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THE MORPHOLOGY OF UIGHUR

by

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1

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TABLE OF CONTENTS

	Page
Preface.....	iv
Phonology.....	1
Morphophonemics.....	11
Morphology.....	14
Tables.....	30

PREFACE

Uighur, also known as Eastern Turki (1), belongs to the south-eastern sub-group of the Turkic group of the Altaic language family. There are approximately five million (eight million) speakers living in western or Chinese Turkestan, or what is now known as Sinkiang Province of North-west China.

The following analysis is based upon the speech of an educated speaker of the dialect spoken in and around Urumchi (Tihwa), the capital of Sinkiang Province, as obtained from Mr. David Rashid, at present with Georgetown University.

As indicated above, the title of this thesis is 'The Morphotactics of Uighur.' By morphotactics, I mean 'the statement of the sequence of morphemes that occur' in the word. (2) The word is to be defined below.

We know that the order of morphemes in certain constructions, and their definable degree of occurrence within those constructions,

1. Gunnar Jarring and J.D. Shaw use this name as an overall term for those dialects of Eastern Turkestan which they have investigated.
2. p. 54, George L. Trager & Henry Lee Smith, An Outline of English Structure, Studies in Linguistics; Occasional Papers 3, Norman, Oklahoma, 1951.

are basic to language and that an essential part of the work of the descriptive linguist is the description of these principles of arrangement in as comprehensive and as concise a manner as possible. However, before this can be done, a description must be made of the phonology and the morphology of the language under investigation. This is what I have attempted to do in the following pages.

1.000 Phonology

1.100 There are thirty-three segmental phonemes in the dialect investigated, of which eight are vowels and twenty-five are consonants.

1.110 The vowels are:

High			
Front			Back
i	ü	ɨ	u
e	o	a	o
Low			

1.111 Descriptions of each, with their allophones, follow:

/i/ the class of sounds represented by [i], a high front closed unrounded vowel, occurring immediately before pause, and before /y/; and [i̥] ~ [ī̥], a high front open unrounded vowel, which may be nonsyllabic and short, occurring elsewhere.

/e/ the class of sounds represented by [ê], a low front closed unrounded vowel, slightly raised, occurring immediately before /y/; [ê̄], a low front closed unrounded vowel, slightly backed, occurring immediately before back consonants; and [ê], a low front closed unrounded vowel, occurring elsewhere.

/ü/ the class of sounds represented by [ǖ], a high front closed

rounded vowel, occurring immediately before pause, and before /y/; and [Û], a high front open rounded vowel, occurring elsewhere.

/ö/ the class of sounds represented by [ö], a mid front closed rounded vowel, occurring immediately before /y/; and [õ], a mid front open rounded vowel, occurring elsewhere.

/e/ the class of sounds represented by [e], a mid front closed unrounded vowel, occurring immediately before /y/; and [ɛ], a high central open unrounded vowel, occurring elsewhere.

/a/ the class of sounds represented by [ɑ], a low back open unrounded vowel, occurring immediately before back consonants; and [a], a low central open unrounded vowel, occurring elsewhere.

/u/ the class of sounds represented by [u], a high back closed rounded vowel, occurring immediately before pause, and before /y/; and [U], a high back open rounded vowel, occurring elsewhere.

/o/ the class of sounds represented by [o], a mid back closed rounded vowel, occurring immediately before /y/; and [ɔ], a mid back open rounded vowel, occurring elsewhere.

1.112 Examples and distribution of the vowels follow:

/t/ does not occur before pause, but is fronted to /i/; while /o and õ/ probably do not occur before pause.

initial	medial	terminal
/t/ [t̥] /t/ "dog"	[bɪz] /bɪz/ "we"	[mɪnɪ] /mɪnɪ/ "me"
/e/ [aɛt] /ɛt/ "muscle"	[baɛz] /bɛz/ "gland"	[kãncɛ] /qãncɛ/ "how much?"

/u/ [ú] /ú/ 'three'	[tú] /tú/ 'noon'	[súngú] /súngú/	
		'bayonet'	
/o/ [ót] /ót/ 'Pass!'	[bót] /bót/ 'hand-made, rough cloth'		
/t/ [ét] /ét/ 'Tell!'	[qíz] /qíz/ 'girl, daughter'		
/a/ [át] /át/ 'horse'	[báz] /báz/ 'ice-house'	[pívá] /pívá/	
		'beer'	
/u/ [úc] /úc/ 'point, tip'	[búz] /búz/ 'Spoil!'	[bàrídú] /bàrídú/	
		'he (she, it, they)	
		go(es)'	
/o/ [ót] /ót/ 'fire'	[bót] /bót/ 'brown'		
/l/ before /y/	[tí ¹ n]	/tíyn/	'squirrel'
/e/ before back consonants	[é>kín]	/éqín/	'current, flow'
	[é>gíl]	/éqíl/	'haystack'
	[é>xlét]	/éxlét/	'trash, garbage'
	[é>hmét]	/éhmét/	'Personal name (male)'
	[é>zlé>g]	/ézléng/	'Speak (polite)!
	[é>lmúgúz]	/élmúgúz/	'protuberance on forehead'
/u/ before /y/	[kú ¹ gúli]	/kúyóglí/	'son-in-law'
/o/ before /y/	[ú ¹ dá]	/úydé/	'at home'
/a/ before back consonants	[á>kéimú]	/yáqéimí/	'How are you?'
	[bá>lámák]	/báglámáq/	'to tie'
	[á>xám]	/áxám/	'evening'

