

## Chapter 1 : Music Theory/Indian - Wikibooks, open books for an open world

*Hindustani classical music has strongly influenced Indonesian classical music and Dangdut popular music, especially in instrumentation, melody, and beat. Besides vocal music, which is considered to be of primary importance, its main instruments are the sitar and sarod.*

Here are some descriptive comments on the most common instruments that one might hear in a Hindustani concert:

**Melody Instruments**

**Bansuri** The bansuri is a deceptively simple bamboo flute. The Indian-style flute uses no keys, tone control being a matter of breath control and careful fingering on the six or seven holes in the flute. The bansuri is one of the recent additions to classical music in India, having been traditionally regarded as more of a folk instrument.

**Bin Rudra Vina** The bin is one of the oldest instruments in Indian music. Technically a stick zither, it consists of a fingerboard with two large gourd resonators at either end. The bin usually has four main playing strings, and two or three "chikari" strings used as rhythmic drones. It is used primarily in performance of Dhrupad, and as such is rather rare.

**Harmonium** An instrument introduced by the British, the harmonium is like a small pump organ. It is almost never used as a solo instrument, being much more common as an accompaniment for a vocalist. Some musical purists object to it because it cannot reproduce the subtle changes of intonation that are necessary in Indian music.

**Santoor** Another instrument which until recently was used mainly for folk music, the santoor is the Indian version of the hammered dulcimer. The classical version has 84 strings. It is traditionally associated with the province of Rajasthan.

**Sarangi** The sarangi is the principal bowed instrument in modern Hindustani music. A typical sarangi has three main playing strings, and from sympathetic strings. Although traditionally used mainly to accompany singers, it is gaining a reputation as a solo instrument.

**Sarod** One of the two main plucked string instruments in Hindustani music, the sarod is a fretless instrument with usually 25 strings. Of these 25, fifteen are sympathetic strings, and six more are tuned to various drones, leaving four main playing strings. It is played with a plectrum made out of a piece of coconut shell.

**Shehnai** The shehnai is a double-reed wind instrument like an oboe. Traditionally it was used mostly for outdoor celebrations, and for temple music. More recently it has been used as a concert instrument as well.

**Sitar** The sitar is probably the best-known of the instruments of India. It is a long-necked plucked lute, typically with about 18 strings 11 sympathetic, 3 - 5 drone strings, and 2 - 4 playing strings. As it is fretted, the complex ornamentation of Indian music is produced by pulling the string sideways along the fret.

**Surbahar** The surbahar is similar to the sitar, but larger, and with a deeper tone. It is used in some of the same contexts as the bin, and is also a rather rare instrument.

**Rhythm Instruments**

**Dholak** The Dholak is a small barrel-shaped drum, used mostly for folk music. It is sometimes heard in percussion ensembles, or accompanying Qawwali concerts.

**Pakhawaj** The pakhawaj is a barrel-shaped, double headed drum, with a low, sonorous tone. It is rarely used these days in performance of anything other than Dhrupad music.

**Tabla** Tabla is the most common percussion instrument in Hindustani music, and almost any concert will include a tabla player. The instrument consists of two drums, one played with the right hand, one played with the left. The right hand drum appearing on the left in this picture is tuned to the drone, and thus provides an extra reinforcement of the fundamental pitch.

**Drone Instruments**

**Tanpura** The tanpura is the most common source of a drone in Hindustani concerts. It is a long-necked lute similar in shape to a sitar , without frets. It usually has four to six strings, which are strummed continuously throughout the performance.

**Swarpeti** The swarpeti literally, "note-box" is like a harmonium without the keyboard. It is just a bellows and a few reeds which are tuned to the drone. These days it is not uncommon to see electronic swarpetis at concerts as well.

**A typical instrumental performance**

**A Typical Instrumental Performance** When the musician takes the stage, he or she will almost always be joined by a tabla player. The only exception is Dhrupad-inspired instruments such as the bin and surbahar, which may play either unaccompanied, or accompanied by pakhawaj. Most instrumentalists will use a tanpura as well, but some sitar and sarod players rely on the open strings of their instruments to provide a drone. After tuning which for some instruments may take a while the artist will begin the first raga. Again, development starts with the alaap, in which the raga is built up note by note. Instrumental alaap tends to be more drawn out than vocal alaap, reaching further into the nuances of the

raga, and often exploring the lower octaves as well. When the first part of the alaap is finished, the musician will begin the jor, introducing a pulse into his improvisations. As the pace increases, some instrumentalists especially sarod and sitar players will insert rhythms on the drone strings of the instrument, in what is known as jhala. Once the alaap is complete, the tabla will start playing a tala and the first composition will begin. As with vocal music, the first composition will be slow, although rarely as slow as a slow khayal composition. As usual, the composition serves mostly as a jumping-off point for improvisations within the raga. Again, as with vocal music, a faster composition will follow, and may build into a second jhala, completing the performance of the raga. Many instrumentalists will also incorporate lighter classical pieces into their concerts, most commonly dhuns folk tunes from various parts of India. Occasionally, the instrumentalist will sing parts of these songs as well. A typical vocal performance

Although concerts in the Hindustani tradition all share certain commonalities, there are definite differences between vocal and instrumental concerts, so the two are described separately. The harmonic principle of contrast between simultaneous sounds is foreign to the Indian conception of music. The concept of modulating or changing keys is also absent. Instead, the music is based on a drone, a continual pitch that sounds throughout the concert. This acts as a point of reference for everything that follows, a home base that the musician returns to after a flight of improvisation.

