

PROBLEMS IN THE ACQUISITION OF ENGLISH CONSONANTAL CLUSTERS BY JAFFNA TAMILS

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1. INTRODUCTION:

Consonantal Clusters are considered as combinations of two or more consecutive consonants which occur within a syllable in this study. American linguists consider the consonantal clusters as consecutive consonants which occur within a morpheme. The consonant combinations which do not occur within a syllable are not considered as clusters. They are considered as consecutive consonants in which one member goes into a syllable and the other goes into another. For instance *mp* in 'compare' are consecutive consonants but each consonant belongs to a different syllable as *com-pare*.

In the acquisition of Standard British English (SBE) consonantal clusters pose more problems than other sounds to Jaffna Tamils.¹ The study is based on twenty carefully selected informants of both the sex, who have different educational and socio-economic backgrounds. Three hundred chosen words and one hundred sentences containing all possible combinations of SBE clusters were tested with these informants.

To study the acquisition of SBE clusters by Jaffna Tamil English (JTE) speakers and to study the type of JTE clusters and the cause for the errors in the acquisition of SBE clusters one needs to compare the SBE clusters with that of JT. By doing the comparative study one would be able to predict the difficult learning points to the Jaffna Tamils and point out the possible area of interference from JT in the acquisition of SBE clusters.

Speakers know that the phoneme of their language cannot be strung together in any random order to form words. The phonological system determines which sequence is permissible in a language. After a consonant like /k/, /p/, /g/, or /b/ another similar consonant is not permitted by the rules of English phonology. If the initial sound of an English word begins with [c] the next sound should not be a consonant but a vowel as in *church*. All languages Jaffna Tamil have similar constraints on the sequences of phonemes which are permitted. Children of a language community learn these rules when they learn the language. Second language learners have problems in acquiring the phonological sequential rules when the sequences of phonemes are different from what they have already learnt in their mother tongue especially in the context where the 2nd language is not spoken as a mother tongue by the community where the learners live.

1. Jaffna Tamil is a dialect of Sri Lanka Tamil spoken mainly in the peninsula. Jaffna Tamil will be abbreviated as JT.

2. Types of SBE clusters

There are many clusters in SBE than in JT. SBE clusters can be classified into two main types.

- A. Clusters of assyllabic consonants and
- B. Clusters of syllabic consonants.

2.1 A - Clusters of assyllabic consonants:

There are three sub types of A type clusters: AICC, AIICCC and AIIICCCC.

2.1.1.A-I CC This is called biphonematic² clusters:

This type includes two consecutive consonants which belong to the same syllable. This structure is known as CC type (where C stands for consonants) CC can be further subdivided into two types as (a) ≠CC -and (b) -CC≠

(a) ≠CC-type: This type consists of CC in the initial position of a syllable or a word. For instance *black* has *bl-* in the initial position. Both the members of *bl-* belong to the same syllable. Therefore this type of cluster is abbreviated as ≠CC-type.

(b) -CC≠type: This type of cluster includes two consonants which fall into the same syllable or word final position. For instance *milk* has *-lk* in the final position. Both the members of the cluster belong to the same syllable. Therefore this type of cluster is abbreviated as -CC≠type.

Neither of the members of -CC≠ are syllable and therefore they are known as assyllabic consonants. For instance -≠*pt-* in *stopped*.

English has more of CC types of clusters than other types.

2.1.2A II: This type is called Triphonematic clusters. This type includes triphonematic combinations which occur both in initial and in final position of a syllable or a word. It is further classified into types as (a) ≠CCC- and (b) -CCC≠.

(a) ≠CCC- In syllable or word initial position this type of cluster is abbreviated as ≠CCC-type. For instance, *scream* consists of this type of cluster ≠*skr-*

(b) -CCC≠ In syllable or word final position this type of cluster is abbreviated as -CCC≠ type. For instance *gaped* consists of this type of cluster -*spt≠* English has less -CCC≠type than ≠CCC-type.

2.1.3. A III CCCC : This type is called quadriphonematic clusters. English has only a limited number of this type of clusters. This type occurs in final position of a syllable or a word. This type is abbreviated as -CCCC≠. This type could be found in a few examples in English -*mpts≠* as in *prompts*.