[râhmâ t] /râhmét/ 'Fine!' 7

[tân] /tân/ 'dawn'

[âllâqâčân] /âllâqâčân/ 'It's already happened.'

/u/ before /y/

[û¹ğ¹r] /ûğ¹ór/ 'Uighar'

/o/ before /y/

[ô¹nâ¹dâ] /ôynâydâ/ 'he (she, it, they) play(s)'

1.120 The consonants are:

- p b m n ŋ
- t d l ɭ
- k g r
- q
- f w h
- s z y
- š ž
- x ǰ

1.121 Descriptions of each, with their allophones, follows:

/p, t, k, q/ bilabial, alveolar, velar, and post-velar, slightly aspirated voiceless stops.

/b, d, g/ bilabial, alveolar, and velar, unaspirated voiced stops.

/f, š, ž, x, h/ labio-dental, alveolar, alveo-palatal, post-velar, and glottal voiceless spirants.

/z, ž, ǰ/ alveolar, alveo-palatal, and post-velar voiced spirants.

/č, ǰ/ voiceless and voiced alveo-palatal affricates.

/l, ɭ/ alveolar and velar laterals.

- /l, ɫ / alveolar and velar laterals.
- /m, n, ŋ / bilabial, alveolar, and velar nasals.
- /r/ alveolar trill.
- /w, y/ bilabial and palatal glides. /w/ has the allophones [β^v], a bilabial slit voiceless spirant slightly backed, occurring medially and before pause; and [vβ], a labio-dental slit voiceless spirant slightly fronted, occurring elsewhere.

1.122 Examples and distribution of the consonants follow:

/ŋ/ does not occur immediately after pause; the voiceless stops do not occur immediately preceding pause.

1.1221 Examples and distribution initially:

/p/	[paéš]	/péš/	'coat-front'
/b/	[baéš]	/béš/	'five'
/t/	[tár]	/tár/	'narrow'
/d/	[dár]	/dár/	'gallows'
/k/	[kú ^h l]	/kú ^h l/	'ashes'
/g/	[gú ^h l]	/gú ^h l/	'flower'
/q/	[qú ^h l]	/qu ^h l/	'slave'
/f/	[fàqát]	/fàqát/	'only'
/s/	[sór]	/sór/	'Winnow!'
/z/	[zór]	/zór/	'difficult'
/š/	[šòrpá]	/šòrpá/	'soup'
/ž/	[žòrnál]	/žòrnál/	'magazine'

/x/	[xál]	/xál/	'mole (on body)'
/g/	[gás]	/gás/	'goose'
/w/	[hál]	/hál/	'condition'
/ð/	[ðám]	/ðám/	'leather'
/j/	[Jás, q]	/Jéq/	'war, battle'
/l/	[lám]	/lám/	'necessary'
/l/	[lámíq]	/lámíq/	'necessity'
/m/	[márkás]	/márkás/	'capital, main, central'
/n/	[nársás]	/nársás/	'thing'
/r/	[rús]	/rús/	'Russian'
/w/	[wáqát]	/wáqát/	'time'
/y/	[yíp]	/yíp/	'thread'

7

1.1222 Examples and distribution medially:

/p/	[árpá]	/árpá/	'barley'
/b/	[árbá]	/árbá/	'cart'
/t/	[átá]	/átá/	'father'
/d/	[ádá]	/ádá/	'island'
/k/	[áká]	/áká/	'elder brother'
/g/	[ígím]	/ígím/	'my trousers crotch'
/q/	[íqím]	/íqím/	'my white'
/f/	[áfğán]	/áfğán/	'Afghan'
/s/	[ásán]	/ásán/	'easy'
/z/	[ízím]	/ízím/	'my little'

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/b/	[išim]	/ʌšim/	'my food'
/b/	[bišim]	/bʌšim/	'my customs, duty, tax'
/x/	[axir]	/axir/	'final'
/g/	[bišim]	/bʌšim/	'my garden'
/h/	[əhmət]	/əhmət/	'Personal name (male)'
/b/	[ačiq]	/ačiq/	'hot, bitter, angry'
/j/	[ajiz]	/ajiz/	'weak'
/j/	[ilis]	/ʌlis/	'Exchange!'
/j/	[ala]	/ala/	'variegated, particolor'
/n/	[amma]	/amma/	'but'
/n/	[ana]	/ana/	'mother'
/j/	[ajim]	/ajim/	'my idea'
/r/	[aram]	/aram/	'short rest'
/w/	[awgus]	/awgus/	'August'
/y/	[ayim]	/ayim/	'my month'

