Chaha (Gurage) Morphology*

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1. Introduction

Chaha (čəha) is a Gurage dialect belonging to the Ethiopian branch of the Semitic language family. It is a member of the Western Gurage group of dialects along with Ezha, Gyeta, Endegegn and Inor. Chaha itself also has some sub-dialects, Gura and Gumer. The data for this article come from the dialect spoken in the main Chaha town of Endeber and neighboring villages, such as Yeseme. Endeber is located approximately 180 kilometers south-west of Addis Ababa, the capital of Ethiopia. The 1994 census

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The following abbreviations are used: acc. = accusative; f = feminine; m = masculine; p = plural; s = singular; impf. = imperfect; pf. = perfect; juss. = jussive; conv. = converb; inf. = infinitive; impl. = impersonal; caus. = causative; neg. = negative; def.fut. = definite future; indef.fut. = indefinite future; O = object. Person, gender and number combinations such as 3fs correspond to subject marking unless otherwise indicated.

Symbols are in accordance with IPA except for the palatal affricates, for which I use [č] and [ǰ]. Note that the vowel I transcribe as [ə] is other authors' (Leslau, Hetzron) [ä] and my [ɨ] is their [ə].

divides the Gurage into three groups according to language: Soddo, Silte and Sebat Bet. Sebat Bet translates as 'seven houses' and is a linguistic-cultural term referring to the seven main groups of the Western Gurage. There were 621,691 Sebat Bet Gurage speakers in the whole Gurage administrative zone in 1994 (1994 Population and Housing Census of Ethiopia); it is not known how many Chaha there are within this group. The number of Sebat Bet speakers for the Chaha Woreda, or administrative district, was 114,970, most of whom can be assumed to be Chaha speakers. This figure, of course, does not include the large numbers of Chaha who live in other areas of the district and country, particularly Addis Ababa.

2. Morphological typology

The verbal system of Chaha is highly inflectional, with prefixes and suffixes indicating categories such as person, number, gender and tense.[1] Although the Gurage dialects have been largely influenced by Cushitic (Leslau 1952), the verbal system nevertheless retains the characteristic Semitic root-and-pattern morphology, well-known from studies of Arabic, Hebrew or Tigrinya. The 'root', composed of consonants[2], conveys the core lexical semantics. The 'pattern' refers to the stem shape and stem vowels which correspond to different aspectual or tense categories. The

[1] Description of the morphology is presented in an item-and-arrangement model. Although standard practice, this model does pose certain problems with i) process alternations and ii) isomorphic form-meaning correspondences.

[2] There are some roots which have vocalic elements. See section 3.4.

nominal/adjectival system has some vestiges of the root-and-pattern morphology, but is inflectionally impoverished; noun stems lack gender and number marking altogether. For example, there is no system of internal changes to indicate plurality ('broken plurals'), as there are in other Semitic languages such as Arabic and Tigrinya. Notwithstanding, there are identifiable common roots between nouns, adjectives and verbs, as the following examples illustrate:

(1)

Root	Verb[3]		Noun/Adjective	
k'ms	k'əməsə	'he tasted'	k'ɨm^{w}ɨs	'tasty'
k'rt'm	k'ɨrət'əmə	'he cut into parts'	k'^{w}ɨrč'ɨm	'splinters of wood'
grz	gənəzə	'he aged'	g^{w}ɨrz	'old'
			gɨrzɨna	'old age'
t'βt'	t'əβət'ə	'he grabbed'	t'wač'ə	'handful'
rβr	nəpərə	'live'	nɨβrət	'life'

[3] Verbs are given in the 3ms perfective citation form. Chaha perfective verbs end in a suffix –m in affirmative main clauses, which is usually shown in the citation form (Leslau 1979). I leave this off for simplicity.

Chaha (and other Western Gurage dialects) has undergone numerous morphophonological changes, which can render opaque the relationship between words formed from the same root. Characteristic changes illustrated above include labialization, palatalization, devoicing and sonorant alternations. Some of these alternations have also come to indicate, often in conjunction with other affixes, particular morphological categories. See section 5.7.

3. Verbal stem morphology

Ethiopian Semitic languages employ the root-and-pattern system of combining a consonantal root with vowels to form verb stems. The Chaha roots /mgr/ 'suppurate', /srf/ 'be afraid', /kft/ 'open' and /dβr/ 'add' illustrate the verbal root-and-pattern system in the three main aspectual verb forms, perfective, imperfective and jussive. The medial root consonant is devoiced in the perfective form, or /r/ is hardened to [n]; we will return to this phenomenon in section 3.2.

(2)	'to suppurate'	'to be afraid'	'to open'	'to add'
Perfective	məkər-ə	sənəf-ə	kəfət-ə	dəpər-ə
Imperfective	jɨ-məgɨr	jɨ-sərf	jɨ-kəft	jɨ-dəβɨr
Jussive	jə-mgər	jə-srəf	jə-kɨft	jə-dβir

The standard tri-consonantal perfective form is of the shape CəCəC,[4] where C stands for root consonant, and the imperfective is CəC(ɨ)C. The vowel [ɨ] is epenthetic - its occurrence throughout the language is largely predictable from syllable constraints (Banksira 2000a:25). The jussive has two main forms: CCəC if the verb is intransitive, as with jə-mgər, and if transitive, either CCɨC or CɨCC. The position of the epenthetic vowel depends on the quality of the second and third consonants (Leslau 1964, Banksira 2000a, Rose 2000). The imperative has the same form as the jussive, minus subject agreement prefixes.

3.1 Lexical verb types

Triconsonantal verbs in Ethiopian Semitic are divided into lexical classes (Cohen 1936, Leslau 1950). The forms illustrated in (1) are 'Type A' verbs. Chaha also has Type B, Type C, and a fourth type, Type D, not normally recognized in other Ethiopian Semitic languages. Type B verbs are characterized by a palatal consonant or a front vowel in the first vocalic position of the stem. This occurs in the perfective and imperfective positions, but not in the jussive.

[4] The only exception to this shape is if the second consonant is [n] and the final one is a coronal stop: fənt-ə 'cut in half' or bənt'-ə 'become wise'

(3) Type B verbs

	‘finish’	‘cut in big slice’	‘to burn’	‘to select’
Perfective	ǰəpər-ə	gʲənəz-ə	məkʲər-ə	met’ər-ə
Imperfective	jɨ-ǰəpɨr	jɨ-gʲənɨz	jɨ-məkʲɨr	jɨ-met’ɨr
Jussive	jə-dəpɨr/jə-dəβɨr	jə-gənɨz	jə-məkɨr	jə-mət’ɨr

The initial consonant is palatalized if it is a coronal or velar obstruent, as shown in the first two verbs. The second consonant is palatalized only if the first consonant is a labial consonant or a coronal sonorant and the second one is velar, as with the verb məkʲərə. Otherwise, the front vowel [e] appears instead of [ə], as with mezərə. Some authors claim that Type B verbs are not formed from triconsonantal roots, but are instead quadriconsonantal forms, the second consonant being the glide /j/, which is responsible for the palatalization and vowel fronting (Rose 1994b, Banksira 2000a). Leslau (1948) proposes that Type B had a historical CeCəC or CeCC shape, with the /e/ triggering palatalization of relevant consonants. Hudson (1974) and Hetzron (1972, 1977) assume that palatalization is, in some manner, part of the underlying root. Unlike Type A verbs, Type B verbs usually show no alternation of the penultimate consonant. This is due to the fact that they have devoicing or hardening in all aspectual forms. However, some verbs optionally show devoicing in the jussive, as with the verb ‘finish’.

Type C verbs are characterized by the vowel [a] in the first vocalic position in all aspectual forms, as shown in (4):

(4) Type C verbs

	'to capture'	'to demolish'	'to get lost'
Perfective	manəx-ə	banər-ə	zapət-ə
Imperfective	jɨ-manx	jɨ-banɨr	jɨ-zapɨt
Jussive	jə-marx	jə-barɨr	jə-zapɨt/jə-zaβt[5]

As with Type A verbs, the medial consonant alternates between between [p] and [β], with the voiceless variant appearing in the perfective, imperfective and optionally in the jussive. The same pattern of alternation is found with [n] and [r], with [n] in the perfective and imperfective. These mutation patterns are found throughout the verb conjugations and will be discussed shortly in section 3.2.

Type D is described by Petros (1993) and is similar to Type B, except the initial consonant is labialized. There are few members of this class; most verbs belong to either the Type A or Type B categories. The consonant [b^w] is realized as [w] in intervocalic position. Banksira (2000a) analyzes these verbs as quadriconsonantal, the second consonant being /w/.

