

English Loans in Assamese : A Phonological Account

Hemanga Dutta, English and Foreign Languages University, India

The IAFOR International Conference on Language Learning – Dubai 2016
Official Conference Proceedings

Abstract

Loanword adaptation is always fascinating as it bears the traces of native phonology, default settings of Universal Grammar, and adaptation as perception and perceptual similarity (Kang, 2010). This paper deals with the loanwords in Assamese phonology which are borrowed from English with reference to the constraint ranking approach embedded within Optimality theory (Prince and Smolensky 1993). Although Assamese, an Indo-Aryan language spoken in the north-eastern part of India shares some commonalities with English phonology, both the languages are characterized by language specific phonemic inventories and phonotactic principles. This paper shows the phonological processes that loanwords undergo, and patterns that emerge as a result of this process of borrowing not only at the segmental level but also at the syllabic level. The main purpose of this paper lies in showing how the Assamese phonology repairs borrowed syllables and segments derived from English.

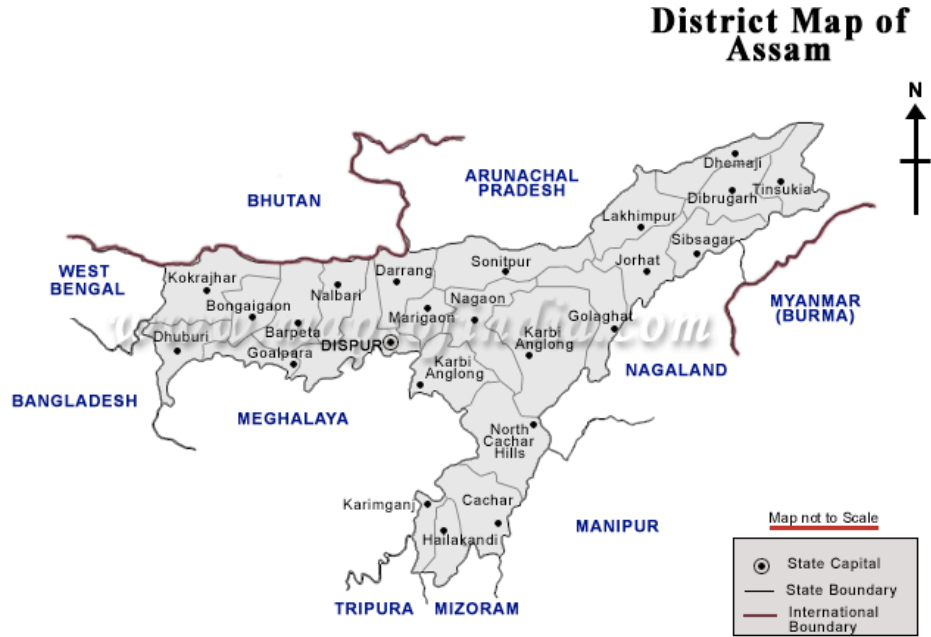
iafor

The International Academic Forum

www.iafor.org

Introduction:

Assamese is spoken in the north-eastern part of India (in the state of Assam) and its neighboring areas. It is an Indo Aryan language.



Copyright (c) Compare Infobase Pvt. Ltd. 2001-02

Assamese language has many varieties which are shown below in a figurative representation.

