

CHAPTER VI

DATA ANALYSIS AND INTERPRETATION

CHAPTER - VI

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VI.1 INTRODUCTION

In this chapter a Contrastive Analysis of the two systems of sound segments (in the light of the interfering effects of the L1) has been done on the basis of the two languages in contact. As proposed in Chapter V (Plan and Procedure), analysis and interpretation of perceptual, environmental and phonetic data also make a part of this chapter.

The phonetic data sheets have been prepared on the basis of the differences in the process of articulation of the two systems of sound segments, and this chapter, hence, gives the phonetic material and units, used and tested. Furthermore, the analysis and formulation of guidelines for the evaluation of correctness achieved in the use of the Russian segmentals, and assessment of the effectiveness of a direct access to the process of the formation of foreign articulation have also been discussed here.

It has been noted earlier that the task here is to ascertain as to what extent the Bengali (L1) speaking learner deviates from the actual and correct speech units or segments of the Russian language, and what are the difficulties faced in the process of the training in the same. Also important is the question of the learners' drawing wrong parallels between the L1 and the TL, and to find out as to under what circumstances can the L1 be used in a positive manner.

In order to be able to correctly gauge the difficulties, there is an objective necessity of studying the structures of the

errors mainly in two ways: a. purely the phonetic errors based at the acoustic-articulatory level, i.e. variants of the sound positions in speech, and b. at the level of invariant units: phonemes and prosody. Both of these have been studied, as they are closely interrelated, and it should be borne in mind, that the character of the articulation in the TL will depend upon the acoustic-articulatory habits of the learner; articulatory basis of the L1 of the speaker. Hence, it was important to classify the errors into the following three groups:

- a. PHONETIC.
- b. PHONOLOGICALLY DIFFERENTIAL.
- c. MIXED.

It is important to note here that the errors, as reflected in the phonetic data are analysed in the light of perceptual and environmental data, as that has a direct bearing on the former. Hence, in the classification and analysis, the phonetic data will get precedence, however details on perceptual and environmental data have already been given earlier.

VI.2 A CONTRASTIVE ANALYSIS OF THE TWO SYSTEMS OF SOUND SEGMENTS (IN LIGHT OF THE INTERFERING EFFECTS OF THE L1)

While studying the different, sometimes quite distant from each other, languages often a row of common features is encountered in them. Like in almost every language we find the system of vowels and consonants, existence of words and their combinations, with each language having its own set of suprasegmentals, and so on.

Genealogically both the languages (RUSSIAN and BENGALI) of this study belong to the Indo-European family. Over their long path of evolution and growth, the Russian and the Bengali languages have developed their own systems of sound segments, rules of combination of such segments, alternation of consonants, assimilation rules, and rules of stress and reduction along with intonation etc.

In each of the above one or two or all of the following three characteristic features are noticed:

- a. Segments and/or rules which are same.
- b. Segments and/or rules which are similar.
- c. Segments and/or rules which are different.

Segments and/or rules which are same, methodologically pose least problems in their acquisition; same is the case with the new segments and/or rules. Problems are mainly posed by the similar ones, and especially when they change in positional variations, or otherwise. The main reason for this is explained by the fact that the learner always tries to look for parallels of the L1 in the TL, and quite often subconsciously tries to find in the TL a suitable replacement of the L1 units.

VI.2a A TYPOLOGICAL ANALYSIS OF THE VOWEL PHONEMES OF THE TWO LANGUAGES

In order to understand the expression "TYPE" it is important to remember about the presence of unities of that, what is common and also characteristic for the given phenomenon. This unity comprises of the essence of the expression that we abstractly call "Type", (Arakın, V.D., "Tipoloģija jazykov i pr.obl.jema mjetodicjeskogo pr.ognozirovanija", Vysšaja Škola, Moskva, 1989, p.7).

The following is an analysis of the two languages of this study, undertaken with a view to identifying the common as well as distinctive features of the two languages:

TABLE : 15 THE RUSSIAN AND BENGALI VOWEL PHONEMES
(**IN STRONG POSITIONS)**

The Russian Phoneme:	Comparison	The Bengali Phoneme:
/ɪ/	Both are close, front, unrounded (nonlabial) vowel phonemes, and can be treated to be same (1).	/ɪ/
/e/	Both are half close, front, unrounded (nonlabial) vowel phonemes, and can be treated to be same (2).	/e/
	The Bengali /æ/ is a half open, front, unrounded (nonlabial) vowel phoneme, and is absent in the Russian language (3).	/æ/
/a/	Both are open, central, unrounded (Nonlabial) vowel phonemes, and can be treated to be same (4).	/ä/
	The Bengali /@/ is a half open, back, rounded (labial) vowel phoneme, and is absent in the Russian language (5).	/@/
/o/	Both are half close, back, rounded (labial) vowel phonemes, and can be treated to be same (6).	/o/
/u/	Both are close, back, rounded (labial) vowel phonemes, and can be treated to be same (7).	/u/

1. In the case of 1. above it is important to note that in strong positions, the Russian /ɪ/ and the Bengali /ɪ/ hardly register any difference. However, the Bengali nasal /ɪ̃/ is absent in Russian. (In the Russian language there are no nasal vowel phonemes, and no interference is expected from the Bengali nasal vowels into those of the Russian language). The Bengali /ɪ/ differs in length and the short /ɪ/ is quite similar to the Russian unstressed /ɪ/, e.g. R.[ɪ:lɪ] 'or', and B.[ɪSpä:tɪ] 'steel'. Hence, the Bengali vowel phoneme /ɪ/ is not expected to have any negative interference on the Russian /ɪ/.

2. In the case of 2. above the Bengali /e/ has little difference in stressed positions, however, the Russian /e/ in unstressed positions changes into /ɨ/, e.g. R.[e:ta] 'this/it is, these are', R.[ɨta:Z] 'floor', and B.[eSo:] 'come', [e|h@n] 'now'. But B.[ə] 'one', [ə|lã] 'alone' etc. all written with /e/. Hence, the difference between the Bengali vowel phoneme /e/ in strong positions should be noted. However, since the Bengali language has the /ɨ/ phoneme, there should not be any problems in learning the Russian unstressed /e/, though a possibility of confusion can not be ruled out totally.

3. The Bengali /æ/ is absent in the Russian language. Hence a learner, in view of 2. above, may have problems in identification of the Bengali /æ/ in trying to find an equivalent (especially in weak positions of /e/) parallel sound in the Russian language. But such cases are expected to be very rare, as sounds which are absent, pose least of problems. However, some interference can not be ruled out totally.

4. In the case of 4. above there will be no problems learning the Russian stressed /a/, as it is the same as in Bengali. Special care should be taken about the Russian unstressed /a/, which not only changes quantitatively, but also qualitatively, and depending upon its distance from the stressed syllable, there are variations, both in quality and quantity, e.g. the unstressed /a/ may change into /ə/, or /a/, or even /ɨ/. Hence, the difference between the two /a/ should be clearly borne in mind, and it is expected that there may be some negative interference in the process of the training in the Russian unstressed /a/ by the Bengali speakers.

A more detailed description of the Russian unstressed /a/ has been given later in this chapter.

5. The Bengali /@/ is totally absent in the Russian language. It is important to compare the same with 6. above, i.e. the Russian and the Bengali /o/, especially with the Russian /o/ in

The Bengali /@/**	The Russian and Bengali /o/
a. Half open	a. Both half close
b. Of the back row	b. Of the back row
c. More rounded	c. Rounded
d. In all positions	d. In all positions

unstressed position. A learner is very much prone to looking for its (that of /@/) equivalent in the target language. The Russian unstressed /o/ is less rounded, as compared to the Bengali /@/. In each of these languages B./@/ and the R. unstressed /o/ are quite random in initial, middle and final positions. For example:

	Initial Position	Middle Position	Final Position
The Russian unstressed /o/	(ona:) (poto:m) (ono:) (pogo:da)	(xor.oSo:) (go:r.ad) (cjel.ovje:t) (mo].o.ko:)	(bl.j:udo) (mje:sto) (go:r.od) (nje:bo)
The Bengali /@/	(@col) (@Si:m) (@l|h@j) (@p@r)	(J@l@c@r) (l@l@r@b) (c@p@l@) (b@n@c@r)	(lromoS@) (J@l@c@r) (b@n@c@r) (l@l@r@b)

Hence, special care should be taken to minimise the interfering effects of the Bengali /@/ on the Russian unstressed /o/, and /a/.

6. In the case of 6. above the two in stressed positions are absolutely the same. Hence, interference can be only of the positive nature. The negative influence of the Bengali /@/ on the Russian unstressed /o/ has been discussed in 5. above.

7. In the case of 7. above both the stressed /u/ are the same. The Russian /u/ in unstressed position undergoes no qualitative change. The question here is that of the Bengali long /u:/, and the short /u/, which are expected to pose no problems in the training of the Russian /u/, neither in strong nor in weak positions.

It has been observed earlier, that stress in the Bengali language does not stand as a distinctive feature. What is important to note here is the reduction of the Russian vowel phonemes in unstressed positions.

In the Modern Russian Literary Language two degrees of reduction of vowels are distinguished in unstressed positions, which depends on the position of a vowel, as compared to the stressed syllable (Table : 16).

The 1st degree of reduction in the 1st pre-stressed position and the 2nd degree of reduction in other unstressed positions. In unstressed syllables, less quantity of vowels are seen, than compared to stressed. What is important here is the position of Russian unstressed vowels after hard and soft consonants.

The following Tables: 16 and 17 indicate the reduction of vowels in the Russian language, as described above.

TABLE : 16 CORRELATION OF STRESSED AND UNSTRESSED RUSSIAN VOWELS AFTER HARD CONSONANTS:

(a) In stressed position:	[a:]	[o:]	[e:]	[y:]	[u:]
(b) 1st degree of reduction:	[ə]	[ø]	[ɪ]	[ɨ]	[ʊ]
(c) 2nd degree of reduction:	[ä]	[ä]	[ɪ]	[ɨ]	[ʊ]

TABLE : 17 CORRELATION OF STRESSED AND UNSTRESSED RUSSIAN VOWELS AFTER SOFT CONSONANTS:

(a) In stressed position:	[a:]	[o:]	[e:]	[ɨ:]	[u:]
(b) 1st degree of reduction:	[ɨ]	[a]	[ɪ]	[ɨ]	[ʊ]
(c) 2nd degree of reduction:	[a]	[a]	[ä]	[ɨ]	[ʊ]

Following is a Contrastive (typological) analysis of the Russian and Bengali consonantal phonemes.