[5] Both forms are attested.

(5) Type D verbs

	‘to become strong’	‘to feel lonely’
Perfective	k’^{w}əmər-ə	b^{w}ənəs-ə
Imperfective	jɨ-k’^{w}əmɨr	jɨ-wənɨs
Jussive	jə-k’^{w}əmɨr	jə-wərs

Like Type B verbs, the jussive pattern is CəCC. The same [n]/[r] alternation also appears in Type D, with the [n] appearing in the perfective and imperfective, and the [r] in the jussive.

Due to the lexical conjugation patterns, it is possible to have homophonous triconsonantal roots that differ in their Type classification, ex. bənər-ə ‘fly’ (A), a-benər-ə ‘yawn’ (B)[6] or banər-ə ‘demolish’ (C).

Quadriconsonantal verbs are also common in the language, and are conjugated as in (6). Alternation of the penultimate consonant (voiced/voiceless in the case of gɨrətəmə) occurs in the perfective and imperfective.

[6] This verb has an obligatory prefix. See section 4.

(6) Quadriconsonantal verbs

	‘to testify’	‘break something in two’
Perfective	mɨsəkər-ə	gɨrətəm-ə
Imperfective	jɨ-msəkɨr	jɨ-grətɨm
Jussive	jə-məskɨr	jə-gərdɨm

3.2 Mutation pattern

The system of consonant mutations are an integral component of the conjugation patterns differentiating the verb Types and aspectual forms. The consonant correspondences are shown below. I will refer to the voiced/x/r series as ‘weak’ and the voiceless/k/n series as ‘strong’.

(7)

Weak	Strong
β/b w/b^w	p p^w
dǰ z ʒ	t č s ʃ
g g^w g^j	k k^w k^j
x x^w x^j	k k^w k^j
r	n

The strong consonants are the hardened or devoiced versions of the weak correspondents. However, the voiceless consonants [t č s ʃ] are not always devoiced variants of the voiced obstruents, and may simply be underlying voiceless obstruents, a situation which results in neutralization in the perfective stem. So, if a perfective form has a voiceless penultimate consonant, other verb forms must be examined to reveal whether the voicelessness is underlying or derived via devoicing. For example, bətərə 'he was first' has the root /bdr/ (imperfective: jɨ-βədɨr), whereas kətəfə 'he chopped' has the root /ktf/ (imperfective: jɨ-kətf). The same problem does not arise for [n] and [p] which are allophonic variants of their underlying counterparts (Petros 1996a, 2000). The consonant [k] is derived from /g/ or /x/ (Banksira 2000, Kenstowicz and Banksira 1999).

The strong variants are the synchronic indication of a historical geminate consonant. Former geminate /rr/ was hardened to [nn] and geminate /xx/ to [kk], as they are currently in the related dialect, Ezha. Certain voiced geminates were devoiced. Subsequently, Chaha lost surface geminate consonants, leaving behind the devoiced or hardened consonants as a residue of the former geminates. Related Western Gurage dialects illustrate this point (Rose to appear). Ezha has mainted gemination; Endegeň shows the stage of voiceless geminates.

(8)	'sting' /ndf/	'jump' /zgr/
Ezha	nəddəf-ə	zəggər-ə
Endegeň	nədəf-ə	zəkkər-ə
Chaha	nədəf-ə	zəkər-ə

Not all verbs with voiced medial obstruents show the alternation pattern, as seen above with the verb nəddəfə. As first pointed out by Banksira (2000a), the nature of the final root consonant is responsible for whether mutation occurs. Rose (to appear) and O'Bryan and Rose (2004) argue that it is the phonetic duration of the final root consonant which largely determines whether gemination takes place in the perfective form in Endegeň, and by extension, whether mutation occurs in Chaha. In Endegeň, the sonorants and some voiced stops /g d/ condition gemination; in Chaha it is primarily the sonorants and /t/ (Banksira 2000a).

The four triconsonantal verb Types differ not only in their stem shapes, but also by the mutation patterns which occur in the three aspectual forms. The gemination patterns key to the verb forms of other Ethiopian Semitic languages are here translated

into consonant mutations, indicated by C_m. All illustrative triconsonantal verbs have medial [r]/[n] alternations.[7] The quadriconsonantal form is also illustrated.

(9)

	Perfective	Imperfective	Jussive
Type A 'survive'	CəC$_m$əC tən̲əf-ə	CəCC jɨ-tərf	CCəC/CCC jə-trəf
Type B 'cut off with knife'	CəC$_m$əC/CeC$_m$əC č'ən̲əf-ə	CəC$_m$C/CeC$_m$C jɨ-č'ən̲f	Cə(C$_m$)C jə-t'ən̲f
Type C 'capture'	CaC$_m$əC man̲əx-ə	CaC$_m$C jɨ-man̲x	CaC(m)C[8] jə-mar̲x
Type D 'feel lonely'	CəC$_m$əC b^{w}ən̲əs-ə	CəC$_m$C jɨ-wən̲ɨs	CəCC jə-wər̲s
Quadriconsonantal 'break in two'	CɨCəC$_m$əC gɨrətəm-ə	CCəC$_m$ɨC jɨ-grətɨm	CəCCɨC jə-gərdɨm

[7] Banksira (1996, 2000a) argues that there is no underlying contrast between [r] and [n], but a single phoneme /r/, which is realized as [n] under predictable conditions. Notably, [n] occurs in word-initial position and pre-nasally; [r] in most other environments.

[8] The mutation pattern in the jussive of Type C verbs seems to differ depending on the verb. Compare jə-marx 'let him capture' (no mutation) with jə-zapɨt / jə-zaβt 'let him lose his way' (mutation optional).

3.4 Weak roots

Like other Semitic languages, some Chaha verbs only have two surface consonants, but their roots historically had, or are synchronically assumed to contain, three elements. The third root segment is either a glide /j/ or /w/, or a vowel /a/, attributable to former guttural consonants. Prunet (1996) analyzes the vowel /a/ as an underlying pharyngeal glide in the related dialect, Inor. These 'weak' segments fuse with other elements in the verb root, causing palatalization or vowel fronting in the case of /j/, or labialization or vowel rounding in the case of /w/. Some examples of verbs with root /a/ are shown below:

(10)	a-initial	a-medial	a-final
	'milk'	'laugh'	'listen'
Perfective	anəβ-ə	dak'-ə	səma
Imperfective	j-ariβ	jɨ-dək'	jɨ-səma
Jussive	j-əriβ	jə-dak'	jə-sma

The final [a] of a-final stems is deleted preceding 2nd and 3rd person plural subject suffixes, ex. səmo 'they kissed' < səma-o.

Roots containing /w/ in initial and medial position are shown below.

(11)	w-initial	w-medial	w-final
	‘fall’	‘wipe’	‘be satiated’
Perfective	wət’ək’-ə	f^{w}əx-ə	t’əf^{w}-ə
Imperfective	jɨ-wət’ɨk’	jɨ-f^{w}əx	jɨ-t’əf^{w}
Jussive	jə-t’ək’	jə-f^{w}ɨx	jə-t’f^{w}e

The initial consonant [w] often deletes in the jussive if the verb is intransitive, as with ‘fall’ jə-t’ək’, but not if transitive, where the stem shape is jə-wCɨC: jə-wt’ɨr ‘invent’. There are exceptions to this pattern, though, ex. jə-sd ‘take’ *jə-wsɨd. The medial /w/ labializes the initial consonant if labializable (velars and labials), as with f^{w}əxə. Otherwise, it fuses with the stem vowel /ə/ to create a round vowel [o], ex. t’omə ‘fast’, or is realized as [u] if there is no stem vowel. Banksira (2000a:222) argues that /w/ in final root position triggers both palatalization of an immediately preceding root consonant and labialization of the rightmost preceding root consonant, so a verb such as k’^{w}əʒə ‘have dysentery’ is formed from a root /k’zw/.

There are no verbs with a surface consonant [j] in the initial position, unlike w-initial verbs.[9] Verbs with [j] in other positions have vowel fronting or palatalization:

[9] There are verbs that begin with [e]: et’ət’ə ‘got really mad’, or enək’ə ‘vomit’, but at least enək’ə conjugates like a Type B verb, so this is probably the source of the vowel fronting.

(12)	j-medial	j-final
	'be done successfully'	'cry'
Perfective	teg-ə	bək^{j}-ə
Imperfective	jɨ-teg	jɨ-bəx^{j}
Jussive	jə-teg	jə-bx^{j}

The perfective 3rd person plurals and the non-perfective 2nd and 3rd person plurals of j-final verbs lack palatalization of the second consonant: ex. jɨβəxo. The 3rd person plural has a glide [w]: bəkəwo 'they cried'.

