore cognates). A very few clear putative descendants of Arabic adoptives into proto-Maba were found, e.g. 'shadow':

Arabic	Proto-Maba	Proto-Masalit	Masalit	Maba	Aiki
az-zill	* asil	→ * asir	asro		

↓

* anjil	→	anjilo	onjulo-k	anjie
---------	---	--------	----------	-------

In this case one may hypothesize a chronology to explain the synchronic facts: that the Arabic form was adopted into proto-Maba between 300 and 600 years ago; that the 'proto-Masalit' dialect of Maba altered this form to * asir; that the proto-Maba form altered by prenasalization to * anjil, giving rise to the contemporary Maba and Aiki forms by direct descent, and to the Masalit form possibly by adoption from Maba (which means 'shadow of non-human', asro means 'shadow of human').

5.5 SEMANTICS

On the basis of some recent word-lists it appears that Arabic adoptives make up about ten percent of the Masalit lexicon's semantically basic items and about thirty percent of the whole lexicon. As a rough guide these figures illustrate the depth of Arabic influence on the (nominal) lexicon. The semantic areas influenced most profoundly have been those concerned with manufactures and human relations - i.e. areas influenced by new technologies and the religion of Islam. The areas least affected are those concerning body parts and products, flora, fauna and physical phenomena - areas which would have been familiar to the Masalit before the coming of Arabic.

APPENDICES

APPENDIX A

MABA GROUP EQUIVALENTS

* = Arabic, {} = plural, / = alternatives, verb bases are the shortest, given between --, Fl = Fulfulde, Ha = Hausa, Kn = Kanuri, Sn = Sango

gloss	Maba	Masalit	Aiki	Kibet	'Root'
all	dum*	kuli*	pát	kàdàmán	
ash	awun	awén-di	àwàn-dí	awun-di	AWUN
back	der-in/dahr*	sar-gi*	sídá	siida	SIDA
bad	nemere-k	tan biye	cén*	jar san	
belly	tabu-k	kúnyò	bütùlù*	kul	
big/old	kula-k	kódi/gurí	kwàyè/kùdè-ndé	kwɔɛ/kuyoy	KUL/KUD
bird	koʃi-k (-tu)	kúʃi-k	kòs-i (-it)	kwòsí	KOSI
bite	-is-	-iʃ-	-òtí-	-ut(ed)-	-S/T-
black	lu-lu-yok	dún-gi	dàkán	dind-ík	LU/DUN
blood	eri	fàrín	pày (-ó)	fal (-u)	(F)ARI
body	nduu	ndü	ndü-k	ndu-k	NDU
bone	kanji-k	kónji	jìngàr	njekedi	KANJ/JIK
breast	anguun	àngùini	àngòfi	àngòfi	AŃGUN
charcoal	kikimi-k	kicimi	kúyúyì	gàʃiʃimàn	KICIM/
child	kala-k	kima	kàykày	káikàl	KAL/KIM
cold	kera*	kérí-mà*	àtàandí	àtàandí	ATAANDI
come	-ar-	-ár-	-ár-	-(aw)ár-	-R-
country	daar*	gani/kase*	kàsè*	lan	GAN/LAN
crow	agura-k*	agura*			AGURA
cut	-atam-	-ífél-	-ètám-	-and(ay)-	-TAM-/
day	dalka	dekadi*	sóɔrɔ	sarwɔ	SAR ?
die	-ei-	-iy-	-id-	-id(ik)-	-Y/D-
dog	niu-k	ínji	míʃ (míʃjit)	míʃ (mínjík)	MIÑ/NJ
drink	-ang-	-aŋ-	-àŋ-	-aŋ-	Ń
ear	koi-k	kwóyè	kàsá	kàsá	KOY/KAS
eat	-iʃ-	-any-	-áʃ(ɔw)-	-áʃ(áw)-	AÑ
egg	kademi-k	kándàngí	kàdèmɔŋ	kademaŋ	KADAM

gloss	Maba	Masalit	Aiki	Kibet	'Root'
eye	kasi-k {-fi}	kó-gí {-sí}	kàs-èk {-ò}	kàs {-u}	KAS
fall	-ongun-	-inder (cir)-	-ùs(ét)-	-us(it)-	
farm	ɔsur*	asurti*	sɔɔrɔ*		ASUR
fat	niamu-k	nyomor	ñim {ñimú}	ñim {ñumo}	ÑIM
finger	kartongala-k	nagaram	kàrà	kàrà	KAR
" -nail	ñiṅgirmisi-k	kinjimi	siṅgimi	siṅgirim	SIṂGIRIM
fire	wosi-k	wáasù	nàsàk {nusu}	nàsà-k	WAS/NUS
fish	kuño	kúnyò	kùñún {-ó}	kuñan	KUÑ
five	tur	tur	tór	tur	TUR
foot	ja-k {-fi}	jo-nyí {-ø}	dò-dí	dòo-dí	JA/DO
four	asal	as	átéy	atal	AS/AT
give	-ofio-	-inj-	-(ùw)inj-	-unj(ik)-	-Ñ/NJ-
go	-aw-	-ay-	-ày-	-ɔkɔɛ-	-Y/KOŃ-
good	namara-k	kala*	sám*	jár	
grass	luwa	tari	yà-k	la/lɔ	LA/YA
hair	tifi-k	tíṅà/tifa	tów	tów	TIF/TOW
hand	kara/kana	kɔrɔ	kàrà {kɔro}	kàrà {kórɔ}	KAR/KOR
head	kij-ik	kújò	ki {kijé}	kic {kujo}	KI(J)
heart	kuli-k	kúrí	jì	adasa	KUL/
horn	kami-k	kámi	gàm-dí	gàm-dí	KAM/GAM
house	tán	tan	tòṅgó	tòṅgó	TAŃ
hunger	ajuu*	wicitie	átú*	átú {àtúdó}*	
hunter		sayadte*	ganis*	ganis*	
kill	-au-	-iyaw-	-àsɔw-	-asao-	-(AS)AW-
knee	tumo-k	kádiṅyo	dàm-dí	dàm-tí	DAM/
know	-as-	-os-	-ɔɔt-	-ot(ɔk)-	-S/T-
lake	tasu-k {-u}	ret*	kùrtó {kúrtó}	kùttó {-do}	
laugh	-askir-	-ecek-	-àté-	-àt(áy)-	
long	lele-k	cùkángí	dè-di	dée-di	LE/DE/
man	maɟu-k {-u}	ka-ṅgi {-ø}	kà-méré	kà-méré	KA-MA
meat	niu	nyú-gí	ndobo	yibu	ÑU(B)
moon	aye-k	áyè	àṅjá-k	àṅjá-k	AY/ANJ
mountain	kodo-k	kómà	kòmàan-dí	kùmàan-dí	KOM/KOD
mouth	kan-a {-tu}	kánà	yù-k	yù-k	KAN/YU
name	mil	mirsi	mèekí	maliki	MIL/MIR

gloss	Maba	Masalit	Aiki	Kibet	'Root'
navel	dumo-k	- -	àdám	àdám	AD3M
neck	biti-k	kóti	kàrmí	kàrmí	
night	ifè/ajurko	kosan	diindé	díindò	
nose	boŋ	dúrmi	mùndú	mùndú	BOŋ/MUD
one	tek	tíilò [Kn]	kàndá	faya [Ha]	
path	liŋa-k [Sn]	búrti [Fl]	ñòŋgwéyé	ñòŋgòlé	ÑOŋGOL
person	kanɣ/kai	kanɣi	kàn (kè)	kan (ke)	KAN
pound v.	-uddung-*	-iduk-*	-dɔɔk-*		-DUK-
rain	inji	sa	tà-k (tá)	ta	SA/TA
red	ku-ku-yok	furŋ-gi	ndàlàn	kwònjé-k	KU/FUR/
river	bita-k (-si)	madaldi [Fu]	tà-k (-ø)	ta	(BI)TA
salt	uja	àngò	síim	silim	SILIM/
say	-er-	-er-	-àyàr-	-ayer-	-R-
see	-oko-	-iser/ikel-	-òònd-	-ònd(ək)-	
shadow	onjulo-k*	anjilo/asro*	ànjié*		ASIL
sit	-oŋeg-	-unyun-	-ùfiun-	-ufiun (nduk)	
six	sittaal*	iti*	issei*	iss^l*	
skin	koi-k	bàrá	màdà	madda	BAR/MAĐ
sky	samaa*	sama*/mundu	mùnùnù	sámà*	MUN
/cloud	abioo	abiri	sáap*	sahap*	ABI
sleep	-ib-	-ibi- (lie)	-àbèi-	-ubi-tik-	-B-
small	fièki-k/nyili	súwàná	káakéy	kádéekàl	
smoke	kulda-k	urunɣi	àmbròfi	àmbrùfi	AMBURUNI
snake	tojomo-k	taránɣi	kòlò	kɔɔ	KOL/
spear	suba-ŋ*	nyori	sàbò-k*	sábà-k*	S3B/ÑOR
stand	- -	-ornaŋ-	-òtət-	-òotətér	
star	menue-k	kíyé	kèij-á (-ó)	kéɛj-á (-ó)	KEIJ/
stick	dolo-k/cum	buta	- -	- -	
stone	kodo-k	kómà	dúsi	dúusi	DUS/KOM/
sun	aŋi-k	áyinɣé	àfiŋ	àfi-ŋ (-ùŋú)	Aŋ/AY
tail	olu-k	kora	àlèm-dí	àyù-dí	ALU(M)
thorn	aŋi-k/ife	arce	àdí-k (ádí)	adi-k (-i)	Aŋ/AD
three	kongal	kan	kásánɣá	kásánɣàl	KASAŋAL
tongue	delmi-k	gélmèdi	àd-iyím	àdàl-əm	DELEM
tooth	sati-k	kácinɣi	sàdí	sàdí	SAD/KAC

gloss	Maba	Masalit	Aiki	Kibet	'Root'
tree	songo-k	síngi	rí-k	ri-k	SIŃ/RI
trousers	serwal*	sirwal-ko*	sòrwál*		SIRWAL
two	mbar	mbàrà	mbá	mbar	MBA(R)
water	inji	sá	tà-k	ta	SA/TA
white	fa-far-ak	ji-sa	pár {-ó}	far {fórò}	FAR
wind	auli-k	agùri	àgwìy	ágùli	AGUL
woman	mu o-ŋ {-o}	múcò	mi {mís}	mi-l {-sík}	MIS
wood		xafab*	njóm	njirim	NJIRIM
world	dunya	dinya	dúníá		DUNYA
year	kudria-k	senε*	kàdàròwòn-di	kadarwun-di	KADARWO

This list is based on an analysis of one hundred semantically basic lexemes in four Maba-group languages, Maba, Masalit, Kibet and Aiki, initially conducted jointly with M. Pierre Nougayrol of CNRS, Paris. I have gone one step further than our original comparison and have attempted the reconstruction of putative proto-Maba 'roots'. Of interest to this study are the lexical differences between the languages - many of the most common lexemes being totally different giving clues as to which lexemes might be adoptives which otherwise might not be easily identifiable (mentioned above in Methodology, p.91), e.g.

'back' Mb: **deriŋ** < Arabic **ẓahr**
Ms: **sargi** < Arabic **ẓahr**
Kb: **siida**
Ak: **sidá**

The Aiki and Kibet forms appear to be cognates and descended from a possible proto-Maba form * **sida**, leaving the Maba and Masalit forms isolated and therefore putative adoptives.