THE ASSAMESE LANGUAGE

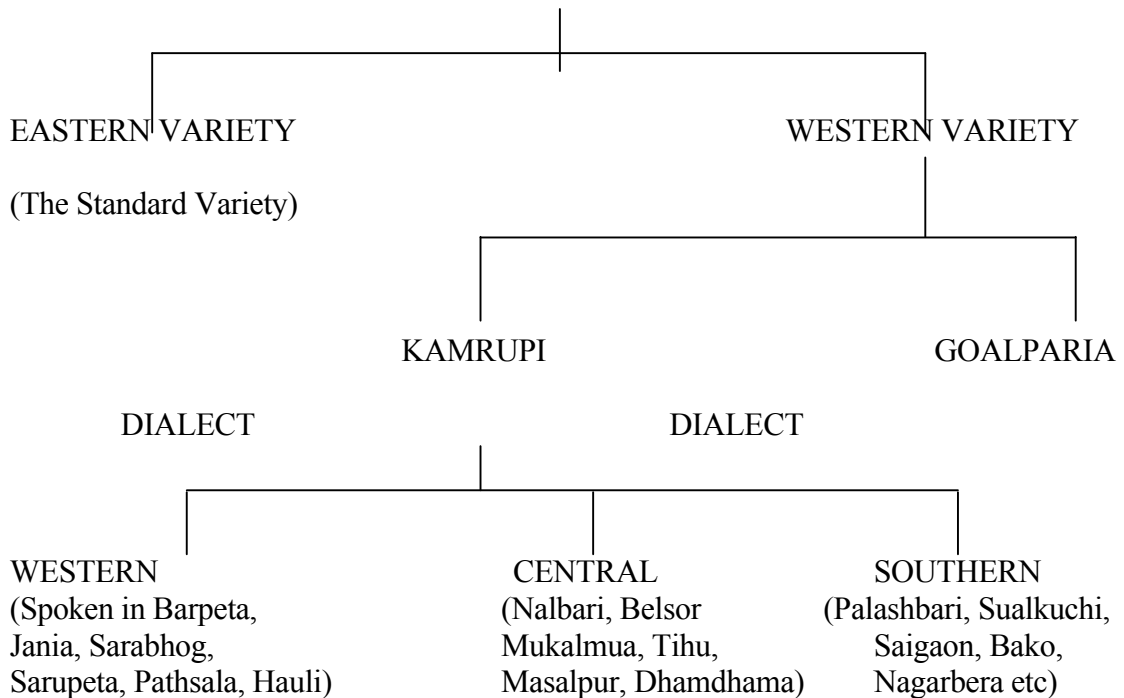


Figure: Dialects of Assamese according to Kakati (1941)

English and its influence in Assamese

In the present day Indian scenario, English is predominantly the language of wider communication. Kachru (1983) said “In India, English is the only language with an all-India circulation; it offered itself as neutral link language across diversity”. Its use has been increasingly persistent, which was not foreseen by the framers of the Indian constitution. The Indian constitution recognizes 22 National languages, with Hindi being the official language and English, the link language with a decree that English was to be replaced by Hindi in a period of 15 years. For obvious reasons, English has prospered very much in the post-independence era.

In the state of Assam too in government and academic institutes Assamese along with English are used as a medium of instruction. Most of the private corporate organizations use exclusively English for the optimal functionality and wider visibility. As a result, there is abundance of English loan words in Assamese vocabulary and in the course of time these words have been phonologized.

In the next section I am going to explore different phonological processes that loan words in Assamese have undergone. The changes in loan words are expressed in constraint ranking within Optimality theory (Prince and Smolensky, 1993).

Process of substitution involved in Assamese loanwords derived from English

While some sounds undergo deletion others adopt the repair strategy such as substitution by sounds which are available within the domain of Assamese phonotactics. The process of epenthesis is very common at the syllable level. The loanword adaptation in Assamese can be divided into two levels: segmental level and syllable level.

Substitutions in onset positions:

- a) Affricates turn into fricatives
- b) Fricatives become aspirated stops in onset position.
- c) Voiceless dental fricative also turns into an aspirated stop in the coda position
- d) Voiced dental fricative does not aspirate.

i. /ch/ becomes /s/ in the onset

English	Assamese	Gloss
Chein	sein	‘chain’.
Chicken	siken	‘chicken’

ii. /f/ is substituted by /ph/ in the onset

English	Assamese	Gloss
Frai	phrai	‘fry’
Fæn	phan	‘fan’

iii. /v/ becomes /bh/ in the onset

English	Assamese	Gloss
væn	bhæn	‘van’
vo:t	bhut	‘vote’

iv. /θ/ becomes /th/ in onset as well as coda position

English	Assamese	Gloss
θri:	thri	'three'

vi. /ð/ becomes /d/ in onset

ð is	dis	'this'
------	-----	--------

Analysis of some of the processes in OT model:

/frai/	*[+cont, -strident]/σ[IDENT[turbulence]	*[+spreadgl]	IDENT-[cont]
a) φ /phrai/			*	*
b) /frai/	*!			
c) /prai/		*!		*

Table: Representation of substitution of /f/ with /p^h/

The constraints considered in the above tableau are:

*[+cont, -strident]/σ[- : Avoid clusters with continuant and non strident in word initial position.

IDENT [turbulence]: the turbulent airflow of aspiration is reflected in the frication of [f]

*[+spreadgl]: The feature spread glottis is prohibited.