3.5 Reduplicated verbs

Chaha has three kinds of reduplicated verbs, in which a root consonant is repeated in a systematic fashion. The first is the well-known Semitic 122 pattern of 'doubled verbs', in which the final consonant is repeated. There is no systematic semantic notion of repetition or pluractionality associated with this pattern, and it is generally assumed that the root is biconsonantal with repetition of the final consonant to conform to the canonical triconsonantal shape.[10] These verbs in Chaha may belong to Types A, B, C or D. Mutation occurs with [r]/[n] and with [β]/[p] only.

[10] Although see Gafos (2003) on an alternate approach to the same class of verbs in Arabic.

(13)	A /βr/	B /ft'/	C /βz/	D /k'^{w}r/
	'to fly'	'discriminate'	'feel depressed'	'thatch peak of roof'
Perfective	bənər-ə	fet'ət'-ə	bazəz-ə	k'^{w}ənər-ə
Imperfective	jɨ-βərɨr	jɨ-fet'ɨt'	jɨ-βazɨz	jɨ-k' ^{w}ənɨr
Jussive	jə-βrər	jə-fət'ɨt'	jə-βazɨz	jə-k' ^{w}ərɨr

Quadriconsonantal verb forms may have repetition of the last consonant in a 1233 pattern or total reduplication in a 1212 pattern. The former are assumed to have a triconsonantal root, and the latter a biconsonantal root. This type of reduplication conveys a notion of repetition, physical impairment, or 'local movement', defined as actions close to the body or small repetitive movements (Prunet & Petros 1996). These verbs conjugate like regular quadriconsonantal forms.[11] The 1233 type are usually not related to triconsonantal forms with the same consonants. Note that mutation of the penultimate consonant is possible, as shown by zɨrəsər-ə; there is no extension of the devoicing to the other half of the consonant pair.

[11] The jussive/imperative forms of some verbs has a deleted second consonant. This consonant deletes if labial, or if dorsal followed by a coronal, ex. /jə-zəfzf/ → [jə-zəzɨf] 'let him put to soak', /jə-dəgdg/ → [jə-dədɨg] 'let him fill completely' (Banksira 2000a:176-180).

(14)

k’ɨmət’ət’-ə	‘wrinkle’	fɨk’əfək’-ə	‘ooze’
dɨrəzəz-ə	‘be very blunt’	nɨsənəs-ə	‘sprinkle’
sɨrətət-ə	‘feel ill at ease’	zɨrəsər-ə	‘cut meat into strips’
fɨrək’ək’-ə	‘remove layers of plant one by one’	sɨrəsər-ə	‘level floor of house by scraping’

Some verbs of this type have a prefix (ɨ)n-, ex. ɨn-kɨrətətə ‘tilt’, which has no clearly identifiable meaning.

The final pattern of reduplication in verb forms is 1223, a type known as the ‘frequentative’, a common form in Ethiopian Semitic languages (Leslau 1939, Rose 2003). Unlike the other patterns, this type of reduplication is generally derived from a corresponding verb form, and adds an extra syllable, either with the vowel [a] or [ə]. The frequentative conveys the notion of intensity and repetition of the action of the regular verb. Mutation patterns are the same as other quadriconsonantal forms; again, devoicing can affect the penultimate consonant, but not extend to the other half of the pair. Its conjugation pattern differs slightly from other quadriconsonantal forms in the jussive: cf. CəCCC vs. CCə/aCC. Type B verbs with the vowel [e] (i.e. met’ərə) lack the [e] altogether in the frequentative. Type B verbs with palatalization have palatalization in all

frequentative forms, including the jussive. Note that although the regular Type B has mutation of the penultimate consonant in every aspectual form, the frequentative reveals the nature of the underlying root, as seen with the verb ǰəkəmə[12].

(15) Frequentative

	A səpərə	B met'ərə	B ǰəkəmə
	'break'	'select'	'hit with fist'
Perfective	siβəpər-ə	mɨt'ət'ər-ə	ǰɨgəkəm-ə
Imperfective	jɨ-sβəpɨr	jɨ-mt'ət'ɨr	jɨ-ǰgəkɨm
Jussive	jə-sβəβɨr	jə-mt'ət'ɨr	jə-ǰgəgɨm

There are restrictions on what kinds of regular verbs may form frequentatives. First, the verb cannot be intransitive. Second, it cannot already contain reduplication of the three types discussed previously. Third, the verb cannot be quadriconsonantal. Other Ethiopian Semitic languages allow frequentative formation from these types of verbs (Rose 2003). Fourth, it is not clear that Type C and Type D verbs can form the frequentative.

[12] This verb has an alternate pronunciation with all [k]: jə-dʒkəkɨm 'let him hit with a fist repeatedly'

3.6 Compound reduplicative verbs

There is a class of compound verbs in Chaha that are composed of a reduplicative stem and either the verb barə ‘say’ or the verb amənə ‘make’. The stem has the shape 1v21v2 or 1v22 where v = one of the vowels [ə], [a] or [ɨ]. Banksira (2000b) identifies several semantic classes of compound reduplicative verbs, including feelings (anger, desire), mental disorder, manner of walking, growth and physical properties such as liquid, brightness, odor and noise. Examples are given in (16) with the verb barə.

(16)

basbas barə	‘wander’	č’ɨnn barə	‘wait, linger’
bəkbək barə	‘smell bad’	k^{w}aʃʃ barə	‘rustle’
g^{w}afg^{w}af barə	‘fluff out’	zəgg barə	‘enlarge’
k’^{w}aʃk’^{w}aʃ barə	‘clash, clank’	čɨmm barə	‘fight hard’
zəfzəf barə	‘walk gracelessly’	zəff barə	‘sit gracelessly’
t’əbt’əb barə	‘drip’	t’əbb barə	‘drip a little’
tɨktɨk barə	‘stare rudely at’	tɨkk barə	‘stare at’

There are sometimes pairs of related meanings between CvCCvC and CvCC forms, as exemplified by the last three pairs in (16). The longer form generally has the more intense

meaning. Verbal affixation appears on the supporting verb, ex. gəbb bar-o-m 'they calmed down' or basbas amənə-x^{w}ɨ-m 'I made someone wander'. A suffix –t forms nominals: k'^{w}ərk'^{w}ər-t 'homelessness', and adjectives can be formed from the nouns with the suffix -ənə: k'^{w}ərk'^{w}ər-t-ənə 'homeless' (Banksira 2000b:8).

4. Derivational verbal prefixes

There are three valence-changing prefixes in Chaha, a-, t(ə)- and at-. These occur closest to the stem, and other prefixes, such as negation and subject markers, are affixed outside the derivational prefixes.

The prefix t(ə)- is known as the passive-reflexive. It attaches to transitive verbs to form the passive (Petros 1996b), as shown by the following examples:

(17) Amadu ɨnǰapa səpər-ə-m

Amadu glass break.pf.-3ms-past[13]

'Amadu broke a glass'

ɨnǰapa tə-səpər-ə-m

glass pass.-break.pf.-3ms-past

'a glass was broken'

[13] -m is a main verb marker/past tense marker – see section 5.1.

The addition of the prefix t(ə)- causes internal vowel stem changes, namely adding the vowel [ə] in the second vocalic position of the imperfective and jussive for all verb types, including quadriconsonantal. In addition, mutation occurs in the imperfective of all verb Types, including Type A. When preceded by another prefix, the form of the passive prefix is [t].

(18) Passive-reflexive

	Type A	Type B	Type C
	'was broken'	'was lost in lawsuit'	'was demolished'
Perfective	tə-səpər-ə	tə-rəkʲər-ə	tə-βanər-ə
Imperfective	jɨ-t-səpər	jɨ-t-rəkʲər	jɨ-t-βanər
Jussive	jə-t-səβər	jə-t-rəkər	jə-t-βanər

Finally, the prefix t(ə)- conveys the notion of reciprocal, along with a change in the first vowel of the stem to [a], ex. məkərə 'give advice' → tə-makərə 'give each other advice' or k'ənt'ə 'despise, have contempt for' → tə-k'ant'ə 'despise each other'. The reciprocal cannot be formed directly from transitive verbs of the type CaC, where the

second root element is /a/, ex. samə ‘kiss’. These verbs require reduplication of the initial consonant, and alteration of the vowel to [ə]: tə-səsəmə ‘kiss each other’.

