KRISHNACHANDRA'S SCHEME
OF MELAS

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The attempt at classifying melodies *(ragas)* on the basis of certain basic scales *(melas)* and thus establishing a *janyajanaka* relationship between them is found in several treatises on our music like Ahobila's *Sangitaparijata*, Ramamatya's *Svaramelakalanidhi* and Somanatha's *Ragaviveka*. But the system propounded by Venkatamakhi in his *Chaturdandiprakasika* obscured all the earlier ones on account of its logical order, symmetrical pattern and mathematical perfection. Even this system has not gone unchallenged, particularly with regard to the forty *vivadimelas* it propounds, but no alternative scheme of equal facility could be suggested by any of these critics. A venture in such a direction is made by Krishnachandra (Attoor Krishna Pisharoti) in his *Sangitachandrika*.[1] It is worth while to examine this scheme and see how far it is an improvement on Venkatamakhi's.[2]

Krishnachandra's method is original; so too the nomenclature. He postulates 84 *melas*, of which 32 are *mukhyamelas* and 52 *sankirnamelas* and names each *mela* in such a manner as to show whether it is *mukhya* or *sankirna* and to indicate which *svaras* are *vikrita*. He accepts the conventional 24 *srutis* in a *sthayi* and also the 12 *svarasthanas* and takes Sa and Pa as invariables and the other five as having two varieties each, the first *suddha* and the second *vikrita*. But he takes these twelve as uniformly of two *sruti* interval each and thus takes the Karnatak system as one of equal temperament, a view which is not in consonance with that of most other writers and which is not borne out by the acoustic analysis of the notes in present-day music. It is admitted that in some of the *ragas* derived from a *mela* some *svaras* may have to be sharpened or flattened, but this concession alone does not warrant the Karnatak system being taken as one essentially of equal temperament.

A *mela* should have all the seven *svaras*. It is said to be *mukhya* if it contains all the *svara suddha* or either the *suddha* or the *vikrita* variety of a *svara* but not both. It is said to be *sankirna* if it contains both the varieties of a *svara*. Among these the *mukhyamelas* are *uttama,* the *melas* which contain both varieties of a single *svara* are *madhyama* and those which contain both varieties of two *svaras* are *adhama,* this classification being on the basis of their melodic content. When both varieties of a *svara* occur in a *mela* one of them is looked upon as a variety of the preceding or succeeding *svara* as is appropriate in order that the *mela* may have the seven *svaras,* and they are then given separate names. Thus in the company of *suddha rishabha, vikrita rishabha* (called *chatussruti risabha* in current practice) is called *chyutagandhara; suddhagandhara* (corresponding to our *sadharanagandhara)* is called *tivrarishabha'* when followed by *vikritagandhara; vikrita dhaivata* following *suddhadhaivata* is called *chyutanishada; suddhanishada* followed by *vikrita nishada* is called *tivradhaivata.* The association of *suddha madhyama* with *vikritamadhyama (pratimadhyama)* is also accepted and the *suddhamadhyama* in such cases is called *tivragandhara.*
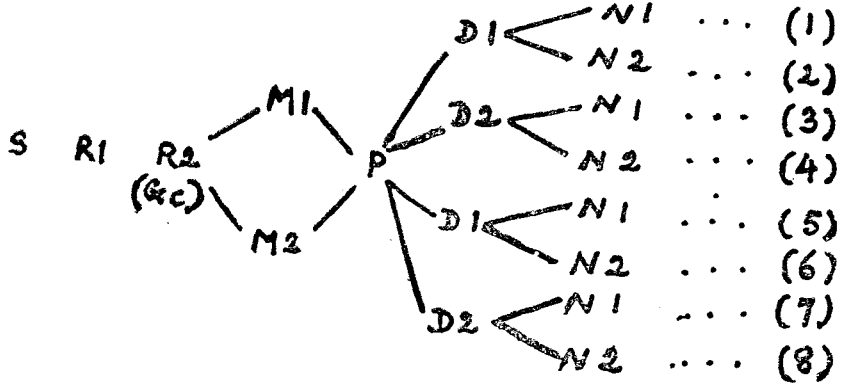
Apart from the difference in the names given to these varieties of *svaras,* the distribution of the *svaras* in the scheme can be seen to be practically the same as Venkatamakhi's:

