MODERN

LETTER-BOOK

P. 300

School _____

Name _____

Class _____ Subject _____

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BOMBAY 1.

Music

I. BILAWAL THATA

1. The parent scale now in use with all svaras shuddha.

2. Corresponds to the major diatonic scale of European music. Has the first tetrachord of the European major mode, with a slight sharpening of the sixth. Suddha or Tivra Dha in the second half.

3. The corresponding Carnatic raga is the Shankarabharan, but the Karnasvraya is also very close. If ha is added to the latter, it becomes the Hindusthani Bilawal.

4. With the exception of Ma, all the other notes are flats to the Suddha note.

S R G. M P D or n⁻ N S̄
#
C D E F G A A B C

I. The Bilawals (12)

1. Bilawal Shuddha, calm with joy
2. Alokiya Bilawal = ni, both Komal and shuddha
3. Shukla Bilawal
4. Nata Bilawal
5. Kukuba Bilawal
6. Durga Bilawal (Suddhasaveri)
7. Deepak Bilawal
8. Pahari Bilawal
9. Patmanjari Bilawal
10. Yemeni Bilawal

THE BIHAGS

1. Bihag Shuddha (nat. C) Love, tenderness
2. Pat Bihag
3. Nat Bihag
4. Bihagra

OTHERS:

1. Sarparda
2. Devagiri
3. Lachasak
4. Shankara
5. Deshkar
6. Mahuhakedar
7. Jaidharkedar
8. Nata
9. Madha or Madham
10. Gunakeli
11. Asha
12. Kamabranjani
13. Chandrika
14. Chakradhar
15. Jairaj

16. Bhavani

17. Bhinshadoz

18. Mand

19. Rasranjani

20. Raschandra

21. Lajwanti

22. Hansdhoni

23. Hem kalyan

24. Savani Kalyan or Kajri

25.

II. KALYAN THATA

1. Uses tivra ma in place of suddha Ma of Bilaval.

2. The corresponding Carnatic raga is Mechakalyani.

3. This is the Lydian authentic mode with the addition of F♯.

4.

S	R	G	m'	P	D	r	n	N	S
C	D	E	F♯	G	A		A♯		BC

THE KALYANS

1. Kalyan Shuddha (Mechakalayani) Merriment. Evening.
2. Jayat Kalyan
3. Yemen Kalyan – Merriment
4. Shyam Kalyan
5. Lakshmi Kalyan
6. Raj Kalyan
7. Shri Kalyan
8. Hamir Kalayan (Hamirkalyani) Merriment, evening

OTHERS:

1. Bhupali (Mohanam) pentatonic, Sweetness, Noon
2. Chandrakanta
3. Puriya
4. Hindol – Calm and joy
5. Malashri
6. Kedar – Gaiety
7. Hamir
8. Kamode
9. Chaya
10. Chayanant
11. Nat Narayan
12. Gaud Sarang (lower tetrachord in the Greek Ditonal, shudha Greek scale)
13. Yemen
14. Nand
15. Maru Bihag
16. Malarani

17. Vaijyanti

18. Sanjh Hindol

19. Nisasag

20. Kumari

III. THATA KHAMAJ

1. Khamaj takes ni Komal

S R G M P D n S

C D E F G A B♭ C

2. Hypo=Lydian plagal mode (?)

3. Corresponding Carnatic raga = Harikambodhi

1. Khamaj (Nat. C.) Love
2. Jhinjhoti (Nat. C.) (Harikambodhi), Imploring, Praise, Night, Love
3. Sorath
4. Desh
5. Khambavati
6. Tilang – Quiet
7. Durga Khamaj
8. Rageshwari
9. Jaijyanti
10. Gara
11. Tilak Kamode
12. Kalavati
13. Khokhar
14. Gorakh Kalyan

15. Champak
16. Champakali
17. Nag Svarawalli
18. Nat Kuranjika
19. Narayani
20. Shyam Kedar
21. Saraswati
22. Sajan
23. Hansshri
24. Pahari Khamaj
25. Lung
26. Shankarabharan
27. Bihagra Khamaj

IV. THATA MARWA

1. Marwa takes ri Komal and tivra ma
2. Marwa differs from Purvi in using Suddha and Tivra Dha for Komal Dha

S r G m P D or n N $\bar{S}$

C Db E F# G A A# B C

3. Corresponding Carnatic raga = Gamanapriya

1. Marwa, (Pyaramanapriya) Passion, evening
2. Puriya
3. Sohni
4. Lalit
5. Basant
6. Jayat
7. Shankara
8. Bibhas
9. Bhatihar
10. Sazagiri
11. Maligaura
12. Pancham
13. Gauri
14. Purav Kalyan
15. Malin

16. Varati

17. Bangali

18. Mangal

19. Rajavijaya

V. THATA TODI

1. Ri Komal and ga Komal, dha Komal

2. First part of the tetrachord of Bhairavi and the second part of Purvi and using the sharpened fourth. It also makes use of a sharpened seventh, somewhat sharper than suddha Ni.

S r g m P d N or N^{+} $\bar{S}^{-}$

C Db Eb F# G Ab B B# C

3. In this group microtonal variations are frequently used. The Ri will be atikomal and the Dha and Ma will be less than the full sharpened semitones.