**Raga - Organization of Melody** "Raga" is one of those troublesome words which has no equivalent in English, and is thus difficult to define. Terms like "generalized melody" or "melodic framework" are perhaps the best English descriptions, although they are only somewhat helpful. I like to describe a raga as being about halfway between a scale and a tune. A scale is just a set of notes, which can be used in any way you want. A tune leaves no room for spontaneous creation of melody. A raga lacks the total freedom of a scale, but has much more freedom than a tune. A raga may be characterized in a number of ways. It is built out of a specific selection of tones from the octave at least five, like a scale. But in a scale all notes are equal. A Raga will have notes of greater and lesser significance. A raga will also have characteristic phrases that are used in its performance, and specific ways in which the notes cannot be used. Each raga is also associated to a particular mood, and to a particular time of day or season of the year. The result is a melodic structure that is easily recognizable, yet infinitely variable. No two performances of the same raga, even two performances by the same musician, will be identical. Indeed the same raga may be played by the same musician one night for half an hour, the next night for an hour and a half. Yet the character of the raga, the mood it creates, will still be the same.

**Tala - Organization of Rhythm** In the same way that ragas are melodic structures, talas are rhythmic structures. A tala can be thought of as a cycle, divided into equal beats which are collected into subgroups. The tala is usually represented by a series of strokes called "bols" on the tabla, reflecting the sub-groupings within the tala. The tabla player will vary the strokes that he plays, but will do so in a manner consistent with the basic rhythm of the tala. In particular, he will be careful to differentiate between the tali on-beats and khali off-beats, which are defined for each tala. The most important beat of the tala is the first one, called "sam". In performance, the soloist may go off on a long improvised phrase that may last for many cycles of the tala, but will always return to the composition on the sam. The classical music of India is such a large topic that it is hard to know where to begin. There are two different systems of classical music in the Indian subcontinent; the Hindustani system, prominent in the north, and the Carnatic system, more common in the south. This guide discusses Hindustani music, although the fundamentals are similar in the two styles.

## Chapter 2 : Sunil Mukhi's Indian Classical Music Page

*This time-theory which governs the raags is a unique feature of Hindustani ragedaydvl.com are about main raags, each of which is defined by its unique combination of scale-pattern, dominant notes, specific rules to be followed in ascending or descending and certain melodic phrases associated with it.*

Imagine a world without music, where there are no instruments and no tunes. What would have happened if music never came into existence? Nobody can know the exact answer to this question, but certainly a world without music would be less beautiful. Music is undoubtedly a pious and blissful form of expression. Read more Imagine a world without music, where there are no instruments and no tunes. One of the most ancient and esteemed forms of music is undoubtedly Indian Classical Music. The origins of this art form can be found in the early inscriptions of Vedas which date back to the BC. This course on Hindustani Music is an attempt to bring this elaborate and expressive art form to every individual who wishes to learn. Less Course Objectives The primary aim of this course is to give beginners an introduction to classical music. This course is structured into three primary sections. The introductory section deals with the basic approach to Indian music notes. Following up on the introduction of notes, the course moves into the traditional ways of practicing low octave notes. This fundamental practice is called as "Kharaj". Towards the end of this elemental course, emphasis is made on "Alankaar". The root meaning of Alankaar is ornament; rehearsing Alankaar adds depth to the genre of music. Knowledge of this aspect frames the building blocks of any aspiring classical singer. Once the finishing flag for this course is crossed, you can get a clear insight to the fundamental rules of Indian Music. Read more The primary aim of this course is to give beginners an introduction to classical music. Less Pre-requisites and Target Audience: It is not mandatory to know any musical knowledge in order to take up this course apart from an interest in learning music. The course is taught in Hindi and hence anyone with basic Hindi understanding knowledge would be able to benefit maximum from this course.

**Chapter 3 : Hindustani classical music - Wikipedia**

*History of Hindustani Music. Hindustani music is the term given to the classical music of the northern Indian subcontinent, stretching from Lahore, Pakistan, well into Bangladesh, and encompassing.*

About An Introduction to the Concept of Raga A scale can be defined as a musical theme created by choosing a specific set of notes from within an octave. Think of the twelve basic notes in an octave as twelve basic colors. Now, what if you limited yourself to a select few out of these twelve colors for a painting? That would be like giving yourself a theme. A palette comprising blue, green, violet, gray, white, black and yellow colors, for instance, would produce a very cool picture. Red, brown, yellow, black and orange, meanwhile, would make for a fiery combination. You could use colors that are similar, or you could choose contrasting colors for a more dramatic effect. The possibilities of mixing and matching are endless. And even though you could create any number of paintings using a given color scheme, they would all share an easily-recognizable underlying quality that is distinct from paintings based on other color schemes. That is how it is with a scale. The idea of a scale is actually quite fundamental to all music. The music of ancient Greece, for instance, was based on modes, which are essentially scales. And then, of course, there are major scales, minor scales, pentatonic scales, jazz or blues scales, and many other scales. The video below demonstrates ten major raga scales on a keyboard. Several of these scales have equivalents in Western music. Ten major raga scales in Indian classical music Getting Ragas from Raga Scales A scale is merely a prescribed set of notes. So long as you use only those notes, you have plenty of room for creativity. A song, on the other hand, is rigidly defined by specific musical phrases arranged in a certain way. This leaves very little room for creativity, but it does make for a very recognizable piece of music. A raga is somewhere in between a scale and a song, though closer to a scale than to a song. It leaves you plenty of room for creativity while also being quite easily recognizable with practice. What makes a raga more easily recognizable than a scale is the way in which its melodic contours move and flow. Certain musical phrases can be extremely evocative of a raga while others may sound strangely out of place even when you use only the prescribed notes of that scale. Familiarity with the raga and an intuitive feel for it are what help you understand the way a raga glides and flows. This is why, in Hindustani classical music, we discuss ragas in terms of their chalan movement. Having said that, all ragas have certain observable qualities, and these have been distilled into a set of guidelines for students to get them started. For instance, within the parameters of a given scale, a raga may leave out certain notes in ascending phrases and use them only in descending phrases. It may have a base note griha svara that is different from the tonic. To continue with our earlier analogy, getting a raga from a raga scale is like fine-tuning a color scheme. Given a palette comprising blue, green, gray, white, and yellow, for instance, you could emphasize blue and green with sparing use of yellow for a certain effect. Or you could emphasize yellow and white and use only a touch of blue and green for an entirely different effect. Similarly, you can get many, many ragas out of the ten raga scales in the video above. In fact, according to one of the prevalent systems for classifying ragas, these ten scales are considered to be the "parent scales" from which most ragas are derived. Click on the audios below to see how changing the base note and leaving out certain notes in ascent immediately gives the scale a slightly more specific effect. Kalyan scale, the parent scale of Raag Yaman.