APPENDIX B

LIST OF MASALIT CLANS AND LINEAGES

(those living in Dar Masalit)

abdurrag
 ajemuṅ/aj(u)mung
 amunung ¹
 ankasabuṅ/kusube (-(u/e)ṅ is a nominal suffix in
 anyemuṅ (at Kereinik) ² Masalit denoting 'that/those of
 asumuṅ/asumung ¹ (a certain) place)
 bilala
 disuṅ/diseng
 fokunyung/fukunyung/fukkunyaṅ ¹
 forung (FUR ?)
 geimerung ¹
 gireisung ¹
 girnyuṅ/gernyeng (at mt. Girgi near Adre) ²
 gisuṅ (at Efendi) ³
 gonykokony
 going ¹
 jebel ⁴
 kariyuṅ/keriyung
 kokong ¹
 komore/komere ¹
 lere/lereng
 marfa (?)
 masara/masala
 meingering/mingiri/mangiri ¹
 misteruṅ/misterinn (Hejam) (at Mistere) ⁵
 mogurnung ⁴ (DAJU ?)
 mundera
 nyernen/niernung
 serbung/surbuṅ (at Sirba)
 surumbung ¹
 tajal (DAJU ?)
 torong
 tubbung ⁴
 urrung ⁴

(those living in South Dar Fur)

awnung
 fokanyung
 gunkung | bialung
 merkerinn | kaidung
 mungare | kunderung
 serbung-----| sugurbo | amburthung
 umbercung | aryeng
 umbuus/ambuus-----| adukong ⁶
 | dudonga
 | jerkereng
 | kunjaara
 | urta

- 1- "the ten groups that migrated from the North" (Arkell)
- 2- The **Anyemuṅ** and **Girnyuṅ** are reputedly the most religious clans; the present sultan is of the **Girnyuṅ** clan
- 3- The **Gisuṅ** of **Efendi** are said to be the first to introduce Islam to the Masalit; there are hot springs and trees of mystical significance at Efendi. **efendi** means 'teacher' in Masalit.
- 4- The 'aboriginal clans' of Dar Masalit
- 5- The **Misterenṅ** are said to 'have the original Masalit language'.
- 6- Arkell lists the **Adukung** with **Lisung**, **Gyurrung**, **Kenga**, **Asamung** and **Gamung** as 'originally **FUR**'; he also lists in the same document **Kubbusung**, **Matting**, **Ullung** and **Kongara** as 'originally **Keira FUR**'.

Compiled (giving most of the alternative spellings of authors with reference to the following sources):

- 1922 MacMichael H, History of the Arabs in Sudan
 1930s MS of Arkell A.J at S.O.A.S., London (especially box 5/19)
 1962 Le Rouvreur, Sahéliens et Sahariens du Tchad
 1966 Tucker A & Bryan M, Handbook of non-Bantu Languages of N.E. Africa
 1978 Caprile J-P & Barreteau D, Inventaire des Études Linguistiques
 1983 Doornbos P in Bender M, Nilo-Saharan Language Studies
 1984 Kapteijns L, Mahdist Faith and Sudanic Tradition
 1979-83 personal information from Ibrahim Yaquub Ali, Muhammad Umar Shariif, Ali Umar Shariif and other students at Geneina High School, Dar Masalit, also from Pierre Nougayrol at C.N.R.S., Paris.

APPENDIX C

FUNDAMENTAL COLOURS IN THE MABA GROUP LANGUAGES

There appear to be three fundamental indigenous colour lexemes based on the 'radicals' **ko** (red/brown), **lu/du** (black/dark) and **(d)ra** (green/yellow/blue). Maba colours are characterized by tone pattern LHL, redoubling of the 'radical' and final **-k**, Masalit colours by tone pattern HL and suffix **-ngi**, Kibet colours by tone pattern LH and suffix **-ndik/-njik**. The three Aiki equivalents are disparate: 'green' is similar to Kibet (LH, **-ndVk**); 'black' also as Kibet but with tone pattern LL or HH and suffix **-kVn**; 'red' is clearly from a different lexical radical altogether (possibly Sara **landang** 'nuance of red' (?))

	MABA	MASALIT	AIKI	KIBET	(OTHER)
RED	kù-kúy-àk	ko-ngi (brown) fur-ngi (red)	ndáláfi	kòo-njik	morungni (Tama)
BLACK, DARK	lù-lúy-òk	dú-ngi	dí-kín	di-ndúk	lungni (Tama)
GREEN	dri-dríy-àk	rá-ngi ;	raa-ndik	raa-ndik	kirɔ (Fur)

Masalit 'red' poses a problem in that although it fits into the 'colour' pattern for Masalit (HL, **-ngi**) it is clearly not the same lexical radical as the Maba (the cognate of which is distinguished by the Masalit as 'brown'). There seem to be three possible explanations for this: ① it is related to Tama **moru-ngi** 'red', ② it is related to the lexeme 'blood' (Ms: **farin**), ③ it is related to 'white'. This last possibility is interesting as Masalit 'white' is the 'odd man out' (related to **ji** 'milk') and **furngi** presents a **a/u** vowel contrast with Maba **fáfáràk** 'white' which is a characteristic of sets of 'resembling opposites' in Maba, e.g. **maj/muj** 'male/female', **namarak/namurik** 'rich/ poor'.

The forms for 'white' are part of a wider areal spread of putative equivalents in the region (cf. Hausa **faril**, Kanuri **bul**, Murle **əvər**, Coptic **fori**).

	MABA	MASALIT	AIKI	KIBET
WHITE	fáfáràk	ji(i)sa	pár	far

APPENDIX D

LISTS OF SEMANTICALLY BASIC NOMINAL AND VERBAL LEXEMES (DOORNBOS)

(based largely on Swadesh's list; dialect of southern Dar Masalit)

* = putative Arabic adoptive

first hundred:

all	kɔ̃i
ashes	awúndi
bark of tree	kérfèldi *
belly	kúfi
big	kɔ̃ddù
bird	kúci
bite vb.	kiiʃ
black	dúŋgi
blood	fárin
bone	kɔ̃nji
breast	áŋɔ̃ñè
burn vb.	kummɔ̃n
claw, nail	kínjimi
cloud	abyètti
cold	kírímà * ?
come vb.	ká
cut vb.	kéffèl
die vb.	li
dog	ínjè
drink vb.	lanàn
dry	fèrrè
ear	kɔ̃yè
eat vb.	ñɔ̃
egg	kédengi
eye	kóogi
fat	nisi
feather	tínà
fire	wási
fish	kúfiò
fly	áñŋgi
foot	jo
give vb.	andi
go vb.	ko
good	kállá *
grass	terrí
hair	tínà
hand	kɔ̃rɔ̃
head	kújò
hear	kírrò
heart	kúrí
horn	kémmi
I	ama
kill vb.	lúf
knee	káddiñɔ̃
know vb.	kɔ̃siŋ
leaf	kóyè

liver	ɲátíɲà
long	cùkángí
louse	akíngì
many	kɔddur *
meat	ɲúgì
moon	áyè
mountain	kúmà
mouth	kánnà
name	mírsi
neck	kɔtti
new	ɲúndi
night	ammín
nose	dúrmi
one	tílè
other	to
person	káangì
rain	sá
red	furungì
road	búrta
root	rátátí
sand	bɔrɔ
say vb.	kuron
see vb.	sérrò
seed	jɔ̀ɲɔ̀ná
sit vb.	ɲúɲ
skin	bárrá
sleep vb.	lárniɲ
small	súwánnà
smoke	urunji
snake	taráangì
stand up vb.	kúrnán
star	kiiè
stone	kúmà
sun	áyíngè
swim vb.	tíríngì
tail	kúrrà
thin	ndèndèna
this	íggì
thou	man
three	kaan
tongue	gélmandi
tooth	kácíɲe
tree	síngè
two	mbárrà
warm	úɲà
water	sá
we	mí
wet	síllà
what?	ɲgérri?
white	jíisà
who?	ɲgá?
woman	múcò
work vb.	---
ye	kí

second hundred:

back (body)	sárgi *
bad	bíìè
bed	kárrà *
blow vb.	fu ken
boy	kimma
breathe vb.	kúrrí
bring here vb.	náa
buttock	gònjórtí
catch vb.	kibbin
clean	nadiif *
cow	dèe
cooked	ngule
dig vb.	kúllòṅ
dirty	írniṅ tene
down	jícir
earth, soil	abbi
elbow	muturkuñi
enter vb.	lái
exit vb.	tíṅ
face	úyò
fall vb.	teer
far	ñèlle
fat, thick	muṅgulo
fear vb.	kòrràn
feces	áñi
five	toor
four	aas
full	támà *
goat	sí
gourd	kódòkkà
granary	damanga *
green	ráangi
hard	njúṅà
hate vb.	---
heavy	lírrà
here	iggim, gim
hit vb.	riffil
honey	tímiṅgitá ñámi (bee's fat)
house	táṅi
how?	ṅgo nindo?
how many?	ṅganna?
inside	kùdé
jump vb.	lemmin
laugh vb.	céen
left (hand)	kèrè
live vb.	ko tinde
love, like vb.	ṅṅíñ
man	kámbé
milk	jíi
near	mṅnjé
now	hassa *
old	gurri
open vb.	luturòṅ

outside	soole
penis	kám̄buri
pour vb.	lɔ̄n
pull vb.	ciŋgàn
push vb.	falla ken
rainy season	xariifu *
rat, mouse	jù
right (hand)	kád̄rkóñi
river	madaldi
rope	sugurti
rotten	tuwíè
rub vb.	fuit ken
run vb.	kerrin
salt	áŋgɔ̄
scratch vb.	ŋɔ̄siŋ
sew vb.	nutta
sharp	táñéñé
short	d̄rt̄llá
shoulder	kàttáfkó *
shut vb.	rusɔ̄ŋ
sky	múndi
smell vb.	nukuyɔ̄ŋ
smooth	fèréetà
soft	loboka
spear	fióri
stick	buuta
straight	tàkké
take away vb.	kul
ten	utuk
that	illi
there	oi
throw	rácò
tie vb.	kúcùŋ
tomorrow	diimen
turn vb.	numburɔ̄ŋ
turtle	tekke
up	dòlé
urine	íssà
vulva	diile
want vb.	nindè
when?	ŋgannam?
where?	ŋgarame?
why?	ŋgɔ̄ro?
wind	ágùrí
woods	waara
yellow	asfar *, agunati *
yesterday	gindikén

APPENDIX E

SHORT LEXICON OF MASALIT NOMINALS

Putative Arabic etyma are given in parentheses, A. = Classical Arabic
 CQW. = Colloquial Arabic of Wadai-Dar Fur. Most items are from my own
 field research, where other sources are included they are indicated:

{A} = Arkell, {D} = Doornbos, {DV} = Davies, {Y} = Yahya

1	abdomen	kunyo/kunyi
2	ablution vessel	keifeteri (CQW. kafeterii)
3	above	dol
4	'abuju' insect	durgi
5	accountant	saraf (A. ṣarraaf)
6	adultery	zina (A. zinaa?)
7	afternoon	asur (A. 'aṣr)
8	afterwards	baadu (A. ba' da)
9	again, almost	hukwe
10	again	hogudu
11	air, wind, storm	aguri
12	all, every	kuli (A. kull)
13	all, every	koi
14	alone	de
15	always	tebet (?A. ṭab'aan)
16	always	daima (A. daa'imān)
17	amount	tuka
18	amulet	ijaba/hijabat (A. hiġaab/ pl. -aat)
19	amulet	koma
20	ancestor	uwa (= grandfather)
21	angry	kurite
22	angry	zahjante (A. za'jaan)
23	animal/wealth	malko (A. maal)
24	animal (wild)	seidagi {D} (A. ṣayda 'hunting')
25	ankle	jo-kogi
26	ant	aṅgundi
27	ant	atie
28	anus	konyi
29	anyone	ṅgaw
30	apex of hut	gosa
31	apex frame	gur (square frame at apex)
32	approximately	kamela
33	Arabs	aramta (A. 'arab)
34	Arab	eringi (A. 'arab)
35	arm, hand	koro
36	arrow	nima
37	arrow	niḡabko (A. niḡaab)
38	ash, grey	awendi
39	aunt (maternal)	kala (A. ḡaala)
40	aunt (paternal)	aṅya
41	autumn (rainy s.)	xarifu, harifo {A}, kərip {Y} (A. ḡariif)
42	axe (generic)	gengenya
43	axe (small)	nyantela
44	axe (for trees)	kafia/kanya

45	baby	kima fara
46	baby	ḡana
47	baby	nyerko
48	bachelor	azabi (A. aḡaḡb. .)
49	back (behind)	dumo
50	back (anatomical)	sargi/sargiko (A. ḡahr)
51	backbone	ku
52	bad	biye
53	bag	ḡenta (A. ḡanḡa)
54	bag	buja
55	baggage	mointa (A. muuna)
56	bank (of river)	tukutuku-madal-di-tare
57	bar (for liquor)	gasim
58	bark, rope, binding	sugorti
59	bark	kérfél-di (D) (A. qirfa)
60	basket	humura, omra/umur (A) (A. 'umra)
61	basket	doma (CQW. dooma)
62	basket	kariyḡ
63	bastard	gulaḡi
64	bead	kodir (A. ḡaḡur)
65	bead	siḡi (CQW. sinii)
66	bean	kukurum
67	bean	ise/use
68	bean	filta (A. fuul)
69	beard (of chin)	kamari
70	beauty	moḡa
71	because	genen (after verbs)
72	because	taḡanim (after nouns)
73	bed	kara (?CQW. angariib)
74	bee (queen)	tingi
75	beforehand	gilengu
76	beforehand	alelok/alelokwe
77	belief	ibada (A. 'ibaada)
78	bell	simbildi
79	bellows	bosongo
80	belly	kunyo
81	belt (leather)	gaḡ (A. qaaḡiḡ)
82	belt (cloth)	miliki
83	bending	dunger (CQW. dunger)
84	big	moḡulare
85	big	kodi
86	bilharzia	isa-irmi-dina
87	bird	kuḡik/kuuci
88	birth	tunyena/unyena
89	bitter (tasting)	kuruka/kurukandu-tene
90	black, blue	dunḡi
91	blacksmith, potter	kulle
92	blessing	barak (A. baraka)
93	blind	konyi
94	blood	farinḡ
95	blowing	fu (A. fuu? 'mouth')
96	blow (hitting)	durubu (A. ḡurb)
97	body	ndu
98	bone	konji