S	R1	R2	G1	G2	M1	M2	P	D1	D2	N1	N2
	Gc	Rt		Gt					Nc	Dt	

(c=*chyuta;*   t=*tivra)*

Among the *mukhya melas* the first has all the *svaras suddha.* Then we get five having one of the variables alone *vikrita* in the order R2 G2 M2 D2 N2. Then are the ten having two of the variables *vikrita* and they are in the order R2 G2, R2 M2, R2 D2, R2 N2, G2 M2, G2 D2, G2 N2, M2 D2, M2 N2 and D2 N2. Then follow ten *melas* with three of the variables *vikrita* R2 G2 M2, R2 G2 D2, R2 G2 N2, G2 M2 D2 etc. Then we get five with four of the variables *vikrita* R2 G2 M2 D2, R2 G2 M2 N2 etc. Lastly we get one *mela* with all the variables *vikrita.* Thus we get 32 *mukhya melas.*

Under the *sankirna* type we get two kinds, *ekasankirnamela* and *dvisankirnamela,* according as the number of *Sankirnasvaras* occurring is one or two. Under the first we get five groups in the order of the *sankirna* R, G, M, D, N. Each of these five contains eight *melas* based on the number of regular permutations. Thus for instance, in the first group containing *sankirnarishabha,* that is having both varieties of *rishabha* (the second variety of course being named *chyutagandhara),* we get four combinations each with M1 and M2. Of these four, the first two have D1 and the other two D2 and in each such pair, the first has N1 and the second N2.

S   R1   R2
     (Gc)

M1   M2

P

D1 ⟨ N1 ... (1)
       N2 ... (2)

D2 ⟨ N1 ... (3)
       N2 ... (4)

D1 ⟨ N1 ... (5)
       N2 ... (6)

D2 ⟨ N1 ... (7)
       N2 ... (8)

Similarly we get for G, M, D, N thus making a total of 40 *ekasankirna-melas*. Among the *dvisankirnamelas* we get six groups, RD, RN, GD, GN, MD, MN. Each of these contains two *melas*. In the first four the two are due to the difference in M (M1 or M2) and in the other two it is due to the difference in R-(R1 or R2). With these 12 *dvisankirnas* we get thus a total of 52 *sankirnamelas*.

A close examination of this scheme shows that it contains all the *melas* propounded by Venkatamakhi, but it contains 12 *melas* in addition containing both the varieties of *madhyama*, a class not recognised by him. There is also difference in the arrangement. Venkatamakhi formulates his scheme on the basis of six possible combinations of *svaras* in the *purvanga* in the order R1 G1, R1 G2, R1 G3, R2 G2, R2 G3, R3 G3 to each of which is added in order the combinations in the *uttaranga* D1 N1, D1 N2, D1 N3, D2 N2, D2 N3, D3 N3. By adding M1 to each of these we get 36 *melas* and by adding M2 another 36, thus making a total of 72. Krishna Chandra's arrangement can be seen to be in the order of the *vikrtasvaras* or *sankirnasvaras* as the case may be.

In the names of the varieties of the *svaras* also we find some difference:

Krishnachandra			Venkatamakhi	
Suddha Rishabha	(R1)	=	*Suddha Rishabha*	(R1)
Vikrita Rishabha	(R2)	=	*Chatussruti Rishabha*	(R2)
Chyuta Gandhara	(Gc)	=	*Suddha Gandhara*	(G1)
Suddha Gandhara	(G1)	=	*Sadharana Gandhara*	(G2)
Tivra Rishabha	(Rt)	=	*Shatsruti Rishabha*	(R3)
Vikrita Gandhara	(G2)	=	*Antara Gandhara*	(G3)

Suddha Madhyama	(M1)	=	Suddha Madhyama	(M1)
Tivra Gandhara	(Gt)			
Vikrita Madhyama	(M2)	=	Pratimadhyama	(M2)
Suddha Dhaivata	(D1)	=	Suddha Dhaivata	(D1)
Vikrita Dhaivata	(D2)	=	Chatussruti Dhaivata	(D2)
Chyuta Nishada	(Nc)	=	Suddha Nishada	(N1)
Suddha Nishada	(N1)	=	Kaisiki Nishada	(N2)
Tivra Dhaivata	(Dt)	=	Shatsruti Dhaivata	(D3)
Vikrita Nishada	(N2)	=	Kakali Nishada	(N3)