**Chapter 4 : A Beginner's Guide to North Indian Classical Music**

*(A) HINDUSTANI MUSIC (VOCAL) (CODE NO. ) CLASS-XII ( ) (THEORY) One Theory Paper 3 Hours A. 1. Total Marks: Marks: 30 60 periods Theory.*

History[ edit ] Around the 12th century, Hindustani classical music diverged from what eventually came to be identified as Carnatic classical music. Hindustani music places more emphasis on improvisation and exploring all aspects of a raga, while Carnatic music is primarily composition-based. The central notion in both these systems is that of a melodic mode or raga , sung to a rhythmic cycle or tala. Noted composers such as Tansen flourished, along with religious groups like the Vaishnavites. After the 16th century, the singing styles diversified into different gharanas patronized in different princely courts. Around , Vishnu Narayan Bhatkhande consolidated the musical structures of Hindustani classical music, called ragas , into a number of thaats. This is a very flawed system but is somewhat useful as a heuristic. Distinguished Hindu musicians may be addressed as pandit and Muslims as ustad. An aspect of Hindustani music going back to Sufi times is the tradition of religious neutrality: Muslim ustadhs may sing compositions in praise of Hindu deities and vice versa. Characteristics[ edit ] Indian classical music has seven basic notes with five interspersed half-notes, resulting in a note scale. Unlike the note scale in Western music, the base frequency of the scale is not fixed, and intertonal gaps temperament may also vary; however, with the gradual replacement of the sarangi by the harmonium , an equal tempered scale is increasingly used. The performance is set to a melodic pattern called a raga characterized in part by specific ascent aroha and descent avaroha sequences, which may not be identical. Other characteristics include "king" vadi and "queen" samavadi notes and characteristic phrases pakad. In addition each raga has its natural register ambit and portamento meend rules. Performances are usually marked by considerable improvisation within these norms. Ragas are particular ascending and descending of notes. The ragas must have at least five notes. Ragas are of three types, Ourab - five notes, Sharab - six notes, Sampurna - Seven notes. Most of the past and present musicians of Hindustani Classical music follow the Natya Sastra of Bharatmoonni and the systems introduced by Bhatkhande. The musicians have to be very careful to avoid other ragas while playing or singing a raga. Ragas may originate from any source, including religious hymns, bhajans, folklore, folk tunes and music from outside the Indian subcontinent. As the words help to compose a poem or story, colours for a nice painting, the musical notes help to compose a raga. The continuous playing or singing of a raga creates a mood which has an effect on the listeners and they like it. The mood of a raga could be of various types, such as bir, sringar, romance, love, and anger. Ragas are also claimed to have specific timings of the day and night for their performance. There are morning ragas, ragas of the noon, afternoon, ragas of the evening and ragas of the night. In between there are ragas which are called twilight ragas, or Sandhiprakash ragas, or sung at the end of the day and beginning of the evening, dusk, or the end of the night and beginning of the morning, dawn. Also, ragas suitable for particular seasons such as the spring, summer, Monsoon, and winter. Sanskritic tradition[ edit ] Music is dealt with extensively in the Valmiki Ramayana. Narada is an accomplished musician, as is Ravana ; Saraswati with her veena is the goddess of music. Gandharvas are presented as spirits who are musical masters, and the gandharva style looks to music primarily for pleasure, accompanied by the soma rasa. The Natya Shastra deals with the different modes of music, dance, and drama, and also the emotional responses rasa they are expected to evoke. The scale is described in terms of 22 micro-tones, which can be combined in clusters of four, three, or two to form an octave. While the term raga is articulated in the Natya Shastra where its meaning is more literal, meaning "colour" or "mood" , it finds a clearer expression in what is called jati in the Dattilam , a text composed shortly after or around the same time as Natya Shastra. The Dattilam is focused on gandharva music and discusses scales swara , defining a tonal framework called grama in terms of 22 micro-tonal intervals sruti [2] comprising one octave. It also discusses various arrangements of the notes murchhana , the permutations and combinations of note-sequences tanas , and alankara or elaboration. Dattilam categorizes melodic structure into 18 groups called jati, which are the fundamental melodic structures similar to the raga. The names of the jatis reflect regional origins, for example andhri and oudichya. Music also finds mention in a number of texts