1.1223 Examples and distribution terminally:

/p/	[ep]	/ep/	'capable'
/t/	[et]	/et/	'muscle'
/d/	[tok]	/tok/	'high tension current'
/d/	[tok]	/toq/	'full stomach'
/t/	[ruf]	/ruf/	'roof'
/s/	[pes]	/pes/	'low'
/z/	[bez]	/bez/	'gland'

/b/ [báǎ]	/báǎ/	'head'
/g/ [gàráǎ]	/gàráǎ/	'garage'
/x/ [àráx]	/àráx/	'a type of alcoholic beverage'
/t/ [báǎ]	/báǎ/	'garden'
/n/ [si ¹ áh]	/siyáh/	'ink'
/o/ [áǎ]	/áǎ/	'Open!'
/j/ [pǎláǎ]	/pǎláǎ/	'beach'
/e/ [ǎl]	/ǎl/	'people'
/y/ [ǎǎ]	/yéǎ/	'breeze'
/a/ [tám]	/tám/	'wall'
/n/ [ǎn]	/ǎn/	'curse'
/a/ [tǎǎ]	/tǎǎ/	'dawn'
/r/ [tǎr]	/tǎr/	'narrow'
/w/ [pǎláw ^β]	/pǎláw/	'a type of food'
/y/ [ǎ ¹]	/ǎy/	'moon, month'

1.130 Occurrence of segmental phonemes is according to the following

patterns:

V	/ú/	'he (she, it, they)'
VV	/áu/	'prey, quarry'
VC	/ǎn/	'curse'
CV	/bí/	'this, that'
CVC	/tám/	'wall'
VCV	/iki/	'two'

VCC	/ówl/	'owl'
CCVC	/trén/	'train'
CVCC	/tört/	'four'
CVCV	/háí/	'his (her, its, their) head'
VCVC	/účún/	'for'
CVVC	/fèil/	'verb'
VCCV	/òtèí/	'stable-boy'

1.131 The following vowel clusters occur in my material:

/i/	/tábí/	'naturally'
/ia/	/dàríà/	'river'
/ei/	/fèil/	'verb'
/ou/	/sòúq/	'cold'
/ai/	/šáír/	'poet'
/au/	/dàút/	'Personal name (male)'

1.132 The following consonant clusters occur in my material:

/tr-/	/trén/	'train'
/dr-/	/drámátikà/	'dramatic'
/fr-/	/frànsià/	'France'
/-rt/	/tört/	'four'
/-rɔ/	/ní yóɔ/	'Place name (New York)'
/-wl/	/ówl/	'owl'
/-yt/	/íyt/	'Tell!'
/-ya/	/póya/	'train'

/-yn/ /tɪyn/ 'squirrel'

7

1.200 Suprasegmental phonemes in the dialect investigated include three phonemes each of stress, pitch, and juncture.

1.210 The phonemes of stress are symbolized by /' , ` , and ~ /, representing primary, secondary, and weak stress respectively.

1.220 The phonemes of pitch are symbolized by / ¹ , ² , and ³ /, representing low, mid, and high pitch respectively.

1.230 The phonemes of juncture are symbolized by / / , / , and # /, representing respectively open juncture, i.e., the interruption of the breath stream between two phonemes with no change in pitch; and the terminal junctures, single bar, a pause with no fall in pitch, and double cross, a pause with a fall in pitch.

1.240 The onset of high pitch /³/ probably falls only on syllables with primary stress, while the onsets of mid and low pitches /² and /¹/ may fall on syllables with all three stresses.

/²mǎnjǔrlár / ... zúlúm³ / kǒrídú¹ /
/ádrí² / ... bǒlúp² / ándiján² / ... ótqíp³ / alídú¹ /
/íkinčí² / qáncě² / /

2.000 Morphophonemics

2.100 Vowel changes include vowel harmony, assimilation, and alternate bases.

2.110 Vowel harmony, which is a predominant characteristic of the Uighur language and of the majority of Altaic languages, is a pattern of noncontiguous vocalic assimilation in which vowels exhibiting certain phonetic features are followed by vowels exhibiting like phonetic features.

There are three types of vowel harmony in Uighur, to be referred to below as vowel harmony one, two, and three, and symbolized respectively as $-V_1-$, $-V_2-$, and $-V_3-$.

