

A Phonological Sketch of Asur

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Abstract

The paper briefly examines the phonological features of Asur. Asur is North Munda language mostly spoken in Gumla district of Jharkhand in India. Asur being a North Munda language, has phonological features like the presence of glottal sound and unreleased stop /g̚/. Asur phonology is rich in retroflexes and aspirated retroflexes which is also a common feature of Munda languages. The paper looks into the phonemic inventory and allophonic variations in Asur phonology. It also delves into other phonological phenomenon like gemination, syllabication, nasalization, reduplication and morphophonemic adaptation of borrowed verbs in Asur.

1.0 Introduction

Asur language (ISO-639-3) has been categorized as a ‘definitely endangered’ language by UNESCO in 2010. Asur is a language belonging to the Munda branch of Austro-Asiatic family of languages. Being a North Munda language, Asur shares similarities with other North Munda languages like Ho and Mundari. Asur is also known as Ashree, and more commonly known as Asuri. The native speakers or the community members prefer to call their tribe and their language ‘Asur’.

Native speakers of Asurs mostly live in Gumla district of Jharkhand state in India. The people of Asur tribe can also speak Sadri and Hindi language other than Asur. Some speakers can also speak Kurux language due to their close proximity with the Oraon/Kurux tribe. While Asur is an Austro-Asiatic language, Hindi and Sadri belong from the Indo Aryan family of languages and Kurux is a language of Dravidian family. Therefore, there are three different language families coming in contact and much likely influencing each other. Sadri being the lingua franca of Jharkhand has a much greater influence on Asur language. The domains of usage of Asur are continually shrinking, or rather it can be said the lives of the community people is becoming very divergent and domains in life are expanding where Asur language is not used. Sadri or Hindi is spoken in schools and workplaces. There is a massive amount of lexical borrowing from Hindi and Sadri that can be seen in Asur.

2.0 Asur Phonology

Asur, being a language of North Munda family has phonological similarity with other North Munda languages like Mundari, Ho and Santhali. The presence of glottal sound in Munda languages is something

that sets Munda languages phonologically apart from the neighboring languages of Indo-Aryan and Dravidian family. Vowel length in North Munda languages is mostly not phonemic and so is nasalization. In following sections explicate the phonology of Asur language with examples.

2.1 Asur Phonemic Inventory

2.1.1 Consonants in Asur:

	Bilabial	Labio dental	Dental ¹	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Glottal
Plosive	p b		t̪ d̪			ʈ ɖ		k g	(ʔ)
Aspirate d plosives	p ^h b ^h		t̪ ^h d̪ ^h			ʈ ^h ɖ ^h		k ^h g ^h	
Nasal	m			n				ŋ	
Trill				r					
Tap/Flap						ɽ			
Fricative				s					h
Approximant		w					y		
Lateral Approximant				l					
Affricates					tʃ dʒ				
Aspirate d affricates					tʃ ^h dʒ ^h				

North Munda languages have several retroflexes. Glottal sounds is heard at the word end position when the preceding vowel is open i.e /a/, glottal sound is followed by unreleased [g[̚]] sound. Therefore glottal [ʔ] may not be a phoneme but an allophonic variation of /g/, occurring word finally. The sound /g/ is seen to appear word finally mostly in borrowed words, where the words have been borrowed from Sadri or Hindi language. The absence of word ending in released /g/ sound in Asur language supports the above claim. Similar phenomenon can also be seen in Mundari which is also a language closely related to Asur,

¹ Instead of IPA symbol /t̪/ and /d̪/, for voiceless and voiced dental plosives, the symbols /t/ and /d/ will henceforth be used in the text for the purpose of simplicity and general readability.

sharing phonological, lexical and morpho-syntactic similarities with Asur. Main phonological difference between Asur and Mundari is that unlike Mundari, Asur does not have the phoneme /p/.

2.1.2 Minimal Pairs in Asur

Following are few minimal pairs that could be spotted in Asur lexeme.