4. This group probably arose from an ancient enharmonic scale basis. The corresponding Carnatic raga = Subhapantuvarali

1. Todi Shudha (Subhapantuvarali) Adoration, evening
2. Gurjari Todi
3. Desi Todi (Nat. C) dhaivat to dhaivat, just major
4. Lakshmi Todi
5. Miyaki Todi
6. Ferozekhani Todi
7. Bahaduri Todi
8. Darbari Todi
9. Sughrayi Todi
10. Todi Mudra
11. Todi Suha
12. Multani — Calm

VI. THATA ASAVARI

~~1. Asavari~~

~~2. Jaunpuri~~

~~3.~~

1. Ga, dha and ni all Komal

2. Differs from the Kaphi group in the use of Dha Komal for Suddha Dha

S R g M P d n $\bar{S}$

C D E♭ F G A♭ B♭C

1. Asavari (Natabhairavi) Tenderness
2. Jaunpuri
3. Gandhari (Gandharara)
4. Khat
5. Sindhu Bhairavi (Nadabhairavi) Sad, night
(same as the Hypo=Dorian plagal mode)
6. Kouiki Kanada
7. Darbari Kanada
8. Ziloph
9. Deshi
10. Adana
11. Abheri
12. Anand Bhairavi
13. Komal Desh
14. Gopi Basant

15. Jangla

16. Jeevanpuri

17. Dev Gandhar

VII. THATA BHAIRAV

1. Ri and dha Komal; ~~rarely~~ sometimes ni is also Komal in meerh, but just touched; other times incipient ni, just touched or glossed over
2. Corresponding Karnatic raga is Mayamalava gaula.
3. Some people have suggested this as the shudha scale.

S r G M Pd or D n or N $\bar{S}$
C Db E F G Ab A♮ Bb B♮ C

4. The Arabs have a mode similar to this called Hyaz.
5. This may have developed from the old raga Mukhari (now called Kanakangi) by a modal shift of tonic one semitone higher, just as the Greek scale has done.

1. Bhairav - Reverence, dawn
2. Shivamat Bhairav
3. Ananda Bhairav (chakravakam), Love, anytime
4. Ahiri Bhairav
5. Gouri Bhairav
6. Kousi Bhairav
7. Bangal Bhairav
8. Kalingra (Nadanamakriya) Calm,
9. Megharanjani
10. Saurashtra
11. Jogia - (Saveri) Adoration
12. Ramkali
13. Prabhati
14. Bibhas Bhairav
15. Lalit Pancham (Suryakanta) Tenderness

16. Gunakri

17. Araj

18. Ziloph Bhairav

19. Devranjani

20. Saveri

21. Hijaji

VIII. THATA KAFI

1. Dha (?) and ni Komal; ga both Komal and shudha

2. Corresponds to the Karharapriya of Karnatic music.

3. Was the parent scale in earlier times; a nearly modern Kafi was the shudha scale of Lochana Panit. ~~Mukhari in this thata was the shudha scale in the of Pundarik~~.

S R g M P D n $\bar{S}$

C D E♭ F G A B♭ C

4. This is the Dorian mode. Similar to Sama gana scale. minor mode.

1. Kafi (Karaharapriya), Passion, noon
(Dorian note, similar to Sama gana scale)
2. Dhanashree – Calm
3. Saindhabi
4. Dhani
5. Bhimpalasri – Quiet
6. Pradipaki
7. Pilu
8. Hanskankani
9. Bageshwari
10. Bahar
11. Suha
12. Sughrayi
13. Kaushika, Kowshik or Koshiyan
14. Shahana
15. Nayaki
16. Kanada

17. Patmanjari Kafi
18. Nilambari
19. Barwa
20. Malgunji or Malgazar
21. Rajeshwari
22. Shivranjani
23. Hanomanjari
24. Sindhu
25. Mukhari
26. Deosag
27. Gaur Sudha
28. Suravi
29. Revati Kanada
30. Husseini Kanada
31. Gauri (Dhenuka of Carnatic)

IX. THE SARANGS (8)

1. These deserve to be raised to the status of a thata; or at least a sub-thata.

2. Both Pundarik in his Raga Chandrodaya and Lochan Pandit in his Sangitrangini gave it the status of a thata.

3. Shudha Serang being sampurna = sampurna the task is easier.

1. Sarang Shuddha - (Madhyamavati) contemplation and illusion
2. Madhumadhava sarang
3. Brindabani sarang (Nat. C.)
4. Samanta Sarang
5. Miyaki sarang
6. Badahansa sarang

X. THE MALHARS (13)

1. These two deserve to be raised to the status of a thata.

2. Lochana Pandit did give them a status of a thata under the title of Megh.

1. Sur Malhar
2. Ramdasi Malhar
3. Miyaki Malhar
4. Megh Malhar
5. Gaud Malhar
6. Nat Malhar
7. Mira Malhar
8. Malhar Shudha

XI. THATA PURVI

1. Ri and dha komal; ma both tivra and shudha

2. Differentiated from the Bhairava group by the use of Ma Tivra instead of Ma Sudha

S r G m P d N Ṡ

C Db E F# G Ab B C

1. Purvi (Kamavardhani) mystery
2. Gauri - Laughter
3. Reba
4. Shri - Mystery and contemplation
5. Deepak
6. Tribeni
7. Malavi
8. Tanki
9. Jetashree
10. Basant
11. Purya Dhanashree
12. Paraj (Nat. C.)
13. Chandrakalyan
14. Manohar
15. Lalit Gauri
16. Shri Tank
17. Jayant
18. Dhanashree
19. Bairati

XII. THATA BHAIRAVI

1. Ri, ga, dha and ni all komal; ma sometimes tivra

2. Probably in ancient times this raga was known by the name Todi.

3. All the alterable notes komal.

4. Modification of Kaphi by using komal ri and komal dha instead of suddha varieties.

S r g M P d n $\bar{S}$

C Db Eb F G Ab Bb C

5. The corresponding Carnatic raga = Hanumatodi.

1. Bhairavi (Hanumatodi), Sad, morning
2. Malkosh (Hindolam). Gay
3. Uttari Gunakali
4. Bilaskhani Todi
5. Bhupali Todi

RAGAS	RAGINIS	
1. Bhairava	1. Gunakali	2. Malasri
	3. Patmanjari	4.
	5.	6.
2. Malawa	1.	2.
	3.	4.
	5.	6.
3. Shri	1. Kedara	2. Kamode
	3.	4.
	5.	6.
4. Hindola	1. Devagandhari	2.
	3.	4.
	5.	6.
5. Deepak	1. Purvi	2. Dhanashree
	3.	4.
	5.	6.
6. Megh	1. Gandamalara	2.
	3.	4.
	5.	6.