VI.2b A CONTRASTIVE ANALYSIS OF THE RUSSIAN AND THE BENGALI CONSONANTAL PHONEMES.

The Russian Phoneme:	Comparison	The Bengali Phoneme:
/p/ /p`/	Both are bilabial, voiceless, plosive. Except for the distinction between the soft and hard /p/ in the Russian language, there is hardly any difference. Hence, there should be no negative influence of the Bengali /p/ on the Russian one.	/p/
/b/ /b`/	Both are bilabial, voiced, plosive. Except for the distinction between the soft and hard /b/ in the Russian language, there is hardly any difference. Hence, there should be no negative influence of the Bengali /b/ on the Russian one.	/b/
/m/ /m`/	Both are bilabial, voiced, nasal occlusive. Except for the distinction of the soft and the hard /m/ in the Russian language, there is no other difference. Hence there should be no negative influence of the Bengali /m/ on the Russian one.	/m/
/f/ /f`/	The Russian /f/ is labio-dental, voiceless fricative, and is contrasted in hard and soft. There is no /f/ in the Bengali language, except for its existence as an allophonic variant in the borrowed words from English, Arabic-Persian and other languages.	

The Bengali /ph/ is bilabial, voiceless, aspirated, plosive and there is no equivalent of this in the Russian language. Due to the absence of /f/ in the Bengali language the sound /ph/ is expected to have negative influence while learning the Russian /f/.

/v/ /v'/

The Russian /v/ is labio-dental, voiced fricative, and is absent in the Bengali language. However, the segments /v/ and /w/ exist in the Bengali language as allophonic variants in loan words from other languages.

It is very important to take note of the Bengali /bh/ : bilabial, voiced, aspirated, plosive sound, that highly affects the acquisition of the Russian /v/. Being similar, it is expected to have a lot of interference and the same is with the Bengali /b/ which too is expected to have a negative influence. The errors will often be that of problems in phonological identification of the correct one and the habitual articulations of /b/ and /bh/ of the Bengali language. The students will tend to equate the same with the Russian /v/.

It is important to note that the

existence of /v/ and /w/ as allophonic variants may not always suffice in the process of learning the Russian /v/. For example: the Bengali words: /hawâ/ 'air', /Jawâ/ 'going', /lhawa/ 'eating', and so on. The /w/ appears before /â/ at the end of the word. Hence, in the middle and initial positions /v/ or /w/ are not customary in the Bengali language.

/t/ /t'/

The hard, voiceless, plosive dental /t/ in both the languages is the same. However, there is no equivalent of the Russian soft /t'/ in the Bengali language.

There may be an influence of the Bengali retroflexive, unaspirated, voiceless, occlusive plosive affricate and also that of the Bengali medio-lingual palatal, unaspirated, voiceless, occlusive plosive /ç/ especially on the Russian palatalised (soft) /t/ and also on the Russian alveolar palatalised, voiceless affricate /c/ and non alveolar /ts/ and also that of the Bengali medio-lingual palatal, aspirated, voiceless, occlusive plosive /ch/ on the Russian /c/, and /ts/.

/t/

/t./

/ç/

/ch/

The Bengali forelingual apical-dental, aspirated, voiceless, occlusive plosive /th/ is absent in the Russian language /th/ language. It is expected to bear no interference on any Russian sound.

The Bengali retroflexive, cerebral, aspirated, voiceless, occlusive plosive /t.h/ is also absent in /t.h/ the Russian language, and it is expected to have no interfering effects on any Russian sound.

/d/ /d'/' The Russian hard /d/ and the Bengali /d/ are both plosive, voiced, apical-dental, unaspirated, and are quite the same, except for the Russian soft /d'/' which is alveolar and palatalised. The Bengali medioin- /J/ gual-palatal, unaspirated, voiced occlusive plosive /J/ is quite similar to the Russian palatal /d'/' and it is expected that the sound /J/ may have some negative influence.

The Bengali retroflexive, cerebral unaspirated, voiced, occlusive plosive /d./ is absent in the Russian /d./ language. The Bengali /d/ may interfere sometimes in the identification of the Russian hard /d/.

The Bengali retroflexive, cerebral aspirated, voiced, occlusive plosive /d.h/ is absent in the Russian language, and is expected to bear no interfering effects on any Russian sound. /d.h/

The Bengali aspirated,voiced,occlusive plosive, forelingual, apical dental /dh/; retroflexive cerebral /d.h/ (as above); mediolingual palatal /Jh/,and back lingual velar /gh/ are absent in the Russian language. Except for /Jh/, others are expected to have no interfering effects. /dh/ /Jh/ /gh/

The Russian fricative, alveolar voiced /Z/ is absent in the Bengali language.Though most of the Bengali speakers are acquainted with this sound from words from the English language,e.g.[pleZa], [meZa], etc. however, the Bengali /Jh/ may have some negative influence on the Russian /Z/. /Z/

The Russian fricative, voiceless /s/ and alveolar palatalised /s`/ are absent in the Bengali language and exist only as allophonic variants, used before /t/and /m/, e.g. [S@sta] 'cheap',[b@sta]'gunny bag', [m@sto] 'huge',[smito]'subtle',etc. /s/ /s`/

The Bengali mediolingual palatal non-occlusive, voiceless fricative /S/ is quite like the Russian alveolar /S/. The Bengali /S/ is expected to have a very high degree of negative influence on the Russian /s/.

The Russian fricative, voiced dental /z/ and the alveolar, palatalised /z'/ are absent in the Bengali language. It is possible that a Bengali native speaker may try to equate them with the Bengali palatal, unaspirated, voiced, occlusive plosive, /J/. Hence, there is a possibility of interference.

Both are dental, nasal, occlusive, plosive, where hard and the soft Russian /n'/ is alveolar, palatalised. There may not be any negative influence of the Bengali /n/ on the Russian one.

The Bengali language also has the occlusive, nasal backlingual velar /ŋ/; medio-lingual palatal (n~) and the retroflexive cerebral (n.), which are all absent in the Russian language, and may, in very isolated cases, cause some negative influence.

/l./	sonant /l./ is different from the Bengali /l/ in the way that the latter is a fore-lingual, alveolar, occlusive, and is likely to have a negative influence on the Russian /l./ and not on the soft Russian /l.ʹ/, which is an alveolar, palatalised, lateral sonant.	/l/
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/r./ /r.ʹ/	The Russian rolled, alveolar, flapped /r./ is the same as in the Bengali Bengali language, except for the fact that in the articulation of the Russian /r./, the tip of the tongue vibrates thrice, compared to the Bengali /r/ that vibrates twice.	/r/
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/t/	The Bengali and the Russian occlusive plosive, voiceless, unaspirated back-lingual velar /t/ and the voiced /g/ are quite the same. Hence, they are not expected to have any negative influence.	/t/
/g/		/g/

/x/	The Russian fricative, voiceless, back palatal /x/ is absent in the Bengali language. Negative influence is highly possible by the back-lingual, velar aspirated, voiceless occlusive plosive /kh/ of Bengali, and a learner may try to draw parallels also in the Bengali glo-	/kh/
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ttal, non-occlusive, fricative /h/,
which is absent in the Russian /h/
language.

/j/ The Russian fricative, voiced,
 medio-palatal /j/ is quite similar
 to the Bengali medio-lingual pal-
 tal, non-occlusive fricative /y/,
 and the Bengali /y/ is expected to /y/
 help the Russian /j/ in combina-
 tion with vowels, appearing after
 /j/, whereas /j/ in adjectival
 endings, in masculine gender, and
 nouns in genitive case forms in the
 Russian language, having /j/ in the
 final position, may be influenced
 by the Bengali /y/, or even /ɨ/,
 the latter being a vowel.

 The Bengali retroflexive, rolled,
 flapped, occlusive-fricatives /R./, /R./
 and /R.h/ are absent in the Russian /R.h/
 language, and very rarely may
 interfere in the acquisition of the
 Russian /r/ only as a identifica-
 tion error.

VI.2c THE OTHER PECULIARITIES OF THE RUSSIAN SEGMENTALS IN ISOLATION AND IN COMBINATIONS, AND CHARACTERISTIC DIFFICULTIES FOR THE BENGALIS

The above comparisons of the vowel and consonant phonemes of the Russian and the Bengali languages lead us to the following difficult segments of the Russian language, expected to be faced by a majority of the Bengali (L1) speaking learners, learning the Russian language.

a. The character of the strong syllable and the place of stress in Russian word, since STRESS does not happen to be a distinctive feature in the Bengali language.

b. The question of qualitative reduction of vowels. Here, it is expected that a weak vowel will not reduce at all, or the reduction will have an altogether different character, or the vowel in unstressed position may be totally lost, and sometimes mean altogether a different word, e.g. [par.əxo:d] 'steamer', where the first and second syllables are unstressed, which may change into [pr.əxo:d] 'passage', or [par.əvo:z] 'transport', 'carriage', where the first and second syllables are unstressed, which may change into [pr.əvo:z] 'locomotive', resulting in a total loss of the original meaning.

c. The contrast of the consonantal phonemes in soft and hard, where often a considerable amount of difficulty arises in the process of the palatalisation of consonants before the front vowels, and it is with great difficulty that one gets attuned to the difference e.g. [byl.] 'was', and [bil.] 'beat'.

d. The devoicing of voiced consonants in weak positions before voiceless consonants and at the end of a word. The following errors are observed very often:

[tʰl.ub] instead of [tʰl.up] 'club'.
[mjod] instead of [mjot] 'honey'.
[sad] instead of [sat] 'garden', and so on.

e. Distinction between the 1. the fricative, voiceless, dental /s/ and the alveolar /s/; 11. the fricative, voiced, alveolar /z/, and palatalised /dental /z/; 111. correct articulation of the Russian /v/, /j/, /l./, /r./, /f/, /x/, /ts/, and as in 1. and 11. above /s/, /z/, and /Z/.

A detailed study of the difficult sounds and their combinations for the Bengali speaking learners, has been incorporated after the classification of data and it also includes various other factors: perceptual and environmental, that may have influenced (negatively or positively) in the process of training in the Russian segmental features to the Bengali speaking learners.

VI.3 DATA ON PERCEPTUAL AND ENVIRONMENTAL BACKGROUND OF THE RESPONDENTS AND ITS CLASSIFICATION

Data on perceptual and environmental background have been collected from all the 79 respondents under three major categories.