2.111 In vowel harmony one, affixes containing high vowels have:

/i/	if the preceding syllable has /i, e/ (front, unrounded)
/ɨ/	/ɨ, ø/ (front, rounded)
/ɛ/	/ɛ, a/ (central, unrounded)
/u/	/u, o/ (back, rounded)

2.112 In vowel harmony two, affixes containing low vowels have:

/e/	if the preceding syllable has /i, e, ɨ, ø/ (front)
/a/	/ɛ, a, u, o/ (back)

2.113 In vowel harmony three, affixes containing high rounded vowels⁷ have:

/i/ if the preceding syllable has /i, e, ɛ, ø/ (front)

/u/ /ɨ, a, u, o/ (back)

2.120 /e/ and /a/ may undergo regressive noncontiguous full and raised assimilation to /i/, when separated by a consonant or geminate. Examples:

*/at-i/ > */at-i/ > /ət-i/ 'his(her,its,their) horse' /At-i/

/ø/ and probably /o/ may undergo regressive noncontiguous full and raised assimilation to /u/ and /u/ respectively, when separated by a consonant or geminate. Examples:

/køy-mék/ 'to burn' /øğül/ 'son'

*/køyøğül-i/ > /küyøğli/ 'his son-in-law' /kÖyÖğli/

/a/ may undergo regressive noncontiguous full and rounded assimilation to /o/, when separated by a consonant or geminate. Examples:

*/yáp-úp/ > /yóp-úp/ '(and) doing' /yAp-úp/

It will be noted that capital letters are used to symbolize the vowel which has undergone assimilation.

2.130 Alternate bases occur in some loans. Examples:

/zülüm/ 'cruelty' /zälím/ 'a cruel person'

/šèír/ 'poem' /šàír/ 'poet'

2.200 Consonantal changes include assimilation of consonants and consonant alternation.

2.210 Voiceless stops before ^{pa}ise assimilate to voiced stops when

Intervocalic. Examples:

p > -b- /gàrip/ 'west' /gàribijámùq/ 'southwest' /gàripijámùq/

2.220 In close juncture, contiguous medial consonants tend to assimilate to the same point or manner of articulation as the following

consonant. Examples:

/ón/ 'ten' /qádèm/ 'step' /bèšòqádèm/ 'five or ten steps'

/bís/ 'we' /sòz/ 'self' /bissòzání/ 'we, ourselves'

2.230 /g/ may not occur geminate, but assimilates to /q/. Examples:

/bág/ 'garden' /bàqqá/ 'to the garden'

2.240 Alternation of consonants in medial position may occur in

loans. Examples:

/bànká/ - /bànqá/ 'bank'

/àmèriká/ - /àmèriqá/ 'America'

3.000 Morphology

In Uighur, words (which are defined as (a) particles, i.e., any morpheme which does not take affixes, or (b) any sequence of morphemes, the first of which may be a prefix, verb root, or noun base, and the last a post final inflectional suffix.) are formed by agglutination, i.e., by affixing to verb roots or noun bases sequences of morphemes for the purpose of expressing grammatical categories and relationships, syntactical functions, etc. In this respect, Uighur has a predominantly suffixal structure. This feature, as is vowel harmony which was mentioned in 2.110 above, is a characteristic feature of the Altaic languages.

Those morphemes which may be affixed to the verb roots and noun bases are classified into two major groups on the basis of common characteristic features by which they are differentiated, i.e., derivational suffixes, non-final suffixes which form verbal or nominal stems when affixed to verb roots or noun bases; and inflectional suffixes, i.e., final suffixes which may occur in sets or paradigms.

Both derivational and inflectional suffixes are divided into two major groupings based on syntactical functions, i.e., nominal or

verbal derivational suffixes, and nominal or verbal inflectional suffixes.

Nouns may be broadly defined as those words to which may be affixed case endings while verbs may be defined as those words to which may be affixed personal endings.

Derivational suffixes are divided into two orders, (1) desubstantive verb affixes and deverbative noun affixes, i.e., respectively, affixes which form noun stems from verb roots and affixes which form verb stems from noun bases; and (2) deverbative verb affixes and desubstantive noun affixes, i.e., respectively, affixes which form new verb stems when affixed to verb roots or stems, and affixes which form new noun stems when affixed to nominal bases or stems.

Within each order there are position classes to which each morpheme belongs.

For identification purposes, there will be found with each morpheme in the list which follows a number(1), which identifies each morpheme as to group, order, and position class.

The last number from the left of the decimal point determines if it is a derivational or inflectional affix (1 and 2 respectively); the next number, still reading from the left of the decimal point, determines its order, desubstantive verb, deverbative noun, deverbative

1. This is a modification of the morphological index devised by C.F. Voegelin and Paul Carvin.

verb, desubstantive noun (1, 2, 3, and 4 respectively), and verb inflectional and noun inflectional (1 and 2 respectively). (2) The next number identifies the individual morpheme. The number immediately preceding the decimal point determines that morphemes position class within its order. The number immediately following the decimal point identifies the allomorph when applicable.

For example, the first morpheme listed below is $/-V_2-/$ which has the morphological index number 1111. It is a desubstantive verb derivational suffix occurring in position one of its order and it is morpheme one in that order.

