

THE PHONOLOGY OF AWNGI

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The Phonology of Awngi

Abstract

This study presents the phonology of Awngi, a major Central Cushitic language spoken in Northern Ethiopia. Awngi has six vowels, one of which an almost predictable epenthetic vowel /i/, and twenty-nine consonants, of which five are labialized and two are post-stopped fricatives. Two tone levels are also contrastive in the language. This paper presents evidence for contrast and variation for all Awngi phonemes, a description of the syllable structure, a discussion of the phonological rules, and a list of 325 Awngi words in IPA phonemic writing.

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0. Introduction

This paper¹ is intended to be a summary of the basic phonology of Awngi (ISO 639–3: awn), the language of the Awi people. The data in this paper, including the word list in the final section, was collected from 2001 to 2006 in Kosober² and other locations within the Awi Zone of the Amhara National Regional State. The principal language informant providing the data was Enyew Yeneget', a resident of Kosober. The study is based on the variety of Awngi spoken in and near Kosober.

Awngi is a Central Cushitic language spoken by at least half a million people³ in an extensive area in northwest Ethiopia, including all of Awi Zone, but also some areas of the Metekel Zone of the Benishangul-Gumuz National Regional State, and various places in the Alefa and K'wara Woredas of the North-Gonder Zone of the Amhara National Regional State. The Alefa and K'wara varieties have sometimes been called Kunfāl⁴, but are dialects of the Awngi language.

Previous attempts to describe the phonology of Awngi were undertaken in brief form by Palmer (1959) and Hetzron (1969, 1976 and 1978). Those writings dealt mainly with grammatical matters and covered phonology only as necessary. Previous studies that focused specifically on Awngi phonology include Gella (1986) and Hetzron (1997). None of these research publications covered the range of detail as is attempted by this study. For a few important points, like the phoneme inventory, tone or the application of some rules, this study will also present alternative solutions to the ones suggested by Hetzron.

The Awngi transcriptions in this paper will differ considerably from previous research publications on Awngi: Here, the International Phonetic Alphabet (IPA) is used instead of the transcription typical of the Ethiopianist tradition. Therefore, [j] is a palatal approximant and not a voiced palatal affricate. Phonetic affricates are transcribed as [ts, tʃ, tʃʰ].

¹ The research undertaken for this study was part of the activities of the Awngi Language Development project, a joint project between the Awi Zone Desk for Culture, Tourism and Information, and SIL Ethiopia. My special gratitude goes to the many officials in Awi Zone and in the Amhara National Regional State who generously supported this research in many ways. Specifically I would like to thank Ato Shittu Ayene, Ato Teferi Getahun, Ato Girma Mekonnen, Ato Mebratu Haile, Ato Mekuriaw Anagaw, Ato Workneh Abebe and Ato Zewdie Getahun.

² Kosober is also now called Injibara.

³ The 2007 census lists 631,565 ethnic Awis in all Ethiopia.

⁴ The Awis of this area do not appreciate being called Kunfāl, but prefer the name Agaw. They do not refer to themselves as Awis.

1. Overview

1.1 Consonant Phonemes

Awngi has twenty-nine consonant phonemes of which five are labialized.

	labial	alveolar	palato-velar ⁵	uvular	
voiceless plosives	p	t	k	q	plain
			k ^w	q ^w	labialized
voiced plosives	b	d	g	g [ɣ]	plain
			g ^w	g ^w [ɣ ^w]	labialized
voiceless affricates		ts	tʃ		
voiced affricates		ɖ [z]	ɖʒ		
fricatives	f	s	ʃ		
post-stopped fricatives		st	ʃt		
nasals	m	n	ɳ		plain
			ɳ ^w		labialized
lateral approximant		l			
vibrant		r [ɾ]			
approximant	w		j		

Table 1: Awngi Consonant Phonemes

Remarks:

- This table displays the phonological system and the natural classes as they occur in the language. The symbols for the phonemes are chosen according to the place they have in the system, and not necessarily according to the actual pronunciation. Where the differences are significant, the IPA symbol of the most common pronunciation is added in square brackets.
- Although /ɖ/ and /ɖʒ/ are phonetically realized as fricatives in many environments, they function as the voiced counterparts of the voiceless affricates with respect to phonological rules (see section 5.1).
- On the interpretation and nature of post-stopped fricatives, see sections 2.2 and 3.5.
- For the uvular place of articulation, the opposition between plosives and fricatives is neutralized. There are also no affricates. For that reason it is possible to speak of uvular obstruents rather than uvular plosives or fricatives. This is reflected in the choice of symbols; the voiced uvular obstruents are actually realized as the voiced

⁵ For a discussion of this place of articulation, see section 3.1.

fricatives [ɣ, ɣ^w]. The devoicing rule of section 5.1 demonstrates that the voiced uvular obstruents are in fact the counterparts to the voiceless uvular obstruents.

- In modern Awngi the sound /h/ appears sometimes in loans from Amharic like **hajk** ‘lake’ or **birhan** ‘light’. As often as not the sound is left out, as in **ajk** and **biran**. So there is really no phonemic status for /h/ (c.f. 3.8).

1.2 Vowel Phonemes

Including the vowel /i/⁶, there are six vowel phonemes in Awngi.

	front	central	back
close	i	(i)	u
non-close	e	a	o

Table 2: Awngi Vowel Phonemes

1.3 Tone and Stress⁷

Awngi has two distinctive tone levels, high and low⁸. On word-final syllables these two tones can combine to create a falling tone.

Example 1: contrastive tones in Awngi

ɕemeré ‘I sing’
áre ‘grain (acc)’
birê ‘blood (acc)’⁹

Hetzron (1969, 1997) reported a penultimate demarcative stress feature operating independently from tone. I am not able to confirm this observation. How tone and stress relate to each other in Awngi will be explored in section 4.

⁶ Regarding the phonemic status of the close central vowel /i/, see section 2.2.

⁷ A more detailed treatment of tone is provided in Joswig (2010).

⁸ Previous studies of Awngi, like Hetzron (1969, 1997) or Palmer (1959) have identified three different levels. For a review of this assumption see section 4.1.

⁹ The suffix **-ê** in this example goes back to the merging of the two morphemes **-í** ‘masculine’ and **-wa** ‘accusative’.

2. The Syllable

2.1 Basic Syllable Structure

The Awngi syllable in most cases fits the maximum syllable template CVC (C = consonant, V = vowel). This means that there is at most one consonant each in the syllable onset and the rhyme. Exceptions to this happen at word boundaries, where one [-sonorant] extrametrical consonant may appear:

Example 2: extrametrical consonants

ɕifɪnt	CV-CVCC	‘fear’
ɡsántí	CCVC-CV	‘big’

This means that word-medial there should be no clusters of more than two consonants, which is true in most cases. The most common syllable in Awngi is CV. Word-medial there are no clear examples of vowel clusters. Syllables beginning in a vowel are possible, but only word-initial, as in **asip** V-CVC ‘think (imperative)’. The only vowels acceptable in this position are the central vowels /a/ and /i/. Therefore, the following constraint is operating in Awngi:

Rule 1: Non-Central Vowel Prohibition

Non-central vowels cannot occur word-initial.

There is an issue, however, with word-medial consonant clusters. With some speakers, even combinations of two consonants are broken up by inserting the vowel /i/, like combinations of plosives of differing places of articulation, as in **kágítúga** (CV-CV-CV-CV), ‘you dried’. Elsewhere, one hears Awngi speakers producing three-consonant-cluster words *without* an epenthetic /i/, when these clusters can be easily pronounced, as in **ímplá** (VC-CCV), ‘one’. Therefore it appears that the number of consonants is not as important as the ability to pronounce a given combination as determined by the sonority hierarchy. Note, however, that the examples given here can be pronounced differently by different speakers, or even by the same speakers at different times, as **kágtúga** or **ímpílá** (Joswig 2006:788).