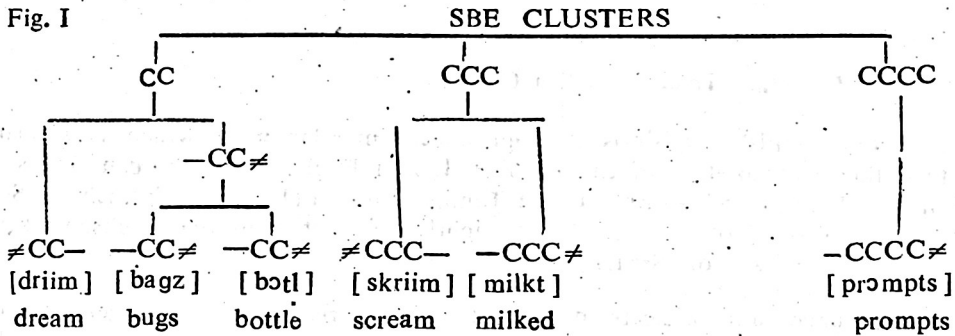
2. The term biphonematic, triphonematic and quadri - phonematic are adopted from Cohen (1952).

2.2. B-Clusters of syllabic consonants

Consonant combinations in which one of the consonants is syllabic. The syllabic consonants are sometimes called vowel-like and they are always nasals and liquids in SBE. For instance in *dapple*, /l/ is syllabic and /p/ belongs to the same syllable /dæe - p l/.

2.3 The following diagram shows the types of clusters in SBE.

Fig. I



3. Types of Jaffna Tamil clusters

Jaffna Tamil has consonants in combinations only in the medial position of a word. This combination occur syllable final positions as in *kaaLp-pu* which means *dislike*. Eventhough there are many combinations of consonants, all of them are not considered as clusters. For instance /nanme/ which means *benefit* has *nm*-combination but not a cluster, /n/ falls into a syllable and /m/ into another syllable as /nan-me/. There are only a few clusters in JT. Any medial triconsonantal combination in JT belongs to two different syllables the first two members being syllable final and the third member being syllable initial as in /vaayp-pu/ which means *opportunity*. Clusters occur when the two consonants of the triconsonantal combination being geminated consonants. Geminated consonants always belong to two separate syllables in JT.

3.1 Consonantal clusters in JT are as follow :

1. -Lp- /kaaLp-pu/ hesitation
2. -Lt- /vaaLt-tu/ congratulation
3. -Lc- /viiLc-cj/ fall

4. -Lk- /vaaLk-ke/ lite
5. -yp-/caayp-pu/ shed
6. y-c-/maayc-cal/ big effort
7. -yk- / vaayk-katici/ – raw rice for Hindu corpse
8. -ic- / kuLitci / cool

JT has no other types of clusters but biphonemetic clusters- Only a small number of biphonemetic clusters occur in JT.

4. Types of Jaffna Tamils' English Clusters

Jaffna Tamils' English is an approxilect (inter language) which is similar to the other sub varieties of English like Indian English, Singaporean English, Phillipines' English and so on. Jaffna Tamils' English (JTE) is a branch of Sri Lankan sub variety of English. JTE is slightly different from the English spoken in the southern part of Sri Lanka, being influenced mainly by JT.

Language and dialects differ not only in regard to the inventory of phonemes but also in regard to the sequences of phonemes permitted. English has many post vocalic consonant clusters of three or even four consecutive consonants: *rests*, *prompts* etc. JT permits only post vocalic clusters of two consonants and there are not many of these. JT has mainly consonant combinations each consonant of which belongs to a different syllable. In initial position there are no clusters in JT. Therefore JTE speakers produce many CVC very often instead of CC or CCC in the initial position of a syllable or a word. In word final position, JT also has closed syllables which mostly end in laterals and nasals but not in clusters. Consequently JTE speakers often produce -C (but not -CVC) for syllabic consonantal clusters of English. However, CVC is the frequent substitution in JTE for -CC≠ of SBE. There are more final clusters than initial ones in JTE,

Since there are limited number of clusters in JT, the JTE speakers have problems in the acquisition of SBE clusters. We have already seen the cluster types in SBE above. An average JTE speaker consists of biphonemetic clusters usually. Triphonemetic clusters are not common in JTE and there is hardly any quadri-phonemetic clusters.

4.1 The following table indicates the JTE substitutions for SBE clusters in general.

Fig. 2 JTE SUBSTITUTION for SBE CLUSTERS

SBE CLUSTERS

JTE SUBSTITUTIONS

≠CC-	(a) CC - [klaas] class (b) CVC - [kiLaas] class (c) C - [tuuN] tune
-CC≠	(a) -CC [vaast] vast (b) -C [res] rest
-CC≠	(a) -CC [æpl] apple (b) -CVC [ΣppiL] apple
≠CCC-	(a) CCC- [sprit] spirit (b) CCVC- [skiriim] scream (c) CC- [sree] stray
-CCC≠	(a) -CCC [tΣksT] taxed (b) -CC [aasT] asked (c) -C [tuvel] twelfth
-CCCC≠	(a) -CCC [gLimst] glimpsed (b) -CC [proms] (c) -C -C [sik-s] sixths (d) -C [prom] prompts

These types will now be discussed in more detail.