/p/ and /b/

paɽi ‘able’ - baɽi ‘banyan’

/m/ and /ŋ/

sim ‘rooster’ - siŋ ‘tree’

/dʒ/ and /dʒʰ/

/dʒaiɽ/ ‘root’ - /dʒʰaiɽ/ ‘heavy continuous rain’

2.1.3 Consonants in Asur in Initial, Medial and Final position of words

Asur is constantly losing domains in which it is used. All the Asur speakers are speakers of at least one Indo-Aryan language. Words therefore are heavily borrowed from other languages, mostly Hindi and Sadri and so are sounds. For example, Asur does not have the phone [ʃ], but some speakers may pronounce this phone when using a borrowed word like [ʃam] ‘evening’. Certain sounds do not occur word finally in Asur phonology like /ɟ/, /dʒ/. Although these sounds do occur in the words borrowed into Asur lexicon from other languages, mostly Sadri and Hindi.

2.1.3.1 Plosives:

Voiceless bilabial plosive- /p/ can be found in word initial, medial and final position in Asur language.

Position	Example in Asur	Meaning
Initial	/puɽus /	‘ a wild flower plant’
	/pandʒ/	‘footprint’
Medial	/pipar/	‘peepal tree’
	/gapa/	‘tomorrow’
Final	/mikep/	‘once’
	/tip/	‘funnel’

Voiced bilabial plosive / b/ can be spotted in word initial, medial as well as final position in Asur language.

Position	Example in Asur	Meaning
Initial	/biŋ/	‘snake’
	/baha /	‘flower’
	/bair/	‘a small berry’
Medial	/ɖabni/	‘lid’

	/umbe/	‘ a kind of fruit’
Final	/kara:b/	‘bad’
	/hab/	‘to bite’

Voiceless Dental plosive /t/ may occur in word initial, medial or final position in Asur language.

Position	Example in Asur	Meaning
Initial	/tawa/	‘frying pan’
	/tala/	‘middle’
Medial	/situm/	‘sunlight’
	/utu/	‘vegetable’
Final	/ot/	‘land’
	/d ^h ait/	‘flame’

Voiced Dental plosive /d / appears in word initial, medial or final position in Asur language.

Position	Example in Asur	Meaning
Initial	/dao/	‘chopping knife’
	/dail/	‘pulses’
Medial	/bandra/	‘monkey’
	/baha/	‘flower’
Final	/me ^h ed/	‘iron’
	/ayub/	‘evening’

Voiceless Retroflex plosives /ʈ/ appears in word initial, medial or final position in Asur language.

Position	Example in Asur	Meaning
Initial	/ʈuku/	‘stone’
	/ʈeʈa/	‘chameleon’
Medial	/puʈus/	‘a wild flower plant’
	/ʈeʈa/	‘chameleon’
Final	/siloʈ/	‘grinding stone’
	/g ^h a:ʈ/	‘mountain slope’
	/roroʈ/	‘lizard’

Voiced Retroflex plosives /ɖ/ appears in word initial, medial or final position in Asur language.

Position	Example in Asur	Meaning
Initial	/ɖihi/	‘village’
	/ɖigʈi/	‘a cooking vessel’
Medial	/banda/	‘castrate’
	/biɖ/	‘to sow’
Final	/uɖ/	‘mushroom’
	/biriɖ/	‘to wake up’

Velar voiceless plosive /k/ appears in word initial and medial position in Asur language. Whenever it occurs in the word final position it is in the words which have been borrowed from Sadri like the word /muruk/ or Hindi as the word /saṛak/.

Position	Example in Asur	Meaning
Initial	/koraiya/	‘a flower’
	/kuru/	‘fir’
Medial	/puṭka/	‘a kind of fruit’
	/bakla/	‘peel’
Final	/saṛak/	‘road’
	/muruk/	‘very’

Velar voiced plosive /g/ appears in word initial and medial position in Asur language. It also occurs in word final position but it appears as a glottal sound or an unreleased /g̚/ sound.

Position	Example in Asur	Meaning
Initial	/gohom/	‘wheat’
	/galaŋ/	‘to weave’
Medial	/dogo/	‘saliva’
	/agu/	‘to bring’
Final	/sag/	‘a leafy vegetable’
	/muiŋg̚/	‘ant’
	/toreŋg̚/	‘ash’
	/uriŋg̚/	‘bull’

Glottal sound followed by unreleased /g/ i.e. [ŋg̚] and glottal [ʔ] appear to be allophones of the phoneme /g/. The two allophones manifest every time /g/ occurs word finally, except when the word is borrowed from Hindi or Sadri like the word /sag/. The glottal sound appears word finally every time /g/ is preceded by the open back vowel /a/, in all the other instances the unreleased phoneme [g̚] is also heard word finally along with glottal stop as its allophonic variant.