Ident -[cont] : Corresponding segments must agree in terms of the feature continuant. Here to get the optimal candidate a) /phrai/ the ranking of the constraints I have proposed is:

[+cont, -strident]/σ[- >> IDENT [turbulence] >>[+spreadgl] >> Ident -[cont]

In the same way the English phoneme /v/ is substituted by /bh/ in word initial position in Assamese. However, in Assamese word final position /ph/ and /bh/ spirantize to /f/ and /v/ in order to preserve aspiration as high turbulence in a context where the cues to aspiration are minimized (Dutta& Kenstowicz 2015, Steriade 1997). For, illustration consider the following tableau:

bh#	*[labial,+spreadgl]#	IDENT[turbulence]	ID-[contin]
bh#	*!		
φ v #			*
b		*!	

In the same way it is observed that in the Assamese phonemic inventory affricate sounds are not available. Hence the borrowed words from English with these sounds are always substituted by closest sounds with similar place of articulation Consider the following example :tʃikən>sikən

Explanation through OT tableau

tʃiken	[*delayed release]	*[Cor, -ant]	Ident[strident]	Ident[cont]
☞ siken				(*)
tʃiken	*!	*		
ʃiken		*!		(*)
tiken			*!	(*)

Here, the constraints [*delayed release] is higher ranked over *[Cor, -ant] and Ident[strident], Ident[cont].

4. Consonant clusters, syllabic consonants of English and loanword phonology:

Loan words adaptation patterns are perceived at syllable level too. In English phonology the segments /m/, /n/, /l/ /r/ functions as the nucleus or syllabic consonants. But in Assamese these consonants cannot act as syllabic consonants which leads to the emergence of epenthetic vowels in order to conform to the syllable structure of Assamese phonology:

/teibl/ <table> /tebul/
 /botl/ <bottle> /botol/
 /kotn/ <cotton> /koton/
 /pædl/ <paddle> /pædɛl/
 /sadm/ <sudden> /saden/
 /tækl/ <tackle> /tækul/
 /ga:gl/ <gargle> /gargul/ /
 /babl/ <bubble> /babul/
 /kazn/ <cousin> /kazin/
 /chænl/ <channel> /senel/
 /hospitl/ <hospital> /hospital/
 /neison/ <nation> /nɛsɔn/
 /pæʃn/ <passion> /pɛsɔn/

Explanation through OT tableau:

/teibl/	*Peak [+cons]	*OR	DEP-IO	ALIGN-R	Contiguity
a) ☞tebul			*		*
b) teib	*!				
c) teibl		*!			
d) teblu			*	*!	

Here the constraint *Peak [+cons] bans candidate (b) from becoming the optimal candidate. Candidate (c) is not allowed as it violates the constraint DEP-IO and ALIGN-R in the sense that /l/ is more sonorous than /b/. So the winner is the candidate (a) which has the least number of violations.

From the examples of the loanwords it is clear that Assamese does not allow a word ending with a cluster /ʃn/ which is very common in English. Assamese employs the repair strategy of epenthesis to satisfy the phonotactic criteria of the language. In order to capture this notion in OT consider the following constraints:

*OR: words can't end with an obstruent followed by a sonorant

*[+cont, -ant] : ban the clusters comprising a continuant and non-anterior sounds
 DEP -V : don't insert a vowel
 ID [ant] : Corresponding segments must agree in terms of the feature [anterior]
 Consider the example :ʃn# >sɔn

ʃn #	*OR	* [-ant]	Dep-V	IDENT-[ant]
ʃn	*!	*		
sn	*!			*
ɔsɔn			*	*
ʃɔn		*!	*	

Here the optimal candidate is [sɔn#], as per the constraint ranking *OR >> * [-ant] >>Dep-V>>*IDENT (ant)

CC Initial Cluster with Plosive as the First Member and approximant as the second member not allowed in loanwords in Assamese phonology.
 First Member Second Member

/twin/ <twin> /tuin/
 /tju:n/ <tune> /tiun/
 /kwik/ <quick> /kuik/
 /kjuə/ <cure> /kiur/
 /bju:ti/ <beauty> /biuti/
 /dwel/ <dwel> /duel/

/twin/	*C glide	Ident[syllabic]
a) twin	*!	
b) tuin		*

Here, the OT tableau shows that the constraint *C glide bans the candidate [twin] to become the optimal candidate.