from the Gupta period ; Kalidasa mentions several kinds of veena Parivadini, Vipanchi , as well as percussion instruments mridang , the flute vamshi and conch shankha. Music also finds mention in Buddhist and Jain texts from the earliest periods of the Christian era. Narada actually names and classifies the system in its earlier form before the Persian influences introduced changes in the system. In the 13th century, Sharngadeva composed the Sangita Ratnakara , which has names such as the turushka todi "Turkish todi " , revealing an influx of ideas from Islamic culture. This text is the last to be mentioned by both the Carnatic and the Hindustani traditions and is often thought to date the divergence between the two. Medieval period[ edit ] The advent of Islamic rule under the Delhi Sultanate and later the Mughal Empire over northern India caused considerable cultural interchange. This helped spur the fusion of Hindu and Muslim ideas to bring forth new forms of musical synthesis like qawwali and khyal. He is credited with systematizing some aspects of Hindustani music, and also introducing several ragas such as Yaman Kalyan , Zeelaf and Sarpada. He created the qawwali genre, which fuses Persian melody and beat on a dhrupad like structure. A number of instruments such as the sitar were also introduced in his time. Amir Khusrau is sometimes credited with the origins of the khyal form, but the record of his compositions do not appear to support this. The compositions by the court musician Sadarang in the court of Muhammad Shah bear a closer affinity to the modern khyal. They suggest that while khyal already existed in some form, Sadarang may have been the father of modern khyal. Much of the musical forms innovated by these pioneers merged with the Hindu tradition, composed in the popular language of the people as opposed to Sanskrit in the work of composers like Kabir or Nanak. This can be seen as part of a larger Bhakti tradition, strongly related to the Vaishnavite movement which remained influential across several centuries; notable figures include Jayadeva 11th century , Vidyapati fl. As the Mughal Empire came into closer contact with Hindus, especially under Jalal ud-Din Akbar , music and dance also flourished. In particular, the musician Tansen introduced a number of innovations, including ragas and particular compositions. Legend has it that upon his rendition of a night-time raga in the morning, the entire city fell under a hush and clouds gathered in the sky, and that he could light fires by singing the raga "Deepak", which is supposed to be composed of notes in high octaves. At the royal house of Gwalior , Raja Mansingh Tomar " CE also participated in the shift from Sanskrit to the local idiom Hindi as the language for classical songs. He himself penned several volumes of compositions on religious and secular themes, and was also responsible for the major compilation, the Mankutuhul "Book of Curiosity" , which outlined the major forms of music prevalent at the time. In particular, the musical form known as dhrupad saw considerable development in his court and remained a strong point of the Gwalior gharana for many centuries. After the dissolution of the Mughal empire, the patronage of music continued in smaller princely kingdoms like Awadh , Patiala , and Banaras , giving rise to the diversity of styles that is today known as gharanas. Many musician families obtained large grants of land which made them self-sufficient, at least for a few generations e. Meanwhile, the Bhakti and Sufi traditions continued to develop and interact with the different gharanas and groups. This system had many benefits, but also several drawbacks; in many cases, the shishya had to spend most of his time serving his guru with a hope that the guru might teach him a " cheez " piece or nuance or two. In addition, the system forced the music to be limited to a small subsection of the Indian community. To a large extent it was limited to the palaces and dance halls. It was shunned by the intellectuals, avoided by the educated middle class, and in general looked down upon as a frivolous practice. First, as the power of the maharajahs and nawabs declined in early 20th century, so did their patronage. With the expulsion of Wajid Ali Shah to Calcutta after , the Lucknavi musical tradition came to influence the music of renaissance in Bengal , giving rise to the tradition of Ragpradhan gan around the turn of the century. Raja Chakradhar Singh of Raigarh was the last of the modern era Maharajas to patronize Hindustani classical musicians, singers and dancers. These two gentlemen brought classical music to the masses by organizing music conferences, starting schools, teaching music in class-rooms, and devising a standardized grading and testing system, and by standardizing the notation system. His books on music, as well as the Gandharva Mahavidyalaya music school that he opened in Lahore in , helped foster a movement away from the closed gharana system. He undertook extensive research visits to a large number of gharanas, Hindustani as well as Carnatic, collecting and comparing compositions. Between and , he produced the monumental four-volume work Hindustani

Sangeetha Padhathi, [7] which suggested a transcription for Indian music, and described the many traditions in this notation. Finally, it consolidated the many musical forms of Hindustani classical music into a number of thaats modes , subsequent to the Melakarta system that reorganized Carnatic tradition in the 17th century. In modern times, the government-run All India Radio , Bangladesh Betar and Radio Pakistan helped to bring the artists to public attention, countering the loss of the patronage system. With the advance of films and other public media, musicians started to make their living through public performances. As India was exposed to Western music, some Western melodies started merging with classical forms, especially in popular music. A number of Gurukuls , such as that of Alauddin Khan at Maihar , flourished. Meanwhile, Hindustani classical music has become popular across the world through the influence of artists such as Ravi Shankar and Ali Akbar Khan. Principles of Hindustani music[ edit ] The rhythmic organization is based on rhythmic patterns called tala. The melodic foundations are called ragas. One possible classification of ragas is into "melodic modes" or "parent scales", known as thaats , under which most ragas can be classified based on the notes they use. Thaats may consist of up to seven scale degrees, or swara. Hindustani musicians name these pitches using a system called Sargam , the equivalent of the Western movable do solfege:

**Chapter 5 : Resources for Learning Indian Classical Music - Raag Hindustani**

*Van der Meer: Intonation in Hindustani Music 51 Ancient Indian Theory of Intonation The man who is always cited on this is Bharata, a great scholar of two thousand years ago, who wrote a treatise on theatre in which there is an important part devoted to music.*