The Thata System

1. It should proceed from the simplest (Bilaval) to the most complicated (Bhairavi)

2. It should as far as possible incorporate the medieval Raga=Ragini system.

3. It should give representation to the big raga groups like Sarang, Malhar and Kannada.

4. In order to ~~achieve~~ meet the above=mentioned needs the following new thatas should be established:

(a) Sarang Brindabani Sarang
(b) Malhars Gaud Malhar
(c) Kannadas Darbari
(d) Kedaras, and Shri
(e) Hindol.

That will give us 15 thatas.

5. There are three Kafis (shuddha, Patmanjari and Bangiya) but all are in the Kafi thata.

6. There are 13 Todis, of which 11 are in the ~~Kafi~~ Todi thata and the others in Bhairavi thata.

The parent ragas of the Thatas:

1. Bilaval = Sampurana = Sampurana; V = dha; S'v = ga;

2.

3. Khamaj = Shadav = Sampurana; ga; ni;

4. Marwa = Shadav = Shadav; ri; dha;

5. Todi = Sampurana = Sampurana; dha; ga;

6. Asavari = Odava = Sampurana; dha; ga;

7. Bhairava = Sampurana = Sampurana; dha; ri;

8. Kafi = Sampurana = Sampurana; Pa; Sa;

9. Purvi = Sampurana = Sampurana; ga; ni

10. Bhairavi = Sampurana = Sampurana; Ma; Sa
dha ga

1.
2.
3.
4.
5.
6.

THE KANNADAS (18)

1. Kannada Shudha – Kafi thata at present.
2. Revati Kanada
3. Husseini Kanada
4. Suha Kanada

} Kafi

5. Kovsiki Kanada
6. Darbari Kanada

THE KEDARAS (4) +

equivalent to Shri Raga and its Raginis

1. Kedar – at present Kalyan thata
2. Shyam Kedar – Khamaj
3. Maluha Kedar } Bilaval
4. Jaidhar Kedar }
5. Kamode Kalyan
6. Tilak Kamode Khamaj
7. Shri Purvi
8. Shri Tank Purvi

THE HINDOLAS

1. Hindol	Kalyan
2. Sanjh Hindol	Kalyan
3. Devgandhari	Asavari

The BAHARS

1. Bahar
2. Malankas Bahar
3. Basant Bahar
4. Hindol Bahar
5. Bhairav Bahar
6. Bageshri Bahar
7. Adana Bahar
8. Jaunpuri Bahar

The Scales

In order to prevent a decline to the equal temperament of European music, the varying scales of Indian music must be stressed. This can be done by arranging the different shudha scales which have been in use.

1. The beginning is to be made with Bhup, which is pentatonic and has a just major scale, and is in use throughout Asia, Africa, America, Scotland and Ireland.

2. The next to be used should be Gand Sarang, whose lower tetrachord is in the Greek ditonal and was the shudha scale of the Greeks.

3. As a contrast the Carnatic Senghoti (same as Greek Dorian) should be used. It is also pentatonic.

4. As a further contrast the Todi, which is again in the just major scale from dhaivat to dhaivat should be used.

5. Next the Kafi with both dhaivat and shadj tuning

6. The Mukhari

7. ~~Lastly~~ the The Bilaval

8. ~~Lastly~~, the Bhairav.

9. The Kanakangi to show the difference with Carnatic music

The SRUTIS

A purely melodic system like Hindusthani music must necessarily lay great emphasis on distinctions in scales. These distinctions become all the more important in the notes; neither 12, nor 18 but 22 notes should really be used.

As an illustration the Komal ga used in both Todi and Multani are not the same.

The shudha ri used in ~~Bhup~~ Bhup is very different from the shudha ri used in Kafi or Bilaval.

The main task is to write down pairs of ragas illustrating the sruti distinctions, so that all the srutis are known.

S. No	Name of Sruti			Svara	Vikrit	European
1.	Tivra			Shadja madhya		C
2.	Kumudwati	rishabh	mridu = ri b		Ri Komal	D Flat
3.	Manda		shudha = ri b			
4.	Chandobati		triruti = ri ♮			
5.	Dayabati		Chaturuthi = ri ♮	Ri shudha	(Tivra ri?)	D
6.	Ranjani	—	—			
7.	Raktika	gandhara	triruti = ga ♮		Ga Komal	E Flat
8.	Raudri		Chaturuthi = ga b	Ga shudha		
9.	Krodhi		antara = ga ♮		(Tivra Ga?)	E
10.	Bajrika	madhyam	shuddha = ma ♮	Ma shudha		F
11.	Parasarini		Prati madhyam = ma ♮			F sharp
12.	Priti				Ma tivra	F#
13.	Manjari					
14.	Khiti			Pa		G

S. No	Sruti			Svara	Vikrit	European
14.	Kshiti			Pa		G
15.	Rakta	dhairat	mridu = dha ♭		Dha Komal	A flat
16.	Sandipini		shudh = dha ♭			
17.	Alapini		trisruti = dha ♯			A
18.	Madanti		chatusruti = dha ♮	Dha Shudha		
19.	Rohini	—	—			
20.	Ramya	nishadh	trisruti = ni ♭♭		Ni Komal	B flat
21.	Ugra		chatusruti = ni ♭	Ni shudha		
22.	Kshovini		Kakali = ni ♮		(Tivra ni?)	B

♮ = natural; scale of C major in just tuning;
♯ = higher by $\frac{81}{80}$ (the difference between the major and minor tone);
♭ = lower by $\frac{80}{81}$ than the corresponding natural;
♭♭ = low flats, forming a descending strings of just fifths from F;
♭ = other flats
♭ = soft.