/oṛaʔ/	‘house’
/daʔ/	‘water’

2.1.3.2 Aspirated Plosives

Aspirated Bilabial Voiceless plosive/p^h/ occurs in word initial and word medial position, all the words in the with /p^h/ word finally are borrowed.

Position	Example in Asur	Meaning
Initial	/p ^h aṛa/	‘crack’
	/p ^h ikɾo/	‘black bulbul’
Medial	/nagp ^h ini/	‘water lily’
	/sarip ^h a/	‘custard apple’
	/dʒ ^h op ^h a/	‘bunch of something’

Final	/taklip ^h /	‘discomfort’
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Aspirated Bilabial Voiced Plosive /b^h occurs in word initial and word medial position in Asur language.

Position	Example in Asur	Meaning
Initial	/b ^h airta/	‘mashed food preparation’
	/b ^h alu /	‘bear’
	/b ^h adli/	‘small bat’
	/b ^h ijri/	‘tomato’
Medial	/lub ^h i/	‘Greedy’
	/ɖub ^h a/	‘bowl’
Final	--	

Aspirated Retroflex Voiceless Plosive /t^h occurs in word initial and word medial position, all the words in the with /t^h/ occurring word finally are borrowed. The word /pat^h/ has been borrowed from Sadri.

Position	Example in Asur	Meaning
Initial	/t ^h amɽu/	‘mudfish’
Medial	/lak ^h o gur/	‘a kind of sweet dry snack’
	/pat ^h ru/	‘a young goat’
	/g ^h aɽ ^h a/	‘ a boiled maize preparation’
Final	/pat ^h /	‘plateau’

Aspirated Dental Voiced Plosive /d^h occurs in word initial and word medial position, all the words in the with /d^h/ word finally are borrowed. The word /gid^h/ has been borrowed from Hindi.

Position	Example in Asur	Meaning
Initial	/d ^h atra/	‘Stramonium’
	/d ^h uka/	‘storm’
Medial	/d ^h id ^h ipao/	‘to boil’
	/gad ^h a/	‘donkey’
Final	/gid ^h /	‘kite’

Aspirated Retroflex Voiced Plosive /ɖ^h occurs very rarely in Asur language and mostly word initially.

Position	Example in Asur	Meaning
Initial	/ɖ ^h oŋra/	‘box’
	/ɖ ^h aɖɟa/	‘hillock’
Medial	---	---
Final	---	---

Aspirated Velar Voiceless Plosive /k^h appears in initial and medial position in Asur. Following are the examples.

Position	Example in Asur	Meaning
Initial	/k ^h aɽ ^h ra ɽɽauli/	‘mixed rice and grains’

	/k ^h usar/	‘owl’
Medial	/k ^h ak ^h ra/	‘crab’
	/pak ^h u/	‘land’
	/k ^h ok ^h ro/	‘rooster’
Final	---	

Aspirated Velar Voiced Stops /g^h/ occurs in word initial and medial position in Asur.

Position	Example in Asur	Meaning
Initial	/g ^h oʔo/	‘food’
	/g ^h eʔi/	‘female pig’
	/g ^h aila/	‘pot’
	/g ^h iu/	‘clarified butter/ ghee’
Medial	/t ^h ing ^h i/	‘a kind of leech’
	/reg ^h a/	‘coarse’
Final	---	

2.1.3.3 Nasals

Bilabial Nasal /m/ occurs in word initial , medial and final position in Asur.

Position	Example in Asur	Meaning
Initial	/musla/	‘pestle’
	/muŋa/	‘a flower’
Medial	/umbe/	‘a kind of fruit’
Final	/sim/	‘rooster’
	/merom/	‘goat’

Alveolar Nasal/n/ in Asur may appear word initially, medially and finally.