In spite of this individual variation, the Awngi language usually breaks up CCC-clusters in a word-medial position by inserting the vowel /i/ according to the rules specified below. This is a strong indication for the validity of the maximum syllable template CVC. This maximum syllable template is responsible for certain decisions regarding the interpretation of several sound sequences. Affricates have been interpreted as single segments to avoid CCC clusters as in **ɡibɕatɕí** CVC-CV-CV ‘powder’. The same applies for labialized

consonants. Interpretation as a sequence of C + /w/ would result in non-desirable CCC-clusters, as in **tásg^wa** CVC-CV ‘he hit’. The application of the rules below to underlying forms like **gbtʃatʃi** CCCCVCCV or **tasgwa** CVCCCV would result in the ungrammatical surface forms ***gibtʃatʃi** and ***tasgiwa**. For this reason, any interpretation of the affricates and labialized consonants as sequences would have damaging consequences to the phonological system outlined in this study. The same is true for the post-stopped fricatives, as will be shown in the next section.

2.2 The Epenthetic Vowel /i/

To fully understand the structure of the Awngi syllable, the status of the close central vowel phoneme /i/ needs to be considered. Joswig (2006) shows that this vowel is best understood as an epenthetic vowel, which is mostly predictable according to the following set of rules:

Rule 2: Close Central Vowel Prohibition

**/i/#¹⁰*

This constraint states that /i/ never occurs word-final. This is to be expected of an epenthetic vowel in a language that allows word-final consonants – there is no need to insert an epenthetic vowel in that position. All other vowels in the Awngi language can appear word final.

Rule 3: Left-to-Right Orientation

The assignment of epenthetic vowels proceeds from left to right.

Rule 4: Consonant Cluster Tolerance Limit

Whenever a combination of two consonants is phonotactically acceptable, it will not be broken up.

Rule 3 and Rule 4 regulate the epenthesis of /i/ based on the assumption that the maximum syllable template is CVC, allowing for extrametrical consonants at word boundaries and the individual variation noted in section 2.1. These rules applied to the underlying form **kurtmí** ‘cold’ will attack the cluster /rtm/ from the left (Rule 3). The combination /rt/, spread over two syllables, presents no difficulty in terms of the syllable structure. Therefore it remains untouched by the insertion rules (Rule 4). The addition of the consonant /m/ results in a combination violating the maximum syllable template. An epenthe-

¹⁰ The symbol # represents a word boundary.

tic vowel is inserted in front of the offending consonant, producing the correct surface form **kurtími**¹¹.

This epenthetic process is also strong evidence that the two phonetic sequences [st] and [ʃt] need to be treated as single segments in Awngi. They are never separated by the epenthetic vowel under any circumstances. Wiese (2000:42f) proposes to call sounds like these “suffricates”. For reasons to be explored in section 3.5, however, they are called post-stopped fricatives in this study. If they appear at the beginning of a word, they are always preceded by the epenthetic vowel. The same is true for both geminate consonants and nasals preceding homorganic or nearly homorganic consonants. Therefore the following rules can be stated for Awngi:

Rule 5: Initial Post-Stopped Fricative Prohibition

$$\emptyset \rightarrow i / \# _ C [+stopped]^{12}$$

Rule 6: Homorganic Nasal Separation Restriction

A combination of a nasal and a following homorganic consonant is never separated by /i/, but the epenthetic vowel will precede the combination, if no other vowel does so.

Rule 7: Gemination Divorce Restriction

Geminated consonants are never separated by the epenthetic vowel.

These three rules account for the following occurrences of /i/:¹³

Example 3

Rule 5		Rule 6		Rule 7	
isté	‘it is called’	ingir ¹⁴	‘back’	issán	‘nose’
íʃté	‘I was’	impíla	‘one’	íll	‘eye’
		indʒug	‘ripe’	ímmíg^wa	‘he held’

As shown in Joswig (2006), even with this set of rules, there remain some residual issues to be resolved. One is with the phoneme /r/, which never appears word-initial, but is al-

¹¹ The high tone on the vowel is assigned for grammatical reasons.

¹² For this feature, see section 3.1.

¹³ There is a notable exception to Rule 7. **titrí** ‘dust’ should be **íttirí** according to this rule.

¹⁴ In Awngi, all nasals preceding a velar consonant are velar in pronunciation. Therefore the combination is here phonetically homorganic.

ways preceded by /i/. Worthy of note at this point in the analysis is the fact that Awngi shares this identical feature with some other Ethiopian languages, including Amharic.

Rule 8: Initial /r/-Prohibition

$$\emptyset \rightarrow i / \#_r$$

That /i/ needs to be inserted in the cases shown thus far is consistent with the idea of /i/ as an epenthetic vowel. More problematic is the fact that sometimes the vowel occurs preceding consonants, which do not appear to be geminated phonetically. These consonants are /G, G^w, j, w, ts, tʃ, ɕ/. This issue can be resolved by acknowledging the fact that these consonants never appear phonetically geminated at any time. One can assume that on the surface the contrast between the geminated and non-geminated versions of these consonants has disappeared, but that it is still valid in the underlying form. When the consonant is geminated, it shows through the epenthesis of /i/.

Example 4

surface form	underlying representation	
íjíg ^w a	jjíg ^w a	‘he gave’
íwurtúga	wwurtúga	‘he coughed’
ítsi	ttsi	‘worm’
íg ^w i	gg ^w i	‘hyena’
ígmí	ggmí	‘cold’

Another challenge to the epenthetic status of the close central vowel is the fact that the rules above do not apply when derivational morphology is employed. If derivational morphology consists of a sequence of consonants, the epenthetic vowel always precedes this sequence, regardless of whether the root ends on a vowel or a consonant. This leads to the following form, which would otherwise be ungrammatical.

Example 5

kusiŋtsúga (**kus-ŋ-tsúga**) ‘he advised’ (Reciprocal & Causative)

To resolve this issue, it needs to be assumed that the grammatical boundary between root and derivational affix is recognized and respected by the phonological system of the Awngi language.

As a summary, the status of the sound /i/ is difficult to assess in Awngi. Since its occurrence is almost, but not fully, predictable, one hesitates to call it a phoneme. Apart from

very few exceptions¹⁵ (for which there may be a suitable explanation, if the rules were better understood), there is no occurrence of the vowel *u*, which is not governed by the rules shown above. On the other hand, the vowel is not simply a phonetic feature, but is very much needed for the make-up of Awngi words. In many¹⁶ words /i/ is the only vowel present. It also appears that the assignment of this vowel happens on a very low level of the phonological system, most likely already on the lexical level. The vowel is there when the morphologically governed tone rules apply. Therefore it seems reasonable to include the vowel into the vowel inventory of Awngi, calling it the default vowel phoneme of the language.

¹⁵ Apart from the exception in footnote 13, it is worthy to mention *sísqí* ‘sweat’, which should actually be **íssíqí* according to our rules.

¹⁶ This feature applies to 24 of the 325 words of the word list in the appendix (or approx. 7.5%), which is indicative of the language as a whole.

3. Phonemes

3.1 Place and Manner of Articulation

Awn̄gi has four places of articulation: labial, alveolar, palato-velar and uvular. The palato-velar place of articulation obviously needs some justification. Although there are both palatal and velar consonants, these do not stand in opposition with respect to their place of articulation. The plosives and nasals are velar, while the affricates, fricatives and approximants are palatal. That all these sounds belong to the same place of articulation is suggested by the behavior of the approximant /j/, which by a devoicing process is transformed into the plosive /k/ (see section 5.1).

