Chapter— V
An Analysis of Modern Bengali Songs as Musical Texts

5.1.0 Introduction

This chapter attempts to deal with the musical aspects of MBS. As Fabb (1997: 96) states “The musical structure can be thought of as a sequence of notes and rests........ A note has a pitch value and a duration; a rest is a silence which has a duration.”

Consequently, in order to state the characteristics of MBS in relation to the musical structure, we present some observations with regard to the duration of some sound segments resting on pitches, variation in pitch, variation in tempo and the structural relation of the divisions of the melodic aspect of MBS.

5.2.0 Duration of Sound Segments

In this section, the duration of vowels, semi-vowels, nasals, laterals and r-sounds have been discussed (with reference to MBS).

5.2.1 Duration of vowels

With regard to duration of vowels we may consider the views of different scholars. Trask (1996:125) explains the ‘duration’ as “the amount of time occupied by an articulation, usually measured in milliseconds(ms); the primary phonetic correlate of length and sometimes one phonetic correlate of stress.”

Trask (1996:200) describes length as “the duration of a syllable, or of the vowel or diphthong it contains, regarded as a phonological characteristic; the phonological correlate of duration.”

Abercrombie (1971:80-81) says “length—the duration in time—of segments............. it may have phonological importance from the point of view of syllable structure.”

Ladefoged (1975:171) says “Recording of the waveform and the intensity provide a good way of studying variation in length.”
According to Lehiste (1970:18), "To a certain extent, the duration of a segment may be determined by the nature of the segment itself, that is, by its point and manner of articulation. The term intrinsic duration may be used to refer to the duration of a segment as determined by its phonetic quality. ... As far as the vowels are concerned, their duration appears to be correlated with tongue height: other factors being equal, a high vowel is shorter than a low vowel." Later we have mentioned that vowels comparatively low are mostly prolonged in MBS. Thus, prolongation appears to have some correlation with intrinsic duration.

At first we would look at the duration of closed and open syllables. As Bhattacharya (1996:67) observes, "A syllable may be prolonged even for one or two cycles of the song-meter and that of course, is dependent on the particular tune and mood of a song." In the present work the same observation has also been made in relation to the Modern Bengali Songs e.g.,

Song metre: six moric; 3/3

\[
\text{a ma r | SOM ro no I bi - n | -- - I - e ki}
\]

"my memory a lute is this

"my lute of remembrances. Is this .......?"

Here [bin]'lute'—the monosyllabic word of the closed variety has been prolonged and due to prolongation this single closed syllable-word containing the nasal as the coda becomes a bisyllabic word containing two open syllables, that means the coda remains no longer the coda but becomes a nucleus forming an open syllable with the form —

Zero Onset ----------Nucleus----------Zero Coda

Here it has also been observed that in the song, the word [bin] 'lute' containing a closed syllable has been prolonged for more than one full cycle of the song—

metre style consisting of six morae divided into two feet having 3/3 morae each respectively.
Further, in songs the open syllable can also be prolonged for one cycle of the song metre or more, e.g.,

Song metre : eight moric; 4/4

\[
\begin{array}{c}
o - \text{I} \quad \text{go} - \quad - \quad - \quad I - \quad - \quad - \quad I - \quad - \quad - \quad I \\
voc.
\end{array}
\]

tu mi - na \quad | \quad e \quad le - \quad je \quad I

"Oh, if you do not come, then"

The syllable [go]'vocative' is prolonged for two cycles of the song metre style consisting of eight morae divided into two feet, each having four morae.

In this connection we may mention that sonorants have been observed to have the potentiality of being prolonged. As Ladefoged (1975:248) mentions, "Sonorants are sounds produced with a vocal tract cavity configuration in which spontaneous voicing is possible; obstruents are produced with a cavity configuration that makes spontaneous voicing impossible." Thus sounds that have spontaneous voicing includes vowels, semivowels, nasals and laterals.

Among the vowels in MBS, a, e, o are prolonged in most cases; i, u, O, E in a few cases respectively. Nasalised vowels are also prolonged but the prolonged forms are not as abundant as those of the oral vowels. Among the nasalised vowels, aM, eM, iM and uM the most common one is aM, the duration of which occurs for about three morae. eM occurs comparatively in a fewer cases. Prolongation of iM and uM is observed to be rare. The most common duration of nasal vowels is of two morae.