CATEGORY - I Bengali students learning the Russian language in the Indian classroom/ environment (Total Nos. 64)

CATEGORY - II Bengali students learning the Russian language in the Russian classroom/ environment. (Total Nos. 15)

CATEGORY - III Non-Bengali students learning the Russian language in the Indian classroom/environment. (Total Nos. 10)

The following table 18 shows the perceptual and environmental background of the respondents at a glance. Sample under Category -I included a total of 64 respondents, of whom there were 29 males, and 35 females in the age groups: 17 -- 20 yrs = 30, 20 -- 25 yrs. = 18; and 25 yrs. and above = 16 respondents respectively. There were 38 such respondents, who had been learning the Russian language with a language background of Hindi, English, and/or Nepalese languages as their OTs as dominant languages in their interest groups; 14 such respondents who had English, Hindi and/or Gujarati as their OTs, and 11 such respondents who had English, and either Hindi, or Urdu, or Marathi, or Punjabi as their OTs. In most of the cases the OTs of the respondents coincided with the OTs or MTs of their friends, and that of their interest groups. Hence, the OTs and interest groups have been treated as complimentary to each other.

The local dominant languages, where the above students had been learning the Russian language were Bengali*, Hindi, and English for 38 respondents, and Hindi*, English, Marathi*, Gujarati*, and Punjabi* for 26 students (*most dominating languages). Medium of instruction for all these respondents has been a mixed one of Russian and English, varying in degree from institution to institution. However, it must be noted, that 15 students from one of the above institutions had Russian as the main medium of instruction.

By occupation there were 39 students, 15 in various services and 10 others (not specified). 49 of the above had been learning the Russian language for about 6 months -- 1 year, and the remaining 15 for more than 1 year. 14 of the above were learning the language as a hobby, 30 seeking career in

the language, and 20 by chance (did not specify). Lastly, 11 respondents were married, and 53 unmarried.

TABLE : 18 PERCEPTUAL AND ENVIRONMENTAL BACKGROUND OF THE RESPONDENTS

	CATEGORY-I	CATEGORY-II	CATEGORY-III
1. Sample size:	64	15	10
2. Males: Females	29:35	07:08	04:06
3. Educational Qualification.....			
a. Undergraduates:	34	04	07
b. Graduates :	20	08	02
c. Post-Graduates:	10	03	01
4. Language background.....			
a. Bengali/Hindi/ : English/Nepalese/ Urdu	38	..	..
b. Bengali/Hindi/ : English/Gujarati	14	01	..
c. Bengali/English : and one of: Urdu, Hindi, Marathi, Punjabi :	11	10	..
d. Hindi/English : Marathi	..	..	02
e. Marathi/Gujarati: English/Hindi	..	..	06
f. Gujarati/Hindi : English/Punjabi	..	..	02
g. Bengali/English : Urdu	..	05	..
5. Local languages (childhood).....			
a. Bengali/Hindi : and English	38	..	..
b. Hindi/English/ : Marathi/Gujarati/ Punjabi	26	..	..
c. Russian	..	15	..
d. Gujarati/Hindi : Marathi	..	..	07
e. Hindi/Punjabi : English	..	..	03
6. Medium of instruction.....			
a. Russian/English :	64	06	10
b. Russian :	..	09	..
7. Occupation.....			
a. Students :	39	09	09
b. Service :	15	02	01
c. Others :	10	04	00
8. Duration of learning the Russian language.....			
a. 1 year:More :	49:15	10:05	08:02
9. Motivation.....			
a. Hobby :	14	04	04
b. Career :	30	08	05
c. Chance :	20	03	01
10. Married:Unmarried:	11:53	03:12	00 :10

It is important to note here that the Data Sheet of perceptual and environmental background (Appendix - A) included the following columns as well.

1. Setting: (Childhood)
 - a. Place
 - b. Local language(s)
 - c. Local Dialect(s)
 - d. Medium of instruction at school
 - e. Formal education began at the age of...
2. Motivation:
3. Friend Circle: Languages spoken and interest groups.
4. Marital status:
 - a. Languages spoken by spouse
 - b. Languages spoken at home
 - c. Any foreign language(s) known/spoken at home

Data pertaining to above are found to be quite insufficient because most of the respondents failed to adequately and/or correctly reflect on the them. A large number of the respondents have pursued their school education and spent their childhood in various parts of the Country and some even abroad. It was therefore felt that these inadequate and insufficient data would not be of much help in arriving at any logical conclusion, and as such excluded from analysis.

Sample under Category - II indicates that out of a total of 15 respondents male:female ratio was 7:8 in age group 20 -- 25 years - 6 students; and 25 years and above - 9 students. There were 4 undergraduates, 8 graduates and 3 post-graduates. 5 such respondents had been learning Russian with a background of English and Urdu languages as OTs and dominant languages in their interest groups, 1 respondent with Hindi, English and Gujarati as OTs and interest groups (in this Category too, the OTs and interest groups coincided, hence, treated complimentary to each other). The local language for all these

15 respondents was Russian (5 respondents had some exposure to the Russian language prior to their arrival/study at Moscow). The medium of instruction for 6 respondents was Russian/English, and for 9 respondents only Russian. By occupation, this category included 9 respondents, 2 in service, and 4 others (not specified). The duration of learning the Russian language for 10 respondents was upto 1 year, and more than 1 year for 5. Of these 4 were learning the language as a hobby, 8 seeking career in the subject, and 3 were learning only because they got a chance to visit Moscow under some of the then bilateral programme, etc. Out of the 15 respondents, only 3 were married, and 12 unmarried. (Under this category too data on childhood setting, and languages spoken by spouse, at home etc. could not be gathered adequately).

The overall impression that could be drawn from the interviews and the data sheets indicated:

1. That all the 79 respondents under Category -I + II spoke very good Bengali, however, respondents from Bangladesh used the language under tremendous influence of Bakhali dialect.

2. That all the 79 respondents knew apart from the Bengali language (MT) two other languages, viz. English and either Hindi or Urdu, and in most cases a fourth language as well. It is worthwhile noting here that those sounds-segments of the Russian language which differ in various shades, or are absent in the Bengali language, thereby posing problems while learning the Russian language were either used in different ways, or heard in the use of the DTs of the respondents. The researcher here wishes to note that only 16 of the 79 respondents spoke either English or Hindi with little interference of the MT, i.e.

Bengali. This was felt while discussing with the respondents various problems that they faced while learning Russian.

The following is the description of classification of Phonetic data of the respondents from all the above three categories:

VI.4 DATA ON PHONETIC ERRORS OF THE RESPONDENTS AND ITS CLASSIFICATION

As stated in Chapter - V phonetic data were recorded on magnetic tapes from all the 79 respondents. These data were then carefully transcribed on data sheets after listening to the recordings several times.

On transcribing the above data it was found that the respondents committed a number of errors of a varied nature which were classified under the following headings:

- I. Russian sound(s)/phoneme(s) and their combinations in transcription as per required pronunciation: (Explanation).
- II. Russian sound(s)/phoneme(s) actually pronounced/ articulated by students with Bengali as their L1: (Examples).
- III. Position of the above segment in the word, or line (in combination with other segments of following words in the same sentence) and in combination with: (if any segment in particular).
- IV. Frequency of errors of students with Bengali as the L1 (BL1), and other languages as L1 (OL1).

V. First principle of classification of the errors: (Meaning)
a. Phonetic, b. Phonologically differential, and c. Mixed

VI. Second principle of classification of the error: (Reason)

VII. Third principle of classification of the error: (Main difficulty in overcoming the error)

VIII. Remarks: Typical Error:(TE), Errors rectifiable with time and practice: (ERTP); Other tongue influenced errors:(OTI), L1 influenced errors:(MTI)/(L1IE), Most problematic due to L1 influence: (MPL1I).

The following Table - 19 shows all the errors at a glance, which are classified as above.

TABLE : 19 Phonetic Data

	Description:	Sr. No. 1.
I.	Russian sound(s)/phoneme(s) and their combinations in transcription, as per required pronunciation: (EXPLANATION):	[ɪ](i.e. /e/ in unstressed positions)
II.	Sound(s)/phoneme(s) actually pronounced/ articulated by students with Bengali as L1: (EXAMPLES):	[e] [egza:mɪn], [semja:], [teatr.], [el.r.a:n].
III.	Position of the segment in the word, or line, and in combination with: (IF ANY IN PARTICULAR):	In initial and middle positions, especially in combinations with /s/, /t/, /r./ etc.
IV.	FREQUENCY:	Optionally: Bengalis -- 65 Others -- 09
V.	First principle of classification of the error: (MEANING):	Phonologically differential.
VI.	Second principle of classification of the error: (REASON):	Absence of a qualitative reduction of /e/ in the L1, and also the influence of English letter [e].
VII.	Third Principle of classification of the error: (MAIN DIFFICULTY IN OVERCOMING THE ERROR):	Lack of training in the automatization of the reduction of /e/ to /ɪ/ and inability to overcome the OT habit.
VIII.	REMARKS:	EPTP

TABLE : 19 (Contd.)

	Sr.No.2	Sr.No.3	Sr.No.4
I.	[à], (i.e. /a/ and /o/ in 2nd prestressed and other positions)	[a], (i.e. /a/ and /o/ in 2nd prestressed and other positions)	[ə], (i.e. /a/ and /o/ in 2nd prestressed and other positions)
II.	[a:] [pa:ci mu], [na:zivat'sja], [vl.a:dimi:r.], [dr.u:Zna:ja] [pa:ta:mu:Sto]	[@], or [ə:] [èna:], [u]i:jasnèvy], [mno:g@:], [x@r.@So:], [m@l@l@o:]	[o:] [potamu:Sto:], [bylo:], [igr.a:lo:], [slu:Sal@:]
III.	In all positions, especially in combination with /h/, /p/, /l/, etc.	In the middle after /n/, /r./, /g/, /x/, /m/, /l/, etc.	At the end of a word, after /t/, and /l/.
IV.	Often. Bengalis - 68 Others - 09	Optionally. Bengalis - 60 Others - 00	Optionally. Bengalis - 70 Others - 05
V.	Phonologically Differential.	Phonetic.	Phonologically Differential.
VI.	Inattentiveness, as a result of which the sound does not get reduced.	Used to such CV combination in L1. For example: [p@~ÇaSi], [r@t@:n], [g@mg@mâ], [h@b@:r], [m@hâ:n], etc.	Used to such CV (in verbal endings) combinations. For example: [Jeto:], [torto:], [theto:], [Suto:], [poR.lo], etc.
VII.	Unable to get used to the process of reduction of /a/ and /o/ in unstressed positions.	Inability to overcome the L1 habit due to similarities in the articulation of the two segments.	Inability to overcome the L1 habit, because of the random use of /o/ in the L1, especially in the verbal endings.
VIII.	ERTP	TE+MPLII	MPLII+TE

TABLE : 19 (Contd.)

