

### 1.0 Introduction

Syllables in Noakhali Bangla (henceforth NKB) are the focused points of the present paper. A close look at the dialectal communication finds out the fact that the unmarked syllables in NKB tend to have the simple straight forward segmental combinations. Such combinations avoid any kind of complexity at the syllable margins, i.e. consonant clusters both syllable-initially and syllable-finally. So the literature of syllable formation in NKB tends to satisfy the following two requirements: (i) The canonical syllables in NKB should have either of the structures as CV or CVC or VC or maximally V. (ii) The clustered syllables those are prevalent in Standard Colloquial Bangla (henceforth SCB) and those are also used in NKB, are the subjects to be modified through few clusterbreaking repair strategies.

#### 2.0 Syllables in Noakhali Bangla

are ensured in the dialectal practice.

Syllable, the significant phonological unit has varied internal structures across the world's languages. Except the central obligatory vowel element, the presence of the marginal releasing and arresting consonants in the syllable is languagedepending. The initial and final consonant combinations are also language specifically preferred. Some languages prefer consonant clusters both in the onset position and the coda position (English), some languages prefer it at either positions, and some totally disallow consonant clusters. For example, the Hawaiian and Samoan do not permit consonant clusters, they have only open syllables, as Meli Kalikamaka is the Hawaiian version of Merry Christmas (Akmajian, Demers, Farmer and Harnish 2001:103). Yoruba, a major Nigerian language permits only open syllables or codas of /µ/ and /v/, as in  $\kappa\epsilon \Leftrightarrow \rho\epsilon \Leftrightarrow \sigma\iota\mu\epsilon\sigma\iota$  Christmas and  $\sigma\iota \Leftrightarrow \tau \circ \Leftrightarrow v\upsilon\exists$  stone. The classical Arabic and many other varieties of Arabic modern colloquial forms admit no initial cluster at all, but allow final clusters of two or three consonants. On the other hand, the Caucasian language Georgian permits initial clusters of two to six items, e.g.  $\pi\rho\tau\sigma\kappa\sigma\nu\alpha$  to peel. Pollish allows a wide variety of initial clusters, both the initial and final consonant clusters allow almost any combination of two or more consonants: πσζχζολα, πτοκ, etc.

Across the world's languages the most common type of syllable has the structure CV(C) (Akmajian, Demers, Farmer and Harnish 2001:126). The marginal C segments are optional in forming a syllable. The middle V segment is the nucleus of the syllable without which no syllable formation is possible. The standard syllable structure CV cross-linguistically is called core syllable. Yet languages permit more than one marginal segment for a syllable, although one V segment remains compulsory for any syllable. For example, English permits up to three initial consonant to form an onset and up to four consonants to form the coda, as in spriN spring and tempts tempts respectively. Bangla or the Standard Colloquial Bangla (SCB) commonly prefers up to two consonants for syllable initial position, as in pran life, but no C combination for coda position. But in the NKB variety, any kind of consonant cluster is completely disallowed, and so the syllables with such consonant clusters are considered as marked syllable in the dialect. The unmarked and marked syllables in NKB are like:

#### (1) NKB Unmarked Syllables

CV	μα	'mother'
	γα	'body'
CVC	βαπ	'father'
	ρα□	'poverty'
VC	αμ	'mango'
	ι	'bricks'
V	'yes ok etc.'	
	Θ)	'yes etc.'
	α)ι	'l or me'

#### (2) NKB Marked Syllables

*CCV	*πραν	'life'
	*κλασ	'class'
	*σπορ.δ5Ηα	'audacity'
	*σκυλ	'school'

However, among the four types of unmarked syllable structures in NKB, the first three are major syllable structures and last one is very rare in number and also very weakly formed as it lacks at least a consonant to form either an onset or a coda. Sabine Lappe (2007: 209) while analyzing monosyllabic truncated forms in English asserts that truncated syllables consisting of one single vowel are impossible for the lack of an either marginal consonant. In that context, he refers to the Optimality Theoritic constraint as CONSONANT (CONS), (Grijzenhout & Penke 2004: 10), which requires that every word contains at least one phase which is characterized by an oral closure, i.e. every word has at least one consonantal place of articulation. Since in NKB also, the V structured syllable may form a monosyllabic word, such syllable can be treated as weak in comparison to the rest three types. It is in fact, for this reason that such V type monosyllabic words are very rare in number. It is more irregular than it is unmarked in the dialectal practice.