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1. Tivra — Shadja

2. Kumudwati

3. Manda

4. Chandobati

5. Dayabati

6. Ranjani

7. Raktika

8. Randri

9. Krodhi

10. Bajrika

11. Parasarini

12. Priti

13. Manjari

14. Khiti

15. Rakta

16. Sandipini

17. Alapini

18. Madanti

19. Rohini

20. Ramya

21. Ugra

22. Kshobini

Primary Ragas

1. Bilaval
2. Kalyan
3. Khamaj
4. Marwa
5. Todi
6. Asavari
7. Bhairav
8. Kafi
9. Sarang
10. Malhar
11. Purvi
12. Bhairavi
13. Kanada
14. Shri
15. Hindol
16. Bhup
17. Gaud Sarang
18. Mukhari
19. Kanakangi (C)
20. Multani.
21. Senjhoti (C)

Of these 1, 5, 7, 8, 16, 17, 18 and 19 illustrate distinctions of scale; 1 and 16 and 19 and 20 give examples of relationship between srutis and svaras.

Some Popular Derivative Ragas

1. Yemen
2. Bhupali
3. Hamir
4. Kedar
5. Kamode
6. Shankara
7. Behag
8. Desh
9. Jhinjhoti
10. Jaijaywanti
11. Jogia
12. Gouri
13. Sohani
14. Basant
15. Bageshwari
16. Bhimpalasri
17. Pilu
18. Bahar
19. Adana
20. Jaunpuri
21. Darbari
22. Malkosh
23. Nilambari
24. Mand
25. Durga
26. Ramkali
27. Maru Behag
28. Tilang
29. Bibhas
30. Barwa
31. Lalit

Some Ragas which illustrate distinctions of Sruti

1. Vasant, Sohni
2. Bhairav
3. Todi, Purvi, Bhup
4. Bilaval, Kafi,
5. Todi
6. Multani, Kafi
7. Yemen, Bilaval
8. Bhupali
9. Bageshri
10. Jogia
11. Yemen
12. Hindol

Atikomal Ri
Komal Ri
Madhya Ri
Sudha Ri

Atikomal Ga
Komal Ga
Sudha Ga
Tivra Ga

Sudha Ma
Ekaruti Ma
Tivra Ma
Tivratara Ma

(Turn over

13. Madhmavat Sarang

14. Bhairav

15. Khamaj

16. Kalyan

17. Bhimpalasi

18. Kafi

19. Bilaval

20.

Atikomal Dha
Komal Dha
Tiraruti Dha
Suddha Dha

Atikomal Ni
Komal Ni
Suddha Ni
Tivra Ni

Historical Scales

1. Vedic represented in Southern Saman chants – Abhogi (e) pentatonic

2. Sarangdeva (1210 – 1247) Mukhari or Karakangi
(similar to European minor mode – all the vikrito sharps of the suddha scale – most likely developed from the ancient Ga=grama. ancient Greek chromatic scale.

3. Lochnakavi (15th cent) –

4. Punderik (17th cent) – Mukhari or Kanakangi, because of his Southern origin

5. Ahobala (18th cent) –

6. Md. Rezza (19th cent) – Bilaval, ~~most~~ European major scale – probably developed from Sa=grama.

Time

1. Sandhiprakas – 4–7 am. and p.m.
2. After Sandhiprakas 7–10 am and pm.
3. Before sandhiprakas 10–4 am and pm.

1 = Ragas having ri Komal and ga tivra – Bhairava, Purvi and Marwa groups.

2. Ri, dha and Ga Sudha – Bilaval, Kalyani and khamaj groups.

3. Ga Komal and Ni Komal – ~~Kapti~~ Kafi, Bhairavi and Asavari groups

A. Purva ragas (between noon and midnight) vadi amsa in the first tetrachord.

B. Uttara ragas (between midnight and noon) amsa in the second tetrachord

Ma tivra = sandhiprakas or after sandhiprakas, absent from morning M (uttara) unless attended by a dominant Komal ma. Exceptions.

Evening ragas do not omit Ga and Ni altogether

Morning ragas do not omit Ri and dha

Morning Ragas : Purvanga generally;
Ri and Dha not omitted;
Ma tivra absent unless attended by
a dominant Komal ma.

Evening Ragas : Uttaranga generally;
Ga and Ni not omitted;
Ma tivra present frequently.

Purvanga (amsa in first tetrachord) between noon and midnight

1. Ga and Ni not omitted (Evening)

2. Ga and Ni omitted

3. Ri and Dha not omitted (Morning)

4. Ri and Dha omitted

1. Evening Purvangas i.e. not omitting Ga and Ni:

(a) Pre = Sandhiprakasha i.e. having Ri, Dha and Ga suddha; no Ma tivra
12-4 p.m.

(b) Sandhiprakash i.e. using Ri komal and Ga tivra
4-7 p.m.

(c) Post = Sandhiprakash i.e. Ga and Ni Komal
7-10 p.m.