Position	Example in Asur	Meaning
Initial	/nawa/	‘new’
Medial	/mendʒra/	‘mouse’
Final	/sasan/	‘turmeric’
	/isin/	‘cooked’

Velar Nasal /ŋ/ does not appear in word initial position in Asur.

Position	Example in Asur	Meaning
Initial	---	
Medial	/muŋa/	‘a flower’
	/aŋor /	‘burning coal’
Final	/biŋ/	‘snake’
	/iŋ/	‘I’

2.1.3.4 Trill and Tap, Aspirated Trill and Tap

Alveolar Trill /r/

Position	Example in Asur	Meaning
Initial	/roroʈ/	‘lizard’
	/roʈe/	‘frog’
Medial	/roroʈ/	‘lizard’
	/saram/	‘deer’
	/hora/	‘way’
Final	/aŋor/	‘burning coal’

Retroflex Tap /ɽ/

Position	Example in Asur	Meaning
Initial	/ɽe/	Postposition ‘on’
Medial	/oɽaʔ/	‘house’
	/taɽi/	‘a kind of liquor’
Final	/tʰãɽ/	‘cold’
	/hoɽ/	‘human’

Aspirated Retroflex Tap /ɽʰ/ only appears in borrowed words like /loɽʰa/ ‘pestle’ borrowed from Hindi.

2.1.3.5 Fricatives

Asur language has two fricative phonemes /s/ and /h/. Phone [ʃ] may be heard sometimes from a few Asur speakers, this sound is heard in word borrowed from Hindi language.

Voiceless Alveolar Fricative/s/ may appear word initially, medially or finally in Asur language.

Position	Example in Asur	Meaning
Initial	/situm/	‘sunlight’
	/seyalom/	‘moss’
Medial	/sasaŋ/	‘yellow’
	/busuʔ/	‘paddy straw’
Final	/has/	‘soil’
	/das/	‘horse fly’

Voiceless Glottal Fricative /h/ occurs in word initial, medial and final position in Asur.

Position	Example in Asur	Meaning
Initial	/haɽiya /	‘rice beer’
	/haku/	‘fish’
Medial	/d̪ihi/	‘village’
	/baha/	‘flower’
Final	/oh/	interjection

2.1.3.6 Approximants

Voiced Labio-Velar Approximant /w/ can be seen to occur mostly in borrowed words.

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Position	Example in Asur	Meaning
Initial	/witʃar/	‘thought’
	/wapas/	‘return’
Medial	/piluwa/	‘worm’
	/tawa/	‘frying pan’
	/diwair/	‘shaman’
	/ruwaɾ/	‘back’
Final	---	--

Voiced Palatal Approximant /y/ appears mostly in borrowed words.

Position	Example in Asur	Meaning
Initial	/yad/	‘remember’
Medial	/ʃoya/	‘fish scale’
	/koraiya/	‘hiptage flower’
	/koyoʔ/	‘to peek’
Final	---	---

Voiced Alveolar Lateral Approximant /l/ appears word initially, medially as well as in the word final position.

Position	Example in Asur	Meaning
Initial	/laeme/	‘dig’
	/lad/	‘bread’
Medial	/nala/	‘drain’
	/bakla/	‘peel’
Final	/dael/	‘pulses’
	/arael/	‘hail’

2.1.3.7 Affricates

Affricates are stops that begin as plosive, but the release of the consonant is like a fricative. Asur has two postalveolar affricate phonemes /tʃ/ and /dʒ/.

Voiceless Post alveolar Affricate /tʃ/ may occur inword initial and medial position in Asur language. The words which have /tʃ/ in the word ending position are borrowed from Hindi or Sadri language. The word /tʃammaʃ/ has been borrowed from Hindi, so is the word /tʃuna/, /tʃampa/ and /dʒigtʃi/. But in the words /tʃalom/ and /k^hatʃali/ which occur in word initial and medial position do not seem to be borrowed.

Position	Example in Asur	Meaning
Initial	/tʃuna/	‘lime’
	/tʃmpa/	‘magnolia flower’
	/tʃalom/	‘tail’
Medial	/dʒigtʃi/	‘a cooking vessel’
	/k ^h atʃali/	‘a type of basket’
Final	/ tʃ ammaʃ/	‘spoon’

Voiced Post alveolar Affricate / dʒ/ just like /tʃ/ appears in word initial and medial position in Asur language, and whenever it occurs in the word final position it is in the words which have been borrowed from Sadri or Hindi, like the words- /kamidʒ/ and /tarbudʒ/.