99	book	kitab (A. kitaab)
100	bottle	gazaza (CQW. gazaaza)
101	bottom	jicir
102	boundary	laldi
103	bow (bow & arrow)	baraᅅga
104	bowl	gada (A. qadaᅅ)
105	box	sanduk (A. ᅅanduūq)
106	box (small)	nyerᅅi
107	boy	kimamba/mba/mbara (little boy)
108	boy (small)	nyerko
109	brain	mux (A. muᅅᅅ)
110	branch, whip	mᅅtᅅrᅅk (A. miᅅraq)
111	brand	mire (?A. mirwad)
112	bray	geria
113	bread	abu
114	breast	aᅅguini
115	breath	nduna
116	breath	nefes (A. nafs)
117	bridge	burti-kudumi/burti-kudumu-tene
118	broom	kudusi
119	brother	mir/ler
120	brown	koᅅgi
121	brown	kola
122	bull, male	margi
123	bundle	mendil (A. mandiil)
124	burr	nemnemi
125	burr	kaa-jek-toibi
126	burial	imisiᅅa (ceremony)
127	bush (generic)	jarti
128	(sebesten)	berte
129	(Lot's tree)	korca
130	(Bauhinia ruf.)	cukicuki
131	(gum arabic)	kurᅅ
132	(sodom apple)	adili
133	('quince')	amborkuja (CQW. ambarguuja)
134	bustard	hobara (A. ᅅubaara)
135	busy	kajalanin
136	busy	bokokajalante
137	busy	berte
138	but	lakin (A. laakin)
139	butcher	jezarti (A. jaz ^z ar)
140	buttocks	gonyor/gonjor
141	byre (for goats)	tani-ticeini
142	byre (for goats)	giriᅅo/giriᅅe
143	cache-sex	kunfuz (CQW. kanfuuz)
144	cackle	era
145	calf (of leg)	tulo/tolo
146	camel	diri, diye (young)
147	cannibal	kaᅅgi-kaᅅiya
148	car, lorry	arabiya (A. 'arabiyya)
149	cat	bis (CQW. biss)
150	cave	agu
151	'celery'	onorna
152	certainly	jekwe

153	certainly	tebet (?A. ṭab'aan)
154	chair	kursi (A. kursi)
155	chameleon	lera (?A. hirba)
156	chance	waru
157	change	tininyira
158	charcoal	kicimi
159	cheek	kalala
160	cheese	jibna (A. jubna)
161	chicken (hatchling)	indiak
162	chicken	feruja (A. faruuja)
163	chicken	koro
164	chickenpox	kisimbe
165	chest	gilli
166	child	kima
167	chin	ḥegegemi/nyegedamu
168	cinnamon	jurabi (?A. qirfa)
169	circumcision	tendela
170	circumcision	taar (D) (A. tahar)
171	claw	kinjimi
172	clean	salangi/salinki
173	clean	nadiif (A. naḥiif)
174	clear	zahirte (A. ṣaahir)
175	clerk	katibte (A. kaatib)
176	clever	jiliitii
177	clever	kujo-muxko-tene
178	clever	nyila
179	clever	tilela
180	cliff, steep hill	turti
181	closed	nusurna
182	clothing	bini
183	cloud	abiri
184	cock	dikko (A. diik)
185	cold (adj.)	wasirna
186	cold (adj.)	kerima (A. qirra)
187	cold (noun)	ramba
188	colour	lowni (A. lawn)
189	compassionate	ḥafgante (A. ḥafqaan)
190	conscience	kurim-negu
191	conscious	tijiiri
192	conscious, clever	fohimte (A. faahim)
193	continually	yili
194	cooking place	taḥi-durini
195	cooking place	durti
196	cooking place	sirendi
197	cooking	duri (A. duira 'kitchen', Maghrabi)
198	corn	ase
199	corn	gemeita (A. qamḥ) (A)
200	corn store	kicikirko
201	corpse	jusa
202	country, bush	kase (A. quuz 'sandy plain')
203	cow	dē
204	calf	dahala (A)
205	creation	halak (A. ḥalaq)
206	crime	blyu-tena

207	cripple	kangi-ariño
208	crocodile	gonju
209	crooked	ngule
210	crow	agura (?A. yuraab)
211	cucumber	gonjo/gonja
212	cultivable land	buro (A. barr)
213	cumin	jemarta (A. jamaar)
214	cup	kabulto (A. qabuul 'welcome')
215	cupboard	dolab (A. duulaab)
216	cure	dawa (A. dawaa)
217	curiosity	nerenji
218	custom	adiye (A. 'aada)
219	custom	keindaye
220	Daju (tribe)	bere
221	dance	lama/lemi
222	dance	anjilela
223	dancer	nisari
224	dancing place	dabala (CQW. dabal 'drum')
225	dark, black	dukana (A. daakin)
226	dark, black	dungi
227	date (fruit)	tamur (A. tamr)
228	day	jonyi
229	day	leile (A. laila)
230	day before yest'y	abak/abagu
231	day after tomorrow	dimen/dimenkoso
232	death	lisa
233	death	tiya
234	debt	deinko (A. dain)
235	deer	jergi
236	delicious	numonya
237	denying	nakar (A. nakr)
238	desire, need	ngura
239	desk	maktab (A. maktab)
240	devil	jeitan (A. jaiṭaan)
241	difference	ifina
242	dirty	wasxante (A. wasṣaan)
243	disgrace	kunon
244	divorce	tulak (A. ṭulaaq)
245	divorce	fasal (A. faṣl)
246	dog	inji/inje
247	donkey	leri
248	donkey foal	barndala
249	door	dusuño
250	dove	ambi
251	dove	hamam(-ko) (hamaam)
252	dozen	desta (CQW. dasta)
253	dream	gerira/garira
254	dream	ariña
255	dress (poor), cloth	eragi (A. araaqiyya)
256	drum	dingarko (CQW. dingaar)
257	drum	ganḡan
258	drum	kuron
259	drum	nugara (CQW. nuggaara)
260	drum	nahas (A. nahaas 'copper')

261	drum	daluka (CQW. daluuka)
262	drummer	gangai
263	drumming sound	bunbunko-tige/bunbun-tere
264	dry	ferε
265	dungbeetle	abunjoran (CQW. abunji?raan)
266	dust	fulfundi
267	dust	gubarta (A. yubaar)
268	dust-devil	kurunda-tige
269	dysentery	kunyi-tiyε
270	each	tiilokwε
271	each	narakwε
272	each	tototo
273	eager	aṅonyε
274	ear, leaf	kwóyε
275	earring	halam
276	early	alε/alε-dε/elele/elelen
277	early	bedri (CQW. badrii)
278	earth, place	gani/gari
279	earth, place	ardiye (A. arḡ)
280	east	saba (A. ṣabaah 'morning')
281	egg	kandangi
282	eight	aya
283	elbow	muturkonyi
284	elephant	munḡi
285	eleven	utuk-domun
286	embers	arari
287	emotion	εire
288	enclosure	tartarko (CQW. darduur)
289	enclosure	ho[ko (A. haw[)
290	enclosure	andaburti (small, for goats)
291	end	tina
292	enough	hadi/hadu/hadiye (A. hadd)
293	envy	hasudte (A. hasuud)
294	evening	nyerem/nyeremko
295	ever	gidere
296	evil	biyere
297	except	ila (A. ilaa)
298	experience	tose
299	eye, magic	kogi
300	eyelash	nyirimgi
301	face	uyo/iyo
302	faeces	uṅyi
303	family	ahilta (A. ahl)
304	family	jerbe (A. zariiba)
305	family	irif (A. 'irf)
306	far	nyeε
307	farm, field	asurti (A. ziraa'a)
308	fasting	siyamta (A. ṣiyaam) {D}
309	fat (noun)	nyomor, nyunḡi-tumore (of meat)
310	fat (adj.)	mogula
311	father	baba
312	fate	gadar (A. qadar)
313	feather	tiṅa
314	fear	gorana/torana

315	feeling	gira/gure
316	fence	kule
317	fertility	kuunji
318	few	jekwe
319	few	bakai
320	few	bakena
321	fever	gunyiti-tibi/gunyiti-tibina
322	fight	juria
323	figs	tini (A. tiin)
324	finger	nagaram
325	finger	sada
326	finger nail	kinjimi
327	fire	wasu
328	firm (adj.)	nusula
329	first	gilen/gilengu/gilengunak
330	fish	kunyo
331	five	tur
332	flame	gubra
333	flesh	ñugi
334	floor	ardiye-kudiena/arden-kudiana (A. arq)
335	flour	sogi
336	flour	gaga
337	flower	buraga
338	flowing	nyari
339	fly	anyingi
340	fog	murgi
341	foot, footprint	jo/jonyi
342	football	kora (A. kuura)
343	forearm	dora
344	forehead	yogi
345	forelock	tifo
346	forelock	tina yogitan
347	force	gu
348	force	dura
349	force	xasab (A. yaşb)
350	foreigner, stranger	geribi/gerivi/geriri (A. yariib)
351	food	linga
352	four	as
353	fowl (francolin)	korongi
354	(guinea-fowl)	laagi
355	fox	ñouri
356	free person	hurto (A. hurr)
357	French	faransa (A. faransa 'France')
358	friend	ikwi (A. aɣuuli 'my brother')
359	friend	gekewa
360	frog	ambokola (?A. qurquur)
361	front	iyun/ujin
362	frying	wis
363	full	binga
364	full	nandam
365	Fur (tribe)	fur
366	future	iyoom
367	game (play)	misarin
368	game ('chequers')	dala (CQN. daala)

369	garden	zage (CQW. zaga 'irrigate')
370	garden	madaldi
371	garlic	tom (A. 0uum)
372	gazelle	eri
373	ghost	elete
374	ghost	afriit (A. 'ifriit)
375	ginger	kimba
376	giraffe	leri-garaŋgi (lit. 'donkey-lizard')
377	girl	kimakara/kàrá
378	girth	xurda (CQW. ɣurda)
379	glass	gazaza (CQW. gazaaza)
380	goat (female)	si
381	goat (male)	njulgi
382	goat (kid)	jakala
383	god	mundu
384	god	mola (A. mawla)
385	good	kala/kale (?A. halaal)
386	good	numoŋya
387	good	xorti/horti (A. ɣair)
388	government	hukuma (A. hukuuma)
389	graceful	lemlema
390	grandmother	ia
391	grandmother	kigi
392	grass	tari/tari-raŋgi
393	grave	turba (A. turba)
394	green	raŋgi
395	greeting	salamko (A. salaam)
396	grinding-stone	nunji/munji
397	group, herd	mora
398	gruel	ajina (A. 'ajiina)
399	guard	gafirte (A. yaŋfir)
400	guest	salam-ambeni (A. salaam)
401	guest	kaŋgimini-tara
402	guest	tikelni-nara
403	guest	deif (A. ɗaif)
404	guide	guri-nerek
405	gun	teteje (?CQW. tejtejii)
406	gunpowder	barut (A. baaruut)
407	guts, intestines	irdi
408	hair (single)	tiŋa/siŋa
409	hair (of head)	kiji
410	hair (gen.)	tifa
411	hair (forelock)	guso
412	half	ceki
413	hammer (small)	sindala (A. sindaal)
414	hamlet	ferik
415	hand	kɔrɔ
416	handkerchief	nyagatu
417	happy	maŋyi
418	happiness	amaŋkwe (A. amaan 'safety')
419	happiness	irtiha tirirna (A. irtihaa)
420	harvest-day	amin-ase-gula
421	hat (of straw)	kabaŋga
422	hat	burneita (CQW. burneita)