3.110 The following desubstantive verb suffixes occur in my material:

1111. $/-V_2-/$

$/sán/$

'number'

$/san-a/$ 'Count!'

1121. $/-(V_1)k-/$

$/kéč/$

'late'

$/kĕč-ik/$ 'Be late!'

1131. $/-(V_2)r-/$

$/kòk/$

'blue, green'

$/kòk-ér/$ 'Blossom! (Become green!,

Bruise!, a wish of good

life)'

1141. $/-(V_2)t-/$

2. It will be noted that odd numbers deal with verbal suffixes and even numbers with nominal suffixes.

1151. /kòz/ 'eyes' /gòz-ét/ 'Watch!' 7
1161. /-(V₂)y-/
/áz/ 'little' /áz-áy/ 'Become little'
1171. /-lV₂-/
/sòz/ 'word' /sòz-lé/ 'Speak!'
1171. /-ø-/
/yár/ 'gully' /yár-ø/ 'Split!'
- 120 The following deverbative verb suffixes occur in my material:
1311. /-(V₁)l-/ (Passive marker)
/táp/ 'Find!' /táp-il-in-iš-i-miz/ 'We are found
by each other.'
1322. /-(V₁)n-/ (Reflexive marker)
/táp/ 'Find!' /táp-il-in-iš-i-miz/ 'We are found
by each other.'
1334. /-(V₁)r-/ (Causative marker)
/kòč/ 'Immigrate!' /kòč-úr/ 'Make immigrate!'
1343. /-(V₁)š-/ (Reciprocal or Cooperative marker)
/táp/ 'Find!' /táp-il-in-iš-i-miz/ 'We are found
by each other.'
1354. /-t-/ (Causative marker)
/táp/ 'Find!' /táp-tur-t/ 'Make find!'
1364. /-kV₂z-/ (Causative marker)
/òt/ 'Cross!' /kàn-òt-kez/ 'Waste time!'

1364. /-kV₃z-/ (Causative marker)

/tɕɿ/ 'Fill!' /tɕɿ-qɿz/ 'Fill up!'

1374. /-tV₃r-/ (Causative marker)

/tɕp/ 'Find!' /tɕp-tür-hl-dür/ 'Make someone be found!'

3.130 The following verb inflectional suffixes occur in my material:

210101. /-mV₂-/ (Negative marker)

/kɿl/ 'Laugh!' /kɿl-mé/ 'Don't laugh!'

210202.1 /-V₁p-/ (Past Converb marker)

/qɿl/ 'Do!' /qɿl-ĩp-ti-míɿ-nèn/ 'I am said to do.'

210202.2 /-V₁-/ (Past Converb marker)

/ɕl-tür/ 'Kill!' /ɕl-tür-mé-y-vát-ĩ-nèn/ 'I am not killing.'

210303. /-vat-/ (Momentaneous marker)

/qɿrd/ 'Look!' /qɿrd-má-y-vát-ĩ-nèn/ 'I am not looking.'

210403. /-ver-/ (Continuative marker)

/qɿl/ 'Do!' /qɿl-ĩ-ver-ĩ-nèn/ 'I keep doing.'

210503. /-(a)la-/ (Potential marker)

/qɿrd/ 'Look!' /qɿrd-la-y-nèn/ 'I can look.'

210604. /-at-/ (Past marker)

/kɿl/ 'Come!' /kɿl+ĩ-vát-ĩt-ti-m/ 'I was coming.'

210706. /-sV₂-/ (Conditional marker)
 /kɔl/ 'Laugh!' /kɔl-sé-m/ 'If I laugh.'
210806. /-šV₁-/ (Necessative marker)
 /kɔl/ 'Laugh!' /kɔl-ŭ-šé-m ləzím/ 'I must laugh.'
210906. /-tV₁-/ (Simple past marker)
 /kɔl/ 'Laugh!' /kɔl-dó-m/ 'I laughed'
211006. /-ø-/ (Imperative marker)
 /kɔl/ 'Laugh!' /kɔl-ø/ 'Laugh!'
211108. /-miš-/ (Hearsay marker)
 /bár/ 'Give!' /bér-ip-tí-miš-nèn/ 'I am said to give.'
- 211205.1 /-V₁-/ (Copula marker)
 /bár/ 'Go!' /bár-má-y-nèn mú/ 'Don't I go?'
- 211205.2 /-ø-/ (Copula marker)
 /bár/ 'Go!' /bár-dí-ø-m/ 'I went.'
211301. /-m-/ (Question marker)
 /bár/ 'Go!' /bár-í-m-síz-làr yóq/ 'Don't you go?'
211409. /-men-/ (1st Person Singular Present-Future marker)
 /bár/ 'Go!' /bár-í-mén/ 'I go.'
211509. /-sen-/ (2d Person Singular Present-Future marker)
 /bár/ 'Go!' /bár-í-sén/ 'You (sg.) go.'