The prefix a- forms the causative, and can attach to any verb Type with no concomittant change in the internal stem shape or mutation patterns.[14] Nevertheless, it has semantic restrictions on its association. First, it associates to certain transitive verbs but not others (Petros 1993): ex. t’əβət’ə ‘grasp’ → a-t’əβət’ə ‘make grasp’ but səpərə ‘break’ → *a-səpərə ‘make break’. Second, it associates to intransitives and renders them transitive:

(19) a. k’ɨβ nət’ər-ə-m
butter melt.pf.-3ms-past
‘the butter melted’

b. Amadu k’ɨβ a-rət’ər-ə-m
Amadu butter caus.-melt.pf.-3ms-past
‘Amadu melted the butter’

[14] With a-medial verbs, the medial vowel [a] is altered to [ə] in the perfective and jussive: dak’ə → a-dək’ə (perf.) and jə-dak’ → j-a-dək’ (juss.)

According to Petros (1996b), the prefix a- can attach to all unergative verbs except 'go' and 'descend', ex. dak'ə 'laugh' vs. a-dək'ə 'make laugh'. It cannot attach to unaccusative verbs unless they have a transitive/intransitive alternation, such as bəsərə 'cook' vs. a-bəsərə 'cook something' or k'^{j}ətə 'be tired' vs. a-k'^{j}ətə 'tire someone'. For example, the verb nəzəzə 'dream' does not have a causative *a-rəzəzə 'make someone dream'

The prefix at-, generally viewed as a combination of the two other derivational prefixes, indicates factitive or causative of passive (Hetzron 1977;72). Unaccusative verbs which lack causatives with a- do have them with at-, generally interpreted as the causative of the passive: ex. at-səpərə 'cause to be broken'.[15] The difference between the a- prefix 'causative' and the at- prefix 'factitive' can be demonstrated with the verb not'ə 'run': a-rot'ə means 'he made someone run (i.e. spurred them)' but at-rot'ə means 'forced someone to run (i.e. by chasing)' See Ueno (2000) for more on at-causatives.[16]

A large number of verb stems do not occur without a prefix. These are dubbed 'prefix-necessitating stems' in Petros (1994). Thus, one may find triplets such as

[15] Some verbs acquire an extra glide after the first consonant when at- is added: sənəfə 'be scared' → at-sjənəfə 'scare someone'. It is not clear what conditions this glide.

[16] Also, verbs beginning with [a] do not take the a- prefix, but instead use at- with some stem changes: anəβə 'milk' → atjənəβə 'cause to be milked'

a-k'^{j}əpərə 'pass over', tə-k'^{j}əpərə 'receive, accept' and at-k'^{j}apərə 'respond, talk back', but no plain stem *k'^{j}əpərə. Petros argues that prefix-necessitating stems are bound stems that require prefixes to provide external arguments. He lists several categories of verb stems that require a prefix, such as verbs of involuntary bodily movement (a-benərə 'yawn', a-xəna 'shout', a-rədə 'shudder'), verbs of transfer or possession (such as the *k'^{j}əpərə stem above, or *marə: tə-marə 'learn'/ at-mərə 'teach') and inchoative/causative pairs where the prefixes disambiguate (tə-drakətə 'hurry intr.' and a-drakətə 'hurry trans.').

5. Inflectional verbal affixes

The main order of verbal affixes is as follows. Inflectional affixes include tense markers, negation and subject and object affixes. Note that in perfective stems, there are no subject prefixes, only subject suffixes. Non-perfective may have just prefixes or a combination of both.

(20) Negation - Subject – Valence – VERB STEM – Subject – Object – Tense

5.1 Main verb marker or tense marker -m

The perfective form has a final suffix –m, which has been described as a main verb marker (Hetzron 1977) or as a past tense marker (Petros 1996c).The –m is not present in

two specific formations: with a negative prefix (21a) and in subordinate clauses: compare (21b) with the relative clause in (21c).

(21) a. Amadu an-dak'-ə

Amadu neg.-laugh.pf.-3ms

'Amadu didn't laugh'

b. tɨrama gərəd čən-əč-ɨm

yesterday girl come.pf.-3fs-past

'the girl came yesterday'

c. tɨrama jə-čən-əč gərəd mərkama ban-əč

yesterday rel.-come.pf.-3fs girl pretty be.pf.-3fs

'the girl who came yesterday was pretty'

The main clause restriction prompted Hetzron to label –m a main verb marker. However, there are two future tense markers in Chaha (-te and -ʃə) which appear in the same position on the verb stem (word-finally) and have the same distribution as –m, namely only appearing in main clauses and in non-negative constructions. See section 5.2. This parallel points towards an interpretation as a tense marker. I have glossed it in examples as 'past'.

Other tenses are expressed with auxiliary verbs. The durative/habitual past is formed from the imperfective and the auxiliary 'be' in a bare stem form: banə: ex. t-az-o banə 'you (pl.) were watching' or jɨ-čən banə 'he was coming'. When negated, the verb has b- and the imperfective negative marker a- preceding the stem: b-a-t-az-o 'you (pl.) were not watching' or b-a-j-čən 'he was not coming'. The perfective stem and auxiliary 'be' expresses past perfect: ex. kəfət-ə-m banə 'he had opened'. When negated, the perfective negative marker an- occurs on the main verb: an-kəfət-ə banə 'he had not opened'. See section 5.4 for more on negation. In both cases banə may be reduced to [ba] with no apparent alteration of meaning.

5.2 Future tense

Unlike other Ethiopian Semitic languages, the imperfective form in Chaha and most Western Gurage dialects is only used for the present tense, not the future. The future is expressed by one of two suffixes attached at the end of the verb stem following subject and object markers.[17] According to Hetzron (1996), the definite future –te attaches to present/imperfective stems and refers to predetermined events with external control. The indefinite future -ʃə attaches to jussive stems and is more subjective, conveying uncertainty, willingness or desire. The difference between them is illustrated with

[17] Petros (1996c) treats these as auxiliaries.

Hetzron's example (1996:103) of the question 'Is he going to Addis Ababa?'[18]

(22)

a. ʃəwa j-ar-te? (i.e. has it been decided?)

Shoa 3ms-go.impf.-def.fut

b. ʃəwa jɨ-wər-ʃə? (i.e. will he be allowed to go, is it likely he is going?)

Shoa 3ms-go.juss.-indef.fut.

The jussive verb stem is used as the base for -ʃə, but the subject markers are those normally used for the imperfective. Compare: jə-zgər-o 'let them jump', jɨ-zəgr-o 'they are jumping' with jɨ-zgər-o-ʃə 'they might jump'.

5.3 Infinitive

Chaha has two infinitive forms. They are formed by affixing wə- or –ot to the jussive stem: ex. wə-sβɨr 'to break' or sɨβr-ot 'to break'. They may be affixed with possessive/definite markers: wəsβɨr-əta 'his breaking'

[18] Addis Ababa is referred to by the province name Shoa [ʃəwa̱] in Chaha.

5.4 Negation

The negative marker is an-[19] with perfective verb stems and a- with non-perfective.[20] The affirmative perfective verbs are given with the final main verb marker/past tense marker –m to show the contrast with negative forms. The /n/ assimilates in place of articulation to a following consonant.

(23)	dəpərə-m	'he added'	an-dəpərə	'he didn't add'
	bənərə-m	'he flew'	am-bənərə	'he didn't fly'
	jɨdəβɨr	'he adds'	a-jdəβɨr	'he doesn't add'[21]
	jɨβərɨr	'he flies'	a-jβərɨr	'he doesn't fly'
	jədβɨr	'let him add'	a-jdβɨr	'let him not add'
	jəβrər	'let him fly'	a-jβrər	'let him not fly'

There is also a prohibitive marker ɨn- (which assimilates its place of articulation), that attaches to perfective stems with the same sense as the negative jussive: ɨn-dəpərə 'let

[19] Petros (1996c) and Banksira (2000) analyze the [n] as a present tense marker, so the negation is a-.

[20] The 1s imperfective subject marker is ə- in the affirmative, but n- in the negative: ex. ə-dəBɨr 'I add' but a-n-dəβɨr 'I don't add'. This also occurs with other preceding prefixes: tɨ-n-dəβɨr 'while I add'

[21] The a-j sequence is pronounced [e]: edəβɨr and etot.

him not add' cf. a-j-dβɨr [edβɨr] 'let him not add'. The usage distinction between the two is not clear. Since future tense markers cannot cooccur with the negative prefixes, the forms ajdəβɨr [edəβɨr] and ajdβɨr [edβɨr] could also have a future interpretation as 'he will not add' and 'he might not add' respectively.