423	hate	iyariyu
424	head	kujo/kijo
425	head	gondi (back of skull)
426	health	manyi
427	health	afo/afi (A. 'afii)
428	heart	kuri
429	heavy, thick	lira/lere/lerε/lirra (D)
430	hedghehog	dumsangumi
431	heel	adingeseti
432	help	awen (A. 'awn)
433	hen	kokarε
434	herbs	dokonta (A. duḡaan 'smoke')
435	herd (of cattle)	malta (A. maal)
436	here	igim/gim
437	Hibiscus	angarε
438	Hibiscus	kerkeḡ (?CQW. karkade)
439	high	kudumi
440	hive (bees')	jukuta
441	hoe	jirein (CQW. jirein)
442	hoe	turiyu
443	holy place	adidta (A. 'adaa?id 'customs')
444	holy place	kujur (CQW. kujur 'holy man')
445	honey	asalko (A. 'aṣal)
446	honey	kirima/kirimak
447	hope	nindeyu
448	hope	ngo
449	homosexuals	xista (A. ḡaṣii)
450	homosexual, impotent	tulufo (A. talaf)
451	hole	igu
452	horn, rib, side	kami
453	horse	berε (?A. faras)
454	horse (colt)	bertala
455	hospitality, charisma	karama (A. karaama)
456	hour, watch	saa (A. saa'a)
457	house, hut	tāḡi
458	how, how much	ḡgano/ḡganai/ḡgo
459	human	kaḡgi
460	hundred	mia (A. miḡa) *
461	hunger	wicitie
462	hunt (near home)	maran
463	hunt (far from home)	guro
464	hunter	sayadte (A. ṣayyaad)
465	husband	kamba
466	hyena	awoyu
467	I	ama
468	if	ba
469	if	an
470	illness	marad (marḡ)
471	illness	ndu-manyende
472	impossible	tukinde
473	inside	kude
474	inside	korok
475	inspector	mufetiḡ (A. mufattiḡ)
476	instinct	bajili (?A. baḡarii)

477	intention	nio (A. nii?a)
478	iron (metal)	rabe/rébe
479	Islamic holy man	faki (A. faqih)
480	jealous	dur
481	judge	gadi (A. qaadi)
482	key	mufta (A. miftaah)
483	kidney	girti
484	kisra (thin bread)	abu
485	knee	kadiño/kadiño
485	knee	kudurkonyi
486	knife	joko/joku/joka
487	knot	dokonya
488	kola nut	goro
489	lake	ret (A. rahad)
490	lamp	lamba (A. lamba)
491	lamp (of clay)	sinyar
492	land (cultivable)	buero (A. barr)
493	language	kana, kana masara (Masalit language)
494	last	dimonak
495	last	naraña
496	late (adj.)	warañ
497	late (adj.)	axir/axirkena (adv.) (A. axir)
498	later (adv.)	gunya
499	laugh	jeke/jeke
500	lavatory	mestera
501	lavatory	isa
502	lazy	gihawante (A. qahwa 'coffee')
503	lazy	ajesta (A. 'ajiz)
504	leaf	kwoye
505	leaf vein	sundu
506	leaf stalk	gula
507	leather, hide	bara
508	leg	jo
509	left-side	keré
510	leopard	gokarngi
511	leprosy	ndú
512	letter, paper	orogo/oroga/warago (A. waraq)
513	lie (untruth)	ano, ano-timi (liar)
514	light (of day)	de/dekadi (A. duu?)
515	lightning	kiyeje
516	lightning	walak (A. barq)
517	light-weight	walwala
518	like	-mbo tunyi
519	lime	liimon (A. liimuun)
520	line, row	jira
521	lion	amara
522	lip	kana-jicirna
523	liver	fiatinya
524	lizard	girennyi
525	load	lira
526	locust	arke
527	locust-magician	dambári (?A. dabal 'drum)
528	long	cukangi/cukori
529	louse	akiñgi

530	love	ngonya
531	lover	yan/yana (female)
532	lover	tuli
533	lover	kosine
534	luck (good)	datinyana
535	lungs	amfeffe] (CQW. amfa]fa])
536	mad	murkoti
537	magic	isi
538	maize	ababata (CQW. abuu batta)
539	malaria	gunyeti
540	man, male	kamba
541	man (old man)	dunya/danya
542	manager	mudir (A. mudir)
543	many, much often	kadur/kodir (A. kaθir)
544	marissa (beer)	nyunguru
545	marissa (beer)	kajana (CQW. kajaana)
546	marissa (beer)	kunyunmoru
547	marissa (beer)	gumzib (CQW. qum zibb 'rise penis')
548	marissa (beer)	nyugi
549	market	suk (A. suuq)
550	marriage	jise (CQW. jawaaz)
551	marriage	zawaj (A. zawaaj)
552	mat	baji (A. firaa], CQW. biri])
553	meat	nyungi/nyungu/nyunguri
554	meat	juju (morsel)
555	melon	celta
556	melon	arken
557	meningitis	kujo-niyembo-tiye
558	merchant	tajir (A. taajir)
559	mercy	raham (A. rahm)
560	milk	ji
561	millet	marina
562	millet	kornyan
563	mint	nana (A. na'na')
564	mirror	bireye (A. miraaya, CQW. biraaya)
565	mirror	mandara (A. manzara)
566	miser	behilte (A. bayil)
567	money (generic)	guru] (A. quruu] 'piastres')
568	money (5 pt)]ilin (CQW.]ilin '5 pt.')
569	money (25 pt)	tarada (CQW. tarada '25 pt.')
570	money (£)	jine (CQW. jineih 'pound')
571	monkey	adingi
572	monkey (small)	gurgi
573	month, moon	aye
574	morning	fujur/fujur-go {D}/fujur-loka (A. fajr)
575	mortar	funduk (A. funduq)
576	mosquito	anjulgi
577	mother	da
578	mother of girls only	kalini-da
579	mountain, hill	koma
580	mouse	ju
581	moulding	kulukulu
582	moustache]enab (A.]anab)
583	mouth, word	kana (= language)

584	murderer	tuya
585	must	kate (A. qaṭ'ii)
586	muscle	adalat (A. 'aḍalaat (pl.))
587	name	mirsi
588	name(-sake)	sami
589	narrow	deik (A. ḍaaʔiq)
590	near	munje
591	near	garab (A. qarab)
592	necessary	laazim (A. laazim)
593	necessary	unyotere
594	neck	koti
595	necklace	singita-agiga (CQW. sini 'agiigii)
596	necklace	tagaaga (CQW. tagaag)
597	needle	musala (A. musaala)
598	needle	ibro (A. 'ibra)
599	neighbour	jiranta (A. jiiraan)
600	nest	kurdi
601	net	nima
602	new	ḡundi
603	new	jeke
604	news	axberata (A. axbaar)
605	never	andende
606	never	abadan (A. abadan)
607	next	waranak/warangunak
608	night	kosan
609	nightmare	kabasa (A. kaabuus)
610	nine	ade
611	no!	he!
612	no!	cer cer!
613	noble, great person	kudi
614	noble (royal)	basenga
615	nomad	ruhal (A. ruhaal)
616	noon (prayer)	duhurko/zuhurko (A. zuhr)
617	noon (time)	dur> (A. zuhr)
618	normal, usual	inkode
619	north	ri (A. riih 'wind')
620	nose	durmi
621	nosering	ʃinifko (A. ʃanf 'earring')
622	nosering	jumamko (A. zumaam)
623	not (there is not)	kwóyé
624	not yet	matinde
625	now	hasi/hasa (CQW. haasaa)
626	now	hok/hogi/hogudu
627	number	nimara (A. nimra)
628	nurse	tomorji (CQW. tumurjii)
629	nurse	daya (CQW. daaya)
630	official (clerical)	muwazaf (A. muwazzaf)
631	official	hukumam-ʃul-tige (A. hukuuma)
632	official	dala
633	official	taṇa (strong-arm man)
634	official (captain)	agiid (A. 'aqiid)
635	official	ornun/warnun (CQW. warnun)
636	official (envoy)	taṇa murasila (A. murasil)
637	official	makdum (A. maqduum)

638	official	dimlig (A. duɓɓilj 'bracelet')
639	often	kadur (A. kaθiir)
640	often	iŋkode
641	okra	alenji
642	okra	surare
643	old	guri
644	one	tyom
645	one	tiilò
646	'one day'	u yomko (A. yawm)
647	only, single	tiilotere/tilede/to
648	onion	basal (A. baʃl)
649	open	natururna
650	or	walla (A. walla)
651	or	aw (A. aw)
652	or	su
653	orange	bortokan (A. burtuqaan)
654	order	geri
655	orphan	kima-sawire
656	other	-to
657	outside	sole
658	owner, self	tene/nene
659	palm of hand	kɔrɔ-kuri
660	party	azuma (A. 'azuma)
661	paper	farax (CQW. farɣ) (see letter)
662	past (adj)	narana
663	patience	sabur (A. ʃabr)
664	peace	amunte (A. amn)
665	peasant	bala (A. fallaah)
666	pebble	agokoya
667	penis	kumbor
668	people	ka
669	pepper	dinɓaba (CQW. dinqaaba)
670	pepper (red)	ʃeto (A. ʃaʃa)
671	perhaps	kamel/kamiyela
672	perhaps	yere
673	perhaps	kini
674	permanent	urakete/urake
675	person, one	tide
676	person	kaŋgi
677	pestle	amuda (A. 'amuuda)
678	people	jamato (A. jamaa'a)
679	permission	izinko (A. iɓn)
680	pigeon	hamamko (A. hamaam)
681	pillow	maxada (A. miɣadda)
682	pity	ɔimenta
683	place, area	joweili
684	plant (climbing)	bisi
685	plate	sahan (A. sahaan)
686	plate	surti
687	playing	jari/jaron/jaru/jariya
688	point, tip	duto
689	pus	kwoya
690	porridge	nyuguru
691	possible	gudurken (A. qudr)

692	possible	sanen
693	possible	tuti
694	pot (clay)	dɔkɔɔ (large, for water)
695	pot (clay)	gunyungɪ (small, for water)
696	pot (clay)	tojena
697	pot (metal)	durti (cooking)
698	pot (clay)	sakana (CQW. sakana) (for storage)
699	pot (clay)	damanga/domonga/dabanga * (huge, storage)
700	pot (clay)	mukabar (CQW. muxabar) (for incense)
701	potato	tai
702	sweet-potato	bembe
703	pole	arceldi
704	poor man	fugura (A. faqir pl. fuqura?)
705	power	gudura (A. qudr)
706	prayer	sulla/sullo (A. şullaa) /
707	prayer for the dead	kalawa(-na) (A. xalwa 'religious retreat')
708	pretence	karkara
709	problem	mufkila (A. mufkila)'
710	prostitute	hajala (A. xajala)
711	prostitute	azaba (A. azaba)
712	proverb	kana-marka
713	pulling	jingea
714	pumpkin	godoka
715	pumpkin	celta
716	pupils	muhajiriinta (A. muhaajiriin (pl.))
717	puppy	anjela
718	pushing	falak
719	queen	imo pl. miarim
720	question	mesela (A. masa?la)
721	quick	asir, asirkena (quickly) (A. asra')
722	quick	celcelo, celcelode (quickly)
723	quince	amborkuja (A. ambarguuja)
724	rabbit	mama
725	rabid	jakumun (CQW. jahmaan)
726	race (competition)	sabakko (A. s f baaq) (D)
727	rag, cloth	nyengeti
728	rag, cloth	nyungor
729	rainmaker	kangi-kamarko-tene
730	reading	guru (A. qara?)
731	reason	Janim (?A. (min) jaan)
732	red	furngi
733	refusal	lala (A. laa laa!)
734	refusal	ia (A. 'iyaa)
735	reins	ceke
736	rest (relaxation)	raha (A. raaha)
737	rarely	inkonyembo
738	rifleman	bundukko-tene
739	right (correct)	nasa/nasare
740	right-side	kodrokonji/kodorkonji
741	rider	rakabre (A. rakaab)
742	river, sea	bahar (A. bahr)
743	road, path	burti
744	roof	taŋitaŋ-lejem
745	root	ratati