211609. /-ð-/ (3d Person Singular & Plural Present-Future marker)
 /bár/ 'Go!' /bár-ð-dú/ 'He (she, it, they) go (es)'
211709. /-miz-/ (1st Person Plural Present-Future
 /bár/ 'Go!' /bár-í-miz/ 'We go.'
211809. /-siz-/ (2d Person Plural Present-Future
 /bár/ 'Go!' /bár-í-siz/ 'You (pl.) go.'
211909. /-m-/ (1st Person Singular Past marker)
 /bár/ 'Go!' /bár-dí-m/ 'I went.'
212009. /-ŋ-/ (2d Person Singular Past marker)
 /bár/ 'Go!' /bár-dí-ŋ/ 'You (sg.) went.'
212109. /-ð-/ (3d Person Singular & Plural Past marker)
 /bár/ 'Go!' /bár-dí-ð/ 'He (she, it, they) went.'
212209. /-k-/ (1st Person Plural Past marker)
 /bár/ 'Go!' /bár-dú-q/ 'We went.'
212309. /-ŋiz-/ (2d Person Plural Past marker)
 /bár/ 'Go!' /bár-dí-ŋiz/ 'You (pl.) went.'
212409. /-m-/ (1st Person Singular General marker)
 /bár/ 'Go!' /bár-sá-m/ 'If I go.'
212509. /-ŋ-/ (2d Person Singular General marker)
 /bár/ 'Go!' /bár-sá-ŋ/ 'If you (sg.) go.'
212609. /-ð-/ (3d Person Singular and Plural General marker)
 /bár/ 'Go!' /bár-sá-ð/ 'If he (she, it, they) go (es)'
212709. /-miz-/ (1st Person Plural General marker)
 /bár/ 'Go!' /bár-sá-miz/ 'If we go.'

- 7
212809. /-qiz-/ (2d Person Plural General marker)
 /bár/ 'Go!' /bár-sá-qiz/ 'If you(pl.) go.'
212909. /-ǰ-/ (1st Person Singular Exhortative Imperative marker)
 /bár/ 'Go!!' /bár-á-ǰ-ǰ-ǰ/ 'Let me go!'
213009. /-(V₁)n-/ (2d Person Singular Imperative marker)
 /bár/ 'Go!' /bár-ǰ-fǰ-/ 'Go!'
213109. /sV₃n-/ (3d Person Singular & Plural Exhortative Imperative marker)
 /bár/ 'Go!' /bár-ǰ-sún/ 'Let him go!'
233209. /-li-/ (1st Person Plural Exhortative Imperative marker)
 /bár/ 'Go!' /bár-á-ǰ-y-li/ 'Let us go!'
233309. /-siz-/ (2d Person Plural Imperative marker)
 /bár/ 'Go!' /bár-ǰ-siz-lár/ 'Go!'
233410. /-lar-/ (Plural marker)
 /bár/ 'Go!' /bár-ǰ-m-siz-lár/yóq/ 'Don't you go?'

3.210 The following deverbative noun suffixes occur in my material:

12011. /-V₂-/
 /yér/ 'Split!' /yár-á/ 'wound'
12021. /-(V₂)k-/
 /bál/ 'Divide!' /bál-ék/ 'division'
12031. /-(V₁)k-/
 /yap/ 'Close!' /yáp-fq/ 'cover'

12041.	/-(V ₁)m-/			
	/yár/	'Split!'	/yár-ín/	'half'
12051.	/-(V ₂)n-/			
	/čák/	'Smoke!'	/čák-én/	'smoke!'
12061.	/-(V ₁)p-/	(Past gerund marker)		
	/ól/	'Die!'	/ól-áp/	'dead'
12071.	/-(V ₁)č-/			
	/qál/	'Do!'	/qál-čé/	'sword'
12081.	/-(V ₂)r-/			
	/čáč/	'Spread!'	/óq čáč-ár/	'machine-gun (lit.:bullet-spreader)'
12091.	/-(V ₁)š-/			
	/kél/	'Come!'	/kél-šé/	'coming!'
12101.	/-(V ₁)w-/			
	/síná/	'Examine!'	/síná-w/	'examination'
12111.	/-gV ₃ -/			
	/sáq/	'Hit!'	/sáq-qú-čáo/	'woodpecker, oval'
12121.	/-gV ₂ -/			
	/bál/	'Divide!'	/bál-gé/	'division'
12131.	/-gV ₂ k-/			
	/qáčfú/	'Itch!'	/qáčfú-qáq/	'itch'
12141.	/-gíl-/	(Non-temporal gerund marker)		
	/qáp/	'Get up!'	/qáp-qíl-l/	'for his(her, it's their) getting up.'

12151. /-gV₂n-/ (Past participle marker)
 /təg-ŋl/ 'Be born!' /təg-ŋl-gin/ 'birth, the one
 who was born'

12161. /-gV₃č-/
 /bɪrd/ 'Twist!' /bɪrd-žič/ 'screwdriver'

12171. /-gīče- -gīnče-/ (Non-temporal gerund marker)
 /čl/ 'Die!' /čl-gīče/ 'until(while)
 somebody dies.'