Even the distribution of the epenthetic vowel is conditioned by phonotactic conditions.

C N - Cɔ N
 R - aR
 T L - Tɔ L/ T u L

teibl	*Peak (+cons)	*[p,k] [ɔ]	Dep [u]	Dep [ɔ]
ɔtebul			*	
tebol		*!		
Tebl	*!			

The distribution of vowel qualities can be highlighted with reference to two different loan words 'sample' and 'medal'.
 English word [sæmpɫ] 'sample' becomes [sæmpul] in Assamese loan word adaptation

	* *ə	*C 	Max (Dors)	Dep (a)	Dep (e, o)	Dep (U)	Dep (i)	Dep (ə)
a. sæmpɫ	*! +cons)	(peak	*					
b. sæmpɪ	*! (OR #)		*					
c. sɛmpʊl					*			
d. sɛmpɪl			*!				*	
e. sɛmpəl	*! (ə)		*					*
f. sɛmpəl			*	*!				

But, ‘medal’ [mædɫ] becomes [mɛdɛl] not [mɛdul]

Here, I am considering one more constraint ‘Harmony’ to get this optimal candidate.

/mædɫ/	*C (+syllabic)	Harmony	Max (Dors)	Dep (a)	Dep (e,o)	Dep (u)
a. mɛdl	*		*			
b. mɛdul		*!				*
c. mɛdɛl			*		*	

Here, Harmony >> Max (Dors)

Harmony: V must agree in height (+/- high) and backness with a preceding mid vowel.

Geminates and loanword phonology in Assamese

Assamese speakers tend to pronounce some English words with word medial gemination of the obstruent followed by /r/ and /l/. But the original English words are not pronounced as geminates. The reasons can be attributed to orthography, and the native stress pattern of the borrowing language.

English	Gloss	Assamese loan word
/metrik/	<metric>	[met.trik]
/metro/	<metro>	[met.tro]
/petrol/	<petrol>	[pet.trol]
/saplai/	<supply>	[sap.plai]
/sapres/	<suppress>	[sap.pres]
/riplai/	<reply>	[rip.plai]
/riplei/	<replay>	[rip.ple]
/prokleim/	<proclaim>	[prok.klem]

However following are some examples where such changes are prohibited:

/atlas/	<atlas>	*[at.tlas]
/kaindli/	<kindly>	*[kaind.dli]
/badli/	<badly>	*[bad.dli]
/kastrol/	<Castrol>	*[kast.trol]
/pa:stre/	<pastry>	*[past.tri]

One way of approaching this issue is by correlating the stress with weight of the syllable or the Stress to Weight principle. Mohanta (2004) claims that Assamese initial syllables bears primary stress in majority of the cases. This constraint SWP is ranked above Syllable Contact Principle and it leads to the emergence of geminated loans in Assamese phonology.

SWP: Assign a violation if the stressed syllable is not heavy.

Now consider the candidate: /petrol/

/petrol/	SW P	SYLCONTAC T	Ident[long] -C	*COMPLEXON S	NOCOD A	NO- GE M
pet. rol		*!			*	
pe.trol	*!			*		
☞pet.tro l			*	*	*	*

As far as the prohibition of geminates in certain loans is concerned (such as atlas) we have to invoke a markedness constraint *tl which bans complex onsets with tl.

Now consider the example /atlas/

/atlas/	*tl Onset	Syllable Contact
☞at.las		*
at.tlas	*!	

Here the constraint ranking is
*tl >> Syllable Contact.

Loanword phonology and S-cluster English words in Assamese:

It is interesting to note that majority of the Assamese learners of English in rural areas insert [i] at the beginning of a cluster that starts with fricative /s/ (Baishya, A.K. 2010).

stei:fn	is.te.son	station
sku:l	is.kul	school
spi:k	is.pik	speak
skrin	is.krin	screen
skutər	is.kutar	scooter
split	is.plit	split
smaɪl	is.maɪl	smile
sneɪl	is.neɪl	sneil

However, whenever the word begins with sibilant /s/ and lateral /l/, the repair strategy does not result in prosthesis but epenthesis. The vowel is inserted not at the beginning of the cluster but in the middle of the cluster.