746	rubbing	giya
747	sacrifice	doyo/delo (A. qahiya)
748	saddle	serij (A. sar j)
749	saddle	basur (?CQW. sardi)
750	saddle	pirayo (A. firaaya 'saddle cushion')
751	saddle-cushion	libda (A. libda)
752	sad	ndomoinda
753	sad	nesemerl
754	sadness	antomayenkede
755	salt	ango
756	salt	sangare
757	same, together	sawa (A. sawaa?)
758	sand	abi
759	sand	boro
760	Saudi	suweidi (A. su'uudii)
761	scar	mare
762	scheme, layout	jaro
763	school	madrasa (A. madrasa)
764	scorn	nutukuburi
765	scout	nurkun-niyegi
766	scratch	nose
767	scorpion	diringe
768	seed	bizera (A. biðr)
769	self	du
770	sesame	aneña/aniña
771	set (sun-, moon-)	tilinqfiena
772	seven	mari
773	sexual intercourse	lina
774	season	mosim (A. mawsim)
775	shade, shadow	anjilo (A. zill) (inanimate)
776	shade, shadow	asro (A. zill) (animate)
777	shame	konuñ/konuñgi, konuñ-de (shamefully)
778	sharp	tenene/tenene
779	s/he	tii
780	sheath	kalfi (A. yilaaf)
781	sheep (ewe)	jawi
782	sheep (ram)	ari
783	sheep (ram)	ajawi
784	sheep (lamb)	armbala
785	shells (cowries)	suksukta (A. sikka)
786	shield	darga (A. darqa)
787	shirt	bini
788	shirt	anjebena
789	shiver	gikeria
790	shoe (red leather)	merkubta (CQW. markuub)
791	shoe ('Bata')	zorifa (CQW. zoriifa)
792	shoe	barjañi
793	shoo!	ca!
794	shop	dakakin
795	shop-keeper	dakakintaniñ-tene
796	short	dortala
797	shorts (trousers)	rido (CQW. rida)
798	shoulder	katafko (A. kataf)
799	shoulder	amurti

800	shovel	kadanka (CQW. kadanka)
801	side	kaciŋen
802	side	kunya
803	sign	alala
804	sign	usum (A. 'uṣm)
805	silence	kano-tenende
806	silence	inde-tinde
807	similar	baji
808	simple	basida (A. basiiṭ)
809	sister	lo/mo
810	six	iti (A. sitta)
811	skin	bara
812	sky	sama (A. samaa?)
813	sky	mundi/mundu (= 'god')
814	skullcap	tagiya (A. ṭaaqiya)
815	slate	lo (A. luuh)
816	slave	maji (CQW. hamaaji)
817	slave	abid (A. 'abd)
818	sleep	tani
819	slow	malembu, malembu-de (slowly)
820	small	suwa(-na)/suba(-na)
821	small	monyorko
822	smallpox	jederikodi (A. jadarii)
823	smell	riyeti (A. riiha)
824	smell (rotten)	tuye
825	smoke	urungi
826	smooth	hayin (A. hayyin)
827	snake	tarangi/tirani
828	snake	abujuluk (A. abuu juuluk)
829	snake	bafa
830	snake	sinti/sintu
831	snake	sararangi/sererini
832	sneeze	atiṣ (A. 'aṭṣ)
833	snore	kurta
834	snow, ice	telij (A. ṭalij)
835	so, thus	inyoye
836	soldier	askeri (A. 'askar)
837	some	baka
838	some	туру
839	something	habito
840	song	aji
841	soon	dabe
842	soon	sino/si
843	sort	gonyi
844	soul	tiŋa
845	soul	ru (A. ruuh)
846	sound	tiirii
847	soup	ṣurbo (A. ṣurba)
848	sour	juma (?A. haamuḍ/jamad)
849	sour	ruaba (A. ruub)
850	south	muuta/mota (A. waaṭa)
851	south	sayid (A. sayyid)
852	spear, war	nyori
853	spear	golongo

854	speckles	taramtaramta
855	speed	suro (A. sur'a)
856	spell-caster	kogo-tene ('eye-holder')
857	spell-caster	kutubai (A. kutub 'books')
858	spell-caster	miidibabi
859	spider	nyonyori
860	spittle	injɛr
861	spittle	tuf (A. tuf)
862	splinter	wafara
863	spoon	maalaga (A. ma'alaqa)
864	squeeze	dil
865	squirrel	kure
866	star	kiye
867	stars	kara
868	stars (meteorites)	kiyeje-niyari
869	stars (Pleiades)	kiyeje monyorko
870	stars (Milky Way)	kokori-kimintanmo
871	star (Mercury)	munyine
872	star (Venus)	girfe-cacin
873	star (Jupiter)	san-injilile
874	stick	buta
875	stick	gula
876	stick	kalati
877	stick	bele
878	stone	ditera
879	store (for corn)	surai (CQW. suraai)
880	straight	adilte (A. 'aadil)
881	strap	igit (A. 'iqd)
882	straw (thin)	arai
883	straw (thick)	samaldi
884	straw	tefa
885	stream	ida
886	strong	juɔa
887	strong	maniɔ
888	strut, pole	tokoti (vertical)
889	strut, pole	kermet (horizontal)
890	strut, pole	karkije/karkice (horizontal)
891	strut, pole	kaja (lowest 'karkije' of a hut)
892	stubborn	kujo-juɔa
893	stupid	balit (A. ballid)
894	stupid	neneniri
895	sucking	ndoq
896	sugar-cane	gemberti
897	suitable	tomanɔ
898	suitable, ripe	balak (A. buluuy)
899	sultan	sultanko (A. sulɕaan)
900	sultan's clan	abo (member of sultan's clan)
901	summer	seyfanu (A. ŕayf)
902	sun	ayinge
903	surprising	ajib (A. 'ajiib)
904	sweat	muri/nuri
905	swelling	mogula
906	swindler	nejemi
907	sweet (noun)	manye

908	sweet (noun)	aronai
909	sweet (adj.)	nomonye/tomanye
910	'tabakha' food-cover	karta
911	'tabakha' food-cover	andabala
912	table	tarabeisa (A. tarabeisa)
913	tail	kora
914	tailor	tersi/tersiye (A. terzii)
915	tall	cukangere
916	tame	hanun (CQW. hanuun 'sweet-smelling')
917	taste (abstract)	taam (A. ṭa'am)
918	tax	miri/mili (A. miirii)
919	tea	adi
920	tea	ḷaya (A. ḷaay)
921	teacher	efendi (CQW. efendi)
922	tears	nyi
923	ten	ūtúk
924	testicles	geriṅṅe
925	that	ili/ilú
926	thatch	gemberni-taṅi
927	there	ɔi
928	they	ii/wii
929	thief	neniṅek
930	thief	harami (A. haraamii)
931	thigh	awa
932	thin	dendena
933	thin	bere
934	thing	habi(-to)
935	thing	qui
936	thinking, thought	fakar (A. fakr)
937	this	igi/gi/ogu
938	thorn	arce
939	thought, idea	kujum-neygu
940	thought, idea	tendenera
941	three	kaṅ
942	throat	agara
943	threshing-stick	dawi (CQW. daawii)
944	throwing -knife	somboro
945	thunder	masangi/masalgi/masalingi
946	time (concept)	wakit (A. waqt)
947	time (period)	konon
948	time, hour, watch	saa (A. saa'a)
949	tobacco-snuff	taba (A. taabaa)
950	today	amin/emin
951	toe	dala
952	together	munje
953	tomatoes	birinjalta (CQW. birinjaal)
954	tomorrow	dimen
955	tongue	gelmedi
956	tooth	kaciṅgi
957	top	dol
958	tree (generic)	siṅyi/siṅgi
959	(doom palm)	kurti
960	(desert date)	ginda
961	('habil')	tirti

962	tree (sycamore)	sisi
963	(chewstick)	nyebe
964	(acacia sp.)	tandi
965	('gene')	tumi
966	(tamarind)	kunji
967	(baobab)	tebeldi (A. tebeldi)
967	tribe	sutu
968	tribe	jicumo
969	trickster	hantagi
970	trousers	sirwalko (A. sirwaal)
971	true	noso/naso/nasa/nasa-re
972	trust	amen (A. amn)
973	turban	kadamul (CQW. kadmuul)
974	turning	fit (?A. lafat)
975	turnip	fijil (A. fijil)
976	tweezers	mungaƒ (A. mungaƒ)
977	twelve	utuk-barnaniŋ
978	twenty	utuk-naniŋ/utuk-utuk
979	twenty	riyal (A. riyaal, 20 pt.)
980	twenty	ifrin (A. 'ifriin)
981	twin	seniru
982	two	mbara
983	trying	jerbu (A. jarrab)
984	ugly	gebii (A. qabiit)
985	ululation	ororo
986	uncle (maternal)	mama
987	uncle (paternal)	baba
988	under	jicir
989	under	gonyim
990	understanding	faham (A. fahm)
991	unity	kwoylo
992	unnecessary	inko-unyarande
993	unsuitable	tomanɗe
994	until	hata (A. hatta)
995	until	namen
996	up and down	yon-tisura
997	urine	isa
998	vagina	ginjeli
999	vagina	uma (CQW. umaa?)
1000	vegetables	luti
1001	vegetables	landi
1002	very	jek/jak
1003	village	hilli/hille (A. hilla)
1004	village (deserted)	diluŋa
1005	visit	jera
1006	visit	zura
1007	voice	harka (A. haraka)
1008	wadi, watercourse	madaldi (garden)
1009	wake (for the dead)	jelelko (A. jalaal)
1010	wall (brick)	heita (A. haiŋa)
1011	wall (straw)	tefa
1012	war	unyoro
1013	washing	lukan
1014	warm	unya

1015	warm	niem/niyem/nyam
1016	warning	nuso (A. naṣiḥa)
1017	water, rain	sa
1018	water-bag	girfε (A. qirba)
1019	water-bag	karfato (A. qirba)
1020	water-sound	celelek-celelek-tere
1021	we	mii
1022	weak	hawan (A. hawan)
1023	weather	hawuk (A. hawaa?)
1024	weed	budo
1025	week	subo (A. usbuu')
1026	week	jo-mari
1027	west	garbi (A. yarb)
1028	wet	sila
1029	wheel	ajela (A. 'ajala)
1030	what?	ngo/ngariye/geriye/goriye/giri
1031	when?	nganam/ganam
1032	whipper, whip-holder	mɔtɔrɔkta-tεnε/mɔtɔrɔkta-nenε (A. miṭraq)
1033	whispering	kusu-kana-bedelni
1034	whistle (wooden)	wali
1035	whistle (loud)	binu
1036	where?	ngarare/garame/nguri/gur
1037	white	jisa/jisu/gisa
1038	wide	wasi (A. waasi')
1039	widow	azabare (A. azaba)
1040	wild	ari (A. 'aarii 'naked)
1041	window	ʃubak (A. ʃubbaak)
1042	windpipe	nyamu
1043	wing	nyεfεfεr
1044	winner	faiste (A. faaʔiz)
1045	winter	ʃita (A. ʃittaa)
1046	wife, woman, female	mucu/muco
1047	woman (old)	monjokola
1048	woman (barren)	sεgε
1049	woman (marriageable)	kara-balak-nena
1050	who?	ma-ηgε
1051	why?	ngeriteyna
1052	wood (material)	xaʃab (A. xaʃab)
1053	wood (forest)	wara (QW. waraa?)
1054	work	ʃul (A. ʃuyl)
1055	work	xadam/xidim/xidime (A. xidma)
1056	worm	tuuŋfi
1057	world	dinya (A. dunya)
1058	worshipping	abud (A. 'abuud)
1059	wound	andurti
1060	writing	katab (A. katab)
1061	yeast	neyora
1062	yeast	nifinara
1063	year	sεnε (A. sana)
1064	yellow	abunadi (A. aṣfar naadir 'bright yellow')
1065	yellow	aṣfar (A. aṣfar)
1066	yesterday	gede/gendegu/gandagu/gindiken
1067	yes	aye
1068	yes	ha

1069 yogurt	ji-juma
1070 you (sing.)	maṅ
1071 you (pl.)	kii
1072 youth	nelenṅe
1073 zero	sifir (A. ṣifr)
1074 gravy	su
1075 gravy	kawal (A. kawaal)
1076 difficult	gasi (DV) (qaasii)

APPENDIX F

WIDER AREAL SPREADS

ELEPHANT:

- 1) **mɯŋgi** (pl. **mɯŋjɛ**).
- 2) Mb: **ŋɔon**; Ak: **àŋɔn**; Kb: **aŋon**.
- 3) Fu: **aŋgir**.
- 4) Bm: **kon**; Kn: **kə̀mówùn**; Fl: **ñiiwa**; Lg: **nevi**; Dn: **kon**.