5.5 Copula

The present tense copula is attached to nouns and adjectives as a word-final suffix. All forms except 3ms and 3p have an initial [n]:

(24)

1s	-nx^{w}	1p	-ndə
2ms	-nxə	2mp	-nxu
2fs	-nx^{j}	2fp	-nxma
3ms	-u	3mp	-ro
3fs	-nja	3fp	-rəma

Examples: mərkama-njə 'she is pretty'; bora-u [boro] 'it is an ox'; g^{w}əpɛ[j]-əna-ro 'they are my brothers'. The negative copula is an-xərə from the verb xərə 'to become', conjugated in the perfective form, ex. mərkama anxərəč. 'she is not pretty'. The existential-locative is nərə (with no final –m): ex. ʒəp nərə 'there is a lion' and the

negative is enə: ex. ʒəp enə ‘there is no lion’. The past tense copula is ban-ə (no final -m) and the negative form is an-nəpərə, from the verb nəpərə ‘to live’: ex. ʒəp banə ‘it/there was a lion’ vs. ʒəp annəpərə ‘it/there was not a lion’. Petros (1996c) analyzes banə as two morphemes: a prefix b- attached tothe verb anə. This is due to the fact that in subordinate clauses, we find tanə and janə. Compare tɨrama gərəd bet b-an-əč ‘yesterday a girl was at home’ versus bet j-an-əč gərəd ‘the girl who is at home’ and gərəd xʲɨta bet t-an-əč č’et wət’am ‘while the girl was at home, the sun rose’. The j(ə)- appears on verbs in relative clauses and the t- indicates ‘while, when’ in subordinate clauses. See section 5.9 on subordination.

5.6 Converbs

There are two converbs: the t-converb and the m-converb (Hetzron 1977:94). When joining a sequence of events in a sentence, only the last verb is fully inflected; the first verb is conjugated as a converb.

The t-converb (Hetzron 1977), or the ‘pseudo-gerund’ (Leslau 1950, 1969), is formed by suffixing -tə to a stem identical to the 2nd singular feminine imperative, which exhibits palatalization of a stem consonant (see section 5.7). This stem is then further affixed with past tense/perfective subject suffixes. Examples in (25) are shown with the 2smasc. subject, ex. nɨkʃɨtəxə ‘your biting’.

(25)

2sm	converb	
nɨks	nɨkʃɨ-tə-xə	‘bite’
fɨrəx	fɨrəx^{j}-tə-xə	‘tolerate’
siβir	siβi-tə-xə	‘break’
nɨk’ɨm	nɨk’^{j}ɨm-tə-xə	‘collect’
sidɨd	sɨ̃jɨ̃j-tə-xə	‘drive cattle’
nɨk’ɨk’	nɨk’^{j}ɨk’^{j}-tə-xə	‘take apart’

The t-converb is used before negative verbs, and before non-perfective forms. The converb and main verb agree in subject; the main verb carries additional object marking, negation and tense.

(26)

nɨkʃɨ-tə-xə	a-t-tɨf^{w}a-n
bite-conv-2ms	neg.-2ms-spit out.juss.-3msO
‘don’t bite it and spit it out!’	

tə-zəpe-tə-č	t-ar-te
pass-return-conv.-3fs	3fs-go.impf.-def.fut
‘she will go back’	

The m-converb does not have a special stem form, but consists of the suffix –m attached to the first in a sequence of verbs of any aspect. Like the t-converb, it cannot carry tense or object markers. Typically, the converb and the governing verb have the same aspectual stem form.

(27) jɨ-səβrɨ-m j-ar-te

3ms-break-conv. 3ms-go.impf.-def.fut.

'he will break and go'

tɨ-səβr-o-m t-ar-o ba(nə)

2mp-break.impf.-2mp-conv. 2mp-go.impf.-2mp be(aux).pf.

'you (pl.m) were breaking and going'

In addition to the converbs, the suffix –ta is used when two events are serial or consecutive. It is optional in serial constructions:

(28) not'-əčɨ-m-(ta) bet gəpa-čɨ-m

run.pf.-3fs-conv.-(ta) house enter.pf.-3fs-conv.

'she entered the house running'

5.7 Subject affixes

Like other Semitic languages, Chaha verbs are marked with subject affixes -- suffixes in the perfective aspect, and a combination of prefixes and suffixes in other aspects. These are the same no matter the lexical classification of verb roots.[22] The 2nd person imperative is given here in place of the jussive; the 2nd person jussive appears with prefix t- in negated forms: a-t-kɨft 'don't open!'. The impersonal functions as an agentless pseudo-passive, when the subject is unknown or is not directly addressed, as in wəxem atarim? 'how did one spend the night?', said to a group. The impersonal has a required object marker, the 3ms -i if no other object markers are expressed.

[22] Epenthetic vowels [ɨ] are shown as part of the prefix; these are absent if another affix precedes: ex. tɨkəft 'she opens' vs. atkəft 'she doesn't open'

(29)	Perfective	Imperfective	Jussive
1s	kəfət-x^{w}	ə-kəft	ni-kɨft
2ms	kəfət-xə	ti-kəft	kɨft
2fs	kəfət-x^{j}	ti-kəfč	kɨfč
3ms	kəfət-ə	ji-kəft	jə-kɨft
3fs	kəfət-əč	ti-kəft	ti-kɨft
1p	kəfət-nə	ni-kəft-ɨnə	ni-kɨft-ɨnə
2mp	kəfət-xu	ti-kəft-o	kɨft-o
2fp	kəfət-xɨma	ti-kəft-əma	kɨft-əma
3mp	kəfət-o	ji-kəft-o	jə-kɨft-o
3fp	kəfət-əma	ji-kəft-əma	jə-kɨft-əma
Impersonal	kəf^{w}əč-i	ji-kəf^{w}č-i	jə-kɨf^{w}č-i

The impersonal and the 2fs non-perfective forms are characterized by palatalization of the final /t/ in the verb root above. In addition, the impersonal has labialization of the penultimate root consonant /f/. [23]

[23] This type of morphological alternation is referred to as 'featural affixation' (Akinlabi 1996) in the generative literature, as it involves systematic changes in the quality of the consonant, combined with a suffixal position at the right edge of the verb stem. See also McCarthy (1983) and Rose (1994a).

The impersonal undergoes a simple rule of palatalization: palatalize the final coronal obstruent of the stem (Leslau 1967). The labialization rule for the impersonal is 'labialize the rightmost velar or labial consonant, unless already palatalized'. Some examples are shown below. Note that in the jussive impersonal of 'win in a lawsuit', the plain jussive lacks palatalization due to its Type B conjugation (jə-rəkɨr), so labialization is possible. Reduplicated forms show double labialization or palatalization.

(30)

Perfective	Perfective Impersonal	Imperfective Impersonal	Jussive Impersonal	
nəkəsə	nəkwəʃi	jɨrəkʷʃi	jəŋkʷɨʃi	'bite'
gədəfə	gədəfʷi	jɨgədfʷi	jəgdɨfʷi	'break the fast'
nəkʲərə	nəkʲəri	jɨrəkʲri	jərəkʷɨri	'win in a lawsuit'
wəza	wəʒe[24]	jɨwəʒe	jəwʒe	'be sweaty'
t'əməmə	t'əmʷəmʷi	jɨt'əmʷɨmʷi	jət'mʷəmʷi	'bend'
dɨrəzəzə	dɨrəʒəʒi	jɨdrəʒɨʒi	jədərʒɨʒi	'be blunt'
mɨt'əmət'ə	mʷɨč'əmʷəč'i	jɨmʷč'əmʷɨč'i	jəmʷəč'ɨmʷč'i	'be rotten'

[24] The –i fuses with the final vowel of a-final stems to produce [e].

The pattern of 2nd feminine singular palatalization is more complicated and can be expressed via the following ordered rules:

(31) 2nd feminine singular subject palatalization rules

1. Palatalize final coronal[25] or velar obstruent. If none, apply Rule 2.
2. Palatalize rightmost velar obstruent

   If none, or if there is an intervening coronal, apply Rule 3
3. Insert [i] after penultimate root consonant

The following forms show the contrast between 2fs imperative and the impersonal imperative. Again, if a root has reduplicated consonants, both consonants are palatalized or labialized. These are the only cases of double palatalization.

[25] Final [n] is not palatalized on the surface, but there is no other palatalization or vowel fronting: tən 2smasc. vs. tən 2sfem. 'smoke!'