4.2 Table 1: A-types of SBE and their substitutions in JTE. (omitted words (OW)³ are excluded from the total number (n) of occurrences).

SBE	JTE	%	n
CCCC	CCC	13.3	167
CCC	CC	65.0	807
CC	CCVC	4.0	46
	C-C	0.2	3
	C	8.0	99
	CVC	10.0	125
	OW	-	27
	Total	-	1247

In C-C there is a clear break between the two consonants.

JTE has no CCCC combinations but only CCC and CC combinations. The CC type is the most common with 65% in JTE. However the CC clusters of JTE are not only representatives of the CC clusters of SBE but

3. I use the term omitted words and I assume that the speakers purposely omitted the words as the clusters were difficult for them to produce. Although the omitted words are not included in the intended total number of occurrences, the figures are given in the table to show that there are few omissions for clusters but that there is a certain number of omissions for certain contexts.

also of CCCC and CCC of SBE. As the structure CCVC of JTE contains the cluster CC, the CVC type can be added to CC when the frequency of CC is calculated. Therefore, the CC of JTE would be (after adding CCVC to CC) 68% (853/1247) of the total A-types of SBE clusters. These A-type substitutions will be discussed in detail in the following section.

4.2.1.A1 -type substitutions: substitutions for SBE \neq CC and -CC \neq (Which in the table above are summed up as CC) will be discussed in this section. Table 2 provides statistics for the substitutions. (cf. fig. 1)

Table 2: AI-types of SBE and their substitutions in JTE

SBE	JTE	%	n
\neq CC-	CC-	70.0	306
	CC-	1.0	3
	CVC-	29.0	125
	OW	-	1
	Total	-	434
-CC \neq	-CC	84.0	426
	-C	16.0	82
	OW	-	11
	Total	-	508
CC	CC	78.0	732
	C	9.0	85
	CVC	13.0	125
	OW	-	12
	Total	-	942

There are some striking difference between \neq CC-and -CC \neq

1. The former has a CVC substitution which the latter does not have.
2. The former has only three instances of C but the latter has 82 instances (despite the fact that the total intended number of occurrences for -CC \neq is little different).
3. The later has 11 omitted occurrences while the former has only one.

The point made in 1 shows that initial clusters only have the substitution -CVC and points 2 and 3 show that, although the JTE-speakers seem to try hard to produce final clusters. They avoid pronouncing the word or produce a word with a single C. As JT has words with single consonant endings, the speakers of JTE produce many instances of -C≠ instead of some difficult combinations of -CC≠.

Considering CC SBE as a whole 78% are acquired correctly as CC and 13% as CVC and 9% as C. The JTE-speakers acquire≠CC- clusters without great difficulty although the correct phonetic realization is a problem.

4.2.2 All-type substitutions: Table 3 shows All-types of SBE, ≠CCC- and -CCC≠ (which in the table above are summed up as CCC) and their substitution in JTE.

Table 3: All-types of SBE and their substituitions in JTE

SBE	JTE	%	n
≠CCC-	CCC-	63.0	80
	CC	1.0	1
	CCVC	36.0	46
	OW	-	13
	Total	-	127
-CCC≠	-CCC	48.0	57
	-CC	42.0	49
	-C-C	1.0	1
	-C	9.0	11
	OW	-	2
	Total	-	118
CCC	CCC	56.0	137
	CC	21.0	50
	CCVC	19.0	46
	C-C	0.4	1
	C	4.0	11
	OW	-	15
	Total	-	245

Initial CCC is easier to acquire than final CCC. In initial position English educated JT speakers have some English loan words with initial clusters. This fact probably prevents the speakers from making many errors in initial clusters. It has been shown that in many Asian languages acquiring initial clusters is easier than acquiring final clusters. In initial position the JTE - speakers also substitute CCVC for CCC but not in final position. This fact, i.e. the insertion of a vowel is more or less similar to the insertion of a vowel in the CC-structure in initial position except that the vowel substitution here preserves two initial consonants as clusters. For instance, splice -JTE has the substitution CCVC where /sp-/ of [≠spl-] is preserved. ≠CCC- of SBE is substituted in 37% by ≠CC- (CC and CCVC and -CCC≠ of SBE in 42% by -CC≠. All the ≠CCC- of SBE are replaced by clusters (≠CCC- or ≠CC-) whereas in the case of -CCC≠, 90% are replaced by clusters (-CCC≠ and -CC≠). It should be noted that one instance of C -C and several instances of C are substituted for -CCC≠ of SBE (but not for ≠CCC- of SBE). For CCC SBE (≠CCC- and -CCC≠); the JTE- speakers produce 56% CCC, 41% CC (CC and CCVC) and 4%C.