Wim van der Meer.. As is common in Indian music he started out by tuning the tanpura, which takes quite a long time - like twenty minutes or so. He wants it really perfect. Now, that is indeed a very nice joke, because the bamboo flute has seven holes that are more or less equidistant, so you can imagine how much trouble it is to play that instrument in tune. And I assure you he is one of the most well attuned musicians in India. This raga is in the Western major scale. Raga Tilak Kamod by Ashwini Bhide] Indeed, it is often striking that Indian musicians achieve an uncanny exactness in intonation. We will come back to that in the course of this talk. In this small piece you hear the drone. You also hear the voice and the drum, and on top of that you might have heard a small harmonium that is actually tuned in more or less equal temperament. There are surely another two hundred ragas that are reasonably well-known. Not to everyone, but at least some people know them. There is one book in which about seven hundred and fifty ragas are discussed. But in fact ragas are invented everyday and ragas are changed everyday. Musicians try all sorts of things all the time, so if you would start counting the number of ragas that might have been in existence at any particular moment you are talking about thousands, many thousands. They have no influence on that. And some other ragas have existed already perhaps for the past fifteen hundred years or so, because the whole raga principle got its main shape in about the Vth or VIth century AD. Even then, ragas that are that old might have changed in the course of time. So the whole history of Indian music is very much an evolutionary process of trial and error. Most probably, various aspects of intonation also have been subject to this evolutionary process - trying and finding the best tuned solutions. Intonation in Hindustani Music 51 Ancient Indian Theory of Intonation The man who is always cited on this is Bharata, a great scholar of two thousand years ago, who wrote a treatise on theatre in which there is an important part devoted to music. He explains different intervals of music and people have tried to understand his theory. I think by now there is a kind of general consensus on how it works. Take his division of the octave in a tuning called Sa grama. He divided an octave of seven tones into a total of twenty-two shrutis, which one nowadays knows were not equal in size. He saw that you can tune perfect fifths 2: Most probably he got that problem because he was aware of the existence also of the harmonic major third 4: Put simply, he knew the octave, the perfect fifth, the harmonic major third as primary intervals, derived the fourth as an inverted fifth, then getting the chatushruti meaning "four shrutis" which is the major whole tone 8: Then he recognized another slightly smaller interval called the trishruti "three shrutis" , i. Then came the dvishruti "two shrutis" , the major semitone He was also aware of the syntonic comma Note that the perfect fifth is thirteen shrutis, the fourth is nine. You can also see that the interval Re- Pa re-sol is not a perfect fourth, something he was obviously aware of. What we are saying is that he somehow understood that the harmonic major third actually makes a mess of the beautiful system of fifths: This will be very much a repetition of what we saw this morning. I will first state a General law of consonance: Consonance decreases as the fractional relation between base frequency and the frequency of the related pitch becomes more complex. Look now at the following figures: Then you see 4: Then you can go on and you come here to other known intervals: The 25 also poses a problem. I think about twelve. This leads to my Comment 2: Thus no compound thirds. Intonation in Hindustani Music 53 D. For example if you go from 5: But, as Daniel Wolf says if you have both major and minor thirds you can indeed find the difference between them forming In that case I agree absolutely. The tuning you showed us looks like our minor scale. This is a fundamental scale from which, by transposition, all sorts of other scales were derived with basically seven tones of course, although later two more tones were added - the major third and the major seventh, on which basis again new scales were derived. You finally get quite a complex set of musical scales. Going on with our intervals we get Inverted intervals are more difficult to tune and perform 54 The Ratio Symposium I mean the fifth above the tonic is very easy to produce. A fifth below the octave is very difficult to produce - it would mean the fourth.

The perfect fourth is really far more difficult than the perfect fifth. Similarly, the minor sixth is also much more difficult than the major third. And, if the harmonics of the drone are kept steady, you match the harmonics of the voice to them. Is it because your fourth is nearly your forty-third harmonic? But why are primes bigger than 5 forbidden? But they could come. Between the seventh and sixth is fantastic. A minor seventh, no? Now these are some general outlines that we find in the interpretation of a natural scale in Indian music. The semitone is an independent interval The semitone is really an independent interval produced by some kind of acoustics of the instrument or the voice generating the melody and the drone. There is something funny going on there that is not explained in this theory of simple harmonic relations because we are talking about a strictly complex ratio. I will show you that the semitones used in Indian music are with great accuracy and dependability about ninety-five cents. They are certainly not the What ratio the ninety-five cents is, you can figure out for yourself, of course - extremely complex. The diagonal shows equal temperament, the horizontal lines the pitch spread with the mean value centred of the twelve chromatic notes found in about two hundred s- to IS-minute compositions we computer- processed in the past twelve years. The fifth Pa averages at cents, the major second Re at , beautifully. The major third Ga is a bit high at cents instead of at , hardly noticeably. The major sixth Dha is tempered: The minor sixth dha is interesting, a bit higher than expected 99 cents above Pa and practically tempered. The minor third ga is relatively well spread; especially the minor seventh ni goes really wild. The perfect fourth ma is at cents a bit high, known to Indian musicians who say this is because musicians are too greedy. Pa soll 7 Pa, Re clear preference for high, Ga, ma clear preference for low position Dha almost tempered, ga, dha and ni also near-tempered re, Ma, Ni approximate! Sa although properly zero, often corrected in view of the other notes re easiest place in theory IV -III not used due to absence of IV in drone Re absolute and stable preference of 8: This is so for Re, Ga and Pa It could therefore be expected that notes with two accessible positions are tempered and unstable- this is the case with ga and ni The instability of ma, is spite of an easy choice, is due to its lack of support by the tanpura- mverted harmonic matching is more difficult The semitones adjacent to Sa and Pa are at a distance of cents, but for dha at 99 cents above Pa, seeming to indicate a phenomenon unknown in literature The temperament of Dha indicates balanced consonance with Re and Ga J. So if there were for example in your sample two different versions of the major sixth, you would lose that distinction by averaging them out. That is the next question that has to be raised. Differentiation of intonation by raga I must tell you that after studying the history of Indian music and discussing with many people this scheme of Bharata in which you make this distinction between the higher position and the lower position, a distinction which is discussed very often among Indian musicologists not so much among musicians, as you value , I find that musicologists like to talk about the high position which is the bright position of the notes that relates to the day time, and the low position which is the dark position and relates to the night. You know; day ragas, night ragas. I must say, about ten or fifteen years ago, I staunchly believed that somehow some scheme like this was being followed by Indian musicians. So naturally, when you take this kind of general average of course it happens that sometimes musicians take the higher position, and sometimes they will get a lower position: So naturally the next thing we did was to see, raga by raga, if one can find some ragas that really take the high position and some which take the lower position, because that would be the theory, originally. Watch these measurements, raga by raga, note by note. The minor second re , for example, is found here in eight different ragas. The measurements speak for themselves - there is hardly anything significant here. The minor second is generally at 85 to cents, always lower than the cent I remember hearing that the minor second in Raga Marva ought to be especially high. How did you measure these intervals? An interesting case to attend to is the major second Re ranging in Bhairavi from to cents because both the minor and the major second are used. For instance, here is one really on the low side: You see that most of the major seconds are around cents, though, certainly in the general average. The minor third ga is all over the place. Interesting that in Raga Darbari Kanada, the minor third is supposed to be very low, and it is significantly higher here than what we would actually expect - see also [4. Fai az Khan Sin er: Aminuddin Da ar The major third Ga is also extremely spread out - a problem of measurement.