As in the Venkatamakhi school, Krishnachandra too adopts the *Katapayadi* mnemonics in naming the *melas,* but the names are so coined as to indicate the *vikritasvara* and *sankirnasvaras* in the *mela* and not the numerical position of the *mela* in the table. Thus the first *mela* is named *jnana* (0, 0) in which the letters stand for zero thereby indicating that no *svara* is *vikrita.* This corresponds to the *Hanumatodi* of current nomenclature. The eighteenth *mela* is named *srigata* (2, 3, 6) which shows that the second, third and sixth *svaras* (R, G, D) are *vikritas* and this corresponds to *Harikamboji.* The *sankirnamelas* have all names beginning with *sam;* the next letter in the name indicates the *sankirnasvara* in the case of *ekasankirnas* and the following letter too in the case of *dvisankirnas,* and the rest of the letters show the *vikritasvaras.* Thus *samprajna* (2, 0) indicates that the second *svara* (R) is *sankirna* and no *svara* is *vikrita* and corresponds to the *Ratnangimela* in Venkatamakhi's system. *Samlata* (3, 6) indicates that the third *svara* (G) is *sankirna* and the sixth (D) is *vikrita* and corresponds to *Vagadheeswari Samsiragumbha* (7, 2, 3, 4) shows that the seventh (N) is *sankirna* and the second, third and fourth (R, G, M) are *vikrita.*

These names are obviously different from those in Venkatamakhi's system. In the latter the first two letters in the name taken in the reverse order give the number of the *mela* such as *Khara (22) harapriya* and *Mecha (65) kalyani,* and from the number the *svaras* in the particular *mela* can be ascertained. But here the names directly indicate the *vikritasvaras.* But for each *mela* the author gives the principal full scale *raga* coming under it and this is generally identical with the *melaraga* of the Venkatamakhi school, sometimes stripped of the initial indicatory letters. The following examples may be cited:

Mela	Ragangaraga
Gatha	Malvaragaula
Varsham	Margini
Labhartham	Kamavardhini
Ragottamsam	Sankarabharanam
Samtulabha	Dhavalambari

The author observes that although he has postulated 84 *melas,* only seven among these are the most important because the vast majority of the *janyaragas* come under these. They are *Jnana, Ratna, Rakti, Gatha, Srigata, Ragottamsa* and *Ragavatamsa*[3] with the respective *ragangaragas Todi, Bhairavi, Harapriya, Malavagaula, Harikamboji, Sankarabharana* and *Kalyani.*

It can now be seen that the most outstanding features of the *mela* scheme propounded by Krishnachandra are: (1) the *mukhya melas (samvadimelas).* and *sankirnamelas (vivadimelas)* are separately classed unlike in Venkatamakhi's where in certain *chakras* both occur although in definite position; (2) 12 *melas* in addition to those of Venkatamakhi are postulated and these have both the varieties of *madhyama,* although in such cases the *suddhamadhyama* is given the name '*tivragandhara';* (3) the arrangement in the *mela* chart is in the order of the *vikritasvaras* and not in the order adopted by Venkatamakhi; (4) the names of the *melas* are new and devised to indicate the *vikritasvara.*

Earlier propounders of *melakarta* schemes are subjected to much adverse criticism and Venkatamakhi is particularly so. The arguments against Venkatamakhi's system are mainly three. First, the identification of the *svaras* in a *mela* involves the tedious process of finding out the number of the *mela* from the initial syllables in its name. then the particular *chakra* to which it belongs, then the position of the *mela* in that *chakra* and finally the actual *svaras* constituting the *mela.* The name of the *mela* has no connection whatsoever with the names of the *chakra* or of the place in the *chakra.* There would have been better connection among them if instead of a name like *Mayamalavagaula,* a more self-explanatory one like *Agnigomalavagaula* was adopted so that one can easily understand that the *mela* in question is the third (go=3) in the third *chakra* (agni=3). The present nomenclature avoids all this difficulty by coining names which indirectly indicate the *vikritasvaras* and the *sankirnasvaras.* Secondly. the system is incomplete in so far as *melas* having both varieties of *madhyama* are not included in it. This is a noteworthy omission since in *ragas* like *Saranga* we get both M1 and M2. The claim that this scheme comprises all the possible *melas* is, thus, unwarranted. Thirdly. Venkatamakhi is contradicting himself in that he states that the *raga Saranga* which is given under the *Santakalyani- mela* has *suddhamadhyamagandhara*[4] which means that this has the *suddhamadhyama* position as its *gandhara,* thereby implying that it cannot be under *Kalyanimela.*

Let us examine these objections raised against Venkatamakhi and see how far they are tenable.

It is true that the scheme as it obtains now has a *sankhya-chakra- sthana-svara* process but it may be noted that this is a later ornamenta- tion added to Venkatamakhi's original scheme which simply speaks of the order of the combinations. Even granting it as an integral part of the system, this process which is considered tedious. is only theoretical, since the *melas* are named after the most common *krama-sampurna raganga*

raga coming under each like *Mayamalaragaula* and *Dhirasankarabharana*, the *svaras* in each and thereby in its derivative *ragas* can be easily known. Even if one is not familiar with any particular *mela* one can know the *svaras* in it from its number alone which would enable one to locate its exact position without resorting to the name of the *chakra* and the name of the *sthana*. It is to facilitate this that Venkatamakhi names the *svaras* after the most popular *raga* in which they occur also, like *Gaularishabha*, *Varalimadhyama* and *Sriragadhaivata*.