Awn̄gi has plosives at all four places of articulation. They come in pairs of voiceless and voiced, as do the affricates. The affricates and the post-stopped fricatives, however, only occupy the alveolar and palato-velar places. Fricatives, nasals and the non-nasal sonorants /w, l, r, j/ are only present at the labial, alveolar and palato-velar places of articulation. Fricatives and post-stopped fricatives are voiceless.

The post-stopped fricatives are a category employed to account for specific phonotactic issues discussed in sections 2.2 and 3.5. They are treated as modified fricatives and not as modified plosives (like the affricates), because they share important characteristics with fricatives: they have no voicing distinction, and they consequently do not undergo the devoicing process (section 5.1).

Labialized consonants are contrasted with non-labialized consonants by virtue of the distinctive feature [+round]. It is debatable to what extent this feature is applicable over the system. There are many examples, even word-final, of labialized palato-velar and uvular plosives and a few examples of the palato-velar nasal. For that reason the sounds are included in the phoneme chart of this paper. There are very sporadic word-initial examples of possible rounded palato-velar affricates, as in **tʃ^wá** ‘mother’ or **ɕ^we** ‘he stands up’. More examples with other consonants may be found with a small class of verbs which have roots consisting only of a labialized consonant, as in **b^we** ‘he carries’, **t^wé** ‘he enters’, **d^wé** ‘he pours’ and **l^wé** ‘he slanders’¹⁷. This labialization turns into the vowel /u/ whenever it is not followed by a vowel, indicating that the labialization goes back to the proper consonant /w/. The word for ‘mother’ sometimes is also heard as **tʃíwá**, allowing for the interpretation as a sequence of /tʃ/ and /w/. Because of these considerations, the feature of labialization is only interpreted as such for the phonemes /k^w, g^w, q^w, ɣ^w, ŋ^w/. In all other cases a sequence of the respective consonant and /w/ is assumed.

¹⁷ The vowel /e/ in all these verbs is the tense-person suffix.

The following matrix is an attempt to capture the natural classes of the Awngi language by assigning distinctive features to them:

				+ labial	-labial					
					+ coronal	-coronal				
						+ high	-high			
				-voiced	p	t	k	q	-round	
								k ^w	q ^w	+ round
				+ voiced	b	d	g	ɠ	-round	
-del.rel.								g ^w	ɠ ^w	+ round
				+ del.rel.	-voiced	ts	tʃ			
-continuant							+ voiced			ɖ
				+ continuant	-stopped	f	s			ʃ
-sonorant						+ stopped				st
				+ sonorant	m	n	ŋ			-round
							+ nasal			ŋ ^w
				-continuant	-nasal	l				
									+ continuant	w

Table 3: Consonant Phoneme Matrix

With respect to the places of articulation, the feature [labial] cuts off the labial sounds from the rest of the inventory. The other place features [coronal] and [high] are not relevant for the [+labial] sounds. The feature [high] is needed to distinguish the labio-velar from the uvular non-coronal sounds. It is this feature [+high] that seems to be the defining feature of the labio-velar natural class.

As can be seen in section 3.2.1, the uvular sounds are not distinguished between plosives and fricatives. For that reason the feature [continuant] is not applied to this place of articulation.

The feature [stopped] is not part of standard feature inventories. It is employed specifically for this language; it is needed to distinguish the post-stopped fricatives from regular fricatives.

The feature matrix suggests that the three sounds /w, j, r/ form a natural class in the Awngi language, but this is not supported by any evidence from phonological rules. The devoicing rule of section 5.1 includes the two glides /j/ and /w/, but leaves out /r/.

The six vowels in a systematic grid require only three distinctive features:

	–back	+ back	
+ high	i	ɨ	u
–high	e	a	o
	–round		+ round

Table 4: Vowel Phoneme Matrix

Of course one more feature [syllabic] is required to distinguish the vowels from the consonants of the Awngi language.

The phonemes of Awngi are realized with a considerable degree of phonetic variation. In most cases, however, this variation cannot be described in clear-cut allophonic rules, but rather in terms of probability, in the sense that in many environments a free variation of the variants is observed. This applies to both vocalic and consonantal variation. The following sections will attempt to describe this, together with a demonstration of contrast between the members of the phoneme classes.

3.2 Plosives /p, b, t, d, k, k^w, g, g^w, q, q^w, ɢ, ɢ^w/

3.2.1 Variation

Plosives come in pairs of voiceless /p, t, k, k^w, q, q^w/ and voiced /b, d, g, g^w, ɢ, ɢ^w/. Another distinction only applies to the [-coronal] plosives, which come in pairs of labialized /k^w, g^w, q^w, ɢ^w/ and non-labialized /k, g, q, ɢ/. Phonetically, there are no voiced plosives word-final; /d/ and /g/ are devoiced word-final. The voiced labial plosive /b/ appears word-final as a voiced bilabial fricative [β], which between vowels is also in free variation with the voiced bilabial plosive [b], as in **tsibab** [tsibeβ] ~ [tsibeβ] ‘narrow’.

At the uvular place of articulation, the opposition between plosives and fricatives is neutralized. Phonetically, there are no voiced plosives, and no voiceless fricatives. There are only two obstruents: one the voiceless plosive /q/ (and its labialized variant) and the other one the voiced fricative /ɣ/. Because the phonological system of the Awngi language apparently does not provide a place for voiced fricatives (the other places of articulation only display voiceless fricatives), we propose to call the uvular obstruents just that. That the voiceless obstruents happen to be pronounced as plosives and the voiced ones as fricatives is of a purely phonetic interest. To acknowledge this neutralization, we have chosen to use the plosive symbols for both voiced and voiceless uvular obstruents, so that the voiced uvular obstruents are represented as /ɢ/ and /ɢ^w/, in spite of their pronuncia-

tion in all environments as fricatives [ɣ] and [ɣ^w]¹⁸. Moreover, they are the voiced counterparts of the respective uvular plosives, as can be seen in section 5.1. Together with the other obstruents these sounds are involved in the devoicing process, which closely links these two pairs with each other.

The other voiced plosives appear in syllable-rhyme position word-medial, but are usually followed by the transitional vowel [ɨ]¹⁹. This puts them phonetically into an onset position, as in **sigla** ‘morning’, which is mostly realized as [sigɨlə].

The voiceless, non-labialized plosives appear in a wide variety of environments. They usually have two allophonic variants, aspirated and non-aspirated. The non-aspirated variant is usually reserved for a word-medial context, in the environment of another consonant. The position of this other consonant varies with each plosive. The bilabial voiceless plosive [p] usually appears after a consonant, as in [zempél] ‘thigh’, but even in this context it is in free variation with the aspirated voiceless bilabial plosive [p^h], which also is the variant of all other contexts. The alveolar voiceless plosive /t/ requires the non-aspirated variant [t] preceding other consonants, as in [p^hetp^hetsí:] ‘wing’, whereas following other consonants [t] varies freely with [t^h]. But [t] is also required word-initial preceding the vowel [i], as in [tínk^hɪf] ‘push!’. Both the velar voiceless plosive /k/ and the uvular voiceless plosive /q/ require the non-aspirated variant in front of another consonant, as in [k^hukrí] ‘down’ or [ʔaqɣí] ‘stuff’. Elsewhere the aspirated variants appear.