**Chapter 6 : Concepts of Indian Classical Music**

*In Hindustani classical music, a strong and free chest tone is used for most of the pitches, and an appropriate mix of chest and head tones is used to sing the higher pitches - the higher the pitch, the greater the proportion of head tone.*

About Resources for Students of Indian Classical Music There is an abundance of resources available these days for both serious and casual students of Hindustani classical music. Further down on this page, I have provided detailed information on Indian classical music education and certification as well as tools and resources you may find useful. But first, here are a few voice training tips and exercises. Voice Training Tips The style of voice production is different in different genres of music. Think of how different an opera sounds compared to jazz music. Or how different Hindustani north Indian classical music sounds compared to Carnatic south Indian classical music. In fact, almost all genres of music have their own distinct styles of voice production. Therefore, it is important to find role models within the specific musical genre of your choice. For instance, it would not be appropriate to use an opera singer as your role model for voice production when trying to sing Hindustani classical music. Or the other way round. In Hindustani classical music, a strong and free chest tone is used for most of the pitches, and an appropriate mix of chest and head tones is used to sing the higher pitches - the higher the pitch, the greater the proportion of head tone. The trick is to increase the ratio of head tone so gradually and smoothly that the transition is seamless. The chest voice is the voice that comes most naturally when speaking or singing within your most comfortable pitch range. As you go further down the scale to lower pitches, you will find that your voice begins to acquire a croaking quality vocal fry at some point, and it becomes uncomfortable to sing. Now if you go up the scale to higher pitches, you will again find that your natural voice begins to break at a certain point and that you cannot comfortably sing pitches above that using your chest voice. The range you can sing comfortably without straining in any way is your natural vocal range. Different people have different vocal ranges for their natural chest voice. Some people sing low pitches more comfortably, while others sing high pitches more easily. Some people have a naturally wide pitch range and others can barely sing one octave. The first step in vocal training, therefore, is to expand your natural pitch range to the extent possible. See the section Voice Training Exercises below for a few exercises that are recommended for steadying and strengthening your voice as well as for expanding your natural pitch range. As you go through the process of initial vocal training, you will find out where your chest voice range begins and ends. You can then chose a tonic sa that locates your main octave comfortably in the middle of that range just for reference: Read my section on the twelve notes in an octave to understand this better. Learning to Sing at Higher Pitches Serious Hindustani vocalists need a vocal range spanning about two octaves - the main octave, halfway down the lower octave, and halfway up the higher octave. Different pitches resonate best in different cavities within the body. Specifically, going from the lowest to the highest pitches, the main resonating areas are the chest cavity, the tracheal tree, the larynx, the pharynx, the oral cavity, the nasal cavity, and the sinuses. The key is to learn how to project your voice appropriately to achieve the maximum resonance possible for all the pitches you are required to produce. Well, theory is all very well and it is good to be aware of it, but the best way to learn how to mix chest and head tones effectively is by imitation. Most good vocalists have had the good fortune of learning with a teacher whose style they were able to observe and imitate over the years. In other words, if you have access to a good teacher with great voicalization technique, seek training from them. If not, you may want to find a vocal role model and try imitating their style. Most people are used to singing songs with lyrics, which contain both consonants and vowels. Constants play the role of stabilizing the voice and helping it transition from one note to another, so it is much easier to sing tunefully when you use consonants. Take the consonants out, and suddenly you are left without a crutch, the notes seem to merge into each other and become blurry. The challenge is to train your voice to sing each note with precision and clarity without the consonants. Some notes are harder to hit with certain vowels. You cannot afford the luxury of consonants and lyrics at those speeds. Apart from all this, there is the very important fact that melody can be experienced at its purest when no distractions in the form of lyrics are present. Voice Training Exercises Below are a few practice exercises that will help you condition