(d) Pure Evening Purvangas i.e. omitting Ri and Dha

(e) outside these four categories:
1. Yemen 2. Khamaj

2. Morning Purvangas i.e. not omitting Re and Dha:

(a) Pre-Sandhiprakash i.e. having Re, Dha and Ga Suddha; no Ma Tivra
12-4 am.

(b) Sandhiprakash i.e. having Re Komal + Ga Tivra
4-7 am.

(c) Post-Sandhiprakash i.e. Ga and Ni Komal
7-10 am.

(d) Pure Morning Purvangas i.e. omitting Ga and Ni.

Uttarangas (amsa in 2nd tetrachord)
between midnight and noon

1. Ri and Dha not omitted (Morning)

2. Ri and Dha omitted

3. Ga and Ni not omitted

4. Ga and Ni omitted

Morning Uttarangas i.e. not omitting Ri and Dha

(a) Pre: Sandhiprakash - Ri, Dha & Ga Suddha, no Ma tivra
12-4 am. 1. Bilaval

(b) Bandhiprakash - Ri Komal & Ga tivra
4-7 am.

(c) Post: Sandhiprakash - Ga Komal & Ni Komal
7-10 am.

(d) Pure Morning uttarangas, i.e. omitting Ga and Ni

Evening Uttarangas i.e. not omitting Ga and Ni

(a) Pre-Sandhiprakash – Ri, Dha & Ga Suddha, no Ma tivra
12-4 p.m.

(b) Sandhiprakash – Ri Komal & Ga tivra
4-7 p.m.

(c) Post-Sandhiprakash – Ga Komal + Ni Komal
7-10 p.m.

(d) Pure Evening uttarangas i.e. omitting Ri and Dha

Evening Purvangas, having ga and ni

1. Atikomal Ga and Atikomal Ni
2. Atikomal Ga and Komal Ni
3. Atikomal Ga and Suddha Ni
4. Atikomal Ga and Tivra Ni

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5. Komal Ga and Atikomal Ni
6. Komal Ga and Komal Ni
7. Komal Ga and Suddha Ni
8. Komal Ga and Tivra Ni

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9. Suddha Ga and Atikomal Ni
10. Suddha Ga and Komal Ni
11. Suddha Ga and Suddha Ni
12. Suddha Ga and Tivra Ni

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13. Tivra Ga and Atikomal Ni
14. Tivra Ga and Komal Ni
15. Tivra Ga and Suddha Ni
16. Tivra Ga and Tivra Ni

Morning Uttarangas having Ri and Dha

1. Ati Komal Ri and Ati Komal Dha
2. Ati Komal Ri and Komal Dha
3. Ati Komal Ri and Trisruti Dha
4. Ati Komal Ri and Suddha Dha

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5. Komal Ri and Ati Komal Dha
6. Komal Ri and Komal Dha
7. Komal Ri and Trisruti Dha
8. Komal Ri and Suddha Dha

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9. Madhya Ri and Ati Komal Dha
10. Madhya Ri and Komal Dha
11. Madhya Ri and Trisruti Dha
12. Madhya Ri and Suddha Dha

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13. Suddha Ri and Ati Komal Dha
14. Suddha Ri and Komal Dha
15. Suddha Ri and Trisruti Dha
16. Suddha Ri and Suddha Dha

(1) Ragas taking sharp-ri-ga-dha 7 pm to midnight

(2) " " flat ri but sharp-ga and ~~-dha~~ -ri { 4 pm & 7 pm. / 4 am & 7 am.

(3) " " flat-ga and -ri.

(4) Ragas taking both ri and dha ~~tivra~~ Komala will be followed by ragas with both ri and dha tivra or ga and ni tivra ~~to be follow~~ and these in turn will be followed by those containing both ga and ni komal

The Scales

The fundamentally consonant are 1 & 2.

1. C D E F G A # B C (by admission of A # in place of A, to the audible or major consonances of the drone. Intervals of ~~just~~ a just Fifth).
   240, 270, 300, 320, 360, 405, 450, 480

2. C D♭ E♭ F G A # B♭ C - (from septimal intervals)

3. C D E F G A B♭♭ C
   240, 270, 300, 320, 360, 400, 426 2/3, 480 } Relation of a Fourth

4. C D E♭ F G A # B♭ C
   240, 270, 288, 320, 360, 405, 432, 480 } Relation of a Fifth

5. C D E♭ F G A♭ B♭♭ C
   240, 270, 288, 300, 360, 384, 426 2/3, 480 } Relation of a Fourth

6. C D♭♭ E♭ F G A♭ B C
   240, 256, 300, 320, 360, 384, 450, 480 } Relation of a fifth

6. C D♭♭ E♭ F G A♭ B♭ C } Fifth

240, 256, 300, 320, 360, 384, 450, 480

7. C D♭♭ E♭ F G A♭ B♭ C } Fifth

240, 256, 288, 320, 360, 384, 432, 480

8. C D E F F# A B C

240, 256, 300, 320, $341\frac{1}{3}$, 400, $453\frac{1}{9}$, 480

Nata Group Scale

S, R, G, M, P, Dh', N, S̄ – relation of a fifth

240, 270, 300, 320, 360, 405, 450, 480

C D E F G A# B (C)

Madhyamadi Scale

S, R, G, M, P, Dh', n', S̄ – relation of a fourth

240, 270, 300, 320, 360, 400, $426\frac{2}{3}$, 480

C D E F G A B bb (C)

These two scales together contribute the scales for ragas of the Khamaj and Bilaval thatas. Scales derived by combining two such scales are very similar to those of folk music. Bihag uses ~~to~~ the Nata scale with F sharp in addition. The Kalyan group employs the Madhyamadi scale with F# and B instead of F and B bb. Keder employs the Madhyamadi scales with F# and B in addition.