(32)

2ms	2fs	Impersonal	
nɨks	nɨkʃ	nɨk^{w}ʃi	‘bite’
fɨrəx	fɨrəx^{j}	fɨrəx^{w}i	‘tolerate’
bɨdər	bɨde <bɨdəj	b^{w}ɨdəri	‘be first’
sɨβɨr	sɨβi	sɨwri	‘break’
nɨk’ɨm	nɨk’^{j}ɨm	nɨk’m^{w}i	‘collect’
k’ɨfɨf	k’^{j}ɨfɨf	kɨf^{w}ɨf^{w}i	‘cut the nails’
sɨdɨd	sɨ̃j̃ɨ̃j	sɨ̃j̃ɨ̃ji	‘drive cattle’
nɨk’ɨk’	nɨk’^{j}ɨk’^{j}	nɨk’^{w}ɨk’^{w}	‘take apart’
məzmɨz	məʒmɨʒ	m^{w}əʒm^{w}ɨʒi	‘worry constantly’
kɨtɨf	kɨtif	kɨtf^{w}i	‘hash’
sɨrəf	sɨref	sɨrəf^{w}i	‘fear’
t’af	t’ɛf	t’af^{w}i	‘write’
wɨza	wɨʒə	wɨʒe	‘be sweaty’

5.8 Object suffixes

The object suffixes attach to verb stems following the subject suffixes if present. They are marked for case by an initial consonant (Polotsky 1938, Leslau 1950, Hetzron

1971, Banksira 2000a): zero for accusative or dative, -β/-p or -k for benefactive and -r/-n for malfactive. Only one complement suffix may be associated to the verb, and the general rule is that the malfactive or benefactive takes precedence over the accusative/dative. Object suffixes only occur with definite complements. There are two allomorphs of the object suffixes, referred to as 'light' and 'heavy' (Hetzron 1977). The heavy forms occur following verbs marked with plural subject affixes, the 2sf subject and the impersonal. The light forms occur following verbs marked with all other singular subject affixes. The same affixes are used throughout the different tenses. The heavy forms have an initial mutated consonant of the light, as seen with the x/k or β/p. All forms with [p] have an alternate pronunciation with [k]. The following chart is adapted from Banksira (2000a:262):

(33)

	Accusative		Malfactive		Benefactive	
object	Light	Heavy	Light	Heavy	Light	Heavy
Me	-e	-n	-βi	-p-i	-n-i	-n-i
Us	-ndə	-ndə	-β-ndə	-p-ndə	-ndə	-ndə
You m.sg.	-(na)xə	-kə	-β-xə	-β-kə	-n-xə	-n-kə
You f.sg.	-(na)x^{j}	-k^{j}	-β-x^{j}	-β-k^{j}	-n-x^{j}	-n-k^{j}
You m.pl.	-(na)xu	-ku	-β-xu	-β-ku	-n-xu	-n-ku
You f.pl.	-(na)xma	-kma	-β-xma	-β-kma	-n-xma	-n-kma
Him/it	-n-^{w}	-j-^{w}	-β-ə^{w}	-p-ə^{w}	-r-ə^{w}	-r-ə^{w}
Her	-n-a	-ja	-β-a	-p-a	-r-a	-r-a
Them m.	-n-o	-jo	-β-o	-p-o	-r-o	-r-o
Them f.	-n-əma	-jəma	-β-əma	-p-əma	-r-əma	-r-əma

The five versions of the object suffix ‘her’ (na, ra, βa, ja, pa) are shown below - three different case markings and two allomorphs of the accusative/dative and the malfactive:

(34)

ji-rəxiβ-n-a	'he finds her'	ji-rəxiβ-o-j-a	'they find her'
ji-rəxiβ-r-a	'he finds (sth) for her'	ji-rəxiβ-o-r-a	'they find (sth) for her'
ji-rəxiβ-β-a	'he finds (sth) to' her detriment	ji-rəxiβ-o-p-a	'they find (sth) to her her detriment'

The superscript [w] in the 3sm object suffix refers to labialization of the rightmost labial or velar consonant in the stem, the same pattern as with the impersonal form.[26] With the malfactive forms, this results in labialization of the case marker (/-βə-^{w}/ → [-wə]), but in other forms labialization of the preceding subject marker or root consonant occurs instead.

(35)

a.	no object	ti-kəft	'she opens'
b.	accusative	ti-kəf^{w}t-in	'she opens it'
c.	malfactive	ti-kəft-iwə	'she opens it to his detriment/ she opens with it'
d.	benefactive	ti-kəf^{w}t-irə	'she opens it for him'

[26] See McCarthy (1983) on the implications of this pattern for theoretical morphophonology.

The following are past tense forms with the accusative object, illustrating the pattern of righmost labialization:

(36)

	w/accusative object	
kətəfə	kətəf^{w}ə-n	‘chop’
nəkəsə	nək^{w}əsə-n	‘bite
səpərə	səp^{w}ərə-n	‘break’
k’əsərə	k’^{w}əsərə-n	‘erect’
nək’ək’ə	nək’^{w}ək’^{w}ə-n	‘take apart’

5.9 Subordination

Subordinate clauses are introduced by one of the three particles t(ə)-, b(ə)- or j(ə)- attached to the subordinate verb. They are glossed as ‘particle’, since their meaning alters depending on the construction. The t-, b-, j- forms associate to imperfective stems, whereas the tə-, bə-, jə- forms attach to perfective stems.

Relative clauses have jə- prefixed to the perfective verb stem. Non-perfective relative clauses follow the same construction, but lack the jə-.[27]

(37) a. jə-čən-əč gərəd
ptl.-come.pf.-3fs girl
'the girl who came'

b. ti-čən gərəd
3fs-come.impf. girl
'the girl who comes'

The prefix jə- also associates to the subordinate verb in dependent clauses with the complementizer xəma 'that' (38). (38a) shows the form of the verb 'be' as an in subordinate clauses (see section 5.5).

(38) a. bet j-an-əč xəma x^{w}ar-i-m
house ptl.-be.pf.-3fs that know.pf.impl.-3msO-past
'it is known that she is at home

b. gərəd jə-č'ən-əč xəma x^{w}ar-i-m
girl ptl.-give birth.pf.-3fs that know.pf.impl.-3msO-past
'it is known that she gave birth to a girl'

[27] This distribution prompted Petros (1996c:137) to analyze jə- as a past tense marker. Note that the past tense marker –m does not appear in subordinate clauses.

The prefix t- indicates ‘when, while’ and associates to imperfective stems (39a). The form tə- attaches to perfective stems to indicate unreal condition (‘if’ or ‘when’) (39b):

(39) a. t-i-rot’ aʃəx^{w}-ɨn-ɨm

ptl.-3ms-run.impf. see.pf.-1s-3msO-past

‘I saw him while (he was) running’

b. tə-čən-ə jɨ-sar-e ba

ptl.-come.pf.-3ms 3ms-please.pf.-1sO be(aux).pf.

‘if he were to come, I would be happy

The prefix b- is attached to imperfective (40a) or bə- is attached to perfective to convey ‘if’ or unreal condition (40b). In (40a), the enclitic particle of insistence –m nuances the meaning to ‘even if’.

(40) a. bɨ-t-č’ək’^{w}ɨs-e-m a-m-bəra ba-x^{w}-ɨm

ptl.-3fs-beg.impf.-1sO-enclitic neg.-1s-eat.impf. say.pf.-1s-past

‘even if she begs me, I refused to eat’

b. bə-čən-ə odɨ-n-ʃə ə-βra-ʃə

ptl.-come.pf.-3ms 1s.tell.impf.-3msO-indef.fut.

‘if he comes, I’ll tell him’

Besides xəma ‘that’, other complementizers include dar ‘until’ with the imperfective (may be accompanied by t-)[28] and -e ‘in order to’ with the imperfective.

(41) a. jɨ-čən dar ə-k’^{w}jə-n-te

3ms-come.impf. until 1s-wait.impf.-3msO-def.fut.

‘I will wait until he arrives’

b. jɨ-βər-e bero wənd-ə-m

3ms-eat.impf.-to town go down.pf.-3ms-past

‘he went to town in order to eat’

The example in (41) may also be expressed as tɨčən dar ə-βəra-te where tičən < t-j-čən.

The clause ‘before’ is indicated with t- plus imperfective followed by jɨfte, and ‘after’ with bə- and ank’^{j}ə following the perfective verb. These type of combinations are also used as postpositions, discussed in section 6.2.

(42) a. Amadu ti-j-ar jɨfte ərβat a-fət’ər-əčɨ-m

Amadu ptl.-3ms-go.impf. before dinner caus.-prepare.pf.-3fs-past

‘before Amadu left, she prepared dinner’

b. bə-βəna ank’^{j}ə bero wənd-ə-m

ptl.-eat.pf.3ms after town go down.pf.-3ms-past

‘he went to town after he ate’

6. Nominal/adjectival morphology

Chaha has very little nominal/adjectival morphology. Nouns are uninflected for number or gender. There are a few suppletive singular/plural pairs: ərč/dəng^{j}ə ‘boy/s’ or mɨʃt/ɨʃta ‘woman/women’. Otherwise, plural is not marked.