	Sr.No.5	Sr.No.6	Sr.No.7
I.	[ø], (i.e. /o/ in 1st prestressed and the beginning of a word).	[ø], (i.e. /a/ in 1st prestressed positions and the beginning of a word).	[ø], (i.e. /a/, and /o/ in 1st prestressed position and the beginning of a word).
II.	[o:] [xar.o:So:], [pato:lo:t], [mal.o:tto:], [o:tjets].	[a:], or [ã] [ãna:], [ga:du:] [ràdilsja].	[@:], or [æ] [x@:r.@So:], [mno:g@], [go:r.@d], [p@S]::], [@t1je:ts].
III.	In middle positions after [r:], [t], [l], etc.	In initial and middle positions with many consonants.	In all positions with many combinations of consonants.
IV.	Often. Bengalis - 65 Others - 08	Often. Bengalis - 62 Others - 07	Very often. Bengalis - 70 Others - 02
V.	Phonologically differential: [ø] -- [æ] -- [o:] -- [a:]	Phonologically differential.	Phonetic: /a/-- /æ/-- /@:/
VI.	Influence of the L1, where /æ/ is opposed often to /o:/ and domination of /@:/ and /o:/ in L1. For example: [m@n]-- [mon], [b@S]-- [boS] [ro:So:], [to:] etc.	Inadequate practice in the reduction of [o] and [a], or inattentiveness and absence of such reduction in the L1.	Random use of /@/ and /@:/, and almost a total absence of /ø/ in the L1.
VII.	Inability to deautomatise from the L1 habit, because of the typical combination of consonantal segments being same in the TL and the L1.	Inability to get used to the reduction of [o], and [a] in these positions due to L1 habit.	Inability to overcome the L1 habit, where /@:/ is a very dominant sound.
VIII.	MPL11+TE	EPTP	MPL11+TE

TABLE : 19 (Contd.)

	Sr.No.8	Sr.No.9	Sr.No.10
I.	[y]	[je:]	[ja:]
II.	[i:] or [i] [bi:t], [mi:], [ti:], [nazivãtcja], [izi:k], [bil].	[je:] or [iye] [miniye:]/[mn'je], [iye:st]/[ie:st'], [l'ie:t], [n'iyet].	[ia:] [minia:], [maia:], [simia:], [d'iaJia].
III.	In all positions in combinations with many consonants: /z/, /t/, /m/, /v/, /r./, etc.	In all stressed positions, especially at the end of words.	In all stressed positions, especially at the end of words.
IV.	Very often. Bengalis - 70 Others - 06	Often. Bengalis - 65 Others - 08	Often. Bengalis - 68 Others - 07
V.	Phonologically differential.	Mixed.	Mixed.
VI.	Total absence of the sound R./y/ and the opposition of long and short /i/ in the L1.	Absence of such combinations of CV in the L1, and the presence of /opposition of VV combination in the L1. [namiye], [kãmiye], [tadiye].	Absence of such combinations of CV in the L1, and the presence of/opposition of VV combination in the L1. [loria], [khaia], [lo:ia].
VII.	Inability to articulate the sound, especially in ceretain segmental combinations.	Inability to overcome the L1 habit, and get used to the articulation of the CV combination.	Inability to overcome the L1 habit, and get used to the articulation of the CV combination.
VIII.	MPLJI+TE	TE+RTP	TE+RTP

TABLE : 19 (Contd.)

	Sr.No.14	Sr.No.15	Sr.No.16
I.	[je:]	[ja], (i.e. [ja] in unstressed positions)	[jo:], (i.e. [jo] in stressed positions)
II.	[e] [est]/[est'], [ezd'it'], [tekst]/[t'el'st].	[ja] [aud'itoria], [djadia]/[d'iad'ia] [tiotia]/[t'iot'ia]	[o:] [to:tia]/ [tot'ia], [mo:t].
III.	In almost all words, and in all positions.	At the end of a word.	In the initial positions of a word.
IV.	Often. Bengalis - 60 Others - 07	Often. Bengalis - 69 Others - 06	Very often. Bengalis - 72 Others - 05
V.	Phonologically differential.	Mixed.	Phonologically differential
VI.	Inattentiveness in recognising the typical articulation of the Russian [e] and resemblance of the same with the English letter (e).	Absence of the sound in the L1 and presence of [ja] in a predominant number in the L1 i.e. [iya—ia].	Absence of such a CV segmental combination in the L1.
VII.	Inability to overcome the OT effect (L1,L2).	Inability to overcome L1 habit.	Inability to get accustomed to the required TL articulation.
VIII.	OTJ+RTP+TE	ERTP	ERTP

TABLE : 19 (Contd.)

	Sr.No.17	Sr.No.18	Sr.No.19
I.	[ju:], (i.e. [ju] in stressed positions)	a. [p'] (i.e. palatalised) b. [p] (i.e. devoiced [b])	[b'] (i.e. palatalised)
II.	[u:] [lublu:], [sãu:s]/[sãu:z].	a. [p] b. [b] [piat'], [pie]], [pil], [pili:t'], [sto:lb], [aSibla], [gier.b], [ulybta:].	[b] [bit], [bil], [tr.ubia], [zabiva:t'].
III.	In final positions.	a. Mainly in initial positions. b. In all positions.	In all positions requiring palatalisation.
IV.	Sometimes, Bengalis - 43 Others - 05	a. Optionally. b. Often.	Optionally Bengalis - 65 Others - 05
V.	Phonologically differential	a. Phonologically differential. b. Phonologically differential.	Phonologically differential.
VI.	Absence of such a segmental combination in L1.	Carelessness and lack of practice in the palatalisation of /p/, and in devoicing /b/.	Lack of practice.
VII.	Inability to get used to the articulation of such combinations.	Inadequate training in palatalisation, and devoicing of voiced consonants.	Inadequate training in palatalisation of /b/.
VIII.	ERTP	ERTP	ERTP

TABLE : 19 (Contd.)

	Sr.No.20	Sr.No.21	Sr.No.22
I.	[m'] (i.e. palatalised)	[f] (i.e. devoiced /v/)	/f/ and [f] (including devoiced /v/)
II.	[m] [mia:c], [mio:t], [miaso], [znama:].	[v], or [bh] [vdar.o:1], [vdo:r.ni:], [avdo:bus], [vzigda:], [ulia:nobh].	[ph] [aphtar.], [za:phtr.a] [pha:za], [gato:ph], [phsigda:].
III.	In initial and middle positions requiring palatalisation.	In all positions.	In all positions.
IV.	Often. Bengalis - 69 Others - 06	Optionally. Bengalis - 50 Others - 03	Very often. Bengalis - 72 Others - 04
V.	Phonologically differential.	Phonologically differential/ Phonetic.	Phonetic.
VI.	Lack of practice in the palatalisation of /m/.	Absence of devoicing of [v] in the L1, and lack of practice, along with absence of [v] in the L1.	Absence of [v], and [f] in the L1, and presence of [bh] and [ph] instead. [BhaJa],[bhu:l], [pha~D.a], [go~ph].
VII.	Inadequate training in the palatalisa- tion of the sound [m].	Inability to over- come L1 habit, and get used to the segment /v/ and its voiceless counterpart.	Inability to overcome L1 habit.
VIII.	ERTP	MPLII+TE	MPLII+TE

TABLE : 19 (Contd.)

	Sr.No.23	Sr.No.24	Sr.No.25
I.	/v/	/v/	[t'] (palatalised)
II.	[bh] [bha:l],[bhjal], [bha:s],[Zybho:t], [zabho:t],[zabhu:t] [laro:bha], [tr.abha:], [bhaza:].	[b] [bot],[bo:dla], [ba:s], [zabo:t]/[zabo:d], [zabu:t].	[t] [cita:t], [temno:], [tiotia], [slu:Sat], [piat].
III.	In all positions.	In all positions.	In all positions.
IV.	Random. Bengalis - 69 Others - 05	Sometimes. Bengalis - 40 Others - 04	Often. Bengalis - 72 Others - 07
V.	Phonetic.	Phonologically differential.	Phonologically differential.
VI.	Absence of [v],and presence of [bh] in similar combina- tions in the LI. [bhālo:],[ābha:], [bhit@r],[bhut:], [bhot.],[pro:bhā:], [bhaJā:], and so on.	Resemblance of the TL letter (b) in writing with that of the English letter (b).	Inadequate practice in the palatalisa- tion of the TL [t].
VII.	Inability to overcome the LI habit and get accustomed to the new articulation.	Inability to overcome the DT visual effect.	Inadequate training in the palatalisation of [t].
VIII.	ERTP	DTJ+RTP+TE	ERTP

TABLE : 19 (Contd.)

	Sr.No.26	Sr.No.27	Sr.No.28
I.	[t'] (Palatalised)	[t] (i.e. devoiced /d/)	[d'] (palatalised)
II.	[c], or [ç] [çjo:mnij], [sci:], [je:sç], [byç], [çjo:k].	[d] [sa:d], [go:d], [r.a:d], [vo:dʌa], [sasjedʌa], [sasjed], [zaga:dʌa].	[d] [r.a:dɪ], [sɪdɪ:], [dɪva:n], [dʒadʒa] [dɪtʌ:nt], [(v) go:rade], [lʒudɪ:], [panɪ:dʒel'nɪk].
III.	In all positions.	Mostly in middle and final positions.	In all positions requiring palatalisation.
IV.	Often. Bengalis - 39 Others - 04	Very often. Bengalis - 65 Others - 06	Often. Bengalis - 62 Others - 05
V.	Phonologically differential.	Phonologically differential.	Phonologically differential.
VI.	Resemblance of the TL /t'/ with the L1 /ç/, and also the TL /c/ in speech.	Lack of practice in the devoicing of the TL [d], and also random use of /d/ in the L1 in similar CC - CV combinations: [Sâ:d], [bâ:d], [b@:d], [ç`â:d], [châ:d], etc.	Lack of practice and the influence of L1 units: [dɪdɪ], [b`adɪ], [dɪa], etc.
VII.	Inability to overcome the L1 habit, and also to distinguish between TL /t'/ and /c/ due to incorrect hearing the TL unit.	Inability to overcome the L1 habit along with inadequate practice in the devoicing of the TL /d/, and also incorrect hearing.	Inadequate training in the palatalisation of [d] in required combinations.
VIII.	MPLII+TE	ERTP	MPLII+TE

TABLE : 19 (Contd.)