Kafi Scale

S, R, g, M, P, Dh, n, $\bar{S}$	C D E b F G A # B b ©
	240, 270, 288, 320, 360, 405, 432, 480

The Nata and Kafi scales combined give the scale for the Malhar group.

~~Bhairav Scale~~

Asavari Scale

S, R, g, M, P, dh, $\bar{n}$, $\bar{S}$	C D E b F G A b B bb ©
	240, 270, 288, 320, 360, 384, $426\frac{2}{3}$, 480.

Also used by the ~~Kanda~~ Kanada ragas

Bhairava Scale

S, r, G, M, P, dh, N, $\bar{S}$ | C Db Eb F G Ab B C
240, 256, 300, 320, 360, 384, 450, 480

The Purvi uses this scale ~~but~~ with F# in addition.

Bhairavi Scale

S, r, g, M, P, dh, n, $\bar{S}$ | C Db Eb F G Ab Bb C
240, 256, 288, 320, 360, 384, 432, 480

Todi uses this scale with F# and B instead of F and Bb.

Marwa Scale

S, r, G, M, m+, Dh-, N+, S- | C D E F F# A B C
240, 256, 300, 320, 341 1/3, 400, 455 1/9, 480.

Lalita, Puriya and Hindol also use this scale.

1660 — Sudhe scale of Lochana Pandit and Hridya :

Kafi	Sa	36"	240	vibs
	Ri	32	270	"
	Ga	30	288	"
	Ma	27	320	"
	Pa	24	360	"
	Dha	21½	405	"
	Ni	20	432	"
	Sa	18	480	"

latter 17th Cent — Ahobala's

Sa	240
K. ri	254 12/7
Ri	270
Ga	288
Tura Ga	301 17/43
Ma	320
Mat.	337½
Pa	360
K. Dha	381 3/7
Dha	405
Ni	432
Tira Ni	301 17/43 × 3/2 = 452 4/3
Sa	480

The primer of Indian music should contain about 60 ragas.

A. The 7 scientific scales:

1. Nata,
2. Madhanadi (Sarang, of Kalidasa's song),
3. Kafi
4. Asavari
5. Bhairava
6. Bhairavi, and
7. Marwa,

B. The five thatas not covered by the above:

8. Kalyan
9. Bilaval
10. Khamaj
11. Purvi, and
12. Todi

C. 5 Ragas which illustrate the historical scales:

13. Bhupali
14. Gaud Sarang
15. Carnatic Kanakangi (or Mukhari)
16. Carnatic Abhogi
17. Carnatic Seighoti

D. 4 Ragas which lead groups of ragas and have reference to the seven scientific scales:

18. Bihag
19. Kedar
20. Karada Darbari
21. Miyaki Malhar

E. 8 Ragas which illustrate the use of <u>srutis</u> and thus help to fix the notes; the earlier ragas will also be used for this purpose:

22. Vasant
23. Multani
24. Bageshri
25. Jogia
26. Hindol
27. Bhimpalasi
28. Madhmavat Sarang
29.
30.

F. ~~Addi~~ 30 Additional ragas, which more or less cover the entire range of popular ragas, illustrate the scales, the thata divisions, the use of srutis and the different rasas.

31. Shri
32. Lalita
33. Puriya
34. Tilang
35. Hamir
36. Shankra
37. Jinghoti
38. Sohni
39. Gouri
40. Jaijayanti
41. Pilu
42. Bahar
43. Adana
44. Malkosh
45. Nilambari
46. Mand
47. Durga
48. Ramkali
49. Maru Bihag
50. Barwa
51. Desh
52. Chayanat
53. Sorath

54. Pahari
55. Gara
56. Kalingda
57. Brindabani Sarang
58. Nayki Malhar
59. Jaunpuri
60. ~~Yemenkalyan~~ Kamode
61. Miyaki Todi
62. Jeevanpuri
63. Dhani

G. Ragas illustrating combinations:

1. Yemen Kalyan
2. Tilak Kamode

H. Classification of all ragas, by thatas, scale, consonants, time, olava, shadava, sampurna, sankeerna, Chayalagatar, etc. - List of all extant ragas.

I. The graces of vocal music with reference to those of some important instruments.

No	Sruti	Current Western name	Clements	Illustrative Raga	Sign	Vibrations	Gelie ements	W
1	Tivra	Shadja ~~Hetja~~			S			
2.	Kumudvati	Ati Komal Ri		Vasant, Sohni	r⁻			I
3.	Manda	Komal Ri		Bhairav	r			D
4.	Chandovati	Madhya Ri		Todi, Purvi	R⁻			
5.	Dayavati	Suddha Ri		Bilaval	R			I
6.	Ranjani	Ati Komal Ga		Todi	g⁻			E
7.	Raktika	Komal Ga		Kafi, Multani	g			E
8.	Randri	Suddha Ga		Yemen ~~Bhupali~~, Bilaval	G			
9.	Krodhi	Tivra Ga		Bhupali	G⁺			E
10.	Vajrika	Suddha Ma		Bageshri	M			F
11.	Parasarini	Ekasruti Ma		Jogia	M⁺			F
12.	Priti	Tivra Ma		Yemen	m			F
13.	Manjari	Tivratara Ma		Hindol	m⁺			F
14.	Kshiti	Pa			P			G
15.	Rakta	Ati Komal Dha		Mashmarat Sorg	d⁻			A
16.	Sandipini	Komal Dha		Bhairav	d			A
17.	Alapini	Triruti Dha		Khamaj	D⁻			
18.	Madanti	Suddha Dha		Kalyan	D			A
19.	Rohini	Ati Komal Ni		Bhimpalasri	n⁻			B
20.	Ramya	Komal Ni		Kafi	n			B
21.	Ugra	Suddha Ni		Bilaval	N			
22	Kshobini	Tivra Ni			N⁺			B
		Shadja Tara			S			C

