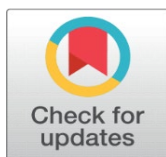
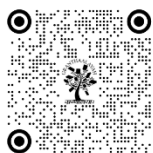


KINSHIP OF DOUBLE HARMONIC MAJOR SCALE AND RAGA BHAIRAV OF INDIAN MUSIC

Dr. Mukul Chauhan 

¹ Ph.D. (Music Vocal)



Corresponding Author

Dr. Mukul Chauhan,
chauhanmukul@hotmail.com

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ABSTRACT

The research paper shares the kinship between Indian Raga and Western music scale. Western system of music consists of scales and chords. A scale is of ascending and descending order of notes. The term scale comes from the Latin word scala meaning ladder. A scale is considered a set of intervals. An interval is a number of semi tones that separates from one pitch to a different pitch. A semitone, also called a half step or a half tone, is always termed the smallest musical interval considered in Western music. It is defined the interval between two adjacent notes of a 12-tone scale from C to C#. Two semi tones are termed as a whole tone or whole step. A specific scale is defined by its interval patterns and by a special note also called as the root note of the scale or the tonic note. For example-in a C-major scale C is the tonic note. There are seven basic degrees in western music which can also be known as seven swaras in Indian music. For example: Degrees in relation with Key C in Western music:

I	II	III	IV	V	VI	VII	VIII
do	re	mi	fa	sol	la	te	do
C	D	E	F	G	A	B	C

1 2 3 4 5 6 7 8
Sa Re Ga Ma Pa Dha Ni Sa

In Indian music twelve semi tones can be defined as seven pure notes or shudh swaras and five altered notes known as vikrit swaras. Out of seven notes Sa and Pa are constant notes which do not change their positions and Re Ga Dha and Ni can be played pure as well as flat, also known as Komal swaras. Ma note can be played as a pure note or Tivra swara also known as a sharp note.

Keywords: Indian Raga, Western Scale Theory, Intervals

1. INTRODUCTION

The twelve semi tones in western music system in Key C with relation to Indian Music:

- C - Sa
- C# or Db- Komal Re

- D - Shudh Re
- D# or Eb- Komal Ga
- E- Shudh Ga
- F- Shudh Ma
- F# or Gb- Tivra Ma
- G - Shudh Pa
- G# or Ab- Komal Dha
- A - Shudh Dha
- A# or Bb- Komal Ni
- B- Shudh Ni
- C- Sa

b=flat/lowered by one semitone; #=sharp/raised by one semitone

These notes are the foundation on which the entire music in the world exists. These notes have all kinds of combinations or permutations from which different music in this world have been evolved. Music has fixed systems but yet it is so diverse in nature that all the music that has been produced in the world share a major kinship between each other.

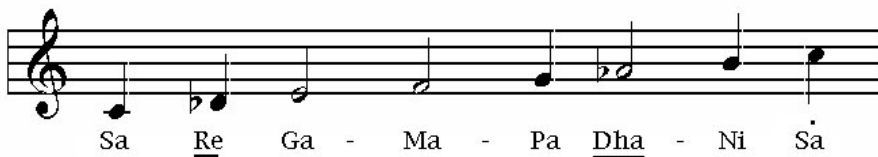
2. RAGA BHAIRAV & DOUBLE HARMONIC MAJOR SCALE

The sequence of intervals comprising the Double Major Harmonic scale is:

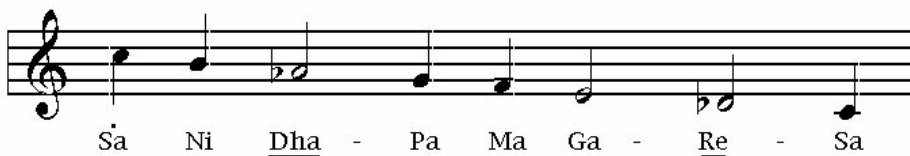
- Half – augmented second – half – whole – half – augmented second– half.
- Or, in relation to the root note:
- Minor 2nd, major 3rd, perfect 4th and 5th, minor 6th, major 7th.
- C-Db-E-F-G-Ab-B-C

Bhairav's characteristics are:

Aaroh



Avaroh



Raga Bhairav has the same notes as western Double Harmonic Scale in the staff notation.

i.e. C-Db-E-F-G-Ab-B-C

Therefore, they have a direct kinship to each other.

The double harmonic major scale has all the notes as the major scale with the 2nd and 6th notes flattened (reduced by one note - the Shudh notes become Komal). This is also known as the Arabic scale.¹ Raga Bhairav swaras be written as S r G M P d N, where: 'r' represents the Komal Re, minor 2nd interval 'd' represents the Komal Dha, minor 6th interval. Shudh Ga Ma and Ni respectively (major 3rd, perfect 4th, major 7th) P represents Pa, the 5th note. Notes of the Raga when C is the root are (C- Db- E- F- G- Ab- B- C), when D is the root note (D- Eb- F#- G- A- Bb- Db- D).

Though they have same notes yet not any phrase in this scale can be referred to as Raga Bhairav as it has to induce an emotion. The raga is governed by certain rules, not every set of notes that follows those rules becomes a raga. Therefore, there is a kinship and divergence between the two concepts of music.

3. CONCLUSION

Therefore, one can come to the conclusion that the western music scale Double Major Harmonic has direct kinship with Indian Raga Bhairav.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

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