The Masalit term **mɯŋ-gi** appears to be an equivalent of a very wide spread of the general shape **(M)N** amongst the languages between Chad and Dar Fur (in Kanuri **k-** is a morphemic prefix, in Fulfulde **-wa** is a singular suffix). Prof. Jungraithmayr has informed me that there is a similar radical common in Chadic languages. It could be derived from an ancestral 'Nilo-Saharan' or Chadic root, adopted from one by the other at an early stage.

COW:

- 1) **dɛ**.
- 2) Mb: **dek**; Ak: **dook**.
- 3) Ta: **tei**; Mi: **tɛ**; Bd: **tei**; Mm: **de**; Md: **tu(r)**; Bt: **fir**;
Zg: **híri**.
- 4) Lg: **inθa**; Wa: **θa**; Kn: **fee**; So: **hau**.

Possibly derived from a 'Nilo-Saharan' ancestor (as so many of the reflexes belong to that ensemble), what does seem certain is that its etymology is not Afro-Asiatic (Semitic/Hamitic/Chadic) (cf. Ar: **baqqaara**; Ha: **saniya**). Most of the Dar Fur/Wadai languages (including all of the Maba-group) have putative equivalents with Masalit, in the form of mono- or di-syllabic dentals.

DONKEY:

- 1) **leri** (pl. **lekar**).
- 2) (Ak: **gussende**; Mb: **addik**).
- 3) Mi: **leil**; Ta:Er: **lil**; Fu: **lel**.
- 4) Sn: **lélé**.

There are only a few putative equivalents for this amongst the immediate neighbours of the Masalit; there are no cognates of it in the other Maba group languages. There is no resemblance and appears to be no connexion with Arabic **himaar**. n.b. 'giraffe' in Masalit is **leri garangi** (lit. donkey-lizard).

MAN:

- 1) **kamba**, **mar** 'male' (cf. **margi** 'bull').
- 2) Mb: **majuk**; Ak: **kamere**.
- 3) Er: **ma**; Mi: **ma**; Ta: **maa**; Mm: **maar**; Bt: **merr**; Zg: **burr**; Fu: **aba**.
- 4) Kn: **kaambee** 'free man'; Tm: **kemaba**; Bo: **kambe** 'free man'; Bu: **boi** 'free man.

It would appear that, though Maba **majuk** could pertain to the same set, it is a more distant cognate of Masalit **kamba** and Aiki **kaameri** than languages further to the west such as Kanuri are. there seems to be a *bilabial radical* signifying 'man' common to many 'Nilo-Saharan' languages (cf. * **maz** the Chadic radical for 'man') including Masalit which belongs to a subset bearing the prefix **k-** (like the Kanuri prefix **k-** (?)).

WOMAN:

- 1) Ms: **muco**
- 2) Mb: **majong +**; Ak: **mi** (pl. **mis**)
- 3) Zg: **mu**.
- 4) Kn: (**na**)**mu** 'woman(hood)'; Ha: **màcè** S; Mk: **mùso**; So: **wey**; Bg: **meji**; Ba: **métjé**.

There seems to be a stronger common thread between the Maba-group languages for 'woman' than for 'man'. Perhaps the /m/ could have been an ancestral radical for 'human', /k/ affix implying male, fricative affix /ʃ-j-c/ female. A bilabial radical with a second, fricative syllable also signifies 'woman' in some 'Nilo-Saharan' and other languages.

+ cf Mb: **mafuk**, 'man'. A relic of former gender distinctive suffixes -ŋ, -k, surviving in the Maba nominal definitive suffix -k, the equivalent of the Kanuri prefix k-?

§ **màcè** has a syllabic and tonal scheme uncharacteristic of Hausa.

TONGUE:

- 1) **gelmedi** (chin = **nyegedamu**)
- 2) Mb: **dilmí-k**; Ak: **ádiyím**; Kb: **àdàlám**; Mm: **mil**.
- 3) Fu: **d-aali** pl. **k-al-inta**.
- 4) Kn: **táilà**; Bn: **lemi/timä**; Fl: **demgal**; Zn: **mira(se)**.

In Koelle's lists for tongue and throat **d-m** and **l-m** are ubiquitous, also in many Bantu languages.

FIRE:

- 1) **wasu**.
- 2) Mb: **wasik**; Ak: **nissik**.
- 3) Mi: **oos**; Ta: **oo**; Md: **uzzi**; Fu: **utu**; Bt: **aza**.
- 4) Bd: **uzuk**; Bo: **wosi**; Ha: **wutaa**; Zn: **we**; Sn: **wa**.

The Masalit form has many equivalents in the Dar Fur-Chad region both Nilo-Saharan and Afro-Asiatic.

RED:

- 1) **furngi** (pl. **furni**).
- 2) (Mb: **kukuyak**; Ak: **ndalen**)
- 3) Dj: **firr/pirra**; Zg: **mara(i)**; Gn: **maro**; Ta: **morung**; Fu: **fukka**; By: **pirr**.
- 4) -

The Masalit form is quite distinct from other Maba group lexemes but it has a number of putative reflexes in other neighbouring languages.

NAME:

- 1) **mirsi** pl. **mirsildin**
- 2) Mb: **mílíí** pl. **mílísíí**; Ak: **mèekí**; Kb: **mílki**.
- 3) Sn: **ili/iri/hiri**; Bm: **ri**; Wa: **jiira**; Bn: **(e')ere**; Zn: **rimo**; Nz: **rumo**; Ngala: **luma**; Lg: **θemaa**; Fl: **jemma**; So: **zammu**; Mk: **diammu**.

Like 'tongue', 'name' appears to have a very wide areal spread of putative equivalents, some possibly derived from an Afro-Asiatic source, e.g. Tm: **eşəm** or Ar: **isim**.

APPENDIX G

PHONEME TABLES OF FUR, FULFULDE, KANURI, HAUSA AND MABA

FUR:

Bilabial		Labio-dental		Alveolar		Palatal		Velar		Glottal
p	b			t	d	j		k	g	
		f		s	(z)	(ʃ)		(ɣ)		h
m						ɸ		ŋ		
				l						
				r						
w							y			

Vowels: i e ε a ɔ o u

FULFULDE:

Bilabial		Labio-dental		Alveolar		Palatal(-alveolar)		Velar		Glottal
p	b			t	d	c	j	k	g	ʔ
	β				ɖ					
		f	v+	s		ʃ*	ɟ*			h
m				n		ɲ		ŋ		
mb				nd		nj		ŋg		
				l						
				r						
w							y			

Vowels: i ii e ee a aa o oo u uu

* given by Arnott for Gombe Fula but not by Stennes for Adamawa Fula.

+ given by Stennes for Adamawa Fula but not by Arnott for Gombe Fula.

KANURI:

Bilabial	Labio-dental	Alveolar	Palatal	Velar	Glottal
p b		t d	c j	k g	[ʔ]
mb		nd		ŋg	
	f [v/β]	s z	ʃ	[ɣ]	h
m		n	ɲ	ŋ	
		l [l] (retroflex)			
		[r]			
		ɾ (rolled)			
w			y		

Vowels: a ɔ e i o u ɜ

HAUSA:

Bilabial	Labio-dental	Alveolar	Palatal	Velar	Glottal
b		t d	c j	k g	ʔ
ɓ		ɗ		ƙ	
	f	s z	ʃ		h
m		s'			
		n			
		l			
		r*			
w		ɾ	y		

Vowels: i e a o u, ay aw

* /r/ is extraneous in Hausa, used only in Arabic adoptives.

MABA:

Bilabial	Labio-dental	Alveolar	Retroflex	Palatal	Velar	Glottal
b		t d	tr dr	j	k g	ʔ
	f	s z		ʃ	x	h
m		n		ɲ	ŋ	
		l				
		r				
w				y		

Vowels: i e ε a ɔ o u

APPENDIX H

MASALIT PERSONAL NAMES

Male	gloss	Female	gloss
irtègà		dálúmà	
girèndià	piece of broken water-pot *	síyà	
cígùf	(as girendia).....	dátúngúlè	something covered
dúngùs	dóngà	
ábità		sùgúyúmà	having a lot of hair
túrà		ndínà/ndindi	
hàrà	Ar: haaruun ?.....	hàrà	
búca/bútà	'fatso' (bag)	tósà	
tábàk		jíyè	
cù/cúkù		kàdíjà	Ar: ḡadiija
nínà		kùltúmà	Ar: umm kulṡuum
dúdùk		kàmísà	Ar: ḡamiisa
gádà	Ar: qadaḡ (wooden bowl)	dínà	
àdómà	Ar: aadam	dí/dé	
jámàlà	Ar: jamaal	ùngúmàfà	
nùmò/numa		tókósà	
hasan	Ar: ḡassan.....	kùtúbáyà	Ar: kutub (books)
bái/bi(te) (< bá'i)		hàsàniyà	
dúgà		méràm	Ar: mariam
démirà	(lorry name ?).....	aʃi/áíʃè	Ar: 'aiija
yusufa	Ar: yuusuf	démirà	
hèjáb	Ar: hijaab	zàhàrà	Ar: zahra
hámòdà	Ar: haamid	notə	
úbdú	Ar: 'abdu	aʃta	
goro	kola nut	áj(i)dà	
jaksa	(drummer)	tútò	
dínka		àmbúsà	
hamis	Ar. ḡamiis		
kunji			
tuja			
káfí			
sínín			
ndoka			
fartak			
ibrahim	Ar. ibraahim		
daud	Ar. dauud		
mohamed	Ar. muḡammad		
musa	Ar. muusa		

The most common names in use in schools and offices are those with Arabic sources. I have no information about domestic use of Masalit names.

* Pieces of broken waterpot have some life-protecting significance.

APPENDIX I

ARABIC ADOPTIVES IN MABA

It is of interest to make a comparison with Arabic adoptives in Maba. Trenga (1947:53-57, from material gathered in 1905-7) notes that the diplomatic language of Wadai is Arabic and all official correspondence is in Arabic.

The first adoptives date from the time when the nomadic Arabs arrived in and around Dar Maba. They became more numerous with the domination of the 'Arab' Tunjur and the later islamisation and commercial links with the East.

Most adoptions concern religion, political offices, war, administration and commerce.

Certain words have conserved both singular and plural Arabic forms, e.g.

	Arabic	Maba
sultan	sulṭaan pl. salaatiin	solṭaan pl. salaatiin
king	malik pl. muluuk	malik pl. muluuk

Some have a 'maba-ized' singular form with -(V)k suffix, e.g.

	Arabic	Maba
needle	ibra pl. ibar	ibr-ek pl. ibar
young man	farfara pl. faraafiir	farfaro-k pl. faraafiir

Some have both 'maba-ized' singular and plural, e.g.

	Arabic	Maba
lettered man	faqiih pl. fuquhaa?	faki-k pl. faki-je
caravan	qaafila pl. qawaafil	gaafil-ek pl. gaafil-je
friend	rafiiq pl. rufaqa?	erfiig-ek pl. erfiig-je

Trenga notes that Arabic is more and more used in Wadai due to the advance of (Arabic) education and literacy and he mentions also that in the Arabic written in Wadai both the orthography of the Maghreb as well as that of the Mashriq is employed (e.g. **ب** and **ف** may

be used for the Mashriqi ف and ق).

He further notes that in Maba the (lunar) month names, feast days, week days, times of day and season names are adopted from Arabic. Though the last are used in conjunction with indigenous Maba terms for hot, cold and rainy seasons, Trenga makes no mention of whether they cover precisely the same semantic area or not. Also adopted from Arabic are male and female proper names.

BIBLIOGRAPHY

BIBLIOGRAPHY

Bibliography, including, but not limited to, references given in the text.

Abbreviations used:

- AU Afrika und Übersee
CNRS Centre Nationale de la Recherche Scientifique
CUP Cambridge University Press
IUO Istituto Universitario Orientale
KUP Khartoum University Press
OUP Oxford University Press
SNR Sudan Notes and Records

GENERAL, HISTORICAL & CULTURAL

- ALI ABDULLAH ABU MUSINN, 1968. madhkirat abi musinn min mudiiriat daar fuur (notes of Abu Musinn from Dar Fur province), typescript at IAAS library, Khartoum University.
- ARKELL A.J, 1951-2. The History of Dar Fur 1200-1700 A.D., SNR pp. 177-209, 129-155, 244-275.
- ARKELL A.J, 1961. A history of the Sudan from the earliest times to 1821, University of London [Athlone Press].
- ARKELL A.J, 1930s. MS papers concerning the Dar Fur 1887-1930s, at SOAS, University of London.
- ARKELL A.J, 1926. Magic and medicine in Dar Masalit, SNR pp. 89-94.
- ARKELL A.J, 1936. Māni Magic in Northern Darfur, SNR pp. 317-320.
- ARKELL A.J, 1939. Throwing sticks and throwing knives in Darfur, SNR pp. 251-268.
- ASHER M, 1984. In Search of the Forty Days' Road, Harlow [Longman]
- BALFOUR-PAUL H.G, 1955. History and Antiquities of Dar Fur, Sudan Antiquities Service, Khartoum.
- BARBOUR K, 1949. The Wadi Azoum from Zalingei to Murnei (typescript), Khartoum [Gordon Memorial College].