Vibrations	Cyclic cents	Western note	Vibrations per second	Cyclic cents	Illustrative Ragas		
		C	240	0		Shadja	1
		D♭	252·8	90	Gaula	Ekasruti Ri	2
		Db	256	112	Mayamalavagaula	Dvisruti Ri	3
			266·6	182	Bhairavi	Trisruti Ri ~~Chatusruti Ri~~	4
		D	270	204	Sankarabharana	Chatusruti Ri	5
		E♭	284·4	294	Bhairavi	Sudha Ga	6
		Eb	288	316	Kanharapriya ~~Dengaldhani~~	Sadharana Ga	7
			300	386	Sankarabharana ~~Kuntalavarali~~	Antara Ga	8
		E	303·75	408	Devagandhari ~~Begada~~	Chyuta Ga	9
		F	320	498	Kuntala-Varali	Sudha Ma	10
		F sharp	324	520	Begada	Tivra Ma	11
		F #	337·5	590	Kalyani	Prati Ma	12
		F ##	341·3	610	Varali	Chyuta Ma	13
		G	360	702		Pa	14
		A♭	379	792	Saveri	Ekasruti Dha	15
		Ab	384	814	M'gaula	Dv. Dha	16
			400	884	Kambhoji	Tr. Dha	17
		A	405	906	Kalyani	Ch. Dha	18
		B♭	426·6	996	Bhairavi	Su. Ni	19
		Bb	432	1018	K'priya	Kaisiki Ni	20
			450	1088	S'bharana	Kakali Ni	21
		B	455·6	1110	Kuranji	Chyuta Ni	22
		C#	480	1200		Tara Shadja	

Notes and Emotions.

Sa and ri = appropriate to expressing the emotions of heroism, wonder and resentment.

Dha = emotions of disgust and terror.

ga and ni = sorrow

ma and pa = humour and love.

Ragas and Emotions

1. Todi – emotional symbol of the feeling of the countryside; pastoral; surrender of animal life to the magic and enchantment of the beauty of nature.

2. Lalit – break of night and day;
   (a) separation of lovers
   (b) return of an offending lover after a night with a lover;
   (c) satiety of love – acceptance of dawn as termination of love.

3. Vibhas – pangs of separation at morn; unsatisfied

4. Ramkali – melody of resentment; the emotion of an offended lady vainly assuaged by her lover.

5. Vasanta – dancing rhythm at the advent of spring; joy of life

6. Megha – sonorous longing for love = union; exuberance of desire and opportunity for enjoyment at rains

7. Kanoda – lamentation of a heroine cut off from her lover by cruel fate

8. Bhupali – joy of meeting lover at eventide

9. Kamoda = rapture of love

10. Bhairavi – purity of love; passion purified by renunciation.
devotion.

11. Purvi – lamentation of nature for the parting day

12. Asavari – melancholy pleading of a grievance for redress.

13. Madhumadhavi – peace of love and contentment.

14. Nata – the heroic and martial in man.

Ragas and the Seasons.

1. Hindola - Spring
2. Vasanta - "
3. Bhairava - Asvin (Autumn)
4. Sri - harvest - early winter
5. Deepak - Spring

acc. to Somesvara

1. Sri - winter 2. Vasant - Spring 3. Bhairava - Summer
4. Panchama or Malkosh - autumn 5. megh - rains
6. Nata Narayana - early winter.

Lochana Pandit's Srutis

1. Tivra	–	Tivra Nishada
2. Kumudvati	–	Tivra Nishada Kakali
3. Manda	–	Tivratama Nishada
4. Chandovati	–	Sudha Sadja
5. Dayavati	–	—
6. Ranjani	–	Komala Rishabha
7. Raktika	–	Sudha Rishabha
8. Rowdri	–	—
9. Krodhi	–	Sudha Gandhara
10. Vajrika	–	Tivra Gandhara
11. Prasarini	–	Tivratara Gandhara
12. Preeti	–	Tivratama Gandhara
13. Marjani	–	Sudha madhyam or Atitivratama Gandhara
14. Kshiti	–	—
15. Rakta	–	Tivratara madhyam
16. Sandipini	–	—
17. Alapini	–	Sudha Panchama
18. madanti		—
19. Rohini		—
20. Ramya	–	Sudha Dhaivata, Komal Dhaivatha
21. Ugra		—
22. Kshobhini	–	Sudha Nishada

Hindusthani		Carnatic
1. Bhairava	—	Mayamalavagowla
2. Yemen	—	Santhakalyan, Kalyani
3. Bilaval	—	Dhirasankarabharana
4. Khamaj	—	Harikedaragowla or Harikamboji
5. Purvi	—	Kaviramakriya or Kamavardhani
6. Marwa	—	Gamakakriya or Gamanasrama
7. Kafi	—	Sri or Karharapriya
8. Asavari	—	Naririthigowla or Natabhairavi
9. Bhairavi	—	Janithodi or Hanumathodi
10. Todi	—	Saivapanthuvarali
11. Anandabhairava	—	Chakravakam
12. Jhinghoti	—	Harikambodhi
13. Nune	—	Chalanata
14. Malkos	—	Hindolam
15. Kalingra	—	Nadanamakriya
16. Kalyan	—	Kalyani
17. Durga	—	Sudha Saveri
18. Jogiya	—	Saveri
19. Lalit	—	Suryakantham
20. Sarang	—	Hatakyamavati
21. Gandhari	—	Gandharva