3.2.2 Contrasts

In the contrast charts that follow in this section, shaded boxes indicate that examples of the respective sounds have not been found in these environments.

	p	b	t	d
#_	patpatsí ‘wing’	bér ‘door’	tablí ‘father’	dad ‘street’ dek ‘well’
_V	ɕepé ‘I buy’	gimbê ‘mouth (obj.)’	sentê ‘tear (obj.)’	siddidí ‘beard’
V_V	ɕepé ‘I buy’	libu ‘slow’	wité ‘I finish’	widé ‘he finishes’
_C	impla ‘one’	débtéri ‘notebook’	patpatsí ‘wing’	ángudba ‘frog’
_#	kép ‘cut!’	tsibab ‘narrow’	ínt ‘you’	dad ‘street’

¹⁸ Word-final (as in [aɣ] ‘he/she is’) or in the environment of a voiceless consonant (as in [ɣsántí] ‘big’ or [ʔaqɣí] ‘stuff’), they are also sometimes realized as the voiceless uvular fricatives [ɣ] and [ɣ^w]. In some lowland varieties of Awngi, like on Belaya mountain, this sound is also pronounced voiceless word-initial (but not word-medial). Perhaps in these varieties the status of the phoneme in the system needs to be evaluated differently. /G/ has been transcribed by Hetzron as /ɣ/ and by Palmer as /x/.

¹⁹ This transitional vowel is distinct from the default vowel phoneme /i/. The transitional vowel does not create a new syllable, and speakers are not even aware of its presence. It is a purely phonetic addition to the consonant.

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	k	g	k ^w	g ^w
#_	ká ‘go!’	gaʃí ‘shield’	k ^w ájg ^w a ‘he barked’	
_V	dikkí ‘bad’	kágí ‘dry’	irk ^w í ‘tooth’	ɕig ^w íg ^w a ‘he threw’
V_V	mekás ‘through’	ligisimí ‘long’	lik ^w í ‘foot (foc)’	ɕig ^w íg ^w a ‘he threw’
_C	kúkri ‘down’	sigla ‘morning’	ínɕík ^w tsi ‘stool’	ang ^w ka ‘breasts’
_#	dek ‘well’	guɕig ‘stomach’	ínɕik ^w ‘sit down!’	ang ^w ‘breast’

	q	q ^w	G	G ^w
#_	qifi ‘bark of tree’		gás ‘wedding’	g ^w ágít ‘laugh!’
V_V	aqí ‘man’	ɕiq ^w í ‘heavy’	ʃági ‘bird’	ig ^w í ‘hyena’
_C	aqgí ‘stuff’		ink ^w agka ‘ears’	ig ^w ka ‘hyenas’
_#	ɕíq ‘drink!’		leg ‘hundred’	ag ^w ‘water’

3.3 Affricates /ts, ɕ, ʃ, ɕ/

3.3.1 Variation

The affricates form a distinct class in Awngi which needs to be distinguished from the plosives. Phonetically however there is some erosion in process which turns the voiced affricates into fricatives in most varieties of the Awngi language. Whereas Palmer (1959) still records a consistent /ɕ/, Hetzron (1969) already presents the same words with the fricative /z/, with the sole exception of *sedza* ‘four’ and its derivatives. This reflects also the phonetics of all data collected for this study. In spite of this, all instances of this sound are represented by the symbol /ɕ/, to indicate its status in the phonological system. A similar process is still observable with the voiced affricate /ɕ/, which is currently found in free variation with the voiced fricative [ʒ]. For historic reasons and because of the symmetry of the system, these sounds still need to be treated as affricates and not as fricatives. This may be different in the near future – the current change might apply sufficient pressure to the system so that the voiced affricates will have to be re-evaluated as voiced fricatives. This may also result in the opening up of a position for a voiced labial fricative /v/, which seems to be creeping into the language these days²⁰. For now the respective sounds need to be treated as the voiced counterparts of the voiceless affricates, which is also supported by their behavior in the devoicing-process (see section 5.1).

²⁰ See section 3.4.1.

Affricates appear in all possible environments, although in front of voiced consonants they produce a transitional vowel [ɪ], as in [qútsɪg^wà] ‘he washed himself’.

3.3.2 Contrast

	ts	ɕ	tʃ	ɕʒ
#_	tsepí ‘do!’	ɕimir ‘sing’	tʃef ‘count!’	ɕepé ‘I buy’
_V	tsíntsá ‘fly’	aɕené ‘I am sad’	angutʃa ‘cat’	innodɕi ‘we’
V_V	itsí ‘worm’	aɕené ‘I am sad’	angutʃa ‘cat’	innodɕi ‘we’
_C	sídzitská ‘fourty’	guɕgo ‘stomach (obj.)’	angutʃka ‘cats’	guɕka ‘nests’
C_	jíntsi ‘mouse’	sedza ‘four’	míntʃ ‘much’	fíndɕál ‘cup’
_#	jits ‘give me!’		míntʃ ‘much’	guɕ ‘nest’

3.4 Fricatives /f, s, ʃ/

3.4.1 Variation

As the system currently manifests itself, the fricatives are only distinguished according to their place of articulation. The features [voiced] or [round] are not relevant for this sound class. But, as pointed out in section 3.3.1, the voiced affricates seem to be in the process of changing into voiced fricatives, at least in their phonetic realization. The phonological system still treats them as affricates, but the pressure towards a re-evaluation may increase. Already some speakers, influenced by Amharic orthography, tend to write intervocalic /b/ (pronounced as [β]) with the character ሸ, which represents the sound /v/ in Amharic. So there might be a system with three voiced and three voiceless fricatives in the foreseeable future.

3.4.2 Contrast

	f	s	ʃ
_V	fí ‘get out!’	síj ‘cloth’	ʃáj ‘1000’
V_V	tafo ‘hand (obj.)’	asebé ‘he thinks’	aʃab ‘salt’
_\$	tʃef ‘count’	jagas ‘o.k.’	giʃ ‘dig!’

3.5 Post-stopped Fricatives /st, ʃt/

3.5.1 Variation

The inclusion of these sounds into the list of Awngi consonant phonemes needs to be justified. The main motivation for this analysis is their phonotactic behavior. In all attested data there is no single occurrence of sequences like /sit/ or /ʃit/. So, as stated in section 2.2, the two sequences are inseparable in Awngi, which suggests that they need to be treated as single segments. Doing this also eliminates the need to assume extrametrical segments in words like **díst** ‘pan’. There are only two post-stopped fricatives in Awngi: The alveolar and the palato-velar one, which matches the situation of the affricates. There are, however, only voiceless post-stopped fricatives in Awngi, which seems to confirm their affinity with the fricatives.

3.5.2 Contrast

	st	ʃt
#_	see Rule 5	
V_V	ísté ‘it is called’	íʃté ‘I was’
_C	ínságístníḡ^wa ‘we worked’	
C_		
_#	díst ‘pan’	

3.6 Nasals /m, n, ŋ, ŋ^w/

3.6.1 Variation

Nasals occupy only three of the four places of articulation in Awngi. There are no phonemic uvular nasals. Sometimes phonetically a palatal nasal is heard. It can always be analyzed as a sequence of /ɲi/, as in **ɲjadʒi** ‘they’²¹. Word-initial syllabic nasals occur in front of another consonant, but they are always in free variation with the sequence /iN/, as in **ímbit** ‘quick’, **ínnóʒi** ‘we’ or **ɲḡk^waq** ‘listen!’ As pointed out in section 2.2, underlyingly only the nasal is present.

Some generalizations about nasal assimilation can be stated: preceding a [+coronal] consonant only the alveolar nasal phoneme /n/ can appear, the labial nasal phoneme /m/ can only appear preceding labial consonants, and the velar nasal /ŋ/ can only appear preceding palato-velar or uvular consonants.

