



ETHNO-MUSICOLOGY

By Alain Danielou

CONTACT between different cultures can only be an enrichment if it means, for each one, a better understanding of the points where it differs from other cultures. New contacts can then lead towards the development of individual characteristics rather than towards a cultural compromise. Thus the contact with another culture is useful mainly when it leads to a better appreciation of our own and to an exaltation in each case of the particular pattern of life which is a civilisation and which expresses itself in all human activities, in religion, social behaviour and customs, literature, art, music, all that which, in a country, has been developed through lengthy centuries of relative seclusion, and which has thus grown as the natural expression of the particular genius of a particular people or nation.

We cannot easily leave aside the pattern of the civilisation in which we are born. It has become an essential part of ourselves. We can learn a new culture as we can learn a new language provided we are well grounded in our own. This is why people who have lived from childhood half way between two cultures face a very serious problem of development, tend

to live in a sort of cultural vacuum, which we can observe in their homes, their manners, their interests. We are all born with individual and group characteristics, and however attracted we may be by a culture other than our own, however efficiently we may adapt ourselves to the civilisation and manners of another country or race, we can almost always observe that in the highest creations of the mind, which are the only really important things for mankind, the higher levels of genius can only be reached within the framework of what is natural to us, within the limitations of our mother tongue, within the frame work of a particular and definite civilisation or culture.

Most musicians in the West play Spanish or Italian or Russian music and often play it very well; but, even in what is a mere interpretation, we feel there is a more subtle and perfect understanding when Toscanini directs a Verdi opera or Karajan a Schubert's symphony or when a real Spaniard plays Falla or Albeniz. And we have no trace of doubt that if a Norwegian tries to compose a Spanish dance it will remain an outward and inadequate imitation of what any street composer can do in Spain without effort. The same applies in India to Karnatic and Hindusthani or even Bengali music.

1. A paper read at the Madras Music Academy on the 29th December, 1955.

I am not at all convinced that a South Indian musician who learns North Indian *ragas* and styles of singing, however well he does it, is doing any service to Karnatic or to Hindusthani music and may be not to music altogether. At the same time mutual ignorance and lack of the appreciation is certainly damaging and is a handicap on any healthy development and is even harmful to the preservation of ancient forms of music. This is because these are things that we must know and not do. If we refuse to know, we paralyse our development and what we have is bound to degenerate, but if we try to experiment with everything we learn, if we try to imitate what others do, we are sure to lose our personality and to degrade whatever is our own.

We are usually not aware enough of the characteristics of our own genius because it seems to us the most natural thing, while we are full of admiration for those characteristics in others which are strange to us so that many of us spend their lives trying to do that for which we are the least gifted.

All this, however, is intended only as an excuse for the subject I am supposed to talk to you about and which is Ethno-musicology, that is, the study of music envisaged as part of the culture of a particular human group, race, or nation.

Ethno-musicology has only been recently recognised as an important subject in some Western Universities and it is still, in many ways, a science in its infancy, although modern technique and equipment have given it considerable means to develop rapidly.

A characteristic of the technical development of the last fifty years has been to alter in many ways our methods of study and this has led to a sort of general reconsideration of almost all the postulates which were considered facts in the last century.

Franz Listz, when he was already one of the famous performers of Europe, decided that he really knew too little of the technique of his instrument. He therefore discarded all he knew and started again to study from the beginning.

The same outlook is noticeable in almost all the branches of learning in our time. Everything that was considered an established fact is questioned again and all studies are restarted

from fundamentals. In fact this is the very criterion of modern sciences, the very characteristic of the modern outlook in all the spheres of human thought. We question the validity of our thinking machine, of the language through which we express our thought, of the religions which try to justify our mode of life. We question the most elementary laws of physics and mathematics so that the guiding minds of our age express themselves in terms of non-Euclidian physics, non-Aristotelian semantics and other sublime abstractions.

But you may ask what has this to do with music. Ethno-musicology is the study of primitive music, and the classical musical art of a developed culture is not a play-ground for Ethnologists and anthropologists. It deals with higher values of culture which have to be approached from a different point of view.