6.1 Possessives, definites, demonstratives

Generally, there is no expression of definiteness on the noun. If required, the definite marker is either the 3rd person possessive suffixed to the noun or the 3rd person

personal pronoun following the noun: -əta/x^{w}ɨta for masculine and -əx^{j}ta/x^{j}ɨta for feminine nouns, ex. mɨs x^{w}ɨta ‘the man’ and miʃt x^{j}ɨta ‘the woman’.

Possessive pronouns are suffixed to nouns and mark the possessor. The vowel [ə] is dropped if the stem ends in a vowel.

(43)

1s	-əna	1pl	-ənda
2sm	-axə	2mp	-axu
2sf	-ax^{j}	2fp	-axma
3sm	-əta	3mp	-əx^{w}na / -əxno
3sf	-əx^{j}ta	3fp	-əxnəma

Possession can be indicated using these suffixes, ex. gərəd-əta ‘his daughter’, or by prefixing jə- to the personal pronoun: ex. jə-x^{w}ɨt gərəd ‘his daughter’, as is done with nominals: jə-tafəsə gərəd ‘Tafesse’s daughter’.

When suffixed to gəg ‘body’ or əǰ ‘hand’, with an optional enclitic -m, the possessives expresses the reflexive, ex. gəg-(m)əta k’ət’ərəm. ‘he killed himself’.

Demonstratives are separate words preceding nouns, or can stand alone with possesive suffixes.

(44)	zɨ(x) mɨs	‘this man’	zɨx-əta	‘this one’
	xɨ(x) mɨs	‘that man’	xɨx-əta	‘that one’
			zɨx-əxno	‘these ones’

6.2 Locatives/postpositions

Subjects are not marked for case, but objects may be marked with a prefixal jə- for accusative. The object must have a specific reference, and object agreement must also appear on the verb: jə-bɨk’^{w}ɨra dənəg-x^{w}ə-n-ɨm ‘you (ms) hit the mule’. Oblique cases are also marked with jə-: dawit jə-č’amut bər kəfət-ə-ra-m ‘Dawit opened the door for Chamut’

There are also two prepositions/particles/case markers to express nominal relationships, often in combination with post-positions. These are the comitative tə- and the oblique marker bə-, used for locatives and ablatives. Some examples of the combinations are given below:

(45)

bə-		‘in’	bə-bet	‘at/in the house’
tə-		‘with, from’	tə-gərəd	‘with the girl’
			tə-bet	‘from the house’
bə-	dən-e	‘under’	bə-satɨn dən-e	‘under the box’
bə	dən	‘inside’	bə-satɨn dən	‘inside the box’
bə-	f^{w}ər	‘on, above’	bə-bet f^{w}ər	‘on the house’
tə-	ank’^{j}ə	‘after’	tə-gɨnzɨr ank’^{j}ə	‘after breakfast’
tə-	jɨft-e	‘before’	tə-gɨnzɨr jɨfte	‘before breakfast’
tə-	ank’^{j}-e	‘behind’	tə-bet ank’^{j}e	‘behind the house’
tə-	jɨftjɨft	‘in front of’	tə-bet jɨftjɨft	‘in front of the house’
tə-	məje	‘beside’	tə-bet məje	‘beside the house’

Some of these postpositions are nominals: jɨft ‘face’, dən ‘abdomen’.

6.3 Question particles

The basic question particles are as follows:

(46)

m^{w}an	'who'	jə-m^{w}an	'whose'
mɨr	'what'	mɨr-gi	'when' ('what (recent) time')
mə-mɨr	'how'	mɨr-axɨr	'how much/many?'
məčra	'when' (past)	məčə	'when' (imperfect)
ete	'where'	jəŋ-k'ar	'why' (k'ar = 'thing')

6.4 Conjunctions of insistence

There are two enclitics to mark emphasis or insistence. -m or –ʃ are inserted between the noun and suffixed pronouns: adot-m-əx^{j}ta čənəčɨm (mother-enclitic-3fsposs. come.pf.-3fs-past) 'her mother came, too.' These clitics may also associate to verbs (see 40a).

6.5 Derivational nominal morphology

Derivational nominal morphology does not show regular patterns. There are few identifiable nominal shapes, and only a handful of affixes with consistent usage. See Rose (1992) for additional information.

The suffix -ənə can be added to some nominal stems to form agentive nouns or adjectives:

(47)	bat'ir	'crime'	bat'ir-ənə	'criminal'
	at'jat	'sin'	at'jat-ənə	'sinful'
	mena	'work, job'	men-ənə	'worker'
	gaz	'war'	gaz-ənə	'warrior'
	nəx^{w}čər	'message'	nəx^{w}čər-ənə	'messenger'

The suffix -nət conveys abstract concepts and associates to nouns or adjectives; the final vowel of the base is dropped:

(48)	g^{w}ɨrmasa	‘poor’	g^{w}ɨrmasa-nət	‘poverty’
	zega	‘poor’	zeg-nət	‘poverty’
	beʃa	‘friend’	beʃ-nət	‘friendship’
	wənəx^{w}ə	‘neighbor’	wənəx^{w}-nət	‘neighborhood’
	dəngənə	‘rich’	dəngən-nət	‘richness’
	barik’	‘old’	barik’-nət	‘old age’
	nɨmǎjə	‘love’	nɨmǎj-nət	‘state of being in love’
	mɨʃra	‘bride’	mɨʃɨn-nət	‘state of being married’
	fɨk’^{w}ɨr	‘fat’	fɨk’^{w}ɨnnət	‘fatness’

The suffix -wət derives feminine nouns from adjectives and nouns (with accompanying jə-). They may also have a superlative reading. The final vowel is dropped before suffixation.

(49)	gəmbəna	‘dark’	gəmbən-wət	‘the dark one (fem.)’
	mərkama	‘beautiful’	mərkam-wət	‘the beautiful one (fem.)’
	ʃəxra	‘clay’	jə-ʃəxɨr-wət	‘potter (fem.)’

The prefix wə- and mə- are used to form instrumental nouns. The stems are bound, and do not have a consistent shape. They frequently have palatalization or labialization of the final root consonant.

(50)

səkək-ə	'drive into ground'	mə-skək	'peg'
nəda	'help'	mə-nǰə	'assistance'
at-rasa	'help lift'	m-at-raʃə	'litter to carry dung'
ʒənər-ə	'block the view'	mə-zənɛt	'curtain'
sənt-ə	'cut severely'	wə-srəča	'pebble for decorating bowls'
sef-ə	'sew'	wə-sifə	'awl'
naf-ə	'blow'	wə-raf^{w}ə	'bellows'
dənəg-ə	'hit'	wə-drəg^{j}a	'hammer'
fənt-ə	'separate'	wə-fənča	'entrance'
t'əməd-ə	'yoke'	wə-t'məd	'trap'

There are some other nouns with wə-/mə- that do not have an instrumental meaning: wə-ret 'sleep' < nɨjə 'sleep' or mə-ŋkəs 'stomach-ache' < nəkəs-ə 'bite'.

The suffix -jə converts adjectives into nouns with an extended meaning:

(51)

t’ɨk’^{w}ɨr	‘black’	t’ɨk’^{w}ɨr-jə	‘black wɨsa bread’
g^{w}ɨrz	‘old’	g^{w}ɨrzɨ-jə	‘child that acts like an old person’
gɨm^{w}ɨm^{w}	‘chipped’	gɨm^{w}ɨm^{w}-jə	‘utensil with chipped rim’

The four suffixes –a, -at, -t and -ət are frequent, but do not correspond to any precise meaning. Rose (1992) suggests that they are residue of former gender markers. Some nouns and corresponding verbs are shown below:

(52)

darə	‘bless’	dərət	‘blessing’
fət’ərə	‘create’	fɨt’rət	‘creation, nature’
t’ənək’ə	‘be scared’	t’ɨnk’^{j}ɨt	‘fear’
		t’ənk’a	‘coward’
fənt’ə	‘have headache’	fɨrt’ət	‘headache’
nəpərə	‘live’	nɨβrət	‘life’
nasə	‘lick’	naʃət	‘licker’

There are some nouns and adjectives that have the form CCC with epenthetic vowels:

(53)

kəβərə	'respect'	kɨβɨr	'respect'
kəmərə	'pile up'	kɨmɨr	'pile'
məsərə	'appear, resemble'	mɨsɨr	'image'
fət'ərə	'lie'	fɨt'ɨr	'lie'
sətəβə	'curse'	sɨdɨβ	'curse'

Many of these also show palatalization and/or labialization of the surrounding consonants:

(54)

fət’əmə	‘block up, close’	f^{w}ɨč’ɨm	‘closed, untouched’
nəfəgə	‘be greedy’	nɨf^{w}ɨg	‘avaricious’
xətərə	‘thatch’	x^{w}ɨ̃jɨr	‘clothes’
bəsərə	‘be ripe’	b^{w}ɨsɨr	‘ripe’
fək’ərə	‘be fat’	fɨk’^{w}ɨr	‘fat’
k’əməsə	‘taste’	k’ɨm^{w}ɨs	‘tasty’
gənəzə	‘age’	g^{w}ɨrz	‘old (person)’

The cardinal numerals are suffixed with -ənə to form ordinals:

(55)	cardinal	ordinal
	at	atənə
	x^{w}et	x^{w}etənə
	sost	sostənə
	arβət	arβətənə
	amɨst	amɨstənə

The remaining numerals are 6 sɨdɨst 7 səβat, 8 sɨmwɨt, 9 ʒət'a 10 asɨr, 11 asrat or asrɨm at 20 x^{w}ɨja, 30 sasa, 40 arba, 50 amsa, 60 sɨdsa, 70 sɨβa, 80 sɨmra, 90 zɨt'əra, 100 bək'ir, 1000 x^{w}ɨm.

The suffix –ra attached to a numeric base (with some alternations) indicates the number of days in the past from today up to three days or a week (Hetzron 1977:112). The suffix -ə indicates the same concept in the future:

(56)

əkwa	'today'		
tɨrama	'yesterday'	nəgə	'tomorrow'
səst-ɨra	'two days ago'	səst-ə	'two days from now'
nəβət-ra	'three days ago'	nəβat-ə	'three days from now'
samt-ɨra	'a week ago'	samt-ə	'a week from now'

7. Conclusion

This article presents an overview of Chaha morphology, highlighting the verbal system, which displays the bulk of the complexity. The nominal/adjectival morphology has been less well-studied and appears to be relatively unproductive. Readers familiar

with other Semitic languages will recognize shared properties in terms of the root-and-pattern morphology and the verbal affixation.

References

1994 Population and Housing Census of Ethiopia (1996) Results for Southern Nations, Nationalities and Peoples' Region. Vol. 1: Part I Statistical Report on Population Size and Characteristics. Addis Ababa: Federal Democratic Republic of Ethiopia Office of Population and Housing Census Commission, Central Statistical Authority.

Akinlabi, Akinbiyi. 1996. Featural Affixation. Journal of Linguistics 32:239-289.

Banksira, Degif Petros. 2000a. Sound Mutations: the morphophonology of Chaha. Amsterdam: Benjamins.

Banksira, Degif Petros. 2000b. Words without a lexical category? Lingua Posnaniensis 42:7-18.

Cohen, Marcel. 1936. Etudes d'éthiopien méridional. Paris: Guenther.

Gafos, Adamantios. 2003. Greenberg's asymmetry in Arabic: A consequence of stems in paradigms. Language 79:317-355.

Hetzron, Robert. 1971. Internal labialization in the tt-group of Outer South-Ethiopic. Journal of the American Oriental Society 91:192-207.

Hetzron, Robert. 1977. The Gunnän-Gurage Languages. Napoli: Istituto Orientale di Napoli.

Hetzron, Robert. 1996. The two futures in Central and Peripheral Western Gurage. In Grover Hudson, ed., Essays on Gurage language and culture, pp. 153-173. Wiesbaden: Harrassowitz Verlag.

Hudson, Grover. 1974. The representation of non-productive alternation. In John M. Anderson, ed., Historical Linguistics II. Theory and description of phonology. Amsterdam: North Holland, pp. 203-229.

Kenstowicz, Michael and Degif Petros Banksira. 1999. Reduplicative identity in Chaha. Linguistic Inquiry 30:573-585.

Leslau, Wolf. 1939. Le thème verbal fréquentatif dans les langues éthiopiennes. Revue des Études Sémitiques 15-31.

Leslau, Wolf. 1948. Le problème de la gémination du verbe tchaha (gouragué). Word 4:42-47.

Leslau, Wolf. 1950. Ethiopic documents: Gurage. New York: The Viking Fund.

Leslau, Wolf. 1952. The influence of Sidamo on the Ethiopic languages of Gurage. Language 28:63-81.

Leslau, Wolf. 1964. The jussive in Chaha. Language 40:53-57.

Leslau, Wolf. 1966. Ethiopians Speak, Studies in Cultural Background, II. Chaha. Berkeley & Los Angeles: University of California Press.

Leslau, Wolf. 1967. The impersonal in Chaha. To Honor Roman Jakobson. Essays on the occastion of his seventieth birthday, pp. 1150-1162. The Hague: Mouton.

Leslau, Wolf. 1969. The pseudo-gerundive in Chaha. Rassegna di studi etiopici (1967-8) 23: 27-42.

Leslau, Wolf. 1979. Etymological dictionary of Gurage (Ethiopic). Wiesbaden: Harrassowitz.

McCarthy, John. 1983. Consonantal morphology in the Chaha verb. In M. Barlow, D. Flickinger, and M. Wescoat, eds., Proceedings of the 2nd West Coast Conference on Formal Linguistics, pp. 122-134.Stanford Linguistics Association, Stanford, CA.

O'Bryan, Todd & Sharon Rose. 2004. Segmental effects on (de)gemination in Western Gurage. Proceedings of the 27th Annual Meeting of the Berkeley Linguistics Society, Special Session on Afroasiatic Languages.

Petros, Degif. 1993. La dérivation verbale en chaha. M.A. Thesis. Université du Québec à Montréal.

Petros, Degif. 1994. On Prefix-Necessitating Stems in Chaha. New Trends in Ethiopian Studies. Proceedings of the 12th International Conference of Ethiopian Studies, pp. 1220-1233.

Petros, Degif. 1996a. Sonorant alternations in Chaha. In Grover Hudson, ed., Essays on Gurage language and culture, pp. 153-173. Wiesbaden: Harrassowitz Verlag.

Petros, Degif. 1996b. Sur l'alternance inaccusative vs. inergative en Chaha. Cahiers de linguistique de l'UQAM 1:71-87.

Petros, Degif. 1996c. On the Absence of AgrS: Evidence from Ethiopian Semitic Languages. In Anna-Maria Di Sciullo, ed., Configurations: Essays on Structure and Interpretation, pp. 129-160. Somerville: Cascadilla Press.

Polotsky, H.J. 1938. Études de grammaire gouragué. Bulletin de la Société de linguistique de Paris 34.2: 137-175.

Prunet, Jean-François. 1996. Guttural Vowels. In Grover Hudson, ed., Essays on Gurage language and culture, pp. 175-203. Wiesbaden: Harrassowitz Verlag.

Prunet, Jean-François & Degif Petros. 1996. L'interaction entre schèmes et racines en chaha. In J. Lecarme, J. Lowenstamm & U. Shlonsky, eds., Studies in Afroasiatic grammar, pp. 302-336. The Hague: Holland Academic Graphics.

Rose, Sharon. 1992. De la palatalisation en chaha. M.A. Thesis, Université du Québec à Montréal.

Rose, Sharon. 1994a. Palatalization, Underspecification and Plane Conflation in Chaha. Proceedings of the 12th West Coast Conference on Formal Linguistics, pp. 101-116.

Rose, Sharon. 1994b. The Historical Development of Secondary Articulation in Gurage. In K. Moore, D. Peterson & C. Wentum (eds.), Proceedings of the 20th Annual Meeting of the Berkeley Linguistics Society, Special Session on Historical Issues in African Linguistics, pp. 112-124.

Rose, Sharon. 2000. Epenthesis positioning and syllable contact in Chaha. Phonology 17.3:397-425.

Rose, Sharon. 2003. The formation of Ethiopian Semitic internal reduplication. In J. Shimron, ed., Language Processing and Acquisition in Languages of Semitic, Root-based, Morphology. Amsterdam & Philadelphia: John Benjamins, pp. 79-97.

Rose, Sharon. To appear. Durational conditions on Endegen gemination. Proceedings of the 15th International Conference of Ethiopian Studies.

Ueno, Mieko. 2000. On at-causatives of transitive verbs in Chaha. Proceedings of the 27th Annual Meeting of the Berkeley Linguistics Society, Special Session on Afroasiatic Languages.