Examples of the prolongation of the vowels and the nasalised vowels are as follows:--

Prolongation of a, e, o, i, u

i) Song metre : six moric(fast); 3/3

\[
\begin{array}{c}
\text{oy} - \quad \text{je} \quad | \quad \text{pa} - \quad \text{khi} \quad I \quad \text{ga} - \quad \text{ne} \quad | \quad a \quad n \quad \text{mo} \quad I
\end{array}
\]

that P bird songs-instr. absentminded

\[
\begin{array}{c}
na - \quad - \quad - \quad I - \quad - \quad - \quad I - \quad - \quad - \quad I
\end{array}
\]

"that bird which is unmindful with the songs"
Here, prolongation of the vowel ‘a’ takes place for about two cycles of the song metre.

ii) Song metre: eight moric; 4/4

\[ \text{bo} - \text{Se} - | \text{chi} - \text{le m} | \text{E} - \text{ka} - | \text{cha} - \text{ti m} \]

sit-pst.pf.1       alone       large trees with digitate leaves

Here, prolongation of the vowel ‘e’ takes place for about one and a half cycle of the song metre.

iii) Song metre: eight moric; 4/4

\[ \text{O} - \text{I go} - - - | - - - I - - - | - - - I \]

Voc.

\[ \text{tu mi} - \text{na} | \text{e le} - \text{je I} \]

you     not       come then

“Oh, if you do not come, then ......

Here, prolongation of the vowel ‘o’ takes place for two cycles of the song metre style consisting of eight morae.

iv) Song metre: six moric; 3/3

\[ \text{Se y I mo} - \text{dhu} - r - \text{I ha} - \text{Si} - \text{te} - \text{I} \]

that       sweet-gen.       laughter-instr.

\[ \text{hri} - \text{dO} | \text{Y bho} - \text{I ri} - - | - - - I \]

heart       fill up-pres.1

“I fill up my heart with that sweet laughter.”

Here, prolongation of the vowel ‘i’ takes place for about one cycle of the song metre.
v) Song metre: seven moric; 3/2/2

\[ \text{--- ga | ne | mo | I | --- | r | ko n I} \]

\[ \text{--- j | r | kon} \]

\[ \text{--- song—instr. my which} \]

\[ \text{--- in dro | dho | nu | --- | --- | --- | --- | I} \]

\[ \text{rainbow} \]

"What kind of remarkable rainbow is there in my songs?"

Here, the vowel ‘u’ is prolonged two morae more than one cycle of the song metre.

Prolongation of the nasalised vowels aM and eM:

i) Prolongation of aM

Song metre: six moric (fast); 3/3

\[ \text{--- | a ma | gu n | ko | re che | I} \]

\[ \text{me | allured do pres.pf.3} \]

\[ \text{khu n | re che | o | --- | baM | I Si | ---} \]

\[ \text{murdered do pres.pf.3 that flute} \]

"That flute has allured me and murdered me"

ii) Prolongation of the nasalised vowel eM

Song metre: six moric; 3/3

\[ \text{kO n Tho | keM | pe | ja | Y | - ta y} \]

\[ \text{throat vibrate—pres.3 so} \]

"Voice vibrates, so ...."
5.2.2 Duration of nasals, liquids and semivowels

There are three Bengali nasals m, n and N. The semivowels of Bengali are Y, W, y and w and the liquids are r, R and l. While discussing the prolongation of nasals, laterals, r-sounds and semivowels, it is to be mentioned that the semivowels Y, y, W, w are lengthened in a few songs only. In some songs when these are prolonged, the closed syllables of speech containing either the semivowels, or the nasals or the liquids as coda, become two open syllables, due to prolongation. Thus the monosyllabic words become the bisyllabic ones. The semivowels become the full vowels when prolonged. r, l, n when prolonged, may have pitch variation in one mora or in more than one mora. Further, it is observed that N is rarely prolonged, but pitch variation while articulating N is possible in one single mora.