22. Bageshri — Sriranjani

23. Bhoop — Mohanam

24. Tilang — Nata

25. Bhimpalas — Abheri

26. Bhupali — Bhupala

Arabic melodies

1. Rahawi
2. Huoanai
3. Rast
4. Hejaj
5. Buzurg
6. Kochak
7. Irak
8. Nawab
9. Safha
10. Ushashaq
11. Jangla
12. Busalik

1. Bhupali — ~~all tones - no semitones, no quarter-tones~~ tivra ga

2. Hamir → ~~tivra ma~~, Ekasruti ma

3. Kedar → ma is between tivrata ma gandhara + suddha ma ↑

4. Bageshri → ma is between Ekasruti ma, going down to suddha ma ↓

5. Behag → madhya ri; ga touches tivra ga + comes down to suddha ga
pa is also slightly rising up + coming down.

6. Desh — tivrat Ni in ascent; Komal ni in descent.

7. Tilak Kamode → ga rises from tivra ri to suddha ga

8. Kalingra — atikomal ri, Komal dha

9. Sri —

10. Sohni — atikomal ri; suddha ga rising from ri, ma is tivratara

11. Bageshri — ~~Komal ga atikom~~ Tivra ga, ~~rising from~~ going down to Komal ga
Suddha dha but coming down from atikomal ni

12. Brindabani Sarang →

13. Bhimpalasri — Komal ga comes down from Suddha Ga.
Suddha ma but lower by a sruti.

14. Pilu

15. Gaunpuri — suddha ni but higher by a sruti.

④ French toast.

Take a plateful of milk. Add sugar to the milk. Soak slices of bread in the sweetened milk. Then soak this same bread in a plateful of beaten eggs. Then fry this bread in ghee into a golden brown colour.

⑤ Plantains with Curds.

Cut plantains into thin circular slices. Cut green chillies into small bits. Put these into the curds. Add a teaspoonful of sugar and salt to taste.

⑥ Tamarind Chutney.

Soak tamarind in water for some time. Press out the thick juice of the tamarind and throw out the pulp. Cut jaggery into tiny bits & mix it thoroughly with the tamarind. Add a little salt. Chop onion finely. Cut chillies (green) & Coriander leaves (धनिया) into small

bits. Add the chopped onion, chillies & coriander leaves to the tamarind mixture. Take roasted groundnut & pound it into bits and ~~roast~~ mix it thoroughly.

— x —

1. Salt.
2. Pepper.
3. Mustard.
4. Red chillie Powder.
5. Curry powder.
6. Grated copra.
7. Sugar.
8. Tea leaves.
9. Green chillies
10. कोथमीर Coriander leaves.
11. Turmeric Powder.
12. जीरा
13. राई

Take fresh lamb, roast it on a slow fire till it is brown — spread it in a shallow dish lined with ghee — push boiled lobsters into the lamb — take oysters (flavour it with caviare paste), drill small holes in lobsters and drop the flavoured oysters — Make a paste of mincemeat and ~~white~~ yolk of eggs, add baking powder to give it body — Lay a layer of this paste — turn the lamb = lobster concoction in it — Put another layer of this paste on top of the concoction. Scatter bacon chopped in bits, almonds, pistachio, currants on the paste top. Ground dessicated copra and ~~bu~~ lay it thick on top.

Turn the pie in a ~~ob~~ deep vessel full of coconut milk, put copra, almond top dressing. Put the thing in a refrigerator for 24 hours; on a slow fire for 4 hours; in steam for 2 hours and back in refrigerator for 24 hours.

Take the cooked thing — serve in dishes lined with betel leaves laid out with their

tips pointing outwards. Sprinkle rosewater for fragrance.

A dash of potassium Cyanide to make it slightly sour and the last dish.

Custard.

Beat 2 eggs together. Add milk to it in such quantity so that a mild yellow colour ~~of the eg~~ is retained by the mixture. Add sugar to taste. Keep the ~~vessels~~ vessel with this mixture in another vessel half full of water.

Keep ~~it~~ ~~the~~ vessels on the fire till the mixture becomes quite firm but not hard.

Eat with bread.

Potato Fingers. ~~Make~~ Cut potatoes in long fingers. Soak potatoes in a little salt water. Remove the potatoes from the water. Fry the potatoes in ghee. Add pepper to taste

Bhatia Vegetable

Chop into fine bits – potatoes ~~gree~~ french beans, onions. Take a vessel ~~add~~ put ghee ~~to~~ in it. Put ~~an~~ the mixture of onions, french beans, potatoes & green peas to it. ~~Add~~s Cut chillies and कोथमीर ~~to it~~. Add a little जीरा and राई. Add a pinch of हळदी and ~~a~~ red chillie powder. Add ~~a~~ ~~p~~ salt to Taste.

Cover the vessel & put it on the ~~ven~~ fire. Keep water on the lid. Keep for about 20 minutes till well steamed. Add hot water from the lid to it. Mix thoroughly & keep on the fire till ~~all~~ the vegetables are well ~~ot~~ cooked.

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INDEX

3,200
1,000
4,200

~~250~~
~~250~~
~~250~~

(1)	Dr. Shafi	1367 . 0 . 0
(3)	Baloo ×	700 . 0 . 0 .
(2)	Hannahbai .	480 . 0 . 0 .
(5)	Mummie . ×	1000 . 0 . 0
(4)	Chenuil	250 . 0 . 0
(6)	Jre	450
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		4247

~~3,000 → 2,000~~

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1833

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450.

Chemist	50	0	0
Shafi	208	0	0
Hamdi	50		
	308		0

450
308
152