

CHAPTER - 4

G A M A K A A N D I T S
V I S U A L
R E P R E S E N T A T I O N

GAMAKA AND ITS VISUAL REPRESENTATION

In Karnāṭak music, each rāga is identified by phrases, defined by specific movements of the constituent tones, expressed also in terms of svara-s.

"In modern practice, the sound that a south Indian would describe as a "svara" in any given musical context might be a plain note, but it might also be a complex of pitches analogous to a note with a turnsign over it, a note with a portamento from the preceding note, or one of many other types of ornate sounds. It is important to remember that a svara in a specific musical context is not just a "note" separable from its "ornaments" but is, rather, the whole sound complex considered as a unit"¹.

This concept of gamaka is perhaps as old as our music itself. Many treatises define a set of 10-15 Gamaka-s. Subbarama Diksitar, in his Sampradāya Pradarśini, has notated many compositions with the aid of symbols (designated to specific Gamaka-s).

¹Harold S. Powers.

The Back ground of the South- Indian Raga System
p.8.

In contemporary works, the general notation followed is the 'svara notation*' which is only prescriptive. Our analysis of some chosen rāga-s has many instances wherein a particular svara or phrase lends itself to interpretation in many ways. It is, therefore, essential to give a descriptive notation which would convey what the writer intends. The western staff notation cannot be adapted for our system, although it has precision. The problems of transcription and perception of (easily identifiable) svara-s through symbols could be taxing. In the descriptive notation, all the microtones figuring or constituting a phrase are notated ---- the phrase being first split in terms of the identifiable or singable svara-s (as in prescriptive notation) over which the microtones figuring in each svara and pause is notated with the approximate duration. The microtones, also, could be at times approximate, and are subject to a variety of approaches.

"In the case of oscillating ornaments, it is obviously pointless to make electronic measurements in order to produce a pseudo-scientific appearance of mechanistic musical determinacy:."2

 * At times supplemented with some not so well defined terms and symbols

² Harold.S. Powers, The Back ground of the South Indian Raga System, p203.

The extent of approximal variation is too minimal to distort the rāgatva or idea conveyed.

To notate a phrase descriptively, it is essential to undo many preconceptions. Our ears are trained to see a phrase as a complex movement, and to simplify it in terms of the constituent microtones (or the recognisable svara sthana-s within a svara) is a task. The splitting of the tones ---- and the designation of specific microtones for the svara-s in the prescriptive notation ---- is, besides being difficult, a process wherein one could be deceived by one's own ears. The notation, again, could be used only as a reference or aid for learning or teaching, but the fact still remains that music is a language of sounds, and only sounds. Dynamics, in terms of volume (again a variable factor in music), cannot be indicated, and the audio cassette is intended to rectify these shortcomings.

To arrive at the descriptive method of notation, it is essential to understand the following concepts :

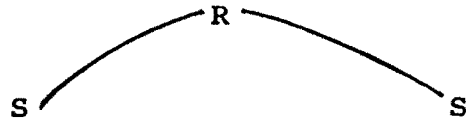
- i) Movement pattern or the way of Gamaka
- ii) Microtones.

Movements, in the most elementary sense, are of four patterns. Any complex movement or 'Gamaka' could be easily split up into its component basic movements. The

complexity, as seen by us, arises more due to the inherent dynamic factors than to the movement itself. *

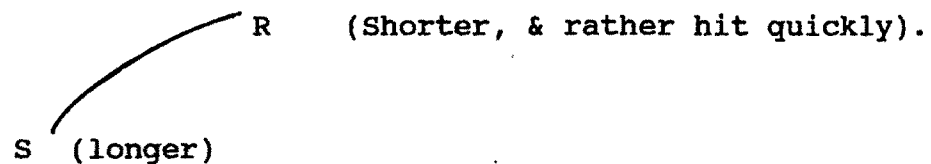
Movement involving two notes is of three varieties.