In fact, nasals are seldom seen to be prolonged. Examples of the prolongation of liquids, nasals and semivowels are as follows:

i) Song metre: six moric; 3/3

<table>
<thead>
<tr>
<th>to bu</th>
<th>o to</th>
<th>I no tu n</th>
<th>ko re</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>yet</td>
<td>P</td>
<td>in a new way</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

phu | be | bo ku | I a ba r | I |

bloom-fut.3 name of again a flower

"Yet the flower ‘bakul’ will bloom again in a new way"

Here ‘r’ is prolonged for three morae.

ii) Song metre: six moric; 3/3

<table>
<thead>
<tr>
<th>a ma r</th>
<th>SOM ro no</th>
<th>I bi</th>
<th>n</th>
<th>I</th>
<th>e ki</th>
</tr>
</thead>
</table>

my memory a lute is this

"my lute of remembrance. Is this………?"

Here ‘n’ has been prolonged for four morae.
iii) Song metre: six moric; 3/3

So no na | ki o yI a j | di | ke di ke I
listen   int. that today in all directions

ha - Y | - - -I

Alas

"Alas, can't you listen to that in all directions?"
Here the semivowel 'Y' has become full vowel 'e' in perception, due to its prolongation.

iv) Song metre: six moric; 3/3

pO th che | Re da -IW - -| - - -
way leave-pres.imp.2

"leave the place"
Here, the semivowel 'W' has become 'o' in perception due to its prolongation.

5.3.0 Variation in Pitch

At the beginning, we take note of the articulatory basis of pitch variation. Regarding variation in pitch, Ladefoged (1975:226) says that "Altering the tension of vocal chords is the normal way of producing most of the pitch variations that occur in speech.........Stressed sounds will usually have a higher pitch." He further says that when the vocal cords are stretched, the pitch of the sound rises.

According to Lehiste (1970:66) "the subjective pitch of a periodic complex sound depends on the periodicity of the wave form, regardless of whether there is energy present at the frequency of the fundamental or not." ......."Miller and Taylor studied the perception of repeated bursts of white noise, which they turned on and off at different rates." They studied that the pitch depends essentially on periodicity rather than on the harmonic structure of the sound waves (1948). Cooke (1959:102) explains pitch as felt to be an up and down dimension of notes with more vibrations. He explains 'up' an effort and 'down' a relaxation. 'High' notes demand a considerable effort and it means scientifically 'high' number of vibrations per second.
Lehiste. (1970:66) defines intrinsic pitch by saying that “there is a connection between vowel quality and the relative height of the average fundamental frequency associated with it; the other factors being constant, higher vowels have higher fundamental frequency.” Following Abercrombie (1971:102) “we can say that the pitch of the voice fluctuates continuously, and mostly it is in the process of either rising or falling. It rests on a note for a fraction of a second. It follows a well-defined melodic pattern rather than being a random fluctuation. This melodic patterns of pitch fluctuation is continuous. “Fluctuation in the pitch of the voice is probably the most important of the features of voice dynamics. In fact, this function of pitch fluctuation might be called vocal gesture,..........” Abercrombie (1971:104)says, “Voice pitch fluctuation thus has both an indexical and linguistic function, and the latter is basic in the sense that the indexical signs are superimposed on the language-bearing patterns. Pitch fluctuation, in its linguistic function, may conveniently be called speech melody.” He (1971:106) further says, “Indigenous song, however seems always to be accommodated to speech melody patterns so that ambiguities do not result.”

In fact, the melodic structure of songs primarily depends on the sequence of pitch fluctuations.

5.3.1 Variation of pitch in the data

It has been observed in the data that pitch variation often occurs in MBS. There are so many musical notes observed in a single mora in MBS. This is a special characteristic of MBS which exhibits the notes with variations which can be regarded as pitch variations in MBS. The characteristics in relation to the variation of pitch in MBS as observed can be generalised in the following way:-

1. In MBS, pitch variation occurs very frequently, that means the notes of the songs often change in the consecutive morae.

2. Unlike RS, it is not very common in MBS that a single mora consists of a single note only. There is a tendency of occurring one or more notes in a single mora in MBS. This is a special feature of MBS. For this reason, MBS seem to be more attractive and appealing than RS.
3. The rapid changes of notes from low to high and high to low, occur in MBS very frequently. Thus pitch variation in MBS occurs very swiftly.

4. It has also been seen that in case of r, l, m and n and semivowels, variation in pitch may occur in one single mora, which is not possible for stops.