Position	Example in Asur	Meaning
Initial	/dʒurʊ/	‘creeper’
	/dʒam/	‘black berry’
	/dʒara/	‘handkerchief’
Medial	/dʒadʒaoni/	‘touch-me-not plant’
	/sardʒom/	‘sal tree’
Final	/kamidʒ/	‘shirt’
	/tarbudʒ/	‘watermelon’

Aspirated Post alveolar Voiceless Affricate / tʃ^h/ appear mostly in borrowed words. It does not appear word finally in Asur.

Position	Example in Asur	Meaning
Initial	/tʃ ^h amka laq/	‘a kind of sweet bread made of rice flour and jaggery.’
	/tʃ ^h oʃi/	‘small/young’
	/tʃ ^h apit/	‘to vanish’
Medial	/batʃ ^h ru/	‘calf’
Final	---	---

Aspirated Post alveolar Voiced Affricate / dʒ^h/ does not seem to appear word finally in Asur language. /sodʒ^h/ is a borrowed word from Sadri.

Position	Example in Asur	Meaning
Initial	/dʒ ^h ipni/	‘rice sieve’
	/dʒ ^h urli/	‘a kind of fish’
Medial	/k ^h adʒ ^h ra cauli/	‘mixed rice and grains’
	/padʒ ^h ra/	‘water spring’
Final	/sodʒ ^h /	‘straight’

2.2 Vowels in Asur

There are three unrounded vowels in Asur - /i/ , /e/ and /a/ , and two rounded vowels /o/ and /u/. The five vowels in Asuri have allophonic variants, like /e/ may be heard as [ɛ], /a/ may appear as [ə],[æ] or [ɑ] and /o/ sometimes may be heard as [ɔ]. Vowel length is not phonemic in Asur language, which means that change in vowel length in utterances in Asur language would not bring about any change in the meaning.

2.2.1 Asur vowels’ formant representation

The following is the representation of format 1 and formant 2 of vowels as recorded during the fieldwork. The speaker is a 20 years old male, native speaker of Asur language. The chart is just a graphical representation of Asur vowels, of a few words recorded of an Asur speaker. For better understanding of

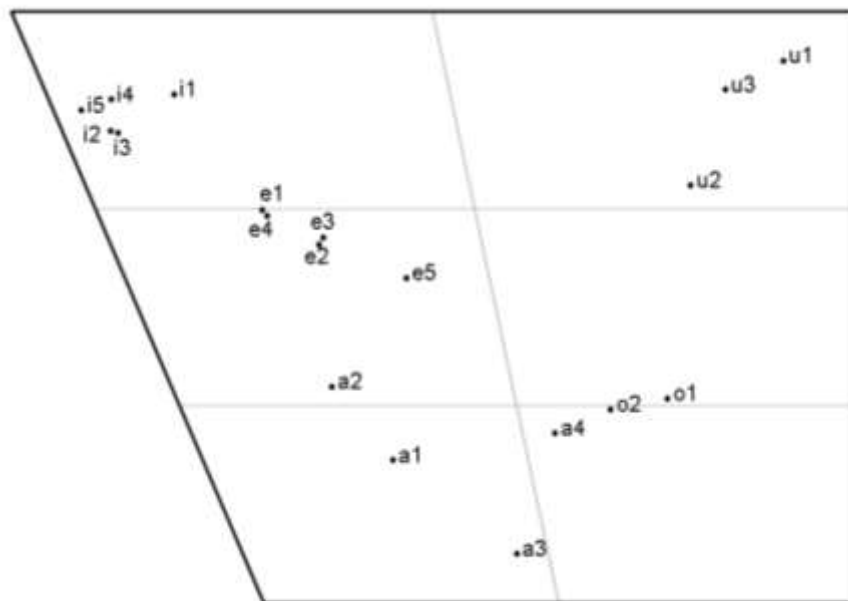
complete acoustic space of vowels in Asur, a more detailed study with multiple speakers of Asur is needed.