A) Up and down movement with equal duration in both the notes, uniform stress being given by duration alone.



Ex. S R S

B) Speedy upward movement with quick stress on the second note, the first note being longer.



(P.S. This movement is similar to what is commonly known as 'sphuritam' to vaiṇika-s.)

C) This is the reverse of B. Here the movement is from a long upper note, hitting at the lower shorter note.

*In most of the existing works, Gamaka-s are understood as complex movements. The following analysis of the gamakas is based on the new approaches to gamakas evolved by Karaikudi Dr. S. Subramaniam.

D) B and C combine to give the movement illustrated below.

Ex. RS ↓ S

The position of ṣaḍja, here, is defined with respect to the upper and lower limits. The interval in the second part '↓' is very close to ṣaḍja. In other words, ṣaḍja is accented from a microtone slightly below.

E) 3 2 3 1

(The numbers indicate the svara-s or microtones involved, in the ascending order of sthāna.)

Ex: g R (in Bhairavi)

R = 1, g = 2. g R is characteristically rendered as m g, m R, therefore, m = 3.

The movement is as follows:

m g, m R or 3 2 3 1



The 'Vibrato kind of oscillation' is used in a note more particularly as a device to bring a thrust upwards. Occasionally, the vibrato* itself is also used, but in very small proportion. (The frequent use of vibrato is considered to be in the domain of 'light music'.)

* In the complete sense. A mild vibrato kind of oscillation is frequently used in our music.

iii) Microtones:

Our ears are trained to see the rāga through phrases, and phrases through svara-s designated to the underlying movements. At a conscious level, we do not recognise the microtones (other than the svara sthāna-s taken by the rāga). We perceive these microtones as oscillation, or movements of the svarasthāna-s (taken by the rāga under study. The fact is that more often svara-s are designated to the movements, and similar movements even within one rāga may be expressed through different svara-s in different phrasal contexts. Many instances are found in the analysis.) A detailed analysis will prove that many rāga-s take microtones other than the actual svarasthāna-s. Ex. 'Ri' of Dēvagāndhāri, Kalyāṇi, Madhyamāvatī, Mōhanam is not always defined by the oscillation between Ri and the next adjacent svarasthāna taken by the rāga --- i.e., Ga (in Dēvagāndhāri, Kalyāṇi and Mōhanam), and ma in Madhyamāvatī. It is very often a movement between 'Ri' and 'ga'. This Gamaka, if examined from a conscious level, might defy the Ārōhana - Avarōhana or scalar perception.

Movements are, therefore, very basic. This is perhaps why scales evolve into potential rāga-s in course of time. At the same time, a conscious production of such microtones (perceived outside the frame work of rāga) is not very desirable. It is not uncommon to hear .

ŚNŚ D,nDn DM,D MG,m
N D , M G r

in Pūrvikalyāṇi

Ś n P m g,Rg
g , ,

in Śuddhadhanyasi

Ś,NSN nD,n
S , , D P

in Mōhanam

This kind of Gamaka, however pleasing, (even if the microtone figures in many other phrases in the raga), is best avoided. It definitely imparts a lighter and non-classical touch to the rāga. A good performer would be definitely able to distinguish the right movement pattern and employ them judiciously.

The discussion on Gamaka-s/microtones may sound very complicated, and the notation very simple. Movements ---- when sung ---- are complex, and when analysed, are still more complex. A final presentation through descriptive notation might look very simple. It is these contradictions in perception and communication that form a large lacuna in lakṣaṇa and inadequacy in communicating lakṣya.

"Though all the discussion of ornamentation may seem quite complicated, even over simplified as it is in many instances here, it seems so only because of the necessity to attempt rather precise and detailed description. They (South Indian ornaments) are absolutely

fundamental to the system, but they are largely unconsciously produced. The complexity lies in the analysis, not in the data, and the final result, once the analysis has been made, is once again relatively simple."³

³ Harold. S. Powers
The Back ground of the South Indian Raga System p.204