Slet	silet	slate
slo:	solo	slow
slop	solop	slope

Consider the following tableau given below:

/skul/	*COMPLEX	DEP	SYLLABLE CONTACT	CONTIGUITY
skul	*!			
☞ is.kul		*		
si.kul		*		*!

Table : Representation of the phenomenon of epenthesis at the edge in Assamese

In the above tableau SYLLABLE CONTACT is not violated and hence CONTIGUITY ensures that edge epenthesis is optimal. So from this tableau and the following one it is revealed that SYLLABLE CONTACT determines the epenthesis site: at the edge for falling sonority clusters like s-stop and internal epenthesis for rising sonority clusters. This outcome can be expected as long as SYLLABLE CONTACT is ranked above CONTIGUITY; its ranking in relation to DEP is not crucial. This pattern is an Emergence of the Unmarked effect. The same tableau can be used to describe the prosthesis process of s with nasal clusters.

As far as the questions pertaining to the disparities between the repair strategies for sl cluster words and st or sk or sn cluster words, we can address them by invoking the violation of the Syllable Contact Principle.

Syllable contact: Penalize a coda-onset sequence in which the sonority of the coda is x degrees lower than the onset i.e. avoid heterosyllabic clusters of rising sonority.

Consider the example : ‘silet’

slet	*Complex	Dep-V	SyllableContact	Contiguity
a)slet	*!			
b)is.let		*	*!	
☞ c)si.let		*		*
d)sleti	*!	*		

S+nasal clusters do not violate Syllable Contact Constraint since in this word the sonority distance between coda and onset cluster is not 2 or greater but only 1.

sneil	*Complex	Dep-V	SyllableContact	Contiguity
a)snel	*!			
b)☞ is.nel		*		
c)si.nel		*		*!
d)sneli	*!	*		

Conclusions: Here I have shown as how Assamese phonology adopts different repair strategies to incorporate borrowed syllables and segments in to its native phonotactic domains. Such kinds of analysis can give us insights in to the specific segmental patterns that loanwords exhibit. The patterns are not random but very systematic as the pattern of adaptation is a reflection of language specific facts of the native phonology.

Further research can be focused on the phonetic factors embedded within the loans adaptations and perceptual factors accounting for adaptation patterns. Even in the future an endeavor should be made to identify the grammar external factors for such loan adaptations.

References

- Baishya, A.K. 2010. 'Phonology of English Loan Words in Assamese'. Assam University Journal, Humanities and Social Sciences, vol. V, no.1. Silchar: A.U.
- Calbrese, A. 2009. Perception, Production and Acoustic inputs in Loanword Phonology. In *Calabrese and Wetzel*(2009), 59-114.
- Haffernan, K. 2005. Phonetic Similarity and Phonemic Contrast in Loanword Adaptation. *Toronto Working Papers in Linguistics* 24, 117-123.
- Kachru, B. 1983. *Indianization of English*. Oxford University Press.
- Kachru, B.B. 1999. Englishization and Contact Linguistics. *World Englishes* 13, 135-151.
- Kager, R. 1999. *Optimality Theory*. Cambridge : Cambridge University Press.
- Khan, A. 2011. Phonological Adaptation of English Loanwords in Pahari. *Language in India* 11, 61-73.
- Kakati, Banikanta. 1941. *Assamese : Its formation and development*. Guwahati, Assam: LBS Publications.
- Mohideen, S. 2009. A Study of English Loan Words in Selected BhashaMelayu Newspaper Articles. *Language in India* 9, 14-205.
- Nagarajan, Hemalatha. 2014. Constraints through the ages: Loan words in Bangla. *The EFL Journal*.
- Prince, A. and P. Smolensky. 1993. *Optimality Theory: Constraint Interaction in Generative Grammar*. Ms., Rutgers University, New Brunswick and University of Colorado, Boulder. Later published as in 2004 from Blackwell Publishing, Malden, MA.
- Gouskova, M. 2002. Falling Sonority Onsets, Loanwords and Syllabic Contact. In M. Andronis, C. Ball, H. Elston and S. Neuval (eds.) *CLS 37: the main session. Papers from the 37th meeting of the Chicago Linguistic Society* (pp. 175-186) Chicago: The Chicago Linguistics Society.
- Kang, Y. 2010. Loanword Phonology. Accessed on 10 February 2012 from www.individual.utoronto.ca/yjkang/TBC_100.kang.pdf.