The table below shows the mean formant values of the phonemes as recorded, and the words in which they appeared.

Asur words	Meaning	Vowel	Label	Mean F1	MeanF2
/ikin/	'this'	i	i1	321	2036
/iŋ/	'I'		i2	358	2140
/tiŋ/	'my'		i3	360	2128
/d̪ihi/	'village'		i4	326	2139
/mi/	'one'		i5	337	2188
/pe/	'three'	e	e1	438	1892
/senme/	'go'		e2	473	1799
/senme/	'go'		e3	466	1792
/bera/	'time'		e4	444	1884
/ɽe/	'in'		e5	507	1656
/tayom/	'back'	a	a1	691	1678
/apa/	'father'		a2	617	1778
/alum/	'not'		a3	786	1475
/t̪aɽ/	'cold'		a4	664	1413
/hoɽ/	'man'	o	o1	629	1229
/okaɽe/	'where'		o2	640	1322
/d̪ʒumme/	'all'	u	u1	287	1039
/ruwaɽ/	'back'		u2	413	1191
/duɽu/	'sit'		u3	316	1134

Graphical representation of vowels in Asur²:

² The above vowel chart was made using <https://www.adambaker.org/formant-chart/formant-chart.html>



2.2.2 Vowels in Asur in Initial, Medial and Final position of words

Front Open Unrounded /a/

Position	Example in Asur	Meaning
Initial	/aŋor/	‘coal’
	/ape/	‘you’
	/aʃa/	‘flour’
Medial	/daʔ/	‘water’
	/saram/	‘deer’
Final	/koʃa/	‘boy’
	/sikʃa/	‘jackal’

Front Close-Mid Unrounded/e/

Position	Example in Asur	Meaning
Initial	/eneʔ/	‘dance’
	/e:ʃi/	‘heel’
Medial	/keʃeg/	‘strong’
	/te:ŋ /	‘up’
Final	/-re/	(locative marker)
	/roʃe/	‘frog’

Close Front Unrounded /i/

Position	Example in Asur	Meaning
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Initial	/iŋ/	‘I’
	/ipil/	‘star’
Medial	/ni:r/	‘fast’
	/dʒilin/	‘long’
Final	/kuɾi/	‘girl’
	/sukri/	‘pig’

Back Close Rounded /u/

Position	Example in Asur	Meaning
Initial	/usul/	‘tall’
	/uɖ/	‘mushroom’
Medial	/kul/	‘leopard’
	/gaduɖ/	‘dirty’
Final	/haku/	‘fish’
	/utu/	‘cooked vegetable’
	/batʰru/	‘calf’

Back Close-Mid Rounded /o/

Position	Example in Asur	Meaning
Initial	/oʃaŋo/	‘to fly’
	/ot/	‘land’
	/oŋ/	‘to blow through mouth’
Medial	/lolo/	‘hot’
Final	/lolo/	‘hot’
	/kʰokʰro/	‘rooster’

2.3 Diphthongs in Asur

Diphthongs are formed with the combination of two adjacent vowels within a syllable. A diphthong vowel starts with a certain monophthong vowel but at the end with sound of a different monophthong vowel.

	Initial	Medial	Final
ai	----	/gʰaila/ ‘pot’ /baiʰi/ ‘a kind of cutting instrument’ /pāiri/ ‘anklet’	/bilai/ ‘cat’
ae	-----	/laeme/ ‘dig’	/ellae/ ‘very’
ao	---	/lajaoni/ ‘touch me not plant’	/dao/ ‘chopping knife’ /manjʰao/ ‘used to wash’
au	/aur/ ‘and’	/ʃauli/ ‘rice’ /ʃhaur/ ‘trail’ /naura/ ‘mongoose’	-----
oi	-----	----	/goi //goe/ ‘death’
ou	-----	/ʃouli //ʃauli/ ‘rice’	-----
ui	/uihar/ ‘worry’	/aɾguime/ ‘take down!’	/sui/ ‘needle’

2.4 Consonant cluster

Consonant cluster can be seen in Asur words. But Asur phonology does not allow intra-syllabic consonant clusters. Consonants occurring next to each other belong to two different syllables one in the coda position of the first syllable and the other in the onset position of the next syllable. For example: /sar.dʒom/ ‘sal tree’ , /b^hidʒ.ri/ ‘tomato’. Only in the case of allophonic variation of /g/ where glottal stop is followed by unreleased /g/ that intra-syllabically two consonants can be seen to appear one after the other as in the word /mui?gʔ/ ‘ant’.