²¹ Usually, the form of this pronoun is **ɲadʒi**, but a few times I have heard the form as cited above. This seems to be the more original one, consisting of the 3rd singular pronoun **ɲi** and a pronominal plural suffix ***-wadʒi**.

3.6.2 Contrast

	m	n	ŋ	ŋ ^w
#_	magur ‘blow’	náka ‘today’	ŋári ‘head’	
_#	sím ‘name’	ín ‘this’	íŋŋ ‘bite’	aŋ^w ‘thorn’
V_V	ɕimí ‘song’	wéni ‘when’	giŋí ‘run!’	aŋ^wi ‘thorn (focus)’
_C	dámbi ‘bridge’	gsántí ‘big’	káriŋka ‘stones’	aŋ^wka ‘thorns’

3.7 Liquids and Approximants /l, r, w, j/

The alveolar lateral approximant phoneme /l/ can appear in all positions. In front of voiced consonants /l/ may produce a transitional vowel [ɪ], as in **[ilɪwa]** ~ **[ilwa]** ‘cow’ or **[wolɪgedí]** ~ **[wolgedí]** ‘crooked’. The vibrant phoneme /r/ does not appear word-initial²². In the other environments /r/ comes in three variants. Word-final the voiceless alveolar flap [ɾ] is in free variation with the alveolar trill [r]. In all other positions there is only the voiced alveolar flap [ɾ]. When [ɾ] and [r] meet at the boundaries of two syllables, they combine to produce the trill [r], as in **bírro** **[bíro]** ‘silver’.

The labial approximant phoneme /w/ occurs in all positions, usually realized as a labial-velar approximant [w]. In syllable-final position it combines with the preceding vowel to a phonetic diphthong, as in **áw** ‘come!’, which is realized as **[áu]**. The same is true for the palato-velar approximant phoneme /j/, which, in syllable final position, forms the secondary part of a phonetic diphthong as in **aj** **[eɪ]** ‘who?’. Word-initial the palatal approximant [j] is in free variation with the voiced palatal fricative [ɟ] as in **[jits]** ~ **[ɟits]** ‘give me!’.

3.8 Miscellaneous Notes on Consonants

Two more sounds appear phonetically. The glottal approximant [h], as mentioned in the overview section above, appears occasionally in loans from Amharic, but is omitted by many speakers in the same words. So it is definitely not part of the Awngi phonological system, at least not in modern times. But /h/ is attested in archaic words like **wírɪh** ‘season’ (Hetzron 1978:140) and still remembered today.

The glottal stop [ʔ] appears only in word-initial position before vowels, but it is in free variation with ∅. Since (as in the following example) it does not prevent elision in case of a

²² As seen in section 2.2, all cases of an underlying word-initial /r/ are preceded by the epenthetic vowel /i/.

word-initial /i/ following a word ending in a vowel or approximant, it is safe to assume that it does not have any phonemic status.

Example 6

kúsím aj + isté → kúsím ajsté ‘what is your name called?’

In Awngi there are phonetically long consonants, which mostly represent two of the same consonants meeting at syllable boundaries, as in **tsilli** ‘small’, **daddá** ‘on the street’. In some words, however, these geminations appear at the boundaries of a word, at least in the underlying structure. As pointed out in section 2.2, this leads to the insertion of /i/ at the beginning of a word (Rule 7). Some words also end with a double nasal, as in **ínn** ‘this’ or **ínn̩** ‘bite!’. They are sometimes heard with a transitional vowel following the gemination [**ínni**]. It would be interesting to do further research to discover how these geminated consonants came into being at word boundaries.

3.9 Vowels /i, e, i, a, o, u/

3.9.1 Variation

The system of vowels is very symmetrical in Awngi. There are two distinctive vowel heights, a distinction between front and back and, for the back vowels, a distinction between rounded and unrounded. The status of the close central vowel /i/, however, is dubious. Although attested by Appleyard (1991) as one of the Proto-Agaw vowels, Joswig (2006) shows that its appearance is, for the most part, predictable as an epenthetic vowel, confirming a suspicion of Hetzron (1997:482, see also section 2.2 in this paper). Still it appears wise to make this vowel a part of the phonological system of the Awngi language.

The following phonetic descriptions are based on the perceptions of the author, who is quick to add that no formal acoustic study of the vowels has been attempted to date.

The close front vowel phoneme /i/ comes in two varieties. The near-close front vowel [ɪ] is used in the environment of uvular consonants (e.g. [**?aɣɪ**] ‘man’), preceding /r/ (e.g. [**brɪrr**] ‘fly!’). In closed syllables [ɪ] is in free variation with [i] (e.g. [**dɪndɪfɪ**] ~ [**dindɪfɪ**] ‘arm’). In other environments only the close front vowel [i] occurs. Like all vowels with exception of the central vowels, /i/ does not appear word-initial.

The non-close front vowel phoneme /e/ has four allophones. The near-open front vowel [æ]²³ only appears word-final following a labialized uvular consonant, as in [ʔəŋ^wæ] ‘hyena (obj.)’. In other word-final positions only the long close-mid front vowel [e:] appears, as in [ne:] ‘speak!’. After the labialized uvular plosive [q^w] the two sounds [æ] and [e:] are in free variation, as in [tʃãŋq^wæ] ~ [tʃãŋq^we:] ‘dew (obj.)’. Word-medial /e/ is represented by the short close-mid front vowel [e], as in [dek^h] ‘well’. In the environment of non-nasal sonorants, /f/ and uvular consonants, [e] is in free variation with the open-mid front vowel [ɛ], as in [ʔedér] ~ [ʔedér] ‘please!’. In some recent Amharic loans [ɛ] is also used in other environments, as in [mek^hine] ‘car’.

The close back vowel phoneme /u/ has two allophones. The rounded long close back vowel [u:] is used in syllables with a high tone, and the rounded near-close back vowel [ʊ] appears only in low tone syllables. This leads to the following interesting pair: [ɡone] ‘woman’ vs. [ɡú:ne] ‘they eat’²⁴. If it is true that tone usually does not have the ability to change vowel qualities²⁵, but stress does, then this is a indicator that the prosodic system of the Awngi language is actually based on a pitch-accent system. This would also explain the greater degree of phonetic vowel length for the high tone variant. For a continuation of the discussion of the nature of Awngi tone, see section 4.2.

The non-close round back vowel phoneme /o/ is represented by the rounded close-mid back vowel [o] in all environments. In the environment of uvular consonants, however, it is in free variation with the rounded open-mid back vowel [ɔ]. So sógéta ‘eight’ can be pronounced as either [sógé^hɐ] or [sógé^hɐ]. It is certainly true that this vowel has its historic roots in the sequence [wa], as can still be seen in the various allomorphs of the accusative suffix and in several dialectal and idiolectal variations²⁶. In the current state of the language, however, it has established itself as a vowel phoneme.

The central vowel phonemes /a/ and /i/ are by far the two most frequently occurring sounds in Awngi. As mentioned above, they are the only vowels to be found word-initial. The vowel /i/, being the default vowel of the language, is used whenever a phonotactical

²³ Hetzron (1997:482) lists this sound in his inventory of Awngi vowels, noting that it is the result of a merger of a “palatal element and a subsequent a”. This does not seem to be the case any longer. The word cited as an example by Hetzron is currently pronounced [ɲe:ré] ‘her husband’. In any case, the sound is certainly not part of the phoneme inventory of Awngi.

²⁴ This could possibly be the phenomenon referred to by Hetzron (1976:6f) in his rather vague passage “Functioning of Tones”.