5. Variation in pitch in one single mora may also occur in case of vowels.

   Examples are given below:
   i) Song metre: six moric; 3/3
   
   .ta y | ga n So I na te *** -

   so song listen-Vnf.

   ha* - **|*** ** *Y I

   alas

   "So to make you listen the song, I regret"

   [* indicates a change in notes i.e. variation in pitch]

   Here, pitch variation is observed in the inflexion ‘te ***’ of the word Sonate “to make you listen”. Also it is remarkable here that, pitch variation occurs in one single mora in case of a vowel.

   ii) Song metre: six moric; 3 / 3

   .je | te da* *W a* ma - | Y De* ko I

   to go allow me call

   na* - - | - - -I

   not

   "Please let me go, do not call me".

   The rapid changes of notes from high (↑) to low (↓) and vice versa is observed in this line of the song.
ii) Song metre: six moric; 3/3

\[ \text{phu}^{**} \text{ ra}^{**} - | \text{le} \text{ ha} \ YI \]
end - cond.conj. Exp.?

\[ \text{gO}^{*} \text{ n}^{**} \text{ dho} | \text{je ta}^{**} *r \ I \]
smell P its

"When its smell vanishes"

Here, variation in pitch takes place within one mora, in case of a nasal.

5.4.0 Tempo and Modern Bengali Songs

Regarding the function of duration, Lehiste (1970: 51) says, "The function of quantity on the sentence level is quite different from its function at the word level. Changes of the relative durations of linguistic units within a sentence do not change the meaning of individual words; however they convey something about the mood of the speaker or about the circumstances under which the utterance was made."

We find that the same is true in case of songs in connection with the duration of rests. Significant changes in the relative duration of rests manifest changes in the tempo which help to express the particular idea and mood of the song. In this connection it is to be noted that, the same song can be performed in various tempos, where the song metre may vary. Furthermore, usually, tempo is fixed for each of MBS. But in many cases, mixed tempo, i.e. two different tempos – one after the other are found in a single song. An example of a song having the mixed tempo with varying song metres is given below:

Obak prithibi ! Obak korle tumi

"I am surprised; Oh earth! You have made me surprise."
Part I

Song metre: six moric; 3/3

Obak prithibi! Obak korle tumi
surprised earth surprise made you
"I am surprised; Oh earth! You have made me surprise."

jonmey dekhi khubdo SOdeS bhumi
immediately after birth see-pres.1 distressed motherland
"Just immediately after (my) birth, I can see distressed motherland."

Obak prithibi! amra je pOradhin
surprised oh earth! we P subjugated
"We are surprised, oh earth, that we are subjugated."

Obak ki druto jOme krodh din din
surprised how fast accumulate anger day by day
"We are surprised, how fast anger accumulates day by day."

Obak prithibi, Obak korle aro
surprised oh earth surprised made more
"We are surprised, oh earth, and you have made us surprise more."

dekhi ey deSe Onno neyko karo
see-pres.1 this country-loc rice not of anyone
"I can see that in this country, there is no food for anyone."

Obak prithibi! Obak je barbar
surprised oh earth surprised P again & again
"I am surprised, oh earth, -- surprised again and again."
I can see the action of the death itself going on in this country.

whenever I have taken the accounts-copy in my hands.

I have seen the book keeping of blood-expenditure in that.

being born in this country, I have received only kicks.

I am surprised, oh earth ! I salute you.

today, there is revolt everywhere

I go on writing the day to day record of events
Eto biddroho kOkhono dEkheni kew
such revolt never seen anybody
"Nobody has ever seen such a revolt"

dike dike oThe Obaddhotar Dhew
in all directions rise disobedience-gen. wave

Sopno cuRar theke neme eSo SOb
dream summit-gen. from come down all
"All of you come down from the top of your dream"

Sunecho ? Sunecho? uddam kOlorOb
listened listen-pres.cont.2 uncontrollable an uproar
"can you listen to the uncontrollable uproar"

nOYa itihas likheche dhOrmoghOT
new history writen strike
"new history has been written by the strike"

rOkte rOkte aMka procchOd pOT
blood-instr. blood-instr. drawn a cover of a book
"the cover is painted with blood"

prottoho jara ghrinito o pOdanOto
everyday those hated and stamped
"everyday, those who are hated and stamped"

dEkho aj tara 'SObege SomuddOto
see today they severely prepared
"see, today they are virulently prepared"
Here, in the above song, two kinds of tempo are available. One is of 3/3 moric style and the other is of 4/4 moric style. Thus in this case, the song metre varies for two different tempos in the same song. In speech, tempo is measured in terms of syllables per second. Tempo is “the pace of the delivery of speech” (Laver, 1994:158). In the same way, the tempo of a song can also be measured. If the duration of pause is more, then the tempo of the song becomes slow. But if the duration of pause is less, then the tempo of the song becomes fast.