2.5 Gemination

When same consonantal phoneme is repeated back to back giving a consonant lengthening effect, this is called gemination. Consonant lengthening effect is due to the fact that the strictures in the vocal cavity are held for a longer period of time due to repetition of the same phoneme one after the other. The following are some examples of gemination in Asur:

1.	/iʃʃa/ ‘small prawn’
2.	/qabba/ ‘box’
3.	/ʃmmaʃ/ ‘spoon’
4.	/hukka/ ‘hukka’
5.	/gulli/ ‘grain’
6.	/maʃʃa/ ‘butter milk’
7.	/ʃirra/ ‘squirrel’
8.	/babba/ ‘father’
9.	/nummu/ ‘name’
10.	/umme/ ‘to blow’

2.6 Nasalization

Nasalization in Asur is not phonemic, it occurs in free variation. The absence or presence of nasalization does not affect the meaning of words. Following is the list of nasal sounds found in the recorded data. Nasalizations are consistently used in words borrowed from Hindi and in onomatopoeic words like words for animal sounds.

1.	t ^h ã:ɾ ‘cold’
2.	b ^h ã:ɾa ‘earthen pot’
3.	mahi: ‘curd’
4.	g ^h ã:s ‘grass’
5.	ãora ‘indian gooseberry’
6.	hãɾha ‘wolf’
7.	kõ-kõ ‘sound made by monkey’
8.	b ^h aĩs ‘buffalo’
9.	ʃĩ:ya ‘chick’
10.	ʃũ ʃũ ‘sound of rat’
11.	bã bã ‘mooing of buffalo’

12.	kē kē ‘sound of duck’
13.	gōe gōe ‘sound made by pigs’
14.	irēḍi ‘castor’

In the above examples 7, 10, 11, 12, and 13 are onomatopoeic words, reduplication of one or more syllables can be seen in onomatopoeic words. The onomatopoeic words of Asur can also be seen to repeat syllables in similar fashion.

2.7 Reduplication

Other than onomatopoeic words Asur has other words which show reduplication such as /dʒodʒo/ ‘tamarind’, /teteŋa/ ‘lizard’. Some examples of reduplication of syllables in Asur are given below:

1.	/dʒodʒo/ ‘tamarind’
2.	/teteŋa/ ‘lizard’
3.	/teṭebania/ ‘a kind of insect’
4.	/taŋap ^h ap ^h a/ ‘a kind of insect’
5.	/roroṭ/ ‘frog’
6.	/dirdiri/ ‘steep rugged slope’
7.	/dʒodʒom/ ‘to eat’
8.	/gidgida/ ‘sound made by flooded river’
9.	/dʒ ^h imir dʒ ^h imir/ ‘light rain’
10.	/sisir daʔ/ ‘dew’

Asur reduplication of words and morphemes also perform semantic function. For example:

/apan apan kami ke/ ‘Do your own work’

Here /apan/ which is a reflexive pronoun is reduplicated to pluralize. The reduplicated reflexive means ‘each their own’.

/lolo lolo daʔ/ ‘hot hot water’

The reduplication of the adjective hot performs the semantic function of intensification of the adjective.

/duṛu duṛu/ ‘sit sit’

Reduplication of verb in Asur conveys continuity of action. In example (c) the verb ‘sit’ i.e. /duṛu/ is reduplicated to show continuity of the action.

2.8 Syllabic Structure

Sound system of Asur does not allow consonant clusters in a syllable. Following are some examples of syllabic structures of Asur words:

1.	/a.ha/ ‘mouth’	V.CV
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2.	/ak ^h .riŋ/ ‘to sell’	VC.CVC
3.	/ba.bat/ ‘itch’	CV.CVC
4.	/bai.ga/ ‘village priest’	CVV.CV
5.	/sik.ta/ ‘jackal’	CVC.CV
6.	/bi.lai/ ‘cat’	CV.CVV
7.	/ui.har/ ‘to worry’	VV.CVC

Based on the above kinds of syllabic structures found in language, it can be said that Asur allows syllabic structures V, CV, VC which can be represented as (C)V(C) and when there are diphthongs, the structures VV and CVV can be seen which may be represented as (C)VV.