12181. /-gV₃če- -gV₃nče-/ (Non-temporal gerund marker)
 /kél/ 'Come!' /kél-gūnče/ 'instead of
 coming.'

12191. /-mV₂- -mV₂k-/ (Infinitive gerund marker)
 /təqd/ 'Knit!' /təqd-má/ 'knitting'

12201. /-sV₂n-/
 /čáp/ 'Run on horseback!' /čáp-sán/ 'quickly'

3.220 The following desubstantive noun suffixes occur in my material:

140101. /-e-/ (Feminine gender marker)
 /mádir/ 'director' /mádir-é/ 'female director'

140201. /-e-/
 /véyrán/ 'ruined' /véyrán-é/ 'ruin'

140301. /-(V₂)y-/
 /qđl/ 'arm, hand' /qđl-ŋy/ 'easy to handle'

140401. /-(V₂)k-/
 /yip/ 'thread' /yip-ék/ 'silk'

140502.	/-(V ₁)nč1-/	(Ordinal marker)		
	/bfr/	'one, a, an'	/bfr-lnčf/	'first'
140601.	/-istan-/	(
	/hábés/	'Ethiopian'	/hábés-ístán/	'Ethiopia'
140701.	/-čan-/			
	/čil-čán/	'smile'	/čil-čán-čán/	'perpetual smiler'
140801.	/-čé-/			
	/rús/	'Russian'	/rús-čé/	'in Russian'
140904.	/-č1-/	(Agentive marker)		
	/sú/	'water'	/sú-čf/	'water-carrier'
141007.	/-čV ₂ k-/	(Diminutive marker)		
	/bá1á/	'baby'	/bá1á-čán/	'little baby'
141101.	/-čV ₃ k-/	(Diminutive marker)		
	/yán/	'side'	/yán-čú/	'side-pocket'
141201.	/-čV ₃ č-/			
	/kók/	'blue'	/kók-kúč/	'bluish'
141303.	/-kar-/	(Agentive marker)		
	/kánd/át/	'modesty'	/kánd/át-kár/	'modest person'
141403.	/-kéč-/	(Agentive marker)		
	/aráx/	'a type of alcoholic beverage'	/aráx-kéč/	'drinker'
141501.	/-koy-/	(Agentive marker)		
	/rás/	'truth'	/rás-kóy/	'truthful person'

141601. /-li-/ (Attributive marker)

/niʃán/ 'bull's-eye'

/niʃán-li/ 'an engaged couple
(or person)'

141702. /-lep-/

/ʃi/ 'two'

/ʃi-lep/ 'two by two'

141806. /-lɿk-/

/yèʃl/ 'green'

/yèʃl-lɿk/ 'greenness'

141901. /-mɿ- (Decimal marker)

/ʃi/ 'six'

/ʃi-mɿ/ 'sixty'

142001. /-nə-/

/nə/ 'good'

/nə-nə/ 'neighbor'

142101. /-nək-/

/tə/ 'tea'

/tə-nək/ 'tea-kettle'

142201. /-nəi-/

/qàrà/ 'black'

/qàrà-nəi/ 'darkness'

142301. /-pərez-/

/xətɿn/ 'woman, wife'

/xətɿn-pərez/ 'woman-crazy'

142401. /-pəz-/ (Agentive marker)

/ə/ 'food'

/ə-pəz/ 'cook'

142507. /-raq-/ (Comparative marker)

/təwən/ 'low'

/təwən-raq/ 'lower'

142605. /-sɿz-/ (Privative marker)

/qɿ/ 'winter'

/qɿ-sɿz/ 'winterless'

142701. /-tan-/

/kʰɪl/ 'ash' /kʰɪl-dʰɛn/ 'ash-tray'

142801. /-tʰɛ-/ ('One that accompanies' marker)

/mɛnɬɛk/ ' /mɛnɬɛk-tʰɛ/ 'colleague'

142902. /-tʰɛ-/ (Agentive marker)

/dʰɪɬɛn/ 'shop' /dʰɪkʰɛn-dʰɛr/ 'shopkeeper'

143007. /-tʰɛ₂k-/ ('Like' marker)

/mɛn/ 'I' /mɛn-dɛk/ 'like me'

143101. /-tʰɛ₃k-/

/qɔɪ/ 'arm, hand' /qɔɪ-tʰɛq/ 'armpit'

143203. /-wɛz-/ (Agentive marker)

/qɪɪɬɛ/ 'sword' /qɪɪɬɛ-wɛz/ 'swordsman'

143303. /-wɛn-/ (Agentive marker)

/bɛɬ/ 'garden' /bɛɬ-wɛn/ 'gardener'

143401. /-yɛ-/

/rʉs/ 'Russian' /rʉs-yɛ/ 'Russia'