5.5.0 Division of the melodic aspect

In this section, the melodic structure of MBS has been divided into some units which have been set up on the basis of paradigmatic relations and arranged in terms of syntagmatic relations.

Following Nattiez (1975, as in Asher 1994:2664), on the basis of opposition we can establish structurally three units on the melodic level, viz., Neutral(A),
Ascending(B), and Descending(C). These three units are determined on the basis of the paradigmatic relationship.

Generally, the opening stanza of a song can be said to have a neutral melody, the second and fourth stanza of a song have the ascending melody and the third stanza has the descending melody. Such oppositional patterns are the general pattern of the Modern Bengali Songs.

Following Ruwet (1966: 65-90) as in Asher (1994: 2644), on the basis of the pattern of repetition, these three units of the melodic aspect are arranged syntagmatically to form the following general pattern, viz., A + B + C + B. This is the general syntagmatic pattern of the melody of MBS.

For an example we can refer to the song 'o nodire' (see sec. 3.3.1). The song is composed of four stanzas of which the first stanza has the neutral melody (A), the second and the fourth stanzas have the ascending melody (B) and the third stanza has the descending melody (C).

It is remarkable to note that the fourth stanza of the song has the same melody as that of the second stanza. We must admit that this general pattern of melody of MBS is also found in other types of Bengali lyric songs. But as observed in the data, many exceptions of this pattern are also available in MBS, which appear to be special. Their syntagmatic patterns are also different. Some of the exceptional patterns as available in the data are as follows:

i) A + B + B : as available in the song

*ey je pOther ey dEkha*

"this meeting on the way .......

ii) A + B + B + B : as available in the song

*megh kalo aMdhar kalo*

cloud black darkness black

"clouds are black and darkness is also black."
iii) A + B : multifarious as available in the song

Öbak _ prithibi , Obak korle tumi
surprised oh earth, surprised made you
“Surprised, oh earth! You have made me surprise.”

iv) A + A + B : multifarious as available in the song

o alor pOthojattri
voc. light-gen. traveller
“Oh traveller in the path of light!”

v) No particular melodic pattern : as available in the song

ranar
runner, the post man.

5.6.0 Conclusion

The study of the melodic aspect of MBS has shown some characteristics which can distinguish them from other types of lyric songs. These characteristics have been discussed on the basis of duration of sound segment resting on pitches, pitch variation, variation of tempo and the structural relation of the divisions of the melody. Regarding duration, it can be mentioned that among the vowels, a, e, o are mostly prolonged; i, u, O and E are prolonged comparatively in a fewer number respectively. Nasalised vowels are also lengthened but the prolonged nasalised vowels are not as abundant as the prolonged oral vowels.

Among the nasalised vowels (aM, eM, iM and uM), the most common one is aM, the duration of which occurs for about three morae. eM occurs comparatively in a fewer cases. Prolongation of iM and uM is observed to be rare. The most common duration of the nasalised vowels is of two morae.

While discussing the prolongation of semivowels, liquids, laterals, r-sounds and nasals, it is observed that the semivowels are lengthened in a few songs, but the semivowels become full vowels when prolonged. The closed syllable containing the nasals or the liquids as coda become two open syllables due to prolongation.
The sounds r, l, n when prolonged, may have pitch variation in one mora or in more than one mora.

Regarding variation in pitch it has been observed that there are many musical notes occurring in one single mora, and also frequent variations of notes are observed in Modern Bengali Songs. In fact, pitch variation occurs very frequently in Modern Bengali Songs. The rapid changes of notes from low to high or vice versa are also common here. Variation in pitch may occur in one single mora in case of r, l, m, n and vowels. The nature of tempo of Modern Bengali Songs has also been dealt with. Usually, tempo is fixed for each of MBS.

To describe the melodic structure of Modern Bengali Songs, we have identified three units on the melodic level, viz., Neutral (A), Ascending (B) and Descending (C) on the basis of opposition and paradigmatic relation. The general syntagmatic pattern of the melodic aspect of Modern Bengali Songs is found to be $A + B + C + B$ . Many exceptions of this form are also available in the Modern Bengali Songs.

References