	Sr.No.29	Sr.No.30	Sr.No.31
I.	/d'/ (i.e. palatalised)	/s/ and [s']	[s] (i.e. devoiced [z])
II.	[J] or [z] [r.a:Ji]/[r.a:zi], [Jiva:n]/[zi:va:n], [Ji:pta:nt], [l]u:zi], etc.	[S] [vapr.o:S],[Simja], [Sa:m],[Sa:t], [fSi:gdə:],[Su:mka], [fSlu:x], etc.	[z] or [J] [pa:lə:z], [r.əslə:z], [Jə:kə:z], [mar.o:J], [gr.u:J], etc.
III.	In all positions, requiring palatalisation.	Random in all positions.	In initial and final positions.
IV.	Often. Bengalis - 64 Others - 07	Random. Bengalis - 73 Others - 06	optionally. Bengalis - 35 Others - 04
V.	Phonologically differential.	Phonologically differential.	Phonologically differential / phonetic.
VI.	Absence of soft /d'/ in the L1 and incorrect hearing of the palatalised /d'/.	Absence of /s/ in the L1, except for that of in combi- nations with /t/: [S@sta]/[b@sta]etc. But: [S@m@:y], [S@l @l], [S@b@:S], [S@:S@n], etc.	Absence of /s/ and its voiced counterpart in the L1.
VII.	Inability to overcome the L1 habit.	Inability to overcome the L1 habit, since /s/, /S/, and /\$/ are free variants in the L1.	Inability to get used to the TL requirement.
VIII.	MPLII+TE	MPLII+TE	RTP

TABLE : 19 (Contd.)

	Sr.No.32	Sr.No.33	Sr.No.34
I.	/S/ and [S] (including the devoiced [Z])	a. /S/ b. /\$/	/Z/
II.	[s] [malad'jo:s], [my:s],[mu:s], [sa:l],[s]a:f], [sa:r.f], [va:sa], etc.	a. /\$/ b. /S/ [təva:r.ɪS], [ʃa:pka], [ʃu:m], etc.	[z] and [ʒ] [zi:zn], [zina:], [zivu:]/[ʒivu:], [Ju:tl̩a], [gər.a:z]/ [gər.a:ʒ], etc.
III.	In initial and final positions mainly.	In initial and final positions.	In all positions.
IV.	Only with those students using the '[Ghot.ɪ]' dialect of the CB. Bengalis - 16 Others - 02	Random. Bengalis - 65 Others - 04	Often. Bengalis - 40 Others - 06
V.	Phonologically differential.	Phonologically differential.	Phonologically differential / phonetic.
VI.	Inability to hear, apprehend, distinguish/ differentiate between the two sounds /S/ and /s/.	Inability to distinguish between the articulations of the two sounds: /S/ and /\$/.	Improper hearing and of practice in proper articulation.
VII.	Inability to hear/ apprehend, and reproduce the sound /S/ of the TL under influence of native dialect [Ghot.ɪ].	Free variation of /S/ and /\$/ in the L1, hence inability to distinguish between the two, and to over- come the L1 habit.	Inability to get used to the new sound. However acquainted with the English words: [pleZa] and [meZa], etc.
VIII.	MPOT&L1]+TE	MPL11+TE	ERTP

TABLE : 19 (Contd.)

	Sr.No.35	Sr.No.36	Sr.No.37
I.	/z/	/ts/	/ts/
II.	[J] and [Z] [Jaopa:r.t], [Ja:fr.a], [vaZbuZda:t`], [Zi:zn], etc.	[dz] [øt`jedz], [ma].ød`jedz], [na]ønjedz], etc.	[ç] and [ch] [øt`jeç]/ [øt`jech], [øgurjeç], [lønjeç].
III.	Always with some students in all positions.	In final positions after [je].	In the end of a word after [je].
IV.	Always with some students. Bengalis - 29 Others - 02	Optionally. Bengalis - 18 Others - 02	Sometimes. Bengalis - 22 Others - 04
V.	Phonetic.	Phonologically differential.	Phonetic.
VI.	Unable to articulate the sound, hence try to find a similar one.	Influence of OT's (English).	Unable to distinguish between the sounds: /ts/ and /ç/ or /ch/ because of the predominance of them in the L1
VII.	Inability to overcome L1 inertia.	Inability to overcome OT influence.	Inability to overcome L1 habit.
VIII.	ERTP	ERTP	ERTP

TABLE : 19 (Contd.)

	Sr.No.38	Sr.No.39	Sr.No.40
I.	/c/	[n'] (palatalised)	/n/ in combination with [g]
II.	[ç] [ça:sta], [mjaç], [zøçjot].	[n] [nyos], [lo:n], [nyt'], [pirinjos], [njeba].	[ŋ] [liniŋgr.a:t], [mi:t'iŋg].
III.	In all positions.	In all positions.	Mostly in the middle.
IV.	Often. Bengalis - 45 Others - 03	Often. Bengalis - 39 Others - 04	Optionally. Bengalis - 41 Others - 04
V.	Phonetic.	Phonologically differential.	Phonetic.
VI.	Random use of /ç/ in the L1. [çasâ], [çâmo:ç], [çâ], [søçel]-[æçel], [pæçâ], etc.	L1 and Ot's do not distinguish /n/ and /n'/. hence unable to apprehend.	Incorrect syllabic division.
VII.	Inability to distinguish the difference due to L1 influence.	Inability to distinguish the difference.	Inadequate and improper training.
VIII.	MPL11+TE	ERTP	ERTP

TABLE : 19 (Contd.)

	Sr.No.41	Sr.No.42	Sr.No.43
I.	/r./ and [r.ʼ]	/j/	/x/
II.	[r] [ru:la:], [ri:s], [ru:clə], [ru:bl.], [pa:rl.], [go:rat], [rabo:tə].	[j] or (nj) [sənatə:r.i_], [xar.o:S_], [pləxə:i], [mo:i], [ga:ila], [Sa:iba].	a.[ʔh] b.[h] [har.əSo:], [hi:mi]/ [hi:mi], [shjəmā], [hl.jep], [su:thā], [hədʼi:tʼ], [ho:l.adna].
III.	In initial and middle positions.	In all positions. Mainly in final positions after /i/.	a.In all positions. b.In initial and middle positions.
IV.	Often. Bengalis - 63 Others - 06	Very often Bengalis - 72 Others - 07	a.Often. b.Optionally. Bengalis-70and34 Others -06and04
V.	Phonetic.	Mixed.	Phonetic.
VI.	Difference in the articulation of the two segments being inapprehensible.	L1 does not use /j/ after /i/.	The L1 does not distinguish /x/, but has: /h/ and /h/.
VII.	Inability to overcome L1 inertia.	Inability to overcome L1 habit and get used to the required VC combination.	Unable to articulate properly because one is always looking for a parallel.
VIII.	MPLII+TE	MPLII+TE	a.MPLII+TE b.ERTP

TABLE : 19 (Contd.)

	Sr.No.44		
I.	/l./		
II.	[l] [byl],[cita:l], [r.əbo:tala], [la:mpa],[lop], [lu:l],[slo:l], [slu:Säl] etc.		
III.	In all positions. Very common with all BL1 students at one or the other point of time. Especially in final positions of verbal endings in p. tense		
IV.	Bengalis - 73 Others - 06		
V.	Phonetic		
VI.	L1 does not have a hard /l./ but uses /l/ in all posi- tions in similar CC combinations: [lâS],[lom],[kɪ:l], [lu:lye],[Slo:l]' [pit@l] etc.		
VII.	Inability to overcome L1 habit.		
VIII.	MPL11+TE		

TABLE : 19 (Contd.)

	Sr.No.45
I.	Combinations of a.two, b.three and c.four consonants: a.[fʃ],[fʃs],[dʃ],[zʃ],[gʃ],[ʃn],[ʃm],[ʃt],[ʃc] b.[skʃ],[str.],[fʃs.],[dʃs] etc. c.[vzʃ],[vstr.],[r.stʃ] etc.
II.	a.[fʃkʊ:snā],[fʃsɪgda:],[dʃnɔm],[zʃdʃes],[gʃdʃe],[kʃni:ga],[vʃmjestʃe],[fʃtor.nɪʃ],[sʃa:stʃe],etc. b.[mā:ʃva:],[sʃtr.a:ʃni],[fʃsl.ux],[dvina:ʃchatʃ],[tr.ɪna:ʃchatʃ], c.[vzʃ].jə:t / [vzʃgəl.ʃatʃ],[vistr.jeʃa],[l.ɪkə:r.ʃstʃvə] etc.
III.	Varies with different consonantal combinations.
IV.	Always with a few of them. Bengalis - 09 Others - 01
V.	Mixed.
VI.	Due to defective automatisaton of the articulatory organs, especially those of the tongue and lips. Some of these respondents used Bengali, Hindi and English languages in a distorted manner too.
VII.	Individual draw backs, and inability to overcome them.
VIII.	NEGLIGIBLE / ERTIP

TABLE : 19 (Contd.)

	Sr.No.46
I.	Combinations of prepositions and nouns. [v+d], [v+g], [v+t], [v+l], [k+b], [k+d], [s+v], [s+b].
II.	[vødo:mje], [vøf]a:ssje], [vøgo:r.ad'je], [vøt'itr.a:d'i], [søbráco:m], [købr.a:cu], [søbr.a:ta], [fødr.u:gu], [løbr.a:tu], [vøfní:gje], etc.
III.	Depending upon consonantal combinations.
IV.	Always with some respondents. Bengalis - 15 Others - 03
V.	Mixed.
VI.	Due to defective automatization of the articulatory organs, especially those of the tongue and lips. Some of these respondents used Bengali, Hindi and English languages in a distorted manner too.
VII.	Inability to get accustomed to required articulation.
VIII.	ERTP

VI.4a DICTATION DATA --- ITS CLASSIFICATION AND ANALYSIS

Data on errors reflected in dictation of texts were collected from all the respondents under categories I, II, and III. Information so gathered, was then carefully transcribed on data sheets for classification and analysis.

The following tables 20 and 21 have been prepared for the analysis of the errors, reflected in the dictations in juxtaposition with errors, committed in speech.

Table 20 shows the correlation of all errors in writing and in speech, whereas Table 21 shows some isolated cases of errors.