- BARTH F, 1970. Dar Fur economics, in FIRTH R.W, Themes in Economic Anthropology, London [Tavistock].
- BEATON A.C, 1939. Bari and Fur rain cults and ceremonies, SNR pp. 181-204.
- BEATON A.C, 1940. Fur dance songs, SNR pp. 107-109.
- BEATON A.C, 1941. Fur youth organization, SNR pp. 181-183.
- BEDRI B, 1969. The Memoirs of Babikr Bedri [OUP].
- BOVILL E.W, 1933. Caravans of the old Sahara; an introduction to the history of the western Sudan, London [OUP].
- BRAME M.K, 1972. (ed.) Contributions to generative phonology, Austin, University of Texas.
- BRIGGS L.C, 1960. Tribes of the Sahara, Cambridge [Harvard University Press].
- BROWNE W.G, 1799. Travels in Africa, Egypt and Syria from the year 1792 to 1798, London.
- BURCKHARDT J.L, 1819. Travels in Nubia, London.
- CARBOU H, 1912. La région du Tchad et du Ouaddaï, Paris [Études ethnographiques].
- CHAPELLE J, 1982. Nomades Noirs du Sahara: Les Toubous, Paris [l'Harmattan].
- CORDELL D.D, 1985. Dar alKuti and the last years of the trans-Saharan slave trade, Madison [University of Wisconsin Press].
- CORDELL D.D, 1977. Eastern Libya, Wadai and the Sannusiyya: a tariqa and a trade route, Journal of African History, pp. 21-36.
- CORNET Cpt. F, 1911. Trois ans chez les Ouadaiens - au Tchad, Paris.
- DABITZ G, 1985. Geschichte der Erforschung der Nuba-Berge, Stuttgart [Franz Steiner].
- D'ANNELET B, 1932. A travers l'Afrique Française (du Cameroun à Alger), Paris.
- DAVIES R, 1957. The Camel's Back, London [Murray].
- DAVIES R, 1925. The Masalit Sultanate, SNR pp.49-62.
- DAVIES R, 1926. Some Arab games and puzzles, SNR.
- DE LABORIE B, 1932. Du Cameroun au Caire, Paris.
- D'ESCAVRAC DE LAUTURE, COMTE, 1855. Memoire sur le Soudan, Paris.
- DESTENEUVE Lt.Col, 1904. La Région du Tchad, Paris.

- EDGAR J, 1983. Dar Masalit, Africa Now, 2^e pp. 53-54, 6^e pp. 27-28, 8^e pp. 72-73.
- EDGAR J, 1985. Dar Masalit, Middle East, 11.
- FAGE J.D, 1978. An Atlas of African History, London [E.Arnold].
- FERRANDI J, 1930. Le Centre Africain Français, Paris.
- FERRANDI J, 1912. Abéché capitale du Ouaddaï, supplément à l'Afrique Française d'Octobre.
- FISHER H, 1970. The Western and Central Sudan, in the Cambridge History of Islam, II, pp. 345-405.
- FOUREAU F, 1898. Mon neuvième voyage au Sahara et au pays Touareg, Mars-Juin 1897, Paris [Augustin Challand].
- FOUREAU F, 1902. Mission Saharienne Foureau-Lamy, D'Alger au Congo par le Tchad, Paris [Masson].
- FOUREAU F, 1905. Documents Scientifiques de la mission Saharienne Foureau-Lamy, Paris.
- FRESNEL M.F, 1849. Memoire sur le Ouaddai, Bulletin de la Société de Géographie.
- GAUTIER E.F & CHUDEAU R, 1908. Missions au Sahara, Paris [Armand Colin].
- HASAN Y.F, 1971. The Fur sultanate and long distance caravan trade, 1650-1850, in The Central Bilaad al Suudaan, 1st International Conference (on the) Sudan in Africa, Khartoum.
- HASAN Y.F, 1973. The Arabs and Sudan: from the seventh to the early sixteenth century, Khartoum [KUP].
- HILAIRE J, 1932. Du Congo au Nil, Paris.
- HOLT P.M, 1970. The Nilotic Sudan, in the Cambridge History of Islam, II, pp. 327-344.
- HOLT P.M, 1961. A modern history of the Sudan from the Funj sultanate to the present day, London [Weidenfeld and Nicholson].
- HOROWITZ M.M, 1967. Reconsideration of E.Sudan, Cahiers d'Études Africaines, pp. 381-98.
- HUNWICK J.O, 1970. 'Zanj', in Language and History in Africa, ed. DALBY D, London [Frank Cass].
- HUNWICK J.O, 1964. Influence of Arabic in W.Africa, Transactions of the Historical society of Ghana, 7, pp.24-41.

- HUNWICK J.O, 1970. 'Tavrûr' in ALLEN C & JOHNSON R.W African Perspectives, papers in the history, politics and economics of Africa [CUP]..
- JOMARD R preface to Dr Perron's translation of TUNISI (see below)
- JULIEN Col. 1916. Archives Nat. d'Outer-Mer, Paris, Afr VI, Rapport sur le Ouaddaï (1910-1916).
- KAPTEIJNS L, 1985. Mahdist Faith and Sudanic Tradition: The history of the Masalit Sultanate 1870-1930, London [KPI].
- KAPTEIJNS L, 1979. Dar Masalit, Sudanow, 5.
- KHAYAR I, 1976. Le Refus de l'École, Paris [Librairie d'Amerique et d'Orient].
- KUMM H.K.W, 1910. From Hausaland to Egypt through the Sudan, London.
- LE ROUVREUR A, 1962. Sahariens et Sahéliens du Tchad, Paris [Berger-Levrault].
- LEWIS I.M, 1966. Islam in Tropical Africa, OUP.
- MACMICHAEL H, 1922. A History of the Arabs in Sudan and some account of the people who preceded them and of the tribes inhabiting Darfur, Cambridge.
- MAHAMET-SALEH Y, 1983. Thèse de doctorate de 3ème cycle, Sorbonne IV, Les populations musulmanes du Tchad et le pouvoir politique.
- MALVAL J, 1974. Essai de Chronologie Tchadienne (1707-1940), Paris [CNRS].
- MARTIN B.G, 1976. Muslim brotherhoods in nineteenth century Africa, CUP.
- MESSEDAGLIA G.B, 1880. Via Commerciale nel DarFur, L'Esploratore, V, pp.70-79.
- MESSEDAGLIA L, 1935. Uomini d'Africa, Messedaglia Bey e gli altri collaboratori italiani di Gordon Pascià, Bologna.
- MOSRIN J, 1948. Étude sur la vie, les coutumes et les moeurs des tribus ouadaïennes, Biltine, Ouaddaï, F.O.M. 57 pp..
- MOUKHTAR M.B, 1982. Thèse de doctorate de 3ème cycle, Sorbonne VII, Les peuples du Tchad oriental et leur évolution dans un Ouaddaï statique.

- MUSA MUBARAK ALHASAN, 1970. taariix daar fuur as-siyaasii (Political history of Dar Fur), (typescript) at IAAS library, University of Khartoum.
- NACHTIGAL G 1879-89. Wadai und Dar Fur, vol. IV of Sahara and Sudan, translated by B and H.J Fisher, 1979, London.
- NADEL S.F, 1947. The Nuba. An anthropological study of the hill tribes of Kordofan, London.
- NALDER L.F, 1926. Influence of Animism in Islam, SNR pp. 75-87.
- NALDER L.F, 1935. Throwing knives in the Sudan, SNR pp. 297-302.
- NICOLAS G, 1981. Dynamique de l'Islam au sud du Sahara, Paris [Publications Orientalistes de France].
- O'FAHEY R.S, 1980. State and Society in Dar Fur, London [C.Hurst].
- O'FAHEY R.S & SPAULDING J.L, 1974. Kingdoms of the Sudan, London [Methuen].
- PALMER H.R, 1936. The Bornu, Sahara and Sudan, London.
- PETERMANN A & HASENSTEIN B, 1863. Geographische Mitteilungen, Engänschaft Nr 11, Gotha, Blatt 6 + 8, v. Dar Fur, pp 42-50.
- SANTANDREA S, 1964. A tribal history of the western Bahr el Ghazal, Bologna [Editrice Nigrizia].
- SHABAN M.A, 1976. Islamic History II, CUP.
- SHUQAIR N, 1903. taariix as-suudaan (History of the Sudan), Cairo.
- SLATIN R.C, 1896. Fire and Sword in the Sudan, London & New York.
- SWEENEY C, 1973. Background of Baobabs, London [Constable].
- THEOBALD A.B, 1965. Ali Dinar: last sultan of Dar Fur 1898-1916, London [Longman]
- TOURENQ Lt, 1920s. Notes on the Kibet, Archives Militaires, Vincennes, Paris.
- TRIMMINGHAM J.S, 1949. Islam in the Sudan, London [OUP].
- TUBIANA M-J, 1964. Survivances préislamiques en pays zaghawa, Paris [Institute d'Ethnologie].
- TUNISI M.O, 1845. Voyage au Dar Four (Muhammad ibn 'Umar alTūnisi, translated by Dr Perron), Paris [Duprat].
- TUNISI M.O, 1851. Voyage au Ouaddaï (Muhammad ibn 'Umar alTūnisi, translated by Dr Perron), Paris [Duprat].

- VIKØR K.S, 1982. The Desert Side Salt Trade of Kavar, African Economic History, pp.115-144.
- WENSINCK A.J, 1933-69. Concordance et indices de la tradition musulmane, Leiden.
- WESTERMARCK E, 1933. Pagan survivals in Mohammedan civilization, London.
- WILLIS J.R, 1985. Slaves and Slavery in muslim Africa, London [Frank Cass].
- WORKS J.A, 1976. Pilgrims in a Strange Land; Hausa communities in Chad, New York [Columbia UP].

LINGUISTIC/LANGUAGES

- ABDO D.A, 1968. Arabic writing and sound systems, Beirut [Ras Beirut].
- ABU MANGA A, 1986. Fulfulde in the Sudan: Process of adaptation to Arabic, Marburger Studien zur Afrika und Asienkunde, Berlin [Reimer].
- ABU ABSI S, 1968. Basic Chad Arabic, Indiana University Intensive Language Training Center.
- ALIO K, 1986. Essai de description de la langue Bidiya du Guéra (Tchad), Marburger Studien zur Afrika und Asienkunde, Berlin [Reimer].
- ALTUMAH S.J, 1969. The problem of Diglossia in Arabic, Cambridge Mass..
- AMERY H.F.S, 1905. English-Arabic vocabulary for the use of officials in the Anglo-Egyptian Sudan, Cairo.
- APPEL R & MUYSKEN P, 1987. Language contact and bilingualism, London [Arnold].
- ARKELL A.J, 1930s. MS at SOAS library, Univ. of London (word lists of Dar Fur/Wadai languages).
- ARMBRUSTER C.H, 1965. Dongolese Nubian: a lexicon, CUP.
- ARNOTT D.W The nominal and verbal system of (Gombe) Fula, 1970, OUP.
- AUGIER Lt, 1955. MS, Éléments du dialecte gorane parlé en Ennedi, Archives Militaires, Vincennes, Paris.