This, I am afraid, is not quite justified in the case of music. If we do not want all the systems of music of the world to vanish in a complete musical mix-up, we have to reconsider carefully and consolidate the real foundations of the various systems and entirely revise the approximate and inaccurate theories which may have been sufficient a century ago but do not meet the challenge of our age.

It is wrong to believe that Ethno-musicology means the study of tribal or primitive music and that the established systems of art-music are too lofty to be probed into with the help of modern measuring instruments. In fact, the technical study of the particularities of musical systems, as they actually are, and not as musicians believe they are—is an enormous asset for the disentanglement of the pure, the essential, aspects of a particular system of music from the accretions due to outside imports and influences. The music of Europe would be much healthier if its theorists were more aware of its origin, its possibilities of development and the use of such possibilities in the musical systems of other parts of the world.

In India, at least four entirely distinct learned systems of music have existed from very ancient times—these were known to the Sanskrit writers as the four *matas*—yet there seems to be a growing confusion as to what are the essential elements of each of these musical systems and the means of preserving their individual characters, the purity of their style, the quality of their expression.

While taking into account the written theory of music, whether eastern or western, Ethno-musicology keeps very shy of the statements of musicians or of the old-fashioned musicologists, it refuses to acknowledge many of their classifications and much of their often oversimplified or over-complicated theories. In India, if we want to really understand the fundamental differences between the existing systems and to find out which of the ancient texts really referred to what sort of music, we have to start our observations on the basis of the actual performance of the remnants of the ancient music as they are found to-day. And when we have established the characteristics of each system, of each school of music as they may still exist to-day, we may be able to understand what was meant by the classifications of the ancient writers instead of interpreting them as it suits our own views on musical history or the particular styles of music we are pleased to call classical.

It should be wrong to believe that the idea of studying music as a human phenomenon is altogether new. It appears that many of the earliest Sanskrit writers on music approached the art in a true musicological spirit and the very title of a work like the *Brihaddesi* expresses the intention of its author Matang to study the various songs of men just as they are found among the various peoples of the land.

Methods and Instruments

For an objective study of music we need several things, the first one is convenient measuring instruments and methods for the analysis of intervals, whether simultaneous or successive, and also easy instruments to reproduce and play back conveniently the intervals measured so as to ascertain, with the help of the musicians themselves, whether the intervals measured were really those intended and not accidental.

Then we need an adequate system of notation to record our observations accurately and in detail not merely in the form of arithmetical figures but also in a musical score that can be studied and played musically and in which ornamental subtleties can be conveniently expressed.

We need recordings as a permanent evidence of our observations and to make

sure that we are not tendentious in our measures and do not interpret music to bring it back to a pattern known to us.

Recordings are also the safest basis for the notation and measure of intervals, since the musician need not be disturbed in his play at the time of recording and we can also later repeat exactly the same passage any number of times which is essential for an accurate analysis and notation.

In the case of songs we need also an exact transliteration of the text as it is sung—this is often quite distinct of the original written text—with its accents and long syllables and, if the language is not familiar, an accurate translation of the meaning of each word.

From the historical and technical points of views a study of the instruments is also important. A good photograph of the instrument being played and details as to its tuning, strings, manufacture and ways of playing are usually most useful.

The Musicological Document

The preparation of a perfect musicological document is an elaborate process. Different musicologists follow distinct methods. I shall give you some idea of the way I proceed myself.

The performers and instruments must be carefully selected and brought to a convenient recording place. I personally prefer as far as possible to work in a sound-proofed studio since this allows a better study of the sound quality and a better balance of the voices and instruments.

The music must then be rehearsed long enough so that the musicians are quite in the mood and sing or play with the proper feeling. This is very important since most musicians take a little time to get into a *raga* and the intervals they use in the beginning are very approximate. It is only when they are caught by the mood of the *raga* that the intervals become precise and should be measured. Most musicians believe that they can demonstrate without preparation this or that interval, sing the 22 *sruties* in succession, etc. This according to my experience is never more than a vague approximation. Accuracy in music is always linked with

emotion and so long as the feeling is not there, the accuracy remains doubtful.