#### 3.0 Avoidance of Marked Syllables in NKB

Cluster avoidance in NKB is realized through the proper application of four repair strategies. In the following four subsections, the four strategies and their natures will be taken into account in detail.

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## 3.1 Vowel Epenthesis

Vowel epenthesis means inserting a vowel in between the clusters. The insertion re-syllabifies phonologically complex forms into the new non-clustered phonologically unmarked forms. Universally ranked constraints shows that front vowels are more marked than back and that round vowels are marked. Languages may vary in how they rank the markedness of low and non-low vowels (Lomberdi 2002). It is the fact that the most unmarked vowel or vowels are epenthetically inserted. If the language has more than one unmarked vowel, the epenthesis will be as - first the most unmarked vowel and then the relatively less unmarked vowels. However, there exists no hard and first rule for deciding the epenthetic segments across languages. While epenthetic vowel is concerned, /i/ and / / are cross-linguistically selected as epenthetic vowels (Kager 1999: 125). NKB employs both these and an additional /O/ what is specifically unmarked in the dialect. NKB also has another interesting kind of epenthesis i.e. the copy epenthesis. In this process the vowel segment following or preceding the cluster is copied and then it is inserted in between the cluster of the input SCB phonological forms, as in sri à siri sri or mister. So in V-epenthesis, the first possibility is to insert an / / segment, then  $\Theta$  / segment and at the maximum possibility the adjacent V of the cluster is copied to break the cluster:

### (3) / / Epenthesis in NKB

SCB	NKB	Gloss
προστ5αβ	η .ρ σ.τ5αβ	ʻa proposal/a topic/a storyʻ
πραν	η .ραν	'life'
γραΣ	γ.ρΣ	'Mouthful'

### (4) /Q/ Epenthesis in NKB

SCB	NKB	Gloss
gram	γΘ.ραμ	'village'
glaS	γΘ.λαΣ	'glass'
klaS	κΘ.λαΣ	'class'

## (5) Copy Vowel Epenthesis in NKB

SCB	NKB	Gloss
klip (Eng.)	κι.λιπ	'clip'
film (Eng.)	□ι.λιμ	'film'
sri	σι.ρι	'mister'

### 3.2 Consonant Deletion

Consonant deletion is the second unmarked mechanism to avoid marked (clustered) syllables in NKB. While V-epenthesis breaks consonant clusters by inserting few language specific unmarked V segments, C-deletion rules out the clusters by deleting the 'secondary' extra C from the CC combination in SCB syllable. It is 'secondary' in the sense that particularly the C-2 of SCB CC combination is a common subject to be deleted. It happens in only one special case that the C-2 is retained and C-1 gets deletion from the syllable. This specialty involves the deletion of the C-1  $/\sigma$ / that is followed by the voiceless labial stop  $/\pi/$ , as are found in  $\Box \sigma \Box$  and  $\Box \rho \Sigma$ corresponding from SCB sp  $\Sigma$ .  $\Box o$  clear and sp  $\rho$ .  $\Sigma o$  to touch respectively. It is to be mentioned that this  $/\sigma\pi/$  combination can also be broken by V-epenthesis, as is in  $\sigma\pi o \rho.\delta 5 H \alpha$  $\alpha\Sigma.\square~\rho.\delta5\alpha.$  However, this incident of deleting the first C (C-1) is also found in an English-based creole language Sranam spoken in Surinam on the Caribbean coast of South America (Alber and Plag 1999). For example, story à tori, stand à tan, speak à piki etc.