- BAILLEUL C, 1981. Petit dictionnaire bambara-français, français-bambara, Avebury.
- BAKALLA M.H, 1975. Bibliography of Arabic Linguistics, London [Mansell].
- BALDI S, 1981. Thèse de doctorate de 3ème cycle, Sorbonne III (INALCO), Emprunts de swahili et haoussa en arabe.
- BARGER Y G.P, 1934. Hausa dictionary, London.
- BARRETEAU D, 1978. Inventaire des Études Linguistiques, Paris.
- BARTH H, 1862-6. Sammlung und Bearbeitung Central-Afrikanischer Vokabularien, I, II, III, Gotha [Justus Perthes].
- BEATON A.C, 1968. A grammar of the Fur language, Khartoum [University of Khartoum].
- BENDER M.L, 1983. (ed.) Nilo-Saharan Language Studies, East Lansing, Michigan.
- BENDER M.L, 1980. ed. First Nilo-Saharan Linguistics Colloquium, Dordrecht [Foris].
- BENDER M.L, 1976. Nilo-Saharan Overview (pp.439-483).
- BENTON P.A, 1912. Notes on some languages of the western Sudan including twenty four unpublished vocabularies of Barth, London.
- BLANC H, 1960. in Contributions to Arabic Linguistics, ed. FERGUSON C.A, Cambridge Mass..
- BRUEL G, 1918. L'Afrique équatoriale française, Paris.
- BRYAN M.A, 1948. Distribution of the Nilotic and Nilo-Hamitic languages of Africa, OUP.
- BRYAN M.A, 1968. n/k languages of Africa, Journal of African Languages.
- BRYAN M.A, 1955. Afrikanistische Studien, 26 pp. 312-332.
- BULLEN H.B, 1952. Zande and English dictionary, London [Sheldon].
- BYNON T, 1977. Historical Linguistics, CUP.
- CANTINEAU J, 1960. In Études de Linguistique Arabe, Mémorial Jean Cantineau, Paris [Klincksieck].
- CAPRILE J-P, 1969. Lexique Mbaï-Français, Lyon.
- CAPRILE J-P, 1971. La dénomination des couleurs chez les Mbay de Moïssala, Fort-Lamy.
- CAPRILE J-P, 1975. Lexique tumak-français, Tchad, Berlin [Reimer].

- CARBOU H, 1913. *Methode Pratique pour l'étude de l'Arabe parlé au Ouadday et à l'est du Tchad*, Paris.
- CARRADORI A, 1877. *Nubian Vocabulary* (in HOFMAN I, 1985. *Das nubische Wörterverzeichnis des Arcangelo Carradori aus dem frühen 17. Jahrhundert*, Wien).
- CHARTRAINE P, 1970. *Dictionnaire Etymologique de la Langue Grecque*, Paris [Klincksieck].
- CREWE W.J, 1973. *The place of Sudanese Arabic: a study in comparative Arabic dialectology*, Sudan Research Unit, University of Khartoum.
- CRUM W.E, 1939. *A Coptic Dictionary*, Oxford [Clarendon Press].
- DAUZATS, 1952. *Lexique français-peul et peul-français*, Albi [Imprimerie Albigeoise].
- DAVIES R, 1920s. MS of Masalit Grammar, at Khartoum University library (IAAS).
- DÉCOBERT C, 1985. *Phonologies Arabes du Tchad*, Paris [Geuthner].
- DECORSE Dr., (vocabularies given in GAUDEFRY-DEMOMBYNES, below)
- DEROY L, 1956. *L'emprunt Linguistique*, Paris [Les belles lettres].
- DESTAING, 1914. *Dictionnaire français-berbère (beni Snous)*, Paris.
- DIMMENDAAL G.J, 1983. *The Turkana language*, Dordrecht [Foris].
- Directions in Sudanese linguistics and folklore*, 1973. University of Khartoum.
- DOORNBOS P.A, 1983. *Languages of Wadai and Dar Fur*, in BENDER M.L, *Nilo-Saharan Language Studies*, East Lansing, pp. 43-79.
- DOORNBOS P.A, 1979-81. MS word-lists of Maba, Masalit, Aiki and Kibet.
- DUCROZ J.M & CHARLES M.C, 1978. *Lexique soney-français; parler kaado du Gorouol*, Paris [l'Harmattan].
- EDGAR J, 1988. *A Masalit Grammar, with notes on other languages of Darfur and Wadai*, *Frankfurter afrikanistische Beiträge*, Berlin [Reimer]. (forthcoming)
- FAURE P, 1969. *Introduction au parler Arabe de l'Est du Tchad*, Lyon.

- FERGUSON C.A, 1959(1). Diglossia, *Word*, XV, pp.325-40.
- FERGUSON C.A, 1959(2). The Arabic Koine, *Language*, XXXV, pp.616-30.
- DE FOUCAULD, 1951-2. Dictionnaire Touareg-Français, dialecte de l'Ahaggar, Paris.
- FRAJZYNGIER Z, 1985. Causative and Benefactive in Chadic, *AU* pp. 23-42.
- FROMKIN V.A, 1978. *Tone: a linguistic survey*, New York [Academic Press].
- GADEN H, 1909. *Bagirmi grammar*, Paris.
- GAIRDNER W.H.T, 1917. *Egyptian Colloquial Arabic*, Cambridge [Heffer].
- GAIRDNER W.H.T, 1925. *The Phonetics of Arabic*, London.
- GAUDEFROY-DEMOMBYNES M, 1906. Documents sur les langues de l'Oubangui-Chari (de Dr. Decorse), du tome II des Actes du XIV^e Congrès Internationale des Orientalistes, Paris.
- GREENBERG J.H, 1970. *The Languages of Africa*, Bloomington, Indiana.
- GREENBERG J.H, 1947. Arabic Loans in Hausa, *Word*, pp. 85-101.
- GREGERSEN E.A, 1967. Dating device for loan words, *African Language Review*, 6, pp.102-8.
- GUTHRIE M, 1967-71. *Comparative Bantu; an introduction to the comparative linguistics and prehistory of the Bantu languages* (vol.I), Farnborough [Gregg].
- HACQUARD A, 1897. *Manuel de la langue soŋgay parlé de Tombouctou à Say dans la boucle du Niger*, Paris.
- HAIM S, 1962. *New Persian-English Dictionary*, Teheran.
- HAIR P.E.M & STEVENSON R.C, 1970-1. *African language review*, pp.110-4.
- HALLAIRE J & ROBINNE J, 1959. *Dictionnaire Sara-Français*, Koumra-Fourvière.
- HARRELL R.S, 1957. *The Phonology of Colloquial Egyptian Arabic*, New York.
- HEINE B, 1968. *Afrikanische Verkehrssprachen*, Köln.

- HISKETT M, 1965. African Language Studies, VI, 18-26, The historical background to the naturalization of Arabic loans in Hausa.
- HILLELSON S, 1925. Sudan Arabic, English-Arabic vocabulary, London.
- HOCK H.H, 1986. Principles of historical linguistics, Berlin [Mouton de Gruyter].
- HUTCHISON J.P, 1981. Kanuri grammar, Madison, University of Wisconsin.
- HYMAN L.M, 1976. Studies in Bantu Tonology, Los Angeles.
- JOURDAN, 1935. Notes grammaticales et vocabulaire de la langue daza, London.
- JUNGRAITHMAYR H, 1965. Les langues africaines, Afrika VI,2, 16-18.
- JUNGRAITHMAYR H, 1971-2. How many Mimi languages are there? Africana Marburgensia.
- KAYE A.S, 1976. Chadian and Sudanese Arabic in the light of comparative Arabic dialectology, The Hague, Paris [Mouton].
- KAYE A.S, 1982. A dictionary of Nigerian Arabic, Malibu [Undena].
- KIGGEN J, 1948. Nuer-English dictionary, London.
- KNAPPERT J, 1970. Loans in African History, pp 78-88, in DALBY D (ed.) London Seminar on Language and History in Africa, London [Frank Cass].
- KNAPPERT J, 1973. Loans in African Languages, AU pp. 283-308.
- KOELLE S, 1854. Polyglotta Africana, London [Church Missionary Society].
- LACROIX P.F, 1967. Emprunts Arabes en Peul, Africa, 37, pp. 193-
- LADEFOGED P, 1975. Course in Phonetics, New York [Harcourt, Brace & Jovanovitch].
- LETHAM G.I, 1920. Shuwa Dialect of Bornu, Nigeria and of the Region of Lake Chad, London.
- LUKAS J, 1933. Beiträge zur Kenntnis der Sprache von Wadai, Journal de la Société des Africanistes, III, 1, pp.25-56.
- LUKAS J, 1937. Study of the Kanuri language, OUP.
- LUKAS J, 1937. Zentralsudanische Studien, Hamburg [Friederischen de Gruyter].

- LUKAS J, 1952. Verbalwurzel und Verbalaffixe in Maba, AU.
- LUKAS J, 1953. Tonbezeichnete Mabatexte (Waddai), AU.
- MACMICHAEL H, 1922. A history of the Arabs in the Sudan, CUP.
- MACMICHAEL H, 1920. Darfur Linguistics, SNR pp. 197-216.
- MALHERBE E.G, 1969. Description and Measurement of Bilingualism, Toronto.
- MALMBERG B, 1963. Phonetics, New York [Dover].
- MONTEIL V, 1963. Arabization des langues négro-Africaines, Afrique, II, 1, Geneva.
- MORAVSCIK E.A, 1978. Language Contact, in GREENBERG J.H, Universals of Language Contact [Stanford], pp. 95-120.
- MÜLLER F, 1872. Grundriss der Sprachwissenschaft, Berlin.
- MURAZ G, 1932. Vocabulaire du patois arabe-tchadien ou 'tourkou', Paris.
- NEBEL A, 1979. Dinka-English/English-Dinka dictionary, Bologna [Editrice Missionaria Italiana].
- NOUGAYROL P, 1987. Note sur la langue Kibet, Africana Marburgensia.
- NOUGAYROL P, 1982-3. MS word-lists of Aiki and Kibet.
- OKUNOR V, 1967. Tone in the Ga verb, Legon, University of Ghana.
- OWENS J, 1977. Aspects of Nubi Grammar, thesis, University of London.
- PERRON A, 1874. Vocabulaire de la langue du Dar Four (ex TUNISI).
- PETRAČEK K, 1987. Berti or Sagato-a (Saharan) Vocabulary, AU pp. 163-193.
- PIKE K.L, 1948. Tone Languages: a system for determining the number and type of pitch contrasts in a language, Ann Arbor, Michigan.
- DE POMMEROL P.J, 1977. Contes et Chantes du Tchad (région d'Abéché), Paris [École Pratique des Hautes Études].
- PRITZWALD K.S, 1938. 'Sprachwissenschaftliche Minderheitenforschung; ein Arbeitsplan und eine Statistik' in Wörter und Sache, 1, pp.52-72.
- PROST A, 1980s. Des mots d'emprunt dans les langues ouest africaines, MS at INALCO library, Sorbonne III.

- QASIM 'Awn 'Ashshariif, 1972. qaamuus allahjat al'aamiyya fii assuudaan, Khartoum.
- REDHOUSE J, 1968. Redhouse Yeni Türkçe-İngilizce Sözlük, İstanbul [Redhouse Yayınevi].
- ROPER E.M, 1928. Tu Beğawic, Hertford [Austin].
- ROTH-LALY A, 1969-72. Lexique des parlers arabes Tchado-Soudanais, CNRS, Paris.
- ROUZÉE P, 1820. Vocabularies, vol.III Memoires de la Société de Geographie.
- SAMARIN W.J, 1967. A grammar of Sango, The Hague [Mouton].
- SANTANDREA S, 1963. A concise grammar outline of the Bongo language, Rome [St Peter Claver].
- SANTANDREA S, 1970. Brief grammar outlines of the Yulu and Kara languages, Bologna [Editrice Nigrizia].
- SANTANDREA S, 1976. The Kresh group, Aja and Baka languages: a linguistic contribution, Napoli [IUO].
- SANTANDREA S, 1965. Languages of the Banda and Zande group. Napoli [IUO].
- SAPIR E, 1927. Language, New York.
- SCHUCHARDT H, 1928. Hugo Schuchardt-Brevier ein Vademecum der allgemeinen Sprachwissenschaft, Zusammengestellt und eingeleitet von Leo Spitzer, Halle.
- SEETZEN U.J, 1816. Linguistischer Nachlass: Wörter-Sammlungen aus Nord-Est Afrikanischen Sprachen, Berlin.
- SKINNER A.N, 1980s. MS Data for an Etymological Dictionary of Hausa, Madison.
- STENNES L.H, 1967. A reference grammar of Adamawa Fulani, Michigan State University, East Lansing.
- STEVENSON R.C, 1956. A survey of the phonetics and grammatical structure of the Nuba mountain languages with particular reference to Otoro, Katcha and Nyiman, AU XL, 73-196.
- TAYLOR F.W, 1927. Fulani-Hausa vocabulary, Oxford [Clarendon].
- TAYLOR F.W, 1932. Fulani-English dictionary, Oxford [Clarendon].
- THELWALL R, 1983. Meidob Nubian, in Bender M.L, pp. 97-113
- THELWALL R, 1978. Linguistic Profile, Aspects of Language in the Sudan, Coleraine, the New University of Ulster.