TABLE : 20 CORRELATION OF ERRORS IN WRITING AND IN SPEECH

Sr. No.	The Russian (Cyrillic) Letter:	The segment as required to be articulated:	Error, as reflected in writing:	Error, as reflected in reading:	REMARKS:
1.	(а).....	[a:].....	none	none	---
2.	.....	[ø].....	none	[a:],[@:], [ø],[ä].	---
3.	.....	[ä].....	(a:)- /a:/	[a:],[@:], [ø].	(CAE) *
4.	(э).....	[e:].....	(e)	none	(OTIE)
5.	.....	[i].....	none	[e]	---
6.	(и).....	[i:].....	none	[u:]	---
7.	.....	[i].....	none	[u]	---
8.	(о).....	[o:].....	none	none	---
9.	.....	[ø].....	(a) - [a]	[ä].[o:], [a:],[@:], [ø].	(L1IE) *
10.	.....	[ä].....	(a) - /a:/, (o) - /o:/	[a:],[@:], [ø].	(L1IE)
11.	(у).....	[u].....	(u) - [i]	[i:],[i]	(OTIE)
12.	.....	[u].....	(u) - [iu]	[iu]	(OTIE)
13.	(ы).....	[y:].....	(u) - [i], (y) - [ai]	[i:],[i]	(L1+OTIE)*
14.	.....	[y].....	(u) - [i], (y) - [ai]	[i]	(L1+OTIE)*
15.	(я).....	[ja:].....	(ia)- [ia]	[ia:],	(L1IE) *
16.	.....	[i].....	(i) - [i]	[ia]	(CAE)
17.	(е).....	[je].....	(ie)- [ie]	[iye→ie>e]	(L1OTIE) *
18.	.....	[i].....	(i) - [i]	[e]	(CAE)
19.	.....	[e].....	none	none	---
20.	(е).....	[jo:].....	(uo)- [io]	[io],[o:]	(L1IE) *
21.	(ю).....	[ju].....	(iu)- [iu], (u) - [u]	[iu],[u]	(L1IE) *
22.	.....	[u].....	(y) - [u]	none	(CAE)
23.	(б).....	[b]+v →/p/	(b) - [v], (p) - [r.]	none	(OTIE)
24.	.....	[b'+v→/p'/	(b')- [v'], (p')- [r.')	[b] →[p]	(OTIE)
25.	(в).....	[v]+v →/f/	none	[b],[bh]→ [ph],[bh]	---
26.	.....	[v'+v→ [f']	none	[b'],[bh]→ [ph],[bh]	---
27.	(г).....	[g]+v→/k/	(g)-[d]>[k]	none	(OTIE)
28.	(д).....	[d]+v→/t/	none	[g],[d],[d]	---
29.	.....	[d'+v→/t'/	(z)-[z]→ (c)-[c]	[d],[J],[z] → [t],[c],[ç]	(L1IE) *
30.	(ж).....	[Z]+v→/S/	(z)-[z]→ (c)-[s]	[z],[J→s]	(L1IE) *
31.	(з).....	[z]+v→/s/	none	[J] → [S]	---
32.	.....	[z'+v→/s'/	none	[J],[Z]→ [Z],[J]	---
33.	(и).....	[j].....	(u) - [i]	[i]	(L1IE) *
34.	(к).....	[k].....	none	none	---

contd...

TABLE : 20 Contd.

Sr. No.	The Russian (Cyrillic) Letter:	The segment as required to be articulated:	Error, as reflected in writing:	Error, as reflected in reading:	REMARKS:
35.	(Л).....	[l.].....	none	[l.ʹ]	(L1IE)
36.	.....	[l.ʹ].....	none	none	--
37.	(М).....	[m].....	(m) - [t]	none	(OTIE)
38.	.....	[mʹ].....	(mʹ)- [tʹ]	none	(OTIE)
39.	(Н).....	[n].....	(n) - [p]	[h]	(OTIE)
40.	.....	[nʹ].....	(nʹ)- [pʹ]	[h]	(OTIE)
41.	(П).....	[p]-v→[b]	(p)-[r.]→ (b)-[v]	[n]	(OTIE)
42.	.....	[pʹ]-v→[bʹ]	(pʹ)-[r.]→ (b)-[v]	[nʹ]	(OTIE)
43.	(Р).....	[r.].....	(r)	[r],[p]	(OTIE)
44.	.....	[r.ʹ].....	(r)	[rʹ],[pʹ]	(OTIE)
45.	(С).....	[s]-v→[z]	(S) -[S]→ (Z) -[Z]	[S]→[z][J]	(L1IE) *
46.	.....	[sʹ]-v→[zʹ]	(S) -[S]→ (Z) -[Z]	[Sʹ],[zʹ]	(L1+OTIE)*
47.	(Т).....	[t]-v→[d]	(m) -[m]→ (d) -[d]	[m],[c],[ʒ] [d]	(OTIE)
48.	.....	[tʹ]-v→[dʹ]	(c) -[c]→ (z) -[z]	[t],[c],[ʒ] [J]	(L1IE) *
49.	(Ф).....	[f]-v→[v]	none	[ph]→ [b],[bh]	(CAE)++
50.	.....	[fʹ]-v→[vʹ]	none	[ph]→[bh]	(CAE)++
51.	(Х).....	[x].....	none	[kh],[h]	(L1IE)
52.	(Ц).....	[ts].....	(c) - [c]	[tz],[c][ʒ]	(L1IE) *
53.	(Ч).....	[c].....	(mʹ)- [tʹ]	[tʹ]	(CAE)++
54.	(Ш).....	[ʃ]-v→[ʒ]	(W),(z)-[z]	[S]→[z/J]	(OT+L1IE)++
55.	(Щ).....	[ʃ]	(S) -[S]	[S]	(L1IE) *
56.	(Ъ).....	soft sign	(b) -[v]	[b],[v]	(CAE)++

TABLE : 21 SOME ISOLATED CASES OF ERRORS IN WRITING

57.	мне	[mnʹje]	мене	[miniye], [miniye]	
58.	меня	[minʹja:]	миния	[minia]	
59.	в Дели	[vdʹje:li]	во Дели	[vodieli]	
60.	в Центр	[ftsʹje:ntr.]	фо центор	[fotsjentor]	
61.	двaтцaч	[dva:tsatʹ]	двaдцaть	[dva:ddzac]	
62.	отец	[otʹje:ts]	отиец	[otiyets]	
63.	преподаватель	[pripodava:- tʹilʹ]	приподавачил	[pripoda- va:cil]	
64.	у меня есть	[u minʹja: jestʹ]	и миния ест	[i minia jest]	
65.	брат	[br.at]	врат врать	[vr.at], [vratʹ]	
66.	студент	[studʹje:nt]	ctudent ctudent	[studijent] [studʹjent]	English ++ letters ++
67.	инспектор	[inspʹjektor]	инспектор	[inspʹjektor]	do. ++
68.	инженер	[inZinje:r.]	енгинер	[enginjer.]	do. ++
69.	очень	[o:cinʹ]	ачи:н	[aci:n]	
70.	русский	[r.u:sskij]	русский	[r.isskij]	do ++

The errors, which are reflected in the Dictations have been grouped under the following by their type and origin:

- a. Errors which are influenced by the L1 (L1IE).
- b. Errors which are influenced by OTs (OTIE).
- c. Errors committed due to carelessness and in the process of automatization thereof (CAE).

Errors which could simply be treated as spelling mistakes have not been incorporated in the above list since they do not apparently have any substantive bearing on the present study. However, a few of them have been marked with ++ in the above Tables in view of their frequent repetition.

There are 38 different errors, reflected in writing, out of which 14 are L1IE's, and 13 OTIE's, 05 L1+OTIE's, and 08 CAE's. From the above numbers it is clear that there are 16 such errors (marked with *) that are reflected both in speech and writing, and are influenced mostly by the L1. It is also observed that the OT influenced errors are committed mainly due to similarities in the graphic expressions of Russian and English languages, and quite a few errors of this type are overcome with time and practice.

There are 14 such errors which are reflected in speech and not in writing. It is important to note here that the L1 (Bengali) script is totally different, and the segments which have no graphic representations in either English or Russian scripts are not reflected in writing.

The 38 errors which are reflected both in writing and in speech have an important bearing on this study, as they indicate the fact that the students write exactly what they hear, and they read as they write.

FOR EXAMPLE:

HEAR:	WRITE:	FOR:	READ:	DEVIATION:
[b]	(b)	[б]	/b/ or /v/	[б] → [v] = /b/ → /v/
[m]	(m)	[М]	/t/ or /m/	[М] → [m] = /m/ → /t/
[t']	(т)	[Тб]	/c/ or /t'/	[Тб] → [c] = /t' / → /c/
[Z]	(z)	[Ж]	/z/ or /J/	[Ж] → [z] = /Z/ → /z/J/
[d']	(з)	[Дб]	/z/ or /J/	[Дб] → [z] = /d' / → /z/J/

In fact almost all errors which are reflected in speech, are reflected in writing too. Errors which are not reflected in writing are the ones that have no similar graphic expressions in the script in use, or they are replaced with letters from the English language.

VI.4b INTERVIEW DATA (TEACHERS)

Very important and valuable information could be gathered from the teachers of the Russian language from 5 major institutions. These teachers have had several years of experience and many students with Bengali as their L1 and who have learnt the Russian language under their guidance. The following is an account of their views:

All the teachers were of the opinion that not only at the initial stages, but even later, the L1 has a very important role to play in the process of a second language acquisition. Further that they have experienced that an average student of one L1 background could learn a second language better, as compared to other languages as L1, and vice versa. They opined that a set of errors were typical for one L1 group of students, while the others may never make such errors. These errors are mostly reflected in speech as phonemic or phonetico-phonological errors, and also in the sphere of sentences affecting, at times, grammatical requirements of the language, both of which are reflected in writing too in varying degrees. They were of the opinion that, especially in the initial stages, the L1 constantly interferes

with its own characteristic features. These could sometimes be as POSITIVE TRANSFERENCE (influence) too. This influence, be it positive or negative, definitely depends on the L1 background of the learner. Hence it is certain that students with Bengali as their L1 background will and do also have a set of problems while learning the Russian language. Some of these problems could be identified as typical for the Bengali speaking learners of the Russian language.

In the context of the 'Multilingual Indian Classrooms' and the exposure of each student to at least two other languages (for the Bengali speaking learners English and Hindi mostly), it was felt that the typical L1 influenced, especially phonetic errors are also reflected in their OTs and, hence, these could be treated as the main difficulties in learning and using not only the Russian language, but also the OTs. The OTs, however, also, at the same time, help in learning the Russian language.