For ordinary recording, it is important to record a full piece with its prelude, beginning and end, but for musicological studies a few slices of a longer performance give usually the best results.

The recording equipment should preferably be a professional tape machine allowing proper editing. Amateur tape recorders can however be used for field work and are sufficient for making notation if not for making discs. Many amateur machines use only half of the tape and record something else on the other half. This is most inconvenient and necessitates duplication on a full size tape to make ulterior editing work possible.

Notation

Once the record is made the notation is a complex task. The intervals and their variations have to be carefully measured and a series of play-backs and attempts at reproducing the exact intervals on a suitable musical instrument in collaboration with the musicians made to determine whether the intervals used are really those the musicians were aiming at or whether they have occasionally gone slightly—or noticeably—out of tune. This procedure is essential since all musicians go occasionally out of tune and we must be careful not to mistake such accidents for parts of the system. We have to know what the musician wants to sing or play and this is not always what he actually does.

If we attempted to find out the scale of western music by measuring the intervals sung by some Italian singers during an average opera performance we would be sure to get the most astounding results. This mistake is very commonly made in the study of so-called primitive music and leads to absurd conclusions. Another difficult problem is the exact notation of grace or ornaments, as well as of the indirect attack of notes. This requires patience and care but the results are most rewarding since it is in the subtle elaboration of ornament and the approach to notes that the original character of a musical system and its connections with other systems can be most safely established. It is in that particular field of notation that diagrams can be made regarding intonation and vocal and instrumental technique

which bring out the particular characteristics of a musical system and its possible connections with other systems.

I have not yet had the time to do systematic work on Karnatic music although I have done already a good deal of recording and notation of it but I know it is one of the richest fields in the world as regards the originality and variety of musical ornamentation. Grace has to be studied as a completely separate subject. The intervals used in *vibrato*, in *appoggiatura*, in gliding to a note from above or below, in turning around it, or linking it to a sometime quite distant note, make use of intervals which are different in their nature from those of scales. And this is why they constitute an independent contribution to musical expression. If they are played artificially with the ordinary notes of the scale they lose all character and meaning. This is why the modern interpretation of early western music makes it appear often so absurdly ornate.

The study of music with the help of modern facilities will allow us to bring much fresh air and new material in musical theories that have become stale, and are, mostly, built up of unverified statements repeated indefinitely and made to suit conventional ideas as to what the history of a particular system should be.

We are faced in South India with a most ancient and original system, which has very probable links with some of the oldest branches of European music and definite affinities with some musical elements still found in North Africa, particularly Tunisia where it may well be that something has remained of an ancient—should we say Carthaginian culture,—which once flourished there.

I believe that only when we make a technical study of Karnatic music, quite independently of the claims of some of its exponents, we shall be able to gradually find its proper place in the general history of Indian music as well as of world music and its dependence on or independence from the various systems expounded in the numerous and often contrary layers of Sanskrit musical theory.

In this study it is important to make a parallel analysis of the art-music of the cities—or classical music as it is now somewhat wrongly called—and the music of different ethnic groups broadly classified as folk music,

though much of it represents remnants of other branches of ancient art-music.

The geography of music in India is as interesting as it is bewildering. We often meet side by side in the same locality musical systems which seem altogether different in their origin and form, and it is only when we study them and classify them adequately that we shall be able to give a true picture of the origin and place of the different music forms found in India to-day. Until then most of what we say for or against a particular musical system remains without much proof. There is in the town of Banaras a caste of milkmen said to be the descendants of an ancient tribe whose songs are built on a scale of 12 semi-tone which is otherwise completely unknown to the music of North India. I am sure we could find such instances almost anywhere in this country.

We hear many strong statements regarding scales and intervals. We are told that there are natural intervals and others considered artificial. This is probably true and comes from our ability to grasp some intervals as more meaningful than others to perceive some types of ratios more clearly than others. We should not however believe that these are established and permanent facts. Such theories are at the most a guess. Indian music is theoretically based on the same type of division of the octave as is western music. Yet both utilise often in practice noticeably distinct intervals. The fact that the tempered scale which is based on roots tends in some countries to replace proportional or harmonic scales does not necessarily imply that we are abandoning a good type of scale for a bad one but raises the question as to whether we can grasp a series of proportional ratios as corresponding to expressive values why we cannot grasp roots in the same way. True musicology must keep very shy of any theory and avoid carefully any form of number-mysticism. We soon enough shall find that most people in practice follow a division of the octave quite distinct from the one they claim to be using.