In the above examples where there are intervocalic consonants, we can see Maximal Onset Principle being followed like most languages. In /ba.bat/, /bi.lai/ and /a.ha/ we can see the intervocalic consonants form onset of the latter syllable. According to Maximal Onset Principle, the consonants which are intervocalic should be considered onset first as long as there is no violation in sonority hierarchy.

2.9 Morphophonemic adaptation of borrowed words

Whenever a verb from Hindi or Sadri is borrowed into Asur it the sound /ao/ is added to the verb root of the borrowed verb to form the verb root or the infinitive verb structure in Asur:

Sl. No.	Hindi Verb Root		Phoneme addition		Asur Verb Root	Meaning
1.	/bai ^h /	+	/ao/	→	/bai ^h ao/	‘sit’
2.	/bana/	+	/ao/	→	/banao/	‘make’
3.	/ba ^h /	+	/ao/	→	/ba ^h ao/	‘increase’
4.	/bud ^h /	+	/ao/	→	/bud ^h ao/	‘understand’
5.	/daba/	+	/ao/	→	/dabao/	‘control’
6.	/ʃal/	+	/ao/	→	/ʃalao/	‘work’
7.	/d ^h o/	+	/ao/	→	/d ^h oao/	‘wash’
8.	/gal/	+	/ao/	→	/galao/	‘melt’
9.	/soʃ/	+	/ao/	→	/soʃao/	‘think’
10.	/tal/	+	/ao/	→	/talao/	‘fry’
11.	/toʃ/	+	/ao/	→	/toʃao/	‘break’

This phenomenon is seen whenever borrowing from Sadri or Hindi verbs take place, although borrowed nouns and other words may experience no phonological change. For example, /bes/ ‘good’, /tawa/ ‘frying pan’ are also borrowed words which do not undergo any change. Verbs in Asur which have not been borrowed from other languages do not usually end in /ao/, for example : /duʃu/ ‘sit’, /siriŋ/ ‘sing’, /dʒom/ ‘eat’, /sen/ ‘go’.

3.0 Summary and Conclusion:

Asur phonology has the following main features:

1. Asur consonant inventory constitutes of the phonemes /p/, /b/, /t/, /d/, /tʰ/, /dʰ/, /k/, /g/, /pʰ/, /bʰ/, /tʰ/, /dʰ/, /tʰ/, /dʰ/, /kʰ/, /gʰ/, /m/, /n/, /ŋ/, /r/, /ɽ/, /s/, /h/, /w/, /y/, /l/, /ʃ/, /dʒ/, /tʃ/, /dʒʰ/. (/t/ and /d/ are dental plosives). The allophonic variants of /g/ are [ʔ] and [ʔg̟].
2. /i/, /e/, /a/, /o/, /u/ are the vowels in Asur language. [ɛ] is the allophone of /e/, [ə], [æ] or [ɑ] are the allophones of /a/ and [ɔ] is the allophonic variant of the phoneme /o/.
3. In Asur phonology vowel length and nasalisation is not phonemic.
4. Asur does not have intra syllabic consonant clusters.
5. In Asur reduplication of syllables can be seen within words and also reduplication of morphemes can also be seen. These reduplications may also have some semantic effect.
6. Asur syllables have the structure (C)V(C) or (C)VV.

As Asur is an endangered language which not only has very few speakers left but is also under threat due to increased usage of lingua franca like Hindi and Sadri. The domains of usage of Asur are therefore constantly shrinking. People of Asur community are also migrating to other places in search for jobs, and the medium of primary education and languages spoken at workplaces are Sadri and Hindi. The paper points out several instances of lexical borrowing from Hindi and Sadri as it has been commonly recorded in speech of Asur native speakers. This renders Asur in an urgent need for documentation and its implementation in primary education.

4.0 References

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