It was felt by the teachers that, though it may not be very easy to identify the specific difficulties, except for some isolated segments, in principle they could be located by doing a detailed survey and analysis of the errors and accents of the Bengali L1 students, and going into the roots of such errors and accents. Likewise it is very important to identify such difficulties which may be influenced by factors such as age, interest, language environment, medium of instruction, duration of the course, etc., because a set of problems may be averted by one section of students of one perceptual and environmental background as compared to another.

Keeping in mind the heterogeneous nature of the Indian Classrooms in terms of age, educational qualifications, OTs and L1s etc., it was opined that the teacher concerned will have to work out a list of problems common for all students in the Indian context, and those specific to Bengali or other L1 students. Since all the teachers agreed with the theory that: "FLT basically is a training in habit formation", hence, these specific problems could be avoided, or errors rectified with a suitable amount of drills and repetitions in the required habit formation. These could be supplemented by special exercises, and also with training in the articulation of the required TL segments and their combinations. However, it may not always be possible to overcome all the difficulties and problems. Success, to a great extent, will depend upon the actual efforts put by the learners themselves.

VI.4c INTERVIEW DATA (RESPONDENTS)

It was observed that most of the respondents (as expected) were quite ignorant about the role of the MT and OTs in learning the Russian language. Almost all the respondents, however, quite often tried finding a replacement or alternative to the difficult segments and their combinations from the languages known to them. It is quite important to note here that in all the cases it was found that teachers of the TL often introduced the TL segments with examples from the M1s and O1s, and more than often they themselves drew parallels to explain these sounds and segments. The teachers often talked to the respondents about the TL than in the TL. Some of the respondents had the habit of even transliterating difficult segmental combinations (words) of the TL into English, or the L1, thereby not only distorting the TL segments, but also getting used to some sort of a suitable substitute or replacement of the TL.

Most of the respondents knew as to where they went wrong, or which segments and segmental combinations were problematic for them. However, this realisation was mainly owing to their teachers' pointing out the same to them. The main difficulties, quoted by them were:

1. Clusters of three and more consonants.
2. Reduction of vowels.
3. Some typical segments like: /s/, /z/, /Z/, /y/, /v/, /d'/, /t'/, etc.

Apart from the above the respondents also pointed out the following problems, faced by them:

- a. Inability to identify the correct articulation of segments and their combinations due to the individual differences among the styles and manners of articulation of the teachers themselves.
- b. Inability to follow the comparative method of description of articulation of sounds given in various text books due to lack of knowledge of the language that the TL is being compared with, and also the medium of instruction.
- c. Inadequate contact hours and long gaps between classes, which make the respondents lose link between them.
- d. Fear of committing errors and shyness that restrict the respondents from using the TL units freely.

VI.4d DESCRIPTION AND INTERPRETATION OF PHONETIC DATA IN THE
LIGHT OF OTHER DATA

Sr.No.1. [i] → /e/

The sound [ɪ], i.e. /e/ in unstressed positions is optionally read as /e/ in initial and middle positions of segmental combinations by 65 and 9 respondents from Categories I+II and III respectively. The error may be common for all the categories, however it is important to note here that the BL1 does not distinguish any qualitative reduction of vowels, and also that all the respondents are quite prone to be confused by the English (e) which, in this particular case, is of great importance. Hence, it is possible that the main reason for such an error is the effect of OTs.

In view of the fact that the sound required to be articulated is neither something new nor complicated, hence this phonologically differential error is classified under 'EPTP'. This error is not reflected in writing.

Sr.No.2. [ä] → [a:]

The sound, [a] i.e. /a/ and /o/ in unstressed positions is not reduced, and is often articulated as the stressed [a:] in all positions by 68 and 09 respondents respectively. It is observed that this error is committed due to lack of practice and sometimes due to inattentiveness of the students about the position of the stress in the particular word, and thereby reduction of /a/ → [a]. It is found that the respondents of BL1 (also DL1) are able to rectify this error with practice, because the same basically is a phonetically differential error, and needs proper reduction of [a:] → [ä]. Therefore the same is

classified under 'EKTP'. This error is sometimes reflected in writing.

Sr.No.3. [ä] → [ə],[@:]

The sound [a], i.e. /a/ and /o/ in the unstressed positions, especially in the middle of words in combinations with /n/, /r./, /g/, /x/, /m/, /l./ etc. is optionally not reduced as required, but it is articulated as [ə] or [ə:] by 60 and 00 respondents from the two categories respectively. The sound [ə] does not exist in the TL system of sound segments. It is observed that the sound [ə] is very widely used in combinations with the above consonantal phonemes in the BL1, and that [ə] is a very dominant vowel phoneme in the L1. The error is committed by almost all students in spontaneous speech, and it is noticed that respondents fail to distinguish between [ə] and [a]. The error is committed by the students mostly when they are less alert or inattentive. This is a phonetic error, and the respondents are mostly unable to overcome the L1 habit due to similarities in the two sound segments. The error is classified under 'MPL1I+TE'.

This error could not be ascertained from writings.

Sr.No.4. [à] → [o:]

The sound [à], i.e. unstressed /o/ at the end of words is not adequately reduced, and hence, read as [o:] with stress, especially after /t/ and /l./ by 70 and 05 respondents respectively. It is observed that a similar long [o:] is very random in the BL1 in combinations with consonants /t/ and /l/, especially in the verbal forms in the past tense of third person singular and plural. The error is committed by almost all respondents, and is especially reflected in spontaneous speech.

This phonologically differential error, hence, is concluded to be under MPLII+TE, because of the BL1 respondents' inability to overcome the L1 habit.

This error is not reflected in writing.

Sr.No.5. [ø] → [o:]

The sound [ø], i.e. the unstressed /o/ in the first prestressed positions and the beginning of words did not undergo reduction in 65 and 08 cases respectively, and it was often read as [o:], mainly in the middle of words. It may be interesting to note that the BL1 is characterised by the opposition of [ø] and [o:] ([ø] → [ø] → [ø:] → [o:]), and are used in combinations with the same consonants as in the case of the TL. It is further noticed that the main difficulty is the inability to deautomatise from the L1 habit. Hence, this phonologically differential error is classified under 'MPLII+TE'.

This error is not reflected in writing.

Sr.No.6. [ø] → [a:], [ä]

The sound [ø], i.e. /a/ and /o/ in the first prestressed positions and beginning of words, is often pronounced as [a:] or [ä] by 62 and 07 respondents respectively in initial and middle positions. This phonologically differential error is attributed more to lack of practice in qualitative reduction of /a/ and /o/, but can be rectified with time and proper practice. The lack of such phenomenon in the BL1 does not make it a very difficult task, however, some influence is not totally ruled out. This error is classified under 'ERTP'.

This error is sometimes reflected in writing too.

Sr.No.7. [ø] → [ə],[ə:]

Bengali students very often pronounce [ə] or [ə:] instead of [ø], i.e. /a/ and /o/ in first prestressed positions, and beginning of words. This is reflected in 70 and 01 cases respectively. This is because of the random use of [ə] and [ə:], and a total absence of [ø] in the BL1. Just like in the case of Sr.No.3, the reduction of the vowels is of a different nature, thereby bringing in a different segment all together. This happens as a result of the BL1 habit of [ə:] and [ə] in almost all positions, and the same phonetic error, therefore, is classified under 'MPLII+TE'.

This error could not be ascertained from writing.

Sr.No.8. [y] → [i:],[i]

The sound [y] is very often being articulated as [i:] or [i] almost in all positions, especially in combinations with /z/,/t/,/m/,/v/,/r./ etc. by 70 and 06 students respectively. The articulation required is quite different. However, the BL1 respondents are often confused and unable to overcome the difference between a long /i:/ and the segment [y], and take them to be long and short [i]. This is a phonetic error which is difficult for the Bengali students to rectify. Hence this error is classified under 'MPLII+TE'.

This error is sometimes reflected in writing too.

Sr.Nos.9. [ie:] → [ie:] or [iye]

10.[ia:] → [ia:]

11.[io:] → [io:]

12.[iu:] → [iu:]

The CV combinations [je:],[ja:],[jo:] and [ju:].No.4. [a] — [o:]

The sound [a], i.e. unstressed /a/ at the end end of words is not adequately reduced^{ced} in stressed positions are often articulated as [je:]/[iye],[ia:],[jo:] and [iu:] respectively by an average of 66 and 07.25 respondents in all positions, especially at the end of words. These are typical errors of a mixed nature, and it is observed that the BL1 frequently uses [iye],[ia],[jo] and [ju] in both short and long oppositions. However, though this group of errors poses some problems at the very initial stages of introducing these segmental combinations to the Bengali speaking students, these are classified under 'TE+RTP', because in most of the cases the BL1 students are able to overcome these difficulties with time in most of the cases. However, at the very initial stage of training, this group of errors does pose a lot of difficulties in getting used to the CV combinations and their articulations as opposed to the VV combinations in the L1.

These errors are sometimes reflected in writing too.

Sr.No.13 [i] → [e]

The sound [i], i.e. [je] in unstressed positions is often articulated as [e] mainly in initial and middle positions by 68 and 08 respondents respectively. The required vowel phoneme, i.e. [i] is not new for the BL1 respondents (nor is it new for the OL1

respondents). This phonologically differential error is committed due to the influence of the English (e) combined with inadequate training in the reduction of the unstressed [je] of the TL, and the same is, therefore, classified under 'MPOT]+TE'.

This error is not reflected in writing.

Sr.NO.14. [je:] → [e]

The cv combination [je:] is often articulated by 60 and 07 respondents respectively as [e] in almost all words and in all positions. This phonetic error is committed due to the influence of the English (e) and also inattentiveness of the learners. Though the B11 respondents find it difficult to overcome this OT]+TE, however with time and practice the BLJ students, as it is noticed, get used to articulating the required segmental combination and its articulation. However, as discussed earlier, they often change the same into a VV combination. This error is classified under 'OT]+TE+RTP'.

This error was not found to be reflected in writing.

Sr.Nos.15. [ja] → [ia]

16. [jo:] → [o:]

17. [ju:] → [u:]

The segmental CV combinations [ja],[jo] and [ju] are often articulated as [ia],[o:] and [u:] by an average of 66.5 and 07 respondents respectively. This mixed group of errors are committed mainly due to the absence of such CV combinations in the L1, thereby complicating the process of the required articulation of segmental combinations. It is observed that these errors are rectified without much difficulty at a later stage. Hence they are classified under 'ERTP'.

These errors are often reflected in writing too.