In SCB CC clusters, the C-2 can any one of the set as  $/\rho~\lambda$  v  $\pi$  t5 t5H  $\kappa/$ . Among them the  $/\rho/$  is the regular subject of C-deletion in NKB, while the others are practiced in V-epenthesis mechanism. In SCB CC clusters, the C-2 co-exists with

a preceding obstruent as one of the set / $\kappa$  KH  $\gamma$   $\gamma$ H  $\delta$ 5  $\delta$ 5H  $\tau$ 5  $\Box \Box \pi \beta \beta$ H  $\sigma$ / or one of the two nasals as / $\mu$  v/. In such cases, whatever the C-1 be, the C-2 / $\rho$ / gets total deletion resulting an unmarked syllable (CV or CVC) in NKB:

### (6) C-2 /r/ deletion in NKB syllables

κρι.Σι	κι.Σι	'agriculture'
κΗρισ.□αν	κΗισ.□αν	'Christian'
□ραμ	$\Box \alpha \mu$	'dram or barrel'

#### 3.3 Metathesis

Another instance of repair strategy for phonotactic optimization for the NKB unmarked syllable is metathesis. As the C-deletion breaks the Cr type clusters by deleting  $\rho$ / sound, metathesis there employs an interesting process of cutting the V from CpV type syllable and then paste it just before the  $\rho$ / of CpV, resulting a CVp type output syllable. For example:

#### (7) Metathesized syllables in NKB

κριμι	κιρ.μι	'worm'
τ5ρι.κυ□	τι5ρ.κυ□	'fault'
τ5ρι.π λ	τ5ιρ.π λ	'a mat'

As in the copy epenthesis the adjacent V is copied and pasted within the CC cluster, in metathesis, the technical procedure is not solely limited to 'copy-paste', it is actually 'cut-paste'. Cutting completely the adjacent V, this process pastes it in between the marked C-combination (SCB) so that an unmarked syllable in NKB can be optimized. For this metathesis, the /u sound is the most favorite V segment, while / and /a/ are also occasionally function as the 'cut-paste' V of metathesis in NKB unmarked syllable. For example, the form  $\beta p.\mu \alpha$  is correspondent from SCB  $\beta po\mu.\mu \alpha$  Hindu God of fire.

### **3.4 Total Substitution**

The last procedure for marked syllable avoidance in NKB is the use substitutive forms, regardless of the direct correspondence between the SCB input and NKB output forms. The substitutive forms semantically may be synonymous or in an approximation to each other, but it is sure that they will be in accordance to the unmarked syllable structures:

#### (8) Total substitution of clustered syllables in NKB

κρε.τ5α	κι.νοιν.να	'buyer'
προ.ταπ	δ5α. 🗆 🗆	'might'
βρι.τ5Ηα	ηυ.δ5α	'in vain'

All these substitutions are actually to avoid clusters from the SCB syllables. Examples are also present, where clustered syllables can optionally be avoided by either of the repair strategies as V-epenthesis or C-deletion or metathesis, and at the same time those clustered syllables can also be substituted favorably following the unmarked syllable skeleton. In fact, the substitutions are open to all forms, because using the synonyms for marked forms is not any problem. Thus, marked syllables are avoided by using unmarked syllables. For example,

#### (9) Repair and substitution in NKB

γΗραν	γΘ.ραν (ς–επεν)	g n.d5	'scent'
στρι	σι.ρι (Χ–δελ)	βο	'wife'
□ρειν	□ειν (Χ−δελ)	ρελ	'rail'

#### 4.0 Marked versus Unmarked Syllables: A Constraint-Based Solution

The output-oriented faithfulness constraints for NKB unmarked syllables are in fact, the basic reasons for the application of few cluster breaking repair strategies in the dialect. These repair strategies modify the marked syllable structure or 'bad-syllable contact' (Bradley 2006) for tautosyllabic forms in NKB. It is in fact, because of the universally

