Music: the Cultural Context

Robert Garfias

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Part One  The Cultural Context

A Beginning

Music is all pervasive and yet we often seem to take it for granted. By this I mean not so much that we sometimes don’t listen or even hear it when it’s playing in the background, or that we don’t often think about it when we mentally tally up the things that are important in our lives. I also think that we usually don’t think much about how music intersects our lives and how it affects us and the lives of so many others. Think about how a particular mood is enhanced when we add music. When we feel good the music can make it feel even better. When we feel badly, the music can help to pull us into another frame of mind. At times the wrong music can even make the mood worse, sadder, more morose. Sometimes the sound of it, particularly when it’s not what we want to hear, can drive us almost mad. In any case we can all accept that it has a powerful effect on us at times.

If we look at all the societies and cultures known to us and look at all the historical societies of the past to the degree that we can discern, we can deduce with a high degree of certainty that music has always played an important role in human society. If we consider today simply the world of pop music, the manner in which it is effortlessly transcending global barriers and even otherwise extremely difficult linguistic barriers, if we consider the number of people who consume it in some way and millions of economic units consumed in its production and consumption, we are not simply talking about a very big business enterprise. If we ask ourselves what is driving it and we realize that it is largely voluntarily and self willed then we must ask the question, what is it that music does that makes people behave in this manner? The very fact that it is all pervasive and has been so for many cultures through the ages strongly suggests that music in our lives does much more than make us feel good or happy. It must be that music fulfills some important function in what we regard as humanness. It must be linked in some vital way to the health of the species.

But what is it that music does? In this study I cannot hope to answer this question nor can anyone that I know of at this time. What I propose is to look at what we have learned about how music functions in human society and we interact with it, how we change it, pass it on and create new forms of expression. I do not even for this have all the answers, but I drawn on the works and discoveries of many others and my own more than 50 years of study and observation of music, much of it in many different societies all over the world.

In the end I doubt I will see the answer to that question, what does music do,
but I think by looking at the marvelous complexity of forms of expression, at the
ingenuity and yet common sense of diffusion and adaptation we may better
appreciate that although we each listen to our own muse, what drives us to it is very
much the same for those around us.

In order to think about the role that music plays in human life we must do more
than only look at it in our own cultural context. Not only is there much that we can
learn by looking at other cultures, this broad trans-cultural view will also make
aware of things in our own culture that may otherwise miss.

Culture and tradition are intertwined. We do things in a certain way, other take
the idea, and still others take it up even modify in the next generation. People
remember what is good or useful and share it with next generation and with their
neighbors. In this way the most important and useful things we have learned are
diffused and carried on.

Traditions are lost and new ones created. In the process sometimes gradual and
sometimes sudden changes in these traditions take place. The powerful imprint of
the immediate past is impossible to erase and even those deliberate attempts to
create entirely new traditions are bounded by what came before them. A new and
radical departure from an established tradition even as it attempts to break with
tradition reflects it like a positive/negative contrast.

Tradition, habit, and culture bind us all although we think little about the
process as we go about our lives. In the world of music we have today forces that
seem to be working toward a globalization of musical tastes. At the same time if we
look across cultures and even looking within any one, there still exist a great
diversity of forms, styles, and traditions of music. Change has always been a factor
in culture, but today, with the increasing effectiveness of media and communication,
the world is saturated with cultural information and it is rare to find human societies
that are even relatively untouched by it. Change brought about by contact between
groups is part of the process by which culture evolves, adapts and accommodates.
Cultural diffusion is not new and music has been affected by it in the past as in the
present. What is new is that the scope and pace of this diffusion and effectiveness of
cultural saturation.

Cultures that appear to be steadfastly holding on to local or regional traditions
are nonetheless aware of the changes surrounding them. While they may appear to
continue in defiance of globalization, they are still affected. While change and
diffusion through contact with other groups has always been a factor of culture, what
has changed is the diffusion of cultural elements from nearby neighbors to diffusion
of cultural elements across great geographic distances and from cultures with that
prior to the last 50 years of so, there had been little direct contact.

As we look at human musical activity globally, we depend on various types of
information. Living traditions are the most important source of information. We can
study them, interact with them and document them, as well as enjoy them. Sound recordings are a means of preserving some of the very important aspects of living traditions and the past hundred years of sound recording serves as a resource for the study of music that is of great importance. In addition we have other kinds of documentation, both written and graphic, that provide valuable information about music culture. However, written documents, even music notation, and graphic depictions of music practice can give only partial information whose value is limited unless we can link it to some understanding of actual practice. For this reason, sound recordings of music, both from the many European traditions and from the rest of the world become the vital source for our knowledge of human music practice and of the changes that have affected it.

During my lifetime I have been happily engaged in the pursuit of an understanding of the scope of variety and the nature of change in as many of the varied expressions of music in a variety of societies. This pursuit has led me to spend prolonged periods of time in a number of different regions and cultures of the world and in the process to learn a good number of their languages as well. What I have learned is that the variety of manifestations of human musical expression seems virtually endless and in overwhelming proportion variety and uniqueness takes the lead over finding common practices or aesthetics across different cultures.

The question I ask myself after pursuing these many trails is, what does all this tell us about music in human society? This is what I have attempted here in these pages to consider albeit incompletely. One hundred years of recorded music performances supplemented with written and graphic documents are a vast resource into which we have as yet only begun to delve.
How Did It All Start

We can doubtless never know exactly how or when music first entered human life. Seeking such an answer will in part depend both on where we choose to draw the line between music and self satisfied grunts or howls — the distinction between what is music and what is noise is even now not widely agreed upon — and at which point in the human evolutionary schema we choose to pinpoint what we will call humans. This may all sound like a ruse set up to avoid a precise answer but these boundaries are at once both arbitrary and important.

Let us consider each of these in turn. I think we are cutting things too narrowly if we point to the first time a complete song was created, appreciated and passed on as the beginning of music. There are other possible scenarios. Early hunters while making a great noise to chase game into a trap may later have recreated these sounds as a kind of magic retelling of the story of their success. Humming and even moaning to oneself as a form of self soothing or soothing of some one else could be thought of as a kind of proto music. In fact, there are many song types today, Flamenco singing, old country Blues, Romanian Bocet funeral songs, to name just a very few, consist often of pathogenic expressions that cannot be considered melodic but lie much closer to what may have been a very early use of music to sooth, to heal and to aid in seeking balance.

At some point even before this, an observation must have been made that making some sort of sound was effective, felt good, or yielded the right results and it went into the bag of tricks to be used again and again gradually becoming formalized.

When did this start? Just as it is more than likely impossible to know how the first event that we might think of as music began, it is equally difficult to say when it might have begun. Some argue that music is an activity known to many animals, birds and whales to name those that come most readily to mind. Others may prefer to argue that these are not like human music. Recently however, clear evidence has appeared in Slovenia showing that Neanderthals made flutes from animal bones 53,000 years ago. This predates current estimates of the first modern Homo sapiens coming into Europe by 10 to 15,000 years. These flutes were made from bear and deer bone, had finger holes and produced sounds that are remarkably clear and sweet in sound. While this tells us little about neither how Neanderthal man may have used music nor what he used it for, the appearance of these flutes is unmistakable evidence of a clear and deliberate use of music.1)
We have recognized the ability of certain primates such as chimpanzees, to communicate with humans, albeit without the capacity for human language. This does not preclude that chimpanzees may have some means, as yet not understood by us, of communicating amongst themselves. Such a means of communication could be transmitted by gesture, expression, or sound. In whatever form such communication would not be about words as in human speech, but would more directly be an expression of the inner state of being of the individual sending the message. This in essence is what music is at heart after all, the communication of the inner state of being from one individual to another. It is entirely possible in my view that this could have been going with the earliest humanoids.

This is an important beginning point at which to pinpoint what we choose to call music, because whether it is used for self nurture or for communication with others it is based on an expression of an inner state of feeling, something which in no way guarantees that it will be understood by those hearing, but that is another matter. What is important is that this view of music allows us to encompass the vast spectrum of human musical expression through history.

Notes
The Cultural Context

If culture is the sum of the things we do and we know and what we pass on for adoption and modification then it naturally follows that music is a part of all this. It grows out of culture, based on whatever tradition has been inherited along with all the modifications that have taken place. Nothing really new here, except that this means innovations, brilliant new ideas of any particular age must also be seen as a part and outgrowth of the same culture. The resistance to an old established idea and the creation of something consciously different from the past is in itself recognition of that past.

We can understand that music must grow out of its own cultural context. People in each culture create music from what they have learned and from what they have heard. Even when they create something entirely new, it is still based on what existed in previous experience. Music adds to the culture and is an important form and avenue for personal and group expression in it. It is also very much a product of that culture and of all the influences, historical, political, economic as well as aesthetic which have played upon it.

At the same time music has a place, a role, a function, in each culture. That is to say that in addition to being an outgrowth of the culture as well as a reflection of it, music has a status and function in each culture. There is a way that people use it, practice it, continue it and think about it which is unique to each culture. If in some society music begins as the formalizing of sounds used during the corralling and hunting of game and it continues to be performed in a symbolic or religious association with hunting, this is one kind of cultural context for music. If in another society every individual in the community is expected to perform in some way, by singing or dancing whenever the group holds a musical event, then this is another context. In another society, the religious leaders may tell the community that music is not good for them and even so the people go to places where music can be enjoyed and devote themselves deeply and passionately to it. In other societies, most of the people may not engage in the performance of music themselves and will instead pay others to serve this function for them. All of these examples are from cultures that exist today. The differences between them are differences in the cultures and are differences which have, in turn, had an effect on the music itself.

Before going any further it is important to note that in creating labels and categories for what we observe we are merely making use of helpful labels and descriptions to help us as we wade through the depths of myriad of different cultures.
doing things their own way. The creation and application of these labels and categories does not in the slightest take away the importance of the concept as it is viewed in the particular cultural context in which it is found. If the musicians of Java and Bali had no traditional word for music and yet seemed to be making it all the time, they in that cultural context had no particular need for the generalized term. However as well look across many different cultures, we do.

**Music and Ritual and Religion**

In some societies music serves as an important accompaniment to ritual and may have little other function. In such cultures, music is performed only when certain ceremonies are performed. In our own culture we have few rituals anymore. There are a few, however. There are still times when it is expected that we will all sing the national anthem. In the United States, at official government functions, whenever the president appears, the old Revolutionary War march, “Hail to the Chief” is still played. In Great Britain “God Save the Queen”, is played at the end of every theatrical performance, even for the showing of motion pictures. The military still use, in addition to marches, specific bugle calls which are both symbolic and at the same time clear messages to the troops. On ships the boatswain’s whistle is used to make similar announcements and commands to all on board. We do not often think of these ritualized and symbolic ways that music is still used in our society because, in truth, this kind of ritual and symbolism is not really characteristic of modern Western and Westernized cultures anymore.

Music is often associated with ceremony and ritual. In the ancient courts of Asia, music was part of the emblem of the king, emperor or sultan. Certain music when played announced the presence of the ruler and some musics when played indicated that even when the ruler was not present, the performance had royal authority. Music is often used in religious ceremonies. In Japan one of the important annual religious festivals is the *kagura*, which means “music of the gods”. In this ceremony, the performance of the music itself is the ceremony, the songs and dances being intended as entertainment for the gods. In Islam music cannot be associated with religion in any way. Even the reciting of the sacred Koran, which we would regard as singing, is never referred to as singing but as a special form of recitation because music of any kind is strictly forbidden in connection with any religious observation.

The tradition of religious music in the West until the Middle Ages was essentially the intoning of the sacred scriptures. It is likely that rather than actually singing the scriptures as we think of singing today, the text may have been intoned, that is recited as though speaking in tone. Many examples of this use of the human voice made divine by the addition of tone and yet not actually singing exist in many
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Fig. 1 An old woodblock print of a Japanese Noh performance. Some members of the audience are listening, one seems to be asleep and another yawning, while a group in the back is busy conversing. (Sarugaku-zushiki, 1907)

Fig. 2 Woodblock prints were used as announcements of performances by famous Kabuki actors of 19th Century Japan. Even the style of the woodblock prints, their colors and design, reflect the flamboyant and exaggerated movement and speech style of the Kabuki theater. Music, dance and design are all integrated to reflect the style of Kabuki and to set it apart from the more refined and older Noh theater style (From ‘Kabukinotate’ edited by Masakatu Gunji and Yaenosuke Bando. Tokyo: Kodansha. 1984. pg. 113).
Fig. 3  The *Kangen* ensemble of the Japanese Imperial Household. Even the formal spacing of the musicians seated on the floor reflects the Japanese concern for space and order.

Fig. 4  The ancient ensemble of instruments used of the Confucian Ritual, or the Ceremony of the Sun and the Moon, includes a formal arrangement of instruments made of the eight important elements of ancient Chinese culture, played in a precise and very formal and exact musical pattern. The photo is of the Confucian ensemble as it survives today in Korea.
cultures. These are usually situations in which the sacred or magic character of the text is most important and it suggests that early Christian and Jewish liturgy may have been performed in such a manner.

Gradually increasingly complex settings of the scriptures were introduced that were intended to serve as expressions of supplication and of thanks but also inspire the congregation towards deeper religious feelings and to make them feel uplifted. Gradually, the cultural context of religious music in many of the churches of the Western world changed from being music to enhance worship and inspire religious fervor or respect came to be music which was intended to please the congregation and to encourage them to feel welcome and to return. Thus in our own ritual music we have changed from using music to enhance the power of the sacred texts, to using music as a means of enticing people to come to church.

Music in connection with religious ceremonies, as with any of use of music in the culture, can tell us much about how music is regarded and how it functions in that culture. In Zimbabwe among the Shona people, music is used to create an atmosphere which induces the individual to become one with the spirit and thus it serves as a connection to the spirit. But with Shona music, this is not just a created mood that is conducive to the mystic experience. The deep structure of the music has intricate repeated pattern that the listener can hear in many way and in the process creates his or her own perceived mental patterns out of the music by played. Entering deeply into this pattern-seeking while listening does indeed enhance the Shona’s ability to attain the desired mystic experience.

The use of music in the high culture of the traditional world, both East and West shows both the use of complex forms of music expression for the sake of enhanced religious experience as well as offering the opportunity of proclaiming the wealth and status of the institution or even it’s patron. In Western Europe for hundreds of years, the most skilled composers were employed to compose music for the ritual. This was also true in the Ottoman Empire where many of the great composers of the classical music of Turkey were also composers for the sacred dervish ceremonies, the Mevlevi ayin. Many of the most highly acclaimed compositions in this genre were composed for the ceremonies by Sufi mystics, but many were also composed by lay musicians and many even by famous sultans themselves. So music is used in connection with religion as an offering and entertainment to the gods, as in the Ancient Japanese Kagura, as an inducement to union with the spirit as with the Shone of Zimbabwe and as an expression of devotion and inspiration to the devotees as in the West and in Ottoman Turkey.

**Music as Music**

Music is the most complete, complex and fully articulated means by which
humans communicate with their fellows. It expresses the inner states of one individual to another, or that of a group to another group. While it is being performed, performer and listener share in this expression of feelings. We usually attempt to define what we call music in terms of the way it is manifested in our own particular culture. Much of what we to say about music is based on our own knowledge and familiarity with the music of the Western tradition. It is reasonable to be influenced strongly by what we know. However, we need to be mindful that we do not assume universal value systems for music where they do not exist.

When you think about it, we are virtually always in communication with each other. Even when we drop out, most of us need to stay in touch with the sounds of other humans, in some way, by radio, TV or listening to music. Music is one manifestation of the human’s incessant need to communicate with his fellows. Much of his energy is spent in chattering, gesticulating and signaling to other humans, a process with which he has been passionately preoccupied since his first appearance on this planet. We find great comfort in this almost ceaseless and noisy communication with our fellows. Most of us are unwilling to ever stray very far away from it. Once in a while we may hear ourselves declare that we have a deep need to get away “from it all”. Yet many usually find some means of taking it with us or seeking out more of it where ever we choose to go.

Music is one of those links with our fellow beings which most of us prefer not to be without. As a system of communication we know it works although we cannot yet be certain of just what it communicates to us. Given the natural tendency for humans to want to keep in contact with each other, of all the forms of contact available to us, there are many who, when given a choice, would prefer to hear another’s human’s music.

Early humans may have at first made music as a re-creation of the activities of a hunt, or as appeasement to the powerful spirits, or as way of healing for the sick. But at some point humans began to enjoy the sound of music for its own sake. In doing this and in performing music for the pleasure it gave and for the expression of feelings which it allowed, they had redefined music and its role in their culture. It is a different way of thinking about music, an almost self conscious way if we compare it to what must have been its early ritual and mystic origins. Now we can have humans entering a situation in which one might say, ‘let’s have a little music”. Much of, in fact, probably most of what we think of as music fits into this category. But this as little more than a broad functional category for what falls within it encompasses most of the recorded human activity we know of music.

While it is certainly of a later date that what we have been talking about at this point, there is at least a reliable source describing the practice of using music as part of the hunt by the indigenous peoples of the Andes written by one of the early Spanish explorers, a botanist, Hipolito Ruiz. He describes the building of a fence in
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The conscious creation of a category of music as music is also defined culturally. There is of course, nothing inherent in the sound itself to elucidate such a category. It is the function, context and shared cultured that say, this is music to be listened to. This, on the other hand, is music that goes with something else. This distinction is useful because it enables the acceptance of, just to take the example of religious music, the fact that Christians have and refer to music in their religion whereas Muslims do not use the word music in any form to describe the recitation of sacred texts. Yet this same recitation of the Koran were it to be described in any way, would have to be labeled religious and then if not music, some circumlocution to avoid the word, but it would clearly fall into the functional category into which we have placed the Shona spirit music, the Japanese Kagura, the Turkish Ayin and the church music of the West.

Think about the status of music in modern Westernized cultures. Although many popular musicians make substantial incomes, many parents would prefer their children to seek other channels of livelihood. Music is often relegated to a secondary role in our society. It is thought of as something which enriches or entertains us but is regarded by many as a frill, something extra, nice, but not necessary. Yet music is all pervasive. In every society known to us and in every period in history it has been there. Its very persistence and ever present existence suggests that it is more than an enrichment and a refinement to our lives. It, like language is a vital element of our very humanness. If humans everywhere appear unable to get along without music, then music is doing something much more than providing entertainment and even meaningful enrichment to this life. So in each society it takes an important role, even if one must look at the economics of it instead of what culture would have us believe about it.

But there is something else about the way music functions in our culture that is noteworthy. The British psychologist of music, John A. Sloboda has noted:

Through a long social and historical process contemporary Western art culture has become characterized by functional specialism. In the case of music, as with most other art forms, a gulf has emerged between producer and consumer. Adult producers are typically large in number, usually untrained, and often unskilled in most forms of musical production. With the advent of sound recording it has become possible for the various functions to be completely separated in time and space. Consider, for instance, a Beethoven symphony. A group of performers construct their interpretation in necessary isolation from the composer, and also from the audience for whom the performance is intended (for example, in a recording studio). A member of the audience may then ‘receive’ the interpretation in social isolation from both composer and performer as a disembodied aural experience. This is particularly true of the domestic listener who
may, through use of headphones and darkened room create the impression of being totally and exclusively enfolded by sound. Even at the concert there are usually strong social and geographical factors which separate listeners from performers. Performers and listeners go in and out by separate doors; they do not interact with one another. Any form of audience interruption is usually violently resisted. Such constraints tend to reinforce an ‘illusion’ which projects the sound of the music away from the realities of its origins in human work, both physical and mental. As in the puppet theatre, the modes of production become veiled in mystery, and we may have no particular wish to venture behind the proscenium arch.2)

**Art Music, Specialized, Complex and Challenging**

The words and thoughts which we use to describe the concept and ideal of music as “art” are strong in Western and Westernized society. We enjoy music but we remain removed from it. We hear much talk about just how important we believe the art of music to be. Although we generally agree that it is important, in our own culture we tend to think of music as an enrichment - something which makes our lives fuller but something we could manage without if we had to. We enjoy music, but only a few of us actually make it ourselves. This is often the way the subject of music goes whenever there is talk about the need to improve the quality and amount of teaching of music in our society or about the potential expense of better and more fully integrating it into our basic education system. It becomes something desirable but not necessary.

The manner in which music and, in fact, all the arts, are treated in modern society gives little indication of the more important role which it actually plays. In trying to look at some of the ways in which music is considered by humans, we must look beyond our own cultural definitions, beyond our own preconceptions and assumptions.

Even in societies in which there is no conscious verbalization supporting the notion that music is art, it may still be very important. There are cultures, for example, which have no word for music, or in which there is a word, but it is used to refer to only some forms and types in the culture but not to others, but for which we, even as outsiders, would have no difficulty calling music. The lack of verbalized system of terms for music, and its aesthetics does not preclude a recognition of its importance to the group. The stratification of values, whether is it articulated or not, forms a pattern which is unique in each society and never precisely reflected in the same way in any two. Although each may describe it differently it is impossible to find a society anywhere in which music does not play a role which is substantively parallel in importance to the manner in which we describe music as art.

In addition to being a system of communication in and of itself, music in most societies functions as an effective means of defining and delimiting the group and of
helping it to maintain a sense of cohesiveness. We may find that in some societies music is treated with the same sense of awe which is usually reserved for powerful and incomprehensible displays of magic. We do not usually think of ourselves as a society which places great trust in the power of magic. Magicians and sorcerers might not seem an appropriate parallel, yet, when we try to fathom the reasons by which the income of any of the top fifty current US Rock groups goes well up into the highest 5% income bracket of the country, it does seem that if not the awe of something like magic, something akin to it seems to be at work. Our notions of what we imagine to be primitive man’s superstitious awe of his art may not, in fact, be so different from our own. The high ticket prices paid for performances and substantial income from the sale of recordings of the most popular artists around the world is a true indication of the role music actually plays for in modern society, in spite of what we may think. The amount of money used in support of popular music groups is parallel in level to the support which many in Western society give to religious organizations.

The Status of Musicians

In many societies, including those of the West and those that are Westernized, those who provide music are regarded as special people. Sometimes by certain segments of the society, they may be regarded with disdain and yet by others, they may be respected, sometimes even held in awe. Regardless many are often well-paid. In Westernized cultures, as in some others as well, musicians are paid by us to sound off and express feelings and thoughts which we believe are like ours. We pay them because we like the way they express how we feel. In such a society they are often outrageous, mad visionaries who help us articulate our subllest feelings and dreams. Our songs may be the most effective means we have of defining ourselves as a group, of refining our emotions and perhaps of helping us to clarify even our thoughts. Certainly music articulates shades of mood and feeling which are impossible for us to describe in words and even the words to the songs have greater meaning for us because of the music in which they are engulfed.

In Western culture, many young children are given the opportunity to study music. Only a few continue to pursue this are a career or even as an avocation. Instead like many other stratified societies most of the population prefers to pay professionals to provide their music instead of playing it themselves. Thus the purchase of tickets for concerts or the purchase of CDs of music satisfies our need for music without having to learn to play it ourselves. Increasingly in many parts of the world the separation into music consumer and music producer is becoming more common. It may be a factor in increasingly diversified societies to rely on specialists even for music. In Europe during the last three hundred years a well educated person
was expected to perform music himself. Music perform at home among even middle class families was something which continued for many years in Europe and even in America until recently this was not an uncommon practice. Nevertheless, even among the nobles of Europe, many of whom were very adept musicians, they also had a great appreciation for the talent of others and employed the best musicians they could obtain in order to enjoy their performance, sometimes to play together with them and even to learn from them.

For about perhaps three or perhaps four hundred years in Eastern Europe a similar practice existed. Throughout much of Eastern Europe, Roma, or Gypsies had been entering and traveling about. Their reception was mixed at best. In some places they were welcome at other times and in other places the were feared and despised, in part because many thought they were connected to the Turks who were invading Europe at the time. Many times they were singled out merely because they were darker than the Europeans and had black eyes and black hair. The one area in which the Roma were allowed to establish themselves was as musicians. The Eastern Europeans quickly noted that the Roma were excellent musicians, learning the local music and performing to the pleasure and satisfaction of all very quickly. This is a case in which an exogamous group entered the society and one branch of it became valued because they fulfilled a function that was valued and important.

In some cultures, professional musicians, that is those who make a living from it, are less highly regarded than amateurs. This is the case in traditional Iran, Turkey and Okinawa. In these cultures special individuals who have devoted their time to the pursuit of classical music are regarded as the greatest interpreters and carriers of the music traditions. These musicians are people who have other means of employment; generally they are well educated people who have the leisure time to study music for many years. Many in reality spend little time at anything else but the sense that they do not play for sustenance is clearly part of the picture. But what is important is that it is these amateur musicians who know more about the old traditions in these countries then do the paid professional musicians and it is they who have preserved it in its present form.

In some cultures musicians are those who were born into special families of musicians and outsiders are not permitted to join their ranks. The musicians of the Imperial Household Music Department of Japan can trace their lineage back to the musicians who were in service to the court back to the 9th Century and sometimes even earlier. Until the 1950s no one who was not already a member of one of these guild families would be allowed to join the ranks of the palace musicians, although today this has changed. Even today all the court musicians are men. It has been documented from time to time when the family had no male heir, one of the daughters could be married to perhaps the third son of another family and this young man would then take the family name of the hereditary guild family and the tradition
could thus go on.

There are cultures in Africa in which it is believed that only those from families of musicians can ever master music. There is no formal restriction preventing others from learning the music. They simply believe that not being born into one of the families of musicians makes it impossible for them to learn the music.

In most traditional cultures of the world, music was exclusively a profession for men. Often reflecting a system of segregation which was in place in other areas of the society, in some cases, there could be women musicians but then, as in the case of the women’s orchestras of ancient China, the orchestra would be made up of women alone and men would not be permitted to join them. Since the segregation into men’s and women’s quarters was the practice in much of the ancient old world, the segregation of female musicians from male musicians was an outgrowth of the general practice. Women wanted to have music in their own quarters just as the men did and pressure to allow that gave way to the establishment of women’s ensembles and orchestras.

In 16 and 17th century Europe, women were encouraged to take up the study of music because it was thought to add refinement to young women. Men did also take up music and it was not uncommon to have them do so and to do so was considered a refinement. In the case of women, however, it was thought to make a young woman of good family more desirable for marriage since the study of music showed a refinement, something which did not hold true in the same manner for men.

In England, France and in Spain on until even the early 20th century the study of music among women was encouraged by polite society. In the Northern Philippines where the playing of the old Spanish harp continues even today, many women in their youth were encouraged to learn to sing and play the harp, although most did not play again very often after marriage. In Japan the study of the thirteen string koto and the three string shamisen in a repertoire in which they were both used, were thought appropriate for women whereas other forms of music, even other kinds of shamisen music, were often not considered appropriate. It is curious that in this same genre, only blind men could play, whereas in other forms of Japanese music, only men were allowed to learn and to perform. Many of these ideas have slowly and steadily changed, particularly under the purview of changes in government policy. In China, Korea and Japan, many forms of music in which formerly only men were allowed to perform, now have women musicians in their ranks.

One of the areas in which the strictures against women performing music were not always strictly enforced was in singing. Throughout history and in many cultures women were noted as singers in situations in which otherwise music was not considered seemly for them. Nonetheless, in many traditional societies the same restrictions still apply. In some countries of the Muslim Middle East, for example,
even recordings of male and female voices together cannot be played on the radio.

Music as Cultural Delineator

The music we listen to identifies us and explains something about us to others. When you meet someone as you get to know them, the kind of music they listen to may tell you something about them. At times it is through meeting others and learning about the kind of music that they like that we learn about new kinds of music and expand our own collection of favorites. In our fluid and open society, we define our subcultures most clearly with music. Although in more cohesive and less highly stratified societies there are many options and choices available in the kind of music one can listen to and in this way these subcultures can develop. Although the music may be sometimes different, this same diversity of options occurs for example, in Japan and in most of the countries of Europe and in some countries in Latin America.

Music plays an important role in each of our daily lives. We are accustomed to thinking of music and the arts in general, as valuable to us because of the refinement and depth which they add to our lives. Yet, music has much to do with our balance and sense of well being affecting and enhancing even the pattern and nuances of meaning in our speech and thoughts.

To the best of our knowledge there has never been a society in which music did not play a vital and integral role. Claude Levi-Strauss in the Raw and The Cooked after describing music as a metaphor for myth and then drawing several parallels between them says ‘music has its being in me, and I listen to myself through it’3). The use and function of music in all societies known to us suggests that such a contention or something parallel to may exist for all of us. But such a statement logically draws us to consider some of the distinct roles of music and speech.

Music and Language

The parallels between music and language are significant. Both require sound and music, in its most simple form is the utterance of sound from the human voice. If we note that in the earliest leaning of language, the infant learns words through association and repetition. Invariably an emotional tone of emphasis or approbation is enunciated along with the word so that the infant is learning an associated emotional tone along with the word. It appears to me that the infant is first learning an emotional vocabulary and then associating it with words, or may even be leaning to focus and express an already nascent emotional vocabulary through association with sound.
At what point did humans begin to use sound as a means of communication? It will never be possible, most likely, to know this. The evidence is intangible and lost. If is safe to guess that an emotional outburst with sound came before words and that from there the path from sound to signal must have followed. But here again we are faced with the question of pinpointing the line between a sound of surprise or sudden emotion and the production of sound for the purpose of expressing inner states of being. My bet is that what I will music, as a means of codifying emotions, came before the forming of what we think of as words.

Whether this is true or not, music and speech have moved together. The tone and accent pattern of speech have had a guiding influence on the creation of music. This is as evident in what we know of the past as it is in the present. To give just a few examples, the instrumental compositions of Hungarian composers such as Bartok and Kodaly show the same unmistakable accent patterns as found in Hungarian folk music and both are strongly related to patterns in spoken language. In contemporary pop music, the influence of both British English and American vernacular speech have had a strong and defining influence on the patterns of the music. In Japan, where normal speech pattern is more unaccented and unstressed, perhaps parallel to French as opposed to English, the contemporary Japan pop music, sung in colloquial Japanese, deliberately distorts the stress and accent patterns of spoken Japanese to make is sound more like the American and British models it is imitating.

Music, like other aspects of culture including speech, is aided in its dissemination by contiguity. Thus it is easy to find patterns of cultural diffusion among neighboring cultures also showing patterns of musical adoption. This begins to change in 19th century with colonialism and travel across greater geographic and cultural differences. Then we see the sudden transplantation of radically different cultural elements under the support of political sway. For example this is the case with the introduction brass band music suddenly into 19th Century Japan.

The pattern of dissemination of music styles and practices often parallels spread of language and speech patterns, adopted words and structures. However, there are significant instances where music jumps across language barriers with ease. In the present day, the manner in which audiences and performers in the Far East, Japan, Korea and China have adapted European and American popular music styles scarcely impeded by the considerable distance of the spoken language. In addition Chinese, Japanese and Korean popular singers and musicians are also imitating each others imitations of the Western pop music and again unmindful of the considerable language differences.

In spite of the ease with which musical styles and practices can jump borders, a unique music idiom is often felt by those in the culture to represent and parallel their own sense of national or regional identity. This has often been used to subvert
political ambitions as well. At the moment China is working energetically to absorb the peoples of Mongolia. Including the territories of Mongolia under Chinese control is one thing, but they have begun control cultural dissemination to such a degree that much of the recent music of Mongolia is losing its Mongolian identity and is sounding more and more like the idealized Chinese models. Like the loss of languages, if this continues long enough there may soon be only few who remember and perform the old native Mongolian music.

Language and Music as Human Traits

The biologist Lewis Thomas has stated that speech and especially, music, are dominant aspects of human biology. Recent brain research also suggests the notion that the capacity for speech and music are among the unique specialized functions found only in the human brain. We are also learning more about how the brain reacts to sensual stimuli and that its responses are not single and direct, as is characteristic of even the most complex artificial intelligence computer system, but rather that for each stimulus there is a complex of multiple and simultaneous neural responses. Biologists also tell us that the health of any species is reflected in the degree of variant forms in which it appears. In addition to their importance as biological indicators, diversity of choice and variety appear to be closely linked to the best functioning of the human brain and in this way may also be important factors in observing culture. The combination of these ideas suggests that the study of changes in the patterns of accessibility and, in particular, the potential loss of diversity in music for large percentages of the world population should be a matter of serious concern. These changes will have possible far-reaching effects on the human condition.

Notes
How Culture Determines Structure

How Culture Defines the Elements of a Music

Finding Meaningful Segments

When we listen to music, we both seek to hear something familiar and at the same time something new in it. In order to do this we must find our way thought it. We must “follow it”. If we find no recognizable guideposts, we must then try to make sense out of what we hear from scratch. Our culture, that is, our past experience and exposure has established these guideposts for us. These guideposts mark off areas or periods of the music into meaningful segments. One step towards understanding a new music is by trying to isolate what may be significant units or subsections. In a situation in which we are faced with a music style with which we have no familiarity, we naturally try to first make sense of it using our previous experience with music with which we are already familiar. Should this not yield a key, and should we decide to continue, we must then try to make sense of the music in its own terms. Until we can figure out something about how the music was put together, attempting to identify the meaningful segments of that music may be difficult. The key to finding these segments lies in the culture.

We might think that the major cultural differences in music would show themselves in a number of variations of the length or shape of perceivable units. What we find, however, are that the vast differences of cultural and historical context in combination with human imagination and creativity have resulted in an endless number of possible variants. The manner in which time is conceived in the general culture, the way human relationships are delineated, and the manner in which adjustments are made to the environment, in a culture have an effect on the way music is structured in that culture. The physical nature of the region determines what materials are naturally available for the construction of instruments. The economic system of the society and the ideas defining religion and mythology will also contribute to the manner in which music will be defined in any culture. It is the combination of all these elements which establishes the parameters within which the music can develop.

Lets us look at some ways in which culture creates contrasting structure and practices in music.
Repetition as a Cultural Value

The mbira music of the Shona of Zimbabwe, like much of the music of sub-Saharan Africa, is based on a principle of a steadily repeated basic or ground pattern on which variations are superimposed. Although the description of this system of organization may suggest similarity to the use of a repeated background or accompaniment as in some forms of Western Classical music, the African system is different. There is a technique in Western music called a ground in which a bass line repeated many times over which a series of variations are played. There is also the principle of variation in European music, but in fact the Shona ideal is quite something else.

For the sake of drawing a sharper distinction between the Western and this particular African approach, let us first say something about what the Shona music is not. For one, there is no sharp or clear distinction between what we would consider the ground or background and the “melody”. That which we might, from a Western vantage point, consider the melody, is a rather illusive suggestion of a melodic line which rises up from the ground but which, once again from the Western perspective, does not seem to stay there. The melody seems to be heard in Shona music and then it seems to blend into the background. Most of the time it is doing both of these things simultaneously.

The principle of variation as it is understood in Western music does not fit exactly either, since there is no theme on which the variations are based. In the Western concept of variation, there is a theme upon which variations are developed. In Shona music the distinction between a theme and its variations is not so clear cut. It is better to think of the variations in any composition as a great number of possibilities, some of which are simpler and can serve as teaching examples.

It is interesting that, for example, in Japanese, the words and concepts of “wrong” and “different” are close in meaning. In English, so strongly does the culture affect and color the meanings of words that it is difficult to describe the basic underlying principle of the Shona music of Zimbabwe without allowing an amount of pejorative coloring to enter into the description. Simply said, repetitiveness is a positive factor in this music. This is not to suggest that the music goes on endlessly without change, but rather that the repetition of a basic unit is and of itself a positive and unifying factor in the music. The principle of variation in this music serves to enhance the sense of repetition. Repetition is that element in the music which binds the musicians together and which creates the bond between listener and musician drawing the listener more and more closely in order to sense the minute and detailed variations. From a position of some aural distance, that is, from an untrained Westerner’s perception, or when not listening carefully, nothing seems to be happening in the music and it appears only to be repeating itself without any variation at all. In fact, repeating something again and again emphasizes the subtle
and minute differences between each occurrence. Listening carefully and in more detail, one finds that there are numerous minute variations going on all the time. It is something like focusing a lens more sharply on the small details.

**Repetition and Variation in Shona Culture**

In fact, the Shona musicians are creating the music on the basis of a principle which the African musicologist, Andrew Tracey, aptly referred to as “kaleidophonic”. As the musicians repeat the basic structure of a composition, they listen carefully, yet effortlessly and gradually some particular regrouping of the notes they have been playing leaps into the mind. That is to say that, as yet, nothing has changed in what is being played but only in the player’s perception of it. Since this music consists of several superimposed layers of sound, the musician may be hearing one or two of the notes he is playing suddenly combined with a note which someone else in the group is playing to form a new pattern in his mind. He might then add a note or two to better establish the pattern and by this means enable others to hear the new pattern also. At the same time, the principle of unity and repetition is too important in this music to allow constant variations to take over or to destroy the basic structure of the performance. So the principle of variation is exercised with great restraint. Gradually and over the years certain variations come to be associated with one musician, and then his group and eventually they can become the standard form used in one village or area.

The variation principle in the *mbira* music of the Shona is thus an outgrowth of the principle of unity and repetition. The basic form of each composition contains the seeds of several different possible variations and any one performance of the composition, even of the basic ground pattern is already one of the countless different possible variations. Therefore one can understand how in the world of this music with its minute and subtle variations uniquely occurring at each performance, no two performances can ever be exactly alike. In addition as the listener hears different patterns arising out of the music, he is encouraged to contribute to the performance by either singing out a short repeated pattern based on what he hears, or to get up and dance out the rhythmic pattern of what he has heard. The repetitive basic pattern of the music helps to cement the relationship between the listener and the players so that this type of participation is facilitated and is important. The distinction between player and listener is in Shona performance is blurred. The repeated pattern of the music bonds the players and audience into one.

In order to perform and to listen to this music audience and players alike begin with a common basis of expectation. When the music begins performer and audience expect to recognize the pattern, or construct in their minds the range of possible common factors that would define the performance and composition. All expect that the beginning pattern will be repeated in recognizable form until the end of the
performance. Listener and performer both will expect to listen actively and creatively, not only to what they are actually hearing, but to what they might contribute with their own imaginations as well.

Variation in North India

The classical music of North India presents another very different type of mental imaging required when listening to music. In the tradition of North India today, improvisation plays a prominent role. As a consequence each performance is valued as a demonstration of the musician’s skill and mastery of the principles underlying the music and not just in the interpretation of an existing repertoire. The main components of this system, raga and tala require a bit of explanation. The term raga is used to refer to the melodic system of India music. The raga is a group of notes, usually conceptualized in scale order, but with specific and fixed relationships between them. In this system certain pitches are always grouped with certain others, other notes might only be approached only after certain others, some notes might only be heard in ascending passages and would be replaced by others or perhaps omitted in descent. Thus the raga is a matrix or complex of tonal relationships and is much like a nuclear melody or an abstracted version of a melody. It is clearly much more than a scale in the Western European sense.

Tala refers to the underlying rhythmic structure of the music and is a system of complex rhythmic patterns or structures that are multiplied, divided, regrouped into new patterns, etc. An instrumental performance begins with an improvised exposition of the raga in an opening section in free rhythm called alap. The alap can be of varying length depending on the mood and preference of the soloist. After the alap, a fixed melody in a fixed rhythm known as a gat is introduced. This gat also establishes the particular tala for the performance. After the statement of the gat the improvisation in the raga continues now against the matrix of the tala and alternately weaving in and out of statements of the gat.

At performances of Indian music today it is not uncommon for the name of the raga and the tala to be printed in a program or to be announced and nothing else in the way of a title for the particular piece to be performed. However the performance of Indian classical music is structured in expectation that the audience be conversant with the requirements of the style and to therefore be in a position to appreciate the unique contribution which this particular performer is to make. The audience does not really need to be informed as to which raga is to be played because the performance itself begins by explaining, without words and entirely in sound, the structure of that raga. The musician has two responsibilities in performance: he or she must clearly etch out the contours of the raga in order that the audience will recognize its pattern, its accented pitches and characteristic melodic turns. Then in addition the musician must show in the performance a unique aspect of the raga.
with skill and interpretation, and giving it new and heightened meaning while at the same time not destroying the expected norm of that raga. To recognize the raga, the audience need not necessarily know its name but by the careful manner in which the musician states the structure during the alap section, the audience should be able to grasp the general shape of the raga and the rules which govern movement within it. Then the player expands on this, without departing at all in the slightest from the structural pattern established by long tradition for that raga, but by delving deeply into the mood created by that structure and then attempting to surpass previous performances by expressing the rage with more grace and subtlety than ever before.

The main exposition of the raga occurs in the opening section of the alap. Instruments which provide a continuous drone on the fundamental pitch of the raga and, usually, also the fifth, are sounding before the soloist begins. The performance of the alap by the soloist almost invariably begins in the lower register and on the lower notes of the raga, that is, beginning on the low fundamental pitch of the raga and then gradually working up the scale. As each new note is touched upon the player carefully shows how it will be characterized in the raga, how it will be stressed or ornamented, how it will be related to those notes surrounding it, and thus he will gradually show the characteristic patterns which identify that raga.

This process of exposition of the opening alap, followed by the gat and then the improvisations can and frequently does last for as much as three quarters of an hour and longer is also common. Beginning from the lowest fundamental of the raga, the opening can with some musicians require as much as twenty minutes or more to gradually work up to completing the exposition of the first octave. As the listener perceives each note, he is to remember how the note is played, what sort of ornament or inflection it is given, how it is related to other notes. Then he adds to that his impression of other notes, one by one and to the characteristic phrases of the raga. Thus step by step the listener scans quickly back over what he has just heard and adds to it that which he is hearing at the moment. In this manner the listener is being prepared to recognize an entire musical structure of complex interrelationships, without which it would not be possible to appreciate the excellence of the that particular performance.

Variations Defining a performance: The music of the Tzeltal peoples of Chipas, Mexico

To cite just one more example of the use of variation of another very different type let us consider the music of the indigenous peoples of the highlands of Chiapas in Mexico. Among the numerous groups of peoples living in this area, one large group are the speakers of the Tzeltal group of languages. The Tzeltal peoples, like their neighbors, the Tzotzil speakers were converted to Catholicism by early Jesuit missionaries. The Jesuits also introduced Spanish instruments current in the early
In the 17th Century, the harp, violin and guitar. These indigenous people learned to make themselves. While the outward structure of this music may sound like European music, it also appears to have many important characteristics that are indigenous and in fact may only be superficially European at all.

Here the principle of variation is applied to an entire performance in a very unusual manner. The performance consists of several repetitions of the composition. The repetitions do appear to be endless repetitions of the same thing. In the Tzeltal culture, the leader of the ensemble begins playing the already known composition, but in the initial statement, there may be a slight emphasis of one note over another, a slight delay at some point, or perhaps even an added new tone. In any case, once the leader has established this variant of the composition, this becomes the variant that all the group will play during that performance. Thus each performance in its entirety becomes a new and very subtle variant on the already know composition. Each performance would consist of a number of compositions and each would be a unique variation on the know composition.

**Social Structure and Music**

**Parallels Between Social Structure and Music Structure**

It is easy to see and also quite inescapable that music is an outcome of its cultural context, a reflection of the culture which produced it. Still, the ways in which this can happen may not be obvious to us, particularly if we consider only our own culture. However, the manner in which groups of people organize themselves socially is often reflected in the way they organize themselves in their music.

In some societies there is a cohesive communal structure in which all members are regarded as equal, having equal rights and responsibilities. In other societies there is a high degree of stratification, distinct social levels ranging from rulers, enforcers, artisans and craftsmen, to workers and peasants.

In communal societies, the interdependence of members of the community is often reflected in the structure of the music. Many communal societies share common musical characteristics. One such characteristic shared between some communal societies in Central and South West Africa and with the Hill Peoples of South East Asia and the Philippines is the use of interlocking melodic and rhythmic patterns. In such cases each player plays a note or set of notes while another player plays another note or set of notes which interlock with the first set. The notes of the second player fit in the spaces left by the first player’s pattern. The combination of these two or more independent patterns fit together to create a whole pattern, much like the pieces of jigsaw puzzle. In this way the interdependence of the members of the community is reflected in its music. The role of each individual is important. The whole could not be created without each part. Furthermore, each part must be
executed with great precision in order to maintain the spaces in each part clearly so that they can indeed fit together. These performances require cooperation and precise rhythmic synchrony and reflect the existence of these values in the daily lives of people in these communities.

These are cultures in which the entire community consists of one unified group. All of the members of the group do essentially the same work as the others and many members of the community working together share most of the work. In such communal societies people are accustomed to close cooperation and sharing. The Bushmen of Southwest Africa, the Pygmies of Central Africa and many of the Hill peoples of South East Asia and the Philippines live in communities like this. Among the Tinguian people of Northern Luzon in the Philippines their music reflects this social structure. There are basically two kinds of music, singing, both solo or in groups, and dance music, which is provided by an ensemble of gongs. There are some other instrumental musics, such as the bamboo tube zither, kolibit, which also plays the dance music in imitation of the gongs. The technique for playing the gongs requires that each player hold a single gong. Each gong has a different pitch or tone and each plays a special pattern. There are five or six such gong players and each has his own pattern that he or she plays and on which slight variations can be imposed. The sound of the music when heard blends all of the individual gong patterns into one single pattern. In this way the communal structure of the society is reflected in the way the music is organized.

Further South in the Philippines, among the Muslims of the Sulu Islands, they also play the gongs, but here we have a more highly stratified society with special roles for Sultans, Imams, or holy men and soldiers. In these cultures the music is also more complex and stratified. Instead of a set of single gongs, here we have one set of gongs to play the melody, drums to play and ornament the rhythm, larger gongs to punctuate the phrase patterns and a smaller gong to keep the basic beat. The group is divided up into separate discrete but complimentary functions just as the society itself have different unique and interdependent strata. Most of the cultures with which we come into contact are stratified cultures and this social stratification is reflected in their music. Societies like those of Western Europe had music for the upper classes that was used at private functions like dances and concerts. They also had civic music, like the bands that announced the hours from the city towers. There was also the popular music of the city dwellers and the folk music of the countryside. In addition there was music especially dedicated to religious ceremonies and observations. Like the cultures of Europe, traditional Japan, Korea and China, for example had ceremonial and court music. These musics were rarely if ever heard or seen performed by the common people. There was also classical chamber music for the upper classes, theater music which had its own semi cultured following and then urban and rural folk music as well as the special music
for religious ceremonies and village festivals which could be enjoyed by everyone.

In more highly stratified societies in which there are specialized roles and professions, the music usually reflects this stratification. In complex and multilayered societies one finds layered music. Some examples are the symphony orchestra with its special instruments whose duty it usually is to provide bass lines, and others to provide harmonic accompaniment and still others to play the melodic lines. Similar specialized functions can be found in Rock bands as well as in the gamelan orchestras of Indonesia, Chinese, Japanese and Korean court orchestras, numerous drum ensembles of West Africa and Western and Eastern European folk dance ensembles to name just a few. Such manifestations of social order in music structure are merely the result of the way people in each culture see order and this same vision is reflected in music and in society. We organize our music in just the way we naturally organize other things in our culture.

Definitions Defined by Culture

Generic Classifications of Music

In today’s contemporary popular music, one encounters many labels and ways of applying them that are new and innovative. Still, it is difficult to find agreement and consensus among several people about these descriptions. This may mean that the categories are still unclear and are slowly developing, that people are looking and perhaps willing to force similarities between different musical styles in order to make sense and organize them in their own minds. In the process of selling popular music, performers, producers CD manufacturers attempt to place other recordings that they have produced into a category similar to another in which they or a competitor has hits. By this means gradually a consensus of descriptive labels arises and comes into current usage. Categories are redefined to suit the needs and perspective of the times.

Most often we do not think much about labels and yet they are used freely and sometimes carelessly, which does create difficulties. Certain broad categories that are applied to music would seem to be self evident. Folk music, religious music, popular music, jazz and blues might at first seem to be such clear descriptive terms that we would not question their validity and their applicability. They are, in fact, our own cultural view of the matter and even there, we will find difficulties in applying these labels to our own music. There are, understandably ever greater difficulties when we attempt to apply these labels to the music of other cultures. Nevertheless, it is useful to have some broad labels and categories by which to measure man’s musical activities that can then be changed, refined or amplified as we understand each particular cultural context better.

What fits into then category of Pop today, may soon be reclassified as nostalgia
How Culture Determines Structure

which may cause some chagrin to those who are still engaged in listening to it. This is an example of the passing of time, dictating what is current and what is not. In Japan today we can see another variant of this, but one that tells as much about changes in the culture as about the simple passing of time. Japanese record stores even as recently as the 90s had classifications of popular, classical (meaning Western European Music) Jazz, World Music, etc. If we were to look for Japanese traditional music in our record stores we would likely find it filed under world music, Japan. This seems logical. However, in Japan, while Japanese traditional music is as much a part of the world of music as anything else, putting it under the heading of World Music, while European and American Pop, Jazz and Classical were not under world music did not make sense. So there was another category in Japanese called “Hogaku” which means local music. The understanding was that this category included all traditional Japanese music, folk, religious and classical, but not music by Japanese composers in the Western European idiom. In the beginning of the 21st Century the term Hogaku has been re-appropriated. Many of the big record stores in Japan carry virtually no more traditional Japanese music and if they do, it is likely to be classified under World Music. Few of the majority of CD record consumers in Japan ever listen to traditional Japanese music anymore and even the number who listen to Western Classical music, although much, much greater than the number who listen to traditional Japanese, are also far eclipsed by those who listen to and buy pop music and rock. In the new record store, a huge sea of pop and rock music is categorized as “yogaku”, Western Music, however meaning only pop and rock, and “Hogaku” which now instead of meaning traditional Japanese music, now means pop and rock by Japanese artists.

In general labels as classical, popular, folk and religious divide music into broad functional categories that are somewhat useful. Nevertheless, we can encounter difficulties if we attempt to classify other kinds of music, that is music from other cultures under this system. For example in the Islamic world, the musically intoned recitation of the sacred Koran is not regarded as music at all, but part of a religious observance and practice. To label this “religious music” would be offensive to the adherents of Islam, and to describe this musical practice in that culture by the label, ‘religious music’ for this practice is therefore inaccurate. Yet it remains true that such labels imposed from outside the definitions developed within the culture help us to see patterns across cultures and to better understand the larger pattern of music in human existence.

Let us look at the broadest and easiest categories used to describe different kinds of music.

**Folk Music**

Folk music as a term was first used to refer to the music of peasant societies and for the
basic traditional music in societies that had already other kinds of music like classical or professional (see below) music and perhaps religious music. The term is better used for Europe and The Americas, especially European America, where this specific kind of stratification exists. It can also be applied to the village or peasant music of India and the Far East.

By implication the term means that the music comes out of a broad social tradition and that the specific composers or creators of the music are anonymous or forgotten and that the music has been absorbed into the collective memory of the community. It is incorrect to think of the musics of sub Saharan Africa as folk music, nor the musics of the indigenous peoples of the Americas. There are several types of music in the many societies that comprise these areas. Also, particularly in Sub Saharan Africa, the composer and performer may very often be one and the same. Neither does the term primitive music, in the sense of it being rudimentary or preliminary to later developments, apply to these regions since those musics may possess aspects which are highly sophisticated and complex when viewed and understood in their own context and have had as much time to develop and change as any other music existing on the planet.

As a broad and general category, the many musics of Asia should not be labeled collectively as folk music. Asia is comprised of many often highly stratified, societies and possesses many kinds of music. There are many musics in Asia which could more appropriately fall under the label of folk music, but that description does not apply to all. It is best to apply the label folk music to those musics that are collective and anonymous and are the shared tradition of a single group, like a village or region. It is also best applied to this type of music in stratified societies in which are also other types of music.

**Popular Music**

In complex and multilayered societies there often evolve forms of music, usually drawn from folk traditions that are then elaborated upon with an eye to making them more immediately accessible to large groups. Popular music is enjoyed by large segments of the society and very often, starts among the dwellers in dense urban environments and spreads from there. We refer to as popular music, that music which seems deliberately intended and created for the purpose of broadest dissemination and to achieve great popularity most often using mass media distribution systems to aid in that broad dissemination. In popular music, the particular composers are usually known and very often it is particular performers who come to be associated with it as well. It is not that creators and performers in other types of music do not which to be popular or that they do not seek to please their audiences. It is that popular music as a genre has the immediate goal of seeking broad popularity and dissemination. It also follows that popular music is generally not expected to remain consistently so for a long period of time. The hope is that a new popular music will appear to take the place of the recently popular and now dated older stuff.

In the former socialist countries of Eastern Europe, the term “Popular” was used to mean that the music was something “of the people” and therefore had more the sense of the kind of music we have described as folk music here. It is also true that in the socialist republics of Eastern Europe, the state supported and encouraged the dissemination of this music to such a degree that this folk music did eventually become a kind of popular music in the sense that we use the term here, but it was a popular music that had to
maintain clear roots to its folk origins to be accepted and disseminated. In large modern urbanized societies in which there is a great variety of different popular music, there is another sense of the term popular music. It can come to refer to a style of music as well as its social function. This means that although we use the term popular to describe music that is intended for broad dissemination, a contextually defined use of the term popular, the musical elements, melody, form, harmony and rhythm might also identify a musical style that could then be called popular. In some sense the two uses of the term can be synonymous. It is possible, however, and this does happen, that music is created and performed using the style of the contemporary popular music but that the music is intended not to be enjoyed by the largest number of people in that society, but by a smaller segment of it. Thus in contemporary popular music there are some artists whose work would not ordinarily be considered popular music but because of the genre in which the music is set, they may find themselves classified there. Such contemporary artists as Laurie Anderson, John Zorn and Faust and many other such artists are examples of this. During the 1940s when the older form of American popular song was current, songs like *Lush Life* by the African American composer, Billy Strayhorn were clearly too difficult as well as too dark and serious in content to be considered popular in the functional sense. Nevertheless *Lush Life* and a few other songs like this at that time belonged to the popular music genre because of general stylistic characteristics. They sounded like popular music but seemed to be doing a poor job of going about trying to be popular.

**Classical or Art Music**

Like the two previous terms, the idea of a classical or art music fits better in some cultures than others. Classical music, is a term that is most appropriately applied to the Western European tradition of the late 18th Century. More broadly the term classical music has come to be applied to all of the musics of the European art music tradition and not only to the one specific period within it. Most often in our culture we use the term classical music to describe all that music handed down in the tradition from the Renaissance down to the music of contemporary composers in that same tradition. It is therefore, most often described in reference to a long tradition of music in Western society, rather than in the sense of a social or functional quality as we have been using terms above. In our culture we usually use the term classical music to broadly separate it from Jazz, Rock, or religious music.

We still need a term to describe this music as a type of music based on its function rather than as a stylistic tradition. Let us consider that certain kinds of contemporary rock are very challenging in their content and are appreciated only by a smaller subset of even the younger music listeners. We may not want to think of this as “classical” rock because it bears so little similarity to the music usually described by this term. However, it does bear certain similarities to it, in that it is intended to be challenging to listen to and not to be appreciated by the mass audience. In this more general sense of music categories, art music may be a better term to describe it. Usually these elitist forms require long years of training for the artists and composers to reach a level of proficiency adequate to achieve status. This is a condition that requires wealth, patronage or state or community support, certainly at least a sufficient audience to support it.
There are many music traditions in Asia that fit this description on all counts. There are also musics in Africa that fit these prerequisites. In the Western tradition the particular associations with terms such as classical music or art music imply refinement and a high cultural and social level, much like many use the word culture itself. In Asia and Africa where highly developed and complex music forms may also be found, the Western elitist connotation may not apply because the music is associated with a high state or civic function but accessible to the entire population. For example, ensembles playing complex music may provide such music for the entire community but the musicians and often the instruments themselves, may belong to a ruling noblemen, monarch or the state itself. It is the length of the training period and the technical mastery required for it performance that suggest for this music be described in terms similar to those use for classical music in the West.

Professional Music

Sometimes a distinction is made when music is played by professional musicians rather than by amateurs. The implication is that professional musicians would as a matter of course, spend more time learning the trade and practicing their music, thus being more proficient than those who took it up only now and again or when a community function required it. This would separate into a different class, musicians who were paid for their performances or were compensated in some other way, from those who were more or less randomly selected from the group and asked to perform. As we look closer at this distinction we would have to separate musicians who performances provided the means of their livelihood from those who, although they might be compensated for their playing, might do so only occasionally, and who would need others avenues to provide their livelihood. Sometimes musicians are born into families of musicians and are expected to continue in the family tradition. Sometimes long periods of apprenticeship, sometime even from childhood determine future professional status.

In some cultures, amateur musicians may more highly esteemed than professionals, that is those who are paid to perform. In cultures like Turkey and Iran and also in Okinawa and in the Chin music of China, the most highly acclaimed and valued musicians had other means of livelihood and devoted their free time to playing music as an avocation. Some, as many in Turkey, for example, may eventually have given up their professions almost entirely to devote themselves to music and thus cross over into professional status. Although this kind of amateur master is quickly disappearing in many cultures, being replaced by musicians who have been trained in conservatories they were in existence in many cultures until very recent times. They were musicians would preferred to have another means of earning a living in order to devote their spare time to music and did not wish to be seen as a person who accepted money for playing. This is an example in which the professional musician might not have had as high an artistic status as an amateur as defined within that culture.

Culturally Derived Classifications of Music

New forms of music are continually developing. Some are accepted, imitated by others and survive while others fall from popularity or acceptance and gradually fade from collective memory. The process of acceptance begins with a single piece
of music or with a single performer or innovator and is followed by imitations and repetitions. Very often the role of this innovator may be hidden in the slow and anonymous process of collective evolution. Gradually, as the distinctive form is recognized as such, its distinctiveness from other forms in the culture is noticed. A unique label may be applied in order to establish in that society’s consciousness an awareness of the distinction. These labels are quite different from those that a scientist who studies many musics, an ethnomusicologist, might use. These terms described above such as folk music and popular are terms used to explain how music works in many different cultures. By contrast, terms that have evolved from within the culture and that describe music as it is seen from within the culture are very valuable in helping us to understand the structure of that musical culture. We need both kinds of terms, those that are applied from outside the culture, “emic” terms, and those that have developed from within the culture, “etic” culture. These “etic” labels are derived and accepted by members of the culture itself in order to help them define and distinguish new forms. As a case in point, the recent evolution in American popular music of styles such as “Hip-hop” out of “Rap” is an example of this kind of creation of new terms. In this same way, not too many years ago the term “Jazz” came into use to distinguish that music from the earlier “Ragtime” style. Later “Rock” was accepted as a term to define the distinctively new popular music of the late 1960s.

In many other societies, particularly in highly stratified ones, the coining of terms to distinguish different musical forms and practices serves an important function in each culture. Even in less highly stratified societies, labels may be applied to distinguish different musical types in order to allow for more efficient function. In some cultures, new or distinct labels indicate different dance types. In the case of social dancing, the labeling helps the dancers know which dance type and consequently which steps will be required. Labels are frequently used to distinguish distinct melodic and formal types of music as well.

In flamenco, for example, the various labels, Granaina, Malagueña, Sevillana, or Bulerías, indicate specific formal musical patterns in particular rhythms. To those who know the repertoire, the labels also indicate something of the place that a performance of one of these pieces might have in the performance of a larger set as well as giving an indication of its origin.

The use of labels to define culturally important functions and distinctions can be found in numerous cultures, throughout Asia, Africa, Oceania, Europe and the Americas. Sometimes these labels are a recognition of an important musical function. What is common to all these “emic” terms is that they are useful labels for distinctions that are important in the culture. They may function to aid audiences in understanding the music that is being played, or to tell dancers how they should dance. They may also function to tell the musicians something about how the piece
should be played or about the social function in which it is to be used.

Among the Are-Are peoples of the Solomon Islands, there is a practice of playing a great number of fixed and remembered compositions on various ensembles of pan pipes. Each of the compositions represents sounds, natural or humanly produced and is labeled as such.1) Performances are set into groups of ten compositions each. Several such sets of ten different compositions may be played at important festivals more or less continuously. In order that the musicians be able to keep track of the number of compositions played at any festival, after every tenth piece played a special “marker” or “counter” piece is played. This eleventh piece is thus repeated after every ten pieces and it is much easier for the musicians to keep track of how many times they played the “counter” piece than to remember how many pieces they have played in total. Thus in this case the label, “Toto ‘au” in the ‘Au Tahana ensemble indicates the special 11th composition played after any sequence of ten other pieces. Although it is the sound of “Toto ‘au” that the musicians count during a festival, the label allows them to talk about it without having to refer to its function each time.

It is certainly possible to enjoy or to use music without attaching labels to it. It does happen most often, however, that as peoples recognize and make use of distinctions between musical types and forms, the application of specific labels aids in the efficient functioning of the music in fitting within the context of that culture.

Notes

A Note on the Terms Etic and Emic

Anthropologists use the terms etic and emic in a number of different ways. The concept is useful in the study of music in its cultural context because it enables us to view music in culture, both from within and from the outside.

Simply stated, emic is the internal, culturally defined use of the idea, while etic, think of synthetic, is a constructed view of that aspect of the culture from an objective point of view. Although it is easy to slip into thinking that etic is the true, or inside view of the culture and etic is the outsiders view, this is not quite correct. Actually, even some anthropologists have been known to avow that etic is the more pure and scientific view of the culture whereas, emic is “what the natives think.” Actually, neither etic nor emic is more right or wrong. They are just different ways of viewing.

To further clarify this let us consider a few examples. In the study of music we find it useful to consider the basic music types, folk, classical or art music and popular. Let’s just say that folk music usually means a body of music that belongs to
an entire community and for which the composers are no longer known. It seems to exist as something that belongs to the entire community.

Classical or art music is a little more complicated to define. It is played by professionals, but so is popular music, and even many kinds of folk music. Sometimes the best classical music is played by amateurs, as in Turkey, old Iran and Okinawa. The best definition of art music or what we call in the West, “Classical” music is that it was intentionally composed to be challenging and perhaps, not even completely understood on the first hearing. It is supposed to get better, deeper, more profoundly understood, the more one hears it.

Let’s leave that for the moment and talk about popular music. In some sense, everything is supposed to be popular, that is you or someone is supposed to like it. Why else would the performer or composer bother? But popular music, unlike art or classical music is not usually intended to be popular forever. No one is really against the idea, but its real purpose is to make it big in the short run and hope that it lasts as long as possible, at least until the group or the composer can create another hit to take its place. Economics is behind it. It is a way of making a living. So do the adherents of the other two categories of music, but in the case of popular music, the objective is more short term. Popular music is designed to be broadly disseminated, to use mass media system of communication and distribution and to become popular right away. It is more important to make it big now than to make it big later, like Beethoven or Mozart.

This sort of works as an etic definition of pop music. It has to be popular, to be widely disseminated, to make it economically in order to support the performers and the delivery system, and, very important and because of all the above, the performers and composers associated with this music, have to be known and advertised. That works as an etic definition.

This works fine for In Sync and Madonna, however, what about Tori Amos, Bjork and ATB? Will ATB ever be nominated for a Grammy award? Do you think they expect it? Maybe they do and maybe they will get one someday, but it doesn’t look like they are headed in the right direction if that’s what they want to do, does it? What’s going on? Is this pop music? Probably not by the narrow etic definition we have created. But ask yourself, where would the young woman being paid minimum wage at Borders or Wherehouse file it in the record bin? Alternative? Trance? Pop-Rock? In the sense of the way we use this music today it can all be filed under the broad category of pop rock or just pop. It certainly wouldn’t fit next to Beethoven or Mozart, not Nusrat Ali Khan or Compay Segundo. Now here we have an emic definition of pop music. Many groups and artists we consider pop because they “sound” like pop to us even though they may not fir our dictionary, or etic definition of popular music in the strictest sense.

Consider anther kind of example. We have an idea about what we consider and
recognize as music. If we hear a group of musicians from the island of Bali banging away on bronze gongs and metallophones, we can recognize from the concentration and coordination of the performers that this is music. But they have no particular word for music in their culture. So “etic”ly it is music but “emic”ly, we may have to go a little deeper into the culture to get at the truth.

Take another example. A choir in a Christian church is singing hymns. We hear it as music and they probably think of it as such as well. However, if we go to a Muslim mosque and hear the azan, or call to prayer or a recitation from the Holy Koran, we would recognize this activity as music, but in Islamic culture it is not considered music at all and in fact music of any kind in connection with religious observance is frowned upon. This is another clear case of the usefulness of use etic and emic concepts in considering how music functions in a culture.

We sometimes can learn much about how cultures work by taking an emic concept and testing it across a number of different cultures. The famous Encyclopedia Cinematographica of Göttingen, Germany has thousands of ethnographic and scientific films and has been making them for many, many years. They began this enormous compendium of cinematography by filming the way bread was made in different cultures, primarily in Europe. From this they expanded to the filming of virtually all human activity.

Looking at a particular human activity, like eating, for example, across many cultures, can tell us much about the culture. In the same way, even considering music, for which not all cultures have their own term is in itself a kind of “etic” activity. More specifically however, we can take “etic” concepts such as the role of music in gender roles in a number of societies to see hat it tells us about the larger society.
Choice, Preference and Cultural Perimeters

We tend to think of traditions in terms of nations. The United States is a relatively young society with only a little more than two hundred years as a political entity. Great Britain is much older and China can trace its civilization back for several thousand years. However, if we think of it in another way, within the United States, although it is a relatively new country, the individuals that make it up have traditions which go back to the British Isles, to other parts of Europe, Asia, Africa and what is now Latin America and thus, in fact, represent cultural traditions, learning traditions, which go back much further that those of the particular country in which they live. All human societies have had an equal period of development on this planet and each has its own antecedents. When societies develop over long periods of time in isolation from each other, the differences between them become so immense as to be perceived as unfathomable. All around us we see unmistakable signs of rapid technological development. However, we need to remember that because our technology becomes more refined, our culture does not, of itself, get better.

Differences in the rate of technological development are not something which can be reflected in the quality of the arts of a society. Mozart was not a better composer than J. S. Bach because he lived later. Nor would Mozart have been a better composer had he had the opportunity to use modern computer technology for his music. Mozart was great in his own time and the appreciation of his work lived on after his death. In the same way composers like Tan Sen of Indian and Lotring of Bali have transcended their own time in their own culture and are valued even today. Each music is subject to and works within the parameters set by its own time and culture. Each composer/musician works to express himself from the starting point which has been provided by his past. Each sets out to do what he believes he decides to do, but which is already defined for him by what preceded him. On each other’s turf, both Mozart and Tan Sen might have a difficult time reaching each other’s audiences. It is perhaps possible that some few might have been able to bridge the gap, but for most, the cultural and historical distance would be too great.

Hearing and Understanding

In all cultures, music provides an index of minute differences in form and in feelings. To those who are familiar with a tradition, songs which to an outsider may
sound all exactly alike, display differences which are meaningful and important to them. Consider the vast genre known as country blues. The differences between the singing and playing style of Mance Lipscomb, Lightning Hopkins and Bill Broonzy are immense if you know their music and yet perhaps indistinguishable if you do not. In the same way, each of the particular Blues of these musicians is also meaningfully different from the others. Even for those people who say they have no knowledge of music, distinguishing differences between one song and another are important enough that they are able to select preferences based on their response to them. Even for those who are not specialists in music, there is a vast index of sensitive responses to differences in music with which we are already familiar. It is quite possible that these differences of form, rhythm and mood may, by enriching our emotional vocabulary, influence the way we talk and even think. In this way, music may play an important role in “civilizing” us.

Performers and Listeners

In music, communication between composer or performer and listener may come with difficulty as the result of a conscious attempt by the composer or performer to modify the context with each new performance or composition by expecting increased familiarity with the style and requiring deeper concentration for fuller perception of what the creator has attempted. For communication to take place under such conditions there must have been a supporting cultural context in which pre-existing aesthetic parameters have been defined in order that they either now be followed or redefined. The cultural context will define not only the basic aesthetic system to which changes and redefinitions can be superimposed but must also define the degree of expected deviance which can be tolerated.

While we can always be certain that music has been heard - that is that sound waves have actually reached the ear drums - we cannot ever be certain that the sounds thus heard are having any immediate or postponed affect on the listener. We cannot be certain about how much of the sound has been perceived or how much of the signal might have reached the level of consciousness. The signal can be clearly heard and perceived but the “message” may remain opaque. The nature and degree of distinction between signal and message in music is one of the most perplexing questions and one which remains virtually impossible to satisfactorily unravel.

Although we have no means of measuring is communicated when listening to music, we know that communication takes place. Some folks may go to concerts just to be seen there and because it is a cool thing to do. Most, however, go to hear the music and thus whatever drives this social activity is in the music itself. The external behavior verifies what we cannot yet measure.

If we can observe that individuals respond when exposed to selected kinds of
music, one of the conditions we can predict is that no positive response to a music can occur without a preexistent cultural context which defines the experience for the listener. This does not mean that only music from one’s own culture can be appreciated. For the experience to be a positive one, the listener must be predisposed to regard what he is hearing as something which falls within the realm of what he defines as music or at the least something he defines a pleasant sound it before what he hears can interest him. A listener who comes with a cultural context radically different from the one in which the music was first created would predictably respond negatively. However, much will depend on the degree of distinctiveness and remoteness of each culture from the other. How far must the listener stretch to make “sense” out of the music he hears. How much does his cultural predisposition to what he has heard even allow him to wish to stretch toward acceptance of it. For any music for which someone declares that he finds in it great significance, some other could be found to declare that it was all just so much noise.

The old 19th century saw about music being a universal language was based narrowly upon the presupposition that the Fine Art Music of Western Europe was, or perhaps could when presented in its ideal form, be indeed, universally accepted as superior to all others. Such aesthetic “imperialism”, sad to say, has many proponents even today and although not limited exclusively to the West, there are, however, many there. To believe that that which what one loves and believes to be beautiful must truly be so is a predictable human predilection and is something which can be found noted in almost any culture group world which has come in contact with another one. Such an attitude is understandable as an example of the manner in which one culture defines out of consideration all that which lies beyond its own parameters. The idea that (Western European) music can be a universal language may be in itself a definition of music as expressed in one culture but it does nothing at all to define the relationship of music to culture in the larger sense.

Musical Values as Culturally Defined

Rationally, it seems clear that value and meaning, whatever we decide that that may mean, must be defined within the parameters of the culture about which we are speaking. Whatever inherent meaning may be attributed to a particular music composition or performance is defined by and thus can only be examined within the context of that culture. Is there anything inherently meaningful or great about Mozart’s Symphony No. 40, K. 550 which makes it great in and of itself? Western musicians would argue that this must be so. But that greatness, must be defined as great by the tenets of the tradition of the period in which it was composed. Mozart was a product of his time and created music within the context of his own unique experiences and understanding. We accept the greatness of the symphony because
we are a part of that tradition subscribe to the cultural tenets of the 18th century, as we now understand them and through all of the additional layers of value and experience which have been superimposed on it since then.

Can there be a reasonable basis by which this particular symphony of Mozart can be in some absolute way a “better” example of music, say, than the composition Senshuraku of the Japanese Court repertoire, or than the Irak Ayin composed by Dede Efendi of the classical Turkish Mevlevi repertory. Each of these works is considered great in the context of the aesthetics of the particular time and place in which it was created and by those who adhere to those traditions, even today. Each continues to be considered great by many because the cultural context supporting those aesthetics has been transmitted and has survived. Each of these particular compositions is also considered, within the context of the culture, to be better, more successful, more beautiful, whatever value definition might be applied, than many others in the same tradition. But what happens when we try to compare then across cultures. A hard adherence to cultural relativism would mean that these works that are consider to be masterpieces in their own cultural context can have no meaning outside that cultural context and in another in which the aesthetic tradition is different. Do we believe that what is beautiful is the result of a culture which defines it so or do we believe that some things are naturally and innately more beautiful than others.

At this point it is important to clarify that this belaboring of the concept of a basic cultural relativism is justified and indeed necessary because it is possible to think of this in both ways. A masterpiece by a composer like Mozart, for example, is both something which is a great musical expression in and of itself and also is defined only by the principles of that culture. The difference hinges on whether one focuses on the idea that what is beautiful is the result of a culture which defines it so or whether we focus on the observation that some things are naturally and innately more beautiful than others. But can we really have it both ways?

There are factors, such as a high level of congruence and cohesiveness in the form and structure of certain compositions, or even in the works of certain musicians and composers over others which help to explain why they are more highly regarded in their own musical culture than others. In many musical traditions there are some efforts which because of care, skill and sometimes chance seem to work better and are more lasting than others. Since we find this to be the case in many isolated cultures of the world then it might follow that at some level it should be possible to appreciate values across the barriers of different cultures. Culture as a determinant of perception and thus a definer of the parameters of values is, however, so strong a factor that it is only with great effort and a willingness to be retrained that this sort of traversal can ever take place. Excellence where it is a value to be sought after in the culture is something which, in these cultures is recognized and acclaimed.
Choice, Preference and Cultural Perimeters

Hitting it on mark when we enter from outside the culture can possibly occur when we have had the opportunity and desire to absorb some of the elements of that culture, or when valued elements in two cultures are found to overlap. Although this seems to be a definite possibility from time to time, there is always the greater danger that we are forcing our own value system on a culture where it is not appropriate to the culture. Ideally, Mozart or Shakespeare are great examples of Western culture, but may have little meaning for those outside that culture. We may wish to strive to understand for ourselves what this greatness that so many have accepted might be.

It may be difficult for some to think of those works of music which they consider great to have been the result of collective cultural processes rather than as simply great in and of themselves. Yet the ability to appreciate the greatness of these works comes about through gradual inculcation and training and that usually considerable training was also required for the composer to be able reach a level of skill as well as experience and judgment which enabled him to create the work. Both of these processes are part of the manner in which cultural traditions are transmitted and neither the composer nor the listener could have existed without them. However, to recognize that Mozart was a product as well as a reaction to an age is not to say that it was inevitable that the 18th century should have produced him or a genius like him. He was a unique individual, a result of a combination of unique individual abilities and experiences borne out of the context of the times in which he lived. The cultural tradition and the period set the context through which each individual must then find his own way.

Just as the aggregate of experiences in our own culture tends to define what we tolerate as predictable and acceptable, it also defines the limits of surprise and deviance we can assimilate. The delicate balance between the comfortable acceptance of the familiar and periodic incursion into new territory is differently defined by each individual. How long each of us will remain with the familiar before moving away or dropping off to sleep is a very personal matter and the need to vary one’s fare may in itself vary considerably between one person and another and even from one point in time to another for any one individual.

One can imagine, for example, immersing himself deeply into the world of the Beethoven Op. 59 middle period String Quartets so thoroughly and for such a long period of time that listening to Op. 131 could come as great but perhaps startlingly refreshing change. The degree to which then listening to the music of Karlheinz Stockhausen, or perhaps even Hausa gurumi music from Nigeria, would affect the same listener, and whether that response would be one of rejection or welcome change, might depend on a great number of factors but would certainly be affected both by the length of time spent with the Op. 59, then exclusivity with which those works were heard, as well as the degree of previous familiarity with either
Stockhausen or Hausa music.

The degree of previous exposure has everything to do with how that particular composition, form or type of music is received. The significant variable is the intensity and duration of any previous familiarity. It is most likely the nature and degree of this prior exposure which defines for each of us the boundaries of stylistic familiarity beyond which that which is new and different will be perceived as related or new and thus, by extension, more readily accepted or rejected.

**Balancing the Familiar with the New**

The potential for acceptance or rejection of music heard is bound to a host of other factors, physical and psychological and will affect concentration, receptivity and attitude. These, in turn, have a controlling effect on the listener and as such do much toward predisposing him in one direction or another. That a newly heard music might be defined as falling within the parameters of what should be acceptable does not guarantee that it will be accepted. It is also possible to have a situation in which all conditions of receptivity, concentration and attitude are at the optimum levels, but in which cultural conditioning will mitigate against the listener’s acceptance of what he is hearing. A group of people looking forward to an evening performance of Heavy Metal would not likely be receptive if in its place there were to be an evening of string quartet music, or vice-versa.

Considerable economic pressure is exerted on us during the routine of our daily lives in order to make us aware that the ideal of modern, and especially, urban humans should be constant consumption of whatever is new. The focus is on seeking variety and regarding this variety as a necessary and almost vital element in our lives. We are continually besieged with advice to seek change and to replace the old and familiar with the new and one hopes, the improved. Variety has become an important element in many of the world’s societies but it may not be, in fact, as necessary as it has been presented to us. There is an old Turkish saying which goes, “the bear knows two hundred songs, all of them about honey”, a jibe at both the natural tendency to pursue the familiar and the foolishness of the dogged pursuit of the familiar. Yet on the other hand, the Shona people of Zimbabwe have a saying which goes, “If a man eats the same food every day, he knows what it was that killed him.” What is too rich and varied a diet for one may be monotonous to another, yet sanity would suggest a balance between stability and a moderate degree of variation. But there can be no agreement on what constitutes stability or variety.

If one enters deeply into the formal and structural world of the Beethoven Op. 59 Quartets, one finds almost endless variety and depth. The more one listens, the more subtle treasures one can discover. There are numerous such repertoires and have been across time and around the world which have this same qualities to offer
increasing fascination the deeper one delves. The Repertoire of the Imperial Court Musicians of Japan, for example, consists of over one hundred different compositions. These compositions are all set in a very similar formal texture and performance style, so similar, in fact, that to most inexperienced listeners it is almost impossible to detect the difference between one composition and another. Yet if one has the patience to listen closely and carefully and to become thoroughly familiar with the basic style of the music so much that he can begin to distinguish the subtleties of form and melodic style of each piece, then gradually each composition begins to reveal its own clear character and unique subtleties.

This was neatly expressed by Colin McPhee in his book, A House in Bali, when he said that the individual compositions of the Gamelan music of Bali were like leaves on a tree. All are alike and yet no two are identical. Clearly, to appreciate the intended purpose of either Balinese Gamelan music, the Imperial Court Music of Japan, or the middle period Beethoven quartets, a more highly powered perceptual microscope will increase the level of awareness which the listener can bring to the task. Without it or the willingness to try to see more closely the entire body will seem gray and uniform. Repeated listening to a music will heighten familiarity and thus better allow the perception of nuances and of multiple layers of structure. This familiarity also constitutes a framework against which new musical experiences can be measured.

We perceive the contours and characteristic elements of a musical style only as the result of concentrated and focused listening, but it is not always necessary that positive and conscious effort at gaining familiarity be an absolute requirement. Each of us carries about in his consciousness his own musical culture, those musical structures, experiences and associations which together constitute for each of us a unique and inimitable pattern of musical preferences. No two such individual patterns of music preference can be found identical any more than could two sets of fingerprints or voiceprint patterns. And yet, if we could each examine our own particular musical culture, we might be very surprised to learn what manner of layers and mazes of sound structures we are carrying about with us in our heads throughout the days and years of our lives which wait only for a certain stimulus to be again recalled into our consciousness. Our individual music culture is certainly more complex and is larger than we usually imagine it to be.

**Likes and Dislikes as a Part of Culture Pattern**

Our own pattern of personal preferences constitutes a personal value system. It then follows that such a system must contain referents from which new experiences can be tested. We must carry referents around which let us know when something takes us too far from our familiar ground and referents which help us identify sound
structures for which we have negative associations. We all have in our minds, the sound image of musics which we do not enjoy, which bore us, which may make us laugh, and perhaps even a few about which we can say with genuine relish that we hate!

A rather peculiar situation arises when we recall associations with extra-musical experiences which distress us so much that we feel animosity or even violence towards that music. Although, in reality, the music is only an inanimate pattern of consciously controlled vibrating sound waves, we can react to some of these patterns very strongly, because they represent a set of feelings which we understand to be communicated and these we wish to reject. Worse yet, we may even begin to feel animosity towards those individuals responsible for the creation of this music.

In order to have an effective value system such a system must contain both negative as well as positive referents. Although the development of negative referents in our individual musical cultures may be a result of the regularly occurring changes in our patterns of preference - excessive familiarity may bring us to a point of disliking some musics which earlier had appealed to us - some negative referents in our personal value systems must have always been perceived negatively. Such negatively perceived musics were those which, even at first hearing, were perceived as falling outside our already well established value system.

Many such referent may have come about as the result of negative extra-musical associations remember in connection with the particular context under which one last heard such music. For example, there are many who abhor the musical language and style employed by MUZAK, the producers of “canned music”. This is a commercially packaged and transmitted form of background music used in different public places, such as supermarkets, or some larger stores and offices. MUZAK is produced in order to create a “pleasant” sound in the background. The melodies are distinguishable, but generally with few distinguishing performance qualities. In modern Japan many stores, large and small, have a single piece of music associated with that store, played endlessly again and again. The sound blends into the background in order that the listeners do not have to concentrate on listening to it so that they can do whatever it is they have entered those premises to do. Some may find canned music unacceptable because it falls beyond their own limits of a good musical performance. Yet for others, recalling the sound of such music playing softly in the background of their dentist’s waiting room may be quite enough for them to decide that, given a choice, they would prefer never to listen to this music in any context. Since the pattern of development taken in each individual’s own musical value system must be a reflection of, and a response to, all of his musical experiences, this pattern, to the degree that it can be made perceivable to any other, often appears illogical or unusual to anyone else.
Culture shock is something which is experienced when we find ourselves immersed in a new cultural environment and it is the sense of loss and confusion that the individual feels when finding himself or herself in a place where everything is different. We usually think of culture shock as occurring when one travels to a distant culture where a different language is spoken. However, some degree of culture shock occurs even for Americans who spend time in Great Britain or in Australia for example. Everything is familiar and the language is understandable, but even the language is different enough that after a time a feeling of discomfort or confusion and disorientation takes place. Something like this can occur when we find ourselves exposed to or immersed in musics with which we are unfamiliar. Sufficient exposure will get us past the shock and we may never be conscious of having experienced a sense of disorientation. However, gradually exposure to new and different kinds of music may in some way also change what we feel about musics that we had enjoyed previously, which is one of the classic ways in which culture shock often works. We sense it more keenly upon our return to that environment which we assumed was static and familiar.

Cultural differences are not always the obvious ones. There is a great cultural difference between having a musician up on the stage and separated from the audience from the performing musicians being mixed in and scattered within the group. There is a difference in the culture when musicians are not given a special name but are members of the group who perform when it is required. There is a difference when musicians are paid professionals, when they come only from certain hereditary families and when musicians are amateurs who devote the free time to playing music and these are different from cultures in which everyone in the group is expected to participate in the performance.

Think about how different it is for a Western classical musician to practice for years on his instrument until he is good enough to join and orchestra and even then when there is a difficult composition to play, taking the music home and practicing his part alone. An African drummer would never imagine taking his part and practicing it alone without the other instruments. What has to be mastered is getting the one part together with all the others and the idea of doing it alone simply doesn’t fit it the culture. Think about the traditional audience for Indian classical music. Here, the audience understands that it has a responsibility to understand and follow the technical intricacies of the performance. Everyone is the audience may not be able to do this, but it is the ideal for which most Indian concert goers strive, something very different from going and simply enjoying the music.

**Shared Culture and Agreement**

Individuals who live in the same cultural context will share many more
common or similar referents and thus find themselves in frequent agreement on a
great many musical experiences. These shared values are what we consider to be our
common cultural heritage. During the past 50 years an intensification of the
educational patterns and cultural experiences similar to those of the West have made
the number of shared personal cultural values of many people in Japan and Korea,
and more recently China, similar to our own. Japanese and Koreans of today have
developed a love for Mozart and Beethoven which is both sincere and profound in
spite of the fact that it is only relatively recent in its development there. With the
gradual Westernization which has exerted a growing influence in scientific and
technological education in those countries for over one hundred years now, that
Western music should also have been introduced should come as no great surprise.
Nonetheless there are vigorous segments in each of these societies which remain
loyal to their older traditions and many individuals in those societies who do not
regard the adoption of the new musical culture as an unquestionably superior choice.

While it seems that in every culture there is a recognition that certain musical
performances or compositions seem to “work” better than others and that in many
cultures there is some value placed on the degree of congruence which is manifested
in certain works, these values and the judgments which result from them, are defined
entirely within the context of each culture. Concentrated effort may allow us to gain
insight into and appreciation of the values manifested in the musics from other
cultures, even some which are culturally very removed from our own. Yet, there is
nothing inherently better, more valuable, in the sound structures we refer to as
Beethoven’s Op. 59 Quartets than there is in the music of Beethoven’s South Indian
contemporary, Thyagaraja, or in the Navaho Yeibechai “night” songs. Each has
developed out of the particular cultural and historical context of the society in which
it developed and was guided and molded by the common perceptions held by the
members of that group. That set of shared personal value systems held by each
individual in the group created in each culture a support system which patterned the
development of the style, defined its role and thus also pointed out the path which
even the most original of its innovators were by default required to follow.

**Cultural Relativism – Cultural Development**

Is cultural relativism, viewing each culture on the basis of its own value system,
a good thing to do? Are there cultural practices which are simply not good by virtue
of some absolute standard or do we allow each to be judged on its own. In matters of
the arts, it is important to note that these systems arising as they do out of historical
traditions are basically arbitrary. Our very strong opinions about what is good and
beautiful are based on what we are already accustomed to. Probably many people
today are accustomed to accepting some concept of cultural relativism as logical and
natural. We understand that different people have different ways of doing things and that these people also tend to prefer things other that what we may prefer for ourselves. We must remember that culture is the arbitrary result of all those historical, political, and economic factors which have played upon it. We need to remind ourselves that the use of advanced technology in the service of the arts in the West can serve as no indication that the arts themselves have advanced. Technological changes in the arts are a natural reflection of those options which are currently available within the society. Neither does this detract from the value of the music of the Western world. India also has a great music tradition, one that has developed in ways significantly different from those of the West. It has evolved without, until very recently, the technological developments of the West. In spite of this, Indian music incorporates certain musical practices which are so complex that they are virtually irreplicable in the Western world.

Using Music to Talk about and Describe Music

Until recently, it was most unusual for a music performance to quote another kind of music in the midst of the performance in another style. There are a few rare examples of this and gradually as awareness of other cultures increases, so does this kind of cross cultural quotation. Nonetheless, the practice has remained something noteworthy when it appears and is not used very often.

Mozart in his time was anxious to make wind band versions of his operas in order to sell them quickly before some one else arranged them before him. These popular versions served as another means of reaching a broader audience. In 19th century Europe and America it was a common practice to transcribe operas or works for large concert orchestra, for the piano or for some other medium, in order that the music could be enjoyed by more people than only those who could attend concerts. With today’s easy access to recordings of virtually every kind of music, the need for transcriptions as a means of making music more widely available disappears. Instead, we find that transcriptions are used when one musician wishes to borrow from another and to make something of his own of it and something different from the original. Even so, such adaptations rarely cross over great cultural distances.

Collective attitudes about such borrowings change as well. When Georg Philip Telemann, was musician to the Elector of Silesia, he decided to appropriate the fascinating music of the Polish bagpipers he heard at court. He added adagio movements before and after the pipers’ tunes and called them “Polish sonatas”. But in his day it was not at all considered plagiarism.

In the late 19th century it became an increasingly frequent practice, first by the Russians beginning with Glinka and then by the French, to borrow exotic elements first from the music of Spain and to compose music in this foreign style. By the
early 20th century this practice of borrowing exotic musical elements had begun reaching across great cultural distances. We can have no idea today how successful Telemann may have been in his Polish experiments because the originals have long disappeared, although what survives in Telemann’s music does bear a fascinating resemblance to the precious little Polish bagpipe music which survives today. But then from the High Baroque to the roots of European folk music was not such a great cultural leap.

Although the music of Spain was an exotic element in the culture of Western Europe, nonetheless, the development of Spanish music managed to remain intelligibly close enough to the music of the rest of Europe to allow this borrowing to succeed. The incorporation of more culturally distant musics, beginning with Gustav Mahler’s use of pentatonic scales to suggest Chinese music in Das Lied von der Erde and on through the many adaptations of Asian music in particular in the 20th century suggests that the borrowings occurred with too little understanding of the principles which guided in the creation of the original musics. In fact, however, these were not intended to duplicate the musics of the rest of the world but rather to provide new colors by which to enrich the current tradition. Telemann could not improve on the Polish bagpipers short of playing the music on the bagpipe himself. In the process of attempting to incorporate new elements into the music for the enjoyment of his own audiences, what he and the others did was to create something new based on what must be regarded, from the cultural perspective of the originating culture, as an incomplete understanding of what they were borrowing.

Although this practice is something which occurs with more frequency in the West, is has also occurred in other places as well. The ancient orchestras of the Chinese courts regularly included stylized performances of regional folk music and of the music of the various nations which they regarded as under their sway. This practice continued in the courts of Korea and Japan. In 17th and 18th Century Japan although not with great frequency, in the koto music tradition, elements which imitated the style of other music current at the time, as well as of the court music were incorporated into some compositions. In the Japanese Kabuki theater, entire sections of the performance would be done in the music of other Japanese styles, even to having the musicians from those particular traditions right on the stage for the performance.

The rapidity of change depends on the intensity of overall cultural activity. Fifty years ago when Leopold Stokowski began to present his adaptations of the music of J. S. Bach, the concert going public in America was not yet very familiar with much of this music. To hear the music of Bach played by a large 20th Century orchestra was not considered unusual by many, and likewise Bach played on the piano was a much more frequently encountered medium of performance than the harpsichord. In that context, the music of Bach was somewhat more remote from the
choice, Preference and Cultural Perimeters

population than it is today and therefore, re-orchestrated versions of this music for modern orchestra were greeted as quite logical and appropriate. Even a very few years later when some began to question the validity of such experiments, it was often replied that, “If Bach were alive today he would have written for the large orchestra, piano, etc.”, an answer that was usually intended to settle the question then and there.

From today’s vantage point the change in sophistication of concert goers in the past 50 years seems remarkable. Yet the pace of change in cultural attitudes is increasing ever more rapidly as the systems of communication improve in efficiency. During the mid 1970s it came as something of a shock to learn that a new generation was growing up in America and Europe that looked upon the Beatles as “old, dumb stuff”. By the late 1970s the Beatles had become well established nostalgia and distinct changes in popular music trends were becoming clearly visible every three to four years, depending on how sharply one chooses to define it. Meanwhile there are many who, either because of deliberate choice or by simple virtue of having been born too long before the period of the Beatles and the intense changes which that development brought about in our popular culture, find it difficult to find their way about in that music. Their culture within the larger culture does not provide for the detailed imagery and verbal descriptive mechanisms to enable them to perceive the minute changes in style which are taking place in popular music even within any single year.

But culture, as a reflection of man’s incessant need to communicate with his fellows, must, of necessity, be changing incessantly as well. When communication takes place, then some response must follow and from this response changes can then occur. We perceive cultures further away from us as more static to a degree that it is too simple just to say that cultures other than one’s own are static and unchanging. Certain societies emphasize the age of their music traditions, but these traditions are also constantly changing. They are like matrices by which changes are guided and molded, but so long as communication takes place between people with different experiences, that is, any two people, changes inevitably take place.

At the same time it is clear that the rate of change in a culture can vary greatly in proportion to the degree of communication which takes place. After a long period of time during which the classical music of Western Europe could only be heard by those fortunate enough to be able to attend concerts, or who themselves had studied the music, radio was introduced followed by the production and distribution of records. The pace and scope by which the music was disseminated then increased greatly. Today there is a mass distribution system for making available the same well financed records available all over the world as well as a system for providing broadcasts televised globally by satellite. Audiences at live concerts hear the music transmitted to them from the performers at the speed of sound. Our rapid system of
dissemination is almost near to making it possible to cover the globe at the speed of sound.

Notes
There are numerous cultures thriving in the thousands of islands which make up the Republic of the Philippines. In addition to the Hispanic cultures of the lowland areas of the Tagalog and Ilocano peoples of the Northern region and cultures of the central Visayas, there are numerous indigenous peoples living in communal societies throughout the islands and a large group of Muslim peoples living in the Southern Islands of the Sulus and on the island of Mindanao. Textiles, like music, serve as an identifying element of cultural expression. The three upper examples are from neighboring groups living close to each other in the Mountain Province of Northern Luzon. Although all use similar instruments for their gong ensembles, each group has its own unique gong patterns, and also a unique textile pattern. In the far South, the Bagobo people have a different style and pattern. Notice the contrast with the more highly stratified society of the Muslim Marano peoples of Mindanao.
Playing Cards

*Cultural Continuity and Originality in Playing Card Design*

Playing cards offer a fascinating look at how continuity and change interact in the process of transmission. Although the oldest origins of playing cards is unclear, there is a clear thread at least from ancient Persia and the Middle East to the West through the intermediate Tarot cards to the Modern playing cards. We can trace a continuous tradition from the Mameluke cards which exemplify some ancient Middle Eastern type introduced either into Italy or Spain. In Spain the naipes evolved from the Arabic, naibi, retaining the suits of cups, coins, clubs and swords. These eventually became the clubs, spades, hearts and diamonds of the French and later English style which are akin to modern playing cards. A distinctive variant of the European cards evolved in Germany with the skat cards using suits of acorns, hearts, leaves and bells. The Portuguese introduced playing cards into Japan which they evolved into the karuta, or hanafuda. In each case certain functional elements had to be retained, in order to play the established games, which themselves evolved as well. Matters of color, design, and ornamentation were left to the inspiration of local cultural tradition which they reflected. The Japanese set is, not surprisingly, the most different in structure for the others. All the others have four suits or some kind where as the Japanese set has 12 suits of four cards each. The development of card design shows both continuity and local cultural influence as well as some degree of anonymous individual creativity, a good parallel to what also happens in music.
Cultural Contact and the Dissemination of Music

The most of the first things we learn occur during infancy and are the result of contact with adults and the environment around us. Humans learn at an amazing rate during the earliest years of childhood without being aware of nor remembering the ways in which we learned nor the sources from which we learned. We learn from hearing, touching smelling and feeling. We are and have been since infancy bombarded by experiences from which we learn. We weave our way through this variety of stimuli by selecting and ignoring.

Our preferences change. Sometimes the first time we experience something we do not like it but familiarity and positive associations may gradually change this. We are constantly experiencing new things, evaluating them, selecting them and revising our selections. This happens to us as individuals and the same thing can be observed as we watch entire cultures come into contact with each other. Every time we come into contact with others we are exposed to different ideas and different ways of doing things. Some of these new things are agreeable to us and thus we change.

Learning and Borrowing

First Contacts with New Cultures

Our cultural contacts expand almost like our circles of friends. As children we begin within our families. Through our families or in our neighborhood we may begin to make friends outside the family. When we go to school we meet new people, learn new things and make new friends. Each level of school takes into circles of possible friendships which are further steps away from our families.

If you think about it, it is natural that much the same happens with whole cultures. The people living in one village are prone to knowing the people in the next village over better than they do those who live at a greater distance. Proximate villages may be bound by common culture and language. They understand each other because they are similar. What if one village is in the lowlands, near the river and the other in the hills within the forests? One village survives by fishing and farming, the other by a different kind of farming together with hunting. They are different but come together for exchange or barter of goods and thus also learn from each other.
Learning from the Familiar

This process of borrowing and adapting as the result of personal and cultural contact happens so often that we take it for granted and usually do not even think about it. We become so accustomed to practices and ideas around us that we do not think of their origins. What we do and what we are accustomed to seems very natural. What is at a distance we see as more unusual and we group those things together as more or less all the same in proportion to their distance from us.

For most Westerners, it is easy to think of the Far East as a place where most people eat with what we call “chopsticks”. It is also easy to think of the cultures as all very similar culturally, beginning with the fact that they all eat with “chopsticks”. However, we do not think very often about the fact that all Europeans eat with knives and forks, nor that it was only at the time of the arrival of Catherine de Medici from Italy in the 16th Century that the use of the fork and fine cuisine was introduced into France. We most often associate the high art of European cuisine as something from France, but its Italian roots and the fact that it only really developed from the 16th century onward, very recent times in terms of the history of the Far East, are matters that we do not often think about.

The process by which music is diffused is simple. Someone likes what he or she hears and wants to make something like it. We quickly however, get into all kinds of subtle complications. The one who hears it can not quite hear it the same way as the one who created it. The context is now changed, either because the memory of the initial hearing left things out, or because at the time the listener was already filtering out that which did not make sense from his own cultural perspective.

Let us imagine a scenario like this. A person from a country town in the mid 18th Century makes a visit to a big city let us say Prague or Vienna. He is there invited to a ball where he hears exciting new dances and music. We will assume that he is predisposed to like this new music and dance because they are presented in the context of the glory and glitter of the modern urban setting. He later returns to his village and plays the tune for friends and tries to get the local musicians to play it. There are of course no phonograph recordings yet and none of the village musicians has ever been to the big city. They understand the tune and think that they understand the instructions for playing it, but it will naturally become transformed into something closer to the already extant repertoire of the local musicians. The original has been transmitted and transformed.

The most frequently exchanges between cultures occur when peoples borrow from their closest neighbors, often in a process that has gone on so long that both borrower and borrowee are not aware of who borrowed from whom. Another kind of cultural exchange occurs when the borrowers are conscious of the place and the people from which they have borrowed something. This happens very often in
Five different examples of harps, all of which are related. The harps of ancient Egypt and Mesopotamia spread to the east and then back to Europe. The first two harps shown here are from Mexico and Venezuela both owe their origin to the old harps of Spain. The harp from the Philippines is the result of cultural and political contact between Mexico and the Philippines during the time that they were both colonies of Spain.

Fig. 14  The harp was introduced to the indigenous populations of Mexico by Jesuit monks. Zinacantan, Chiapas, Mexico. 1963.

Fig. 15  In the states of Aragua and Miranda in Northern Venezuela, another form of the Spanish harp survives.
Fig.16 An example of cultural diffusion. The old Spanish harp survives in the Northern Philippines, probably introduced through contact with Mexico. (Paoay City, Ilocos Norte, Philippines 1966)

Fig.17 The Turkish cheng was for long periods popular in the Ottoman Courts as it was in Persia but gradually disappeared probably as the result of changes in musical style.

Fig.18 The only surviving harp in the Far East is the elegant saung gauk of Burma (Myanmar). It was related to a number of such harps once popular in India, China, Korea and even Japan.
music. Among the Muslim cultures of Mindanao, both the Maranao and Maguindanao people have a rhythmic and melodic pattern which they call sinulug, which means that it is in the style of the Muslim people of the Sulu Islands. Although sinulug, sinu’ug as it is called in the Sulus, is a little different on Mindanao, the similarity is clear and the generic connection between the different versions is unmistakable.

The manner in which the ancient Chinese at first began collecting the songs from outlying provinces as symbols of their suzerainty and then from foreign neighbors is another example. The existed the belief that if a person’s song, or a groups song was received that the receiver then had some control over the giver. What began as a system of collecting songs from all over China expended to include the collection of songs and dances for all the countries surrounding China, also as a means of showing Chinese dominance over their neighbors. Gradually, the Chinese began to enjoy these foreign musics so much so that by the time of the T’ang dynasty (6th-9thC. AD), Chinese had become very fond of Indian and Persian art and music and these were particularly popular at court and had an influence on the development of music and the other arts at that time.

In the Ottoman Empire of Turkey there was a vast repertoire of compositions played at court and in the homes of the upper classes and this practice has survived long after the abolishment of the Ottoman Sultanates. Within the vast Turkish classical music repertoire of some 5,000 composition, there are a great number of compositions by Armenian, Romanian, Greek, Jewish and Gypsy composers. These compositions by non Turks, however, are in the Turkish style and are appreciated as Turkish music. There are two forms, however, which are thought of and enjoyed as foreign. These are the sirto, which is Greek in origin and the longa which is thought to be Romanian in origin. The Ottoman repertoire is thus both eclectic and in the case of the sirto and longa, consciously so.

**Change and the Process of Dissemination**

Change is a natural and recurring process in all cultures. The pace of change and what causes it and effects it may vary. Some cultures may appear to us to be quite static and others appear to be changing at a rapid pace, but all are changing steadily and continually. Some of the broad patterns of cultural change we can observe are the results of innovation, by chance or deliberate creation, the diffusion of ideas from one individual to another or from one culture to another, cultural loss and forgetting, and forced change processes, such as acculturation and directed change.
The Guitar as a Metaphor for Change and Retention Diasporas

The Guitar in the US

We have become so familiar with the sound of the electric guitar in modern popular music that it is a surprise to recall that the idea of electrically amplifying the jazz or blues guitar did not occur to anyone until shortly before W.W.II. Black country blues singers had been using the guitar in a manner which combined both the picking out of melody, sometimes sliding a small piece of bottle neck attached to one finger for a more fluid melody, while interspersing it with harmonic ground accompaniment. Jazz musicians were not often expected to use the guitar to play melody and usually played only harmony.

The blues singer, T-Bone Walker, who came to be associated with the West coast style of blues, was one of the first to use electric amplification for his guitar. In essence he simply attached a pickup mike to the guitar and thus amplified the sound, making his instrument louder than it sounded before. The West Coast blues style, growing as it did out of Black country blues style, already had the melodic element there which now stood out much more clearly with amplification.

For Jazz, the possibilities of electric amplification brought a greater change to the style. Charlie Christian playing with the Benny Goodman band, was able to profoundly effect the development of the Jazz guitar style. The electrically amplified guitar allowed it to speak in a clearer and stronger voice than before, to contribute to the overall ensemble in a way that previously only the wind instruments could do. It also added a new sound quality to the group, one which heretofore had never been heard.

The first electric guitars were simply ordinary guitars to which a small “pickup” microphone was attached and then connected to an amplifier. It took a surprisingly long period of evolution, it seems, for the realization that the traditional acoustic body of the guitar served no viable purpose since the amplification system replaced all of the acoustic function of the guitar body. Eventually the flat guitar shell with electrical controls and connections built in became standard. Jazz guitarists, however, because they do not play at extremely high volume levels still prefer the electrically amplified guitar which retains some degree of hollow body. Meanwhile, the electric guitar used by rock bands seems to be constantly going through a process of regular modification and addition of new sound producing effects.

The development and availability of easily accessible electronic amplification systems had an important affect on the role which the guitar was to take in the unfolding of popular music in the West. While a similar series of events also affected the piano, it was the guitar which assumed primary importance as a definer of the sound of the new music and as its symbol. While not all rock musicians openly recognize their debt to the old country blues musicians, it is undeniable that the playing and singing of such as Muddy Waters, Chuck Berry, Lightning Hopkins and Howling Wolf are the ultimate source of this music, along with borrowing of stylistic elements from the later generation urban blues musicians.

Large movements of groups of people over time also entail great potential for cultural diffusion. The great waves of immigration into the United States are in great measure what have made the country unique. Underlying the popular culture, a
number of strong cultural traditions survive among the immigrants who in other respects share the common American culture. For example, there are some 500,000 Ukrainian Americans living in the New York metropolitan area alone, not to mention those in the mid-west and far west. Among them the study of the Ukrainian language and culture is considered very important even for third and fourth generation American Ukrainians. The performance of traditional Ukrainian music is very strong among them. Similar examples could be drawn for the Puerto Rican Americans, Chinese-Americans, Polish Americans, Polynesian Americans, Basque Americans, Korean Americans, etc. Under the surface of McDonalds, TV Soaps and MTV there flourishes a rich diversity of cultural traditions in the United States, that are the result of the years and years of open immigration policy and even and in spite of official attempts to stem the tide of these migrations.

One of the strongest cultural influences in the United States has been the influence of Africa on America through the importation of slaves during its early history. Slaves and former slaves saw the performance of music as an opportunity for even limited mobility and along with it and in great measure because of it, were able to implant new African musical concepts into our music. Many Americans are now accustomed to thinking of these forms as All-American to such a degree that African roots are often overlooked. The development of Ragtime, then Jazz and later rhythm and blues which gave rise to Rock and Soul were all in origin and in aesthetic principle, basically African. Certainly non African Americans have made great contributions to all of these genres of music, often so much that they became separated from their Black originators. Nevertheless, the popular forms of music of the United States today, from Rhythm and Blues, to Rock, Rap and Hip-Hop all owe their existence to the persistence of African Americans in retaining and transmitting elements of African music to the new world, often under extremely adverse conditions.

Many diasporas have occurred and been historically documented. The travels of the Jews throughout Europe have continued to mean a diffusion of cultures and cultural influences, often stemming mostly from the last place of their residence. Likewise the movement of the Roma, or Gypsies since the 13th Century beginning in Eastern Europe and eventually reaching France, Germany, the British Isles and finally Spain have been a case in which they retained among themselves their own traditional culture, but for survival learned the local music, reinterpreted it and became so adept at it that they were often acknowledged as the favorite interpreters of the national music.

**Diffusion and New Creation**

When it comes to culture, nothing remains static, at least not for long. Just as
individuals are continually seeking and being exposed to new stimuli, the aggregate pattern that many individuals share together, their common culture, also changes. The process of this change and its rate, as well as what brings it about, all have important impacts on the delineation and development of music cultures.

Cultural attitudes develop like other aspects of the culture, by a long process of selecting certain elements, new ideas or borrowed concepts, while at the same time rejecting others. The pattern of this development may appear haphazard only because such a great number of seemingly separate factors come into play.

Looking only at the pattern of new creation and the adoption of elements from outside the culture, fails to consider the potential effect of extra-musical events, such as political developments and influences, and this may create the false illusion of isolated chance development. Without recognition of the Ottoman Turkish incursion into Vienna and of the Turkish military bands which came with them, a musicologist working hundreds of years later would have great difficulty in explaining the sudden bizarre appearance of Turkish military music in the works of Michael Haydn, Mozart and Beethoven. By the same token, future musicologists would not be able to understand the appearance in America of a music of such distinctive African origins as Rock during the mid 20th century, if they do not take the history of slavery into account.

The period during which there was a fascination with Turkish military band music in Western European Art music was very short. It did have later an important and determining influence on the development of the Western military band, one which can be noted in the brass band ensembles of even today. What began as a isolated and seemingly unrelated historical event, became, after hundreds of years, a firm cultural bias forming the basis for acceptance and rejection of other concepts.

**Individual Creativity in the Historical Process**

In music, each new step is either taken up or rejected by the audience and by other musicians. But the path taken by music in its progress through history is not entirely predetermined by the changes in the culture. Each individual musician responds differently from every other musician in his own time to that which he is exposed and therefore what he does as a result of this stimulus must be unique. Yet, while it would be impossible except in abstract theory for an 18th century central European musician to independently hit upon a Chinese musical idea, there are such infinite possibilities for individual reactions, it is equally inconceivable that any two musicians could ever come up with the same solution either.

In some ways these differences may be accounted for if all possibilities are carefully examined and considered. However, most of what we regard as unique in music is the result of such complex chains of influences and reactions and conscious
and unconscious modifications that they are impossible to unravel. Let us consider the early 19th century Viennese composer, Franz Schubert. We know of Schubert’s respect for the music of Mozart and Beethoven and thus, indirectly through them of the potential indirect influence of Haydn on Schubert. In Schubert’s music it is not difficult to find those elements shared in common with the music of Beethoven and of Mozart. It is also possible to hear in Schubert the pattern of his own background, his trials, his ambitions, the tragedy of his frustrations and at the same time the reflection of his own particular corner of the world and of the times in which he lived. Yet all of these elements together do not reconstruct the uniqueness of what constitutes Schubert. Schubert was the result and product of all of those things which were the culture of his times, but at the same time, his own individual creativity took all of those elements and influences and made a unique and personal statement in his music. Thus Schubert is both a product of his times and a solitary and unique individual.

Just as a complex set of influences and events created the musical style we associate with the name of Schubert, so too does a complex set of factors, events and influences determine how we will react each time we hear Schubert. In this way the process of change in any culture takes place. Thus far, there is nothing new about this. However, something different is beginning to take place in the global process of change which suggests a new parameter to the seemingly never ending process which cultures have endured.

**Cultural Adoption, Change and Diffusion**

The way we remember things, unless our memory is refreshed by being reintroduced to the original stimulus, is the way it is going to stay. We have all had the experience of remembering something clearly and then being reminded by someone or something else that it was not quite that way. Sometimes we even resist the idea that we could have been wrong. In the process of cultural transmission, this sort of thing happens all the time.

In the process of trying to understand each other, we often get things wrong. Sometimes these changes in transmission stay that way and the cultural process moves in that direction. These are not mistakes, but just part of the long process of change. Let’s look at a cross cultural example of how this happens. During the 1940s there was a film with Bing Crosby, called “Going My Way”. The song in film, and indeed, the spirit of the film was, “this is where I’m going and would you like to come along with me?” During the 50s, the film “Going My Way” was somewhat popular in Japan. Following the post war Japanese custom of taking a phrase in English and using it as a kind of motto, it was popular for a while to use the English phrase, “Going My Way”, in the course of a conversation in Japanese,
however, the phrase was now used as a statement instead of a question and so the meaning changed to become, and this was the general Japanese understanding of it, *I’m just going my own way, alone.*”, which is something very different from the original intent of the both the song and the entire film as well. Rather than being simply a misunderstanding, this might be better thought of as another example in the process of cultural change.

Teachers often play a great role in cultural change. In an attempt to clarify and simplify things, the original is gradually replaced by a clear working and easily explainable model of it. This often happens in the tradition of music theory. It also happens in many cultures as part of the transmission of playing techniques. Ornamentation techniques or other aspects of performance, breathing and posture, for example, become codified to such a degree that the new simplified and clarified form becomes the norm and the original, perhaps, freely improvised or stylized form becomes lost.

Forgetting is another aspect, often of the same teaching process. In recent historical times, entire languages have been lost forever, because the only speakers of these languages have died without the opportunity of teaching any others to speak the language. In this same musical practices and entire traditions die away regularly. Family traditions of the performance of certain kinds of music disappear when the last members of the family die without passing on the tradition. Often in the process of passing on the tradition any number of slips can occur. In the course of teaching certain parts of the tradition are forgotten, or the student goes off before having learned all there was to learn, or as often happens, the teacher dies before getting teaching the remaining part of the tradition, sometimes a secret part that is saved for final transmission. In India, in the strict and careful process of transmission from master musician to pupil, as the student leaned more and more, that student gradually came to be regarded as a disciple. Nevertheless, the teacher would retain certain “secrets” about the tradition until on his or her deathbed, at which time they would be transmitted to the disciple. Many such masters have died, however, either suddenly or far from the presence of the disciple and thus these secrets are lost forever. But such loss is part of the natural process of change.

Political and economic control and influence also play a great role is forcing the acculturation of all those cultures within its sway to the practices of the dominant culture. The forced imposition of Spanish on all of the native peoples of Latin America by the Spanish Conquerors also brought with it the forced assimilation of many forms of Spanish music creating the blend of Spanish, Indigenous and African elements which we know today as the many varied forms of Latin music.

In the Far East, China has for centuries been the dominant cultural force, both because of its political power and because of the prestige associated with its political dominance. In very recent times, however, the rapid economic development of Japan
since World War II, has made some forms of Japanese popular music function as a model for the new and modern in other Asian countries because of the attractiveness of the economic prestige of Japan.

Political forces can require change to take certain directions. The effect of slave policy in the United States on the transmission and retention of African music traditions is one clear example. Another is the strictly controlled and governmentally endorsed policy of national musical styles during the years of socialism in Eastern Europe and the former Soviet Union. These are cases in which a policy was put into effect expressly for the purpose of controlling and influencing musical culture.

Asian and European Origins and the Lute

What happened to the guitar in America after it became electrified is something which is happening now and the changes can be noticed right in our own times. But let us think for a bit about how the guitar go to be a part of our popular culture. Although plucked lutes, like the guitar are, in various forms, very popular throughout the world, they seem to have had only one or two different origins and all variants have stemmed from those. The origins seem to go back to the ancient world of many hundreds of years ago.

The change in musical style which took place between the Renaissance which basically ends in the late 16th Century and the Baroque period which begins in the early 17th Century, is a parallel to the change in own times between the influence of Jazz and of Rock in the evolution of Western popular music. The Renaissance counterpart and predecessor of the guitar was the lute. The lute actually became established in Europe during the middle ages. The instrument originated in Persia and spread both eastwards to China and eventually to Japan, where in both countries it still survives, and to the West. The lute was taken by the Arabs and spread with Islam. By this means it reached Spain and eventually to the rest of Europe.

We have only the sketchiest idea of how the instrument might really have been played in those early times. Unlike the present-day Western tradition, notation was in those times, primarily as a simple memory aid. In fact, notation continues to be used in this way in many of the other cultures of the world which do possess a notation system. The notation is often only a mere sketch or outline with the player being expected to remember the details. The notation which survive from the Middle Ages basically gives only the melody line and yet descriptions from the time tell us of great speed and virtuosity among lute players of the middle ages. Clearly the notation which survives is not telling us much about how they might have played.

We can only piece together by conjecture and drawn from the parallel evidence of other surviving music traditions from the same period and from what we know of the playing method of other lute-like instruments in other parts of the world. On this basis we can make some assumptions about the probable playing technique of the
lute in the Middle Ages. It was essentially a melody playing instrument with the melody usually plucked out on the higher pitched strings. The lower strings were employed as rhythmic drones to alternate with and support the melodic line. The contemporary ud of the Arabic speaking world, the historical predecessor of the European lute, makes use of this same technique, albeit in a very distinct musical language. In essence, the style and fundamental technique used for playing the Chinese p’i-p’a and the Japanese biwa, the contemporary easternmost counterparts of the lute, is the same.

The basic lute-like instrument type, exemplified by the Renaissance lute, the Middle Eastern ud, the Chinese pi-pa and the Japanese biwa, has a short neck with a varying number of strings and is plucked either with the bare fingers or with some type of plectrum which varies by location. Such an instrument is ideally designed for strumming across several strings, for rhythmically alternating between high pitched melody playing strings and lower pitched strings drone or rhythmic strings. These are the basic techniques which most easily “fall under the hand” when playing the lute.

Music during the Renaissance period was marked by the rise and dominance of multipart vocal music, or polyphony, that is, music in which several voices perform distinct melodic lines simultaneously. Instrumental music followed the polyphonic vocal style which was soon established and very popular. Keyboard and instrumental ensemble music quickly adapted to these demands. In fact, instrumental ensembles came to function almost interchangeably with voices, since each part could be played by an instrument or sung in any combination and the basic polyphonic texture would be maintained.

For the lute, however, the new style created difficulties since the instrument was designed not to produce a simultaneous independent lines, but as noted above, more easily produced a form of drone or harmonized accompaniment to a single melodic line. Although it was possible to play a single melody line on the lute, the instrument was still thought of as a popular solo instrument or one which could accompany the voice. In order to retain its popularity the lute had to adapt its playing technique to that of the current polyphonic music. In fact, performing polyphonic or multipart music on the lute is almost as difficult and as unusual as it would be to attempt such a technique on a bowed string instrument like the violin. Still this is exactly what happened and the lute continued to serve as a solo instrument and to accompany the voice.

One might therefore have certainly expected that an instrument as difficult to adapt to polyphonic or multi part music as was the lute, would have faded away. But the lute appeared to have other factors in its favor. In a manner similar to that which occurred in the case of the guitar with modern rock musicians, there may have been a romantic or historical image associated with the lutanist that needed to be
Fig. 19 The guitar has become a traditional instrument in the performance of Burmese music. The player uses a steel or glass rod to slide across the frets producing a sound that is well-suited to the Burmese style.

Fig. 20 In Korea the glass rod to slide across the frets has also been adapted in this instrument, the chul hyun gum. It is used to play the improvisatory South Korean music, Sanjo.
Fig. 21  *Kulintang* gong ensemble of the Bajau people from Zamboanga in the Sulu region of the Philippines where the Sulu version of Sinulug (Sinu’ug) is played.

Fig. 22  Roma or Gypsies dancing in the caves of Granada. Here we find one of the only examples of handclapping used in a traditional context in Europe. This practice of marking out the *compas* or rhythmic pattern by hand clapping interlocking patterns is a shored tradition with Western North Africa.
preserved. He was seen as someone who had traveled widely, often a nobleman or someone vaguely associated with nobility, versed in poetry and speaking several languages who thus in many respects may have served as an important connection with the world outside the immediate locality in which he was playing.

In addition to this romantic view of the lutanist himself, the instrument is ideally suited in terms of delicacy and potential subtlety of sound for a single player and a small audience. Being cradled, as it is, close to the body, it is one of instruments with which it is comparatively easy for a player to feel a strong sense of unity, that particular and important sense of identity which occurs when the instrument and the player function almost like one indivisible unit. This is, of course, the ideal relationship between player and instrument in any combination of the two, but in the case of certain instruments, for example, the piano or the organ, the physical distance which exists between the player and his instrument requires that a considerable period of practice occur before the same sense of oneness between player and instrument takes place.

The most important factors contributing to the survival of the lute in the renaissance were, in addition to its easy portability, two: one was that the lute was ideally suited for the accompaniment of the solo song and the second was the continued need for instrumental accompaniment to the dance. Dance music, unlike the liturgically influenced vocal styles, required a clear and fixed rhythm as a guide to the dancers and in this task a light and easily portable instrument was of great value. Since the requirements of dance music for portability and full accompaniment were easily managed by the lute, it found a place for itself in the new music of the renaissance.

**Dynamic Pace of Change**

In our society we are accustomed to witnessing the dynamic effects which technological and scientific developments have on the way we live. We find it natural that music should also change. But dynamic technological development and change are so much a part of our lives that it is difficult to avoid the pitfall of thinking that as the arts reflect changes in technology and science and make use of these developments that they are improving as well. The methods for persevering and disseminating the arts may improve, but their content remains the arbitrary result of all the stimuli being processed within the culture.

Yet many of these changes have come about only very recently. Radio only came into general usage only during the lifetime of many people who are still alive today and television only much later. Yet we have now already relegated radio to something which many people only listen to when they drive and the rapid spread of car cassette systems and CD players appears ready to even further reduce the influence of radio. Meanwhile television has taken an importance in lives of all who
live in the technologically developed societies that seems to increase with each year and new development.

Not long after World War II a few people began to have television in their homes but by the mid-50s, it was almost universal in all modern homes. This was also largely the case in most of Western Europe and has already reached the same prominence in Japan. Thirty years later, aside from the fact that Japan has outstripped us in TV production and technology, as well as in the number of TV sets per home, the development and introduction of satellite transmission and cable television home followed by the general adoption of video cassette recorders and cameras has radically affected the way in which most of us live.

The rapidity and profound effect of these changes we tend to take for granted because we quickly become accustomed to their benefits. Nevertheless changes in technology, like other aspects in a society are also imprinted on the development of stylistic and formal changes in music.

New Technology and the Pace of Diffusion

In the late 19th century when Franz Liszt transcribed for the piano, music ordinarily heard in the concert hall he was attempting to provide this music for possible enjoyment of it away from the concert hall. People could play his piano versions of music which previously could only be heard in the concert hall. This was a practice parallel to that which had taken place centuries earlier in the Renaissance lute settings of polyphonic vocal music. The solo lute player could enjoy the music without a chorus of voices to sing it, or could play the group part to accompany a solo singer in a performance of the same music. In both these cases, the new settings made the music more widely accessible.

With the advent of recording techniques people were free to enjoy music out of its original context and at any time they might choose. At first there was reaction on the part of some traditional music lovers against this non-human means of sound reproduction. Eventually, however, and rather quickly, the convenience of the idea won out and reproduction of music through recordings became a distinctly new aspect to the enjoyment of music and one which has come to identify the 20th century. The reaction against mechanical recording techniques is a response to a new technological development which has many parallels, particularly in our own times. There was not very long ago a reaction, particularly by performing musicians, against the use of electronic and then later, computer generated music. Currently there is still considerable of discussion concerning the development of digital recording techniques and compact discs. Some traditional musicians insist that they can hear the difference between analog and digital sound and the digital recording process does something to destroy the beauty of the music for them. Yet these new
technological media are in a sense no different than what occurs in a radio transmission or even than the effect of the bias oscillator in the tape recording process. After all, when digital recordings are played back, they once again become analog in the sound waves that reach us.

But this is only to reiterate the consistency of the process of change. Within the process of change something else is changing. We seem to be getting better and better at finding effective, efficient and inexpensive means of communicating with each other. We have moved in the space of a few short years from radio to satellite TV communication systems and from the local printing and distribution of newspapers to a single national newspapers and from small special interest production of recordings of music to a vastly complex and far reaching distribution for records which spreads around the world.

Who could argue against the marvels which our industriousness and inventiveness has blessed upon us? Who could argue against the inevitability and necessity of change?

The Effects of Technology on the Pace of Communication

Our methods of communication have been improving so rapidly and so effectively that the rate of change itself has now become a matter of concern. What had until not long ago been allowed to develop at the local level and in response to local taste is now increasingly provided by major distributors of culture in the larger urban centers.

The increased effectiveness of communication systems is not only bringing us closer together but is helping to make us more alike. Local and regional differences in music as in speech are being compressed into common national styles and types. The performance of music is increasingly moving away from the forms it took during the last century when a large percentage of most populations created or performed their own music. After the middle of the 20th century with increasing regularity, the performance of music is being left to professionals and to records, tapes and radio performances of these professional instead of live performances by amateurs.

This phenomenon is taking place not only in the highly industrialized societies. Now that the benefits of radio, records and most recently, cassettes are reaching almost everywhere in the world, their accessibility is also having profound consequences. Some fifteen years I returned to my father’s birthplace in Southern Oaxaca in Mexico. Since my childhood I had heard stories of the marvelous marimba music of the city of Tehuantepec. When I visited there already the music was not frequently played in the traditional manner by three or four men on one large marimba. I was able to find a group of musicians who still remembered how to play the traditional repertoire in the old style. Already the more international
“dance” band with saxophones and electric piano had taken over in much of the Isthmus. When I returned some ten years later most of the traditional repertoire of Tehuantepec, although still remembered, was hardly played even by the dance bands. When the older songs are played they are given a modern treatment with a touch of the bolero or cumbia as they are heard coming from the radio generated from Mexico City. This is sad, perhaps, but not really surprising. The gradual focusing on the major urban center for the determination of new styles is an inevitable result of better and cheaper distribution systems.

Central Java has been long renown for its rich musical traditions, for the sound of its numerous gong orchestras, the gamelans, so profuse that there were several in each village, each with its own unique tuning which gave a special character to the performance of the music and each with its own unique combination of instruments. In the past few years with increasing frequency a cassette recording of a gamelan is being used for village festivals rather than the local gamelan. It is more convenient, less expensive, usually well recorded and dependable. The Indonesian record companies ensure that the basic repertoire is always available on cassette tapes. The tradition is somehow kept alive, so perhaps one should not complain.

In the former Socialist countries, it was felt that regionalism and local folk music styles tended to keep peoples divided into small separate groups rather than unified as a more effective and functioning cohesive unit. The ministries of culture in these countries in the name of preserving the folk traditions of their culture helped to reduce the variant elements and to encourage the dissemination of new, pan-regional folk styles made up of bits from all regions.

**Where Does All This Lead?**

One of the lessons we learn from biology is that an indication of the health of many species lies in the diversity of its variants. While we are making more music available to more people by current methods of dissemination and distribution, the level of available diversity is being drastically reduced. An increasingly large percentage of the world’s population is moving from active participation in music to the passive mode — of allowing someone else to make the decisions about what we can hear, of having someone else perform it for us and of listening passively. The diversity of musical languages is being reduced in favor of those musical styles which will be appreciated and paid for by the largest number of consumers.

But this is not the result of some conspiracy. The process for deciding the directions and methods for the dissemination and distribution of music are being made on the basis of the efficiency of those channels and on the best potential for economic gain. Unless someone can show what harm might result from the dogged pursuit of these ends, it is certainly bound to continue until all the world options will
Diversity in the Arts in America

Numerous music and dance traditions flourish in the United States and many strong traditions are transmitted and practiced here. These are some examples of the numerous separate and distinct cultures which maintain their identity while remaining part of the larger general culture of the country.

Fig.23  Lydia Mendoza of Texas, known as la Alondra del Valle, has for many years been a respected singer of the Mexican American tradition which thrives Throughout the US in the large Mexican communities.

Fig.24  Ensemble of Cuban comparsa drummers like that of Francisco Aguabella, above, are examples of another kind of Latin music alive and active in the US.
Fig. 25  Pow-wow drummers relaxing during between pieces at a big dance. The pow-wow has become a new form of Native American popular culture. Drawing largely on the traditions of the Plains Indians, the Pow-wow has become a cultural meeting place for Indians of all tribes and all regions of the United States.

Fig. 26  Okinawan music and dance is one of the strongest Asian traditions practiced in the United States. Numerous performing groups of Okinawan Americans practice the tradition mainly in the Western US and in Hawaii.
be reduced to singing “The One Big Song”.

It is not likely that this grim picture will come true. Such a terrible reduction of choice could never come to pass. We may never ever be reduced to quite that level. Music is too closely related to the syntax, stress patterns and accents of spoken language to avoid being influenced and even molded by speech. Although the number and variety of local languages is being reduced and radio and television broadcasting are greatly reducing local regional accents in areas where one language is spoken, probably as long as there are different languages spoken, there will also be different musical languages and thus different songs to sing in them.

Today Rock has become an international musical style. There are US, British, French, Italian, German, Australian and Japanese counterparts and even bands in the Russia and the former East Block countries. There are all of the many new African popular musics also. While all these share much in common there is great variety among these vast modern musical languages. Even in the comparing the two most prominent types which use the same language, US and British Rock, it is noteworthy that most of the British tend to sing with an “American” accent which lends them indistinguishable from the singing of American Rock groups. Even so, most teenagers living in the US can distinguish between US and British groups on the basis of musical style. The surviving differences in the musical language of these two groups must be an outgrowth of the differences in the accent and stress patterns of the two spoken languages.

As long as we retain individual spoken languages our distinctive musical languages may also survive. If it is true that music provides an increased diversity in shadings of mood and feeling which in turn can have an effect on our process of thought and on the diversity and intensity of our emotional vocabulary then it must follow that the steady reduction of variety and subtlety in the music which generates these important aspects of our lives can only have increasingly debilitating consequences for our ability to cope with the future and to survive in it. If there is too great a loss in music cultural diversity, can the species itself become endangered?

**The Marimba from Africa to America**

Here is an example of the fortuitous and tenacious path of diffusion. The marimba is an instrument which traditionally was performed exclusively in the Southeastern region of Mexico, in the states of Oaxaca, Tabasco, and Chiapas and on into Guatemala, Eastern Belize, Honduras, Nicaragua and Costa Rica. The instrument and its music have functioned as an important cultural link between peoples of all these countries in Central America and Mexico. The instrument is a xylophone with wooden keys which are struck by a pair of mallets in the player’s hands. Often and usually, a single large marimba covers the range of several octaves.
and is played on by three or even four men. Sometimes two of these large marimbas are paired in an ensemble and played by a group of seven musicians. The deep resonating throbbing and buzzing sound of the marimba playing the local ‘sones’ has come to be associated as characteristic of the music the Southern region of Mexico and of Central America.

The marimba, however, is actually African in origin, having been brought by slaves from Africa who probably served as part of the labor force in the Pacific and Gulf Coastal regions of Central America. In the older simple marimbas still played by the indigenous peoples of the highlands of Guatemala and among the indigenous peoples of Nicaragua, the instrument has a strip of rattan around one side which serves both as a handle and a brace on which the player can sit while playing the instrument. Each key is suspended over an individual resonator, traditionally made of a dried hollow calabash shell in which a small hole has been cut out and this hole covered over with a thin membrane which vibrates when the key is struck. These two elements, the rattan strip and the vibrating membrane along with the name, marimba, all point to the African origin of the instrument. Although in the more popular instrument the rattan carrying strip is not longer used, the vibrating membrane and the name marimba remain to link it to its African origins.

The origins of the marimba in Africa are not clear. What is clear however, is that an instrument of this type, wooden keys, individual calabash resonators, and a curved rattan stick used for a handle or sitting on, is found broadly covering a range from coastal Mozambique in East Africa, stretching all along the central forests of Africa and on through the Western part of Africa extending all the way to Senegal on the farthest Western tip. This distribution roughly coincides with one of the important traditional trade routes through Africa in the days before colonialization. While anything is possible, it does seem more likely that the African marimba was introduced by African slaves from the West coast of Africa to the Americas.

The marimba was apparently an instrument which was taken up by the Indians who learned about it and its techniques from the African slaves with whom they were forced to serve as a common labor force. The instrument was quickly taken up by the Indians and used in connection with their religious rituals, practices which on the surface purported to be Christian but which also retained strong pre-Hispanics elements. From this ritual use of the marimba, the Indians began to use the marimba music for village fiestas and gradually from this came a new mestizo or lowland style of music in which the sound of marimba was perfectly suited to the regional style.

The sound of the marimba is considered in the traditional culture of Southern Mexico and Central America something of great importance and the sound of which forms a cultural link between these otherwise quite separate nations. The haunting sounding of the vibrating membranes of the marimba resonators and the frequently
used tremolo of the keys has inspired the phrase, ‘maderas que cantan con voz de mujer’, “wood that sings with the voice of a woman”. Although increasingly replaced by electronic instruments for local festivals, the marimba continues to serve as a symbol of the southern region. During the 1930s and 1940s a group of musicians from Guatemala, the Hurtado Brothers, carried the sound of the marimba to large audiences in the United States where they eventually took up permanent residence. Their performances became a rallying point for the Southern Mexicans and Central Americans living in the United States during that time. So well accepted is the marimba as a symbol of the culture of Central America and Mexico that few of the inhabitants would believe that the instrument is of African origin.
The marimba of the highlands of Guatemala shows all the characteristics of the classical instrument of African origins, the individual calabash resonators, the vibrating membrane on each resonator, the rattan strip for carrying or for balancing the instrument while sitting.

Fig. 27 The basic elements of the African *marimba*, the rattan carrying strip, the calabash resonators under each key and the vibrating membrane on each resonator.

Fig. 28 The *marimba* of the highlands of Guatemala shows all the characteristics of the classical instrument of African origins, the individual calabash resonators, the vibrating membrane on each resonator, the rattan strip for carrying or for balancing the instrument while sitting.

Chopi, Mozambique. The master musician, Chambini plays a representative African form of the marimba, in this case, the Chopi *Timbila*. 
Fig. 29 The indigenous people of the Masaya region of Nicaragua use a form of the marimba with clear African elements. In this case the resonators have been made of wood and shaped to resemble bamboo.

Fig. 30 The marimba is a well known instrument in Central America. However, the roots and origin of this instrument lie in Africa. Marimba Doble from San Jose Soccotz, Belize.

Fig. 31 Detail of a modern Mexican marimba showing the wooden resonators made to replace those of calabash and the attached ring with the vibrating membrane.
Music across Cultures

Comparisons across Cultures

Using the value system of one culture to evaluate another does not work very well. It still happens and often because having no other recourse when presented with something we don’t know we must draw on the cultural resources we have, lacking any others. Rapid globalization and exposure even to diluted versions of the music of other cultures has meant that some of the worst of these errors of not too long ago have diminished. I recall that a colleague of mine was teaching a music appreciation course for general university students. He told me that he would begin his course with a discussion of primitive music and usually played some examples of Watusi drumming. I didn’t want to be too forceful about but I suggested that maybe that was a rather complex example to use for that purpose. But no, he heard it as very primordial. Without being pejorative about this, I wonder about how a person could hear something and with any thought realize that he himself could not master it in even ten years of hard study and still consider it insignificant or barbaric.

Walking into another culture it is easy to get things wrong. The natural reaction of most people who hear Gagaku, the music of the Japanese Imperial court is that it is amazingly slow, almost unmoving. However slow it is most of what is played by the court musicians and others in the same genre and almost everything that has been recorded of this music is only in the third and fastest category of the repertoire. The two slower types are hardly played and I should not wonder if before too long even the younger court musicians themselves will find themselves unable to play this repertoire, because now the music is played more for public performance, and form people who are not familiar with it, rather than for ritual, the performance is responding to the preferences of an unfamiliar audience. And so while the music sounds very slow in reality it can be much slower yet.

The theory and practice of rhythm in India, as well as the scope of melodic variation made possible by the ability to conceptualize and work with much finer interval divisions than those used in Western music have made this music quite different from that of the West. Indian music also makes use of a much more complex and more highly subdivided rhythmic scope that used in Western music. It is pointless, however, to think that the Western practice of playing the drums has remained primitive because they are still beaten brutally with sticks because the West has not yet discovered the higher degree of rhythmic control and touch
achieved by playing with the bare hands and fingers. Likewise, it would be foolish
to say that Indian music remains primitive because it has not yet developed the
Western usage of harmony. These both, the playing of drums with the fingers and
the development of harmony are the result of nurtured paths in each of these
cultures. No culture is likely to discover something they are not looking for.

There are many people outside of India who enjoy the classical music of India
and the number increases steadily. It took many, many years of exposure for those
not born into Indian culture to be able to distinguish however, between the
performance of an Ali Akbar Khan, a Ravi Shankar, or a Villayat Khan and other
lesser known musicians, or even between what each of these musicians might regard
as their good and outstanding performances? Fortunately, today there are many
outside of India who have attained this level of appreciation. In India, on the other
hand, there are many who exposed primarily to Indian music, express dismay and
pained confusion at listening to Western art music. To many of them the music
seems to wander up and down aimlessly and without meaning. This sentiment can
be heard not only from India, but from many parts of the world in which exposure to
Western traditions has been limited. Colin McPhee recounts that a Balinese
musician once said, “Your music sounds like a child crying without knowing what it
is crying about.”

The very rapid pace at which modern technology has aided in the development
of communication systems is making it extremely difficult to find societies which
are culturally isolated from each other any longer. Still and in spite of the proximity
into which modern media has placed us, vast gaps in cultural communication exist
even within any one society. The desire to learn and imitate is strong. Increased
contact between societies now made possible with increased technology means that
borrowing and learning become increasingly possible. The prestige associated with
the high technological growth of the Westernized cultures has added incentive to
those who would emulate those cultures.

### Cultural Diversity: Diffusion and Resistance within a Culture

Societies like those of Western Europe had music for the upper classes which
was used at private functions like dances and concerts. They also had civic music,
like the bands that announced the hours from the city towers. There was also the
popular music of the city dwellers and the folk music of the countryside. In addition
there was music especially dedicated to religious ceremonies and observations. Like
those cultures of Europe, traditional Japan, Korea and China, for example had
ceremonial and court music, rarely if ever seen by the common people, classical
chamber music for the upper classes, theater music which had its own semi cultured
following and then urban and rural folk music as well as the special music for
Fig. 32 Concepts of simplicity and purity in Japanese Shintoism are carried over into the Kagura dance of the shrine maidens at Kasuga Jinja in Nara.

Fig. 33 Elegance, color, and formality are combined in the tradition of Korean Court dance. Here, complimentary contrasting groups dance in a flowing graceful rhythm.
By contrast, in the dance of the Japanese Imperial Court, Bugaku, slow and refined movements are carefully followed in strictest conformity.
religious ceremonies and village festivals.

In addition to social stratification, it is also possible to have several different cultures within the borders or boundaries of a single large culture. In the United States today there exist several distinct and virtually unconnected musical cultures. The European Classical music tradition has within it several areas which can certainly be regarded as sub-cultures; orchestral music, opera, chamber music, the “avant-garde”, electronic and computer music, the “minimalists”. But these interest groups are all generally on speaking terms with each other. There are the larger divisions between popular music, for example and religious music and the very sharp divisions within each of those in terms of Black American and White American popular and religious music. Furthermore there are the many cultures of folk and ethnic musics in American and the separate popular music traditions, like for example, Country-Western and modern Hawaiian popular music, Salsa and Norteño music. These are all related by virtue of the cultural contact which comes about from being within a single political boundary. Many also share the use of the same recording technology, for one. Still, the distinctions between these musical cultures are so often vast that the music of one such group may be uninteresting and sometimes unfathomable to another.

This kind of cultural diversity is quite common and exists in many cultures. In Turkey, for example, even today there flourishes a strong Roma, or Gypsy sub-culture as well as large numbers of Armenian, Greeks and Jews, all of whom maintain there own cultural traditions while being a part of the larger Turkish cultural ambience. There are large ethnic Chinese groups in Indonesia which maintain their culture and identity there. There is the clear and strong French cultural presence in Canada and like this there are numerous examples. Many national boundaries have been drawn up only in relatively recent times. As a result many nations contain within their national border numerous diverse peoples. If we look closely at Europe we see vestiges of old cultural and linguistic ties, such as the Flemish and French in Belgium, the Dutch and Frisians in Holland, the French, Italian and German speakers in Switzerland, the German and French cultural influences in Alsace-Lorraine. In Eastern Europe there are pockets of cultural Hungarians, Saxons, Swabians and Slavs living in Romania just as there are cultural and linguistic Romanians in Bulgaria and in Yugoslavia. In the United States we cannot so clearly notice the Canadian culture which spills across the border, however in both the Eastern and Mid-Western US the there are clear traces of old French Canadian, Arcadian and Metis culture does trace back to Canada. This serves to illustrate that national borders tend to disguise the historical cultural divisions that existed before they were drawn up and to hide the waves of migration that continue afterwards.

In large countries there is also the possibility of finding regional diversity. Such
regional diversity is not so strong in the United States any longer because of the effective media system we have in place and the natural leveling off that occurs with regular and continued contact. Still, the existence of Hawaiian music in the US is one strong example of a regional form which survives. Country Western when it was associated as the popular music of the South Western states was another, but one which has now grown to popularity throughout the nation and now functions more as a reflection of social stratification rather than regional. Countries in which communication between regions continued to be difficult also reflect this kind of regional diversity. Mexico, for example, has strong music traditions from the Northern regions of the country, from the Coastal region of Veracruz, from the Inland region of Veracruz, from Michoacan and Jalisco from Oaxaca, Tabasco and Chiapas and from Yucatan, to name only the most prominent and well known regional styles. This does not include all of the traditions of the indigenous Mexicans, whose music, might like in the US be better considered an example of cultural diversity, since they represent separate ethnic as well as cultural traditions.

Culture not only delimits the boundaries within which we define music as music, and thereby, permits us if we choose to relegate everything else to the category of non-music, or noise, but also affects and controls the manner in which we perceive music once we have accepted it as such, within what limits we can accept what is new, and where we begin to reject other musics as falling too far outside these boundaries. Our culture delineates how we think about music, how we think in music and even how we decide who also thinks in and about music in ways which are similar to our own. We are often drawn to find parallels between music and language and in the late 19th Century and on into this century, many thought of music as that one language which transcended the problems of comprehensibility posed by all spoken languages. With the new global popularity of Rock related musical forms, it may be possible that we are coming close to the old 19th century idea of music as a global system of communication.

And yet in spite of belonging to and sharing the same culture, the personal experiences of any two individuals in it are apt to be quite distinct. So different are the contexts which each individual brings to the act of listening to music that it seems certain even when two people from the same culture hear a piece of music together that they cannot be receiving the same message from it. The idea that any music can communicate the same meaning across cultural lines becomes impossible to defend, even though it seems certain that some sort of message does manage to be communicated across certain, particularly close, cultural barriers. Even within the United States, itself, one does not find the same audiences enjoying Rap, Jazz, Country Western, Soul, Gospel and Classical music. The spheres of musical preference are sharply divided even within its own borders.
Diffusion and Mixing Politics and Music

The history of humans on this planet is replete with indications of the powerful role that music can play in controlling or influence the lives of others. King’s and noblemen in Europe during the 15th to 18th Centuries had music in whatever scale they could afford, to lend prestige to themselves and their courts. Even lesser noblemen engaged musicians in their courts. When noblemen went into battle as commanding officers, they hired musicians from their own coffers to provide music for their troops. In Eastern Europe it was common for noblemen and landlords to have bands of Gypsy musicians to play for their entertainment and for that of their guests and special bands modeled on the Turkish military bands to play military music.

The Chinese of ancient times believed that a people’s song or poetry, the two were not separable, contained the essence of their spirit and so systematically collected songs from all the regions of China, both as documentation but also as a symbolic demonstration of the fealty that these provinces owed to the central government. During the Sui and T’ang times, from the 6th to the 10th centuries, there was great interest in the cultures which surrounded China on all sides, including Persia, India, and the vast number of cultures which existed then in Central Asia and South East Asia. During these times it was considered very prestigious to have orchestras from each of these countries performing at the Chinese court. While it was prestigious for these countries to have their music presented in the Chinese court, for the Chinese, their presence also symbolized a lord and vassal relationship between them.

Music as a Political Force

Throughout history there have been indications that music was not always regarded as only an enhancement, a formality or a frill. Even when music is performed without words, music can have a powerful effect on events and for this reason has often been feared and treated with heavy restrictions. Even without the aid of words to clarify a political or religious message, the sound of the music itself communicates something that is many cultures including our own regarded with great apprehension.

When the Spanish Conquistadors subjugated the Aztecs of Mexico, in order to ensure peaceful acceptance of the new rule and religion, and certainly to prevent the
possibility of the disastrous economic effects for Spain of a political uprising, they
destroyed all the Aztec priests and scholars. The Spanish also killed all of the Aztec
musicians, as well, so great was their fear of the power of music to organize the
population and to effect a potential uprising. Even so, many of the first accounts by
Spanish priests they describe an amazingly high level of musical proficiency and
skill on the part of these Aztec musicians. While it was possible that there was
genuine dislike of Aztec music which may have played some part in its eventual
destruction, it was the political factors which outweighed all else in the final
decision.

In the United States during the early period of slavery, a policy more stringent
and brutal than any known anywhere else in the Americas was imposed on the
slaves. Not only were slaves from the same tribes systematically separated, but
husbands from wives, children from parents as well. So great was the fear of a
possible slave uprising and of the potential role which music might play in such an
occurrence that in addition to all the controls to prevent the use of African languages
among the slaves, all African musical instruments, in particular the drums, were
strictly forbidden in the United States as well as the singing or playing of any
African musical forms which might be recognized as such.

Two music functions which managed to continue in the United States that bear
an unmistakable African structure, albeit without the benefit of African texts, were
the works songs and the children’s songs. It is interesting that in spite of the
stringent and often brutal measures taken to prevent it, so many Africanisms were so
irrepressible that they survived in the United States and eventually flourished in
sufficient degree to serve as major distinctive stylistic influences on American
popular music even today. Consider that the major trends in American music, once
they could be identified as separate from America’s European roots, were Ragtime,
then Jazz, then Rock and more recently Rap and Hip-Hop, all of which are African
American in origin, although many other contributions have been added to them.
Their survival in the face of the history in the US of the suppression of African
culture is indeed impressive.

**Maintaining an Identity While Part of the Whole**

**Hawaiian Music in America**

After British control and then United States domination, the Hawaiian Islands
became a state. Tourism was and continues to be a major economic factor in the
islands’ survival. Visitors from the mainland as well as from other countries carry
away with them the memory of the tropical islands, the colors, flowers and
especially, the local music. What is interesting is that Hawaiian music has different
strata, the oldest Polynesian music of the original Hawaiian indigenous community
and then the Hawaiian music that was the result of the combination of these
traditional chants with Western music and instruments like the guitar and ukulele.

In Hawaii today this mixed form is the current popular music most often heard by tourists, but it is also part of the same genre that is the popular music of the Hawaiian Islanders themselves. The popular song culture of Hawaii is strong and thriving. There is a repertoire of something like 800 or so songs, almost all sung entirely in the Hawaiian and known by several hundred musicians in the islands. What is interesting is that, in spite of all the local place names and the strong spirit of identity which native Hawaiians feel with their culture, the Hawaiian language is no longer spoken by most of the residents, even by most of the native indigenous Polynesian Hawaiians. Here is an example of such strong regional pride, virtually akin to nationalism, that songs in a language which most of the consumers no long speak have become a symbol of their identity with that culture and stand as a metaphor for the uniqueness of the Hawaiians within the United States.

Political and Cultural Control

During most of the years of the Soviet East Block in Europe, for many of those nations, East Germany, that is, the former Democratic Republic of Germany, served as the leader in things considered most modern. In East Germany as elsewhere in the former Communist Block, popular forms of music from the West were strongly discouraged. However, the Western Zone of the city of Berlin in the very center of the then East Germany was bombarding the airways with radio and television broadcasts filled with new popular music and opulent advertising of consumer goods. It is little wonder then that East Germany represented a seepage point for the introduction of the latest music styles from the West. Although, television sets in East Germany were especially rigged in order that West Berlin channels could not be received, most enterprising East Germans found the means to correct this modification and frequently even in official government hotels, TV sets had been fixed in order to pick up channels from West Berlin. In spite of all restrictions against it, the population found the means of gaining access to what was going on outside the wall and from East Germany the aesthetic styles spread to other East Block nations. Indeed, the force of this cultural seepage from West to East was one of the factors which brought pressure to bring down the Berlin Wall in 1989. The role of music in this was very important.

In the Union of Burma, today called Myanmar, that South East Asian nation which has been virtually sealed off from the rest of the world since the early 1960s, one can sense that one has stepped back in time. Outsiders, long only allowed to enter the country on 24 hour transit visae, now can, with complex and tedious visa application processes, be permitted to spend one week or two in the country. Most Burmese who manage to leave the country cannot ever return. The government has a
clear and strong cultural policy which supports the traditional arts of Burma as opposed to foreign importation and its control, supported by a strong military dictatorship is powerful. In spite of all of this, the younger generation of Burmese is completely given over to the pursuit of Rock, much of the source for it coming in cassettes smuggled over the mountains from Thailand. So widespread is the new Rock oriented popular music that the government of Burma has been powerless to prevent it and has virtually given up.

The roots of this recent Burmese story of failed political control of music may lie in an old and honored South East Asian custom, one that prevails in Indonesia, as well. Throughout several countries in this large geographic area, it is understood that theater and in particular the traditional clowns are not to be suppressed. The various theaters either using marionette puppets, shadow puppets, or live actors, all tend to use plots drawn from classic Hindu or old local historical epics. The actors speak in old elaborate and formal language, beautiful and appreciated by the public, but somewhat difficult to fully comprehend. The clowns in each of these cultures, represent on stage, the local characters, placed on stage, as it were, to observe and comment, and incidentally, to explain the actions of the high noble characters. In this context many jokes are made as well as broad satirization of the actions. Comment on local conditions which are quite out of place in the line of the historical plot going on onstage are quite freely introduced and greatly appreciated by the audience. Even during the October 1966 Revolution in Indonesia and in under the current strict military dictatorship of Myanmar, or Burma, the clowns have been largely free to criticize the government and voice the concerns and resentment of the populace. The clowns in the theater have been allowed to criticize current affairs and even direct their criticism to the current political leaders.

During the last few years of the Soviet Union, they at last relinquished the official policy of discouraging two specific forms of music from the West, Jazz and Rock. (See Inset) After many years of imposing sanctions against these musics, even sometimes sending the offending musicians off to Siberia, it was decided that they simply could not keep this music out any longer. Borders that long stood fast against political and free market economic encroachments were hopelessly permeable to the influence of the most popular forms of mass media transmitted music. Smuggled cassettes and records simply could not be kept out efficiently enough to prevent the music from being heard. After that it was finally impossible to prevent people from playing and enjoying this music.

Not long after even the People’s Republic of China opened its borders officially to Rock after having kept the most effective and total blockade against Western popular music since 1949 of any country in the world. If China and Russia both gave up trying to control the suspected evil influences of the popular Capitalist media, then clearly the power of that media is an example of the importance of cultural
change and natural force which strives to ensure it.

During the early period of Martial Law in Poland at the end of the “Solidarnoscz” movement in 1978, a ban was placed on all recorded Rock music coming either from the US or even Scandinavian countries as reaction to the imposition of sanctions against Poland by the Western powers. In this last instance the reason for the new restriction was to prevent the music from assisting in civil disobedience. However, it also seems likely that the possibility of a simple statement of symbolic retaliation against the West may have been the motivation.

In many nations of the West, the East and even what was formerly known as the Third World, the arts are talked about in terms great cultural pride and of the freedom they enjoy, but such freedom has often meant freedom from support and in the former East Block this meant controlled support without freedom. In many nations either support or freedom can be withdrawn whenever the arts are seen as a threat to political stability. But free economics does not provide support for the arts either. Only those forms which can gain access to sufficient media distribution can find audiences sufficient to guarantee their survival. In this rather inverse manner, then, we have tangible endorsement of the power of the arts by the major political and economic systems of the world.

**The Power of Music as a Guarantee of Freedom.**

There are some cultures, however, in which the arts are seen as powerful, perhaps in a form akin to magic, and as such are allowed to remain free even in a society in which the behavior of individuals may be constrained. In the *griot* or minstrel tradition of West Africa, in Guinea, Senegal and Mali, the singer is free to sing song of praise or derision and can fan the emotions of his listeners at will with a freedom of expression not allowed even to the kings. In Latin America, in particular in some parts of the Caribbean cultures of Venezuela, Cuba, Puerto Rico and Veracruz, Mexico, this tradition survives in the manner in which musicians can sing complimentary songs about passersby. However, if in some way, usually with money, this is not acknowledged or appreciated, the songs can quickly change to strong public criticism. In both Burma and Indonesia, the clowns who appear as part of the traditional theater are free, even in old historical plays, to comment on current events.

**Recent Trends in the United States**

Over the past ten years a slowly growing conflict has risen to a head. This concerns the level of, or even the validity of any government support for the arts. Although the former Socialist states of Eastern Europe and the former Soviet Union
as well as many nations of what was called the Third World, the lesser economically
developed nations, continued to vigorously support the arts at a national level, the
United States has moved in the opposite direction. After starting out in the late 60s
with a modest National Endowment for the Arts, one of the smallest of those of any
industrialized nation and smaller even than the support level for the arts in many of
the underdeveloped nations of the world, the NEA grew ever so slightly and then in
very recent years was virtually decimated by congress and the cultural wars which
swept the nation in the 90s.

The talk was about the battle between censorship and freedom of expression on
the one hand and between asking the taxpayers to support what they viewed as
pornography and whether the masses can effectively decide what is artistically best
for the health of the nation. A great political battle arose over a few government
funded works of art which some deemed to be blasphemous or pornographic and the
argument that these were an infinitesimally small portion of the great good done by
the endowment all across the nation even with the meager resources at its disposal
fell on deaf ears and the endowment was reduced by almost 50% of its already very
small budget.

While the arguments on either side remain unresolved, the effect of the
decimation of the NEA budget has been felt and the waves of reduction are rippling
across the states and local areas in a slow domino effect. What is clear is that there is
a new attitude about music and the arts and that new attitude has been made manifest
by recent congressional action, driven incidentally by massive statements of
agreement from letter writing constituents. This is clearly the way the nation is
inclined to go. The question will remain, is the culture well served when the major
driving force will be economic rather than artistic.

Where There is Money Involved

It is a basic principle of economics that if one person is to devote himself to
making a fish hook, then another must catch enough fish for two while the other
makes hooks. There are cultures in which everyone in the community shares in the
work of providing food and necessities for the group and all share in the making of
music when it is required or desired by the group. But in most of the societies of the
world today, musicians are specialists. They are people who are regarded as having
special skills and their subsistence is provided by others in order that they may
continue to provide what they do best and in exchange for these services.

The principle is clear enough. In static times musicians understand their role
and provide what they must in exchange for having their need for survival met in
kind or in money. However, as cultures change the popular taste changes as well.
New musical styles arise and musicians must adapt to the changes or be left without
support. What about those who create the new styles? In popular music, changes come steadily and rapidly. The process of adapting to new styles is challenging but not so drastic. In the case of art musics, like Western classical music, the creator of new forms may need long periods of support with little completed work to show for the time spent working out new ideas. In modern times, composers try to get grants, or teach music privately or in an institution in order to make ends meet while trying to work on something new. During the 16th, 17th and 18th Centuries wealthy patrons would pay for the services of a court musician or even a court composer whose job it would be to provide new music for the court. Something like this was also true in the courts of Asia and the Middle East. Patrons gave free reign to artists whom they respected and allowed them to create new forms, largely without interference.

In modern Europe, many countries still provide support for composers of music to work on their own in creating new works. This support is provided because of a strong belief that it is of value for the society at large to have the benefit of this creative force at work and it recognizes that there is no longer any other way to provide such support. In the former East Block countries this kind of support for creative composition was always understood to be important to the state and composers were considered workers.

If one musician can manage to make or buy an instrument and finds the time to devote to becoming a specialist, it is a fairly simple matter to do so. Think about what happens when the music requires the playing of five or six musicians, or what about ensembles of 50 musicians or more. It now becomes not just a matter of the logistics of getting that many musicians together at the right time and place, they must all be paid, the location in which they play must be arranged for, people must be notified of the performance, or there must be some cultural support system which provides for all this. We are soon talking about some larger political or economic system which must be in place to provide all this.

Wealthy patrons could provide money for musicians in their own entourage. The earliest military bands consisted of small groups of musicians, personally paid for by the wealthy noblemen who were the commanding officers of those military units. Eventually, some of these functions were taken over by municipalities and states and at the same time wealthy private patrons gradually ceased providing support for ensembles in this manner.

There are cultures in which musicians perform functions in their society but do so not primarily with the intention of making personal profit. In many such societies musicians have other means of livelihood and perform musical functions for reason of tradition, status or personal prestige. Such musicians continue to provide an important service in their communities, but are rewarded in other ways. Under some cultures, in traditional Turkey and Iran of not too many years ago and in Okinawa
today, it would be considered unseemly for a musician to be paid for performing music.

Community, State, and Institutional Support for Musicians

There are communities in which musicians are recognized as specialists, that is people whose task it is to provide this service for the community or group. They may be specially compensated for this purpose, but it is also possible that they are not compensated in any special way other than the by the prestige associated with providing something that is valued by the group. In larger and more highly stratified societies, musicians are more likely to be a specialized group and in societies such as our own, are paid for these services. In our society some musicians are paid great sums for their performances and others must seek numerous engagements in order to make a living and still others can only manage to get a few performances and must have other means of livelihood to survive.

Under the Socialist system that was in place in the former Soviet Union and in Eastern Europe as well as in the Communist countries of Asia, being a musician was not something that one could simply decide to do. Musicians were considered workers and in order to be considered a musician then one had to pass rigorous examinations and training after which one’s work could then be exclusively devoted to the performance of music. However, this did not always mean that others could not enjoy music. If one could find time after doing one’s assigned work in the profession to which they had been designated, one could devote oneself to playing music for one’s own enjoyment or for others. But there was a very big economic and professional difference between those who were designated musicians and those who were not.

The Media as a Control in Economic Selection

Powerful and far reaching systems of communication and networks for transmission themselves exert a strong influence on the selection of what is to be transmitted. Only those forms of music which are believed to have sufficient appeal to bring about a response wide enough to merit the financial investment required to buy time into the system are allowed air time. Getting on the air now, can be difficult. Once into the networks of TV, radio, and recordings, the potential for reaching an audience is global, although saturation is by no means guaranteed. It is against this overwhelming pressure to seek as well as to provide what large segments of the population want that both traditional cultural and political barriers have proven ineffectual. Economic factors, however, can also serve as powerful barriers. Becoming a nationally or internationally known performing artist certainly
depends on talent. However, those in control of the media and those who make decisions about what will finally be produced and what will not be, make judgments on the basis of economic predictions rather than about talent. Sometimes they are wrong about both.

Many of the traditional forms of music in Western Classical are undergoing difficult times, particularly in the United States where even the meager government support has been largely withdrawn. There are no longer wealthy patrons who provide support for composers and musicians and the large foundations are not nearly so large as the need and even they have begun increasingly to turn to what they regard as the more pressing social needs of the world. Chamber music concerts and solo recitals are declining drastically and many symphony orchestras are disbanding. The traditional avenues for exposing and educating people into the tradition of classical music, such as music education in the public schools, are also dying out. Oddly, classical music continues to hold its own small market share in the purchase of CDs and although one might have predicted that because of such little general public interest, that such sales would be limited to a few well known favorites, this has not been true. There is a great diversity of classical music being recorded and if anything that diversity has increased over the past twenty years instead of decreasing.

As with popular music, many are content to purchase CD of their favorite music and listen to the music at home rather than attending live concerts. Attendance at Rock concerts remains high, however, the volume of those attending concerts is still a smaller fraction of the vastly greater CD purchasing audience. Many people in arts world decry the decline in support for the traditional high art forms and the lack of attendance at concerts. It may be that we are, in fact, in the midst of a major cultural change from one set of styles to another, much like what happened in Western music in the change from the Renaissance style to that of the Baroque, or from the Baroque to the Classical. What is different, however, is that instead of a few artists given freedom by their noble sponsors to create new forms and idioms, and thus to lead the culture, the drive for greater sales is the controlling factor in the presentation of new forms and ideas. Support can only be provided if it is deemed that future sales will justify the expense. The question for the future of our mass media driven society will be, when the old complex high art traditions are gone, with what will we replace them if the only growth is the result of trying to find what pleases the largest number of people.
The Pace of Change in Music

Cultural Isolation and the Pace of Change

Many of the methods and perspectives we use in the study of the world’s music are based on conditions of cultural isolation that existed more generally at a time when the world’s many cultures were more isolated from each other than they are today. By the time of beginnings of ethnomusicology in the early part of the 20th century, this isolation was far from total but still enough that the various levels of internal development, external stimuli and assimilation could be better examined independently. That situation has radically changed today.

Increased proximity between formerly isolated cultures has resulted in intensified contact and stimuli of such proportions that we need to consider this altered condition when thinking about the nature of change in musical tradition.

Everything we study concerns itself with change, whether we focus on change in a musical tradition or we choose to concentrate on some delineated and “static” moment in history. Musical change is gradual and continuous and is affected by external impulses as well as the natural and regular review of the immediate past by the present. It is virtually impossible to know the exact balance between internal and external influences that lead to musical change. Let us, in any case, look at some aspects of this distinction.

Change, Choice and Isolation

In our own times we are continually bombarded with external stimuli that are designed to make us want to modify the patterns of our daily lives. This affects everything from career and investment choices to the best kind of toothpaste we should use. It is easier to think of change as a result of these stimuli that offer us new choices than it is to understand how we arrive at these choices.

In the process of reviewing the choices before us there are many that we regard as negative. Often we decide against something without knowing why. A girl of sixteen remembered that when she was four she liked Sesame Street and Mr. Rogers, but that Electric Company was frightening to her. Even now she cannot say why. A young man from Japan remembers that as a child the street calls of the rice cake vendor terrified him. Again he could not say why. Choices are made without any real necessity to understand why we make them. Within each musical culture
options are available for rejection of selection. Decisions are made about what is good and bad, about what is new and up to date or out of step with the times.

We can understand that even in the case of music cultures that were in isolation from other cultures and thus free from the external influence of such cultures as they defined as outside their own were also subject to gradual and continuous internal modification. In the ancient Japanese novel of the Tenth Century, Genji Monogatari, there is a reference to an informal musical performance that tells us something about the pace of change in those times. In the story an old woman created an embarrassingly humorous situation for all present when insisted on joining a group of young people playing music. She proceeded to perform, with unabashed confidence, in a style that had been out of fashion for some thirty years. The story is set in 11th Century Japan at a time when Japan had isolated itself entirely from all foreign contact of any kind for over three hundred years.

The culture of Japan, from what we know of these very refined inhabitants of the capital, Heian was something of great elegance, The Heian Japanese would have looked with great disdain on anything even from the most nearby provinces. Yet in the short space of thirty years, musical styles had changed, apparently simply as the result of internal stylistic development to such a degree that what seemed to them a very humorous, disynchrony could occur. This is a good example of the degree of change that can occur without stimulus from outside the culture. Most often, we encounter examples of change that are the result of internal development occurring simultaneously with changes that are the result of contacts with other cultures.

The Rate of Change

The advent of mass media communication during this century has all but ended the slow process of internal development in isolated cultures. Now instead there are persistent stimuli that are most often external to the traditional culture. These are now quickly absorbed into the internal system of cultural change. Cultures are now redefined to include all these new elements.

However, not too long ago, diplomatic contacts provided a means for cultural contacts to occur between cultures that were geographically isolated, sometimes by great distances. As political consciousness evolved in the hands of the powerful and persistent, these diplomatic and economic contacts bridged increasingly vast expanses of geographical and cultural distance. At the same time that isolated cultural contacts reached across great distances, regular contacts between neighboring groups resulted in continuing stimulus and assimilation. The stability of this pattern throughout much of the history of man is evident when we consider that the cultural distance traveled by Marco Polo to China in the Thirteenth Century was not significantly more than that traveled by those European travelers who visited
China in the early Nineteenth Century.

In contrast to this cultural distance, for every mile of the way between Venice and Kanbalu, the inhabitants of every village knew much about the language, culture, and politics of the inhabitants of the next village along the road taken by these travelers. While little had occurred to bring Europe and China closer together during the six hundred years that elapsed since Marco Polo’s travels, the knowledge based on continuous contact between neighbor and neighbor continued unabated. The nature of culture contact may thus be defined by proximity, be it of the type that occurs only as the outcome of diplomatic contacts between nations separated by great distances, or the simple result of humans knowing the habits of their neighbors. The character of this proximity is defined by the context required for it to occur.

Although the distinction between the two examples just cited is important, this distinction is really only a matter of degree of intensity in the type and number of contacts.

The process of evolution from stimulus to assimilation is dependent on the nurture that can be provided to its growth in the new context. The process is also dependent upon the existence of enough structural and stylistic congruents to permit fusion to occur. A strong political system, for example, can virtually force the acceptance of alien cultural elements to such a degree that even culturally dissimilar musical styles can be adopted. The rate of assimilation that is, the rate of adoption and imitation of the elements of the new stimulus may thus occur slowly or rapidly, depending on the existence of supportive social or intrinsic structural contexts. Nonetheless, even rapid assimilation is something that we observe as measurable in years rather than months.

Choice and Habit

One of the natural inhibitors to smooth assimilation of external stimuli is the natural proclivity of most humans for choosing the familiar over anything but a rare foray into the exotic. It is the task of assimilating the new into that which we are already familiar which causes the greatest difficulty. When there are a significant number of matching structural elements in two traditions, it sometimes makes the assimilation of the remaining few distinctive elements that much more difficult. We can each think of ways in which this happens. Think about trying to cook in a friend’s kitchen. As one might imagine, the frustration of not finding the exact utensils with which we are familiar and scrambling around looking for things is frustrating. Think about a cook trained in Western cooking traditions trying to cook in a Japanese or Indonesian kitchen. This experience can no longer be described in simple terms of frustration. All is so unfamiliar that one no longer expects or hopes
to be able to depend on old standbys and instead the task becomes a challenge of survival or a respectful withdrawal.

**Politics, Influence and Change**

Continued exposure to cultural patterns that show only few dissimilarities might eventually lead to a sufficient level of familiarity which would allow us to function efficiently. The task of assimilating cultural structures that have few parallel elements with our own requires a supportive system which would provide a strong motivation for assimilation, a motivation strong enough to make one work hard to find clues and solutions.

The influence of international diplomacy or political power was often sufficient to provide the supportive structure for the type of acculturation across isolated cultures. The existence of German music in the Russian court, Chinese music in the Japanese court, or Spanish music with the Indians of Mexico are just a few examples of the adoption of musical styles in which there were few congruent structural elements between donor and recipient culture at the time of the adaptation but sufficient political or diplomatic pressure to smooth the path of acceptance.

**Rise and Dissemination of Soukous**

Throughout Africa, south of the Sahara, there has been during the past twenty five years a steady spread of a new style of popular music generated from the Congo or as it was known earlier, Zaire. Soukous, as this music came to be known, had elements of the Cuban Rumba in it and many of the early Soukous musicians cultivated a connection to early Cuban music. After becoming established in the Congo, Soukous musicians began traveling and playing in other African countries. In other African the easy flow of Soukous rhythm and melody were seen by new in the newly rising African republics, as sounding more African then other forms of more Europeanized or Americanized African pop music and this aided greatly in its spread and popularity.

In Harare, the capital city of Zimbabwe, there has been a small band of Congolese musicians who regularly play for Shona-speaking audiences in one of Harare’s well-attended drinking houses. The acclaim of these musicians was based on their performances of popular songs in Congo Rumba style. Had they only stayed in Harare for a short time, this style might have come and gone with them. However, in deciding to remain in Harare, they began to modify their repertoire to include in each performance one set of songs in the popular Marabi style from South Africa, which sounds and feels much like Afro American swing of the 1930s and 1940’s with some blues admixture. This Marabi style had already been an established favorite with Shona audiences. The elements of the style could be quickly adapted.
by the highly polished Congolese musicians. It was, however, only after they had resided in Zimbabwe for some four or five years that the group had assimilated the tone and speech patterns of the Shona language well enough to begin to compose and perform songs in Shona which drew on the linguistic and cultural roots of the audience. Their popularity had already been established but they now became assimilated to such a degree that they could now speak to their audiences in the language of that audience and in a manner which won their approval. The success of the Congo group in Zimbabwe was based not only on their excellence and proficiency in discovering the key which permitted their entry into Shona society, but on the previous acceptance of electric guitar music by the Shona, their familiarity with the Congo style, and certainly the fact that, although mutually unintelligible to each other, the Shona and Luba languages are structurally related. It was the familiarity with the contours of the language which permitted the stimulus to be assimilated.

In this manner Soukous spread and new songs were soon being composed by non Congo musicians until now in the beginning of the 21st Century, much of the new popular music of Africa has a Soukous tinge to it.

**Propinquity and the Media**

While examples of this kind of musical adoption are common, they are rarer than those in which elements from the music of one culture are exchanged with those of its closest neighbor. This occurs naturally during the process of one country engaging in a cultural exchange with another, or a neighbor borrows from a near neighbor. Today the media has the potential to cover the planet in a matter of hours. Mass media communication systems and the economic and political systems that govern, support and drive them have increased the level of contacts between cultures to such a degree that the process needs to be viewed from a different perspective.

The 1936, “Memorandum for the Study of Acculturation,” postulated by Herskovits, Linton and Redfield,\(^2\) still applies; however, the increased level of contact means that the intensified rate of acculturation and its effects must be considered differently than was required when these guidelines were drawn. Were it true that man’s capability for assimilation of external stimuli was limitless, then the recent developments in media technology would merely represent an increase in intensity of a system already equipped for adaptation. The 1977 UNESCO Statistical Yearbook reported that according to a 1975 survey, there were 953 million radio receivers in use in the world, or 305 receivers for every 1,000 inhabitants. In 1978, it is reported that Japan alone produced 19.9 million radio sets, and the sale of these radios represented a growth rate of 40.4% over 1976.\(^3\)

If we look at more recent data we note that the trend towards increased cultural
saturation through the media continues. In the years 1993, 1994 and 1995, the shipments of CDs, cassettes and music videos went from 956 million units to 1 billion 123 million units to 1 billion 113 million units in the United States 4). Although there was a decline of 0.9% in 1995, the dollar value increased by 2.0% which may or may not have had an effect on sales. Meanwhile the percentage of households in the US with television sets has risen from 95.3 in 1970 to 98.3 in 1994 with an average of 5 television sets per household. 4. Although the United States leads the way in the number of televisions sets per household with 814 per 1000 in 1991, still a look at other countries shows Canada with 639 per 1000, Germany with 556 per 1000, France with 407, Japan with 613, Denmark with 536, Finland with 501 and Great Britain with 434.5. If we keep in mind that these numbers often reflect multiple numbers of sets per household, then the power of this form of cultural dissemination looms large and strong.5)

Although we have as yet no idea of the potential limits of man’s ability to absorb stimuli, it is difficult to be sanguine about his capacity to absorb this level of cultural input.

The intensified degree of contact has had effects in many other areas in addition to music. To cite one parallel example in medicine, the increased attendance of preschool children at day care centers, at ages too young for them to have developed natural immunities, has resulted in the much earlier and more rapid spread of the common childhood diseases. While such diseases as even the common cold continue to be studied as discrete cases, the pattern of their spread has now become an area of concern for epidemiologists. While the comparison of music to epidemics may be an unfortunate one, rapid dissemination of musical styles in our own times suggests that we look particularly at the patterns of this dissemination in addition to our studies of discrete musical styles.

**Politics and Control of Choices**

Related to recent changes in media communication systems, political and economic systems also show distinctive differences in the manner in which they affect the arts. Until recently, the major portion of the world’s musics fell under the sway of one of two dominant political and economic systems: that of the socialist states or that of the state’s adhering to the principle of free enterprise. Although neither of these systems operated with total implementation in its own sector of the world, each at its most highly developed state departed significantly from the basis on which most of the traditional music of the world evolved. Each also increased its influence on the arts as the result of improved media communications systems to which it had access. Whereas change occurred slowly during those times when cultures were more isolated from each other, support of the arts came from small
communities of consumers or from the benevolence of a few powerful patrons and not from larger states. With the effective demise of socialism as a major global political force, the world is left with the one dominating system of media dissemination. It is one driven by what sells, rather than by some ideal of what may be best for human culture. Governmental support for music and the other arts is drying up everywhere in the world to be supplanted by a market driven cultural policy.

Such patrons of the arts as the Esterhazys in the 18th Century knew that while you may suggest to an artist the forms which he may employ, the patron should never attempt to dictate the content. In this sense the artist was the expert and the patron was the consumer, one who should not interfere in the artistic process, but only appreciate it and support it.

In Moghul India the noblemen supported artists but respected them as relatively independent. They understood that their duty as lords was to value these musicians who in this one sense were superior to them. Fidel Castro of Cuba suggested a principle that appears to be the inverse of this: that the artist must be free to use whichever medium he chooses but that when the content goes against the principles of state, the state will withdraw its support. 6)

Under the free enterprise principle, the costs of production and distribution must be passed on to the consumer, which has meant that as a general policy only those productions that can guarantee greatest consumption can warrant the risk of investment of costly production and distribution resources. As a concomitant of this, there is a tendency to select for reduced diversity in favor of a safer return of the initial investment. Even in situations in which additional charitable support is sought to supplement the system, such support is usually awarded with a view toward greater dissemination and accessibility.

The attitude in many former socialist states, and one not limited exclusively to them, was one that recognized the importance of a people’s music in strengthening an awareness of the state as a community. Here again, although such attitudes were also prevalent in the development of national music in nineteenth-century Europe, the political structures of the Twentieth Century have gained increased effectiveness in being able to enlist the complete cooperation of the media communications systems to implement their policies. Therefore, unlike the movement toward the development of a national music in nineteenth-century Europe which, however powerful or officially endorsed, could only hope to reach a small percentage of their population, the twentieth-century socialist states with control of media could reach virtually every member of their population.

The desire for standardization follows closely upon the establishment of the state. Even before independence, Thomas Jefferson had given much thought to the development of a system of national education. In Russia the Cyrillic alphabet was
adopted as the standard in 1917. Under this system, all the Turkic peoples of the
former Soviet Union had to devise means of writing their languages using the
Cyrillic alphabet while giving up the use of the Arabic script. With the falling of the
former Soviet Union, many of these former satellite nations have become
independent and are now turning to the use of the Roman alphabet, because of its
use in the Republic of Turkey, in their eyes, the most highly developed of all the
nations of Turkic speakers. Although Turkey exercises no political control over
these countries, it is seen by these newly liberated nations as the model nation they
would like to emulate, one which speaks a closely related language and one with
close historic and cultural links.

In defining the parameters of the music of the state along national lines rather
than according to the diverse traditional regional ones, the twentieth-century
socialist states also followed the tendency of most modern states to define their
boundaries and to unify all within those boundaries as much as possible. The
Marxist Socialist position most often manifested itself in the attitude that
regionalism in the folk arts tends to divide communities rather than unite them and,
therefore, the state should promote the development of state or national styles rather
than to recognize or highlight any of the existing regional variants.

It is not always a simple matter to impose a single national music style. In
Romania, for example, strong traditions, the existence of regional ensembles trained
primarily in the village styles, and regional pride meant that the national style is
being assimilated gradually. However, regular exposure to the national style on radio
and television and the marked tendency to standardize variant forms in the
Romanian regional styles clearly indicated a move toward national standardization
and away from regional diversity.

Change and Biological and Cultural Diversity

How do we measure the effects of change in the level of diversity on musical
systems when we are dealing with such volume?

At the moment, the question presents real difficulties. The question should
hinge on the rate at which the consumer population can assimilate new stimuli. This,
of course, depends on how we define assimilation. “Assimilation” is a term like the
term “culture,” which is difficult to define with exactitude and on which there is
more general agreement as to what it is not. Studies of the functioning of the human
brain have thus far determined that speech production and musical perception are
located in different areas of the brain. These studies have, however, focused
primarily on the recognition of melodies and not on the little understood process of
composition. Creation must depend on memory in some way and memory must
draw on some of the same brain functions that were engaged in the actual execution
of the activity or event being remembered. Several areas of the brain may be simultaneously engaged in the execution of what we may perceive of as a single activity. Speech and melodic recognition functions are located in different areas of the brain. In the creation of music the process links these two functions in some way and that by extension the creation of music naturally follows a pattern congruent with the tone and stress patterns already learned for speech.

By extension of this concept, we can further suggest that assimilation of external musical stimuli might be measured in terms of the degree to which the music conforms to the speech contours of the language of the consumers.

To cite just a few examples of this, let us note that the 17th Century English composers, John Jenkins and Henry Purcell wrote music that followed the basic formal patterns set in Italian music of that period. However in the melodic contours of their music the deviations from the Italian pattern took on an unmistakable characteristic of English music drawn from folk music. Similarly, a German musical style was well established and recognized before the establishment of the German political state, because there were numerous German speakers long before there was a single German nation.

Japanese popular music, however, presents an interesting exception to this. Twenty years ago there existed a number of Japanese popular music forms which emphasized their western origins by deliberately distorting the natural stress contours of Japanese speech. The result was a pastiche of East and West. Ten years ago, Japanese audiences had gained considerable familiarity with many forms of Western popular music. Yet, although the melodic and instrumental accompaniment style of these new popular songs was extremely sophisticated, the distortion of Japanese speech contours continued. In 1979, the newest examples of Japanese popular songs in the western style had reached a very sophisticated level of adoption of western style to a new form of Japanese poetry which is suited to the contemporary Japanese concept of today’s world. Although these new song texts read like good examples of traditional poetry, in their interpretation on these new recordings there is a distinct and apparently conscious distortion of the natural accent and stress patterns of spoken Japanese. One might suspect that total assimilation of the new popular music to the patterns of Japanese speech is being consciously avoided.

Cultural Uniformity and The Media

Most radio and television programming around the world continues to become increasingly uniform. There are of course cherished exceptions, certainly. This uniformity seems to be a reflection of the comfortable conformity we see in so many Holiday Inns, Starbucks and McDonald’s all over the world. Still, there are some
important, if few, channels for diversity. The publishing industry and the record business are two examples that immediately come to mind. The mortality rate for experiment in these industries may be high, but the continued attempts at maintaining diversity are substantial indications of the present health of these two avenues for communication. In spite of continually increasing manufacturing and production costs a great variety of new books and records appear monthly both from the well-established houses as well as from low-budget operations. Is this the signal of the gradual end of cultural diversity, or does this mean that the human species is winning the fight to sustain diversity in order to survive?

**Variants and Aberrations**

We have today in the western world and primarily in the United States a slowly but steadily increasing minority of musicians who are devoting themselves to the study of the classical music of India. This is a concentrated large-scale study of Indian classical music and it has been going on for almost forty years. Yet in spite of a few noteworthy and significant experiments in the fields of pop music and to a lesser degree in Jazz, there has been little true assimilation of the fundamental musical principles of the Indian tradition nor has the knowledge and appreciation of the depths and inner workings of this music moved much beyond the inner circle of knowledgeable specialists. This is not to deny the importance of the large audiences that continue attend concerts of Indian classical music nor to ignore the increasing frequency of those concerts. However, these events still survive in a context that is strongly tied to the Indian tradition and they have not been significantly modified for easier assimilation into the larger recipient culture nor have they been absorbed. There are many reasons for this, not the least of which may be the fact that as a classical tradition carried on by professional exponents, there is little about Indian classical music which allows for the broad popular dissemination. This is something that might have been more easily accomplished with a popular music. It is also apparent that the study of Indian classical music is much more than a passing fad. The result is then an enclave, a very strong one that exists in the dominant culture of many countries in Europe, Asia and America, but closed and isolated from the main stream. There are many such sub cultures within each dominant culture. However, the case of Indian Classical music is particularly interesting because although it continues to be strong within the overseas Indian communities, it has also incorporated a great of non Indian enthusiasts and cognoscenti.

Although it is certainly pointless to speculate on the future, it is interesting to consider the very solid and substantial growing interest in this music and compare this to the plight of the symphony orchestra in the West. With the increasingly high costs of concert hall bookings, transportation costs, and the rising pay scales for
union musicians, many large cities in the United States are finding it nearly impossible to sustain symphony orchestras. Even fund-raising drives which are mammoth compared to standards of only a few years ago still leave symphony orchestras with deficit budgets and dwindling audiences. Municipal orchestras, as large institutions in a free enterprise system, have had to cope with increased costs imposed upon them by similar institutions, such as labor unions, transportation agencies and publicity organizations. The Indian classical music movement in the West has been able to survive and thrive because it lies largely outside these institutional systems and of course, because the inherent costs of a performance are much less.

The tradition of study of Indian classical music survives in the West because it chooses to function largely independent of the monolithic institutional structures. Symphony orchestras today face difficulties proportionate to this dependence. The contrast between the present condition of these two musical traditions arises from different responses to the pressures of large institutional structures to impose uniformity.

**Mimicry, Tradition, Creativity and Freedom**

In spite of the pressures economic and political for uniformity, diversity continues. Perhaps the formal imposition of systems of uniformity both emphasizes and encourages continued diversity. Perhaps change is the result of individuation and cannot be prevented. The art of Chinese calligraphy has been practiced carefully and with little change for over a thousand years in Japan. Exactitude in teaching this art requires that the student imitate as precisely as possible the models set before him. As skill is gradually achieved even the most assiduous attempts at careful imitation only reveal to the teacher the clear and irrepressible reflection of the student’s own personal traits. It may well be that diversity as a manifestation of the expression of each individual’s perception and assimilation of his experiences is a natural and irrepressible aspect of man’s response to his environment.

**Notes**

5) (op. cit., page 859.)
Part Two  The Structure of Music

Structure in Music

The anthropologist, John Blacking often said that it was not possible to study music out of its cultural context and thus the study of music as music also entailed the cultural context. Not to look at the specifics of the structural elements in music would be to miss perhaps the most important manifestation of the expression of the culture through music.

Some tools for understanding these structural elements are “etic” in the sense that they are devices for understanding what goes on in the culture that have been created outside the culture. This should not be too difficult a stretch since already by using the word music and applying as we see fit even to cultures that do not verbally recognize what we understand to be music we have accepted an “etic” tool as an aid to understanding.1)

The manner in which a music is put together grows out of the culture. The manner in which cultures arrange the voices when they sing, the manner in which two instruments play together, all these things grow out of tradition that is itself the sum of transmission, outside influences and all the chance elements that come together in the process of change.

In this section I propose to look at some ways that different structures are used in music always with the clear recognition that these elements have been created in the context of that culture. In all cases, whether considering scale and tone structures, recognition of patterns, or even the use of time, rhythm and meter, the perspective will continue to be from the cultural context that produced these elements.

Notes
1) See note on Etic and Emic (p. 34),
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Space and Pattern

Walking through the streets of the Vieux Carre’ in New Orleans, one experiences an intense sense of atmosphere brought about by the physical appearance of the area which sparks the imagination with vivid thoughts about its past. Simultaneously one experiences the actual sense of being there in real time. One’s imagination flits back and forth and between the present and imaginary thoughts of the past colored by one’s knowledge of its history. For blocks and blocks all of the streets are of equal length and width. Recurring patterns of related architectural styles are repeated at irregular intervals. Shuttered windows and ironwork balconies heighten the sense of unity in that location and contribute to the sense of “place”. We might be moved to think of this part of the city in light of how it might have been at the period when it was planned and built or about how it might have looked at particular times during the years following.

The experience of walking the Vieux Carre’ is heightened by whatever knowledge of its past we may be able to add to it. The information about events associated with the area intensifies the vividness of one’s images. In addition the memory of one’s own previous visits to the place add additional layers of color to the already intense experience.

Each musical event, be it a performance, a composition, an improvisation, a mental or graphic conceptualization of any of these forms, even that aggregate of musical events we might call a style of music, is capable of creating in the mind, something parallel to this sense of place and time. Images created in response to music can become vividly etched in the mind as one experiences patterns and contours, formal structure, style and interpretation. Thus, listening to music, of course depending on the level of involvement in that listening, can be as vivid and real as that of walking through the streets of an old city.

To continue with this analogy a little longer, consider for example, walking the broad avenues of the Inner Palace City, the Gosho, of Kyoto, Japan. Unless it is a special festival day, this vast walled city within the very center of the city of Kyoto is apt to be largely deserted and usually very quiet, with only a faint murmur of Kyoto traffic audible beyond. Broad and long gravel roads bisect the area at precise and regular intervals. These gravel roads separate the area into parks and gardens and blocks of seemingly endlessly long light earth-gray colored walls of the palace
buildings, each marked by five continuous white lines which run the length of the walls and which indicate the Gosho’s relation to the Imperial Household of Japan. Here no cars are allowed to enter, nor do noisy crowds interfere with one’s musings on how this sacred Imperial compound might have looked and sounded in the years before the Meiji restoration. Only an occasional cyclist wheeling across the wide gravel roads reminds one that this place is in the middle of a large modern city and that passage through it is the most convenient means for walkers and cyclists to cut through to the other side of the city.

The Gosho of Kyoto, like the Vieux Carre’ of New Orleans gives an intense sense of place and time. It is strongly evocative of the past and yet also makes one very much aware of the present because of the contrast between the quiet of the inner city and the bustle of modern Kyoto just outside. While both the Vieux Carre’ and the Inner Palace of Kyoto evoke a strong sense of place and are colored by those experiences and what knowledge we bring to them, each is, in addition a very different place. Each has a different treatment of space, a different relationship of building to thoroughfare and a different proportional relationship between the visitor walking through it and the walls and buildings around him.

Perceving Structure

The analogy with music is useful. A musical structure is colored by previous knowledge and experience, and in particularly by what we have most recently experienced. In addition, however, each musical structure, composition or event has a structure and set of formal and temporal relationships and proportions in and of itself. These relationships form the context to which we bring our own individual contributions whenever we experience it.

We perceive structure in music as well as style in music as we pass through it, or as it passes over us through time while we stand still. What we really experience is a constant string of single instants when particular sound waves reach our eardrums. The scanning process by which we mentally move back and forth between what we remember of what we have just heard and compare that and relate it to what we are now hearing, allows us to perceive pattern out of this continuous flow of successive instants. The pattern then becomes registered in our brains and enables us to sort out groups of patterns and directions in the sounds and to begin to establish certain expectancies about what will follow. The perception of form and structure in music is possible only because of our ability to “wander” into the pattern that our memory has convinced us to believe really exists. But in the instant of hearing music, we are not only engaged in scanning back to what we remember. It is also the expectation of what might come next, increasingly delineated by what we have just heard that absorbs us and keeps us listening.
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Fig. 35 The Vieux Carre, or Latin Quarter of New Orleans

Fig. 36 The inner walls of the Gosho, the old Imperial Palace of Kyoto.
In some musics it is evident that the composer/creator wants the listener to follow carefully and to gain maximum appreciation by mentally analyzing the patterns he has created. In some musics, however, it might seem that the perception of form and structure was intended to be subliminal, that the listener was to feel the form and pattern of the piece rather than be conscious of it.

We experience a very different perception of space when we enter a very large space, like the main salon of the Palace of Versailles, than were we to enter the palace broom closet. Our eyes tell us immediately about the differences in the ordering and proportions of space in these two places. Yet, we would still experience much of this same difference if we were alternately to enter these two spaces in total darkness. What I suggest here is that there are many constructs in music that we experience without resorting to conscious analysis or to the necessity of recalling conscious verbal descriptions which affect our listening. The parallel examples of the perception of physical space and, in particular, of the planning of cities are useful here. Patterns of sound created in music as either conscious or unconscious elements have the same importance in listening to music as do the physical characteristics of the space we occupy.

The perception of form in music requires the ability to maintain a mental reconstruction of the pattern of the music and to apply an analysis of it that renders it into meaningful and discernible segments. In one culture or another of this planet the precise definition of form would require modifications enough to make such an exercise futile. The principle that operates in the perception of form is, in essence, based upon the recognition of discrete events in time. Strokes produced on two gongs of different pitches insofar as they are perceived as discrete events can be thought of as exemplifying form. If we hear two equally spaced strokes on the same gong we might also perceive this as two discrete events and thus as form. If the evenly spaced strokes continue we shall need to determine at some point that it has become a predictable and repeating series. If two strokes of the same gong are irregularly spaced apart in time these two strokes can much more easily be recognized as separate and forming the initial segment of a potential pattern.

**A Visual Analogy**

The visual parallel to this aural process of perception would be to draw analogy to the availability of only two options, a space which can only be entirely white or black, that is completely covered with uniform information or containing none at all. The next step is to take this single area and divide into two different areas, one white and the other black. The process of continually subdividing an area into increasingly smaller units creates increased definition of the area. If, however, we begin to rearrange these black and white units into different configurations, the increased
subdivisions allow for a greater scope of variation and a higher degree of definition.

We could continue this until it would be possible to reproduce the level of definition of a high quality photograph. There is no particular point at which we cease perceiving discreet blocks of black and white, and begin to see larger complex units. It just suddenly happens. We need to be jogged into seeing pictures in collections of arranged minute black and white dots on paper. In the same way at some point we cease to hear individual strokes, or beats and if they begin to come close together we may begin to hear them as a single sound. Conversely, the lowest pitches we can perceive as “notes” are in the range of about 20 vibrations per second, at which range one can almost hear the individual beats. Lower than that we hear a series of rapid beats or undulations no longer aggregated into a single event.

The higher degree of subdivision allows a greater degree of definition of the area within the space and by the juxtaposition of the smaller units obtainable within the area more complex variants of the possible patterns become available. Further subdivision of units thus allows scope for the representation of more complex patterns. From two discrete events moving to more complex forms thus is a matter of degree and of level of complexity. The perception of a new event helps to define or redefine a previous one, an event that might have gone otherwise unnoticed. For example, a single group of pitches can be perceived as forming a meaningful segment of a larger unit because of the structural relation which we believe to exist between the individual units in the segment.

**Meaningful Segments into Sequences**

The grouping of these segments results from our having been predisposed by prior experience to expect and therefore define meaningful segments in what we hear. In our perception of a series of sounds, it is our prior experience which allows us to group these sounds into a single unit for comparison with other units and therefore to begin to predict what larger units or segments might follow. In this way we can group a segment of sounds together, consider them either as a series of individual sound events if we wish, or group them together as the beginning of a “melody” or other meaningful grouping.

The manner in which the device known as a sequence in Western European Art music is perceived is a result of this process. The sequence is, on the surface, a seemingly simple device by which a single short melodic or rhythmic motif is repeated at a different pitch or at a new point in the rhythmic pattern. The listener perceives a group of notes, first as a new unit or grouping. At the repetition of the same sequence of notes at a different pitch the contour of the pattern just heard and now reinforced by repetition, becomes highlighted and fixed in attention. Repetition delineates the pattern, but repetition gives the pattern a life of its own and
expectation then permits the sequence to move into perhaps unusual tonal relations if the perception of the formal pattern is retained.

The sequence, because it draws on the pre-established pattern of the first statement, is allowed a high degree of melodic or rhythmic innovation in relationship to what has already been established in the tradition of that music or even in that particular composition. Thus in the European art music tradition, the introduction of a sequence based on a melodic unit can also use the entire supporting harmonic structure as well and in both the melody and harmony introduce in the repetitions, melodic intervals and harmonies which would not usually be heard. In the context of the sequence they are accepted because the listener has been prepared by the established pattern of the first statement. At the same time, a very important feature of the sequence is that, by its use of repetition it establishes firmly a pattern that can now be predicted.

In the music of Burma sequences are very frequently employed. In certain forms of Burmese music, the music for the theater in particular, sequences appear almost at least once in every composition. Invariably such uses of the sequence technique consist of three statements of the melodic phrase usually descending by conjunct steps. Modulation from one mode or tonal system to another is common in Burmese music. However, the use of sequences allows for some modulations which, in the Burmese system, might otherwise be perceived as surprising or unacceptable if introduced without preparation. The device of the sequence in establishing first a threshold of predictability creates a context that allows the listener to comfortably relish the still exciting shifts into surprising tonal relationships.

The use of sequences to create this type of subtle surprise also occurs throughout the history of European art music. Its effect is a little difficult to explain. In both the Burmese tradition as well as in Western music, the mechanical device of the sequence permits the listener’s acceptance of a short melodic phrase which outside the context of the sequence might be considered harsh and yet within it creates a subtle stimulation for the listener.

In the music of India, by contrast, the rules for melodic generation as embodied in the raga system are too firmly fixed to allow for melodic sequences on different intervals. Such a practice might thus introduce fragments from different ragas, a practice which is allowed only in certain very sharply defined types of performance and is usually strictly forbidden. By contrast, however, the Indian rhythmic system makes regular use of rhythmic sequences in both North and South Indian classical systems. The Indian rhythmic sequence in its most frequently encountered form is a rhythmic cadence called tihai in the North and mora in the South. As in the Burmese melodic sequence, this consists of three consecutive statements of the pattern culminating in this case with a synchronized return to the main beat of the rhythmic cycle. Just as the melodic sequence allows for the introduction of otherwise unusual
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Intervals and harmonies, the rhythmic sequence does something similar. It allows, by virtue of having been first previously established as a pattern, the introduction of a rhythmic pattern on an unusual starting beat of the rhythmic cycle, one which would otherwise not be expected.

As well as allowing for the introduction of melodic or rhythmic material which would otherwise be unusual, the principle of the sequence also provides an important means of reemphasizing the importance of the initial statement as a meaningful segment. The sequence is a particularly overt expression of a principle that is going on constantly during the process of perception. Each newly heard event redefines whatever is remembered to have preceded it. The basis on which this redefinition occurs is different according to the particular tradition and the experience of the listener in hearing this particular form, style or tradition.

In the classical or Art music tradition of the West the particular and unique skill of the composer lies in his ability to create forms and structures which are engaging and into which the listener can, with concentration, penetrate. This process might not necessarily require conscious analysis. The composer, particularly, from the late 18th century until the middle of the present century, attempted to lay out a plan, simple enough so that all who wished to could follow, but complex enough so that the task would be challenging. Much of the music of the West during this long period tended, not surprisingly, to unfold much as does literature. The listener is not engaged as an active participant but as a respectful witness who sits and listens attentively as the story unfolds before his ears. He allows himself to be transported, and the composer’s intention is that he should, by the skillful devices contained in the composition. At the end of the performance the listener is expected to appreciate that something of beauty, and perhaps also of complexity has been presented to him.

How Culture Defines the Listener’s Role

This may be something of an exaggeration of the passive role which the Western concert goer is expected to take. His response to the music may also be such that he is not conscious of himself listening to the creation of another human but may feel himself deeply engulfed in the experience of the sound. The role of the Western concert goer does stand in great contrast, however, to the more active role which is expected in many other societies. In the culture of many of the Indian groups of the Americas, every one present is expected to function as a participant and one who contributes something to the performance. North and South Indian classical music provide additional examples of the active roles which audiences are expected to play. This is also true in many Sub Saharan African cultures. The various roles which audiences are expected to play is in direct relationship to the manner in which the music event is structured in time, which is to say that these
different audience roles are a reflection of the very different conventions by which musical form is employed.

At first glance it might seem that the requirements for the Indian concert goer are essentially the same as those of his Western counterpart. There is, however, a vast difference in what is expected of each. In order to appreciate a concert of Indian music the listener must be very familiar with the structure of the music. The audience is expected to be familiar with the raga and tala system enough to recognize the major ragas of the system in order to fully follow the development used by the performer of the moment and to be able to appreciate his unique contribution to it. He must also be well enough acquainted with the tala rhythmic system that he can recognize and mentally or by tapping quietly keep time to the often complex rhythmic patterns. This requires not only the ability to count in often very complex metric units, but to recognize a number of fixed rhythmic patterns and to continue counting them to oneself while the performing artist is executing rhythmic and melodic variations on it.

What one sees and hears at a concert of Indian music is an audience often physically moving to the changes in the music. The audience is often overtly keeping time by clapping out the time patterns of the tala, and sometimes enthusiastically calling out a word or praise to the performer for some particularly skillful turn. Members of an audience attending a concert of Indian music often emit audible sighs, or gasps of appreciation. At the height of the performance, an intense spirit of cooperative competitiveness takes over as the melodic soloist - instrumentalist or singer - and the drummer move into increasingly complex melodic and rhythmic variations make the audience’s task of keeping up with the counting increasingly challenging. At the end of the performance the audience applauds almost as though they were themselves in part responsible for the excellence of the event, so intense was their participation in it.

While it is true that the Western concert-goer is expected to be familiar with the basic repertoire, the level of required knowledge is relatively small when compared with the knowledge of the melodic and rhythmic theory found in the larger percentage of an average Indian concert audience. The expectations are not unreasonable ones in India because so many members of the audience there are amateur musicians themselves. The process of listening to Indian classical music involves considerable background knowledge. The audience must discern discrete and meaningful units of sound by continually relating what is being heard to that which was just heard or was heard on other some occasions. In this manner the listener is first, able to create in his mind, the defining characteristics of the particular raga which is being spelled out step by step. At the same time as he comes to recognize which raga is been interpreted, he is also able to compare this execution with the nuances, new phrases, new tonal relationships which this particular
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composer/performer is giving in his interpretation.

In the *mbira* music of the Shona people of Zimbabwe the listener becomes immersed in the repeated pattern which he hears. The basic pattern repeats so much that it becomes a strong predictable element on which then the minute and subtle variations take on greater significance. The listener does not expect dramatic changes in the music nor displays of virtuosity. These would be out of place the context of this culture. Instead the audience becomes drawn in deeper and deeper into the pattern. He hears constantly changing patterns like those which result from the turning of a kaleidoscope. In this process of picking out and making up in his own imagination new patterns and new groupings of the sounds which he hears, he may be gradually and quietly drawn into a state of trance. The music, so long associated by the Shona people, with their ancestors, may move some even to speak with their ancestors while immersed in this music and in a state of trance.\(^1\) The seemingly endless repeated pattern in the music, the lack of linear formal structure and the context strongly associated with the spirits of the ancestors all contribute to the special type of audience response in this culture.

![Fig.37](image)

**Fig.37** The *mbira dza vazimu* of the Shona people of Zimbabwe. On a small wooden board a number of metal tongues are attached and tuned. These are plucked with the two thumbs and, in the case of this particular type of *mbira*, with the first finger of the right hand plucking the high keys from under. The *mbira* is usually played in interlocking pairs in Shona.

In both the Indian classical music as well as the Shona music of Zimbabwe, the listener is not listening to a gradually unfolding linear pattern or form being
presented to him in increasingly accumulated segments. To describe this other, non-
European kind of listening as a way of perceiving of form is to stretch the usual and
somewhat narrower usage of the term form. Still, the process of listening is much
the same. It is in the culturally defined parameters of the terms we use to describe
what we are listening for where the differences lie.

Balancing Spontaneity and Familiarity

In a sense the ideal mode of listening in Indian music requires sufficient time to
develop the aural image of the complex of tonal relationships, that is, the raga,
which the composer/performer is creating. The end result should be a construct
image in sound that does exist in time, but which remains flexible and fluid enough
to permit many interpretations. A performance is not one fixed map or a formal
structure of tonal relationships that are repeatable and exist in only one fixed sets of
time relations. Here reference to the distinction between general spacetime and
music timespace used by the musicologist Charles Seeger will be useful. While
every performance of the Beethoven Seventh Symphony is conceptually the same in
specific space/time, in the larger context of general space time no two events are
ever precisely repeatable. Each performance of a raga has a unique set of temporal
relationships that constitute the actual specific performance at that moment.
Repeated performances of the same raga, even when by the same performer
attempting to recapture the mood of an earlier performance and even within minutes
of each other, would not be heard by Indian audiences as having the same structure
in specific space/time. The differences in every performance of the same raga, even
by the same performer are the very essence of that which in India is considered the
performance.

The western counterpart of repeated performances of a Beethoven symphony
would not be the identical either. Each performance would be considered distinct
and such performances could be also critically compared. However, any number of
even widely divergent performances of the same Beethoven symphony can be
abstractly conceptualized as a set of tonal relationships with a significance of their
own which stands outside the context of any particular performance of that piece.

These three different usages of time as space in music, the tradition of
European art music, the classical music of India, and the mbira music of Zimbabwe,
provide us with a few of the countless approaches to the organization of time that
humans have thought up during this short period of existence on the planet. They
provide some idea of the scope of possibilities which man’s imagination has enabled
him to create. Each is a solution to the challenge of working within the limits of
man’s ability to conceptualize, to remember and to create from this combination of
activities a mental image of what has been defined as the preeminent “message” of
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The music in the culture.

All these examples require time and pitch for definition and thus can be thought of as being in some way mapped out in time. Yet only in the Western classical music tradition does the analogy of a map seem appropriate, that is to say a sound diagram or plan which is in some way analogous to the plan of a city or a diagram of a building. If an analogy may be used only to emphasize the contrast, the conception of Indian music might be thought of as like the basic principles and theory of city planning which the master builder brings with him to the task of building. By contrast the Shona mbira music might be exemplified differently. Think of an analogy of an imagined scheme or blueprint that describes the form and pattern of a city. In practice the same blueprint could be used for many possible cities. In each realization difference could occur and thus each manifestation would be but one of these possibilities. Many possibilities could occur from the same blueprint, and some might never be realized or ever recreated again in the same way. The perception of pattern or structure in music and the means by which we exemplify it is that which enables us to relate what we are hearing at any one moment to what we have heard before. In short, it provides us the key with which we are able to place whatever we hear in the larger context of our own highly individual cast of our common culture.

Humanly Controlled Change

In any culture what is considered beautiful in music will be unique and may be incompatible with what is considered beautiful in another even closely related culture. The one trait that many, if not all appear to share is that in the process of listening to the music, the listener is in some way aware that this is a human creation even though there may be only a subliminal consciousness of this. One might hold that the most beautiful music ever heard was the sound of the wind through the trees. There is as yet no society known to us that uses a definition of music that includes such non-humanly produced or controlled sounds within its boundaries although there are many cultures in which such natural sounds are considered very beautiful. It is the fact of human creation and execution that in all societies defines music.

One of the most common means for being aware of the human factor in what we hear is in the perception of a pattern of change. Although humans are physically and mentally capable of producing sound which consists of endless and exact repetitions of a single unit this is not done. While there may be people in one culture who may perceive that other peoples’ music is static and repetitive this is usually the view from the outside. There does not appear to be any consciously created music by humans, in which change of some type or another does not indicate the active control of its creator. It is in the perception of change that the conscious awareness
of form in relation to the passing of time takes place. Change is perceived as this moment being different from that moment, of “now being different from “just now”.

**Perception of Change and Its Limits**

The perception of change in music is limited and bounded by the culturally defined delineation of the meaningful units in that music. The listener participates in the process of music by using his memory to experience and define each change he hears as it occurs. The perceived change can be used in the European manner of listening to the gradually laying out of a plan or structure. Change can also be recognized as the gradually increasing number of possibilities from which the listener can contribute to the creation of yet others as in many types of African music. It is, of course true that this same principle operates in strong evidence in much of the contemporary popular music of the world. To acknowledge this fact, is to recognize the distinctly Afro-American element in the origins and roots of this music. In all types of music time and change work together to create that which the listener has been prepared to expect by his cultural conditioning. This consciousness that what is being heard now is different from what was heard just now has evolved as the important element to create cohesion and a common sense of predictability between creator and audience in many cultures. As is the case in all other aspects of music, the manner in which this principle manifests itself is different from one music to another.

**Ways of Controlling Contrast and Change: Theme & Variations**

In Western music the principle of contrast is typically exemplified in two classic forms, the theme and variations, and the variations on a ground. The variations on a *ground* is a method of construction which was introduced into Europe in the 16th century from Spain, perhaps based on Arabic or North African variation principles. It consists, in essence, of a melodic line, usually in the lower part, which is repeated continuously while variations in the upper voice are superimposed.

This form of contrast in which the basis for the variation, the ground, and the variations themselves are heard simultaneously, flourished throughout Europe for over two hundred years, under various names while being gradually modified. The variation form, which later supplanted the ground and which we today typically think when we talk of variation in Western music is the theme and variations. In this structure a theme is stated first in simple form and then the theme, has in the West come to be that which first comes to mind when we think of variation. The older structure of the ground as a basis for superimposed variation is a manner not very
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different from that used in African mbira music or for that matter, the American form of piano blues known as boogie-woogie. In each of these three systems, the ground, mbira music and boogie-woogie, the bass line is not really the theme on which variations are superimposed. The bass line is the fundamental rhythmic and tonal structure within which all the variations grow. Yet, no single fragment, nor even the repeated bass line itself, could appropriately be considered the equivalent of the theme as in the linearly conceived theme and variations concept.

Distinctive approaches to variation are not only a matter of thinking in terms either of linear or of global patterns. To be perceived change in music must occur in time but the approaches to this use of time are virtually limitless. In the gamelan music of Central Java, to choose one of many possible non-European examples, a large ensemble plays compositions each of which has a distinct formal structure. In the tradition of Javanese music there are compositional types. These are systematized structures that delineate a punctuated rhythmic pattern and each may several individual compositions that employ it. Some of these formal types are long, others very long and rarely used and with only a few compositions in each. The formal structure of the composition is heard in a manner that at least superficially parallels the ideal method of appreciation of form in European art music. The listener hears, remembers what he hears and adds that to the gathering information in his memory and thus gradually makes in his mind a map of the structure of the composition.

The Javanese approach to the organization of space and time seems identical to that which is characteristic of much of the music of the Western world. The anticipated audience response to Javanese music may be truly different from that expected from a Western audience. The Javanese composer expected that his audience would more than likely be wandering around during the performance of his music and knew that periods of rapt attention and concentration would be short and sporadic. Audiences in Central Java, as in many of the cultures of South East Asia are free to roam about, to enter and leave the performance area at any time, frequently arriving late and not remaining until the end. Javanese would, however, deny that wandering around or even dozing represented a less satisfactory audience demeanor than sitting in rapt attention. In many Asian theatrical and dance traditions it is understood that even those who might appear to be indifferently attending what is taking place in the performance are, in fact active participants. In many such traditions the music is structured so that it can be heard and enjoyed at several different levels of concentration.

It might seem that this practice is evidence of the low esteem in which music is held in Asia. It must be true that if focused concentration is not predicted or expected from the audience it would be unreasonable for an Asian composer to prepare music which would require it. A large number of the listeners seated in the
Western concert halls are not willing or able to follow the intricacies of the form that the composition of the moment may demand. The expectation, that is, the attitude predicted by both audience and composer is that they will certainly try. The expectations of audience and composer in the culture in this way have a profound affect on the path that the creation of new forms will take. One interesting distinction between the Asian approach to audience perception of structure and form, for example, and that of the West is that music is planned in order that several different levels of involvement with the music can occur. In the West when there is the expectation that in a certain context, at a supermarket, for example, people will likely not be listening attentively, they will likely be provided canned music, Muzak - certainly a type of music which begs to be ignored!

The fact that the audience in a traditional Asian music performance, like that for the Javanese gamelan, may not be concentrating on the gradual unfolding of the structure and form of the composition does not mean that the form of the music is not perceived. The lack of rapt concentration on the part of the audience has certainly not constrained composers to use simpler and more easily comprehended forms for their compositions. It is indeed likely that in Javanese music the structure of the music is re-enforced by the complex system of layering several levels of ornamentation all based on the underlying formal structure. Even the process of anticipating certain key notes in the unfolding of the piece all works to subtly saturate the listeners unconscious with the imprint of the meandering of the melody and consequently, its form.

**Formal Pattern & Structure**

We perceive formal pattern and structure in music as it unfolds in time. Since the willingness to accept the music we hear as something which falls within our personal cultural parameters for what constitutes music, an even brief conscious period of listening must take place in order for that judgment to be possible. In its broadest sense pattern, or structure, is the organizing system by which we are able to discern music, since without it we could only perceive sound at the instant the sound waves hit our eardrum. When we decide that what we are hearing is music we have already been engaged in some scanning activity, however brief, which has enabled us to find form and relate to those categories stored in our long term memory. The apparently sleeping elder at a Javanese concert must have been engaged in exactly that activity before he decided to relax and absorb the music subconsciously.

Ideally the perception of form and pattern in music requires conscious concentration for the pattern to be retained in memory. Yet we must be scanning the sounds we hear even when we are not actively concentrating on what we hear. Anyone who abhors the impersonal, artificial sound of Muzak forcibly piped into his
surroundings and who manages to avoid listening to it only to find himself humming one of their insidious tunes long after leaving the supermarket, should need little more to be convinced of that idea.

Notes
The process of transferring graphic information into a digital format offers a parallel to rhythmic density in music. Visual analog data is changed into dots in varying shades of color. The density of these dots in each inch of a graphic image (dpi) determines how closely the printed or the screen image will resemble the original, the higher density of dots per inch, the greater refinement of the image. The smaller number of dots per inch renders the image so grossly as to be unrecognizable. Similarly, rhythmic cycles of higher numbers offer the possibility of greater and more subtle rhythmic definition.

**Fig. 38**
Time and Perception in the Structure of Music

How sound waves reach our brains and how we respond and react to these wave falls outside the domain of ethnomusicology. Nevertheless, in order to consider something about the way music functions in different human societies, it will help to clarify some of the junctures between natural sound waves and the humanly created construct we know as music. In this manner we can think about where the differences occur between the ways people hear and use music in different societies.

The Properties of Music

Music in Time and Memory

One of the important parallels between the arts of music, dance and speech lies in the fact that they all require the passing of time to be perceived. They exist in time in contrast to the spatial character of the plastic arts. Dance and theater move both through time and space. Literature and poetry can also use time when they are being read, but both these forms are most frequently expressed and conceived in their static printed forms. In fact all the arts deal in a realm of temporal and spatial thinking and between them many parallels can be found.

Music can be notated and read from a static printed page much like poetry or literature. We usually think of music in its aural mode, however. It is either played live or reconstructed again and again in time by means of a recording. Music is a temporal and spatial arrangement of events into a humanly recognizable form. The manner in which one person creates an arrangement of sound events is based on that individual’s previous culture experience and assumptions.

This may seem obvious but think about, for example, the fact that the entire scope of music in one part of the world may be faster, slower, louder, quieter or have a higher or lower range of notes than that of another. All these expressions still exist in time, but the scale of velocity, volume and range may be different for each cultural group and will seem logical and appropriate to those who are a part of that culture.

In order to effectively work in time, music requires that we use our memory. We are hearing the sounds at the moment at which the sound waves reach our ear drums but we make music of this constant stream of sounds because of our ability to remember what we just heard and thereby estimate what it is we just might be
hearing next.

Our ability to remember what we have just heard has natural limits. There is also a great variety in this ability from one human to another. The ability to remember in order to understand a music also varies with the culture. Until the middle of the 20th Century, the tradition of Western Classical music depended on the listener’s ability to retain in memory long and complex streams of music in order to be able to recognize the formal pattern of the music and what the composer had done with it. Many of the traditional musics of Asia also required that the listener be able to retain long music structures in mind in order to appreciate the performances. Much modern music, by contrast, saturates us with its sounds and does not require us to rely on memory of long complex patterns. We are expected to immerse ourselves in the sound without having to remember long or complex patterns that were previously heard. Other musics create a predictable pattern which allows the listener to become one with the music and perhaps even to dance to it.

**James Carlsen’s Experiment with Expectancy**

The systemic musicologist, James Carlsen carried out experiments which compared groups of young people from Hungary, Germany and the United States, groups which included both individuals who were trained in music and those with no particular music training. In this study he illustrated that the patterns of expectancy for the Americans and the Germans were close while those of the Hungarian group were most distinctive. While it might at first seem that culturally, the Germans and Hungarians would manifest a greater number of similarities, the distinctive linguistic features of Hungarian, which set that language completely apart from the Germanic, Slavic and Romance type languages of most other Europeans must account for the distinctive showing of the Hungarians as a group in these experiments.

Memory plays a vital role in the process of listening to music. It enables us to encode new information and to relate it to previous experience. Our ability in daily life, to process new information and relate it to that information we already know enables us to absorb more new material easily and to establish new patterns of association and to learn. Long-term memory process is something separate from the short-term memory that is required in the virtually instantaneous process of actually hearing and rapidly scanning back over what was just heard immediately preceding what is being heard at the present moment. Listening to music we need both of these processes.

As we scan through what we have just heard while we hear what is going on now, we also have expectations about what we will hear next. This is controlled by our preconceptions based on previous experience. Our expectations about what we
will hear next are controlled completely by our previous experiences. People with common experiences in listening will share common sets of similar expectations. Although no two individuals can have the same expectations, similarities do follow along cultural lines.

Listening vs. Hearing

It is entirely possible to hear and yet not listen. If we find the music we are hearing uninteresting or unpleasant we may hear it without listening. If we hear music from a different culture, we may not be able to discern the key to comprehending it, and may decide that we cannot listen to it as music at all. The line between hearing and listening is defined by culture. Previous experience guides us through new experiences and sometimes limits us as well.

The ability to hear and enjoy music is defined by our culture. As we listen, we look for patterns, an indication that the sounds were humanly organized. We then look for patterns that we recognize. This process helps us to decide if this is music we want to enjoy or not and helps us to know if we should sit and listen to it or perhaps dance to it, perhaps march.

Music and Speech: Parallels and Contrasts

Music and speech intersect each other at many junctures. Perhaps man’s first music consisted of the intoning of words. Music and speech develop in close connection and in many cultures, poetry is always sung, a joining of music and speech. We also use speech to talk about music. We create labels to talk about music in our culture, labels that describe the kind of music and where it is to be played, but
also labels which say whether we like it or not.

Speech and music are parallel in many ways, but different in very important ways. Language is used to communicate messages and feelings, most often in an attempt to effectively communicate what it is we have to say. Although the same can be said of music, it is much more difficult to be certain that the message has been understood. Often even when we know that the music has been accepted, we cannot know in what way the message was understood. We cannot know if the message intended by the creator or performer was the same one that was received.

In another way music and language have strong parallels. Common music styles and forms often grow and develop around common and related language families. The stress and accent patterns in different languages have a deep effect on the melodic stress and accent patterns in the music. The tone patterns in tone languages such as Chinese, Burmese and many Bantu languages in Africa have a strong effect on the melodic patterns of those musics.

Culture, politics and economics also exert strong influences on music and can override the natural relationship between language and music. The Basque language of South Western Europe is structurally and linguistically different from the languages of its neighbors. Yet Basque music, while unique in its specifics, is structurally little different form the music of its neighbors. The Japanese and Korean languages are very different from the modern languages of Western Europe. Current contemporary popular music in Japan and Korea has modeled itself so strongly on contemporary Western popular music that these no longer follow the traditional Japanese and Korean patterns of stress and accent.

On Language and Music Acquisition
The Process

Much of the culture we acquire we acquire through the medium of language although not all of it. We take this process for granted and yet there are an infinite number of variations in the manner by which this is accomplished as we consider different languages and cultures.

Children are constantly engaged in the process of absorbing and rejecting from all that they experience each day. Through this process they are constantly selecting and developing a vast repertory of responses, both positive and negative, developing sets of likes and dislikes, and attitudes that generate approval and disapproval. All of this eventually provides them with a guide through the paths to becoming the adults that every society expects and demands.

The Lullaby as Metaphor

The lullaby in a sense serves as a convenient metaphor for the all of the earliest communication to the new infant from those already established members of his
society. In the lullaby speech patterns stress, tone and accent and the sounds of the language are passed on to the infant. The infant also hears the sounds that the adults and older children use to communicate among themselves. The infant is also developing positive emotional associations with these sounds at the same time.

We think of the lullaby as something pleasant and soothing that the mother sings to put her baby to sleep. In Romania the classic prototype of the Cintec de Leagan, the lullaby, has strong ties to, and eventually led to the folk love song of Romania, par excellence, the Doina. Even the polished love song character of the Romanian Doina retains something of the soothing lullaby quality in it.

There are some cultural practices which suggest that the lullaby may be something else. Among the Aymara speaking Indians of the Puno region of Peru, the lullaby takes on a different nuance. The strident quality of the mother’s voice sounds at times as though she is shouting or chiding the child into sleep. In India one might be astonished at the process by which mothers put their babies to sleep. Mothers in India usually sit and lay the baby across their knees while vigorously tapping the heel up and down causing the baby’s head to bounce rhythmically. The babies do quickly drop off to sleep. Certainly this is antithetical to the Western idea of lulling the baby into a state of quiet which leads to sleep.

The apparent primary purpose of the lullaby is to draw the infant into sleep. This does not mean specifically that it must lull the infant into a state of drowsiness. It provides the infant with a sense of the mother’s presence even if she is nearby and continues to work. As long as the infant hears the voice of the mother, or physically feels her presence, the necessary sense of security pervades and sleep can then follow. It was this same reaffirmation of the presence of the mother that was going on between the mother in India and her infant. While lulling, comforting and soothing sounds may be what the Westerner believes to be essential in the raising of a healthy infant, what the survival of the species requires is in essence sleep and this can only come about when a sense of safety and security has been established. The species has survived because there are various cultural adaptations to the need to get infants to sleep.

The lullaby, and perhaps, by extension, also music itself, comes to be associated with love, safety and comfort. We cannot say that this is why so many people in so many of the world’s cultures love and value music. Nevertheless, music first appears in human life in combination with very positive experiences and this fact may enhance the manner in which it is regarded throughout the human life cycle.

**Chopi Music**

In the summer of 1971, I was in the Marieshaft Mine Compound near Johannesburg, South Africa to hear and record the Timbila or xylophone ensembles
of the Chopi workers there. I had just returned from spending a few short happy weeks in Mozambique — all that the then government would permit — studying this same music.

Andrew Tracey, the South African musicologist, knew the musicians at the mines, and had arranged for the recording session. The ensemble of musicians for that day consisted of 12 Timbila, xylophones of different sizes and about an equal number of singers and dancers. They played several pieces from one their current ngodo suites with amazing fire and polish.

The musicians of the ensemble were all polite but with the reserve one found as one of the unfortunate results of the constraints imposed on cross-cultural social exchange at that time in South Africa. After the recording, Andrew told the musicians that I had just returned from their homeland in Mozambique where I had been studying a bit of Timbila with the Master Musician, Chambini who had, incidentally, also, at one time, been Andrew’s teacher. The musicians were anxious, perhaps only curious, to hear me play. I was terribly embarrassed having only had time to quickly learn about ten pieces from Chambini. But from frequent experience in situations like this, I have learned that as a visitor once the suggestion is out, there is nothing for it, but to do the best you can and hope that the sincerity of the effort will carry the day.

One of the musicians got up and insisted that I sit at his instrument. I began to play one of the pieces Chambini had taught me, one for which he gave no special name saying only that it was a kind of study. The musicians in the ensemble did not wait long before they joined me in the most thundering and exciting performance in which I have ever participated, notwithstanding that I was only playing the basic structure of the piece. The basses rumbled and two of the cilanzane, the leader timbilas, were elaborating marvelous variations on the basic pattern and it seemed that the entire mine compound was resonating with the sound.

The excitement of this “cross-cultural friendship” performance soon got the best of Andrew and I heard him exclaim, “I want to play this, too”. He sat down and watching the hands of the player seated next to him quickly picked up the pattern and was soon a part of the performance. After we continued playing this same piece for some minutes, Andrew suddenly put down his sticks, jumped up and shouted, “I know this piece! Chambini taught me this one, too!”

At the time we laughed at this incident which we both found amusing. Yet, in retrospect, that incident tells us about the complexity of procedures going on in the brain when we hear music. How was it possible that one can and quickly learn and then be playing what seems to be a new piece only to discover a moment later, that one already knew it? In this instance, two things are clear; at the outset Andrew thought he did not know the piece and sat down to try to learn it. Andrew did, in fact, sit down and proceed to learn the piece as though it were a new one and one
with which he was not familiar. But it is also clear that he did already know the piece and only realized it after he had been playing it for some minutes.

Perhaps, had this particular piece had a fixed title - most of the Chopi Timbila pieces bear the name of the movement of the Ngodo suite in which they appear - he might have recognized it more readily. It is also in the nature of the “kaleidephonic” and cyclical quality of much Sub-Saharan African music to permit the perception of the pattern of a composition from a different starting point, and thus with a different mental configuration of a same single pattern. Hearing a familiar pattern from a different starting point might at first give the false impression of hearing something completely new.

This story exemplifies two points: first, it shows that it is possible to retain at least two different mental reconstructions of sound; one in which we are actively engaged in thinking about or acting upon and another, which may be the result of an earlier stimulus dealing with the same phenomenon, but about which at the moment of engaging in the first activity, we are not conscious. Second, the manner in which we first perceive the stimulus codes it in such a way that we categorize it, treat it according to the set of behaviors filed under that category where it remains until
something calls it up again or suggests that the existing and current code may need to be changed.

**Early Speech Acquisition**

Children naturally acquire the speech patterns of the language of those heard speaking in their environment. This is true of the music as well. The Indian child in Peru finds it natural and reasonable to sing within the boundaries of this same system. Children in China and Japan and Shona children in Zimbabwe likewise grow up hearing music and speech that come to define their musical cultures.

Several kinds of information are being transmitted during this very early process of speech/music exchange between the infant and those around him, all occurring long before language as we usually think of it has begun to even serve as a means of communication for the new learner. Formal structural information about both speech and music is communicated along with an emotional layer of information. The lullaby contains both these type of information and there is no doubt that the infant is absorbing them both. The child first learns by the tone of speech. The lullaby becomes a pleasant sound by association just as the tone associated with stern words and reprimands then develop negative associations. From infancy the child absorbs both structural and emotional patterns of the language. These are the basis of the music of the infant’s culture. Positive associations with music may begin here. Music comes to be associated with comfort, warmth, security and protection. Eventually we learn to associate that pleasant feeling with the lulling sounds of mother’s quiet singing or with the sounds of a thirty man Balinese *gamelan* that the child grows accustomed to hearing as he falls asleep in his father’s or mother’s lap at all night performance. These sounds come to be associated positively with a sense of peace and well-being. Later in life the same individual may recall some of that sense of peace while half drowsing through an all night performance of the *Gambuh* Theater. Hearing the names of ancient fabled cities and of kings and princes transmitted through the music come in a spoken language that is so classical and archaic that he cannot fully comprehend it.

A Shona child growing up in rural Zimbabwe is soon accustomed to hearing the rich sound of several mbiras as they are played almost continuously for two or three days at a time in the huge smoke filled banya, or meeting house. It becomes natural for him in later life to associate this sound with a sense of well being, and of unity with his community. Eventually he will probably begin to do as most others in the village also do, to become absorbed in the process of picking out various combinations of sounds in the music. Growing up in this environment he may perhaps naturally and uneventfully one day even become entranced by the music and use it as a link to communication with the ancestors through dreams of music.

Such group experiences serve as an excellent means of communal bonding that
at the same time reinforce the cultural values of the group. In the examples described above, the overt pattern of music may seem simple and repetitive. To those in the culture however they gain much more depth - the complex layers of character definition and historical reference in the Balinese *Gambuh*, the complex and ever changing pattern of kaleidoscopic sound in the Zimbabwe mbira music. Among the Tarahumara Indians of Northern Mexico, the music for the Matachines is played by a group of eight or nine violins. While the overall impression is one of an incessantly repeated melody played by all the violins, the musicians and listeners become entranced by listening to the subtle interchange of variations between one musician and another.

**Content of Early Language Acquisition**

In this manner the child in any culture learns the emotional messages appropriate to his or her culture and together with them absorbs in gradual increments, the tonal and structural pattern of the language which then leads to understanding and recognizing the structure of the music of that culture.

The structural principles of spoken language help to determine the pattern structure in the music of the speakers of this language. The very close relationship between language and music in the early periods of acquisition reflects this process. For most of us there is music which has very strong positive emotional associations. Some of these positive associations may go back as far as we can remember. We have been convinced by many, many years of indoctrination that music, as an aspect of our culture is, a cultural refinement, an enrichment of our daily lives, etc. Given the very strong positive position which music has in every known society in the world it is certainly a likely vehicle for more than enrichment and refinement. It is likely that music serves a function vital to the continuation of our very complex species. The manner in which we learn music - to listen to it and to participate as we can in its production - serves to constantly refine and expand our vocabulary of spoken expression. It does so by refining and enhancing our sense of emotional coloring as expressed in minute shadings of tone and stress pattern heard in music. Music may be man’s primary means of sustaining the process socialization and as such serves as man’s most important and effective civilizer.

**Studio Musicians**

The task which routinely faces a professional musician playing in a New York or Los Angeles recording studio is also complex. Because of the pressures to keeping steadily mounting studio costs down the method of recording underwent great changes from those days in which an ensemble sat together rehearsed and recorded. Today musicians often sit in small isolated recording booths and listen on earphones to what other musicians may have recorded previously, days or even
weeks ago and perhaps even in another part of the country. To the sound they hear on earphones - sometimes all they are given to hear is a rhythmic click drawn from the other performance with which to synchronize. Sitting in this small booth, listening to whatever comes over on the earphones, they must blend in the new part to be added. The player must forget that he is all alone in the recording studio and that the other musicians are only there on prerecorded tape.

Because of the high costs of studio time there is a great pressure to get the performance right first time. Thus it is those musicians who can play whatever written music is placed before them at the first try who are most highly considered. But these recordings, be they backup for popular records, TV or film soundtracks, or even TV commercials, must sound as though they originated in a spontaneous live performance. Therefore studio musicians must not only be able to read at sight whatever new music they are given with no mistakes and consequent retakes, but they must also sound acceptably fresh and spontaneous - as if they were creating or improvising the music on the spot. The complexity of musical activity required would seem as great as that required for the symphony orchestra performance.

Although the ideal studio musician must be able to lend an authentic quality of spontaneity to the recording this system does favor the technically proficient musicians over those who might be great individual interpreters but who might require a more conducive and freer atmosphere to do their best. But the preference for a less spontaneous and more regularized interpretation over a freer if rougher performance is a matter of choice which is also based on constructs drawn from previous performances which have entered into our memory, which while themselves subject to constant and regular change, nevertheless continue to color and influence our responses to everything we hear.

**Talking about Music with Words**

We can use speech to clarify thoughts about music and to communicate with other what we think and feel about music. In some societies there is little talk about music in words. In others, great discourse about music as art, about certain creators and about certain particular compositions takes place. But music is a system of communication in itself, and thus communicating about it in another system, language, is bound by clear limitations.

The anthropologist, Claude Levi Strauss in the chapter and section headings to his book, The Raw and the Cooked, which he describes as an introduction to the science of mythology, uses labels based on forms of European art music. There are sonatas, arias, fugues and canons. He sets out by describing myth as a system with deep affinity to music and even dedicates his book to music, but in the design of his book he attempts to parallel its formal structure to the forms of Western musical composition. Were the labels to be removed, however, and had the author not
mentioned this in the introduction his intentions could hardly be guessed.

Another work is an example of an adventurous enterprise using as model a verbal thesis in musical form. This is Douglas R. Hofstader’s, Gödel, Escher, Bach: an Eternal Golden Braid. Each chapter deals with mathematics, music and visual art. To each of these chapters, the author has affixed a section titled after a composition of J.S. Bach. The content of each of the last sections of each chapter is in the form of a fabulous dialogue, but the formal structure is based on particular composition of Bach. Hofstader’s essays can be read without knowledge of the musical composition on which each is based. But the work does read like a puzzle because of the knowledge that an unknown musical form is guiding it.

In the books of Levi-Strauss and Hofstader the reader is asked to make a leap of faith in accepting the author’s intentions. There is no way from the clues provided in each work, that the reader can, nor perhaps should, fathom the precise model on which the author has based his work was based. Both books stand as intriguing attempts by their authors’ to communicate with words in a manner usually reserved to music. Hofstader’s book, in particular is, in every section and chapter, about the interrelationship of science, music and visual art, - not a description of their interaction, but an expression in them.

Ordinarily, we use words to say things about the music we like or don’t like. Musicians use words to communicate with other musicians as well as with their audiences about what they will perform or perhaps use words to provide some background about themselves or the music to be heard.

**Hearing, Sleep and Dreams of Music**

As yet we understand only little of the nature of the listening process which takes place when we sleep. Sound may continue to reach our eardrums but we are probably not conscious of what it is we may be hearing. Recent studies indicate that it was possible to control the breathing of subjects during all stages of sleep by playing audible tones while they slept. A burst of alpha wave activity at the start of the tone indicated response but did not wake the subjects. Therefore it would seem that perhaps REM/dream stage level consciousness was not maintained but the tones could still affect the breathing rate during sleep. From this we can infer that the sounds were heard and responded to, but not processed in the way dreams are during REM sleep.1) (Pietro Badia, John Harsh, Thomas Balkin, Peggy Cantrell, Allen Klempert, Diane O’Rourke and Lawrence Schoen, “Behavioral Control of Respiration in Sleep”, Psychophysiology Vol. 21, No. 5, (September 1984) 494-500.) It may be that attempts to stimulate learning during sleep may have harmful effects in that they cause an interruption of the necessary dream-time required for the brain to process new information received the previous day. Experiments have shown that prolonged REM sleep deprivation results in nervous disorders of extreme
It seems like this unconscious kind of hearing without conscious listening must be different from the kind of hearing without really listening we are engaged in when we hear “Heavy Metal” sounds coming through the walls of an apartment while we are engrossed in other activities, or while hearing “MUZAK” in the supermarket when we are certain we have succeeded in blocking these sounds out of our consciousness. In these last two instances, we may suddenly become “conscious” and aware of the intrusion and at the same time perhaps unpleasantly aware that we have actually been listening and scanning while we thought that our thoughts were elsewhere.

This certainly seems different from what we understand of the nature of hearing during sleep. To grossly simplify the function of sleep, we might think of the various stages of deep sleep as “body sleep” and the REM stage (during which Rapid Eye Movement occurs) as “mind sleep”. Our sleeping hours are spent switching back and forth between various levels of deep sleep and REM depending evidently on the type and intensity of activity in which we were engaged during the previous day. Dreaming generally occurs in the REM stage which seems to be the period during which the brain “processes” the various stimuli received during the day, many of which may not have entered into full consciousness at the time.

Most likely we do not scan and process sounds which are being “fed” to us while we sleep unless they intrude so much as to begin to wake us into consciousness. More than likely during our dream states we process those sounds which we have stored in memory which along with the other stimuli of the day are being reviewed for cataloging, resolution and filing. I find it is something of a relief to believe that the brain floats between the REM and deep sleep stages all through the night. There have been occasions on which I would go to bed with some example of music going through my head and awakened the next morning to find the same tune still there in the first moments of consciousness. At such times I would feel weary at the thought that I must have been “working” all through the night.

It seems that dreams help us to better remember what we have experienced during our waking hours. If emotional responses to music which we have heard during the waking hours cause this music to enter into our dreams, then such music might stand a better chance of being stored in memory for possible later recall. Could this music dreaming activity establish the emotional coding which would then permit its recall through emotional association when hearing others musics with patterns which appear to us to be similar?

If our tangible knowledge of the function of dreams is small, evidence which sheds light on dreaming of or about music is even scantier. Recollections of dreams about, or with music which we remember occur during the REM stage which must
be arrived at after passing through some level of deep sleep. Whether music appears to us in deep sleep has not yet been reported or documented. One element of this question is quite interesting. People who recall dreams with or in music most often recall them in some “real” context - in the dream someone is actually playing the music or in the dream they are in a situation in which music is being played. This kind of music/dreaming has been described by people in many parts of the world, and in fact among the Shona people of Zimbabwe, such dreaming of music functions as one of the most significant means by which the ancestors speak to the members of the tribe.3)

The existence of empirical evidence describing music dreamed in a real context cannot preclude the possibility that some individuals may dream in pure music, that is in pure sound, without any dramatic or story context which they might easily recall on awakening. People who are engaged for long periods of the waking day in the performance or conceptualizing of music spend more time processing musical thoughts than others and some of this activity might well occur during sleep. Some of this recursing or replaying activity in “pure” music, that is, without dramatic context, may also occur during the various stages of deep sleep.

**Communicating about Music Non Verbally**

We also communicate about music without using words in many different ways. The manner in which we react to a performance, even the degree to which we respond or ignore the performance are ways of communicating about with music without words. Musicians in performance communicate with each other either through silent signals or body language during the performance and in this way enhance its quality. Musicians in many different cultures of the world greatly value this ability to communicate with other musicians in the group during performance.

In the story about the two Czech musicians, two different kinds of communicating, one about music with words and the other in music have taken place. In the discussion the name of the Czech composer, Jirovec comes up. Here the verbal dialogue is used to recall something in the memory of each of the two men. The name of the composer is known to both and at the beginning of the scene each of the two may have had different experiences with the music of this composer and therefore different attitudes about it. After that common shared experience has been established, another kind of communication about Jirovec begins to take place. At the mention of the name of the composer each of the musicians has drawn upon his memory and whatever associations with that name he may already have. One of them is then is then able amplify the experience of the other by sharing his experience. But this second part is shared in actual participation in the music.

This special kind of communication takes place whenever musicians get together everywhere from Mexico to Japan to Africa. The appearance given by this
A kind of interaction is, in fact, deceptively simple. Two musicians sit down, exchange a few brief words, then begin to play. What could be simpler? Yet, before they can begin to “do” together there must be agreement on what it is they will “do”. This agreement is established by their common culture and refined by their further common experiences. It becomes much more difficult for this reason, when musicians come from different musical cultures.

Musicians who perform together must have or must create a common musical culture, points of agreement between them, if the musical performance is to succeed. After establishing the parameters, most of the communication occurs at a non verbal level.

**Verbalized vs. Noverbalized Communication**

A string quartet comes together for a rehearsal. The working session consists of much playing interspersed with talk, about phrasing, tempo, and dynamics. Details are discussed, perhaps argued and finally agreed upon. At the final concert performance the musicians enter satisfied that what has been agreed upon in rehearsal ensures a successful performance. The audience is appreciatively stunned at the grace and delicacy of the interpretation and at the overall cohesiveness of the ensemble. Certainly the compromises and agreements worked out at the rehearsal have much to do with the united front presented to the audience in the final concert. These preliminary verbalizations about tempi and phrasing do much to lay the groundwork for the final consensus that is the actual public performance, but this ground plan is really only a very rough map compared to what occurs in the final performance. The rehearsal provides a partial verbalized concept upon which there is general agreement. In the actual performance, on the basis of this verbalized and memorized framework each of the players must be prepared for yet an additional and much more minutely refined level of redefinition to occur spontaneously as the result of hearing and responding to the interpretations and interaction of his colleagues.

At the time of the actual performance, the four musicians are listening to each very careful and adjust and adapting to what they hear. In this climate based on previous common experience, they can respond to each other in minute matters of fractions of a second and minute changes in volume and expression. It is the ability to sustain this flexibility in performance that makes a great string quartet performance.

A kind of communication occurs among musicians of the Burmese *Hsaing* orchestra, an ensemble of about eight musicians playing a varied set of bronze gongs, tuned drums and double reed pipes. The Burmese gong ensemble music plays with great virtuosity manifested in rapid changes of tempo and dramatic textural changes and frequent quick changes into tempos of the fastest pace imaginable. The
ensemble is led and controlled always by the player of the large drum circle, a set of twenty one tuned drums. The leader controls the ensemble only through the playing of the drums and never gives any verbal message nor does he conduct the ensemble overtly or visually. The sound of his drums is the sole means of communication between himself and the other musicians in the group. The ensemble might be, between pieces casually sitting, chatting, sipping tea and carelessly and lightly touching their instruments. In the midst of this quiet confusion, the leader sounds one clear but not particularly loud stroke on one of his drums. There then follows an instantaneous silence among the musicians, for they know that the next stroke, whenever it comes, will be the first note of the composition and all are expected to begin at precisely the same moment.

Here again, there are two kinds of signals that take place; the starting sound on the leader’s drum is an overt signal that something is about to begin. This is the kind of signal which in other societies could have been communicated verbally, or even by a stamp of the foot. It is not a signal that means that after a fixed number of beat the composition will commence. It is a call to attention and all are to be prepared for the beginning of the piece whenever the leader decides it should start. The other kind of communication occurs during the process of playing and is similar to that which occurred in the performance of the string quartet just described. In the Burmese ensemble speed and style change so rapidly and with such style and flourish that it is only by being extremely attentive to each minute change of inflection and speed that

![Gypsy or Roma musicians from Andalucia Spain. Here Anosonini Del Puerto, Joselero and Deigo Del Gastor improvise on the bulerias form. Each musician has a clear idea of the basic pattern of possibilities that the form implies, yet at any time either the current singer of the guitarist may choose a substitute note of harmony for interest. Each has then to be prepared to adjust his improvisation to the other's probable outcome. This is in part what makes this music so spontaneous sounding and so exciting.](image)
the ensemble manage to accomplish such minute gradations. These minute contrasts would be impossible were there a single conductor standing before them attempting to lead them through these changes.

Most musicians will agree that this kind of communication during performance exists and that it is important for a good group performance. A level of nonverbal sensitivity and reflex is vital to the performance of music and this seems to be at least one value that transcends several different otherwise isolated cultures. It is also at this level that endless heated discussions on the merits of a particular performance occur, very often with no tangible or measurable evidence which could conclusively sway stubborn personal conviction one way or the other.

Cohesiveness is perhaps a good word to encompass all of those difficult to define elements that are refined and agreed upon between musicians in performance without the assistance of verbalization. This same word may be used to describe that positive quality of good rapport and ensemble responsiveness that makes us prefer the performance of certain ensembles to others.

Notes
How Music Organizes Time

Rhythm as Pattern

We usually think of rhythm as a beat, or a steady series of strokes which by their regularity tell us that the sound we are hearing is humanly controlled and something we should listen to or dance to. But a simple series of strokes is not what compels humans to move. It not until we recognize a pattern of these strokes, only then do we hear the imposition of a human sense of order on what would otherwise be another of the random or chaotic number of events which we constantly hear around us.

Victor Zuckerkandl has said, “Music is not just in time. It does something with time.” ¹ This is an important distinction. Music does exist in time, but in a real sense, music is a playing with time, creating patterns, changing them, repeating them.

It is not just that music exists in time, is it that music is about time. What engages our interest and stimulates our response to it is the manner in which music defines time for us while we listen to it or dance to it. We heard sound in motion and try to recognize humanly generated form and pattern in it.

Abstracting Patterns in Music

All music events, performances and even when we imagine actual music in our minds, occur in time. Although they occur in actual time, musical events can be conceptualized and then repeated in time at will. Each performance of music, each time we think of a song, that performance or that memory occurs once in actual time, yet we can repeat the ordered pattern of the song in performance or in memory many times. The musicologist, Charles Seeger referred to these two different types of time as general spacetime, to refer to our perception of seemingly never ending and never repeating time, and, in distinction, music timespace to refer to discrete units of time, as in musical performances or compositions which could be repeated in different general spacetime contexts.²

It is helpful to think of the manner in which music exists in time in these two distinct ways. Any music, performed, heard, or even imagined, occurs at one particular point in time, at a single unrepeatable point in history. Music can also exist as an abstract concept outside the limitations of general spacetime, as for
example in the case of a recording on tape or CD. The abstracted musical composition can then be repeated as a separate event in general spacetime. Music can thus also be imagined away from the context of the original performance. This specific timespace is what we use to conceptualize about specific musics, while each particular act of conceptualization occurs in general spacetime.

Mozart’s Symphony No. 40 has a formal structure and a pattern of durations and spaces in time which form a culturally shared concept in our culture even when the symphony is not actually being performed. While this way of thinking about time may appear obvious, it is helpful when we begin to look at the manner in which music functions in cultures other than the Western European Fine Art tradition. For example, until recordings became commonplace, each improvised performance in either the classical music tradition of India or in American Jazz, was conceived of as a unique and unrepeatable occurrence in general spacetime. There was no culturally conceived abstraction of the music beyond the performer’s and the listener’s memory of it, which could be carried over from one performance to another. As memory faded, the possibility of reconstructing or repeating the performance faded as well.

Although we can think of the Mozart Symphony No. 40 as a fixed and particular composition, no two performances of it can ever be identical to each other either. The difference between the Mozart symphony and North Indian classical music for example, is that the Mozart symphony can be conceptualized in that culture as an entity apart from any one performance of it, something which is not feasible, desirable, nor appropriate in either the Jazz or Indian music traditions.

**Spaces Surrounding Sounds**

Music occurs in time and requires time to be realized. The contours and forms perceived must be perceived in space and time. A sheet of paper with a drawing of a star on it is more than just a presentation of a star on paper. The space around it as well as its placement on the page makes it more than only the pictorial description of the object. Music also uses space and time in the same way. What we think of as a melody is more than a group of sounds or notes. Perception of the melody is as much the result of the spaces and silences between the sounds as the sounds themselves.

In teaching us to see more accurately in order to draw realistically, Betty Edwards in her book, *Drawing on the Right Side of the Brain*, advises us that we must first overcome the natural interference created by the preconceptions that the “logical” and “thinking” functions of our brains have been trained to tell us about objects we see. We need to see things as our eyes see them, not as our “intellectualizing” brain tells us it knows it really is. She suggests that we may learn
to achieve this by attempting to look not only at the object but also around it at the abstract pattern of shapes created by the spaces around the object. By thus concentrating on these abstract patterns of space for which we have no logical or verbal preconceptions the actual form of the object we are attempting to depict will appear in more accurate proportions.

In music we are accustomed to thinking of sounds, but these sounds would not lend themselves to organization into meaningful patterns without the spaces which set them off. While in many cultures music is thought of as a pattern of sounds, in fact, the durations, pauses, rests, or empty spaces which surround the sound are also a vital element in delineating patterns in our perception. In our culture we sometimes speak of a person as having a bad sense of rhythm. This usually means that this person is not careful or skillful in preserving the spaces around the sounds, although the sounds themselves might be correct.

**Organization of Patterns**

Let us look in more detail at how we use pattern in music. We can speak about the particular approaches to organization of space, melodic contours, form and rhythm, used by a particular musician, or by an entire culture for that matter. Speed of performance, tempo, and pulse are one means of talking about differences between one music performance and another. In fact much of what we perceive about speed in performance is subjective. Music can be both fast and slow at the same time. When we hear, for example, music in slow tempos but with rapid streams of notes, do we determine that this is to be experienced as fast or slow? To give an illustration, let us imagine a music in which there is a basic pulse while there is a slow melody going on in lower range and at the same time rapid melodic activity in the higher range.

Thus, for example:

**Example**

| Basic pulse: | * * * * * * * * * * * * |
| High range:  | ........................................ |
| Low range:   | 0 0 0 0  |

If in the previous example we were not able to hear the basic pulse but only the low range slow melody and the high range fast melody we might decide that the music was either fast or slow. Depending on our point of focus, either option would work. We can enjoy music without having to verbally describe it as a fast or slow tempo, but should we want to do so, the way in which we decide about the speed
will come from the context which has already been defined for us by our previous experience and not from an abstract analysis we might make as to whether the low melody or the high was a better indicator of tempo. In other words, sometimes music can be heard as either fast or slow depending on how our culture has defined it and how our own previous experience has prepared us.

It is our own culturally learned verbalizations and conceptualizations which delineate the boundaries within which we make judgments about what we hear. But our culture also creates limitations for us in dealing with such aspects of music, limitations of which we are usually unaware and which often interfere with our ability to hear new relationships in music with which we may as yet be unfamiliar.

**Cultural Preferences and Tempo**

There are broad patterns of music which show up in specific cultures as distinct preferences for faster or slower rates of speed (tempi). This makes the music of one culture seem relatively faster or slower by comparison from the vantage point of another culture. In spite of variations in the perception of speed between one music and another we may notice that in a particular culture or style of music one particular performer regularly plays at a faster tempo than another performer or that one composition is played faster than another. We are able to measure this perceived difference by relating it to time. What occurs is that we become accustomed to our cultural labels of fast and slow in the type of music we are accustomed to and may find that our labels do not apply when we enter the realm of another culture.

In the music of Central Java as in the music of Bali there is a practice in which the higher pitched ornamenting parts of the ensemble execute rapid streams of notes at slow tempos than at a higher rate of fast to slow parts than is usual when playing at more rapid tempos. The effect of this standard Indonesian practice is that at slow and moderate tempos, there is a great degree of articulation, rapid melodic lines, in the higher instrumental parts which gradually decrease and falls away as the music gets faster.

The analogy one might draw is to the shifting of gears in an automobile; at slower speeds there is more rapid turning of the gears relative to the axle than at faster speeds. The overall subjective impression received by both those familiar with this music as well as by even those who may not be so familiar with the music is clearly that the tempo has become faster. However, there is an important difference in the manner in which the impression of tempo change is given in the Indonesian examples compared to the manner in which the effect would be produced in the West. The use of this “shifting of gears” technique in the music of this part of the world gives it a very distinctive “Indonesian” character whenever a change of tempo occurs.
Time and Space in Japan

Japan is a culture in which great emphasis is placed on balance and symmetry. In Japan, there is as much thought for spaces as for the objects which they frame. This concept manifests itself in many aspects of Japanese life, from traditional brush painting to the manner in which food is prepared and served. In modern colloquial Japanese the word for “wrong” is “ma chigau” which literally means the spaces are different or wrong. The words for “different” and “wrong” are derived from the same root. This does not mean that every time a Japanese speaker wishes to indicate that something is wrong he is consciously referring to objects and spaces. However, the root meaning and original intention of these words strongly corroborates the importance given to space as a concept in the general culture.

We might not immediately be struck by the evidence of the Japanese sense of balance between object and empty space, when we hear Japanese music, but for the Japanese, it is there. In learning Japanese music for example and in particular, in the study of Japanese singing, the length of each note and the length of the space between notes is from the earliest steps, considered very important to the process of learning. Even school children in Japan sing in loud strong voices, almost at the top of their lungs, carefully observing the timing of the rests between notes.

Basic Principles of Rhythmic Organization

The Divisive Principle

In the West the organization of rhythm is approached from a divisive principle. Units of time are, either added together to make them longer, or subdivided into smaller and usually equal units of time. In theory, we conceptualize a regular and fixed unit of time and then subdivide it. Therefore, the traditional rhythmic patterns of the West have historically tended towards evenly divisible rhythmic groups of two, four, six, eight, twelve and sixteen. The metric pattern based on a unit divided into three has, of course, also had considerable favor in Western music. It is the basis for such important traditional dance forms as the waltz and the minuet. This unit of three beats occurs just a little less frequently than the even meters of two, four, and eight, in the Western tradition. When a three beat rhythm does occur, it too is subdivided into smaller units, which causes the subdivision to return again to an evenly divisible number such as six or twelve.

The divisive principle in Western music in not an absolute limitation, it is however, the basis for the notation system in Western music and is the underlying structural principle in the music. Note durations are organized in relationships which are twice as long, or twice as short, or one and one half times as long as another. Single durations are divided into equal subdivisions, usually of even numbered
values, two, four, eight, and sometimes three, but also at times into 5, 7 or 9. This is not to say that all music in the Western tradition is written in these values exclusively. Composers have imaginatively devised new patterns and the means of notating them. Nonetheless, it is important to remember that the notation system was devised to accommodate the most frequently used types of rhythmic organization and the divisive principle does this well.

The Additive Principle

The subdivision of a unit of time into regular and equal parts comes quite easily to us. Before the beginning of this century rhythmic meters using five, seven or nine beats were extremely rare in Western or Central European music. Turkish music has had an important influence on the music of Eastern Europe, in particular in the Balkan states of the former Yugoslavia, and in Albania Macedonia, Bulgaria, Romania and Greece. Turkey has for hundreds of years approached the organization of rhythm from the additive principle. By this means units of time are added together to make patterns. Subdivisions of beats into smaller and shorter durations do occur, but the basic rhythmic organization is by the adding together of shorter units of time. In Turkish folk or classical music some metric patterns may be evenly divisible and others not. That is because the addition of some units, two plus two, for example, results in an evenly divisible unit whereas the addition others, two plus three, for example, will not.

In Turkish music a metric structure of eight units, being also a combination of units of two, can occur as easily as one of seven or nine beats. However, since adding together units of either only twos or only threes can produce nothing but endless, and to the Turks uninteresting, strings of repeating twos or threes, the basic additive unit in Turkish music became the addition of two plus three. Meters made up of various strings of mixed twos and threes became characteristic. So we commonly find in Turkish folk music and in the music of those areas of the Balkans which came under Turkish political and cultural influence, meters of five, seven, nine, eleven, thirteen and even twenty-five units and longer ones.

These units function in a manner roughly equivalent to the use of measures or bars in the Western European tradition. In the Classical music of the Ottoman court, each rhythmic pattern is called an usul. The Usul patterns can be very long and complex with certain usuleri, as these rhythmic cycles are called in Turkish, comprising as many as 64 or more units. Since these usul are made up of varying combinations of groups of two and three units, the overall pattern created by the irregular alternation of twos and threes creates for each usul a singular and unique identity.

These references to Turkish and Western European metric principles were
chosen here as means of illustrating two distinct rhythmic systems based on different principles. The Turkish rhythms seem complex to Westerners who are accustomed to divisible metric units and thus see these as asymmetric rhythmic patterns. However, even the term asymmetric belies a Western prejudice. The word additive seems to better explain the governing principle.

**Additive Plus Divisive**

The music of India provides us with yet another metric system, one which uses both additive as well as divisive principles. It seems that in the older forms of folk music of the Indian subcontinent, additive meters of combined two and three unit groups were commonly used. In the classical music traditions of both North India and South India great emphasis has been placed on the systematization of all possible permutations of tone and rhythm. In terms of the use of rhythm in Indian classical music it is perhaps not quite the same principle of equal divisions of a single unit that one finds in the West. In the music of India the basic additive approach to the fundamental number of metric units is enriched by the potential for subdividing each unit into a smaller number of sub-units, which may in turn consist either of equally divisible sub-units or asymmetric numbers. In addition, however, the entire larger unit may be redivided into another pattern of sub-units and then that one again further subdivided.

To choose a simple example as an illustration, in a metric structure of eight beats it is possible to further subdivide each of those eight beats into two, three, four, five, six, seven, eight or nine sub-units. In addition, it is possible to take the larger eight beat unit and within precisely the same space of time in which it took to execute eight beats, now execute a different number of total beats. To illustrate the principle, let us create a simple example.

A basic cycle of eight beats;

```
1 2 3 4 5 6 7 8
```

can be subdivided into threes;

```
1 2 3 4 5 6 7 8
123 123 123 123 123 123 123 123
```

making a total of 24 beats. This total number of sub-units permits a different possible configuration of beats, which results in the potential for a new pattern. Since 24 can also subdivided by 2 into 12, by use of this technique, a very different
pattern emerges out of what was first heard as a pattern which consisted of 8 beats;

\[
\begin{align*}
1 & \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad = 8 \\
123 & \quad 123 \quad 123 \quad 123 \quad 123 \quad 123 \quad 123 \quad = 24 \\
1 & \quad 2 \quad 1 \quad 2 \quad 1 \quad 2 \quad 1 \quad 2 \quad = 12
\end{align*}
\]

This new subdivision into 12 might be further regrouped into groups of three;

\[
\begin{align*}
1 & \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad = 8 \\
123 & \quad 123 \quad 123 \quad 123 \quad 123 \quad 123 \quad 123 \quad = 24 \\
1 & \quad 2 \quad 1 \quad 2 \quad 1 \quad 2 \quad 1 \quad 2 \quad = 12 \\
1 & \quad 2 \quad 3 \quad 1 \quad 2 \quad 3 \quad 1 \quad 2 \quad 3 \quad = 12 \text{ divided into 3}
\end{align*}
\]

In an Indian music performance the actual use of this technique becomes considerably more complex. The story in the inset may serve as an example. Since the principle by which Indian musicians divide units of time is based on their ability to remember and “sense” the duration of a large unit of time, the challenge in a good performance is very different from what it may appear to a Western trained listener. To draw a simple comparison, with Western practice, in general slower tempos are considered easier from the standpoint of technical difficulty than faster tempos. In India, however, slower tempos are considered most difficult by musicians because it is necessary to be able to maintain and work with a mental image of a longer period of fixed time as a single fixed unit upon which to draw varying permutations. Thus, playing fast becomes a matter of technique and dexterity but playing in slow tempos requires an ability to a fixed spatial memory of a single long duration and then to imposes mathematical permutation of it.

This illustration of different approaches to rhythmic structure gives some idea of the scope of variation which becomes possible as the result of differences of cultural tradition which have evolved along independent paths. It is also important to think these differences as directions or paths rather than as static conditions. They manifest themselves as different practices and grow and change. Thus one can easily see how the cultural context not only sets the situation in which a different type of rhythmic problem is encountered, but the solution to the problem must also follow from the culture as a natural step. In this way the North Indian musician, who has been making use of multiples based on additive patterns, when searching for a stimulating solution in an improvisation performance will not reasonably consider choosing the Western method of symmetrically equal subdivisions of a rhythmic unit.
Discovering the Indian Rhythmic Principle

I can remember some years ago at a performance of North Indian classical music my sense of astonishment and satisfaction when the late Chaturlal, a great North Indian tabla player, performed a rhythmic improvisation in an unusual tala, or rhythmic cycle. This was the tala, Pancham Saveri, a rhythmic cycle of 15 beats. Pancham Saveri is not of a simple string of fifteen beats, but instead an interesting pattern consisting of $2 + 4 + 4 + 2 + 1.5 + 1.5$ making a total of 15. In the course of his improvisation he took the audience through many complex and minute subdivisions of the basic pattern of 15 beats which defines this tala, always returning, however, to the basic $2 + 4 + 4 + 2 + 1.5 + 1.5$ of the basic tala.

Throughout the course of his improvisation he maintained the same basic tempo. Therefore each repetition of the 15 beat pattern or cycle was covered in the same amount of time. In the midst of this improvisation he suddenly introduced a new pattern of 10 beats which exactly covered the same period of time in which he had been playing 15 beats. After some thought it became clear that what Chaturlal had done was to mentally divide each unit of the basic pattern of 15 into 2, thus producing a common denominator of 30. By then emphasizing every third beat of the 30, he could now execute a pattern of 10 beats in the space of time in which he had been playing 15. Thus:

By using the common denominator of 30 total beats in each cycle Chaturlal was able to alternate between a rhythmic cycle of 15 beats and a superimposed pattern of 10, both of which were executed in precisely the same period of time. I say precisely with the understanding that comparison by a stopwatch or certainly by more precise means of time measurement would doubtless have revealed minute but natural human fluctuations. However, to all present the perception was that the theoretical, mathematically precise feat had been accomplished.

I recall that I had a great sense of self-satisfaction at discovering a small, but to me very significant, key as to what goes on in Indian rhythm. However, a few short years later my confidence was shaken by a concert in which another tabla player, this time Mahapurush Mishra, improvised in a rhythmic cycle of seven beats. During the course of various permutations and subdivisions of the seven beat cycle, he suddenly shifted into a pattern of ten even beats, again within what was perceived as
precisely the same amount time in which he had been playing seven beats. The only possible common denominator for both 7 and 10 is the number 70, but at the rapid tempo at which he had been performing it would have been absolutely impossible for any human to conceptualize 70 subdivisions of that unit of time — and yet, try as I might, I could think of no other means of accomplishing this feat.

The answer, which appeared obvious upon reflection only much later, was corroborated for me by other Indian musicians. If a musician has been trained to be very sensitive to the perception of varying periods or lengths of time, he can retain the mental image of that period of time while subdividing it into various units. This is to say that it is possible to perceive and hold in memory, the period of time, the duration of time between fixed points of time. Thus the Indian musician playing a cycle of seven beats has a mental image of how long it takes to complete the seven beat pattern. He can then subdivide this same period of time into various sub-units. My Western orientation, based as it was on the principle of equal subdivisions of units of time, made it difficult to imagine that the solution would lie in that a span of time of about six or seven seconds in length could be thought of as a tangible entity that could be mentally sliced up by various numbers into equal portions.

**Multilayered Rhythm**

It is in the study of the world’s music that one finds some of the most intriguing examples of man’s ingenuity in devising new and unique cultural solutions to cultural forms for which we might otherwise have thought there were no more possibilities. It was not too many years ago that many Westerners, Americans and Europeans, thought of sub-Saharan Africa as a region of primitive or primordial rhythms. Most of us today have had some even minimal experience with African music and, we trust, have a more objective impression of what goes on there. In fact, what may have to the first European visitors seemed like unschooled and disordered music was, in fact, some of the most complex music devised by man on the planet.

What is misleading about this approach to rhythmic organization is that is may all too easily sound the total pattern that one hears. Yet what drives the group and by extension, the dancers and the entire community who are listening to it, is the power resulting from each musician playing his own part, with its own patterns of strong and weak beats and pattern of accents, combined with several others each doing the same with a different pattern and set of accents. The end result is not just the totality of the complex pattern, but the effect of several individuals each pulling in a different direction and yet combining to produce a cohesive yet driving whole.

One important element in the African cultures of the region south of the Sahara desert is a strong sense of social cohesiveness. Members of most communities are closely linked and a sense of a unified group is something reflected in the music, as
well.

Native American Rhythm

While it is difficult to speak precisely about the concept of rhythm as it is employed by the Native Americans of both the Northern and Southern hemispheres, it seems that rhythm is not thought of in terms of fixed rhythmic cycles which are repeated or divided. It may be more appropriate to think of this music as being held together by a constant, never ending beat, so strong in its directness that one can imagine that it goes on in the mind even when it is not heard. It is also very common for the rhythm of the voice to be separate and independent of the accompanying percussion rhythm. Whereas in Sub-Saharan African musics, it is possible to find points of synchronization between varying layers of simultaneous patterns, this is more difficult to explain in Native American music. That voice and percussion should exist in separate and independent spheres even when played by a single performer is something understood and accepted in the native cultures of America without the need for any written or verbalized theory to explain it.

Characteristically, performances give the impression of not beginning or ending at any precise moment. The rhythm begins as though it had been going on silently in everyone’s mind and at some point everyone made it explicit and audible. The devotees of the Peyote religious cult in the Southwestern United States say that they must always have a campfire to sit around during the ceremonies and that the change in perception takes place as one stares at the endlessly changing patterns of the flames.

While in most of the cultures we have talked about here, the abstraction of time is used to function as the organizing unit in music performance. This unit can then be stretched, compressed and accelerated or prolonged according to the requirements of that tradition or that particular performance. It does also appear, however, that there are traditions, like those of the Native Americans and some few others in which this artifice may be considered unnecessary.

Uncountable Rhythms

It is possible with precise tools of measurement to record events occurring at even minute fractions of a second. Cognitive scientists sometimes say that somewhere about one twentieth of a second is the threshold of human perception. Although scientific equipment can record events at levels beyond the limit of our ability to perceive them, what is important in the study of man, is what lies within those humanly perceived limits. There are certain rhythms used within the many music cultures of the world which seem to defy unaided human measurement. These
rhythmic patterns are regular enough so that we know that they are humanly control and deliberate, and yet at the same time even experts are baffled and disagree about how they are counted.

One interesting example of this type occurs among the Maguindanao people who live on the Island of Mindanao in the Southern Philippines. They use gong ensembles called *kolintang*, or *kulintang*. One of the many rhythmic patterns used by the Maguindanao is called *titdu*. This is a pattern is two beats, barely unequal with a slight prolongation of the first beat in relation to the second. The sound is of a two beat rhythm which sounds just a bit off, but not as distinctively off as say to be counted 3 to 2. The Maguindanao musicians may simply think of this as their style of playing a two beat pattern. When asked them to play a simple pattern of two regular even beats, the musicians played what again sounded like *titdu*.

The Roma or Gypsy musicians of Romania play many kinds of music for all audiences in Romania. When they play their own music for themselves, they have a rhythmic pattern used only for one type of their own special urban Roma or Gypsy love songs. This pattern, called *tiitura de of*, is another example of a pattern which consists of two slightly unequal beats. The tempos used for these expressive songs are moderately slow and the voice seems to float along effortlessly while the rhythmic accompaniment can only be described a moving with a “graceful limp”. The first of the two beats, like in the example of the Maguindanao *titdu* described above, is longer, a difference which is made even clearer with the generally slower tempos use in the Romanian music.

Romanian Roma musicians have no need to count the rhythm. To refer to it by its name, or even just to suggest a song usually accompanied by this pattern is enough for all to agree on the execution of the rhythm. Romanian musicologists argue over whether this is a pattern of 8 followed by 7 counts or 11 followed by 9. Upon measuring a recording of this rhythm electronically, the durational differences each first beat and each second beat turned out to vary minutely in each case. No two were found to be precisely alike enough to be able to describe the rhythm a proportional label. The ratio of long to short beat averaged .75 but ranged from .73 to .80. Therefore by converting these ratios to the Western metric system, this music wandered between a possible 7 beat pattern of 4 plus 3, through a 37 beat pattern of 21 plus 16, to a 9 beat pattern of 5 plus 4.3)

What is important to performers and their audiences alike is not the precise measure of the pattern. In fact, one can feel the slight changes in the duration of the beats and this must give the pattern some of its flavor. These numbers simply represent the closest approximation to a meter which will accommodate the execution of these unusual patterns. The conceptualization in the musicians’ minds is enough to recreate the fluid sense of rhythm required for the music and clear enough in each of their minds to maintain the fluidity of the performance without
straying into some other rhythmic pattern. As they play the musicians let the rhythm fluctuate slightly in reaction to the melodic phrase at the moment.

Another interesting example occurs in Africa. Throughout Africa south of the Sahara, one finds frequent use of what appear to be regularly repeated and fixed rhythmic patterns. These patterns are often grouped together in multiples of six beats, that is, either six beats, 12, 24 or 48 beats. These rhythmic patterns are easily discernible as regular and predictable and one might easily venture that whether the African musicians conceptualize the patterns in numbers or not, they do conceive of them as regular sets of even beats. However, electronic measurement of one such “regular” and “rhythmically even” performance, one in a rhythmic grouping of 6 beats, revealed that the time space between beats 5 and 6 averaged a 20th of a second longer than the time space between beats 4 and 5.4)

**Time and Rhythm as Cultural Constructs**

Again and again and in many places throughout the world, we find that in attempting to explain and understand the practice of music, theoreticians have devised and employed convenient templates to better explain practice. The difficulty is that these devices soon begin to take on lives of their own. They begin as a convenience become rules even when they are not useful or even applicable to the situation at hand and as such can influence and color our perceptions. Concepts of time and how it can be measured arise out of the culture and music practice likewise develops out of the same culture and uses the same concept of time. Although the explanations of the theorists may be of little use to the performing musician, both theory and practice arise from the same basis.

In some cultures, such as our own, time is conceived as a unit which is to be then divided, added, or multiplied. In some cultures, time is instead thought of as endless, almost as though each performance occurs as part of a continuous segment briefly abstracted out of general spacetime. Music thus conceptualized can then be organized around the concept of a steady and regular pulse rather than a fixed and repeated metric structure. The music of the Indians of North, Central and South America comes to mind, for while one might try to apply some principle of metric organization to the analysis of this music, the results fail to explain the sense of continuity.

As we observe the use of pattern and principles of organization of time in music in a number of different cultures, what we have been describing is a set of performance principles which have evolved in each culture over a long period of time. There has been in every case a mixture of newly created practices which eventually become standard within that culture. We observe the final results today as vastly different and unique principles of rhythmic organization however, some may
have developed as independent threads out of original connections. The use of rhythmic pattern in the Far East, India and the Middle East has made use of extensive borrowings of each others practices and what we see today as highly individual cultural characteristics may have been, perhaps five hundred years ago, much more like common practice.

**Notes**

**Fig. 42** The Northern Indian tabla, makes use complex patterns and subdivision of various rhythmic cycles. Zakir Hussein and Ashish Khan.

**Fig. 43** Groups such as this Haitian Petro dance group make use of multi layered African polyrhythm.

**Fig. 44** In Cuba, the mixture of African polyrhythm and Spanish melodic and harmonic forms and concepts gave rise to new forms of music, such as salsa, which continues, like rock and hip hop is a musical form heavily based on African principles and is very popular today.
As in the United States, the importation of slaves from Africa brought about new and resilient mixtures of music, such as that of the Brazilian *choro* band depicted here in an old engraving from 1845.

The Korean Court orchestra, the wind ensemble plays music on the terrace. The beginning tempos of such compositions are often so slow that one cannot perceive a regular beat at all and yet the ensemble is held together by each musician’s internal sense of where the meter is.
How Music Plays With Time

In a very real sense, music plays with time. Besides looking at the differences between cultures in the manner in which time is structured and divided, the manner in which musicians play with and play in time also varies from one culture to another. Here we also look at different performance practices which have evolved out of different cultural patterns and how contiguous cultures have passed practices on to each other which in turn have them been modified.

Prolonging and Compressing

Although the principles of rhythmic organization which exist throughout the world are numerous, they really consist of various ways of arranging and organizing delimited periods of time. These structural principles, the various and complex methods of organizing time, can then be performed at different speeds, according to the range of tempos allowed and preferred within that particular culture. These might appear faster or slower relative to other musics in the same culture and, in turn, can themselves be slowed down or speeded up.

But most of what we have talked about here has been within the realm of culturally defined units of repeatable time - units that can be moved about and executed at faster or slower tempos. In Western “classical” music it is also possible to conceptualize a unit of time - a “measure”, or “bar”- and accelerate a part of it, say, a few beats only, without destroying the sense of the basic meter.

This is a concept with which Westerners are all familiar, certainly in sound if they are not, by chance, acquainted with the description of the practice of ritardando and accelerando. In Western music these are techniques used to create emphasis, to accentuate or highlight something that is about to occur in the music. By delaying or slowing the tempo slightly at a certain point in the measure, the listener feels anticipation for what may follow. This technique is one of the resources at the disposal of the interpreter of the music, a resource, which along with minute changes in volume and velocity of attack enables the performer to add a layer of increased personal expression to his performance.

It also happens in different cultures, that a flexible treatment of a fixed unit of time, - a measure, for example, can occur as a regularly repeated element of the music. That is to say that the unit of time, or measure, is conceptualized as having a fixed relationship of sub-units within it, a regular number of beats, but that in
interpretation certain of those beats are either shortened or prolonged regularly at each repetition of the measure. This is a related to, but quite distinct from the Western ritardando/accelerando practice.

One such practice occurs in the realm of the ancient court cultures of the Asian world. In the ancient court music traditions of Korea and Japan there is a practice in which the last beat of each measure is prolonged by as much as 25 per cent during the slowest tempos. The prolongation of the last beat of each measure only occurs during the slowest sections of the music, usually at the beginning of each composition. As the tempo gradually increases in speed, although the tempo would still seem very, very slow compared to Western music, the prolongation of the last beat is gradually decreased until it is no longer noticeable.

The degree of prolongation or stretching is not exactly the same for each measure. It is a little more exaggerated in those measures preceding an important accent in the rhythmic and melodic cycle. Here have here a system in which beats are exaggerated in every measure to give an effect of gravity. This is also used even more strongly to underline important accents in the music. The degree of prolongation of these stressed beats is also affected by the overall tempo of the specific point in the performance, less prolongation at faster tempos. Here we might say that stressed beats are used both as a specific point of emphasis in the rhythmic phrase, but also as an overall element added to create a general atmosphere in the music.

Although it may be difficult to make a hard distinction between these two kinds of modification of the rhythm, a distinction is, nonetheless, of importance. The overall prolonged treatment given the final beat in the slower beginning tempos of the Korean and Japanese court music performances is somewhat like the particular altered stress pattern given the waltz particularly evident when it is interpreted by Viennese musicians. Although the waltz is written in Western notation as in 3/4 meter, there is a slight staggering of the rhythm in the best performances, an effect almost of rhythmic swagger or nonchalance.

**Delineating with few Strokes**

In Indian Classical music, as we have seen, slower tempos are more difficult to grasp and retain in memory than faster tempos. If one increases the speed enough, a long, slow rhythmic cycle such as one used by a North Indian musician can be eventually perceived, even by someone trained exclusively in European music, as a fixed and regular unit of time without resorting to counting its subdivisions. If, however, an Indian rhythmic cycle were to be speeded it up to a tempo rapid enough that the duration of a complete rhythmic cycle of, say, seven beats could be heard with ease as a single unit of time, this would render it virtually useless to the Indian
musician. The tempo would now be so rapid that there would be no possible scope for interesting permutations of pattern nor for subdivisions of varying sizes.

**Khyal**

In some musics the tempo of performance can be so slow that metric subdivisions cannot be heard easily, let alone a sense of the entire rhythmic cycle as a single unit of time. For example in North India there is a very strong tradition of singing of a particular type known as *khyal*. Each performance is usually in two sections, a slow *drut* followed by a faster *vilambit*. It is very common for the slower section to be performed in a slow rhythmic cycle of 14 beats called *Juhmra tala*. Not only is the tempo slow, but the khyal style requires that the drummer, that is, the *tabla* player, play in a very unornamented accompaniment texture with ample empty spaces - one which consists mostly of single widely dispersed strokes, and these not usually even on every beat of the cycle. The resulting sound is one of a free, highly but gracefully ornamented voice line supported by a few seemingly very isolated strokes on the drums.

So slow is the tempo and the space between each drum stroke so great that even one familiar with other types of Indian music at first finds great difficulty in sensing the pulse firmly enough to predict where the next beat might fall. The musicians must develop the ability to function accurately and yet sensitively in this style. Certainly the avid audiences for khyal singing would suggest that they, too, are not completely confused by it. Nothing exemplifies the atmosphere of a current North Indian Classical concert than the slow pace of the opening vilambit and few sparse stokes of the tabla underling the voice line.

**Sanjo**

In the music of the province, Cholla-do, Korea, there are two related musical forms or styles; an improvised instrumental form called *sanjo* and a vocal form called *P’ansori*. Each of these forms is traditionally accompanied by a single drummer. Both forms make use of a variety of different rhythmic patterns, one of which is a pattern of 12 beats called *chung mori*. This is a slow pattern but certainly not the slowest tempo possible in this music. The style of drum accompaniment in this Korean music is, in many respects, similar to that of the khyal in Juhmra tala described above, that is, a slow tempo with a few drum strokes spaced widely apart.

This South Korean improvisatory style has a strong rhythmic flow even in slow tempos. With a few explicit drum beats a clear and moving rhythmic pattern can be felt clearly. Although the highly abstracted style of rhythmic accompaniment used for this music requires careful listening for deeper appreciation, it does draw from rhythms that were traditionally known to all Koreans through the folk rhythms *kutgori* and *chung mori*. Thus Korean audiences thoroughly saturated with the
rhythmic patterns of their folk music could hear these new, more challenging treatments of the same patterns and could recognize and enjoy them. In the sanjo and P’an sor i styles fewer drum strokes were used as a matter of style, in part, in order not to distract from the soloist. Once the listeners have recognized a familiar rhythmic pattern from what might at first sound like a few scattered beats, they can now participate in an important way in the performance by mentally filling in some of the implied subtleties which the performers have intentionally left unstated.

This understated approach to the exposition of rhythmic pattern parallels the style of black ink painting widely used in Korea, Japan and China. In this technique one might depict, or better, imply a mountain surrounded by clouds, by merely showing a bit of the mountain and allowing the white of the paper to suggest clouds, sky and nothingness. Another familiar example from Asian brush painting is to depict bamboo in snow. The snow on the bamboo leaves, is in fact, indistinguishable from the white of the paper, but by deft use of the black strokes on the white paper, the bamboo and the snow are filled in the minds of the viewers.

Different perceptions of rhythm are developed gradually over very long periods of time and, in spite of the complexity of the end result, usually without very much in the way of verbal explanation. In the course of the training to be a professional musician in a particular culture, one hears daily a particular practice often enough that it begins to seem perfectly natural and the student will become firmly convinced that there can be no other reasonable way.

**Compositions for Percussion Alone**

Many musics in the world are organized so that there is both a melodic, and sometimes, harmonic element, which are usually dominant in the structure of the performance or composition. Rhythm, when used as a separate element is most often provided by percussion instruments and is most often thought of as accompanying the melodic harmonic elements. The various approaches to the organization of time in music thus far described have applied both to the rhythmic structure of melodic and harmonic elements as well as the structure of the accompanying percussion element and to the organization of percussion instruments when played alone.

There is, in addition to the use of percussion instruments as accompaniment to voices or other instruments, the use of percussion instruments alone to perform compositions specifically for them. This is not a matter of a different approach to the structure of time, but instead is a recognition in the culture that formal patterns for percussion instruments alone is are accepted, enjoyed and encouraged. Such use of percussion ensembles seems to follow no particular pattern of cultural diffusion. They are found scattered about the globe.

Although we have no surviving tradition of it, descriptions by the Spanish
conquerors of the New World describe very precise rhythmic performances by Aztec musicians. The dairies of the priests say that the drums were accurately tuned to certain notes and the rhythmic precision was amazingly impressive. We no longer have any idea what they played because in their zeal to get rid of everything which they presumed to have been derived from the devil, the Spanish killed all the Aztec priests, teachers and musicians.

Some other examples of this type have survived. The drums played for the kings of the Tutsi in Rwanda Burundi are an example. Although they play in patterns based on the sub-Saharan African approach to rhythmic organization and make use of multiple layers of rhythm, this drum music is structured like a series of compositions for a set of six or seven drummers. Instead of being organized simply as patterns, these are compositions with beginnings and endings which are played through and which can then be repeated.

Another example of this kind of organization is to be found in the playing of the Farmer’s Bands, now generally known as *Samul Nori* of Korea. These are complex compositions for percussion ensembles that incorporate numerous changes of tempo and rhythm. Although they may sound like spontaneous improvisations to those unfamiliar with this music, if we notice the complexity of the patterns and consider how tightly knit and synchronous the performances sound, it is evident that these are previously composed and memorized compositions of percussion patterns.

One other example of the use of pre-composed percussion compositions occurs in India, both in the Northern and Southern traditions. In the course of accompanying a vocal or instrumental soloist, the percussionist will frequently be allowed to play a solo. The spirit of such percussion solos is to show the drummer’s improvisatory skill and imagination. In the course of the performance, the player may introduce previously composed complex patterns of his own creation. He first demonstrates the new pattern by vocally reciting the drum syllables that parallel the pattern and then plays it. The drummer may also quote well known and previously composed compositions of other percussionists, reciting them first and then playing them.

**Time Limits in Popular Music**

Except for its earliest beginnings, the history of Jazz has been entirely documented on recordings, and during most of the first thirty years of that history, it was documented on 10 inch 78rpm records which had a duration limit of three minutes. Like popular music in America during the same period the three minute limited imposed by the recording medium had its effect on the music itself. During much of that same period, classical music was recorded on 12 inch 78 rpm records, allowing for a 5 minute duration per side.

During most of that period Jazz musicians simply recorded three minutes of
music on each side of the record, but even when they played in public performances, most stayed close to three, four or five minutes for each piece. And yet, as early as 1929, Duke Ellington tried a daring experiment and recorded the Tiger Rag on two sides of a single 78, followed in 1931 by a recording of the Creole Rhapsody which also lasted six minutes.

Although this seems like a very reasonable attempt to extend the scope of the music beyond the technical limitations of the recording industry of the time, when one realizes that out of the hundreds of 78s in the Jazz and popular field which were produced during that period, Ellington’s experiments were among the very, very few it becomes clear that Ellington, or those who advised him, had a vision of what his music required beyond that of most of his contemporaries.

It is also fascinating to hear these pieces now, years later transferred to Lp and find that on Tiger Rag there is almost no change in the tempo from what had been one side of the old 78 to the other. On the recording of Creole Rhapsody, what would have been side two begins with a brief piano interlude in free tempo but then quickly returns to the mood and tempo of side one. Then it is clear that while at the time they were recorded, there was no way for the two sections to have been heard in continuous succession without having two records and two record players, cued to play one side right after the other, Ellington took pains to have the tempo at which side one ended followed as exactly as possible by the tempo at the beginning of side two. He conceived of the two sides as one continuous performance at a time when he probably could not have imagined that they would one day be linked without pause and presented on record as a single six minute performance.

Ellington, of course, lived on into the era of the Lp and was able to make a great number of recordings of his own compositions, most of which went well beyond the old imposed limit of the three minutes per piece. While the three minute limit severely restricted the scope of time resource available for the Jazz and popular music arranger and composer, it imposed very real limitations on the improvising Jazz musicians as well. The usual practice was to divide up the three minutes of the recording with an opening statement of the composition or arrangement followed by a succession of improvised solos and then returning to a repeated statement of the fixed part of the composition.

This left painfully little time for improvisation. In the rather democratic Jazz world in which everyone in the group had to be allowed a solo, three minutes would go by very quickly.

Two of the greatest Jazz improvisers ever were Django Reinhardt and Charlie Parker. There are certainly others who are also great, but these two will serve as examples of the best. Each of these men was a master of improvisation, being able to spin out what appears to be an endless stream of continuously changing musical ideas. The major recorded documents which remain to us of these two artists were
originally recorded on single sides of three minute 78rpm records. One notices with Charlie Parker, that now with the availability of all the alternate takes which were made at the time of the original recording, each take is completely different with virtually no common material from one take to another. Listening to the hundreds of these three minute masterpieces which constitutes most of their surviving legacy and finding little redundancy or no lapses in imagination, one becomes intrigued by the thought of what these men might have created if they had lived just a little longer and had responded to the potential scope provided by the 25 or 30 minutes afforded by the Lp or the entire hour afforded by the CD.

Both Django Reinhardt and Charlie Parker died in the mid 1950s, well after Lp recordings were established. Yet, we have for neither of these artists a very satisfactory example of the manner in which they could develop any particular improvisational idea for a longer period of time. In fact, most of the Reinhardt and Parker recordings left to us contain only a small fraction of the three minutes of each side because of the time taken up by introductions and other soloists.

Therefore, while both Reinhardt and Parker worked within the three minute limitation of the recording technology of their time and Ellington, on the other hand, was, from the beginnings of his long career, experimenting with forms which went beyond this time limit, popular music in America and in most of the rest of the modern world began with this same three minute limitation and even today, only rarely ever moves very much beyond that limitation.

Thus while for Ellington, Reinhardt and Parker, the limitation was a real one imposed by the available technology of their time, for popular music of today this limitation no longer exists. Yet the market, popular taste, the demands of AM radio, etc., have all worked to retain the three to five minute aesthetic until the present day. Although we known that with concentration, longer attention spans are humanly possible, it may be that those who were engaged in the market for popular music, and the Jazz market was traditionally placed in this category by the record companies, decided or observed that the attention span of that audience was and continues to however around three to four minutes.

**How Ensembles Organize Themselves Rhythmically**

When we play or sing alone we are masters of whatever we choose to do within the limits of our own abilities. Speed and volume can be changed, the pitch can rise or fall and we can change to another tonality or key as we like. When two or more people play together, the procedure quickly gets more complicated. We must establish a set of verbal and nonverbal rules about how we are going to stay together. If its a simple tune we all know, like singing “Happy Birthday” at a party, we don’t need much in the way of preparation. On the other hand, think about how
many birthday parties you’ve been to when the singing doesn’t settle down into uniformity until near the end. Maybe even the simplest singing does need some kind of preparatory coordination.

Whether musicians need to talk much before a performance or not, it is the cultural context which they share which allows them to understand each other musically during the performance. If they talk about how they are going to play or sing, their understanding of the words they use comes about because they share the culture in which these words are defined. In this case we are talking more about shared culture more than shared language although often they are the same. But consider that the members of the Tokyo String Quartet may speak English very well, but they do not need to speak English to play the Beethoven Quartets. Through their training and practice they have absorbed and adopted enough of the culture of the performance of that music that they can play. When a large symphony orchestra plays together it can include members who speak a great number of different languages and may only share one very unevenly. Still, it is the fact that they understand the shared musical concepts required for the performance, regardless of the language with which they are most comfortable that determines the effectiveness of the ensemble playing.

Small Ensembles

Different kinds of music performance are possible for large groups performing together or small groups. More flexibility is possible with small numbers of players or singers, although it is not always the case. Conversely however, the logistics of maintaining communication between performers in large ensembles naturally restricts the amount of freedom that any one individual might have.

Small ensembles of three or four musicians have great possibilities for flexibility and freedom in performance if these are characteristics that have been selected within the culture. In some cultures, for example, those in which the music is meant to provide a ritual or formal function, free improvisation may not have been elected in the culture as an appropriate possibility. However in others, like small Jazz ensembles, North and South Indian classical music and the Sanjo music of Southern Korea, a high degree of spontaneity and collective improvisation has been nurtured.

String Quartet Playing

In chamber music ensembles of many cultures, great flexibility is possible because the musicians can hear each other as well as observe minute physical gestures and movements. The Western string quartet offers an excellent illustration of the ability of a small group of four musicians playing together and making use of very subtle and minute changes in volume, tempo and expression. Although the
musicians must rehearse frequently, their verbal agreements about such matters is far less accurate in controlling and affecting performance than the careful listening which they do while they are actually playing. The Western European string quartet is an excellent and familiar example of a small group of musicians, without a visible director, but capable of performing together some of the most complex and fluid music in the Western tradition. It is a tradition in which careful sensitive listening and balancing with each other, entirely by listening creates a flexible and cohesive ensemble performance.

**Tempo in Japanese Court Music**

I can still vividly recall now some years ago when I was studying Gagaku, the music of the Japanese Imperial Court, how very, very slow the music seemed to me on first impression. I was allowed, after some years, to join in the weekly rehearsals of the court musicians. By then I was quite familiar with the sound of Gagaku and with the performance style and tempi use by the court musicians. However, when I joined then in these rehearsals, the tempos at which they performed seemed always just a bit slower than I had anticipated they would be at the start of the each rehearsal.

Familiarity had prepared me for the fact that the music was played slower than anything I had ever played before and that experience was helping to give me some conception of where the tempo would be, but every time we played together I can recall the same slight shock at the length of the first note played, never finding myself completely prepared for how slowly they actually played. Within a few years after leaving Japan, although I continued to be closely involved with Gagaku, cultural and perceptual distance between my conception of the very slow Gagaku tempi and the actual performance by the court musicians only increased with each year. Most recently, however, in 1988 the court musicians of Japan toured the United States. Now when they played, I marveled at how much faster they played everything than the way I remembered it. When I asked them about this I was told that the younger musicians could no longer hold their breath as long and they gradually speeded the music up to accommodate this change.

**Large ensembles**

Whenever large groups of performers play together, let us say in groups of ten or more, different principles of organization need to be employed. In the Western European Art music tradition, the large orchestra under the direction of a single conductor who is ultimately responsible for transmitting to the entire group the potentially complex series of changes of tempo and expression that are required for the performance is an example of one model. In many cultures, however, a conductor is not used, or is not visible. The leader of a large ensemble may direct
and control the performance from within the ranks of the group and may not be visible to the audience. In other cultures, formal structures that aid in the organization of the performance may be built into the tradition of the music itself.

The technique of using repeated rhythmic cycles of a fixed number of beats as a unifying principle is to be noted throughout the Far East. As a widespread practice it may date from the long period of several hundreds of years preceding the 13th century Mongol dominance of most of Asia and of the spread of Islam in India. Before this time large ensembles dominated the courts of the great and small nations of Asia.

Although the principle of a fixed and repeated metric pattern can be used in many different types of musical context, it was used to particularly good effect in these large ensembles. It is likely that out of the necessity for maintaining a cohesive ensemble performance with several different instruments, emphasis was placed on formally elaborate fixed compositions with consequently less freedom for scope of individual interpretation for a soloist in the ensemble. What we know of the structure of the music from this tradition shows that it was composed using long and complex melodic forms superimposed on a fixed although often complex rhythmic framework.

The idea for these large orchestras of the ancient world probably came out of the gradually developed need for impressively large groups of musicians to perform music for ceremonial and court ritual. Thus the large ensemble concept grew out of a tradition in which the performance of music was in itself a ceremonial function. The playing of the King’s orchestra symbolized the King whether or not he was present.

The music began to take on a slow and stately quality in many areas, in keeping with the gravity and power of the court, but also because the music was intended to provide an important part of the atmosphere of the court, adding to and underlying the other ceremonies. The music of these large ensembles came to function as part of a pervasive atmosphere of the court ceremony much like the pervading and ever present fragrance of incense. Most of the surviving compositions of the courts of Japan, Korea and Central Java are of great length and duration and are played very, very slowly. Far to the West, in Turkey in the Ottoman Empire, this same kind of large ensemble music using slow and complex rhythmic meters also survived. Here too, long complex melodic composition were superimposed over repeated fixed rhythmic patterns, many of which were long and complex in themselves. Who could hear these long and intricate patterns and the interrelationship between them and long, flowing melodic line? We no longer live in times where submersing oneself in the sound of music which is so slow as to almost seem motionless. However, the life of the court in ancient Asia demanded formality and gravity. If the music was to function in providing an atmosphere which could be absorbed almost unconsciously as well as providing a music which also could be listened to then it should naturally
give the illusion of being endless.

It is of course impossible to know today what audiences of the time may have felt when hearing this music. We cannot know either if these same very slow tempos were in use during the heyday of the court music system. We do know that in the court music traditions of Japan and Korea today performances are executed at tempos that are so slow as to be difficult to perceive when compared to the tempos used in most other cultures of the world. Even in those cultures themselves, few can hear the complexities of music with such a seamless and seemingly endless formal structure. But then what, we may wonder, of the perception of the musicians who are expected to provide this endless music?

One of the common characteristics of these ancient court musics, is the use of a single stroke on some deep toned instrument to mark the end of a rhythmic cycle and the beginning of the next. In the music of Central Java, this function is performed by a very large gong. The playing of the large gong is invariably entrusted to one of the oldest, most seasoned and respected musicians in the ensemble, although not usually the leader. In some of the very long compositions, the *gending ageng* type, for example, each rhythmic cycle might last as much as five minutes and therefore the large gong would have only one stroke in that time. In Java it would not be unusual to witness an all night performance in which the oldest musician in the group sits calmly sleeping but awakens quietly and effortlessly in just ample time to gracefully strike the gong at the precise moment which will give logic and meaning to the several minutes of music which had preceded.

When we discussed the manner in which the musicians of India were able to retain an accurate mental conception of a segment of time as long as several seconds, we were perhaps speaking of the same sense of time as perceived by the old musician when playing the gong. When viewed from the vantage point of modern Western practice, to mentally hold the image of a precise period of time lasting several seconds may seem difficult, while doing the same for a nevertheless, there is nothing unusual or innate about the abilities of these musicians. The practices developed out of the needs of the particular tradition and gradually the accurate perception of long periods of time became one of the skills required of a professional musician in these cultures.

**The Use of Staggered Melodic Phrases and Rhythmic Cycles in Japanese Court Music (Gagaku)**

Large ensembles of ancient Asia frequently used a structural device in which melodic phrases would be altered slightly over the fixed and repeated rhythmic cycle. Unlike the Indian *raga* and *tala* system, in which the beginning and ending of each rhythmic cycle coincides with the beginning and ending of each melodic cycle, in this ancient formal style, melodies would begin to stray, or enter and end a
different points in the fixed rhythmic cycle. The listener would be expected to become familiar with the rhythmic cycle by hearing the pattern played by the large drum which struck on the main beat, and the smaller drum and small gong which articulated the pattern around that main beat. For the sake of simplicity, let us look only at the contrast of the basic pattern, indicated by measures, in the example below, four measures to each single main beat of the large drum, indicated here by the small circle appearing at the beginning of the third measure.

The beginning of each measure is indicated by the short vertical bar. In the example above, we have a rhythmic cycle of four measure with one strong stroke. In the following example the melodic phrases are indicated by a heavier line under the line for the rhythmic cycle. The Gagaku composition *Shinraryo no Kyu* consists of 16 main rhythmic, indicated here by two cycles on each line, and two additional “ending cycles”, here indicated by the ninth line.

This composition is quite regular. In rhythmic cycles 1 and 2, the melodic cycle is two measures long, or two melodic phrases to each strong beat of the drum (indicated by the circle in the third measure). Rhythmic cycle three continues this pattern, but in rhythmic cycle four the melodic phrase covers the entire cycle of four measures. Thus in this composition, the pattern consists of variously alternating melody phrases of two and four measures over a regular four measure cycle.
Now that we have seen the manner in which the basic structure works, let us look at a more complex example. In the composition, *Kyounraku*, given below, we have a rhythmic cycle of eight measures to each main stroke of the drum, a longer rhythmic cycle. This composition is also set in a slower pattern in that each measure now has eight beats rather than four as in the previous *Shinrarya no kyu*. The overall character of this piece, *Kyounraku*, is of a very slow and stately form, although all of the Gagaku compositions are played in a very slow tempo and although tempos may have changed over time, at least in Japan it would appear that the music was usually played rather slowly.

In *Kyounraku* we immediately notice that the melodic phrase is staggered against the rhythmic cycle. In the first cycle, the first melodic phrase ends in the middle of the third measure, the second melodic phrase begins in the middle of the third measure and ends in the middle of the fifth measure, right after the main drum stroke and the third melodic phrase goes from the middle of the fifth measure to the end of the sixth measure. The fourth phrase begins at the beginning of the seventh measure and carries over to the next rhythmic cycle, 2, where it ends at the end of the second measure. By following the rest of the composition in this manner, we can see a very complex relationship between the regular and fixed rhythmic patterns and the irregular melodic phrase.

The organization principle evolved out of the need to create interest and variation between melody and rhythmic accompaniment. Since this was a repertoire performed by a large ensemble, these variations had to be formalized into the composition since collection improvisation with a large group of musicians, a minimum of 8, but usually many more in this case, could not create structures of such complexity, they had to be pre-composed. Actually these relationships were fixed in the formal relationship between the melody and the rhythmic pattern.
Fig. 49 The Burmese *hsaing* ensemble consisting of a drum circle, a gong circle, a gong frame, drums, clappers, bells and small double reed pipe. The ensemble is held together in performance by the subtle control of the leader who plays sitting in the center of the drum circle frame.

Fig. 50 A Goralska String Band from Zakopane in Southern Poland.
Fig.51 Performances by large ensembles, such as the Ah-Ahk, Court music orchestra of Korea, require careful coordination. Without relying on a conductor, the ensemble synchronizes by attentive and sensitive listening to each other.

Fig.52 A Chinese painting depicting a chamber orchestra in the Tang Dynasty. There were ensembles of all women musicians as well as men’s ensembles. The group is divided into two groups, Left and Right with the same instruments on each side.

Fig.53 Jamaican String Band. Seemingly loosely organized ensembles such as this make use silent signals and careful listening to play as a unit.
Fig. 54 A Transylvanian Gypsy band from Tirgu Mures, Romania

Fig. 55 Usually such small ensembles play together with an internalized sense of the tempo and feeling of the music. Under the days of socialism in the countries of Eastern Europe, small ensembles were thought to be improved by making them larger ensembles. Also in order to show that the music had status and high standing a conductor was added. Here in this small Romanian Taraf, or band of musicians a conductor has been added to this stage presentation where in fact none was needed.
Tone Systems and Formal Structures

A. The Physical Properties of Sound

Music exists both in space and time. Besides requiring the passage of time to unfold and permit us to perceive its patterns, music simultaneously exists in a spatial realm of sound that varies from low to high. Sounds that we hear are the results of waves that travel to the ear. The velocity of these waves, we hear as volume. The rate or frequency at which these waves move through the air, we hear as pitch or as different notes, as low or high sounds.

Sound waves are similar to light waves. Differences between rapidly undulating waves and slowly undulating waves we perceived as higher and lower sounds. Differences in wave frequency are measured by the number of cycles, or vibrations that occur in a second. The average range of human hearing ranges from about 20 cycles or vibrations per second (CPS) to about 18,000 CPS. The middle C note on the piano vibrates at 256 CPS.

Although we are used to associating these vibrations with musical instruments, they also occur in the natural world. Early humans must have discovered that certain bodies, such as particularly resonant pieces of stone (lithophones), tightly stretch vines, stretched and twisted animal intestines, or stretched skins, particularly over hollow areas, produced audible and pleasant sounds. These sounds which vibrate at frequencies within the range of human hearing were cultivated and refined by learning and experimenting with the physical bodies which produced them. Pragmatism and the need for food may have produced the first hunter’s bow, but in many places the sounds produced by the bow were soon cultivated into musical instruments. In many parts of Africa, the hunter’s bow is used as an instrument. In ancient Japan, the courtiers whose duty it was to keep watch would sound the hours by twangling on their bows. From this according to Japanese mythology one of the first zithers, the wagon, was created by lashing together six hunting bows and putting bridges under each of the strings.
With the entire range of audible sound, from roughly 20 to 18,000 cps, from which to choose, a great variety of different sound choices have been made throughout the world. Nonetheless, in those cultures we know of, the tendency has been to use primarily those sounds which fall in the mid range human hearing. The choice of which particular tones that is which frequencies or vibrations to employ evolves differently in each culture. It is possible for the human voice to produce, if its governing brain can “visualize” it, virtually any pitch within its potential range. The selection and eventual limitation in the choice of one set of pitches as the musical standard of one culture as opposed to another comes about when we start to make instruments. A string tightened to a certain tension produces a note that changes if the tension is adjusted. The pitch of a drum can be changed by increasing or decreasing the tension. A pitch or tone of musical stone, vibrating slab of wood or a cast metal gong or bell cannot be easily changed, although some adjustment can be made by shaving different areas of the vibrating body in order to make one part vibrate more or less rapidly than another. It is true that these are limitations for which humans can and eventually did find means to overcome. What is important is that we must assume that at first these sounds were valued, enhanced and preserved. They thus became part of the established and accepted resources of that culture. The choice of which sounds were preferred in each culture was largely arbitrary, either the result of chance or of gradual refinement.

**Choices and Borrowings**

Just as people borrow and learn each others melodies they appear to have borrowed each other’s ways of tuning, that is, the set of preferred pitches or frequencies selected and used in any particular culture. In today’s times, with the saturation of pop music in every culture, much of it originating in the West, it is not surprising that increasingly, people in many places of the world have begun to adopt the most frequently used tuning systems and in particular, the modern Western tempered tuning. The convenience and consequent dispersion today of electronic instruments, all tuned to that system which evolved in Western Europe, has led to further adoption of the western tuning system.

If we go back to a time before this intensive dissemination, to a time when cultures were more isolated from each other, we find a great variety in the choice of tones that make up the range of culturally possible selections. There is great variety of tone selection among the various nomadic peoples and hunter/gathers of the world. We find numerous tonal systems in Siberia and Central Asia as well as among the numerous Native American peoples from the Inuit of the far North to the Ona and Yagan of the extreme southern part of South America as well as among the many hill peoples of mainland Southeast Asia and the Philippines. In addition, the
traditional musics of the cultures of Japan, Korea and China, of Indonesia, Burma and Thailand, of North and South India, of Persia, the Arabic world and Turkey represent among them thousands of other permutations of tone arrangements of pitches unique to each. All until the advent of recordings, all of these were almost unknown in the West.

Choices of which tones are to be used for the music of any culture, are like other aspects of culture, arbitrary. This does not mean that they are not important in that culture nor that there are not even strict rules governing the theory of the tonal systems. It only means that the selection of certain notes and the rejection of others is the result of the history and experience of the people in the group. No one tone system is better than any other any more than one language is better or more efficient than another. Each has been developed and refined in order to best achieve the requirements of that particular culture.

Although people accustomed to one set of pitches can be made very uncomfortable when confronted with music in a different system, there is nevertheless a high degree of tolerance for variety within one’s own culture. The human brain has a flipping capacity. In each culture, there are certain notes which all agree are basic in that system. Suppose that we hear a set of notes that we recognize. Then one note is gradually raised, let us say. We continue to hear the changed note as the original even though it is getting higher and higher. At a certain point, we “decide” that it is now the next note up in our system. Humans seem to share the ability to accept slightly variant notes as the same as the note next closest to them. Trained musicians, of course, have refined this sense greatly, which means that they have much less tolerance for these variations and do not like to accept them. Precise and careful tuning was important in ancient China, is still very important in the traditions of India and the Middle East. In Indonesia, in Bali and Java, in particular, virtually every set of instruments is tuned differently and this special quality sets the character of the region or village where it is employed, or the unique character of the particular set of instruments being used. These tunings may be culturally important but they are still arbitrary, perhaps in part, because their differences do not seem to be humanly important. Life or health do not appear to be affected by the tuning system we choose for ourselves.

**Human Theories of Tone**

In both the ancient West and East the question of the generation of different tones was important. In both Ancient Greece and in China it was discovered that vibrating bodies, strings or metal and wood, vibrated in orderly ways which could be explained with numbers. Although we hear only one particular “note”, vibrating bodies are sounding several “notes” at once. They are vibrating in complex patterns
that result in multiple simultaneous sounds. When we hear a note sounded on a piano string, for example, culturally, we hear a single note, but in fact, what gives the note its character is the fact the several other notes are sounding a bit more softly but at the same time. The string is simultaneously vibrating at a half, a third, a fourth, etc. of its length at the same time as it is vibrating the number of times equivalent to the basic frequency which we are hearing. If we could visualize the pattern of this vibration, or see it with an instrument like an oscilloscope, we would see, not only the fundamental vibration of the entire string, but smaller patterns of vibration that occur simultaneously. These smaller vibration patterns seem to divide the string in half, in thirds, in quarters and so forth. This principle of simultaneous sounds produced by vibrating bodies is known as the natural overtone series, the natural harmonic or partial series and sometimes as the “chord of nature”.

In the natural overtone series a vibrating body vibrates at several different frequencies simultaneously. The most prominent of these is usually the fundamental, the pitch that we perceive that we are hearing. Usually the next audible frequency occurs at twice the number of vibrations of the fundamental described as the ratio 2:1. This frequency produces a note one octave higher than the fundamental pitch. The next frequency to be heard would be the frequency 2/3 the frequency of the second harmonic, which was the octave. This produces a pitch that is an octave and fifth higher than the fundamental pitch. These subdivisions continue upwards, each step slightly decreasing the size of the interval from the preceding step until they disappear in very high numbers and small intervals, and fade beyond the range of audibility.
The Ancient Greeks

The Greek philosopher, Pythagoras (c. 582-c.507 BC) was the first known music theorist. We can think of him as one of the first scientists as well. He was one of the first to propose that the earth was a sphere revolving around a fixed point. It was Pythagoras who measured and subdivided the length of a vibrating string and found that the system of pitches produced in the natural overtone series could be explained in terms of low number ratios. Thus in the overtone series the first partial, the octave is the ratio, 2/1, the next partial, a fifth higher, is 3/2, the next, 4/3 and so forth. To us today, respectful products of the age of science, well accustomed to the idea that there is a scientific explanation for all our perceptual experiences, Pythagoras would seem to be the first to scientifically explain the phenomenon of music. Yet what was important for Pythagoras was that mathematical facts such as the low number ratios could also be heard as equally pure truths in sound. The simple mathematical ratio of 2 to 1 ratio could be perceived in the simple perfection of an octave - two sounds which are the same yet different. The study of theory thus began initially as a means of explaining sound as natural phenomenon that could be explained mathematically.

The Ancient Chinese

In the ancient Chinese view of the universe, music was important in ways that exceeded the importance given to it in the West. The balance and continued stability of the universe was an important responsibility of the reigning dynasty. The ritual ceremonies honoring the ancestors were also intended to maintain the balance of all the natural elements in the universe. Musical instruments were thought to be construction of materials which the ancient Chinese regarded as the 8 basic elements, wood, bamboo, earth, vegetable, animal, stone, metal and silk. When an orchestra of these elements played together in perfect balance, it represented the balance of the universe and the performance ensured the continuation of that balance.

The careful tuning of each of these instruments was also of great importance. All the pitches of these instruments were generated from a single tone, which was known as the “Yellow Bell”, or Hwang Chong. In the event of a disastrous war, or of famine or some natural calamity, it was taken as a sign that the reign and its system were either corrupt or no longer functioning. In such a case, the entire governmental system had to be changed, but this also meant that a new pitch had to be chosen for Hwang Chong. This of course meant remaking all the instruments, recasting the bronze bells, cutting new musical stones, etc. However, the music system was intrinsically interrelated to the system of weights and measures. The
pitch of the note, Hwang Chong, was preserved by means of a tube of bamboo, stopped at one end, which when blown across, produced the desired note. The length of the tube also served as the unit of measure and the number of grains of millet which could be contained in that tube constituted the unit of weight. When the music system had to be changed, so did the entire system of weights and measures throughout the empire.

The ancient Chinese book, the Tao Te Ching, or the “Book of Tao” says that “one begets two, two begets three, and three begets all the numbers”, which may be interpreted to be saying that with three the truly interesting part of mathematics begins. This cryptic proclamation also means that from the first tone we generate its own octave (2/1) and from the octave (the two) can be generated a fifth (3/2). From the fifth, by successive additions of 3/2 fifths, can be generated all the possible tones which we are capable of hearing.

It was by this means that the Ancient Chinese devised their entire tonal system. They too, understood the principle of the subdivisions of the vibrating string length. They observed that by continually adding a note that was a 3/2 fifth higher than the previous note, a series of tones could be generated. Of course, this is a theoretical model. In actual practice the upward 3/2 fifths would be alternated with falling 4/3 fourths, otherwise the notes would soon cover too great a distance in pitch. The Chinese made use of 12 such pitches within one 2/1 octave. At first sight this system would seem to coincide with the Western 12 tone system, the twelve different notes
available on the piano for example. But the principle is very different. After proceeding up 12 3/2 fifths, the Chinese recognized that the 13th 3/2 interval did not return to the 2/1 version of the fundamental. The 13th fifth produced a pitch which was a bit, higher than the fundamental starting tone. Although this difference was small, it nevertheless was noticeable. In theory, the Chinese recognized the possibility of 60 possible fundamentals, or Hwang Chongs, which could be generated by these successive cycles of 3/2 fifths. This is the equivalent of subdividing the half tone distance on the piano between C and C sharp into 60 micro tones.

Western Temperament

The Western tonal system is a logical cultural outgrowth of thinking about the organization of music in a technologically oriented society. It evolved out of the music system of the ancient Greeks. Through long development under the guidance of the Roman Church, the Western music system gradually evolved into a basic 12 tone system from which most of its music was set in a scale made up of seven of these tones. The series of seven tone scales formed the fundamental tonal structure of Western classical and popular music. Over the years, but increasingly since the 18th Century, classical composers, in an attempt to make their music more interesting, began changing from one set of seven tones to another in the midst of a single composition. These seven note scale systems came to be known as keys and
the process of shifting between them was known as modulation.

Moving from the fundamental tonal center in which the instrument was tuned to another key or tonal center, a fifth higher or a fifth lower was a fairly simple task. However, as composers toyed with the idea of being able to play pieces in a key starting on any of the 12 possible tones and became increasing daring in the choice of tonalities to which they might modulate an adjustment had to be made. In the 12 tone system as it evolved in the West adjustments had to be made, first to accommodate melody, the Just Intonation System, and then to accommodate harmony, the Mean Tone Temperament. When the music needed to move freely between scales built upon all and any of the 12 possible tones in the system, the differences interval between notes varied too greatly depending on the starting point. These scales were evolved to serve a melodic purpose and the intervals between notes evolved to allow for these to sound pleasing in a melodic context. The need to be able to change freely between systems required a compromise in order that all of the potentially produced seven tone series sounded equally pleasant.

Compromise is precisely what was devised in the West. First used in the early 18th Century the Equal Tempered system compromised all of the 12 available tones in the system by dividing the perfect 2/1 octave into 12 equal parts. This allowed the possibility of freely changing between starting points on any of the twelve pitches of the Western system. The cost was that none of the intervals so produced fall within the range of the lowest pure ratios of the natural overtone series. One of the most serious losses which resulted from this change of tuning system, was the loss of the perfect 3/2 fifth which in the Equal Tempered system was replaced by a fifth which has the ratio of 2.9966:2.

Such high number ratios as those produced by the Western Equal tempered system are far from the low number ratios of the natural overtone system. Nonetheless, because this system allows for free modulation between different keys in the Western system, something which the development of music in the West required, the discrepancies between the natural and tempered system are overlooked. Given the wide range of different tone generations systems and tuning systems throughout the world, contacts between cultures using differing systems has made the acceptance of music across such cultures, often difficult. Nonetheless gradually over time, neighboring peoples adopt the music and the tonal systems of each other’s cultures.

How people sing is in many cultures regarded as something very close to the pure expression of the human spirit. It should not be surprising then that fierce pride concerning one’s music and its tonal system is expressed along with disapproval and disdain for other systems. Although the particular tonal system used by any culture is the result of arbitrary cultural or historical processes, the importance given to such systems is a reflection of how importantly music is regarded in the culture.
B. Tones and Textures

The number of ways in which music can be organized are thousands. Yet, out of numerous possibilities we become so accustomed to what we usually hear that we do not often try new schemes. In most cultures, people are content to use the same practices over and over again and over long periods of time. However, as we live in our own time and culture, we may believe that great changes are occurring constantly in our music. It is only when we look across cultures that we can note broad continuous patterns that are the result of repeated usage of certain culturally preferred forms.

Let us consider just a few of the virtually numberless possibilities which man has devised for organizing sounds and voices.

Monody

In a predominant number of cultures throughout the world if there are only a few forms of music, most or all of them will be vocal. Vocal music is the most widespread form of musical expression globally. In many cultures, the voice either sings alone or if in groups, the group sings in a culturally defined form of unison. This means that the voices may not sing with the precise cohesiveness of a trained Western choral group, however, within that culture, they consider what they are doing as singing together as one and to be singing one melodic line. Whenever a group of people sing together without harmony and sing the same melody, such singing constitutes monody.

Diversified Monody

One of the first ways by which man alters and enriches the texture of vocal music is in the recognition of different vocal functions. Sometimes this takes the form of a leader of the group singing part of the song and then being joined by the remainder of the group. In the way in which this can occur can vary greatly. In some cases, the leader completes the song and stops before the group begins. In other cases, the group may enter before the leader completes the opening section. Still in other cases, both the leader and the group may be singing together all the time and the leader by singing differently than the others exerts influence on the group performance. There are cases in which the leader sings essentially the same as the group, but only the timing of the singing is different. In other cases, the leader’s part may be greatly ornamented compared to the group, or even freely improvised.

There are cultures in which, we might suspect that there was no leader at all, just a group singing in a loosely structured manner. Careful study will reveal that the
leader or leaders are within the group, may even be standing in among the singing group and visible indistinguishable from the others. They may be singing the same melodic line as the others, but by small accents and emphasis, by slight anticipation they can be leading the group from within. Such cases, of course, require that the group be very well accustomed to this practice and sensitive to the suggestions of the “soft spoken” leader. Another example of modified single line singing occurs when in the group women take a variant line from that of the male singers.

All of these variants of group organization tell us something about the organization of the society as well as about the musical structure. The role of the lead singer to the group naturally arises out of ideas within the group about leadership. A society in which there is no elected or appointed leader or in which leaders are selected from within the group on the basis of age or experience rather than wealth or status will organize differently into singing groups than in more highly stratified societies. Think about what happens at a birthday party when everyone decides to sing “Happy Birthday”. We usually just start and no one in particular says, “Okay, here’s the pitch!” We just all start out at once and eventually it starts to come together. Whose voice pitch do we usually follow? That of the best singer in the group? The one with the loudest voice? Perhaps we all just adjust to the one voice that persistently sings on in spite of all the pitches around it. Should we deduce that we have some special system for group singing, a unique cultural interpretation of monody?

Heterophony

The tonal organization structure that ethnomusicologists call heterophony is sometimes difficult for Westerners to grasp. This is because examples of it occur rarely in the Western European traditions. Heterophony is said to occur when two or more voices or instruments performing together deliberately vary a single melodic line differently. It is a reflection of predominant unity because all are iterating the same melody or tune, however, it is also a reflection of acceptance of individual freedom. We define and identify heterophony when it is not the natural variations in vocal quality between performers on the one hand, nor deliberate free improvisation on the other. It is that medium line when all are performing the same melody, but each with his/her own unique nuance or flair.

This practice occurs most frequently in the Far East and in the Middle East. An excellent example occurs in the Cantonese Drama tradition of Southern China. At the end of the play, after the story has resolved and concluded, all the main characters, perhaps seven or eight singers appear on stage and together stand and sing a closing song to the audience. Each of the singers sings this song in the style of the character portrayed in the play. All sing in the same tempo. The hero sings the
melody in a strong vigorous style, the heroine sings it with delicacy and refined ornament, the judge with deep and slow moving articulation and so on. The audience hears the main melody clearly while at the same they hear it slightly blurred by the differences in human character reflected in the individual variations in the singing.

**Polyphony**

Polyphony occurs when two or more voices sing in complete independence. This style of performance indicates a higher degree of individual freedom than in heterophony. In the case of polyphony the voices or instruments are much more clearly independent of each other.

Although the individual lines are closely related structurally, a round is a good example of polyphony. When singing “Row, Row, Row Your Boat”, all are singing the same melody, however, the staggered entrances of the voices produce a result in which, when all three parts have entered, truly independent and simultaneous melodic lines are being heard.

Although we are accustomed to thinking of polyphony as an attribute of Western music, because it appears in our classical, popular and religious music, it does occur with great frequency in many cultures of the world. We may think of polyphony in its familiar Western manifestations. The singing of rounds, like, “Row, Row, Row”, the singing of complex masses by composers like Johann Sebastian Bach, or the rich singing of Black Gospel Choirs in the major urban areas of the US. All these are examples of polyphony, but there are many more.

One of the simplest types occurs when one singer or a group of singers sustains a single tone and another sings a melody over it. The singing drone accompaniment as a type of polyphony is widespread and seems to be the origin of polyphony in both Western and Eastern Europe. Another common and widespread type occurs when the difference between the leader and chorus is so great that they can be labeled two independent melodies.

In the areas of the world in there is a tradition of choral singing, often mixed choruses of man and women, there is a tendency to also have varied melodic lines for different parts of the chorus. This kind of choral polyphonic singing is traditional in much of Polynesia and Central and South Africa. In such examples as these, many times it is not entire independent melodic lines which identify this as polyphony, but the introduction of sporadic harmonic notes in the context of an otherwise unison singing texture.

Sometimes, the use of polyphony is blended in with other sounds. In societies in which women have a high degree of independence, the female vocal line can be independent and simultaneous with the male vocal line. This occurs, for example, in
the court music of Central Java in Indonesia and in the Royal Court music of Korea.

Polyphony thus includes a number of very dissimilar textures because in its broadest sense the word is used to describe the independence of two or more voice. When a southern Philippine *Kulintang* ensemble performs there are several separate parts going on and this is polyphony. When in a rock band, one guitar plays a solo, another a bass line and another strums harmony, this too is polyphony. When a 16th Century European choral work is sung with each of the four or five voices is singing what sounds like a completely different melody, or when Crosby, Stills and Nash, or the Beach Boys used to sing one their close harmony arrangements of a current pop tune, this too is polyphony. The definition depends on the degree of independence of each voice or melodic line.

**Relating Text to Music**

There are many different ways in which text can be intoned or set to music. On one scale the voice can speak, barely emphasizing the tonal patterns of the spoken language. Tone patterns vary from one language to another. French and Japanese, for example, tend to be spoken in a even tone with little stress and a slight drop at the end of each utterance. German and English, by contrast are heavily stressed and accented. Other language like Chinese and Vietnamese rely on tonal patterns for elucidation of the meaning of the word. In each of these cases, the idea of a spoken text passage that slightly intones would be different.

**Voice Quality**

The recitation of sacred texts by Hindu priests, Buddhist monks and in the old form, by Roman Catholic clergy used something close to the natural speaking voice with a slight exaggeration of the tone. It is an example of the human voice made divine by the addition of tone. In our own times and culture, the distinction between speaking and singing grows ever wider. In most societies poetry is always sung. Gradually, poetry in the Western world separates from song and one can now consider reading poetry or reciting it without tone. But even in the recent past, poetry was often recited with a slight emphasis on the underlying tonal pattern, not quite singing, but with clear intonation. Listening to the old recordings of the Welsh poet, Dylan Thomas, one can clearly hear a melodic pattern underlying the text. During the late 1920, Kurt Weill and Bertohld Bretch in Berlin were attempting to create a kind of theater in which the actors would seem to appear far away and quite small, as though seen through the wrong end of a telescope. This technique was called “Objectivism”. If we listen to the original cast Berlin recordings from the late 20s, one can hear that the actors are really using the “sprechstimme” or speech-song
Tone Systems and Formal Structures

technique. The voices are exaggerated if we hear them as speech and yet if we hear them as song, they sound like they are only halfheartedly sung.

In many cultures the idea of a beautiful voice is not something as highly regarded as the sense of music and the musical knowledge which is expressed through it. The spirit with which a singer interprets a song is thus more important than the natural beauty of the voice. Some highly respected singers may sound like they are not even clearly singing out the “notes” of the music, but this singing style, very close to the natural speaking voice may be regarded as very appropriate within that culture and may be regarded as highly artistic.

The degree and rate of tremor in the voice is another factor which is largely cultural. There is a great range of individual variation and much tremor in the voice may be natural and involuntary tremor. The degree of culturally prescribed tremor can range from only the natural and involuntary tremor which all humans possess to some degree to the heavy and exaggerated tremor of singers in the Western Operatic tradition. These techniques for beautifying the voice are carried over to instrumental style as well.

Tremor or vibrato is something we are accustomed to in our music. It is more formalized and controlled in classical Western music but is widely used in popular music as well. Other vocal techniques used to modify the voice are raspiness, for example. In both Africa as well as in African American music, a raspy quality is used in the singing of certain songs or in particular styles to create a divine or extra-human effect. The Burundi songs with the inanga zither are love songs sung by moonlight and always use this raspy whisper. In the US, the Blind Gospel singer of the 30s, Blind Willie Johnson sang out his spiritual message using this raspy hoarse quality.

Yodeling is another special technique found in interestingly isolated regions. The singers of the European alps use a yodeling technique which has become incorporated into their folk song style. It is also to be found among the mountaineers of Northern Japan and preserved in old folk songs like, Ho-Hai Bushi. The Native American cultures of both North and South America made extensive use of yodeling as a singing technique. This yodeling style has been incorporated into several genres of the folk and popular music of Mexico. The style known as Sones Huastecas, from the inland area of the state of Veracruz uses a high pitched male voice sometimes holding a long high note before “breaking” the voice back down to the lower register. Songs such as “La Malaguena” come from this tradition and even modern popular groups in the US like Los Lobos perform songs from this tradition. In many Country Western music songs in the US, yodeling is mixed in with the singing, particularly in old cowboy songs. Rather than being related to the European alpine tradition, American cowboys borrowed this technique from the Native Americans and incorporated it into their own songs.
There are numerous other vocal techniques which, like these, evolve and develop in a single culture and later may be shared and loaned to other cultures. Some techniques, such as the raspy whispering style found in Africa and Afro America are not readily borrowed into other cultures and remain more exclusively tied to the single cultural tradition.

B. Formal Patterns and Structure in Music

The listener, like the performer, hears music flowing through time. Its passage in time is marked by formal patterns that articulate the manner in which the time has been divided up. The pattern may, and frequently does include repetitions of previous material, or it can move through time with no repetitions and consist of a single continuous statement. Repetitions can be of simple short patterns repeated again and again with varying degrees of change and ornamentation.

Most often and in most musics, the pattern of repetitions and changes is complex and varied. A widely accepted pattern such as the sonata allegro form in Western music is a formal pattern that serves as the matrix for formal development in a great body of music in the European classical tradition. Individual compositions using this form are treated differently from one composition to another, so that virtual no two identical treatments of the form can be found in the canon of the European tradition. Still, the broad form of the pattern is audible and because we know that composers were consciously using it and performing variations upon we can recognize its importance in that period of Western music.

Short forms

Even in communities in which there is little more than vocal music, the forms of this music can demonstrate considerable complexity. Repeated phrases of a song, called strophes, can be combined to create a great variety of possible patterns and the differences in the use of such patterns between cultures can exhibit great variety. Such complex formal patterns may make use of numerous phrases and complex repetitions which then make an elaborate pattern for the piece.

For example, in simple songs such as “Mary had a little Lamb” or “Happy Birthday”, the song has but a single phrase. In the case of “Mary had a little lamb”, there is a second set of lyrics, beginning with the words, “Everywhere that Mary went....”, however, the melody is the same as that of the first phrase. For this reason the song can be thought of as having only one melodic section or phrase.

Let us consider another song, “Yankee Doodle”. In this song, the phrase, “Yankee Doodle went to town, a riding on a pony,” constitutes one melodic phrase. The next part, however, beginning with the words, “Yankee Doodle, Keep it up,” is
sung to a new melody and this constitutes a second melodic phrase. Thus the first two examples, Mary had a little lamb,” and “Happy Birthday” might be described as having the simple form A + A, or simply A, in the case of “Happy Birthday”, while “Yankee Doodle” would have the melodic phrase structure A+B.

Songs in which contrasting phrases are repeated in various patterns are frequently described as strophic in character. In the history of Western popular music there has been a slow but noticeable shift in the preferred formal pattern. For many years beginning around the time of the Civil War, American songs follows the pattern of European popular music and used a pattern that was based on that of the minuet of the previous century. In this form, an opening melodic phrase, A, was stated and then repeated, A A. After this, a new phrase, B, appeared which was closely related to, but still contrastive to A and this was repeated, B B. After this both As and Bs might be repeated giving the pattern AABBAABB. This was followed by a different melody, usually in a different key and often equal in length to the entire AABB section. This section, C, was called the trio and it too would be repeated.

This form served as the basis of most popular music until after the First World War and was the basis for most American marches, as well as for ragtime and the songs of the ragtime era. After the First World War and primarily during the 1920s a new short song form became popular. This had the form AABA, that is, a single phrase repeated twice and a single phrase of contrasting melodic material, and usually in a different tonality introduced only once, before the final repetition of the initial phrase. The AABA form gave rise structure to thousands of songs, from Broadway musicals, to the most popular songs in the country. It continued to serve as the basic form for American popular music until the late 1950s when songs gradually began to follow the irregular but more natural patterns of the song texts.

Throughout the world numerous formal types are used as the basis for songs and instrumental music. The idea of contrasting repeated phrase into patterns that created unique and congruent forms of musical statements is something that is used in many cultures. These forms served as a matrix for creating compositions that had the advantage of a pattern with which the audience was already familiar, which allowed the emphasis to lie in the uniqueness of the particular text and melodic structure.

Such songs made up of various phrase and using patterns of contrastive material are sometimes called “strophic” songs. Sometimes formal patterns in strophic songs are so complex that the entire performance of the composition may consist of a single statement of the pattern, although two or more iterations of the formal pattern are most often encountered. There are also compositions that do not make use of a repeating phrase structure. These are compositions that contain no repeated phrases and instead flow from beginning to end with new material at each
Longer Forms
Connecting Two or More Compositions

The connecting of two or more compositions into a suite occurs in many cultures. Sometimes these are fixed compositions that are always played one after the other and in fixed order. Sometimes, each composition is classified according to type and then they are connected or played one after the other in alternating sets. The movements of the Western European symphony as it was practiced in the 18th and 19th Centuries is an example of this type of organization. The pattern consisted of an opening movement, followed by a second movement in slower tempo, a third movement which had a dance like rhythm, at first a minuet and then later a scherzo, and finally a faster closing movement. These four composition types in this order were what audiences came to expect when hearing a symphony. Variations occurred by they were in the nature of gradual expansions and redefinitions of the established form.

The need to provide music to accompany the dance motivated musicians to connect pieces with the goal of creating a diversity of dance patterns. This may have become formalized as musicians decided got into the habit of connecting certain songs, dance pieces, or rhythm types and as their audiences became accustomed to hearing them in this order and at last, came to expect them this way.

Slow and Fast Movements

One of the very common types of organization is to connect two compositions together, the first a slower introductory movement, followed by a livelier and faster second movement. This occurs in many cultures. Rarely if ever does one find a fast followed by a slow movement or two movements of similar tempo. We deduce, therefore, that either it is a very old idea which became popular in many places and spread throughout the world, or it is a fundamental method of organizing musical events in time. Some of the common examples of this practice are the Renaissance European danse followed by the faster contradance, the more recent Hungarian practice of following the slow romance with a faster czardas or friss movement. In North Indian khyal singer the slower vilambit section is followed by the faster drut. In Latin America it was for a time common to begin a dance with a slow introductory fandango in which the male partner invited the female partner to dance, which was followed by the livelier jota in which she accepts the invitation. In the
turn of the century Cuban popular dance form, the danzón was followed by the more intense and faster, son.

**Accelerating Movements**

Another very common form of organization is to connect a series of movements in gradually accelerating tempos. This type of organization is also so common as to suggest that it may be an extension of the two part slow and fast movement type of organization. In this type of organization, however, several distinct movements or fixed compositions can be connected and each one is a little faster than the one preceding it. Examples of this are the great formal compositions that still exist in the repertoire of the Korean and Japanese court music traditions. A full suite in either of these traditions can consist of over ten movements and can take as long as forty five minutes or an hour to perform.

The Southern Korean sanjo, a form traditionally improvised always consists of several movements in increasingly faster tempos. The classical suite of the Ottoman court of Turkey also tended to move from slower to faster compositions of various types, songs and instrumental compositions. In the lighter and popular fasil suites, which were sets of Turkish popular or light classical songs the slow to fast progress through a series of compositions, anywhere from five to 15 became the rule. This method of organization is quite widespread not only going back to the ancient court musics of Asia. It was also noted by the conquistadors upon their arrival in Mexico that the Aztecs were very precise in matters of pitch and tempo and that performances would begin at slow tempos and gradually get faster and faster with great accuracy.

**Heterophonic Organization**

There are collections of separate compositions that are organized to create contrast between them rather than a gradual sense of acceleration. This heterophonic type of organization is noted more widely with dance music, although strictly concert music such as the European symphony and concerto also follow this principle. The idea of contrasting slow and fast movements noted earlier is amplified now to either alternate fast and slow movements, or to add a number of different rhythmic types and tempos to make greater contrast. The dance suite was used for listening music as well as dance music during the Renaissance and Baroque periods of Western music. Through its history it evolved from the two movement danse and contradanse to a series of contrasting dances in different rhythms. Although there were a great number of variants and different preferences in different countries within Europe, the allemande, courante, sarabande and gigue became well known.
The Irish *ceili* and American country dances are outgrowths of the European dance suite as it became more popular and widespread. In the same way 19th century popular dances such as the mazurka, schottish, polka, gallop and eventually the waltz were often grouped into sets of dances and spread with the increasing power and prestige of Europe and America in the last century. In classical Western European music the symphony and concerto forms used a contrasting system of organization between movements.

The *ngodo* suites played on the *timbila*, or xylophone orchestras, of the Chopi people of Mozambique and a good example of another culture in which this form of organization was developed, apparently without distant outside cultural influence. Here each year a group of up to 30 musicians, singers and dancers, perform a newly composed set of songs, dances and instrumental compositions. The performance is executed with great flair and polish and sometimes favorite compositions may be repeated in subsequent years.

In contemporary popular dance music, the practice changes as dance styles change. Today, there appears to be less interest in contrasting tempos between dance pieces and no attempt to organize dances into fixed sets. Instead, each dance seems to create its own mood and atmosphere that is manifest in the song text and in the musical structure of the composition.

**Formalized Introductions**

In a number of cultures there exists a practice in which the instrumentalist, or singer or an ensemble first performs what can be thought of as a warm-up preceding the performance of the main composition or compositions. This may be difficult to imagine because we have nothing quite like it in our culture. It is as though the warming up and noodling that singers and instrumentalists engage in backstage before a performance, sometimes on stage in full view and hearing of the audience, were formalized into part of the performance.

In these situations, the introductory part is not thought of as a warm up for the musicians, but an exposition of the mood of the composition to follow or an exposition of the technique and skill in free improvisation of the soloist or soloists. This practice occurs in at least two notable forms. One is a group performance, noted in the large ensembles of Asia, the *patetan* of the gamelan music of Central Java, and the *netori* of the court music ensembles of Japan, for example. Here, a smaller subgroup of the larger ensemble sets the atmosphere of the tonal or modal system of the compositions that will follow. The other type is that found in *alap* of India, both North and South, and in the *taksim* of Middle East. In this type of introduction, the soloist does set the atmosphere for the modal and tonal system in
which the following compositions are to be performed, as in the previous type. In the alap and taksim, however, this can become a major part of the performance and the status of the performer may be judged by it.

**Performances Organized into Theater**

Although it is possible to think of theater and music performances as two separate activities, in most cultures of the world, theater and music are always joined. In fact, in many forms of music-theater a separation between the two is not possible. We can think of theater, a dramatic basis, plot, or story line even when it is only very sketchy, as another way of joining and extending music together into a larger form. In some cultures larger forms were created by connecting a series of separate pieces together to form a longer composition, but another means, sometimes occurring in the same culture was to connecting several pieces together by means of a story line.

In the dance tradition of Okinawa, many dances are done to a single musical composition. There also a number of dances in Okinawa that consist of separate pieces, which are played one after the other in order to make a short dance story in which the music supports the stylized action of the dance. In the Imperial Court of Japan, the musicians attached to the palace are required to perform for religious ceremonies in the palace as well as for the emperor’s entertainment. One of the most important of these ceremonies is the sacred *Mi-kagura* which is a series of songs and dances performed as an entertainment for the gods which has been performed regularly, at least once a year, since the 9th Century. It is the idea of a ceremonial performance meant to be witnessed and enjoyed by the gods that serves as the thread linking several separate songs and dances together.

Entire stories can serve as a basis for cohesion in a theatrical performance and in this music can be incidental, that is, played from time to time, to highlight certain highpoints. This occurs, for example, in the Vietnamese *Cai Lung* in which the singing of the *vong co* underlines the high emotional point in the dialogue. Songs were also used in this way in the class music movies in which the story would move along and at some point a song would be sung as part of the story, sometimes even as an unrealistic intrusion into the story line. In some films music appears at different points in the background to serve as a highlight for particular scenes.

There are other uses in which music provides an almost constant background to the drama. The Indonesian *wayang*, or theater, either with puppets or with live actors can have some kind of music going on at all times during the performance. The Western opera is another example in which all the dialogue is sung when the actors are not singing, music is usually playing to underline the action on stage or to create a mood.
To these numerous examples we could add the Noh and Kabuki theaters of Japan, the many forms of Chinese music drama, the Indian *Ramalila* and other theatricals and the numerous forms of traditional theater of Burma, Thailand, Cambodia, Laos and Vietnam. In all of these cases, music does not connect the performance through the logical flow of the music itself, but instead, music underlines and highlights the action on stage, and it is this action which cements the various independent musics together into a single performance.
Theories of Music

During the late 1970s I was doing research in Romania on the music of the urban Gypsies. One Day in Bucharest I was riding in the car with Ionel Budisteanu, conductor of the Rapsodia Romina, the Romanian National Folk Orchestra. As we rode along, over the radio came the strains of a *Doina*, that free lyric, song form of the Romanian folk tradition which expresses the essence of the Romanian national style - similar in this regard to the blues in America. There are *Doinas* from many different regions of the country, each slightly different in certain details from the others. Many are difficult to distinguish, one from another. I asked Ionel, “What type of Doina is this?” “Ah,” he said, “this one is from Banat”, indicating the Southwestern region of the country. When I asked how he could identify the style as such, he replied, “The melody drops down a fourth going into the cadence.” “Ah,” I responded.

Why Theory

The information that concerns the music itself lies in the sound of that music. The study of ethnomusicology includes a great many different kinds of tasks and methods of study and each ethnomusicologist defines his or her focus or emphasis a little differently. Ethnomusicologists are as different from each other as are psychologists or microbiologists. The music of the entire world - the vast area of sound in which ethnomusicologists work - is their common turf. Yet the emphasis and point of focus in the research of each can be quite distinct. Each ethnomusicologist studies some aspect of one of the musics of the entire world, some concentrate on the social context of the music and yet others emphasize seek to understand the formal structure of these musics as both sound and symbol. The most popular stereotype is that, like the anthropologist of not too many years ago, they must travel far away to exotic realms to seek out their treasures, however, many today, study the music cultures right around them.

How Ethnomusicologists Work

Everyone who works as, or at something, at some time has to face the stereotype view by which others see his profession. In my own mind, two such stereotypes of the ethnomusicologist stand out. Both come from cartoons in the New Yorker magazine. In one, the pith-helmeted explorer, tied to a stake and awaiting the sacrificial fires, is surrounded by an entire village that could only be somewhere in
the darkest forest of Africa. Everyone in the village is theatrically lined up into massive groups of drummers, singers, rattle shakers, etc., like a Busby Berkeley musical. In the midst of this scene, the explorer says to the witch doctor, “say, have you fellows ever thought of putting this stuff on wax?”

I think of that New Yorker cartoon as exemplifying the general non-ethnomusicologists view of the discipline - running around to exotic places, being fascinated by remote and inaccessible musics. The other New Yorker cartoon again shows an African ritual in which the senior drummer is explaining to one of the young novice drummers, “Remember. Its boom after bam except before wham.” This one stayed on the outside of my faculty office door for years, because while it was a stereotype of the ethnomusicologist, it really, in my view, came very close to the mark as a description of what I was trying to learn.

Music Practice and Theory

A practical performing musician, like Ionel Budisteanu from Romania (see inset), may know hundreds of such formulas and patterns for distinguishing the various regional subtypes of Doinas as well as other kinds of Romanian music. The experience is gained over many years of performing in and conducting ensembles which played this music. He required this knowledge to be successful in his profession. It would never occur to him to devote himself to the study of Ethnomusicology. Such an effort would not improve his ability to do that at which he already excels. Neither would it occur to him to sit down and recite a list of the all distinguishing formal characteristics of the various Doinas of Romania although he certainly has the knowledge to do so. It would not occur to him lay out a scheme of the music in that manner. Yet, this is exactly the kind of information that might fascinate an ethnomusicologist. Why? Perhaps that knowledge might offer a key to the regional differences in the Romanian doina. This could lead to a study of the pattern of these regional differences and their possible cause in the regional differences found in the spoken language. But this is what one ethnomusicologist might do. Another might choose a different focus. Each is studying a specific aspect of a particular tradition in order to begin arriving at some of the broader parameters of music - those beyond the limits of any one cultural tradition.

A thorough knowledge of the forms and devices of the music enables the performing musician to better perform, create or interpret this music. The musician acquires knowledge needed in order to perform. He or she must have sufficient experience to understand enough of the structure of the tradition of the music. In an number of cultures, however, there appear individuals who seek to understand the structure of a music for the sake of that knowledge itself or sometimes in order to be able to explain it to others. In ancient China and in India, like with the music
theorists of ancient Greece, music theorists were akin to philosophers or metaphysicists.

Somewhere in the course of its development, the teaching of theory in Western music came to be regarded as an important adjunct to learning the performance and appreciation of the music itself. Music theorists become less philosophers of the nature and structure of music and instead veered towards an explanation of the practice of music as an aid to would be performers.

**History of Theory**

Pythagoras (5th Century B.C.) was the first known music theorist. We can think of him as one of the first scientists as well. It was Pythagoras who measured and subdivided the length of a vibrating string and found that the system of pitches produced in the natural overtone series could be explained in terms of low number ratios. To us today, respectful products of the age of science, well accustomed to the idea that there is a scientific explanation for all our perceptual experiences, Pythagoras would seem to be the first to scientifically explain the phenomenon of music. Yet for Pythagoras it was that the mathematical facts such as the low number ratios could also be heard as equally pure truths in sound that impressed him. The simple 2 to 1 ratio could be perceived in the simple perfection of an octave - two sounds which are the same yet different.

The study of theory began initially as a means of explaining sound as natural phenomenon. The ancient Chinese Tao Te Ching, or “book of Tao” says that “one begets two, two begets three, and three begets all the numbers”, which is a way of saying that with three the truly interesting part of mathematics begins. But this cryptic proclamation also means that from the first tone we generate its own octave and from the octave (the two) can be generated a fifth (the ratio of 3/2). From the fifth, by successive additions of 3/2 fifths, can be generated all the possible tones which we are capable of hearing.

Gradually the study of theory in the West began to move away from the Pythagorean perception of sound itself as scientifically measurable reality. Theory in music became less concerned with the value of music as a manifestation of the cosmos and turned to explaining the specific stylistic elements of the great composers. Theorists began mapping out procedures followed in the creation and performance of music, and thus gradually the studying and teaching of music theory as part of the preparation for a professional study of music in the west became a means of enhancing performance rather than an explanation of it.
Theory and Practice

The teaching of theory has a tendency to become strong in and of itself. As such the music theory both in the West and in India developed a life of its own, apart from actual performance practice. There is a story told of the renown composition teacher, Nadia Boulanger, who taught composition and theory in Paris to many of yesterday’s and quite a few of today’s great composers. While correcting a student’s work in tonal counterpoint, the student is said to have protested that Bach had used this very same technique, to which Madame Boulanger is said to have replied, “Bach yes, but you, no!”

It is understandable that theory should be taught in a clean and efficient manner and with exceptions reduced to a minimum. The best way of achieving this is to avoid the ambiguous, and devise rules to be used as explanations. This is something that happens not only in the West. In India, in Turkey and Iran and in China and Japan musicians often argue that music theorists are talking about something removed from actual practice, while theorists often argue that the musicians have become corrupted and misguided because they do not understand the theory fully enough.

Separation of Theory and Practice.

Theory forms a major and certainly a fascinating part of the lore surrounding Indian classical music. This is also the case in the musics of the Arabic speaking world, and of Turkey, Iran, China, Korea, and Japan. Perhaps the pre-Colombian Mexicans and the Quechua and Aymara of South America had theories of music as well. Of this we shall never know since not only were their books destroyed during the conquest, but even all the individuals who had knowledge and skill in the performance of the music. While in all of the cultures were theory exists, theorists vigorously maintain that theory accurately describes the performance practice of music, in each of these cultures one finds that discussion with the practicing musicians reveals fascinating discrepancies between the regularity and neatness of the explanations and the intriguing complexities and variants required by actual performance.

Although it impossible today to know anything of the theory of music in pre-Conquest America, in those cultures where it does exist such as Turkey, Persia, India China, Korea and Japan, theory survives in a special place, remote from practice but not inaccessible. For example most of the best performing musicians of Turkish Classical music in a general way, know the theoretical writings of the important theorists like Dimitrie Cantemir, Sadettin Arel and Suphi Ezgi. A few might make a study of these works and all might at some time quote some
significant point made about some particular *makam*, often to show how practice differs from what the theorists say. Yet very few individuals would make the theory of Turkish Classical music the object of special study. They have imbibed the necessary amounts of theoretical information in the process of learning and performing the music. In the course of actual performance the musician amasses a sufficiency of theoretical information required for his performance. Therefore, one does not find among the performers of the traditional music of Turkey, or of China, India, or Japan a need for special classes or teachers of theory.

Theory need not always be remote from practice. It does seems that after a time, however, the ways of thinking and acting in music each begin quite easily to take on separate lives. Notwithstanding the tendency in most cultures for the practice and the theory of music to develop separately, the degree of this separation can vary considerably. In the Middle East and in both North and South India, the theory and practice of music are much more closely interdependent than are their counterparts in either the West or the Far East. The Indian musician is required to have a profound knowledge of the theory of his musical tradition before it is possible for him to perform. In fact performance in Indian music is very close to what we in the West think of as composition, but composition which requires deep and comprehensive knowledge of the underlying theoretical principles.

**Theory as a Part of Practice**

In India, music theory comprises those aspects of the modal system, ragas and the rhythmic system, tala, as are required for performance. In India, however, theory is taught in the course of teaching practice. As a young musician learns to play the music he is at the same time given increasing amounts of theoretical information which serve as a guide to his own efforts at creation in the newly acquired forms. In the case of India we might refer to this as the “practical” theory of Indian music. Apart from the Indian performing musician, the Indian theorist, usually an amateur performer himself will propose theories to explain the relationships between ragas, their possible paths of development, and theories of their history and interpretation.

The contrast between these two modes of thought in India and in the West is strong. In India musicians learn a practical theory of music which they continue to develop in the course of their professional performing lives, leaving “theoretical” theory to the theorists. In the West, virtually the only theory ever learned by practical performing musicians is in theory classes taught by theorists. Only rarely does theory ever enter in the process of the practical teaching of performance technique. In fact, few performing musicians in the West are particularly strong in their knowledge of theory nor does it appear vital to their ability to perform the music well. Nevertheless music theory in the West has continued to be vital to the
education of a well-rounded musician.

The theory and practice of music are separate traditions in the Western world just as is the case in so many other cultures of the world and this would be a natural outcome of differences in focus and approach between theorist and performer. The formalization of theory teaching and its incorporation into the curriculum of study may also be the result of the general concern in our culture with precise method and repeatability. This is much like the teaching of foreign language in which one can note emphasis on grammar at the expense of speaking facility.

New Looks at Theory

There remain yet many fascinating and important questions concerning music to which theorists do devote themselves. But many such questions are being considered by scholars outside the field of music theory. For example, the mathematical psychologist, Vladimir Lefebvre postulates with the support of mathematical formulae that people listening, even to the very high number ratios of the equal tempered system, are mentally adjusting to the ideal of low ratio frequencies.1) This intriguing hypothesis offers some explanation for our ability to listen to such discordant combinations as the violin and piano or the human voice and piano - dissonant because it is virtually impossible for the violin or the human voice to maintain regular pitch synchrony with the tempered piano. Objective measurement of this combination in performance shows great discrepancies in pitch while our “ears”, in fact, our brains, tell us that the performance is acceptably in tune.

Some of knowledge of the antecedents in Western music is important understand how practice may have evolved. Lefebvre also talks about the avoidance of the 32/45 and 45/64 intervals in the “just” intonation system, the so called diabolus in musica, “the devil in music” of the Middle Ages. In a system which used fourth and fifths as consonant intervals the appearance of the “tritone” in the diatonic series was disconcerting and to be avoided.2) Avoidance of the “tritone” and attempting to “pacify” it may have lead to the addition of a flat at the lower pitch or a sharp at the higher pitch, either of which would cancel out the devil in music and replace it with a theoretical low number interval, 2/3 or perfect fifth. However in so doing, the path has no been opened to a new set of intervals, in fact a new key or tonality, and consequently the appearance on the seventh degree of another “tritone”, one which again requires pacification and subsequently yet another tonality or key and so on until a full cycle of twelve keys or tonalities has been completed.

Is this, in fact, the history of the development of modulation and multiple tonalities in Western European music? It is difficult to say. There is also the natural tetrachord imbalance which also plays into this as well. If one runs up the white
notes of the piano from c to c, the first four notes, c to f can be thought of as one tetrachord and the remaining notes, g to f, as the second tetrachord. Melodically however, the lower tetrachord commonly stretches to include g, with the result that one hear a whole tone, g down to f, as the top of this tetrachord. While the same can occur in the upper tetrachord by the incorporation of d above c, what has a tendency to occur is that the feeling of the lower tetrachord is duplicated and the upper b is flated in order to reproduce the whole tone, f to g, in the lower tetrachord. Conversely the important tones b to c in the upper tetrachord can also be imitated in the lower tetrachord producing, not the usual e to f but f sharp to g. Both of these processes begin to create the same kind of generic imbalance which requires again another step to correct and eventually leads through the entire cycle of keys in the Western tempered system. While this might strike some as a rather far fetched idea, Nazir Jairazbhoy postulates that it is precisely this tendency to seek to correct the natural imbalance between tetrachords which may have occurred in the classical music of North India and which as a consequence gave impetus to the development of one successive raga after another.3)

Many ethnomusicologists avoid such purely musical considerations preferring to study the social interactions of musicians and audiences and the cultural context of the music. Certainly there is much to study and the area of focus is a matter of free choice. There is however, some sense that the form study the purely musical aspect of practice in a culture is more the realm of the musicologist than the ethnomusicology. But this would suggest that somehow, the music itself could be studied out of the culture that produced it any more than any other aspect of the culture. Clearly the study of it as much an aspect of the anthropology of that culture as anything else and certainly cannot be considered outside that context.

Notes
2) Even on the equal tempered piano some sense of the “tritone” can be heard on the diatonic series, or the white keys of the piano if one goes up in fifths, playing c and g together followed by d and a, e and b, etc. Upon arriving at b and f one notes a distinctive difference in character.
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Style as a Cultural Factor

We use the Western term style in different ways. Most often when people talk about style they use the word to describe something much like a tangible commodity, most often in fact, like an asset. “He or she really has style!”, or perhaps “doesn’t have any style at all”. The general use of the term style in music is somewhat related in that it refers to a collection of selected integrated musical practices that are associated with and which come to identify an interpreter, a composer, a composition or a group of compositions, or even a period of musical practice.

Style is not only a positive and inductive process but also a negative concept in a very important way. Creating a style not only requires accepting elements for inclusion, but in order to produce resultant integrity it must also reject much, much more than it accepts. While it represents choice - the selection of musical techniques or formal elements which together make up the characteristic set - style nonetheless assumes the conscious rejection of those elements which do not seem to fit in effectively with the rest.

When someone undertakes a musical improvisation, whether say in a cadenza in the Classical tradition, or in Jazz or in Indian classical music, the creator must reject musical ideas which are alien to the particular structure which he is attempting to create. Not long ago there was considerable criticism of the violinist, Gidon Kremer’s use of cadenzas written by the modern Russian composer, Schnittke, in his recording of a Mozart violin concerto, not so much because it was a modern addition, but because it “sounded” modern and therefore did not fit into the general conception of the style of Mozart’s time.

Quite logically then style and the recognition of it must be based on certain assumed criteria. These criteria are defined by tradition and this holds true even when a consciously new style is created, because the creation of something that is different from the tradition takes into account that same tradition albeit negatively. In this same manner the audience for this new style must assume the cultural tradition in order to be able to recognize that this new style is new.
Style: Improvisation and Interpretation

Delimiting or defining a style is a requirement not only for the composer or improviser but also for any interpreter. There is no real hard line between free improvisation and the kind of adjustment of interpretation and expression that is required in the performance of any music. Phrasing, attack, stress, vibrato, emphasis, tone quality, etc. are all musical elements that come together in a performance but that are minutely adjusted by every performer. It is the uniquely balanced proportion of these elements that identifies every performer or interpreter as effectively as if it were his own voice print.

Much of this process is unconscious and some of it may be uncontrollable. In the Chinese and Japanese tradition of brush painting, the student is taught to follow each stroke of the master to the smallest detail and to the highest degree possible. This affects the holding of the brush, the motion of the arm, the amount of ink taken on the brush, and the precise details of the strokes. Yet the end result of this careful rote training is that although the teacher’s influence can be clearly recognized in the work of the student, it is the student’s own unrepressable personal characteristics which show through unmistakably to the trained eye.

Those distinctive elements that every human adds to all motor activity become imprinted as perceivable elements of that individual’s style. While the amplitude and frequency of an individual musicians vibrato may be controlled, in part, by unique physical elements related to heart beat, metabolism, nervous system, the matters of where and when to use that vibrato are dictated by more conscious activity. One must train oneself to remember that one’s teacher recommended “a little vibrato here but not too much here”. With experience one is eventually confident enough to make these judgments independently of the master. These are conscious actions and decisions about style. This is not to suggest that a clear line of demarcation can between these two aspects of style and interpretation. The degree to which training gives way to habit and eventually becomes spontaneous is impossible to define and perhaps, not worth pursuing.

Cultural Effects on Style

Some American Jazz musicians have said that it is possible to tell from the way a musician plays if he was raised in the city or in the country. It is noticeable in the more complex sense of harmony that the musician uses and is the result of having been accustomed to hearing more complex music in the city than what was popularly heard in the rural areas. With the internal globalization occurring in the United States, this kind of observation may become increasingly difficult to sense. But when this was true even not too long ago is that the popular music that rural
musicians heard even indirectly had an influence on their Jazz style.

In Jazz, improvisation has usually been the main factor in determining a musician’s status and it is natural to assume that in free improvisation, what the musician has heard previously will have an important effect on what his or her style. What is also interesting about this is the implication that there is or was a city culture and a rural culture and that these have an influence on style. There is nothing in the geographic location itself that could influence this. Instead it is that large cities having greater populations, offer a greater number of choices in order to satisfy the preferences of those populations. It is not that city dwellers have more refined taste, but that that taste is based upon a greater number of choices. Thus is the influence caused by living either in a rural area or in the city is one that consists both of individually learned choices and the involuntary control exercised upon them by factors effecting the environment.

Individual Style and Imitation

Even the conscious learning of a musical style is very complex. A young aspiring musician who dreams of playing “just like” some one whom he respects may attempt to study personally with the master. When this is not possible he must learn to listen carefully and remember.

Recordings have done much to facilitate this type of learning of style. Many music teachers remark on the incredible increase in technical virtuosity of young musicians today. It is apparently the result of easy access to clear, detailed and yet relatively inexpensive recordings. Being able to listen to a recording of the master often enough might almost come to compensate for the absence of private lessons. Jazz musicians, almost since the inception of the idiom have worked in this way. In fact, stories are told of some of the early greats such as Freddie Keppard of New Orleans who refused the opportunity to be the first recorded Jazz musician, because he saw in the recordings the potential for others to copy his style characteristics.

Jazz musicians have relied heavily on the ability to learn from the best of recordings. Many become so skillful that they can learn to pick out particular favorite musicians out of a group recording as a result of a developed familiarity with that musician’s particular combination of tone quality, phrasing and favorite nuances of expression. Just as there are some who become adept at doing imitations of the speech and mannerisms of famous people, there are musicians who can become very adept at doing capturing many of the identifying style characteristics of their favorite musicians.

Dr. Michael White is a clarinet soloist with the famous old New Orleans marching band, the Young Tuxedo Brass Band. His playing sounds amazingly like the great Omer Simion, an old classic New Orleans musician who has now been
Fig. 60 Ashih Khan, son of Ali Akbar Khan and grandson of Al’Uddin Khan whose playing shows influences from his father and grandfather as well as from his uncle, Ravi Shankar.

Fig. 61 The Korean composer and kayagum master, Huang, Byung-gi. As well as mastering the Sanjo versions of several kayagum players, he composes both in the Korean style as well as in the modern international idiom. He maintains the purity of the tradition in his Korean music performances but his compositions in the Western music idiom show the distinctive qualities of Asian music.
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Fig. 62 An instrument of great refinement, the ancient 7 string *qin* of China. Ideally, the player should only perform this music in conditions of thoughtful quiet and with an ideal audience on only one knowledgeable listener.

Fig. 63 The late Amir Khan in concert in New Delhi. Amir Khan was a master of the *Khyal* style of North Indian classical form. During a performance he often took as much as twenty to thirty minutes during the *alap*, articulating the character of only the notes in the first lower octave before moving on to the rest of the notes and the rhythmic sections of the performance.
dead for many years. Yet the similarity is almost uncanny. Michael White admits that Omer Simion was one of his favorite clarinetists. It is improbable that he had ever heard Omer Simion in a live performance, and there are only a few short solos on 78rpm records he had made with Jelly Roll Morton in 1926. Yet the sound of that clarinet on these few moments of recorded sound from the 1920s was enough for Dr. White to grasp and on which to build his own style. However, what is astounding is that it was not merely an imitation of a few recorded “licks” from a few old records, but that he has brought it to life and created an entire living Omer Simion style from those short bits on record and was now making new music in this old style.

Typically, Jazz musicians did not talk much about such matters as posture and breathing nor, in fact, about most of the sort of matters transmitted in the course of formal music lessons in the Western classical tradition. Had Michael White actually taken lessons from the living Omer Simion, the method of holding the clarinet and of breathing and moving the body while playing would likely never have been discussed. Yet even many of these elements of performance, many of which have important bearing on the resultant style are learned from the master without conscious effort.

**Natural Evolution of Style**

Ali Akbar Khan, master musician of India, son and disciple of the great Allaud-din Khan, manifests in his playing the deep influence of his father and still bears his own stamp of individuality. His own son, Ashish Khan, follows in the tradition of his father that is noted clearly in his style. At the same time one can hear in the playing of Ashish, the distinctive influence of the playing of his father’s fellow student, the famous master, Ravi Shankar. In all of this there are layers and layers of influences from within the family tradition as well as without, to the massive body of Indian music in general and all superimposed on the base of the physical and psychological makeup of each individual.

Perhaps what we think of as style may be one of the most important qualities of music. In a real sense it is our awareness of style, of this being different from that, which moves to recognize and select the music to which we listen. In describing the predicament of contemporary music, the composer Lukas Foss once said that it is not enough to recognize that one is hearing a modern composition. If the listener cannot distinguish between one composer and another when hearing a particular work through recognition of the characteristics of his manner of treatment or style then all remains uniform and unfathomable.
Style as a Complex

What we think of as musical style can refer to a number of different aspects of the creation and interpretation of music. In certain ways music style is similar to the process by which we note differences in natural language. Spoken languages can be grouped into broad divisions according to common characteristics, then further into separate mutually unintelligible languages, then further into generally intelligible dialects, regional accents and finally down to personal idiolects.

The classification into these divisions makes discussion of the comparative features of different modes of speech easier. However while the distinctions between such language categories may also be largely an arbitrary matter of convenience, in music it is even more difficult to say where local and personal styles end and national styles and those of an entire epoch can be divided. Any composer’s entire output can be grouped into one large set of common characteristics - albeit that the range of variation might be great. Meanwhile the body of a composer’s work can also be looked at more closely in terms of the style of a particular period in his creative life. Eventually however we can look more closely and recognize a set of common characteristics in each individual composition and such a complex of common features could be thought of as a style. We do not usually pursue this avenue further down to the differences in styles between sections and phrases of a single piece since this takes us into the realm of activity usually defined as formal analysis, or the analysis of form, which is to say, the detailed formal analysis of a particular piece of music.

The analogy with spoken language gives a good broad parallel to style in music. Pushing it down to the level of style of an individual composition, as with the speaking style of an individual is taking it too far. Nonetheless, it becomes useful when we look outside the Western tradition. If we consider current practice in the classical music system of North India, strict application of the distinction between style and individual composition becomes fuzzy. Is each raga the equivalent of a single composition or is each performance, each interpretation of that raga a better equivalent?

Obviously, audiences and musicians in India need not worry about where such lines might be drawn. The application has meaning only in our search for a delineation of the parameters of style. In India one can also go from a broad national style, to regional and local styles and on down to personal individual styles and to variations within each of them. It is also possible, by making use of the availability of some 60 years of Indian Classical music on records, to speak of style changes according to historical periods. Ali Akbar Khan, a widely acclaimed master of the form, is unmistakably the same artist we hear in his jugalbandi duets with Ravi Shankar recorded in the 1940s, as in his numerous Lps recorded in the 50s, 60s, and
70s. As we hear him today, he is still unmistakably the same artist. Still, in each of these periods we can note his personal style changing.

If for a moment we consider the North Indian raga and its place on this style continuum we can separate the common characteristics which all performances of any particular raga has, separate from the individual style of the performer and his time and place. In this sense we can almost think of the theoretical concept of the raga as the set of common stylistic qualities which all performances of it share in common. Thus in a sense, each raga is a highly articulated style which serves as the basis for individual improvisations. Raga is the abstracted matrix of a melodic style from which endless variations can be created.

**Style as Continuum and Similarities in Style**

It is helpful to think of musical style in terms of a continuum that can be viewed in large or small segments and as the result of varying mixtures of geographic, temporal and personal affects. In this multi-faceted, multi-layered view it becomes easier to see how in a given performance the performer might concentrate on emphasizing a certain set of qualities available to him and rejecting others which might also be possible. Given this possibility it then becomes possible to abstract certain elements and transport them across traditionally defined stylistic lines.

A few years ago the pianist Van Cliburn was scheduled to record the complete Chopin Nocturnes. He was apparently not satisfied with his ability to create the mood in these pieces that he felt he wanted. After a few false starts, he asked that the tape recorders be turned off and he began improvising on the piano trying to establish the proper mood for the Nocturnes. After a few moments his improvisation drifted into the popular Dietz and Schwartz song, “You and the Night and the Music” and soon had Cliburn humming along immersing himself in the mood of the piece. He stopped and asked that the recording begin again and went right into the next Chopin Nocturne. There must have been for Cliburn, something in the 1930s popular song that was akin to what he wished to express in the Chopin Nocturne. It is possible for musicians to find parallels, rough broad ones at least, between music from different traditions and then to emphasize these parallels. Such drawn parallels may be very personal ones and may be useful only to that one individual.

The American composer, Tom Ross, formerly a Jazz guitarist spent many years in India studying thoroughly the performance styles of both North and South India. When hearing the South Indian dance composition, the *Jatiswaram in Raga Hemavati*, it impressed him as having a quality somewhat like a blues. Here the fact that he had studied Indian music for many years points out that this was not a superficial first impression, nor should it suggest that anyone who studied this piece
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carefully might come to the same conclusion. Instead it was his personal feeling about the piece. He then reset or composed his own version, which he simply titled the “Hemavati Jatiswaram Blues” in which he clarified the parallel that he heard between the Indian piece and the blues for others to enjoy as well.

Style, Taste and Popularity

It often happens that someone makes something or does something or devises some unique way of dressing that seems unique. It seems to work well and it catches another’s fancy. The other decides to have one too, or to make one like it but in the process it naturally changes it a bit. If it is imitated further, further modification will occur. This continuous process seems to motivate a great deal of creative or recreative activity. The process of duplicating styles helps to define the style of a period. There is also a leveling tendency, what we might think of as the “quick job”. For example a top interior designer comes up with a new idea — Jack Lennor Larsen begins using blended desert tones setting off textiles with a few objects all of which establish the general style. Clearly it is good and others begin reflecting the new trend. Before long as the trend continues, it begins to look as though someone sat down and made a list of the elements which were required in the new style. The producers now go down this list and pull out one of each - one desert plant, one pale gray rug (maybe it will be sandy gray, maybe not) one sunset rust, or orange plastic covered chair (heavy cotton will make it too expensive). As the popularity of the new style becomes established, it becomes more widely imitated. Many only adopt it because it is the style of the moment, without any idea of the aesthetic of the original. Gradually we are inundated with quick and cheap imitations that only bear a superficial resemblance to the carefully planned integrity of the original.

All this happens with music in popular culture too. Those high points in the evolution of style during which the elements of that style come together in a cohesive whole are the high points of a culture. It is from these periods that the long time influence on later styles is generated. There is often a great deal of chance involved. The Indian Classical musician who practices for hours, day after day, year after year, to develop his skill and sensitivity, still depends on the chance that he and his audience will be able to click together and turn the performance into a truly inspiring experience. As often happens in India, after a few such inspired performances the artist usually finds that his style has become the focus of respectful followers. In order for this following of supportive listeners to occur, the masterful performance quality would have to occur with some regularity.
Chance, Improvisation and Accidents of History

Particularly in music performances in which improvisation plays a part, the documentation, on tape or film, of an excellent performance may be an accident or fortuitous chance. What many Javanese musicians consider one of the best examples of inspired gamelan playing on records occurred by chance. Before World War II a number of recording companies, mostly German, went to various parts of Asia to get into the business of providing local people with recordings of their own music. On one occasion four or five of the best musicians in the area around the city of Solo in Central Java were in the studio and for some today unknown reason, a small group of musicians sat down and recorded rather than the usual entire ensemble of twenty five or thirty musicians. This old 78rpm record was reproduced on the old Folkways Music of Indonesia Lp, in which it is called simply Gamelan Slendro. The performance consists of only *suling*, *gambang* and with the gender barely audible because of the limitations of 78rpm recording quality. Nevertheless, the performance literally flies with grace and fire and like no other among the hundreds of recordings which were made at that time.

What we are talking about here under the name, style, is a recognizable complex of elements - discrete in themselves, perhaps, but when integrated into a whole performance, create an unmistakable cohesive unit. Thus, the concept of style in music implies both integrity and cohesiveness. The idea of shifting from one set of practices to another - a switching of styles - is something that does not ordinarily appear to be valued highly in any music culture other than for parody.

The Integrity of Style

It is in the nature of our dynamic and rapidly changing modern society to value of the seeking of what is new. Changing of styles too frequently, however, emphasizes more concern with form than with content. In the traditions of much of the world outside the West, styles were changed rarely and while the Western view was to say that such societies were simply static. There was in these “static” societies, more concern with content than with the creation of new forms. We could well use a refocusing on the content of a music or of a musical style and less overt attention paid to collecting of newer and newer styles with little time to appreciate their significance.

Mozart wrote in the prevalent style of the late 18th century and wrote so much and so effectively that he came to define that period. It would not have been conceivable for a composer like Mozart in his time to have changed styles in the manner that Igor Stravinsky did in the mid 20th century. The significance of Stravinsky’s music was not diminished by his forays into various musical styles.
during his lifetime anymore than Mozart was handicapped by remaining close to one central style for his entire creative output. Each composer was a reflection and response to the limitations and stimuli of his own time and place. Admittedly if one focuses on the music of Mozart one finds that the contrast in style between, say, the works for the theater, the string quartets, and massive number of minuets and other social dances he wrote there certainly is great variety in his work. This having been said, the uniformity - contrasted with Stravinsky - is distinct.

That which we recognize today as the music of Mozart is a highly integrated style, one that allowed Mozart freedom to concentrate on the particular setting for which he was composing. Those who appreciated his genius could look forward to hearing his newest creation and could concentrate on the content of the new work without wondering about a new style. Mozart’s own particular and clear definition of the late 18th century style was so clear to him that much of his music must have come to him in dreams, with such grace and ease does he integrate even the most complex of devices and surprising innovations.

The late Miles Davis, an American Jazz musician who played for many years and was a pioneering innovator, changed styles from time to time. His own personal and individual style was always clear, however. A jazz musician who had played with Miles Davis for some years once said that one of the things that most impressed him about Miles was the integration of all aspects of Miles’ personal taste into a cohesive style. According to him everything Miles liked reflected a single sense of style, from the way he played, his painting style, to the clothes he wore, the cars he preferred and even to the kind of girls he went for. He reflected that for most of us, lesser mortal, our lives represent a disarray of disparate tastes and tendencies. Certainly, it is the cohesiveness and integrity of Miles’ playing at any given time which accounts for his strong and solid status as a leading innovator for many years.

**Style and the Individual**

Style, when considered at the level of the individual characteristics of performance which set one interpreter or composer apart from another resembles the type of uniqueness of pattern that we tend to associate with the qualities of human personality. The complex of behaviors is what we conceptualize as personality. This can be observed and described but is something too complex to document completely or accurately. Likewise there is no satisfactory objectively measurable means available that could be useful in defining all of the parameters of style. Existing discussions of musical style deal with the perception of differences viewed from within a particular tradition and rely on limitations of language and on the predefined mode of describing them.

In the highlands of Scotland, the bagpipe tradition includes one form known as
the *Pibroch* or *Piobaireachd*. These are regarded as the most difficult and challenging pieces in the highland repertoire and pipers are judged on their ability to play them. The Pibroch is a slow and very expressive form of music and makes use of complex but fixed patterns of rapid ornaments. Since the bagpipes cannot make use of changes in volume, nor of expressive alterations of pitch, it is in the very precise execution of these fingered ornaments that a Pibroch player is judged. It is the minute variations in duration in the execution of these ornaments that defines the expressiveness of the performance and it is by their execution that the player is judged. Howard Weiss in his study of the Pibroch or Piobaireachd technique of Scots Highland bagpipers made use of precise mathematical measurements of the proportional differences in duration of fingered ornaments.\(^1\) Weiss’ detailed measurements of differences between one piper and another showed a tangible means of objectively measuring an element of style which could be perceived by the expert judges but which in cases of dispute was difficult to discuss because the extreme rapidity of their execution.

**How to Measure Differences in Style**

If more research in music could take the direction of precisely measuring differences of touch, of accent pattern, proportional delay and acceleration in the interpretation of a melodic or rhythmic unit, we might begin to have a body of information relating to style with which to work. Such measurements in themselves cannot define style anymore than measuring of galvanic skin temperature defines personality. Such systems of measurement can, however, begin to take us away from an entirely subjective and culture based means of talking about style and towards a means of recognizing the appearance of combined characteristics, not easily perceived consciously, by which means we might begin to talk about the existence of these differences from a more global perspective. We could begin to talk about the existence of musical style as a human phenomenon, rather than about what best describes Mozart, the Baroque, Thomas Dolby or Ravi Shankar.

Recently with the appearance of digital recording a number of new developments have taken place. Many musicians decry the introduction of digital sound recording because they believe that the result sounds unnatural. The sampling rate was devised to operate at a rate far higher that the ability of humans to detect it. Nevertheless, many musicians insist that it still doesn’t sound right. However, the ability to convert audio sound into digital data has opened the path for numerous processes of analysis. Digital recording with the aid of MIDI (Musical Instrument Digital Interface) has allowed the precise recording of minute fluctuations of tempo, velocity (the speed at which a note is sounded, or its volume) and clear articulation of high-speed ornaments. This has permitted the precise notation and analysis of
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stylistic factors that heretofore could only be discussed subjectively. Having a musician play through a MIDI device has allowed precise data analysis about details of style that would have been impossible or impractical only a few years ago.\(^2\)

Our perception of that which we have here been calling musical style is probably what makes us recognize that, “this is different from that, and I like it”. Recognition of style is what makes pursue our interest in music. When we find something that we like we want to hear it again. Eventually we may want next to hear something like it. This might be the underlying force that makes us to go to performances, to buy CDs, or perhaps for a few, to study with the creator.

Gradually both by choice and by chance the creators of that which gave us pleasure change the style of our favorites in their repetitions and imitations of them. We either find that we change with them or try to hang on to that which we have already discovered. These are the tendencies that create the complexities of music as it lives in most societies. Although our perception of it may vary because of differences in the rate of change, in any society music exists in an atmosphere of incessant activity of influence, creation, acceptance, change, and resistance that results in an ever renewing balance between focus and uniformity as against change and diversity.

Notes
How is Music Learned?

The First Steps

The way in which music is learned tells us much about how it is regarded in that society. In complex societies such those of the Western and Westernized world, the pattern of learning may follow many different routes. Some children are encouraged to study music by taking music lessons when they are quite young. Those that continue may develop skills, proficiency and sensitivity as performing musicians. Not all who continue can or wish to make music a profession. On the other hand, it appears that most successful musicians of the concert stage began studying music around the age of five or six and continued with it. Therefore, beginning the study of music at a very early age appears to a requirement for success as a concert musician in the Western European tradition, but this alone is not a guarantee of success.

In Western society, however, other musicians appear who are quite successful. Rock musicians, for example, who may never have studied music formally with a music teacher and who may not have even begun to sing or play with any serious effort until they were in their teenage years. There is no denying the success of such musicians. The salaries earned from record sales and concerts by many of rock, hip-hop and other popular musicians are clear indication of the esteem in which their society holds them, so in our own culture, how early one should start learning music depends much on the kind of music it is one wishes to learn.

In traditional South India, a young person, even one coming from a traditional family of musicians, may be sent to the home of a master musician to be taught the technique and tradition. For the first several years, the student may be asked to do nothing but sweep the courtyard and run errands for the teacher. Does this sound abusive? In the Indian tradition, it was believed that the student was absorbing the sound of the teacher playing and teaching more advanced students and that this served as the best foundation for the new pupil. When formal lessons began, the student had a clear mental image of what was about to be learned from having heard it for years as he or she toiled around the house. We would all agree that being familiar with the music should be an important part of learning it. In traditional South India, as in some other cultures, the recognition of this as an important element in learning, has been formalized and built into the learning process.

Among the Chopi people of Mozambique and the Shona people of Zimbabwe
traditionally only men perform music and only men who come from traditional families of musicians. Others who might like to learn are not so much forbidden to learn - these restrictions no longer apply in most places - but many are convinced that because they are not from one of these hereditary families they simply cannot learn it. As in the Indian example, part of this story suggests that growing up in the family and hearing the music with great regularity and seeing it performed by individuals who are in close proximity, must make it much easier for the student to learn when the time for that does come.

**Learning Steps**

In societies in which music and its performance is thought of as belonging to the entire group, the process of learning may be informal, learned in the process of doing it rather than transmitted in a formal one to one manner. Sometimes several individuals are taught as a group. This most often happens in situations like in schools. There is one teacher who teaches a group of students. This method is found in our elementary schools, but it is also used in the beginning stages of teaching in specialized schools of music. More advanced teaching such as in “master classes”, can also be done in this manner. This master class method is also used in traditional India and in many parts of Asia.

In complex musics the process of learning is often formalized. A teacher is engaged and the student goes through a process of learning, being given assignments to work on until the next meeting with the teacher and then, depending on the level of progress, given something a bit more difficult to learn. Thus gradually, more and more of the tradition is absorbed and assimilated. This learning structure is very common in many cultures. The basis is that there is a tradition to be learned and there are people who know it better than others and those who wish to learn it must go to these specialists in order to learn.

There are situations in which, even with complex musics, the learning pattern is different from this because of differences in the social context in which the music functions. In China, among scholars the playing of an instrument called “ch’in (qin)” was considered highly appropriate. This very ancient music tradition was almost exclusively for scholars. In ancient China, government officers were also scholars, because they were required to pass examinations in poetry and literature in order to qualify for government work. The chin is an instrument of seven strings that are plucked in a great variety of different styles. The music exists in notation and hundreds of compositions for the chin survive in this notation. Chinese players of the chin share with each other, rather than teach each other. One scholar may wish to learn the chin and so goes to a friend who plays and asks him to teach. After learning the rudiments of chin playing, the player may find some composition that
How is Music Learned?

he has heard or perhaps only whose title is recognized. If the notation is available the player may work at it carefully and step by step reconstruct a playable version that is satisfactory. When chin players meet, they play pieces for each other and may share notation and give advice to each other on possible ways of interpreting the notation.

This is an example of a complex tradition shared among individuals who consider themselves equals. Some may be superior to others in their knowledge of the literature, or the repertoire or in technique and this would place one in a position to share or teach something to another. It is still done in the context of equals sharing something together.

Another example, also from Asia, is to be found among the musicians of Okinawa. There is a vast repertoire of sung Okinawan poetry which is accompanied by the three string *sanshin*, a long necked lute. Formal lessons are not usually given and instead groups of players meet on several evenings a week for three hours or so. At each of these sessions, there is a master player who informally, but clearly directs the music making by deciding which pieces are to be played. The evening session consists typically of playing a number of pieces, almost inevitably beginning with the first composition in the notation book, and then gradually proceeding through the book of some 200 compositions, skipping here or there as the evening goes by until perhaps some 15 pieces have been played.

No formal lessons are given. The entire group plays together. What happens during such evenings is that the beginners can only play the first and easier compositions. They learn to add more compositions to their set of songs by gradually following along with the new compositions as best they can, at first only listening and then gradually attempting to play. The atmosphere is one of encouragement and openness. No one is discouraged from trying to play along. The Okinawan spirit as it is described and in fact in practice, is to welcome all and players who feel too timid to try are encouraged by being told that they all learned in this way.

In this example, it is not so much that all the players are considered equals, but that the performance is something in which all should share, each according to his ability. It is understood that the process of learning takes time and performing and then pausing to listen to more advanced players, is all part of the group performance and of the learning process. It is also worthy of noting that this system works very well in disseminating knowledge of the tradition. The percentage of people who engage in the performance of music in Okinawa is much greater than in Japan and greater than in many different cultures of the world. Even within the United States, the number of Okinawan American musicians playing their own music is greater than that of any other immigrant group.

Jazz performance is also an interesting case in point. It would seem that one
must know how to play before one can begin to play. No lessons are given usually. Musicians listen, remember, practice alone and then gradually try playing with other musicians. In the traditional Jazz world, great importance is given to the musician’s ability to improvise personal variations. But no lessons are exchanged between master and beginner. Jazz musicians usually begin playing with others at their same level and when they believe that they are ready they may then try joining in informal sessions with musicians whose talent they regard as greater than their own. This is an example of the learning of a tradition entirely by listening and learning while actually performing.

Preparation for actually performing music requires absorbing the sound and spirit of a music. In some cultures this is done during the first lessons, but in others, a long period of listening may precede actual performance. The learning context is one that develops out of that particular music culture. A musician attempting to learn to play classical music on the piano would be shocked at the suggestion that this could be learned without the aid of a teacher. A Jazz musician might be equally shocked at the suggestion that he would have to find a teacher before attempting to play.

**Rote as Memory Aid**

Memorizing and learning by rote are methods used frequently in the teaching of music. Even in traditions where the best performances emphasize skillful improvisation, such as in India and the Middle East, much time is spent in first learning and memorizing the repertoire or techniques. It is after having memorized a great deal of the body of the tradition that the musician may begin to emerge. It is only after the memorization of a substantial body of the tradition that the musician can find the basis upon which to create his or her own improvisations.

**A Tune Remembered**

Many cultures make use of music as an aid to memory. A tune remembered pulls up from memory the needed words that have come to be associated with it. At other times a steady droning pitch lulls one into a relaxed almost hypnotic state in which words long stored in memory begin to flow in a steady chant. We use this mode of remembering in the recitation of prayers or chants.

A group of young girls in Japan sing a song while bouncing a ball. The rhythm of the ball bouncing is incorporated into the song by the use of onomatopoeia for the sound of the ball. The words, “ten, ten, ten” which represent the sound of the ball bouncing also contain the first syllable of the name of the shrine, Tenjin-Sama, at whose festival the ball was purchased.
“Ten, Ten, Ten,
Tenjin-Sama no O-matsuri de,”

‘Ten, ten, ten
At the festival of Tenjin Sama,’

Children’s games are early and very natural uses of text and tone memory patterns. They also conform to the speech tone and accent pattern of the spoken language. Young Black girls in Alabama sang a song, “Ah ha Rosie!” that illustrates the adaptation of speech, tone, and rhythm into a game.

Mnemonic Patterns

Following is a Spanish form which goes back at least to the 16th Century, an old sung jarabe from the Puebla region of Mexico was for dancing during the late 19th Century. It consists of a series of rhymes in which the melody of the first phrase ends before the final syllable of the last word can be fit in. The second phrase begins in the same way but completes the syllable. Very often, the listener is lead to expect a certain word, but on the second and full statement of the phrase, is often surprised to hear another word inserted. This is a frequently encountered technique even in Spanish songs going back to the time of Columbus. Here, there are two patterns superimposed on each other, a melodic pattern and then the text pattern which is staggered against the melody.

Las Doncell.
Las Doncellas valen oro
Las solteras valen plata,
Las viudas valen cobre,
Las Viejas, hojas de lata.

from an old Mexican jarabe, called Las Doncellas

The Vedas

It is in ancient India that we find some of the most amazing techniques of memorization. The most ancient texts of the early Aryan civilizations of India and those which come to have a central role in Hinduism, are the Vedas, a body of sacred texts probably dating from not later than 1000 B.C.. In order to preserve the pronunciation accurately and precisely, the ancient Aryans devised what is now thought of as the first science of linguistics. In order to preserve the correct word
order and to prevent any variation from being introduced they also devised intricate patterns which could be imposed on the texts and then memorized and recited. These intricate and, in themselves, nonsensical versions of the Vedas served as a kind of backup coded copy of the original which could be unscrambled if ever the authenticity of the current version came into question. The impressive part of this lies in the fact that not only was the original memorized by thousands of Brahmin priests, but also were several coded variants of each text.

These patterns were codified by Brahmin priests in a number of different forms, each consisting of a different ordering of the original syllables of the sacred text. Here are only two of many such variants. In Jata variation the syllable order is

1-2, 2-1 1-2,
2-3, 3-2 2-3,
3-4, 4-3 3-4, etc.

The Ghana variation modifies this to

1-2 2-1, 1-2-3 3-2-1 1-2-3,
2-3 3-2, 2-3-4 4-3-2 2-3-4,
3-4 4-3, 3-4-5 etc.

### Rote Learning

In our very literate society we find it natural to question the value of rote learning and in our education system we learn to rely less and less upon it. Some say that Asian educational systems, for example, place too much emphasis only on rote learning and that such a system creates unimaginative robots. This is perhaps too simple a response. Those who make this criticism understand little of how creativity continues to be expressed in Asia. Our non-rote education system is producing the lowest academic standards of any industrialized nation, and a low rate of national productivity. Simple memorization of information without understanding is not useful. On the other hand, information is needed if we are to be able to act effectively. We live in the information age and much information is easily accessible to us. How much do we need to have in our own storage banks to access the information we need successfully. Rote memory can serve as an important aid to thought since it provides a source of information upon which to draw. The greatest research resources, dictionaries, encyclopedias, libraries would never be touched if we did not have in our heads already, some idea of what they contained and how to find it.

In the year 213 B.C. the Chinese emperor Li Ssu decided that the ancient
classics were subversive to the aims of the state and ordered all books be burned. Such great classics as the works of Confucius and the old histories along with perhaps one of the most beautiful collections of poetry, the Shih Ching, or Book of Songs, were all burned. These would have been lost forever had it not been for those nameless scholars of the time who had laboriously memorized all of these works and who could be relied upon to commit them to writing when times were better.

All of the ancient history of Japan before the fifth century AD when the Chinese writing system was introduced had been meticulously preserved by a special guild of reciters called kataribe to whom we owe the ancient Japanese classics such as the Kojiki. In the world of classical Indian music, each professional as well as every established amateur performing musician knows several hundred melodic formulae known as ragas. Within each of these ragas that musician may know several different compositions, melodic patterns and rhythmic patterns making an astounding amount of information required and expected from any accepted artist of any stature in India. This is not mere rote memorization. This vast resource of memorized information serves as the basis for original improvisation, which is at the heart of Indian classical music and is the basis on which the artist quality of a performance is judged.

In the West, our dependence on the literary has often made us assume that literacy is an innate mark of cultural superiority, in and of itself. No one would deny that writing, in all forms, enables us to preserve and restore vast amounts of information, the result of many hours, days, years and lifetimes of experience - the best of what every previous generation judged from their own experience was important to pass on to us. But too literal a dependency on literacy alone may limit our ability to hear — to be sensitive to nuance and tone and to be able to appreciate a good talker when we hear one or to appreciate a good story teller.

People in Western cultures who know a little about music often express amazement that some particularly great performer can “scarcely read a note of music.” Yet the aim of all musicians, and in all the world and in all music traditions may be the only real universal in music, is to make the performance seem spontaneous. In music, the highest quality of performance can only begin after a significant body of musical information has been internalized. Western musicians achieve their best performances after they have completely memorized the written notation and have digested it enough to concentrate only on the sound of that music itself and can completely forget all about the written notes. They all play better without “the music”, that is the written notes.

Learning and Performing

One of the great challenges a performing musician faces is doing that at which
he or she is best, getting closer to their own inner sense of music, but doing this in a very public environment. Some people love music and like singing or playing it. Many of these same people may find that singing or playing on stage produces too much tension. The competition required for getting into the better schools and to have the opportunity to study with the best teachers takes much of the pleasure out of it and they soon give up the idea of pursuing the study.

Each society treats music differently. In the traditional Orient, music was regarded as part of a balanced person’s upbringing. Less a sense of competition for professional status, music was regarded as something that everyone must learn to some degree and a few excelled at it. In many African societies music is regarded as a community activity. Everyone is expected to join in. Skill is recognized but it is allowed to develop during the process of performing as a social function.

In Western European and in American society music was for many years a personal refinement, something in which many people strove to achieve a moderate level of proficiency in order to provide pleasure for themselves as well as for others. This was the root of the European Classical music tradition. Gradually, virtuosity and proficiency increased to such a degree that only very seriously devoted and highly proficient individuals pursue a career in music. At the same time, a new popular music, rock, evolved that did not require long years of training to perform and individuals could quickly enter into competition and possible gain their livelihood.

Music and the Individual

Identifying with Music in One’s Own Culture

We are all each of us, individuals as well as members of a group, usually members of several groups. We become conscious of our individuality as we come into contact with others. In the same way our conscious awareness of belonging to a particular musical culture comes about when we confront a musical culture that we find alien. The formation of one personal musical culture may begin as we acquire spoken language. In the process of “imprinting” which occurs in the first weeks after birth, it is evident that the new born infant assimilates the rhythm, tone and stress of the speech patterns of those adult speakers of the language who surround it. In this way not only does a binding take place between the infant and its family but a unique proclivity for the tone and accent patterns of the language is indelibly established. It is in the structure of language, its patterns of stress and accent, syntax and tone that the parallels to a fundamental music language of a culture are to be found. Already in the earliest stages of language development a child is already formulating the foundations of a culturally preferred music language. As we grow, we are also exposed to other music that is a product of the same culture and makes
Music and the Individual — The Process of Creation

Thus far the discussion has been about music as it functions in its role as a system of communication between people. It can also be used by individuals to communicate back to themselves. The creation of music as performance or composition, for one’s own enjoyment has great significance in many cultures. Particularly in societies in which the creation of music is an idiosyncratic activity which is given over to unique and individual specialists, as sometimes occurs in Asia and Western Europe, it is from the initial process of the individual delving deeply into his own performance that performance for others in the group has its genesis. There may be no real or significant difference between the individual engaging himself in music for his own pleasure and one creating or performing music for others. What is intriguing about the idea of the individual as both creator and consumer is that the music itself becomes a tangible entity separate from the classic performance activity in which one performs and another listens. Now we can conceptualize the music as an event created in one moment and later recreated at will for the enjoyment and reflection of the creator as well as others. Thus the music takes on a potential for communication which is inherent in any particular musical composition or performance itself apart from any particular performance of it.

There are common structural and formal features which exist in Beethoven’s Symphony No. 7 which were evolving as Beethoven thought of it and which became formalized as he wrote it out. This formal and structural pattern grew from Beethoven’s own idea of what the symphony was about and has remained constant in all of the hundreds of often radically different performances it has received by all of the orchestras in all of the cities and nations in which it has been heard in all of the years since it was composed. What meaning might exist in the structure itself apart from the performance of it? In the Western European tradition we are quite comfortable with the inherent schism which results from having at least two elements to contend with in listening to music; our perception of this music as the Beethoven Seventh as he created it and transmitted it through notation and that symphony as is it being interpreted by the particular orchestra and conductor we are hearing at the moment. It no longer takes a musicologist in the audience to recognize that the seventh symphony as performed under Beethoven’s direction must be different in many ways from today’s performances, be they by the Hanover Band or the Hong Kong Symphony. It is usual and even expected to hear a performance of the Beethoven Seventh and also be reminded of other performances of the same symphony by other orchestras and conductors, and to recall some of the associations we might have with those other hearings of the Beethoven Seventh and all of the...
other layers of experiences and associations with those previous hearings.

**Forming Individual Taste**

As we grow and are exposed to many different experiences, we begin to form a set of preferences, many of which remain flexible and open to new influences and suggestions from others and from new stimuli. Others may remain more or less fixed in our minds and will remain unchanged over long periods of time. In complex, highly stratified societies like our own, the number of options is great and it is difficult to see the pattern of influences, suggestions from friends, positive experiences, and our own receptivity and openness at the time of the stimulus, all of which play a part in forming and changing our personal musical cultures.

**Creation and Improvisation**

The composition of new music and the free improvisation during an act of performance are two aspects of the same process. In one the composer works alone and gradually works out piece by piece, the form and pattern of an entire musical statement. The improvisor is doing this on the spot as the performance is going on and unless it has been recorded, it is lost beyond what the player can remember after the performance is finished. In both cases the individual is creating something new. In some forms, such as American Jazz, or in Indian classical music, the improvisation is aided and supported by other players and is sometimes therefore called collective improvisation. Nevertheless, the creation of new music, by composition or improvisation, is primarily an activity of the individual.

In this process there is a question about just how much of an individual and independent role the composer plays in the process. Composers in all cultures, although they are much more difficult to identify outside the Western cultures, generally believe that the process of composition involves finding the “right” note, mood, phrase, whatever it may be. The sense is that they must work and find something as though that thing they seek is not within themselves, but something that comes from outside. Some call the ability to create flowingly and evenly, inspiration. The actual process of selecting what is acceptable and what must be rejected during this process suggests that there is something that is thought to be intrinsic to the music itself, which the creator must find. There is a common sense across many cultures that the creator is trying let the music speak for itself.

Such a notion can only be a reflection of an understanding of the pre-existing musical culture. What works and what doesn’t can only be defined culturally. The composer/creator of new music is trying to do two things. He or she is working in a
How is Music Learned?

very personal way to find a unique medium of expression, one that represents his or her own sense of what music should be. At the same time following the logic and sense of the music tradition as it has already been previously established and to remain within its boundaries.

Some Ways of Using Memory

We all use memory in order to help in almost everything we do. In modern American society rote memorization is continuously being de-emphasized, however, and people there are learning to find ways of using it less and less. Nevertheless, it continues to be important in many ways. “Thirty days hath September, April, June and November. All the rest have thirty one except February which is a little strange sometimes and requires that you check your calendar”. However freely quoted here, this often used aid to memory serves as illustration of more than one principle. It serves to provide a reference to information which we often require. We remember it because its first line consists of two phrases which rhyme which consequently makes it easy to recall in spite of the fact that the second line leaves the rhyme scheme entirely. Even though the grace of the phrase falls off a bit when we reach February. Even so, the phrase, reminds us of what we need to remember and we remember the formula because it structure lends itself to easy memorization.
Musical Instruments

Did humans first create musical instruments by accidentally noticing that certain objects produced pleasant or intriguing sounds when struck? Perhaps humans first noticed that their voices carried better in caves or hollows, or reflected against water. Humans may have incorporated the sounds made by striking different parts of their bodies when singing or dancing, or by cupping the hand in front of the face while talking, shouting or singing. Sticks and other objects beaten together initially used to frighten game and drive them into a trap as part of the hunt may have been used later in recreations of the hunt or because of the pleasant and powerful associations that a successful hunt may have had for the group. All or any of these might have been the origin of humans’ first attempts to develop sound producing bodies.

After sounding bodies had been adopted as instruments, the long slow process of developing them further and refining the sounds then began. Many instruments, like the flute or violin, even a melodic line played on a guitar, sound very much like they are being played to imitate the human voice. We often use instruments to contrast and alternate with human voices. Many of the first instruments were used by humans to imitate the human voice, or to serve as an interesting modification of it. If all instruments sounded like flutes and fiddles we might logically accept the idea that instruments were modeled after man’s own voice. We assume that the man’s first instrument was his own voice. He may have even used it to do something like singing before using it to speak. When we look at instruments like the great variety of drums used around the world, and at unique and unusual instruments like, for example, the cora of West Africa, or a xylophone or a pipe organ, its hard to think that any of these were modeled on the human voice.

Histories of Instruments

If we look all over our planet, we find that the most common instruments, those found in the greatest number of different societies are the flute and the drum. These two instrument types appear in so many isolated places that we must assume that they may have been invented in several places independently of each other. Future research may find that these instruments were only invented once and so long ago that it was at a time before humans separated into different communities in different parts of the globe. At the moment that appears less likely than that the invention of
the flute, like that of the drum, happened in many different places and at different times.

This does not mean that the flute and some kind of drum were the first instruments. While they are certainly widespread and this does suggest great age, it is also possible that other instruments came even earlier but that the flute and drum spread widely and continued to be used in many contexts while other ancient instruments, say the hunter’s bow, slipped out of use. It is possible that hunting may have given rise to some of the first instruments. Early humans must have noticed the resonant sound of the bow when plucked. Early hunters may have used sounds to force animals into traps for freighting them into a small area where they could be easily hunted. Over time these noise producing instruments, such as shakers, rattle, whistles and drums, may have come to be associated with important events and gradually used for other than hunting.

There is no proof that humans developed music along fixed stages or levels, like first using the voice alone, then later using the hunter’s bow and rattles and later arriving at a percussion and drum stage, followed by a flute stage. We simply don’t have enough documentary evidence to make such a claim and most like never will. We can only say that every human society known to us has first of all, the singing voice and then most, but not all seemed to have developed or borrowed instruments in addition to the voice.

After that things get quite complex. The peoples of Africa developed a wide range and an amazing variety of different music instruments. The many cultures of Asia have likewise been the source of another great body of very different instrument types, very different from those of Africa. The Americas although they produced virtually no stringed instruments, are the source of thousands of different types of flutes, whistles, pan-pipes, drums, beaters, scrapers, and rattles.

**Instrument Types and Classifications**

Instruments for many human societies show similarities along certain lines. Sometimes it is the manner in which they are played or at other times the material of which they are made sets them apart. Many societies evolved ways of classifying their instruments. No one system of classification is so logical that it is agreed upon in all societies. The ancient Chinese classified instruments according to the material of which they were made, but recognized that there were eight different “elements” in nature from which they could be made. These were stone, metal, bamboo, silk, animal, wood, earth and vegetable. For their purposes it mattered less how an instrument was played or how it sounded than the material of which it was constructed. To the ancient Chinese, the balance of these instruments in an ensemble should reflect the natural balance in the universe between the natural elements of
which the instruments were made.

In the court music of ancient Korea there is a class of music called, “kwan ahk”, or music for winds, however, this ensemble always includes bowed stringed instruments, because their tone quality and style of playing blends with the winds. This is a case in which the sound of the instrument was the important factor in its classification rather than the material from which it was made, or the manner of playing it.

In ancient India they devised a system for classification which was based on the method of sound production. Instruments were classified as stretched string, vibrating membranes (drums), hollow or pierced pipes (winds) and struck bodies which produce sounds, (bells, etc.). At various points in time performing musicians have created categories which are useful for their immediate purposes. Jazz bands were often thought of as divided into horns and the rhythm section and larger bands subdivided the horns into saxes or reeds, and brass. In the European tradition, musical instruments were thought to be divided in three types, winds, strings and percussion. The European symphony orchestra was traditionally thought of as being divided in this way with the winds further subdivided into brass and woodwinds. This does not strictly work as a classification system, because the flute, for example, is classed as a woodwind and yet it is made of metal. Further, the old Baroque trumpet, called a cornetto, was actually made of wood.

These classifications worked so long as one was talking about only those instruments usually found in that single tradition and even then some adjustment had to be made. The study of organology, which is the study of musical instruments, required a way of looking at all instruments and describing them according to some principle. Late in the 19th Century, a Belgian museum curator, Victor-Charles Mahillon, attempted a systematic classification system for all instruments. It was in part modeled after the ancient Indian system recognizing for main categories, strings, wind instruments, drums and idiophone, that is instruments in which the vibrations of the instrument itself produces the sounds. In 1914, two musicologists, Curt Sachs and Erich von Hornbostel devised a very thorough system of instrument classification. A few attempts have been made to modify it or improve one it, but the Sachs-Hornbostel system continues to be encountered most often. In essence the system is like the one from ancient India and uses a basic subdivision into four broad categories according to the nature of the sounding body. These are I: idiophones, that is solid and non stretchable materials which sound of themselves, II: membranophones, actually drums of all types, III: Chordophones, or instruments using stretched strings, and finally IV: aerophones, instruments in which the air column vibrates to produce the sound. It is beyond the basic division into four parts that the Sachs-Hornbostel system really proves useful. Based on the Dewey decimal system, this system of instrument classification allows for numerous sub categories
under each type. For example, there are seven broad sub categories under idiophones. These include concussion idiophones, struck idiophones, stamped or tapped idiophones, shaken idiophones, scraped idiophones, friction idiophones and plucked idiophones (not including stringed instruments). There are several sub categories under each of these seven sub types, allowing for a wide range of different types of sound producing bodies to be categorized. In the same way, each of the four main categories has numerous sub divisions, enough to allow for the classification of every known instrument type known thus far.

The Sachs-Hornbostel System

I: Idiophones
II: Membranophones
III: Chordophones
IV: Aerophones

It is also possible to classify instruments according to the way in which they are played. The Norwegian musicologist, Tellef Kvifte has proposed just such as system in order to accommodate the electronic instruments which have become increasingly familiar and widespread.¹

Electronic Instruments

There is no denying that in our times a strong relationship exits between music and electronics. Today we use electronics as an aid to listening as well as in producing music. Amplifiers, CD and cassette players, sound systems, car stereos all use electronics to amplify and make recorded sound audible to us. Electronics are used to amplify live sound in concerts. Traditional musicians in the European classical style insist that the natural sound of un-amplified instruments in a good concert hall or chamber is the way music was meant to be heard. Others have joined in and a small wave of acoustic instrument aficionados has arisen. Still there is no denying that electronics are around and in wide usage.

Following upon the idea of a classification system for musical instruments, we can see that what might be called electronic and electronically aided instruments includes a range of different things. It is reasonable to say that an electric guitar is still a chordophone in which electronics are used to amplify and modify the sound of the string. There are however, other instruments like synthesizers that use electronics to produce the actual sound waves we hear and samplers which take naturally recorded sounds as well as electronically generated and modified sounds and make them available one on each key of an electronic keyboard. These instruments use
electronics in different ways by amplifying, generating or manipulating sounds.

**Function, Playing Technique and Timbre**

As we recognize and think about or think in music, pitch or tone and rhythm are the elements which come first. Timbre, the quality of the sound or the character of the sound may come soon after these elements in importance.

Whenever we are able to recognize an instrument, for example, on a recording, it is its timbre, or tone quality which allows us to tell which instrument is making that sound, without ever seeing it. The timbre, or sound quality, is similar to that which helps us to recognize a voice when we hear it on the telephone. The sound of each human voice is a different because of differences in the structure of the throat and mouth, the vocal cords, their size and such factors. Voiceprints, a graphic representation of the sound quality of a human voice, as an accurate representation of the sound of a voice and can be used as an identifier, just like a fingerprint. Timbre is what we see when we look at a voiceprint. In the same way because of the way in which they were made, instruments produce different timbre patterns. The proportion of different partials of the natural overtone series produced by each instrument creates a different pattern. The pattern of these sound differences can be seen with an oscilloscope, a scientific instrument that shows wave patterns. With the oscilloscope we can see that the sound of a violin, for example consists of a much more complex wave pattern that a flute.

Timbre is very important to musicians beyond the basic fact that each class of instruments produces a different timbre. It is the timbre of each particular instrument that makes musicians choose one instrument over another as their best one for playing. It is also what makes players of reed instruments so careful about their selection and treatment of reeds. Everything about the structure of an instrument affects its timbre. All violins may show similar sound spectrum patterns, because of the similarities in the method of construction. However, violins which are considered by violinists to be of the highest quality like those made by Guarneri or Stradivarius have refinements of structure, of the choice and seasoning and treatment of the wood which, in the eyes of many musicians, make them exceptional in tone quality.

Details like the smoothness or roughness of the inside of a barrel drum affect the tone quality as does the thickness of the skin and the animal from which it was made. Strings can be made of many different materials. In modern times, increasingly musicians are choosing and adapting to strings made of steel or nylon whereas in former times many of these same instruments used strings of animal intestine which produced a sweeter, mellower quality. The durability and easy availability of steel and nylon has been a more important factor. Some instruments
used string made of brass that also produced a rich smooth sound, but since brass strings often broke these too have come to be replaced by steel. The kind of wood or bamboo from which flutes and other wind instruments are made affects their tone and careful seasoning, sometimes smoking in the case of bamboo helps to achieve the desired tone quality.

The manner by which a drum is struck is vitally important to its sound. Different sounds are produced if it is struck by the bare hand or a stick. The kind of stroke makes a difference, which part of the hand or with which fingers, all affect the tone quality. The kind of stick if one is used and whether the stick is thin or thick and has a knob on the end or is padded makes a difference in tone.

For reed instruments, how far the reed is inserted into the mouth has an effect and does the thickness of the reed and the manner in which it was treated in preparation for its use. The manner in which strings are plucked, with which finger, or which a plectrum, or pick, or if they are bowed all has a great effect on the sound quality. All of these things are predetermined in the culture or the musical tradition. At the same time, small individual differences in the playing technique by each musician within the same tradition also affect the tone quality and help to distinguish one player from another even when they are part of the same tradition.

It is tone quality that guides the blending of different kinds of instruments in a mixed sounding ensemble like a Western symphony orchestra with its strings, woodwinds and brass instruments. It is also tone quality which guides the blending of large ensembles like the Javanese and Balinese gamelans in which most of the instruments are metallic idiophones, gongs and chimes. Tone quality is what enables us to distinguish individual instruments and voices in ensembles and is our key to separating mixed sounds into discrete and identifiable units.

It is what instruments tell about the process of diffusion and spread of ideas between cultures that is most interesting and about what it tells us about the people who are making the music. The path of diffusion of music and the manner in which these musics have been modified at each point tells us much about the individual cultures.

The Interesting History of Brass Bands

We don’t often think about the history of things with which we are familiar. Sometimes, however, tracing the development of musical forms and styles can tell us much about the way in which humans share culture and at the same time, by observing the pattern of changes which are made to the newly adopted culture, we can learn about what is considered unique and important in each of those cultures.

Somewhere in the old world, perhaps in Central Asia or in India, but probably not much before the 14th Century, an outdoor ensemble came into fashion. This band of instruments had certain important elements in it. It consists of long straight
trumpets, conch shells blown into like trumpets, some kind of double reed instrument, similar to an oboe, and then a double headed stick struck drum and cymbals. This band of instruments fulfilled two regular and important functions: In the cities where there was a court, or in large cities which were surrounded by city walls, as was often the custom in the ancient world, these bands were stationed in the towers above the city gates. Here they played music to sound the hours of the day and also played music to announce the arrival and departure of important people, like the king, emperor, or maharajah, of the ruler of the palace or city. This is one of the early forms of civic music. It functions not only to announce what is happening by its sound, but also symbolically represents the authority of the ruler.

Fig. 64 Small ensembles of musicians have little need for a special conductor or director. By listening carefully to each other, they can make adjustments in expression and tempo, most often without even looking at each other but solely by listening. This is a practice which is found in many cultures of the world, from small Jazz groups, to Asian chamber ensembles and to group such as those depicted here. Old engraving of a Turkish mehter, military band.
The sound and ceremony of this wind band must have impressed visitors to the places where it was played, because it was soon imitated in many places. The courts of India, China and Korea soon had wind bands of this type attached to the palace gates. With the spread of Islam the use of these watch bands spread throughout the Middle East and as far as the Islamic cultures of West Africa in Nigeria. The Turkish armies of the Ottoman Sultans used these wind bands as the basis of their military bands and employed them as they went into battle for the conquest of Europe. Although the Turks did not succeed in conquering Vienna, along with the drinking of coffee, the military bands made a strong impression on Westerners and the military band as we know it. Previously, military bands were simply small bands of wind players employing such instruments as clarinets, horns, oboes and bassoons. Now there began the formation of large ensembles with brilliant brass sections and powerful percussion instruments. This new music soon became adopted as an official music for the populations of large communities. Brass bands were used not only for the military, but as the accompaniment for civic ceremonies and for dance parties and eventually for civic concerts and were the reason that many cities, even in the United States, soon had either a kiosk in the park or a concert shell for concerts by brass bands.

Different cultures within Europe developed their own repertoires and playing styles. The German, French and British band styles developing styles which were
Musical Instruments

distinctive. During the 19th Century it was the practice for the military bands to wear elaborate and colorful uniforms and to march directly into battle along with the troops, often suffering heavy casualties as well. The French style of military band is particularly important in American musical history because out of the French band music was widely played in the Louisiana area under French and later under American rule. This French style brass band music gave rise to the development of New Orleans Jazz which later evolved into other Jazz forms and went on to become a major influence in American music. Even today the use of brass and saxes in modern popular ensembles traces its roots back to those ancient ceremonial wind bands of India and Central Asia.

The Spread of the Double Reed Pipe

One of the instruments of the outdoor watch or tower bands of ancient Asia was the small double reed pipe which was called sona in China and shahnai in India. This double reed instrument spread with the popularity of the wind ensembles all the way across Asia to the West and across Muslim Africa where it survives in Nigeria and Morocco where it is known as algaita. After it was introduced into the west it went through a series of developments, eventually giving rise to a family of instruments, the oboe, English horn and the bassoon. It was introduced into Spain and Portugal where it was known as dulzaina or chirimia. The Spanish conquest of the New World introduced the instrument to the indigenous peoples there and bands using the chirimia and drums are found in many Indian villages in Mexico. Although the outdoor wind band developed in Asia after Japan severed contact with the outside world in the 9th Century and thus this conical double reed was never introduced, it was brought in much later by the Portuguese who came to trade and also attempted to spread Christianity. For this reason, the Japanese version of the instrument is called charumera in imitation of the Portuguese, charumela. In Japan this instrument was only used by noodle vendors late at night as they wandered through the streets announcing that they had noodles to sell. Note that this instrument is quite different from the cylindrical double reed pipe, the hichiriki, which was in use in Japan for Centuries as part of the ancient court orchestras retained there after being introduced from China and Korea in the 6th and 7th Centuries.

Notes
How an Ethnomusicologist Looks at Music

Everything in this text has been viewed from the perspective of an ethnomusicologist. The important element and the one that separates an ethnomusicologist from the traditional musicologist who specializes in Western European music is that, for the ethnomusicologist, the cultural context is always part of the consideration and a very important one. The same is also, in fact, true of the Western musicologist. However, because he or she studies the music of his or her own culture, many general assumptions about the cultural and historical context and its affect on the music are made. The Western musicologist may refer to religious music, entertainment music, military music, for example, without bothering to understand or re-explain these concepts because they are already understood in our culture. The ethnomusicologist cannot assume that cultural definitions from one culture, his or her own, for example, can bear relevance to the culture being studied.

Although the discipline has been consistently changing and evolving, it nevertheless, owes much to two older disciplines, musicology and sociocultural anthropology. If we were to follow the tenets of each these “parent” disciplines, anthropology and musicology, we might believe that a distinction could be drawn between these two points of view: that the ethnomusicologist whose inclinations are more anthropological might be looking for the general meaning of music to the people of a particular culture whereas an ethnomusicologist whose disposition were more musicological would be searching for the unusual and exceptional use of music in some culture, the Mozart or Beethoven of that culture, say. If one observes the work of most ethnomusicologists, such distinctions are difficult to draw. What is basic, however, is that all depend on the cultural definition for the parameters of that music as it is found in that culture. An ethnomusicologist who might decide to study Mozart would accept that he has been defined as a “genius” in today’s culture while at the same time seeking to understand how that definition is manifest in the culture. He or she does not merely accept Mozart as a genius for himself, although it may be important to do this. The ethnomusicologist must try to understand the culture that produced and defined Mozart as such.

What Ethnomusicologists Do

One of the goals of ethnomusicology is to define music generally, as it is manifest in all human cultures. This requires working from specific cultures as a
first step. Although there are some important earlier studies, such as those of Curt Sachs, which did not always concentrate on the music of one particular culture, most classic studies in the discipline have been based on the performance practice of a particular culture. Many ethnomusicologists from the period before World War II did not participate in active fieldwork, relying instead on artifacts and information brought to them by anthropologists and other field observers. The concept of “participant observation”, in which the observer attempts to come close to living in the culture and participating in it in order to better understand how it works, was not used to any great degree prior to World War II.

Today it is expected that ethnomusicologists will spend a considerable period of time in the culture they are studying themselves, and usually learn the language as well. One of the important changes that has taken place in ethnomusicology since World War II has been the influence of anthropological field method and the importance of participant observation. The kinds of questions being asked by ethnomusicologists today vary greatly. Many ethnomusicologists work on the study of current performance practice of the traditional music of many different parts of the world. Such studies have ranged from the many cultures of Africa, the Middle East, India, Indonesia, the Far East and Latin America. In order to undertake the study of such musics, it is always understood that the principles of structure and organization, as well as the values are the result of the unique character that brought forth the tradition. Therefore and in order to minimize the potential for culturally biased assumptions, ethnomusicologist working in this way had to begin at the beginning in each culture. That is, along with learning the language, they had to begin at the first steps of learning music in that culture, just as anyone from that culture might do. The goal is not primarily to shine as an interpreter of the music tradition of the studied culture, although many ethnomusicologist have done very well at this and some such as the Vietnamese ethnomusicologist, Tran Van Khe and the South Indian musicologist, T. Viswanathan are known and respected musicians in their own culture. Rather, the intent of this study is to better understand the music culture from within its own cultural parameters.

More recently many ethnomusicologists have devoted themselves to the development of new popular musics in ascendancy all over the world. This has required looking into the economics of these new music ventures as well as understanding the nature of the adjustments of the traditional music to the new music. Others may study lineages and teaching traditions of guilds and families of musicians while others study the relationship of gender in relationship to music in a culture and others study the musics of various ethnic groups and special communities within a larger society. There are studies of the effects of migration and diasporas on music and a few ethnomusicologists work on the form and structure of the music itself and others delve into the historical connections and
antecedents to many of today’s music.

In its broadest sense, ethnomusicologists study all aspects of music made by humans with the understanding that the cultural context is basic to this understanding. Much of the work of ethnomusicologist is original, in the sense that they travel to countries and cultures that have been but little studied previously. Therefore part of the process of doing fieldwork concerns itself with mapping out a basic ethnography of the music if none has been written before and only after doing so and more clearly delineating the topic can the work proceed. Unlike the Western musicologist, who often relies on written notation for study, the ethnomusicologist must rely almost exclusively on live performances and on recordings as a source of study. Transcription using Western notation can be unreliable unless it has been carefully documented to show the important characteristics of the music and in which ways it is different from the traditional Western interpretation of that notation. For the sake of demonstration, some ethnomusicologist devise transcription methods for the particular music they are studying, attempting to make a notation system that is more accurately descriptive rather than prescriptive.

The Tools of the Trade

Ethnomusicologists use many tools in their studies of the many musics of the world. Some of these are basic to anthropology and others to musicology and others quite new and unique to the discipline. Since the discipline of musicology is, in fact, synonymous with the study of Western music, in particular, Western classical or art music, tools borrowed from musicology must be considerably modified to the study of musics produced in other cultures. Anthropological method while at first glance seems better suited to the study of music in other cultures, also needs adaptation for the study of music. For example, the role and importance of particular individuals may play a much more important role in the development and transmission of a music than might be the case in general cultural anthropology.

The notation system used for Western music is quite flexible and allows for great detail. Nevertheless it is in essence, a prescriptive tool rather than a descriptive one. That is to say that is was designed to aid in their interpretation and performance of Western music, to remind performers of the notes and tempi in a tradition that they already know. It is not, as such very useful, without considerable modification, for describing other kinds of musics because of the fact that it was designed as a shorthand for the performance of a particular kind of music, rather than as a general descriptive tool for music in general.

Ethnomusicologists have devised ingenious modifications of the notation system usually suited only to the one particular music being studied. The Charles Seeger Melograph, which could by writing on graph paper describe melodic activity
with great accuracy, certainly with far greater accuracy than would be possible using the traditional, even modified Western notation system. Sound recordings first available early in the 20th century were a great boon to ethnomusicologist. Here at last it was possible to capture the sound, and with ever increasing accuracy as the years went by. With the addition of film and video and further refinements of recording and documentary technique, one might imagine that the work of an ethnomusicologist had become easy. Yet the basic problem remained. As with the Seeger Melograph and so with sound recordings, it is still entirely possible to misunderstand or to miss what is culturally significant in even the most accurate recording. But these tools have aided greatly in capturing details and providing documentation of the rich diversity of musical expression devised by man on this planet. The need for study remains.

**Etic and emic as useful tools from anthropology**

Some basic anthropological tools are helpful in explaining and understanding the function and process of music in different cultures. The consideration of what is -etic and was it -emic, for example, are simple basic ways of looking at culture both from within and without that culture. Both are very useful and reveal distinctions that may be important to ethnomusicological study. While the ethnomusicologist usually begins by attempting to understand the -emic definitions within the culture, that is, the way things are organized and defined within that culture, -etic definitions, those that are applied by analysis and comparison between cultures are also important.

In studying a musical culture, it is important to know how it is viewed and categorized in that same culture. We can learn about the values in that culture through such investigations and well as learn something about how the music and the tradition that sustains it is valued in that culture. For example, upon arrival in a new and previously to us unknown society we might not know from the sound of a particular music what its function or status in the society might be. After repeatedly observing the performance of this music in a certain context we begin to feel that we can make some preliminary assumptions about the possible function of the performance. Subsequent performances may substantiate this first assumption, may broaden or even challenge it, but gradually by this means we are able to establish a kind of functional taxonomy of the music in this culture to which we can make comparisons and judgments about other musics we later hear in that same culture.

We gradually can begin to abstract of definition of this function in this particular society and can then use this extraction as a means of measuring and understanding other forms and traditions in the same society or in others. In current American popular music for example, there are a great variety of forms and styles,
many of which are very different from each other and are enjoyed by different and isolated segments of the larger society. We may make an -etic definition of popular music as music intended for wide distribution and acceptance with the concomitant feature that this often means a relatively short lived span of popularity. Another element frequently encountered in this -etic definition of popular music is that it is music that tends to be associated with a particular performer or creator, unlike folk music, which tends to be anonymous. Generally, popular music is intended to ensure profit for the creators and performers. However, within the realm of popular music today there are numerous groups and performers who while falling within the stylistic parameters that we might describe as popular music, but the nature of the content of these performances they seem to fall outside the -etic definition. Groups like Faust, Future Sounds of London, Photek and many others like them, produce music that is challenging and difficult and do not seem to be following the same tenets for success as those groups and performers who have attained top 40 status. Thus they fall within the -emic classification of current popular music but not within the -etic definition of popular.

In the same way we may find it useful to create an -etic category based on the observation that certain human social activities tend to make use of music. In many cultures we find music associated with such rites of passage as coming of age, courtship, marriage and often also death. Using any of these or other categories as a yardstick will show us not only that many cultures may use music for similar life cycle events, but the music they use and manner in which it is employed will itself shed light on the values in that culture. If we compare the solemn ritual and seriousness of such music as is employed at a funeral service in Western Culture, as when a requiem mass is performed, we have an indication that this is an example of shared grief and it is this sense of grief and resignation that dominates the event. In many Asian cultures while grief may be genuine, it is also important that the ceremony be given weight and dignity and even manifest some opulence of expenditure because it befits the respect and honor due to the deceased. It functions to reinforce the status in the community of the bereaved family.

Music and songs that express feelings about death reveal something about the culture as well. In many old Lutheran chorales, particularly notable in their settings by composers such as the 18th century German composer, Johann Sebastian Bach, death is seen as a joyously awaited reward for a life of hard work and devotion. Similarly, but a bit different is the expression of joy at the death of an infant in some Latin American cultures, the *muerte de angélitos*, or death of a little angel, is an example. In such a case however, it seems to be a desire to encourage the bereaved family to take heart in the fact that the deceased has gone directly to heaven. A similar sentiment is noted in the return from a New Orleans funeral when the band that had been playing solemn hymns on the march to the cemetery now begins to
console the families and friends by “jazzing” up the hymns and inspiring a joyous
dance in the streets. In this way the use of music serves as a key to the expression of
values in the culture and is a valuable tool for the person attempting to understand
that culture.

**Today and Tomorrow**

If one looks at the recent corpus of works by ethnomusicologists, clearly a great
number of new avenues are being followed. Although some argue and maintain that
the study of music itself, as the manifestation of unique cultural values is a valid and
worthy object of study, the preponderance of recently published work looks
otherwise. There is an increasing concern with archiving materials and the legal
responsibilities and liabilities that are thereby implied, about the complexities of
defining the distinction between what is borrowed, what is appropriated and what is
being stolen. There have been studies of the use of music in shopping malls and of
the formation of small ascendant popular music groups, philosophical and critical
studies of the nature of the discipline and its true direction. Peppered among these,
there continue to be a good sprinkling of empirical studies about music itself.

It might seem that the distinction, so clear only 30 or so years ago, between
what was tradition and what was modern and popular and the result of mass media
dissemination is much more difficult to make today. It leads one to speculate that the
reason fewer ethnomusicologists devote themselves to the study of the great
traditions that absorbed so many ethnomusicologists some years ago, might be
because there are significantly fewer of these traditions alive today and that many of
those are in disarray. But this is to view the situation from the perspective of the
past. Classical music in Turkey today, a heritage from the Ottoman Empire, is still
today one of the most complex and tenaciously surviving traditions in the world.
The classical music of India, in both North and South, survives with both fervor and
complexity. Both the Indian and the Turkish music traditions of today are very
different from what there were only 30 to 40 years ago. Some of the older
practitioners can be heard to say that what exists today, is simply not the same thing.

What exists today is a great diversity of musical activities, much of it growing
out of responses to what has been recently heard and absorbed from outside the
culture itself. But what was outside the culture some years ago, is now clearly inside
the culture. What was considered traditional a few years ago, is still there and is still
considered traditional, even though it is perhaps not so easily representative of the
culture as it might have been thought of earlier. Ethnomusicology has changed and
is changing in great measure because the object of study is changing. In times not so
long ago, when cultures were more isolated from each other and travel and contact
were sporadic, there was a great diversity of musical expressions all over the planet.
Today, while one might expect that propinquity would make us all share the same few choices, a healthy diversity of options continues to thrive. There is little fear that ethnomusicologist will run out of things to study and intrigue them.
Appendix I

Types of Instruments

Terms and Concepts

We sometimes hear it said that Nero fiddled while Rome burned. Actually, the fiddle or violin did not enter into Europe for several hundreds of years after Nero’s time. If he played anything at all, Nero might have played the lyre. We naturally tend to name things we don’t know with the names of objects with which we are familiar and that describe things that we regard as similar. Sometimes this creates difficulties. There are a number of instruments that we know by name and others not so well. Most of us know what a guitar is and what trumpets and violins are. What exactly is a banjo or an ukulele? Traditionally, lower sounding instruments are larger than higher pitched instruments however, in these days of electronically amplified instruments, the bass guitar is not significantly larger than the lead guitar. When we get to other cultures it becomes more difficult. We encounter instruments for which we can think of no appropriate name or reference.

It is useful to be able to name things with some degree of exactness and while a global system of nomenclature is not directly connected to the ability to view the role of music in any given society, we may be aided by a somewhat higher level of specificity. There are some general terms for instrument type which it may be helpful to remember as we think of the different types of instruments that have been developed throughout the history of humans on this planet.

Chordophones

Chordophones are stringed instruments and of these there is a great variety. With the exception of the Americas before the time of the conquest, chordophones of a great variety are to be found throughout Asia, Africa and Europe. Here are just a few of the main types to remember.

Lutes: Lutes are stringed instruments with long necks and a body which serves as an sounding area. The strings are stretched along the length of the instrument and can be either plucked or bowed. Examples of plucked lutes, are the guitar and banjo, as well as the sitar and sarode of India. Violins and other fiddles are bowed lutes because the strings are activated by a bow.

Harp: It appears that the harp as it appears in many parts of the world has but one original source, perhaps two, from which it spread throughout the world. Harps
are string instruments in which a number of strings are stretched between a bow or post and the body of the instrument that also serves as a resonating chamber. Most harps that survive to this day have the body and resonating chamber on the lower part with the bow or post at the top. The modern Western orchestral harp is of this type as are the Irish and Celtic harps and the many harps fond in Mexico and Latin America. In ancient Asia, however, there was a harp in which the resonating chamber was at the top of the instrument and at the bottom was a short post to which the strings were attached. This is the type that was used in ancient Persia and in the Arabic world and which was also known in ancient China, Korea and in Japan. The Asian version of the harp has disappeared everywhere except in Burma (Myanmar).

Zither: These are chordophones with a number of strings attached to them and stretched across a hollow sounding body. Zithers are usually plucked as with the Turkish kanun, the Japanese koto, the Korean kayagum, and the Chinese ch’in and cheng. Included in this category are the chake from Thailand, the kechapi from Indonesia and the kudyapi from the Southern Philippines. These is one bowed zither, the ahjeng from Korea.

Dulcimer: This is a type of chordophone often much like the zither except that its strings are struck with small mallets rather than being plucked. Included in this category are the Chinese yang ch’in, the Persian santur, the Romanian tsambal and Hungarian cymbalom as well as the American hammer dulcimer.

Membranophones

These are instruments in which the sound is produced by a vibrating membranes. Almost all of the instruments in this category are drums, however tambourines would also be placed in this category. There are hundreds of variants in the membranophone class, but here are a few of the main types.

Barrel drums: These drums are of two sub types; single headed and double headed, that is with heads at top and bottom or at the top alone with the bottom open. The heads are attached in various ways, most often the heads stretched over the top and then either held in place with small stakes driven into the sides, or nailed down at the sides. Barrel drums are played either with the bare hands or with sticks. The Cuban conga drum is an example of a barrel drum as are the drums used in a popular traps set.

Laced Drums: These are drums in which the heads are attached by means of a series of laces which hold the heads to the drum and which are tensioned to adjust the pitch. These drums can be played upright, as with the North Indian tabla, which sits on the ground in front of the player, or sideways so that the player can play both ends as with the Korean changgo. Sometimes the laces are tight against the body of the instrument as with the North Indian tabla. With other drums the laces are separated from the body of the instrument as with the Korean changgo, or the
Nigerian dun-dun where the laces are squeezed by the player as he strikes the drum producing a rising pitch on the drum which imitates human speech. The Nigerian dun-dun is called a pressure drum.

**Aerophones**

Aerophones are instruments in which the vibrating air column produces the sound. Throughout the world the most common aerophones are flutes and of these there are many types, however there are some other common aerophones also known in Western culture.

Flutes. Flutes produce sound by the air column striking an edge and being deflected into a tube. The pitch is changed by making the tube longer or shorter, that is, by opening and closing finger holes.

End blown Flutes. End blown or vertical flutes, as the name implies, are flutes in which the player blows into one end. Some end blown flutes are a simple tube in which the player blows at the edge to produce the sound. The Bulgarian and Middle Eastern kaval and the ney are examples of this type of flute, as well as the Japanese shakuhachi and Chinese hsiao.

Sometimes a small guide is attached which directs the air column at the edge correctly so that the player does not have to form the lips in order to make the sound, a difficult task. These flutes with the attached guide are found in the Indonesian suling, for example. The Western recorder, or block flute used extensively during the Baroque period is another common example of this type.

Transverse Flutes. These are flutes in which the instrument is held horizontally in front of the player and the player blows into a small hole cut into the side of the tube. The Western concert flute and piccolo are examples of this are the North Indian bansuri and South Indian venu, the Chinese ti-dze, Korean taegum, and Japanese fue. These are most commonly made of cane or bamboo, but in the West they were made of wood then later of metal.

Reeds. These are instruments in which a small thinly shaved cane or reed is attached to the tube and it is the reed which vibrates the air column and produces the sound.

Single reeds. This now familiar type of wind instrument may have originated in the Middle East. Here a thin reed is either cut from the side of the cane and left attached or a small red or cane is attached and placed over the blowing opening for the instrument. The reed vibrates and “beats” against the body of the instrument or mouthpiece constructed for it, thus giving rise to the description, single beating reed. The clarinet and saxophone are common instances of this type.

Double reed. This now common instrument type makes use of two thin reeds fasten back to back and attached to the tube of the instrument. The two reeds beat against each other. Sometimes, as in many Asian forms of this instrument, the reed
is actually a single tube of reed, cut very short and pressed flat, so that the two sides vibrate against each other. There are two basic and very distinct types of double reed pipe, one has a conical bore and the other is cylindrical. Both seem to be Asian in origin, with the cylindrical type being older and used in the ancient ritual and court orchestras. The second, the conical type was part of the tower and watch music ensemble that eventually gave rise to the military band. The Western oboe and bassoon are examples of this type as are the Middle Eastern and Eastern European zurna and zurle, the Indian shahnai and Chinese sona. (See box)

Lip vibrating aerophones. These are instruments in which the player’s lips buzz or vibrate the air column. The Western trumpet, trombone, French horn and tuba are common types as is the Australian dijeridoo and the numerous trumpet types used in the ancient wind bands of Asia, Muslim Africa and the Middle East.

**Idiophones**

These are instruments in which the body of the instrument itself is what vibrates. Here are some of the most common types.

Gongs and bells are instruments in which metal has been cast into prescribed shape and thickness in order to produce particular tones or qualities. Bells and gongs are found throughout the ancient world and in particular associated with Asia. The invention of bronze casting by the *cire perdu*, or “lost wax” method having been invented in ancient China. Large bells can be either stuck from the outside as in Asian temple bells, or stuck by a clapper hanging inside the bell as with many Western bells. Jingle bells or sleigh bells are small enclosed metal chambers into which a small sounding stone or metal sphere has been inserted to make it sound when shaken.

Musical Stones are stones which have been selected for their sonorous qualities. Sometimes they are used just as they are found and in other cases, such as the jade slabs used in the ancient Chinese ritual orchestras and in the court music orchestras of Korea, the jade has been carefully cut and shaved to produce the correct tone.

Woodblocks and log drums are hallowed or partially hallowed pieces of wood which produce a sound when struck.
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The following illustrations are from historical archival photos.

P. 9, Fig. 1; P. 9, Fig. 2; P. 52, Fig. 12; P. 55, Fig. 15; P. 56, Fig. 17;
P. 76, Fig. 28; P. 111, Fig. 35; P. 157, Fig. 44; P. 158, Fig. 45; P. 172, Fig. 50;
P. 173, Fig. 51 ;P. 173, Fig. 52; P. 180, Fig. 58 ;P. 235, Fig. 64

All others photos and drawings are by the author.

About the Author: Robert Garfias is currently a professor of anthropology at the University of California Irvine. Formerly he was dean of the School of the Arts at UCI. Prior to that he directed the graduate program in Ethnomusicology at the University of Washington. From May to December of 2003 he was a research professor at the Japanese National Museum of Ethnology in Senri (Osaka). He is an internationally recognized ethnomusicologist. He is a former member of the National Council on the Arts of the National Endowment for the Arts and was a member of the Council of the Smithsonian Institution. He is past president of the Society for Ethnomusicology, the national academic and professional organization for this discipline.

He has traveled widely in connection with his research. His doctoral research focused on the Music of the Japanese Imperial Household. Later research has taken him to Burma, Romania, Zimbabwe, Mozambique, Central America and Mexico, Okinawa and, most recently, to Turkey to study the classical music of the Ottoman Empire. He has done extensive filming in the Philippines and Korea in order to establish National Folk Music and Dance archives in each of those countries, and completed several documentary films subsequently. Author of several articles and books on the many music traditions that he has studied, he is also fluent in several of the languages in which he has carried out research.
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