²⁵ Yip (2002:32) states that “*direct and unequivocal interaction between vowel height and tone is extremely rare, and the examples are controversial*”.

²⁶ Many, especially older, speakers still tend to use /wa/ where others use /o/.

gap needs to be closed. Both /a/ and /i/ are subject to elision word-initial when the preceding word ends on another vowel.

The close central vowel phoneme /i/ never appears word-final. Following a labialized obstruent or anywhere in the environment of the labial approximant /w/ it is realized as the rounded open-mid central vowel [ə], as in [wól^ht^he] ‘six’. The rounded near-close front vowel [ɯ] is used preceding labialized obstruents as in [zɣk^wí] ‘heavy’. Elsewhere the phoneme is realized as the unrounded close central vowel [i], but in open syllables it is in free variation with the unrounded open-mid central vowel [ə]. For example, bítí ‘earth’ can be realized as [bit^hí] or [bət^hí].

The non-close central vowel phoneme /a/ appears in all possible environments (the only vowel to do so). It is usually realized as the near-open central vowel [ɐ]. When occurring in the same syllable with a [+round] consonant or anywhere in the environment of a uvular consonant, however, it is realized as an unrounded open back vowel [ɑ], e.g. [áʋ] ‘come!’ or [wɑḡ] ‘full’.

All [+back] vowels can be nasalized preceding the velar nasal /ŋ/ as in [lãŋq^h] ‘arrow’.

3.9.2 Contrast

	i	e	ɨ	a	u	o
#_	Rule 1		íwúra ‘laugh!’	áw ‘come!’	Rule 1	
_#	áni ‘I (foc)’	ne ‘speak!’	Rule 2	séna ‘sister’	ḡú ‘eat!’	binô ‘river (obj.)’
\$C_	dímmí ‘red’	dek ‘well’	dibán ‘sky’	dad ‘way’	dúra ‘hen’	intoḡi ‘you (pl)’

4. The Suprasegmentals of Awngi

4.1 The Tonemes

Tone distinguishes meaning in Awngi and thus will require at least one additional phonological feature. There are three tones that can apply to a single syllable: high, low and falling. The falling tone appears only on the last syllable of a word, although in contrast to the other two.

Example 7

dzemeré	‘I sing’
áre	‘grain (acc)’
birê	‘blood (acc)’

Hetzron (1969 and 1997) and Palmer (1959) both agree on four phonemic tones in Awngi: high, mid, low and falling. Their high and falling tones coincide with this analysis. The mid tone corresponds to most of the low tones in this analysis, whereas Hetzron’s and Palmer’s low tone refers to a tone which is lower than their mid tone and which only appears on the vowel /a/ word-final. Hetzron (1997:483) states that this low tone only occurs on the two morphemes **-gwà** ‘past tense’ and **-mà** ‘question particle’²⁷. It appears, however, that this extra low tone is only a positional variant of the low tone. All instances of word-final /a/ which are not marked by a high tone tend to be pronounced considerably lower than the regular low tone. Hetzron correctly points out that this extra low tone turns into a regular low (or mid, in his terminology) as soon as it loses its word-final position through suffixation. This may also happen to word-final /a/ in connected speech when the next word follows in close succession. This, of course, never happens to the word-final /a/ of finite verb-forms because finite verbs always appear at the end of a sentence. This may explain why Hetzron identified these morphemes as invariably carrying an extra low tone. There seems to be no basis, however, to assign a phonemic status to this extra low tone.²⁸

The following words are given with the phonetic realization of their tones and the phonemic representation:

²⁷ In this instance, however, it would appear that Hetzron forgot the past tense morpheme **/-únà/**, which in his 1969 analysis he also identified as carrying the extra low tone.

²⁸ Further details of this analysis are presented in Joswig (2010).

Example 8

[dāllūgà]	dalluga	LLL	‘it was enough’
[dāllūgāmà]	dallugama	LLLL	‘was it enough?’
[sēdzà]	sedza	LL	‘four’
[ánk ^w à]	ánk ^w a	HL	‘five’

The falling tone seems to be a sequence of high and low. This can be observed nicely in cases where this tone shows up on the /e/-variant of the accusative suffix, which can be traced back to the sequence of **-í** ‘masculine’ and **-wa** ‘accusative’:

Example 9

bir	-í	-wa	→	bir	-ê	‘blood (accusative)’
					^	
L	H	L		L	HL	

All falling tones turn to high tones if they end up in a non-word-final position through addition of some suffix (e.g. **bir-é-ma** ‘blood (acc) + sentence question suffix’).

4.2 The Nature of Awngi Tones

On most lexical roots tone remains constant, with the exception of one class of verbs²⁹, where the tone of the stem changes according to the tense of the verb, and in a class of nouns (Hetzron 1978:129) where the high tone of the last root syllable turns to low in front of a few suffixes.

Looking more closely at the roots, the following patterns become apparent:

- All root-syllables have low tones, or
- All root-syllables have high tones, or
- The root starts out with one or more low tones and, following those, only high tones occur.

A sequence of high and then low tones on the same root is extremely rare, if it exists at all³⁰. This raises the question whether stress may also have a role in the nature of Awngi tone³¹. Roots with only low tones, therefore, could be seen as having no stress at all. All

²⁹ Hetzron (1969:38) calls this class *AB-pattern*.

³⁰ Hetzron (1997:486) identifies only three nouns with that pattern and wonders whether they might not be compounds. The one case which is obviously not a compound is apparently an onomatopoeic word (**bádbadaj** ‘dove’). In Hetzron (1969), of the hundreds of verbs listed on p. 95-106, only seven are reported to have a High-low pattern. All of them are derived verbs (involving derivative morphology).

³¹ This thought was already pursued by Hetzron (1976, p.42).

roots which are accompanied by the stress feature would display this by a high pitch attached to the stressed and all subsequent syllables. So, in theory, it could be possible to show roots without tones in the lexicon, only noting whether the roots are assigned a stress feature, and, if so, on which syllable.

This idea, however, becomes troubling by the fact that many roots not only have a tone assigned to the root itself, but also have a tonal influence on some of the following suffixes. In addition to that, some of the nominal suffixes and most of the verbal suffixes have their own tone assigned to them. This is subject to change at times based on the preceding stem, but nevertheless needs to be noted in the lexicon. Both characteristics are incompatible with an interpretation of tone as being merely a manifestation of a stress feature³².

For example, the suffix for present tense third person singular is regularly **-é** with a high tone and should be noted as such in the lexicon. When combined with the verb **itt** ‘fall’, this suffix (and most other verbal suffixes with a high tone) receives a low tone. Therefore it appears that **itt** has a lowering effect on subsequent suffixes and should be represented accordingly in the lexicon, perhaps involving the following convention: **itt↓** ‘fall’³³. Some other verbs (or rather, some of their stems) have a raising effect on subsequent suffixes, like **gin↑** ‘run’. In short, after a stem with a lowering effect all suffixes start out with a low tone. After a raising effect the syllable starts out on a high tone. If the original tone was low and the syllable is word-final, then the resulting tone is falling.

Underlyingly, of course, it is best to assume floating high or low tones which are responsible for the raising or lowering effects. The tone of the following syllable is de-linked and replaced by the floating tones:

Example 10

itt	↓	-é	→	itte	‘he falls’
L		L		L	L ³⁴

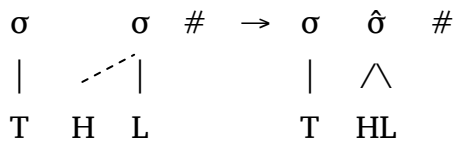
³² In any case, I found no evidence in the varieties of Awngi which I have studied of the “weak stress of intensity” attested by Hetzron (1978:123) on the penultimate syllable.