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employed some markedness constraints those favor the unmarked syllables in languages. It is also for the domination of few language-specific phonotactic constraints that some particular clusters are avoided in some particular languages. Generally, SCB clustered forms are repaired in NKB, while SCB also does not have multiple kinds of complex C-clusters. But whatever may be the clusters in SCB, they are avoided once they enter into NKB oral communication. While \*CLUS-TERS is the most dominating universal markedness constraints for syllables, constraints such as \*[Xp  $\sigma$ , \*[Xv  $\sigma$ , \*[X $\lambda$  $\sigma$ , \*[X $\pi \sigma$ , \*[X $\tau 5 \sigma$ , \*[X $\tau 5 H \sigma$ , and \*[X $\kappa \sigma$  are the phonotactically marked constraints in NKB that ignore the marked tautosyllabic clusters present in the input SCB variety. This is different realization of the universal constraint \*CLUSTERS that those phonotactic constraints in particular are undertaken into function. So while universality is ruling from the top, the phonotactics is realizing the universality from the lower level. SON-SEQ is such a constraint that dominates SCB complex clusters. In such perspective, the universality of syllable structure that the syllable margins should be preferably simple (\*CLUSTERS/\*COMPLEX) is extremely violated by complex clusters. But in NKB, this universality is enriched through few realizing constraints in favor of \*CLUSTERS. The following tableaus illustrate constraint ranking orders for achieving the respective optimal outputs:

## (10) SCB optimal output

Input: (SCB) πραν	SON-SEQ	MAX-IO (SEG)	*CLUSTERS
Φπραν			*
παν		* <u>i</u>	

## (11) NKB optimal output

Input: (SCB) πραν	*CLUSTERS	MAX-IO (SEG)	SON-SEQ
Φη .ραν			
πραν	*!		
παν		*!	

## 5.0 Conclusion

To sum up, it is here clear that the repair strategies phonotactically rearranges the SCB input syllables into the syllables permissible in NKB. It is probably that in NKB, the leading constraint \*CLUSTERS demands the underlying C segments in every case to be concretely released without any neutralization, weakening or simplification. Otherwise, one of the C segments of the sequence CC, tends to be unreleased totally as it is articulated in its isolated form. Constraints-based interactions authentically ensure the well-formedness of syllable along with the domination of the sonority sequencing procedure of syllable formation (Al-Mohanna 1998).

REFERENCE Akmajian, Adrian; Demers, Richard A; Farmer, Ann K and Harnish, Robert M. 2001. Linguistics: An Introduction to Language and Communication. Cambridge: USA. Massachusetts Institute of Technology. | Alber, Birgit and Plag. Ingo. 1999. Epenthesis, Deletion and the Emergence of the Optimal Syllable in Creole. MS. University of Marburg & University of Hannover. July, 1999. | Al-Mohanna, Faisal. 1998. Positional Syllable Maximality: Syllabification in Hejazi. MS. King Saud University, Riyadh. | Bradley, Travis G. 2006. Selected Proceedings of the 9th Hispanic Linguistics Symposium, ed. Nuria Sagarra and Almeida Jacqueline Toribio, 79-90. Somerville, MA: Cascadilla Proceedings Project. | Kager, Rene. 1999. Optimality Theory. UK: Cambridge University Press. | Grijzenhout, Janet & Martina Penke. 2004. The Interaction of Phonology and Morphology in First Language Acquisition and Broca's Aphasia. Vienna: Talk presented at the 11th International Morphology Meeting, Feb, 14-17. | Lappe, Sabine. 2007. English Prosocitic Morphology. Netherlands. Springer. | Lomberdi, Linda. 2002. Markedness and the Typology of Epenthetic Vowels. MS. To appear in proceedings of Linguistics and Phonetics 2002. College Park. University of Maryland. |