Sr.Nos.18. [p'] → [p]

[p] → [b]

19. [b'] → [b]

20. [m'] → [m]

The palatalised sounds [p'], [b'] and [m'], and devoiced [p], i.e. /b/ in devoiced articulation is optionally/often rendered by the respondents as [p], [b], [m] and [b] respectively. These phonologically differential errors are committed mainly due to carelessness and lack of practice in palatalisation of the consonantal phonemes. At a later stage of training, most of the students are seen to overcome this error. Hence the same are classified under 'ERTK'. Some of these errors are also associated with incorrect hearing of the required sound segments.

These errors are not reflected in writing.

Sr.No.21. [f] → /v/ → [bh]

22. [f] → [ph]

23. /v/ → [bh]

The errors [f], i.e. the devoiced /v/ → [bh] and [f] → [ph] are two typical errors that are optionally/very often committed by an average of 70.5 and 06.5 respondents respectively in all positions of words. Though /f/ → /v/ is a phonologically differential error, the others, i.e. [bh] and [ph] are typical phonetic errors of the BL1 students which are committed due to the absence of /f/ and /v/ in the Bengali language, and the presence of a set of very closely similar segments [ph] and [bh] which are used in quite similar sequential combinations as in the TL. These errors remain with the BL1 students for long. However, it is very important to note that OTs do help, as observed, in

rectifying these errors. These errors are, therefore, classified under 'MPLI(+TE'.

These errors could not be ascertained from writing.

Sr.No.24. /v/ → /b/

The phoneme /v/ is sometimes articulated by the BL1 respondents as [b] in all positions of words. This is a typical phonologically differential error, and it is committed by 40 and 04 respondents respectively, and the same is attributed mainly to the absence of /v/ in the Bengali language, and resemblance of the TL segment with the English (b) in writing. This error is, therefore, classified under 'OTI+RTP+TE'.

This error is sometimes reflected in writing too.

Sr.Nos.25. [t'] → [t]

and

26. [t'] → [c] or [ç]

The palatalised sound [t'] is often not palatalised by 72 and 08 respondents respectively in all positions of the word. This is a phonetic error, committed due to lack of practice in palatalisation and can be rectified with time and practice. However, the same error, closely linked with the next, i.e. Sr.No. 26, when instead of [t'] — [c] or [ç] are articulated by 39 and 04 respondents respectively. This error is influenced by the BL1 as there is no /t'/, but there is [ç] in the L1. This error remains for a long time, and it is classified under 'MPLI(+TE'. This error is also linked with incorrect hearing of the sound.

These errors, barring [c], could not be ascertained from writings.

Sr.No.27. [t] → [d]

The sound [t], i.e. the devoiced /d/ in middle and final

positions of words is very often not devoiced as required by 65 and 06 respondents respectively. This phonologically differential error is mainly committed due to poor auditory training and recognition of the sound and lack of practice in devoicing. The error is easily overcome by practice. Hence the same is classified under 'EP/P'. The error is also linked with random use of the voiced /d/ in similar VC combinations, especially in the end of words of the L1.

In writing often (t) is noticed instead of (d).

Sr.No.28. [dʰ] → [d]

29. /dʰ/ → [J] or [z]

The sound [dʰ], i.e. palatalised /d/ in all positions is often rendered as [d], i.e. without palatalisation by 62 and 05 respondents, and as [J] or [z] by 64 and 07 respondents respectively. These phonetic errors are linked with each other and are committed mainly because of the absence of a soft /dʰ/ in the L1. The presence, on the other hand, of /J/ in the Bengali language compels the students in finding an alternative and similar sound. They are also unable to hear the difference in articulation. These two errors are, thus, classified under 'MPL11+TE'.

In writing often (z) is noticed instead of (dʰ).

Sr.No.30. /s/, /sʰ/ → [S]

and

33 /S/ ↔ /ʃ/

The phonemes /s/ and /sʰ/ are two of the most widespread and problematic sounds, and most often all B1 students render them as /S/ at one or the other point of time. This error has a very long lasting effect, because in the B1 (s), (S) and (ʃ) are free

variants, and all have the same sound cover, i.e. [s],[S], and [ʃ] → /s/. This phonologically differential error is committed due to the inability to overcome the L1 habit of using the sound in same CV/CC combinations as that of the TL, except for those with (t). The error is rendered by 73 and 06 respondents respectively, and the same is classified under 'MPL1I+TE'.

These errors are often reflected in writing too.

Sr.No. 31. [s] → [z], [J]

The sound [s], i.e. devoiced /z/ is optionally rendered as [z] or [J] by a small number of respondents, especially from the BL1 students. This group comprises of a phonologically differential and other phonetic errors, mainly owing to the absence of /s/ in the Bengali language. Though the error is linked with the L1, the same can be rectified with time and practice. Hence the same is classified under 'ERTP'.

In writing often (s) is noticed instead of (z).

Sr.No.32. /S/,[S] → [s]

A very small number of students rendered the sound [S] as [s] in initial and final positions. However, these students always committed this error, and it was observed that the L1 of these students was highly influenced by the 'Ghosh.1' dialect of the Bengali language, which is marked by a predominance of /s/ and a total absence of /S/. This phonetic error is committed as a result of inability to distinguish between /s/ and /S/ due to the fact that they are even unable to hear /S/ under the influence of the OT. This error is classified under 'MPOTI+TE'.

This error is very often reflected in writing too.

Sr.No.34. /Z/ → [z],[J]

35. /z/ → [Z],[J]

The phonemes /Z/ and /z/ are also two of the most widespread, problematic sounds which are often rendered as [z],[J], or [Z] and vice versa. These phonetic errors are committed mainly due to the absence of both /Z/ and /z/ in the Bengali language. However, since the BL1 users are exposed to these sounds through English and/or Hindi, these sounds are not new to them, but similar articulations in the OTs make it complicated for them to overcome the L1 habit and get used to using them as required. The errors remain for a long time with some of the students. However, these errors could be rectified (there may be exceptions) with time, and hence, they are classified under 'ERTP'.

These errors (except for [J]) are often reflected in writing too.

Sr.No.36. /ts/ → [dz]

37. /ts/ → [ch],[ʧ]

An average of 20 and 03 respondents respectively rendered the sound /ts/ as [tz], or [ch], or [ʧ] in the end of words. This error was committed optionally/sometimes. It is observed that while [dz] is a phonetic error, influenced by the English language where voicing of the voiceless consonant takes place in /s/ → /z/ at the end of words, the other two are also phonetic errors where the students are unable to distinguish between /ts/ and /ch/ or /ʧ/. This is because of the predominance of /ch/ and /ʧ/ in the Bengali language, and therefore, the errors are attributed to inability to overcome the L1 habit easily. However, it is found that these errors could be overcome with

time. Hence they are classified under 'ERTP'.

These errors could not be ascertained from writings, except that sometimes (c) appears instead of (ts).

Sr.No.38. /c/ → [ʧ]

In all positions the phoneme /c/ is often rendered as [ʧ] by 45 and 03 respondents respectively. This typical phonetic error is attributed to the random use of /ʧ/ in the Bengali language, and inability to distinguish between /c/ and /ʧ/ by the Bengali students. This error has a very long lasting effect and it is classified under 'MPLI+TE'.

This error could not be ascertained from writings.

Sr.No.39. [nʰ] → [n]

The sound [nʰ] in all positions is often read as [n] by 79 and 04 respondents respectively. This is a phonologically differential error, attributed to lack of practice. The same is classified under 'ERTP'.

This error is not reflected in writing.

Sr.No.40. /n/ in combination with /g/ → [ŋ]

The phoneme /n/ in combination with /g/ was optionally read as [ŋ] by 41 and 04 respondents respectively. This is a phonetic error, and the same can be overcome with practice. This error is classified under 'ERTP'.

This error is not reflected in writing.

Sr.No.41. /r./, [r.ʰ] → [r]

The phoneme /r./ and the sound [r.ʰ] were often read as [r], mostly in initial and middle positions by 63 and 06 respondents respectively. This is a typical error and is attributed to the

absence of the phoneme /r./ in the Bengali language. Some students find it very difficult to overcome the L1 habit, and hence, this is classified under 'MPLII+TE'.

This error could not be ascertained from writings.

Sr.No.42. /j/ → [ɨ],[nil]

The phoneme /j/ was very often rendered as [ɨ] in middle and final positions by 72 and 07 respondents respectively. This is a typical mixed/phonetic error that occurs mainly after (ɨ). Sometimes students drop out the phoneme altogether. This error is attributed to the L1 influence and the same is difficult for the BL1 students to overcome. The error is classified under 'MPLII+TE'.

These errors are sometimes reflected in writings too.

Sr.N.44 /l./ → [ɨ]

The phoneme /l./ was often rendered as /ɨ/ by 73 and 06 respondents respectively. This error was noticed in all positions of the word, especially in verbal endings in their past tense forms. This error is also attributed to the L1 influence, and thus, classified under 'MPLII+TE'.

The same could not be ascertained from writings.

Sr.No.43. and 45. /x/ → [kh],[h]

The phoneme /x/ was often rendered by 70 and 06 respondents as [ɨh], and by 34 and 04 respondents as [h] almost in all positions. These are typical phonetic errors of the BL1 students, which could be attributed to the absence of /x/ and presence of /ɨh/ and /h/ in the L1. The BL1 students find it difficult to articulate the sound [ɨ] and try to look for its parallel in /ɨh/

or /h/. This error ([l'h]) remains for a long time. Hence this is classified under 'MPLII+TE', while the error [h] is overcome with practice 'ERTP'.

These errors could not be ascertained from writings.

Sr.No.46 Combinations of two, three and four consonants:

Errors reflected under this column indicate that they could be attributed to defective/incorrect automatisations of the articulatory organs, especially those of the tongue and lips. Some of these respondents used Bengali, Hindi and English languages in a distorted manner too. These are due to individual drawbacks, and inability to overcome them. Some of them could be rectified with time and proper practice. These errors have been considered to be negligible in the present context, and classified under 'RTP'.

These errors are sometimes reflected in writing too.

Some of the above errors could be attributed to age, as they were not reflected in the speech of the younger age group. Also that the younger students found it much easier to overcome some of these difficulties (if any).

It was also observed that Russian medium of instruction, as expected, produced better results, and more motivated students took lesser time in overcoming their difficulties.

Occupation, marital status and educational qualifications did not reflect any significant information in the present analysis.

Lastly it is very important to note that from personal teaching experiences of the researcher it was observed that aptitude, which was not included in 'perceptual and environmental background' data sheet, (as it would have been difficult to gauge the same) made a lot of difference in overcoming many a problem.

The following chapter includes the findings and probable solutions to the main problems of teaching the Russian segmental features to the Bengali speaking students along with broad observations of the researcher.