³³ For the sake of brevity in this paper I have greatly simplified the facts here. Actually the lowering effect is not exhibited by the root of the verb as such, but by some of its extended stems. For an in-depth analysis I refer the reader to Hetzron’s commendable analysis of the Awngi verbal system (Hetzron 1969).

³⁴ This representation does not consider the Obligatory Contour Principle, which would not contribute anything to the understanding of this phenomenon.

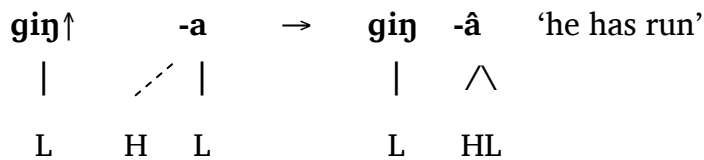
There is, however, a special rule for floating high tones linking to word-final low tones. Instead of de-linking the original low tone, this rule creates the falling tones of the Awngi language:

Rule 9: Word-Final Contour Tone Creation³⁵



This rule can be illustrated by Example 9, where the merging of **-í** ‘masculine’ and **-wa** ‘accusative’ leaves the high tone floating. Another example shows the high tone floating after the stem **giŋ**↑ ‘run’ in combination with the suffix for perfect third person singular:

Example 11



4.3 The Functional Load of Tone

Minimal pairs based on lexical tones are rare. The best set of minimal pairs is cited in Hetzron (1976:42) between **ɖur**- ‘return’ and **ɖur**↑- ‘stroll’, where the tonal difference does not show on the root itself, but on some of the suffixes. Another minimal pair involves words of different grammatical categories: **gúna** ‘they ate’ or **gúnâ** ‘we have eaten’ vs. **guna** ‘woman’. It is hard to imagine a case of ambiguity between the verbs and the noun. However, the difference between **gúna** ‘they ate’ or **gúnâ** ‘we have eaten’ shows the more important function of tone in Awngi. It is often used to underline grammatical distinctions, mainly between persons and tenses. Here it is fairly easy to find minimal pairs. It must be noted, however, that in no case is the tonal difference the only difference between two expressions with different grammatical meanings. In Awngi a verb is not used without its referents, that is nouns or pronouns, somewhere in the immediate context. The only case where one pronoun can refer to two different referents (**ŋi** can be both third person masculine or third person feminine), the verbs always employ two segmentally different stems. So, with very few lexical minimal pairs and grammatical tone only used as a further redundancy together with other segmental strategies, the functional load

³⁵ σ stands for any syllable. T stands for any tone. # is a word boundary.

of tone in Awngi is rather low. For that reason it appears that in orthography, whether Latin-based or with Ethiopic script, tone does not necessarily need to be represented.

4.4 Some Implications of Different Tonal Behaviors

It has already been noted that some nouns or verbs have a raising or lowering effect on some of their suffixes. If these effects are to be understood as phonological processes, then this has implications for those so-called suffixes which are not affected by the raising or lowering. This specifically applies to nominal suffixes, referring to case. Whereas the tone of all number-cum-gender suffixes varies, depending on the stem they get attached to, some case suffixes are variable, and some are not. The most common cases (accusative, dative and genitive) have their tone determined by the preceding stem. If the tone is falling on the accusative suffix, then it is high on the dative and genitive of the same noun. If the tone is low on the accusative, it is also low on the dative and genitive of the same noun³⁶. Then there are case suffixes (**-ŋa** ‘adverbial’³⁷, **-da** ‘locative’ and **-des** ‘ablative’) which either copy the same tone as the preceding syllable (adverbial) or take the polar tone (locative and ablative).

And finally there are those case suffixes with a stable tone: **-sta** ‘comparative’, **-li** ‘comitative’, **-so** ‘directional’, **-gas** ‘invocative’. That these suffixes are immune to any tonal influence from the noun they are attached to might be an indication of a different status as opposed to the other case suffixes. If one accepts that all tonal influence in Awngi has to happen within the boundaries of the phonological word, then it appears reasonable to assume a phonological word boundary between the nouns (including their number-cum-gender-suffixes) and the latter case ‘suffixes’. This then would lead us to re-evaluate them as clitics, instead of suffixes, still in process of grammaticalization from postpositions to suffixes.

³⁶ See Hetzron (1978:128) for a precise listing of the tonal behavior of all nominal suffixes.

³⁷ This suffix does not really behave like other case suffixes and should rather be treated as a derivational suffix, contrary to Hetzron’s (1978:126) analysis.

5. Morpho-Phonological Processes

5.1 Devoicing

Some verbs with a voiced consonant in root-final position vary their stems according to grammatical circumstances: If the verb is in the first person singular or any kind of imperative, the last consonant of the root is devoiced. This one-way transformation only affects the voiced plosives and affricates³⁸ /b, d, g, g^w, ɠ, ɠ^w, ɖ, ɖʒ/ and the two approximants /j/ and /w/. For the plosives and affricates the only change is in the value of the feature [voiced], turning them into their voiceless counterparts /p, t, k, k^w, q, q^w, ts, tʃ/. The two glides, however, are transformed into the voiceless plosives of their respective places of articulation, /p/ and /k/.

Example 12

3 masc	1sg	Translation	
bambe	bampe	he swims	I swim
widé	wité	he finishes	I finish
tseregé	tsereké	he sweeps	I sweep
dang^we	dank^we	he reduces the price	I reduce the price
ink^wágé	ink^wáqé	he hears	I hear
fig^wé	fiq^wé	he breathes	I breathe
agedzé	agetsé	he helps	I help
guɖzé	gutʃé	he refuses	I refuse
ɖewé	ɖepé	he buys	I buy
wijé	wiké	he sells	I sell

For reasons of symmetry one could also expect the phoneme /r/ to undergo a change to /t/ in some words, but this never happens, although /r/ shares its distinctive features with the glides /j/ and /w/. This may point to the possibility that the distinctive feature system of the Awngi language is still poorly understood.

The devoicing process is a good indicator of the relationship between various phonemes and their position in the phonological system. The fact that /j/ alternates with /k/ shows that velar and palatal sounds are not seen to be at different places of articulation in Awngi. The alternation of /ɖ/ and /ts/ shows conclusively that /ɖ/ still needs to be considered an affricate in Awngi, although it is currently pronounced as a fricative. And the

³⁸ It could be argued that the rule applies to all obstruents by virtue of the fact that it applies vacuously to voiceless obstruents.

different behavior of /r/ as compared to /w/ and /j/ leads to the conclusion that in spite of the shared features /r/ is not part of the phonological class of glides in Awngi.

5.2 Vowel Harmony

Whenever a suffix containing the [+high] vowel /i/ is added to a stem, a productive regressive vowel harmony process is triggered (Hetzron 1997:484). The vowel harmony only takes place if the underlying vowel of the last syllable in the stem is /e/. This vowel and all preceding instances of /e/ and /o/ become [+high], until a different vowel is encountered. Then the vowel harmony is blocked. Hetzron (1997:485) provides the following example:

Example 13

moleqés-á ‘nun’ vs. **muliqís-í** ‘monk’

6. Wordlist

The following (but by no means comprehensive) list of words has been collected in preparation of this study. It gives the lexeme first in its phonemic representation, using the IPA conventions, followed by the gloss in English.