143501. /-zɛ-/

/nɪy/ 'reed, flute' /nɪy-zɛ/ 'spear'

143602. /-zɛk-/

/ɪkɪ/ 'two' /ɪkɪ-zɛk/ 'twins'

3.230 The following noun inflectional suffixes occur in my material:

220102. /-(V₁)m-/ (1st Person Singular Possessive marker)

/yɛn-ɬɛq/ 'side pocket' /yɛn-ɬɛq-hɛn-dʰɛn/ 'from my side pocket'

220202. /-(V₁)ŋ-/ (2d Person Singular Possessive marker)
 /dádá/ 'father' /dádá-ŋ/ 'your (sg.) father'
220302. /-(s)i-/ (3d Person Singular & Plural Possessive marker)
 /òy/ 'house' /òy-í/ 'his, her, it's, their house'
220402. /-(V₁)miz-/ (1st Person Plural Possessive marker)
 /bás/ 'head' /bás-ì-m-iz-dín/ 'from our head'
220502. /-(V₁)ŋiz-/ (2d Person Plural Possessive marker)
 /bálá/ 'child' /bálá-là-r-ŋ-iz/ 'your (pl.) children'
220601. /-lar-/ (Plural marker)
 /eskér/ 'soldier' /eskér-là-r-f-ní/ 'his soldiers (acc.)'
220703. /-ø-/ (Nominative case marker)
 /bás/ 'head' /bás-ø/ 'head'
220803. /-niŋ-/ (Genitive case marker)
 /bág-wán/ 'gardener' /bág-wán-niŋ/ 'the gardeners'
220903. /-ni-/ (Accusative case marker)
 /òz/ 'self' /òz-ì-ní/ 'his (her, it's, their) self (ves)'
221003. /-gV₂-/ (Dative case marker)
 /brún/ 'place' /brún-ì-gá/ 'to his (her, it's, their) place'

221103. /-te-/ (Locative case marker)

/asnan/ 'sky'

/asnan-d^h-ki/ 'that which is in
the sky'

221203. /-tin-/ (Ablative case marker)

/bat/ 'head'

/bat-in-iz-din/ 'from our head'

221304. /-ki-/ (Relative marker)

/seher/ 'city'

/seher-d^h-ki/ 'that which is
the city's'

3.300 The following prefixes occur in my material:(1)

001. /na-/ (Negative marker)

/mhwafyk/ 'suitable'

/na-mhwafyk/ 'unsuitable'

002. /bi-/ (Privative marker)

/giná/ 'sin'

/bi-giná/ 'sinless'

003. /yek-/

/sembb/ 'Saturday'

/yek-sembb/ 'Sunday'

004. /du-/

/du-sembb/ 'Monday'

005. /sey-/

/sey-sembb/ 'Tuesday'

006. /car-/

/car-sembb/ 'Wednesday'

1. The morphological index number identifies these affixes as prefixes, (i.e., 0), and as individual morphemes (the number immediately to the left of the decimal point.

007. /pen-/

/pén-ŷembè/ 'Thursday'

L

L

1. I cause someone to be found by someone.
2. We are found by each other.
3. I make someone be found by someone.
4. We will be found together by someone.
5. We cause each other to look for each other.
6. I make someone find.
7. I cause two people to look for each other.
8. It is not eaten.
9. Don't I go?'
10. You didn't go.
11. Let's go.
12. Don't you(pl.) go?'
13. Was I looking?'
14. I can look.
15. It is burning.
16. I am caused by someone to meet someone.
17. I make someone ~~make~~ someone meet.
18. I am said to do.
19. I am said to do.
20. I keep doing.
21. I must laugh.
22. I am not killing.
23. I was killing.
24. If he is being killed.
25. I made kill.
26. If he killed.
27. He was killed(it was reported).
28. He is dying(it is reported).

1. qara rəu	1	2	3	4	5	6	7	8	1	2	3	4
2. dösən						lug			1er		tin	
3. əsmən										1	de	ki
4. bə											rd	
5. aze nəs	ənd					14q					din	
6. xan									at	1	rd	
7. məxni								dek	1er		rd	
8. arətlan				ci							ge	
9. lıqalap				ci								
10. dukan	dar		keş	ci								
11. ay aq					siz	11q		dek				
12. ay aq					siz	14q						
13. qol ay						14q		raq				
14. qol tuq						lug						
15. qan xor				ci								
16. çay nek								dek	1er			

- 7
1. From the darkness.
 2. Enemies(acc.).
 3. That which is in the sky.
 4. Him(her,it,them)self(ves)(acc.).
 5. Sixtieth,
 6. From his(her,it's,their) kingdom.
 7. Of my busy.
 8. Like a lion.
 9. To the revolutionaries.
 10. Shop-keeper.
 11. Without this wooden dish maker.
 12. Like a legless person.
 13. Easy handling.
 - 14.
 15. Blood drinkers.
 16. Small teakettle.