your voice and familiarize yourself with the notes in an octave. Some of these exercises also help prepare your voice for singing with ornaments. Exercises to help expand your vocal range Exercises for understanding the distances between notes Exercises to help you learn to sing gamaks Exercises to help you learn to sing meends A Few Useful Tools and Resources Please note that I am not sponsored by or endorsing any of the products or services listed on this page. I simply offer them as examples of what is available out there. The idea is to point you in the right direction if you would like to study Hindustani classical music and do not know where to begin. Digital Tanpura and Tabla The first thing I would recommend for all learners of Hindustani classical music is to acquire a digital tanpura and tabla to practice with. There are many such products available these days, both standalone devices and software that you can install and play from your computer or smartphone. Digital versions cannot replace the real instruments but they are worth having for their convenience and easy accessibility. The raga database provides information on close to Hindustani classical ragas, the bandish database offers nearly bandish, and the taal database includes a list of 64 taals. Audio demonstrations are available for most of the ragas, and also for many of the bandish and taals. Most of the information on this website is free, but notations and complete audios of the bandish are only available to paid subscribers. Indian Classical Music Education Typically, those who learn Indian classical music begin their training as children under private tutors. Most Indian towns and cities have private tutors who offer individual or group lessons in vocal or instrumental music, and children usually attend these lessons after school. In the larger cities, there are also formal institutions that offer music courses that one can attend. Conveniently, these days, there are many online schools that offer lessons over the internet too. Students can register for paid lessons with a real guru in vocal or instrumental music, for basic or advanced classes, for group or individual lessons. Regardless of how you acquire your training, you can register for and take accredited examinations at different points in your musical training. These exams are given by the Akhil Bharatiya Gandharva Mahavidyalaya Mandal , and students earn certificates for each relevant level upon passing. Several universities and institutes across India offer degrees in Hindustani classical music. Here is an incomplete list.

## Chapter 7 : Learn Hindustani Classical Music Online | Hindustani Vocal | Hindustani Modal

*Overview. Hindustani Vocal music is the classical music of Northern India. Shankar Mahadevan Academy provides the unique opportunity for students everywhere to learn Hindustani Vocal music from the convenience of their own home through a highly structured curriculum, a clear path for progression, and certifications for completion.*

Komal Ni Ni The four notes marked "Komal" and the one marked "Tivra" correspond to the black notes on a piano keyboard. What, then, is a Raga? It is most simply described as a subset of these notes, usually from five to eight notes, together with a set of rules to combine them effectively and create a particular mood. Each Raga has a name. It also has a character, which can be devotional, erotic, bold and valorous, or tragic, to name some examples. And a Raga usually comes with a time of day when it is best performed, usually specified as a 3 hour interval 6 AM to 9 AM, 9 AM to noon, etc. Some Ragas are related to seasons, for example the Malhar ragas are performed mainly in the monsoon season, and then they can be sung at any time. Given a Raga, there exist several compositions, more or less like songs with words, which obey the rules of that Raga and effectively convey its mood. It is common for the words to assist in conveying the mood. A vocal musician will sing the notes of the raga in various combinations, then recite the composition and perform variations on it, often switching to a faster composition after some time. The whole thing can last an hour, or even two, and it is never monotonous because different types of variations are introduced at different stages. The success of the performance depends on how effectively the musician builds up the desired mood. Some Ragas are considered "light" in that they have less richness of structure, and are performed for shorter durations like minutes. For me personally, this music has gone a long way towards opening up the sublime aspects of the world we live in. I did give a slightly longer explanation about Hindustani music to an audience of String Theorists, in a lecture at the Strings conference in Mumbai. You can hear that lecture and view the accompanying transparencies by clicking [here](#). Below, you will find a link to the Kumar Gandharva Home Page. This is the only original material about music on my website other than the above. After that, you will find a collection of links to interesting pages on Indian Classical Music. This material has now undergone revision and updating. This site includes an article that I wrote about Pandit Kumar Gandharva, a photo gallery, the words to some of the bhajans that he popularised, and much more. Monsieur Moutal has displayed a dedication to Indian music that is increasingly rare in our own country. In passing, I hope that those Indians who talk of "protecting our ancient culture from foreign influences" will visit this site, and will then be so kind as to drown themselves out of shame!

*Project Description API Description Limitations of JFugue Remarks References Figures Beginner's Guide for Hindustani Classical Music Aditee Badge, Amruta Gokhale, Kuhoo Gupta.*