Awngi	English
ímpíł	1 (as a numeral)
lágú	1 (while counting)
láŋa	2
ʃúga	3
sedza	4
áŋk ^w a	5
wíłta	6
lánéta	7
sógéta	8
sésta	9
tsíkka	10
laŋárŋa	20
ʃúgátská	30
sidzitská	40
áŋk ^w átská	50
wíłtítská	60
lánítítská	70
sógítítská	80
sístítská	90
leg	100
ʃáj	1000
wullá	all
istá	and
inseská	animal
ɕenɕ	animal horn
ag ^w adzí	animal skin
íŋŋí	ant
dindifí	arm

Awngi	English
laŋq	arrow
wúsí	ash
gerka	at daytime
mikaj	ax for chopping wood
akíłtsí	ax for construction
ɕagrí	baboon
íŋgir	back
dikkí	bad
múɕ	banana
qíʃi	bark of tree
musib	basket
siddidí	beard
tsigará	bee
gudzig	belly
dingulí	big
gsántí	big
tʃági	bird
bírr	Birr (Ethiopian currency)
íŋŋ	bite!
tsárkí	black
birí	blood
k ^w íjits	blow (instrument)!
magur	blow!
ŋats	bone
dámb	bridge
tánkínŋíts	burn!

The Phonology of Awngi

Awngi	English
giwitʃí	bush
tank^wí	canoe
mekina	car (loan from Amharic)
angutʃa	cat (fem)
angutʃka	cats
send	chest
alíkí	chief
sír	child
kóʃkóʃ	chin
jɪŋg	claw
síj	cloth
damminí	cloud
ʃúwi	coarse salt
dúri	cock
kurtímí	cold (weather)
tirqíʃí	cold (substance)
tú	come in!
áw	come!
ʃumbi	corn
íwúra	cough!
ʃef	count!
ilwa	cow
wulgadí	crooked
finʄál	cup
kép	cut!
gém	dance!
ʃanq^wí	dew
gíʃ	dig!
tsámí	dirty
tsepí	do!
gisénj	dog
diɡ^warí	donkey

Awngi	English
tsigarí	door
kúkri	down
ɕíq	drink!
kiriwí	drum
kágí	dry
abwarí	dust
titrí	dust
ink^wagí	ear
bití	earth
gú	eat!
inkulal	egg
kírɲi	elbow
nagésí	empty
dalluga	it was enough
arabá	evening
íll	eye
tsimirk^wí	eyebrow
irʃí	farm
budzí	fat (person)
sag^wí	fat (of meat)
tablí	father
ɕifínt	fear
labí	feather
ítsi	fence
líqa	few
búnktɪŋí	fight!
aʃab	fine salt
laŋet	finger
leg	fire
así	fish
ábíbí	flower
tsíntsá	fly
birrir	fly!

The Phonology of Awngi

Awngi	English
lik ^w	foot
gimbár	forehead
wuglí	fox
ángudba	frog
kupí	fruit
wag	full
koʃaʃí	garbage
bér	gate
fí	get out!
jits	give me!
ká	go!
fijélá	goat (fem)
dibán	God; heaven
wirk	gold
kib	gourd
kíj	grass
ɕirmamitsí	guts
tsitsifí	hair
taf	hand
tinkarí	hard
mírt	harvest
kasíg ^w a	he asked
k ^w ájɕ ^w a	he barked
kirɕ ^w a	he died
dúga	he ladled
sagúga	he sewed
ɕig ^w íg ^w a	he threw
qútsɕ ^w a	he washed himself
ɲi	he; she
ɲárí	head
ink ^w aq	hear!
ʃew	heart
ɕuq ^w í	heavy

Awngi	English
dúra	hen
maʃaq ^w í	heritage
befit	hide yourself!
ɲiqá	his wife
tásɕ ^w a	he hit
kotokótsi	hoe
immit	hold!
ɲárgi	honey
turumbá	horn (musical instrument)
ink ^w uní	Hot
ɲín	house
wíta	how?
mirkítɕ ^w	hungry
kaʃi	hunt!
kaʃantí	hunter
ig ^w í	hyena
áni	I
itsúga	I felt
ɕepé	I will buy
ag	it is
jágála	it is not
pírri	jump!
kú	kill!
gírɕ	knee
karí	knife
jaqí	know!
ájk	lake
ɕ ^w ágít	laugh!
gatsí	leaf
tsangégá	left
tsaneg	leopard
gidimtit	lie down!

The Phonology of Awngi

Awngi	English
birán	light
kilali	light; easy
milági	lightning
kenfér	lip
gubét	liver
liggisimí	long
girití	loose
jínti	louse
geḡerí	machete
aqí	man
gebel	market
míts	marry!
íṣṣí	meat
gendzéḃ	money
árfá	moon
sigla	morning
ṭṣíwa	mother
jíntsi	mouse
gimbí	mouth
míntṣ	much
ṭṣiqí	mud
jítsi	my brother
jíra	my child
jitṣudzá	my sister
sím	name
tsibab	narrow
guringí	navel
gurgúm	neck
iskawí	new
gar	night
aj	no
ímpíláwlá	none
ajkí	no one

Awngi	English
issán	nose
débtér	notebook
ḏéjt	oil
jagas	okay
wuliḏí	old
ílliw	other
díst	pan
girmí	pig
ḏírí	plant!
adér	please!
kíbits	pour!
gibṭṣatṣí	powder
tampi	puddle
gusí	pull!
tínkif	push!
ímbit	quick
íri	rain
dímmí	red
léwá	right
inḏugí	ripe
bin	river
dad	road
daddá	on the road
sír	root
geméd	rope
beseqíg^w	rotten
giṇí	run!
bisqí	saliva
aṣawí	sand
gukí	scratch!
ḏér	seed
wík	sell!
saqí	sew!

The Phonology of Awngi

Awngi	English
silaskíḡ ^w	sharp
gaʃí	shield
ʃam	shoe
dedéŋi	short
tikiʃí	shoulder
maq	shoulder (variant)
qunastiní	sick
ɕimir	sing!
séna	sister
aj	skin of oxen
guri	sleep!
libu	slow
tsíllí	small
dink ^w ali	small seat
garitsits	smell!
tíʃi	smoke
lislasí	smooth
múri	snake
átíʃtí	sneeze!
ɕimí	song
ne	speak!
wirém	spear; war
ʃereríta	spider
intif ne	spit!
ɕú	stand up!
tirít	stand!
béwá	star
dadjéq	steal!
gimb	stick
kárŋ	stone
kétini	straight
fínfíná	straight ahead
aqcí	stuff

Awngi	English
áwá	sun
sísq	sweat
tsirik	sweep!
bampi	swim!
tsimár	tail
káts	take!
ʃají	tea
kintitsits	teach!
kintitsantí	teacher
sentí	tear
ŋaɕi	they
gúna	they ate
ɕampél	thigh
intsu	thin
asip	think!
aŋ ^w	thorn
kirrí	thread
wíwir	throw!
intsip	tie!
náka	today
tsánŋ	tongue
irk ^{wí}	tooth
ɕáláʃo	upwards
malɪŋa	very
laqit	vomit!
innodɕi	we
gás	wedding
arími	weed
alí	well
dek	well (in greetings)
sogénta	wet
dára	what?
wéni	when?

The Phonology of Awngi

Awngi	English
wúʃa	where?
fúʃí	white
aj	who?
awí	whose?
dámaj	why?
issan	wide
nífás	wind
patpatsí	wing
mík	wing (variant)
fatí	wish!
gúna	woman
ítsí	a species of worms

Awngi	English
fífrí	a species of worms
liʃag ^{wí}	Wot' (sauce for traditional Ethiopian food)
kákístí	yawn!
biʃá	yellow
jíga	yes
ajhá	yesterday
íntóŋi	you (pl)
íntu	you (polite)
ínt	you (sg)

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