The Classification of Instruments

The development and characteristics of musical instruments, just like the vocal technique, are a very important element for the study of ethno-musicology.

Many theories have been put forward to

explain the origin and development of the different forms of musical instruments. We should be rather suspicious of such theories since we have no means whatever to know how primitive men may have been many thousand years ago. Kurt Sachs believes that instrumental music came from magic rituals and vocal music from the need of calling one another. Here in India we believe that we got everything ready made from certain divinities. Such matters being impossible to verify do not come within the purview of science.

Instruments are difficult to classify because of their variety. The Chinese used to divide instruments, according to the material they are made of into *kin* (metal), *che* (stone), *t'u* (earthenware), *ko* (skin), *hien* (strings), *p'o* (gourd), *chu* (bamboo) and *mu* (wood). This was not accepted by western musicologists because of the objection that instruments are usually made of several materials. The Indian classification has been for many centuries the most logical and convenient one. It was established probably long before the *Natya Sastra* was compiled and recognises *ghana* (gongs, cymbals, etc.) *avanaddha* (drums), *tata* (strings) and *susira* (wind instruments).

The first reasonable classification of instruments adopted in Europe in the 19th century seems to have been based on the Indian one and modern classifications are not noticeably different.

The technique of voice production is one important element for the differentiation of musical families.

Sir Stuart Wilson gave us some days ago a most interesting and amusing account of some aspects of voice production in the west. His most qualified and beautiful demonstration was particularly interesting for us because it may help us to understand a fundamental difference of purpose between the European and the Indian singer.

Western singing is a form of chanting. It is basically an exalted way of reciting a poem, of carrying words and their meaning above the waves of the orchestra. The melodic line is the chanted flow of the sentence. The accents become the long, powerful and moving sustained notes. It is true that there is such a thing as the Italian vocalisation or *bel-canto* but this remains an occasional ornamentation of the spoken song.

In the purely modal form of music the voice is an instrument. It develops a *raga* exactly as a *vina* or a flute would do. In the higher forms of modal music, a musician can make almost exactly the same musical development on one poem as on another. The form of the *raga*, the ornamentation of the song, the position of the voice, are quite independent of the words. In fact, I have often noted that some of the most beautiful *khyals* of Northern India are built on meaningless syllables or on one or two old short verses whose meaning is not clear to the singer. This is why the gestures and expressions of the Indian singer follow the melodic form of the *raga* in the North, the rhythmic pattern in the South but in no case the meaning of the words.

This naturally leads to a very different approach to singing and much of vocal technique is evolved according to the relative proportion of the three elements, which are the words, the theme and the rhythm, the ancient *Dhatu*, *Matu* and *Tala*, the guiding factors around which are grouped the other elements which come into action in the shaping of the voice.

The extreme sensitiveness to rhythm of the Tamilian leads him to sustain a note by a repetitive rhythmical resounding of an allegedly single note, bringing into action the lowest part of the larynx which works a little as does the palm of the left hand in the sustained sounds of the *mridangam*. This leads to a form of *gamka*, very surprising at first to ears trained to purely melodic patterns of ornamentation. You can therefore observe in this country that we might divide vocal technique into the *flute-voice* where the ornament is purely melodic, the *drum-voice* where the nature of the ornament is essentially rhythmical, the *vina-voice* which is half way between. But we also have in those parts of India influenced by Sino-Tibetan music, the *single-cry* where each note is dealt with as a separate entity, and we know also the chanting or speaking voice similar to that of western countries.

This rough division may give you an idea of how an ethno-musicological survey and study of such basic things as voice production, instrumental technique, besides, the form, the style and ornamentation of the music may give us some useful information for the building up of

a reasonable and sound theory of the history of Indian music and help us to find out the original contribution made by different parts of India as well as the links with the music of other countries.

Ethno-musicology should play in music the part that archaeology plays for history. It gives us the positive documents by which we can verify and implement the data received from written or oral tradition.

The Problem of Notation

In this connection it may be necessary to stress the importance of an adequate system of notation.

Nowhere is the notation system entirely satisfactory, and the purpose of notation is not always clearly understood. To learn a song from notation is not the best way to learn it, and some musicians, therefore, feel that any system is good enough provided it is simple and easy to print.

The work of the musicologist is however impossible if an adequate system of notation is not available. And, the more elaborate and detailed the notation the better his work.

Much of the work done on folk music in Europe in the last century and much of the work done even at present is practically useless as an instrument for Ethno-musicology, the classification of musical families. We cannot draw any valid conclusions from la notation in 12 semi-tones which entirely obliterates the microtones (the *Shrutis*) not only in the main theme but, and this is even more deplorable, in the ornaments.

In India, where the use of microtonal intervals is so varied, so subtle, so beautiful, none will be able to talk sense about them until an adequate system for the analysis and notation of *Shrutis* and for the division of *matras* is not only made available, but comes into common use.

India has probably the oldest system of notation in the world. Greek notation, Arabic notation and later the western *Sol fa* system were most probably derived from Indian notation.

In the past four centuries, Europe developed a much better and convenient system of notation than any previously used. All the recent attempts at increasing the range and possibilities of the Indian notation are imitated from the western system. The two best known attempts at introducing some feature of western notation in the Indian system are those of Vishnu Digamber and V.N. Bhatkhande.

These however remain rather inadequate in comparison to the western staff. The best system I have come across so far is that used by Mrs. Vidya of Madras in her collection of classical *Kritis*. This brings modern Indian notation to a stage closely resembling the systems used in Europe at the end of the Middle Ages. Such notation systems remain however very short of the requirements of Ethno-musicology. I do not see why Indian musicians should not now take the lead and, accepting all the additions made to notation in Europe in the past four centuries, carry this now further by meeting all the requirements of Indian music and thus give a welcome lead to the notation systems used in other countries. This obviously cannot be done until the Indian system is first put up-to-date and standardised.

Need for the Development of Ethno-Musicology

In every country the musical theory is based on the implied assertion that the musical system prevalent is natural, superior, more ancient etc. It is very difficult therefore to explain one form of music to people used to another form in terms of accepted musical theory. If I dared to repeat to you one-tenth of what I have to listen to from western or even North Indian musicians about Karnatic music you would turn me out of this place as a miscreant, a savage, an imperialist, or what not. But I must say for the sake of fairness that I have often to listen in Madras to long discourses as to all the alleged inferiorities of western or North Indian music based usually on some misunderstanding of musical terms. Such an outlook is harmful to everybody. Either people imitate and that is wrong or they

deprecate which is worse. We have to find some common ground for cultural development and understanding.

This is where Ethno-musicology can be for us the best platform, because it deals with facts only and can allow us to build up the basic material for musical studies irrespective of age-worn theories, while dealing with age-old music with its help, we can come to some positive conclusions regarding the history of musical systems in this vast land and the ancient literature which reflects this history. We can also analyse impartially the nature of the different features that are used to build each particular system and thus find out what are its essential elements and possibly the direction in which a particular system of music can develop while keeping in the line with its original genius.

But how to proceed about it practically? How can one develop in India a good laboratory of Ethno-musicology since it requires recording facilities, trained personnel, collections of documents, sound-measuring equipment, etc. It does not belong to me to make suggestions on such matters. I can only hope that the Music Akadami, may be able to play in this as in other branches of musical study a pioneering role and that the new academies established by the Government will become aware of the important work to be done.

One thing seems to me certain: unless we are able to put into modern scientific terms all the prodigious experience and invention of India in the field of music it will not be easy to carry that knowledge beyond India's borders nor even to keep it alive within India itself. It is my belief that the methods of Ethno-musicology may be the instrument that will bring the world to realise the greatness of the contribution of India, past and present, in the field of music, and, at the same time, may provide the means of consolidating the purest classical values and give a new impulse to the highest forms of this most precious creation of the Indian genius.