In the scheme, combinations of M1 and M2 are not recognised because we do not get regular occurrences of both these in any *raga*, except in certain particular *prayogas*, where instead of the normal M2 we get M1. If a *mela* with M1 and M2 is accepted, there will be no place for *Gandhara* in it, since a *mela* can have only seven *svaras* and the function of *Gandhara* will have to be discharged by the *suddhamadhyama*. This would result in the *raga* having no *svara* corresponding to the *antaragandhara*. *Saranga* will then be deprived of its characteristic colour because we do get in it, in practice, *antaragandhara* and the very *prayoga* of *suddhamadhyama* R2 G2 M1 R2 S in it, is in association with this *gandhara*. The attempt, therefore, to devise a *mela* for accommodating *ragas* like *Saranga* disfigures the very *ragas* and defeats the purpose. It is, therefore, in the fitness of things that a *raga* like *Saranga* is considered as a *janya* of *Kalyani* and the *suddhamadhyama*, where it occurs, as an adventitious *svara* which has incorporated itself into the *raga*.

The *lakshana* of *Saranga* cited to show the contradiction in Venkatamakhi is taken from the *Ragalakshana* given as an appendix to the *Chaturdandiprakasika* published by the Madras Music Academy. This appendix is taken by Krishnachandra as a work of Venkatamakhi himself probably on the basis of such a view expressed in the preface to that edition. But a close examination of the text and the appendix would show that the two are not likely to be by one and the same person.[5] The *Ragalakshana* portion is perhaps by the later writer Muddu Venkatamakhi. Granting that it is, in any case by a follower of Venkatamakhi's system, one has to doubt whether the meaning given to the expression *suddhamadhyamaganvitah* is justifiable. Had the name been *Chyutamadhyamagandhara* we could agree with the author that it is a variety of *gandhara*, what he denotes as *tivragandhara*, but as it is it seems to mean that it has got *gandhara* accompanied by *suddhamadhyama*, a feature which we actually find in *Saranga*.

It can therefore, be seen that Krishnachandra's criticism of Venkatamakhi is not quite warranted and his own scheme of 84 *melas* is hardly an improvement on the existing one and in fact raises fresh complications. He is oblivious of the imperfections in his own suggestions when he finds fault with earlier writers.

That we do not find the *mela* scheme of Krishnachandra to be much of an improvement on Venkatamakhi's system need not be taken to mean that his contribution to musical knowledge is not commendable.

In fact this work as a whole is so full of matter relating to several aspects of our music that any patient reader will be simply astounded by its magnitude and magnificence.

FOOTNOTES

1. Published by the Gita Ltd., Trichur, 1954.

2. This has been briefly indicated in the writer's review of the book in Vol. XXVI of the Journal of the Madras Music Academy published in 1956. But the topic deserves fuller treatment and hence the present exposition.

3. ज्ञानं रत्नं शक्तिगाथे श्रीगताख्यन्न पञ्चमः ।

   रागोत्तंसावतंसा स सप्त मुख्यतमा मता : ॥

4. गायं गेयस्तु सारङ्ग : शुद्धमध्यमगान्वित : ।

5. The following differences between the *Chaturdandiprakasika* (CDP) and the *Ragalakshana* (RL) may be noted:

(a) While CDP deals with only 19 melas, RL gives the names of all the 72 melas.

(b) RL gives the names of the melas with the first two syllables giving the number by Katapayadi mnemonics. CDP does not give this.

(c) Difference in the names of melas are also seen. Gaula, Kambhoji and Bhairav i of CDP are Mayamalavagaula, Harikedaragaula and Nariritigaula in RL.

(d) Ragas not mentioned in CDP are found given in RL. Such, for instance, are Manirangu, Margahindola, Gauri and Saindhavi.

(e) Difference in views between the two are also seen. CDP gives Hejjujji as a Sampurna raga with S as graha; RL gives it as without N in aroha and with M as graha. In Hindola, R and D are the svaras absent according to CDP, but according to RL they are R and P.

   For other differences and a fuller treatment of the topic see V. Raghavan, *Venkatamakhi and the 72 Melas* in Vol. XII of the Journal of the Madras Music Academy.

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