Your one stop source for all Indian Music needs.. The svaras in Hindustani music have a different nomenclature in comparison to Carnatic music. Raag is the intricate system of scales and associated melodic patterns. Raags express melodic structure. In their numerical ratios, the scales and melodic patterns correspond with moods, colors, seasons, and hours of day and night. This time-theory which governs the raags is a unique feature of Hindustani music. There are about main raags, each of which is defined by its unique combination of scale-pattern, dominant notes, specific rules to be followed in ascending or descending and certain melodic phrases associated with it. The meends are not as demanding as the gamakams, but they are essential for correct portrayal of certain raags. As raag organizes melody, the other fundamental element, taal organizes the rhythm. A taal is made up of a number of matras or beats. A unique set of bols patterns define each taal. There are hundreds of taals and the most commonly encountered one is the sixteen beat, teentaal. Amir Khusro, a scholar poet and musicologist of rare talent in the court of Allauddin Khilji 13th Century, A. The Hindustani music that developed during the Moghul 15th and 16th Centuries, A. It was during this era that Hindustani music, like an ever flowing river, absorbed many streams of varied musical cultures to make it richer, more colorful yet retain its pristine purity, beauty and grandeur. An important landmark in Hindustani music was the establishment of gharanas under the patronage of princely states. A gharana is more a school of thought than an institution. Each of the gharanas developed distinct facets and styles of presentation and performance. Vishnu Narayan Bhatkhande was a dedicated musician and musicologist whose contribution to Indian classical music cannot be over emphasised. He was the Lakshanakaara of Hindustani music and was the pioneer who gave current Hindustani music a grammar where none existed. He brought most of the renowned artistes and musicologists from all over India together, to give a new significance to music by discourses and performances. His research works, Karmik Pustak Series in six volumes are still among the most authentic documents of Hindustani classical music. His significant achievement is the concept of the ten Thats or basic parent scales from which raags are derived. Pandit Vishnu Digambar Paluskar took up the task of conveying the message of music to every home and convey it in the simplest way. An accident in his childhood deprived him of his eyesight. In spite of this serious physical handicap, Paluskar took up musical training with enthusiasm and perseverance. He believed that music should not only be entertaining, it should also elevate and inspire. He realised that all great art should draw its inspiration from contemporary life and bereft of its social values it would be an empty kernel. He openly declared that his mission was to democratise the art of music. After giving public performances all over north India, in , he founded the Gandharva Mahaavidyaalaya in Lahore, the first music school run by public funds. Here he trained individuals who would dedicate their lives to teaching music. In , Paluskar migrated from Lahore to Bombay and opened a branch of the Gandharva Mahaavidyaalaya. Prominent among his disciples were his son D. A performance of Hindustani music begins with the aalaap. This is a slow invocation of free rhythm, presenting the subtleties of the raag in an expressive and meditative style. Then follows the more rapid rhythmic style called jhala, which fills out the rhythm with rapid notes. The depth of imagination and creativity of the performer is revealed in the aalaap and jhod. After the jhala comes the second part, gat that introduces the percussions for the first time. The main melody is introduced by the artiste while the tabla provides the taal. Against this taal the artiste improvises imaginative melodic patterns and introduces complex rhythmic patterns, which at times appear to diverge from the taal but must resolve on the first beat of the taal. Later the artiste may hold firm to the rhythm while the tabla may create counter-rhythms. The two main vocal traditions in Hindustanic music are dhrupad, the purest of all, without any embellishment and completely austere in its delivery, and khayaal, with a romantic content and elaborate ornamentation. Less abstract vocal forms fall into the light-classical variety: Pandit Bhimsen Joshi and Smt. Gangubai Hangal are vocalists well known to Hindustani music fans. Sitar, invented by Amir Khusro in the 16th Century, A. The Surbahar, Sarod, Sarangi, violin and Santoor are the other stringed instruments

used by Hindustani musicians. The bansuri and shehnai wind instruments are equally well-known in Hindustani music. The pakhavaj is similar to the mridangam in Carnatic music and it predates the tabla. Jog violin , and Ustad Alla Rakha tabla.

**Chapter 9 : What is a Raga? - Raag Hindustani**

*If you are interested in learning about Indian Classical Music, this is a good place to start. There are total 19 pages on the basic concepts of ICM.*

Origins, sources and history Saraswati , the Hindu goddess of all knowledge, music, arts and science, with her instrument, the veena. The Sama Veda , which is believed to have laid the foundation for Indian classical music, consists of hymns from the Rigveda , set to musical tunes which would be sung using three to seven musical notes during Vedic yajnas. It was at this time that Carnatic music flourished in Vijayanagara , while the Vijayanagar Empire reached its greatest extent. Carnatic music was mainly patronized by the local kings of the Kingdom of Mysore , Kingdom of Travancore , and the Maratha rulers of Tanjore [16] in the 18th through 20th centuries. Some of the royalty of the kingdoms of Mysore and Travancore were themselves noted composers and proficient in playing musical instruments, such as the veena, rudra veena , violin , ghatam , flute , mridangam , nagaswara and swarabhat. During the 19th century, the city of Chennai then known as Madras emerged as the locus for Carnatic music. Carnatic music itself developed around musical works or compositions of phenomenal composers see below. It is also used in the sense of graded pitches in an octave. While there are an infinite number of sounds falling within a scale or raga in Carnatic music, the number that can be distinguished by auditory perception is twenty-two although over the years, several of them have converged. Swara Swara refers to a type of musical sound that is a single note, which defines a relative higher or lower position of a note, rather than a defined frequency. These names are abbreviations of the longer names shadja, rishabha, gandhara, madhyama, panchama, dhaivata and nishada. Unlike other music systems, every member of the solfege called a swara has three variants. The exceptions are the drone notes, shadja and panchama also known as the tonic and the dominant , which have only one form; and madhyama the subdominant , which has two forms. A 7th century stone inscription in Kudumiyan Malai [24] in Tamil Nadu shows vowel changes to solfege symbols with ra, ri, ru etc. In one scale, or raga , there is usually only one variant of each note present. The exceptions exist in "light" ragas, in which, for artistic effect, there may be two, one ascending in the arohanam and another descending in the avarohanam. Raga system Main article: Raga A raga in Carnatic music prescribes a set of rules for building a melody – very similar to the Western concept of mode. In effect, it is a series of obligatory musical events which must be observed, either absolutely or with a particular frequency. There are seventy-two melakarta ragas, thirty six of whose madhyama subdominant is shuddha perfect fourth from the tonic , the remaining thirty-six of whose madhyama subdominant is prati an augmented fourth from the tonic. The ragas are grouped into sets of six, called chakras "wheels", though actually segments in the conventional representation grouped according to the supertonic and mediant scale degrees. There is a system known as the katapayadi sankhya to determine the names of melakarta ragas. Ragas may be divided into two classes: Janya ragas are themselves subclassified into various categories. Ninnu Koriyunanura, in Mohanam raaga, set to Adi taala. It is sung by Ramakrishnan Murthy. Tala system Main article: Tala music Tala refers to a fixed time cycle or metre, set for a particular composition, which is built from groupings of beats. They have specific components, which in combinations can give rise to the variety to exist over , allowing different compositions to have different rhythms. Tala is formed with three basic parts called angas which are laghu, dhrtam, and anudhrtam, though complex talas may have other parts like plutam, guru, and kaakapaadam. There are seven basic tala groups which can be formed from the laghu, dhrtam, and anudhrtam: