

## Musical Distinctions

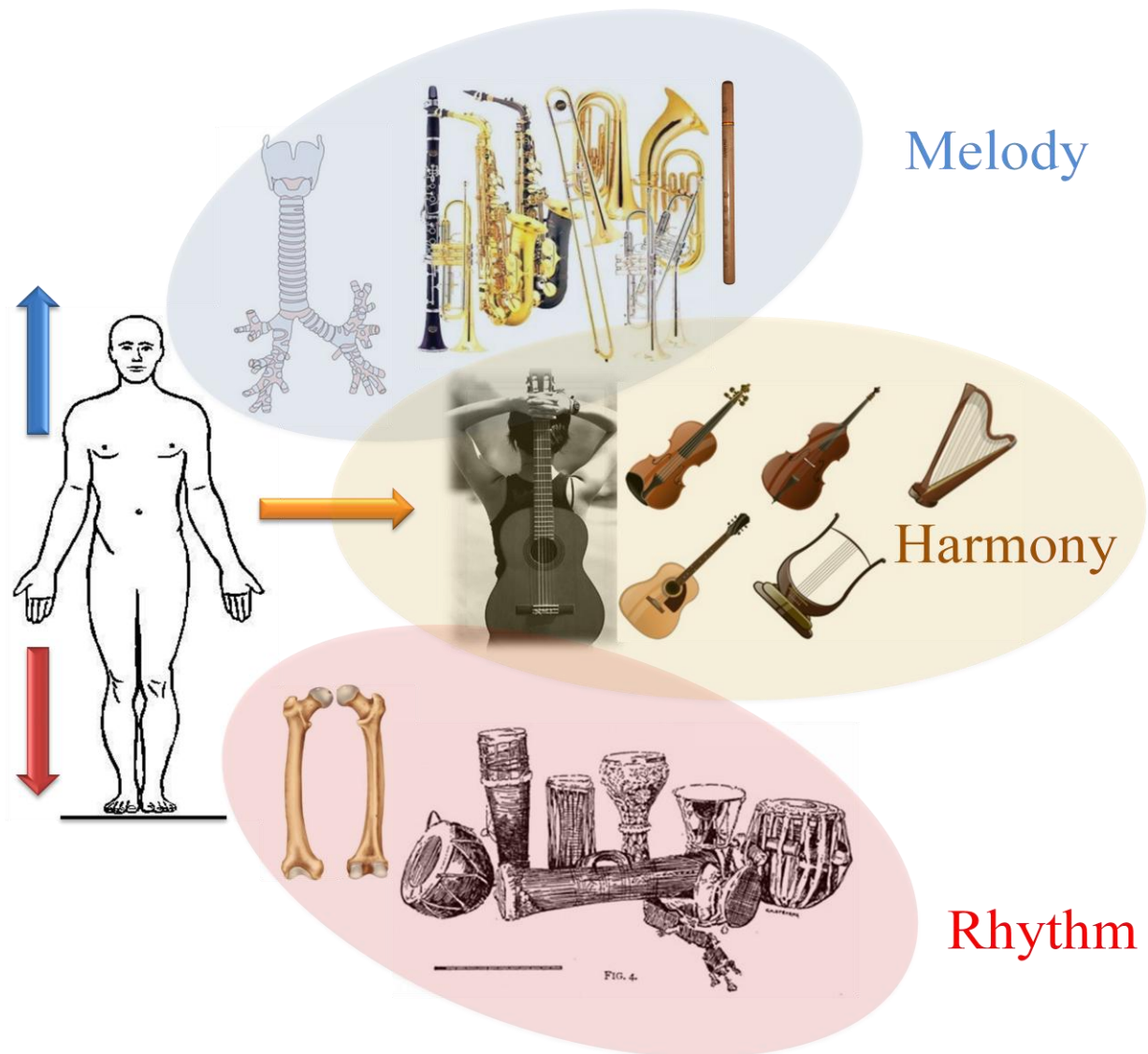
Gopi Krishna

While speaking of a wide-ranging topic like music, one has to keep several things in mind at once. This is because it is hardly noticed, while talking about what music *is*, about what music is *not*. In addition, a large breadth of view is required to analyze something as central as the effect of music on our lives, so one has to take several steps back to get a proper perspective before coming to any conclusions.

What are the distinguishing factors of music? For instance, music is the only art which is completely independent of the eye. It is not a visual art. Most other arts such as dance, sculpture, painting and weaving can be perceived by the eye. One doesn't *see* music. And since it is conveyed through air pressure, and pressure is felt by the entire body as a mode of being, it does *not* depend solely on the sense organs, even the ear! That is one of the greatest lessons that can be learnt from Beethoven's struggle with music, who went deaf just as he was composing his best works. So, if faced squarely, it is unlike any other art experienced in this world, and has access to almost the entirety of the human structure.

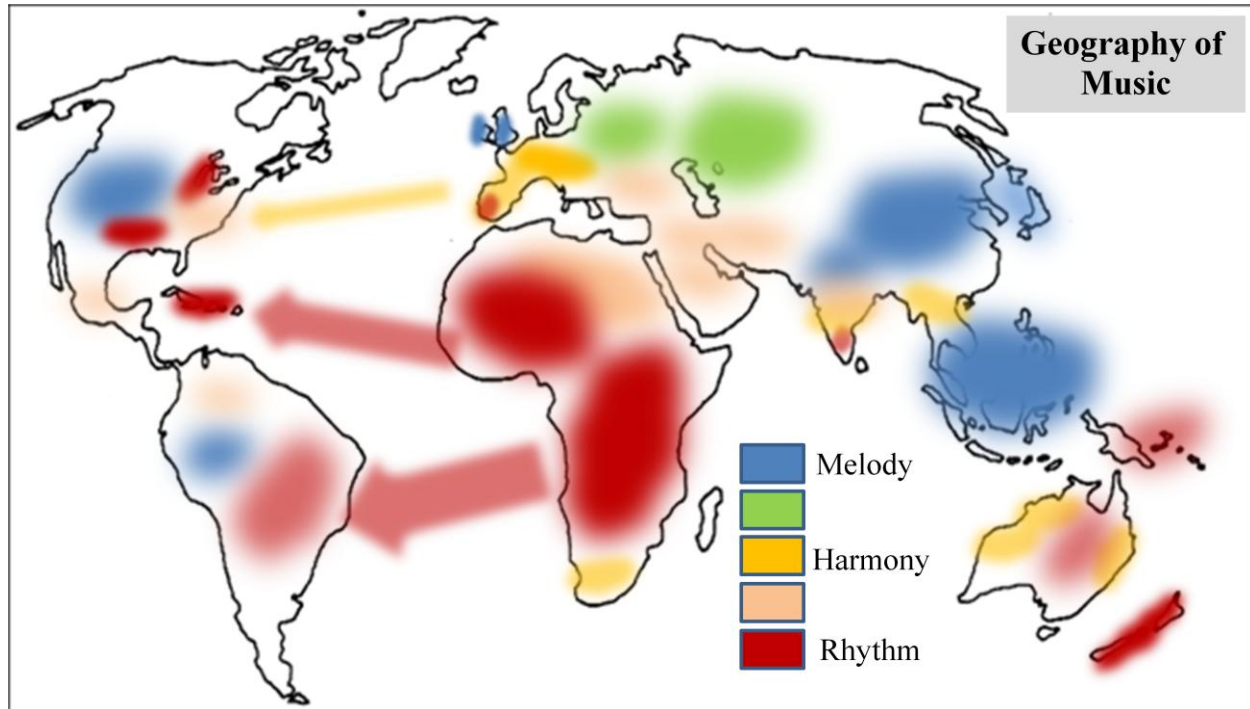
People treat music as if it is just a neutral experience or as is commonly said, "All music is beautiful in its own way, there is no ugly music". In other words, the differentiation within music is not seen, and is simply ascribed to "subjective taste". I like this music, you like that one, I like fries, you like chips. The question is: Is the effect of music entirely subjective? Is it purely a matter of taste, and morally neutral?

To understand that one must delve a bit more into what music is, in terms of its constituents. One cannot chop music into neatly separated elements, but it *is* possible to see three dimensions to it... the element that is reaching upward, the element that is moving downward, and the element that is mediating the two. In terms of the human body, the sound produced is associated either with the upper body, with its airy element of melody, the lower limbs, with the solid element of percussion, while the middle watery element is of harmony, where the different tones flow over each other. The character of music can be observed in the shapes of all the old musical instruments. The double sticks of most percussion and rhythm instruments to be played by the limbs, for instance in drumming, follow the shape of the limbs stamping on the ground. The shape of most instruments that are stringed, have a direct relation to the shape of the human middle, and to the formation of harmony, mixing both melody and rhythm. For instance, the violin is shaped almost exactly like the torso of a feminine body, and the strings remain in the center near the heart... closely related to an expression that says "pulled at my heartstrings". The shape of the flute and other wind instruments follows the shape of the trachea and bronchial tubes, creating melodies. They also indicate the exact reciprocal to the limb instruments. For example, the femur bones were earlier used to thump on drums, but the *hollow* bone served as a wind instrument in many cultures.



So with some vertical orientation done, one can now move on to planar, geographical orientation. In regions of Africa, rhythm predominates heavily, while harmony is touched upon lightly and melody is not given much emphasis. In regions of South East Asia, and also Far East, the melodic element predominates almost exclusively. In the Mongolian regions, the music packs a raw power between melody and harmony that sends the entire blood circulation trembling. As we turn next to the Far West, and the Native Americans, they have a similar quality of melody, but immersed in nature, and speaking through Nature Herself. The South Asians have an amalgam of music, but it is centered almost exclusively in the human voice, while instruments play a relatively smaller role. Rhythm is well developed, but is subservient to the vocals. Moving on to the centre to Europe, the major emphasis is on harmony, with multiple melodies merging with one another (polyphonic). While in Eastern Europe, the Russian emphasis is more on melodies, the central part of Europe created the greatest masterpieces in harmony, while touching lightly on rhythm, merely as a guideline. The use of different stringed instruments is elaborated. Western Europe and England have a similarity to South Asia, in that all elements are well balanced, but without the centrality of the individual vocals. South America and Australia both present mixes... of African and

Native American on the one side and of Aboriginal and European music on the other. Of course, this is an incomplete description, but it is just an attempt to grasp at the essence of each musical type, and you can confirm it by sincerely listening to the music of the respective regions. So broadly speaking, Asia developed the melodies, while Europe developed harmonies, while also rejuvenating melodies.



One important point to mention here is that music does not follow linear logic. For example, one can calculate wavelengths and harmonics and chords, and add and subtract them mechanically. A tone's frequency might be the average of the frequencies of two tones. But *every* new tone brings a *new* feeling into being. For instance, while the major third (chord) in many instances sounds happy and optimistic, while the minor third a feeling of reticence and melancholy, a song which has both does not generate a null feeling, but something new, perhaps inner struggle. Feelings do not follow just numbers, but ratios, where there is no zero. This is why the ratio has been the basic constituent of all musical forms.

This factor of feeling is more pronounced in melody, and less pronounced in rhythm, where the mathematical accuracy plays a much greater role. For instance, many composers would have no problem with a note being of a slightly higher pitch in a rising part of a song and slightly lower in a descending portion, to stay true to the mood. But the same composers would catch on immediately if something is off-beat. In many Indian percussion systems, the beats have to be accurate and logical, sometimes to the fraction of a beat, due to internal variations within the song. It is important to keep this variation of feeling in mind while looking at the different kinds of music, and their variations across the globe. Having examined the spatial variation, one can now examine the key point in the whole series, the temporal variation, or the *evolution* of music.

## Evolution of Music

The musical memory of most people today does not extend very far, at the most to their own lifetime for nostalgic reasons. While those who spend time studying music, or those interested in classical music, might pay attention to what happened first and what happened next over the centuries, those whose interest is not that concentrated are aware mostly about the recent musical bands – a distinctly 20<sup>th</sup> century phenomenon. In short, we are lucky if we can span a century of music, especially with being able to *feel* alongside the music, and the more we look around, the more the amnesia is observed.

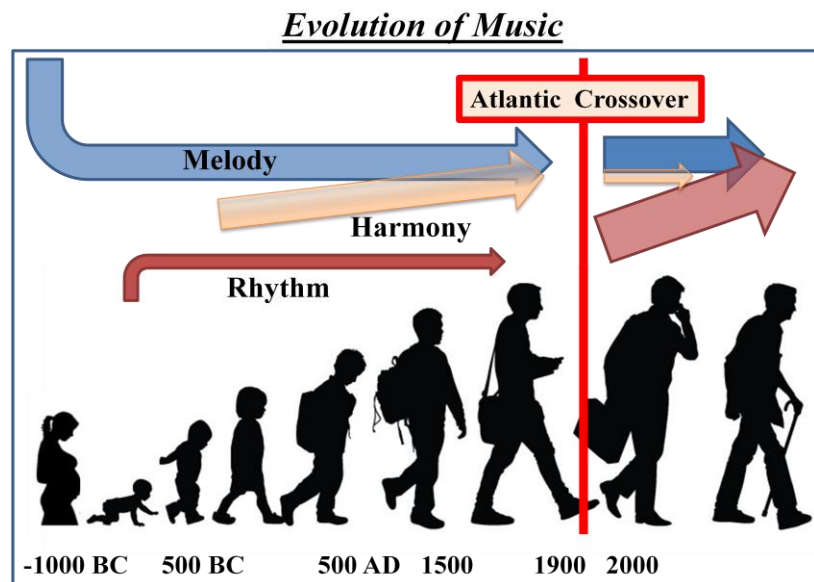
Why is it important to know what music came to the scene at what time? Appreciation and creation of music is a two way street, hence the development of music parallels human development. One can get an accurate picture of human evolution by studying the emphasis on different musical elements. For instance, the old Indian civilization treated the physical world as an illusion, as Maya, something that is quite foreign to the feeling of the European. As a result, the music reflected that temperament, as beautifully described by the Indian poet and musician Rabindranath Tagore:

*“For us, music has above all a transcendental significance. It disengages the spiritual from the happenings of life; it sings of the relationships of the human soul with the soul of things beyond. The world by day is like European music; a flowing concourse of vast harmony, composed of concord and discord and many disconnected fragments. And the night world is our Indian music; one pure, deep and tender raga. They both stir us, yet the two are contradictory in spirit. But that cannot be helped. At the very root nature is divided into two, day and night, unity and variety, finite and infinite. We men of India live in the realm of night; we are overpowered by the sense of One and Infinite. Our music draws the listener away beyond the limits of everyday human joys and sorrows, and takes us to that lonely region of renunciation which lies at the root of the universe, while European music leads us a variegated dance through the endless rise and fall of human grief and joy.”*

With that background, the musical qualities of the people over time can be understood. If it is mapped out compared to an individual’s birth, growth and development... India would correspond to pre-natal existence, while Africa would be the period just after birth when the child is learning to use its limbs. The Greeks first immersed themselves in the beauty that music brought, and still perceived it as a gift from the gods (hence the name: *muse-ic*). They are the ones, who first stand up straight, and the inkling arises that music is not all neutral, but there is an orientation to it, as seen in Plato’s writings. Thereafter the Semitic races first differentiate music in terms of a “higher” and a “lower” music, and correspond to the young adolescence of man. The following period is enveloped in a devotional, religious mood, and slowly, from rhythms, the center of gravity rises, leading to harmony and melody. There is a peak in terms of adulthood when the classical era of music which rejuvenates both harmony and melody to new levels, and which culminated in the late 18<sup>th</sup> century. The aftershocks of that culmination reached up to the late 19<sup>th</sup> century, and it had exhausted itself by the time of the turn of the century. The biographies of many composers are testaments to the wholehearted devotion and dedication given to music, which can be felt by the listener as well, and one can observe the effects of this movement in one’s own soul.

It is important to understand the different stages of music without judgment, as it is very easy to slip into simplistic hierarchies which calls European music as “superior” and hence looks down on African

drumming, or anything of the sort. Just as adulthood follows childhood, but nobody would call adulthood “ideal” and start removing children from civilization or looking down on them, in the same way the musical styles have to be understood as showing different developmental stages, in time. Of course, they all exist to some extent side by side even today, but it is important to identify the *essential time* of a certain form of music. Once more, delicate concepts enter, which is always true when dealing with something as subtle as music.



So it is possible to study a gradual descent of music, from the inaccessible regions beyond melody, to entering the melodious regions, and finally “touching” earth, at which point rhythm awakes, and starts being developed by man as he evolves, where there is a re-ascent. In the descent, the fact that it is a gift from the gods is emphasized, while in the second, the perception arises that man’s participation is crucial in creating music. It is possible to follow this thread of musical development quite well, until the development of technology started in earnest at the end of the 19<sup>th</sup> century and the turn of the 20<sup>th</sup>.

Something entirely new started at this point, when music first started being recorded. As mentioned earlier, music has the peculiarity of having very little to do with the senses, as most of the cues are non-sensory and permeate the body through and through. Anyone who has experienced the full sweep of orchestra, right from the energy of the musicians to the dedication of the conductor and the mood of the audience, can appreciate the effect of live music. It is precisely because music is alive, that it has to be experienced anew each time, as it had been for aeons. *You never enter the same river twice.*

All that changed. One took a snapshot of the river and shared it with everyone, hence no one could experience its wetness, even though they could reproduce its look precisely. This theme entered with recording devices. Focus on the ear became tremendous, as all the other senses were no longer engaged as in a live performance. Earlier, musical instruments alone created sounds. At this point, instruments which looked nothing like musical instruments (radio, tape recorder, speakers and other such “boxes”) were producing musical sound. Just at the beginning of musical adulthood, a break appeared in the very perception of music, and that has had tremendous effects, most of which are not even realized. This brings us to the development of music in the last century, which has acquired very different characteristics.

## The Last Century

Music penetrates the entire person if one is sensitive, and it stands to reason that just as there is goodness and cruelty in human beings, similarly there has to be music that “takes you forward”/“progressive” and music that “pulls you backward”/“regressive”. This is a delicate point, as does that mean one can dictate ethics through music? It is more of a creation of an environment, or soil. Just as it is easier to grow in fertile soil, there is less opposition to ethical behavior when the music is “progressive”. Or, to use another example, just as the weather cannot really prevent you from going somewhere, it can make the journey *very* difficult and almost impossible. Neither can it *make* you go anywhere, but a sunny day can help. Using the background already developed, one can perceive the environment music creates, especially in the recent past.

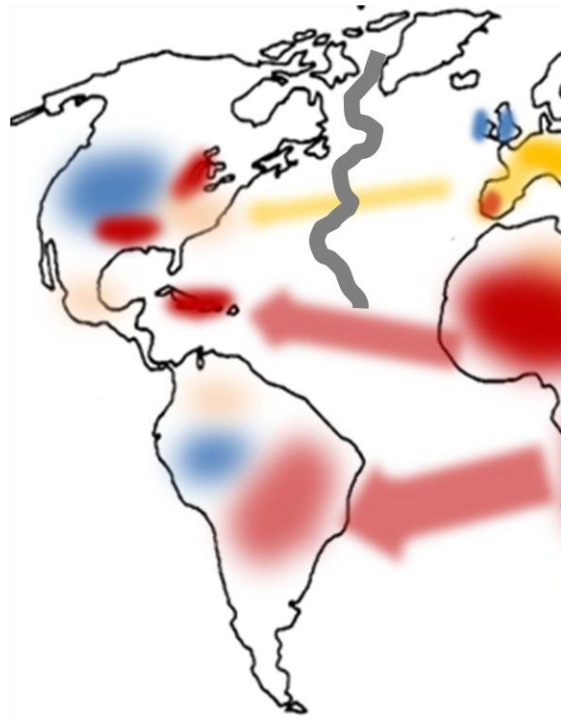
As the focus of culture slowly shifted from Europe to America, one can observe several things. While Europe had achieved phenomenal results in developing the two elements, harmony (particularly) and melody, the rhythmic part was still incomplete. This is no coincidence, as this was the precise time when man began manipulating matter with great skill, but with little regard to its musical qualities. In other words, from the study of cosmic harmonies, one had reached the prosaic periodic table in chemistry as a basis. Music was not observed in matter and also could not enter into physical matter, hence giving new form to the rhythms. Melody and harmony were developed, rhythm remained untouched, and this had far reaching effects on the overall harmony of human social life as well, which was seen quite clearly in the World War catastrophes. These were the first wars with tremendous emphasis on technology, and instead of new rhythms, the rattle of machine guns, and the rumble of innumerable engines of war were heard.

Across the Atlantic, human evolution had to continue, in one form or another. Since Europe had yet to integrate the rhythmic element and move forward, that became the task of America. However, due to its history with slave trade, a section of rhythm was preserved in the southern part of United States by the Africans. This was the only available source for rhythms, as the immigrants from Europe had little of their own to offer in terms of rhythms. Sure enough, before long, African musical qualities started making inroads into the existing European music in America, and thus 20<sup>th</sup> century music was inaugurated.

What were the sources of this music? In the first place, the elements of rhythm from Africa had been combined with evangelical chorus music, to give a new blend: “gospel music”. Hence we had harmony set to a strong rhythm, which was strongly imbibed by the plodding slaves. In the second place, the notes that were played in most classical music were almost pulled downward, or played at a lower frequency, to give that note of melancholy and heaviness felt by the Africans. This gave rise to a “blue-shift”, or “blues”. Along with the rhythm already present, it gave rise to “rhythm and blues (R&B)”, and later when the beats were experimented with, “jazz”. A combination of the above genres gave “rock and roll”. When the local white population of the day picked up the need for including a rhythm, it generated country music. Hence one can see that several new genres flowered in the 20<sup>th</sup> century, all triggered by the rhythmic elements of African music.

We must not forget something important at this point, that active development of music did not transfer *musically* across the Atlantic, but instead the Africans were transported across, who brought in the element of childhood of music once more. This has caused great difficulty for American culture, as it

created a kind of relapse in music, which none of the general populace was happy with. No matter how severely ridiculed, overall the individual composers in Europe were still respected and music still retained the place of queen of the arts. Something different started to occur in America. While gospel music came from church music, R&B, jazz and blues basically made their way into culture through the doors of bars, taverns and the seedier places in the cities. That has been the contrast between Europe and America. Reading the responses of classical musicians to this American form of music is quite educational, as they criticize it heavily as lacking tone, melody, organization, etc. To a certain extent their criticism is valid, but the bigger picture was missed by many. Something more serious was the issue, an inability to properly include rhythm within the existing development of melody and harmony, in the same way Europe developed on melodic elements from Asia.



Meanwhile, music was being driven more and more into the mechanical, repeatable element – from rock, to hard rock, metal, and heavy metal, to electronic music. The melodious quality had also nearly disappeared, with repetition of short sections getting more and more prevalent. One can never squash human talent, and remarkable skills did come up in all these genres, but one can say that the music of individuals came out in *spite* of the existing musical environment, and not *because* of it. It must be emphasized that this does not mean that African music in itself is destructive or harmful, but the way the combination occurred of modern (at the time) continental music and ancient rhythms, without any consciousness or participation, has given rise to many poisonous elements in modern music. This brings us to the key question referred to in the beginning... what is the effect of different kinds of music on human behavior, and has that knowledge been used that way? If so, to what extent?

## The Use of Music

Let us turn back once more to the differentiation in music, and the time when the first indications of it occurred – in the Greek Era. Prior to the Greek Era, from what I have been able to find out, they perceived music, and even played it, entirely according to the stars and astronomical relationships. This was an era when astrology and astronomy were one, so everything on earth followed star positions, including the type of music and the time to play it. This is most likely the source from where the later Pythagoreans got the ideas about "Music of the Spheres" from, which they developed further. That has had far-reaching effects, as that was the same time that mathematics was developed. It is really interesting to see that mathematics and music "descended to the earth" at the same time, as it shows the intricate link between the two. And when it did descend, the Greeks started understanding the variations and subtleties... When the melodic elements alone predominate, to an extreme, it was known in the Greek era that it led to a form of "high", or intoxication. For instance, the image of Pan and his flutes, as well as that of the Pied Piper, both use the wind element to mystify the senses:



On the other side, the first drums made their appearance, bringing an awareness of rhythm. They immediately made their appearance in Dionysian cults, as the *tympanum*:



These were used to generate the feeling of immersion, or going into a trance. The Lyre held the middle position, being an instrument of Apollo and associated with the heart. Hence, the very constituents of music, when identified accurately, show the ways in which music can be used. Most military expeditions involved rhythmic drumming to keep in step with the troops, while church music that sought to transport people to a different region relied heavily on the heavy wind instrument, viz. the organ, for centuries. Wave after wave of musical tastes can be seen to run parallel with the inclinations of people in the



different eras, one leading more out of the body into the sky, and one leading into the body towards the solid earth.

Hence, following the historical development, one can easily predict that music that, literally, plays on man's connection to his limbs has to involve a rhythmic drumming. Here intricacies arise, as rhythms that are out of phase with breathing and heart rhythms, or are arrhythmic, can have destructive effects. Since the mind's consciousness gets immersed in the unconscious, this allows something else to take its place, hence leading to the phenomenon of "possession". It is a common feature of most trance music that it relies on a regular beat to lull the mind to sleep, just as a hypnotist uses the swing of the pendulum. Now, the connection has to be made with African music, which does rely heavily on the limbs, and certain cults that form where people get possessed. In this one can see the degenerated application of what was once music suitable to the development of man. Just as food for the child is different from food for the adult, when African drumming is simply transferred onto modern melodies, the rhythmic element overwhelms the melodies and causes a relapse back into childhood, allowing a different consciousness to "slip in". This knowledge was not entirely clear in the minds of early 20<sup>th</sup> century America, but they did express it in religious terms, the only terms available at the time that spoke of spiritual ideas, as "demonic music". What is actually being said is that the rhythmic element alone has gained too much predominance, leading to a disharmony in the overall human constitution.

But, as seen in the previous section, the development showed a definite necessity of including the rhythmic element in music in the right way. Man had to come to grips with this aspect; just as he had previously mastered the harmonic element. The rhythm had to be made conscious, only then could music rise from instinctive folk music, to conscious creative music, re-opening the doors to a *conscious* spiritual experience. The facts show however, that in contrast to the strong element of devotion that generated the experience of harmony in the great composers, it is the element of "fun" and "entertainment" alone that has remained. This sentiment can be seen in the light of a conversation that took place between the classical composer George Handel and Lord Kinnoull, who had complimented him on his *Messiah*, "the noble entertainment which he had lately given the town":

Handel: *I should be sorry if I only entertained them, I wish to make them better.*

Things had changed in the 20<sup>th</sup> century, and there has been the great danger of the entire development of music from the Greek and Roman Era up to the present times getting entirely short-circuited, linking the Dionysian cultic music once more to the masses. 20<sup>th</sup> century culture did see a resurgence of many Greek/Roman activities, such as an excessive devotion to intoxicating the senses, physical perfection, sports and the re-starting of the Olympics. But, contrary to the Greek Era when it followed a natural progression, the same elements now can serve destructive ends, as "sex, drugs and rock&roll". Hence the Era of Entertainment began, which means music did not have to lead anywhere. Of course, this laid the door open to allow those who knew that music always leads somewhere to choose which direction it would go, and this is the sentiment picked up by many people today that "music is being used to control us". It is a justified sentiment, a natural consequence of neglecting historical evolution and asserting that music serves only personal entertainment. This, then, is the polarity that has arisen: a large majority who deny any direction or ethical concerns with music, while a small minority obsesses over the control of populations with music.

Thus two major developments flow together... the direct inclusion of African music, and the corresponding demotion of music, from helping the progress of the human individual, to entertaining him. A third has to be added to this combination, where technology, especially computers, have been crucial in creating music that rely on the wavelength alone for their effects. No matter how subtle the sound of the flute as generated by a computer, the fact of the matter is that it still uses only rigid mechanical elements, to generate the melody, and is hence still stuck in rhythm. Once we move to the use of electromagnetism, the musical instruments enter a realm even below the solid element, where we do not have any handle on them anymore, and music runs wild. This can be seen in a rapid disintegration in melody, poetry and harmony, and a sharp increase in yells, screams, explosive and grating sounds. Poetry, once an intricate art, has now come to the level of rap. Rhythm, and even lack of rhythm, overwhelms all music.

When the cultural elements went out of whack, art, which was for a long time sustained by patronage, and which has to be sustained by free donations, was overwhelmed by economic forces, creating the music "industry". It has recently been rumored (for instance <http://www.hiphopisread.com/2012/04/secret-meeting-that-changed-rap-music.html>), that due to the increased privatization of prisons, "customers" had to be generated, hence a lot of artistes who emphasized crime and general rebellion were possibly sponsored by the prison industry via the music industry. In other words, there is a lot of conscious development related to music, but in the negative direction, building upon the initial failure of crossing the Atlantic.

It is hence quite clear that music is in a state of severe crisis, and there are very few musicians heeding the problem, or even recognizing it in the first place. In spite of all this negativity, occasional bright lights do surface. For instance, development of the Hang drum in Switzerland, which for the first time scientifically combines rhythm and melody into one instrument. Musicians who are developing what is called "World Music" are doing remarkable work to bring out an overall development again, and Michael Jackson, especially towards the end of his career, showed by example how one can rise from elements of rock and roll to music that has crosses all genres and is very hard to classify (e.g. Earth Song). There are isolated individuals working, possibly with very little recognition, in developing a kind of music that does not merely serve entertainment, or personal whims, but recognize that it is a responsibility of love that can be used to nourish human development in the forward direction again. One does not have to be a dogmatic Fundamental Christian denouncing "demonic music" or even a denier of all direction to our musical development. What is needed, above all, is a clear facing of the facts, and the enthusiasm to work against the retarding forces in the best way possible. The element of rhythm has its home in enthusiasm, and also in scientific development. Hence, from the other side, it is also the responsibility of scientists to identify and utilize music in their devices and inventions, to permeate technology with music, by learning to understand matter as solidified music. This, when properly done, would be a way to curtail the destructive use to which technology has also been used. For too long has technology been divorced from art, and both have become poisonous as a result. It is time to bring them together.

The paths to these activities are also indicated by musical relations themselves. The foremost task is to understand rhythm sufficiently enough to be able to incorporate it into the melody and harmony themselves, in a way that the rhythm does not impose upon the melody. An example of a highly developed rhythmic system is indicated in Carnatic music, but in order to express the full range of rhythms, the singer stops to allow the percussionist to take over, indicating that this complexity could not penetrate the melody. Since understanding rhythm goes side by side with understanding the laws of

matter, development of new instruments would be a natural consequence of any effort put in this direction. Until now, machines have been assigned for utility alone, and musical instruments assigned for art alone. The way forward will have to merge the two. On one hand, every machine must have a musical quality to it. This is already observed today with sounds people come to love with their full hearts. How often has one not heard affectionate words about the “hum” of a car engine or remembered the tinkling of the old telephones with nostalgia? That points towards a healthy expression of music, when one actually gets to design the rhythms in a machine instead of it being an accidental side effect. Additionally, this would also involve understanding the utility of music, which can be used for medicinal purposes or even scientific purposes in studying the relationships in physics. To develop music technologically, and to develop technology musically... this is an ideal that can be kept in front of us, as a guiding light for our activities in both.

Whatever is achieved in music would also bear its results on society as a whole. Just as a study of rhythm has the capacity of producing new scientific discoveries regarding the structure of matter, the study of harmonies denotes a capacity to understand the way different cultures can work together, and which culture can be coupled with which for a certain task. The same knowledge that the musicians have developed and devoted their whole lives to understand can now be applied among the nations to identify the musical characteristics of each. We can understand the relationships between races as well as social categories with musical qualities, which will go a long way towards removing racism than the passing of innumerable laws and the preaching from innumerable pulpits. Music is hence not one person’s private pleasure alone, but something that involves mankind in general, and unsurprisingly so. Every task taken up either by an individual or a group of people can be called a melody, and that is its unique character. Hence, different aspects of musical relationships not only relate to different aspects of a human being, but also different aspects of the human society. It is this social role of music that is crucially missing these days when each one has one’s favorite tunes at the touch of a button. Touching buttons is not enough, losing oneself in a concert is not enough, it is necessary to actually touch real life, understand it, get a handle on it, and transform it. After all, this is what creating music is all about.