4.2.3 AIII- type substitutions: Table 4 shows that AIII- type of SBE (-CCCC≠) and its substitutions in JTE (-CCC≠, -CC≠, -C-C≠ and -C≠).

Table 4: AIII- type of SBE and its substitution in JTE.

SBE	JTE	%	n
-CCCC≠	-CCC	50.0	30
	-CC	42.0	25
	-C -C	3.0	2
	-C	5.0	3
	Total	-	60

CCCC combinations occur only in final position in SBE and there is no CCCC combination in JTE as mentioned before. No vowel insertion is found for CCCC in the sixty JTE occurrences included in our data. CCC substitution for CCCC SBE is more frequent than the use of CCC for CCC of SBE (50 % versus 56%).

4.2.4 Summary : The following main points can be given for substitutions for SBE clusters.

- (i) Among clusters JTE has only CCC and CC for A - types.
- (ii) CCC and CCCC of SBE are substituted also by CCVC (but never by CVCC

which probably does not occur in JTE as substitutions for CCC and CCCC of SBE).

- (iii) Vowel insertion as one of the substituting features (CCVC, CVC) occurs in JTE, only for initial clusters of SBE.
- (iv) In addition to CC and CCC, C and C-C are substitutions for CC, CCC and CCCC, but only in word final position.
- (v) CC is the predominant cluster structure in JTE.

4.3 B-types of SBE and their substitutions in JTE.

Word final /l/ after obstruents is syllabic in English. When an /l/ is syllabic the preceding obstruent also belongs to the same syllable as in /æ-pl/ *apple*. In case of final nasals after obstruents, the speakers are not sure if the preceding obstruents belong to the syllabic /ŋ/ or not. However, Cohen (1952: 63, 64) does not share our view.

“In the case of *bottle* and *button* taking the behaviour of English language users as our guide, we have to render such words phonematically as ending in /t/ and /tn/, as insertion of /ə/ would make these words sound odd... since in our opinion the ‘syllable’ has no significant function in final-consonant clusters in English words. We shall refrain from using the term ‘syllabic consonants’.”

When I asked some English speakers concerning *eaten*, some preferred /iit-n/ and others /ii-tn/. To my knowledge no research has been carried out to establish the existence of syllabic consonants in English. I assume that the syllabic consonant /l/ has only sometimes the pronunciation [ə] where the vowel is more weakly pronounced than a vowel phoneme would be but that it is usually pronounced [l] as for instance *apple* is usually pronounced as [æpl]. phonemically both [æ-pl] and [æ-pəl] are thus realization of /æpl/. In Indian English or in Sri Lankan English the pronunciation with inserted, and stronger vowel is the predominant form and English syllabic consonants are pronounced correctly only by the best speakers. “A Tamil speaker of English pronounces *simple* and *symbol* much in the same way. i.e. both of them as (simbəl) ...” (spitzbardt, 1976: 32).

In the Approxilect, B-types are different from the -CC≠ of the A-type where there is no CVC substitution whereas for B-types there are two kinds of substitutions CVC and CC, the former of which is the most frequent. Not only does JTE has a CVC structure but also, and more generally, Indian English and Sri Lankan English. “The adaptation of English words to the new Indian speech habits results in new structures of the sound-body of words, e.g. by inserting a vowel: IE [singəl] for “single”, B. E. [single]” (spitzbardt, 1976: 32-33).

According to Kandiah (1965 : 163) *noble* is pronounced as [nooble] and *bottle* is pronounced as [botal].

Table 5 gives the substitutions for syllabic consonants in SBE.

Table : 5 B-type of SBE and their substitutions.

SBE	JTE	%	n
Syllabic consonants }	syllabic	5.0	16
	CVC	95.0	288
	OW	-	6
	Total	-	304

5. General Conclusion :

As we have seen above of the A and B types, A type is the most common in JTE. B type hardly exists in JTE. It has been seen that JTE has a high number of CC clusters. Initial clusters are replaced mainly by CVC or CCVC but not final clusters of a type. High degree of consonant reduction (reduction of one or more members of the clusters) takes place in the final position. There is hardly any consonant reduction in the pronunciation of initial clusters (only 1% each in \neq CC- and \neq CCC- types). There is 100% reduction in pronunciation of -CCCC \neq types, 51% in -CCC \neq types and 16% in -CC \neq types. As B -type is usually replaced by CVC in JTE, the existence of syllabic consonants in SBE is noted by JTE speakers (as epenthetic vowel is introduced). It should be noted that only the high vowels are used for the vowel insertion in the substitution of SBE clusters whereas in Sinhalese English only a schwa is used.

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