

## MASTER CLASS NOTES

First of all I would like to thank H.E Sheikh Sultan bin Tahnoon Al Nahyan Peter Scarlet and every one involved in the Middle East International Film Festival for really understanding how important and urgent it is to bring people from very different cultural backgrounds closer to a real understanding of one another through creative cross cultural exchange.

We are very lucky to have these enlightened leaders who are in the process of making a profound change in the world.

They are setting an example here in Abu Dhabi for the rest of the world to follow in all sectors from the arts and science to the environment. And I think we are all here today to help make this message clear to the rest of the world.

This is a lot of info and dots to be connected today so if you start to get dizzy and want to lie down on the floor go a head.

And if you want to ask a question raise your hand even while I'm speaking. don't wait for a question and answer period.

I don't think we will get through all the info I have for you but you can read my notes for today that will be posted on line and feel free to stay in touch after this is over.

The other thing you should know is that I'm no longer calling my digressions "digressions" I'm calling them Sympathetic (as in the un-struck string that vibrates when another one is struck) Synchronistic Segues. So consider this a connecting the dots kind of session.

1. So you had to choose one: what was there infinitesimal seconds after The Big Bang sound or light?

Light? please raise your hand Sound? Please raise your hands...

Well yes most people - say light because light travels faster than sound

I asked this question one time to a lady from New Jersey and she said in her distinctive native accent:

"Well if it's the big Bang then it must be Sound." is this enough to convince you that it is sound.

And in the Bible it says God said let there be light so sound is the SAID part. So is this enough to convince you?

Well if not then check this out: recent scientific research that using The Cosmic Microwave Background which is almost a constant in the universe with a fluctuation of 1 in 100,000 and this fluctuation is used like the rings in a tree to date the age of planets along with radio telescopes. So they were able to go back to infinitesimal seconds after the Big Bang and they discovered a chord moving in a sine wave for 380 million years through disparate sub atomic particles. The chord was 57 octaves above and below middle Bb and at the bottom of the sine wave the first atoms were formed and then after another 380 million years the first stars were formed. So there was sound moving for 760 years before real

sources of light were formed.

**They also looked at the over tone structure - the tuning - of this massive chord and found that the major 3rd was a QUARTER TONE FLAT.** So basically this article provides proof for the existence of Rumi's MUSIC OF THE SPHERES of OM and this the real music of the spheres is still moving thru all of us today and it is tuned to the same kind of tuning that Arabic MAQUAM Indian RAGA and Persian DASTAGH are tuned to. This is the only article in Scientific American that ever made me cry while reading it. I was blown away. I always new from the first moment i heard Arabic and other quarter tone music in 1966 that it had a special effect on me and I became fascinated by it and i've been trying to understand it ever since. But to see this scientific prof was stunning. Many of the worlds great cultures have used different quarter tone systems in their music including Balinese/ Indonesian, Chinese and African music. The movement to create a western system of tuning came to fruition with Bach's WELL TEMPERED CLAVICHORD in 1722 but it actually started before Bach during the period of Rene Descartes in the 17th century. This system created the possibility to play harmonies and transpose into different keys. It is considered to be a major advance in the evolution of music. And it is a major change. The western Major chord wouldn't have existed with out it and we would have had to wait until the invention of Prosaic in order to get up lifter.

In this Chord the major third is about a quarter tone sharper. Not such a big deal right but remember the microcosm and the macrocosm are very finely calibrated and a quarter tone shift in the microcosm reflected in t macocosm would mean that you just flew by Mars and didn't get to and there after all. So in order to achieve this new Western system the quarter tones were asked to leave. They couldn't even ride in the back of the bus they couldn't even by a ticket. So each half note tone had more room to sit. Cents in musical terms means that in between each whole tone there is 100 cents so there was 50 cents between each half tone .

This system that was deemed more beautiful to people in the west and it has been the dominant system in the west is for the last 288 years or so. But thing are changing. Personally I think that this system has serious limitations and that it has a tendency to sound more mechanical and predictable than other tuning systems that use smaller spaces between the notes and therefor have more subtle shading. **Actually the the title of this talk THE COSMIC SYMPHONY is misleading because most symphonic music developed in the west uses this western system but the Cosmos is really tuned to this system. I just saw FOOD INC on the plane it is playing here at the festival and it's a must see. It's based on the writing of Michael Pollen and the main point is that mechanization has taken over the entire production of Food in the US. I always thought that Michael Pollen was destined to write these books because he name is Pollen and one of his main theme is pollination and cross fertilization. These terms also apply to the**

**development of Maquam. Remember culture is a biological term too.** And there were many quarter tone systems through out the Middle East, North africa and India that cross fertilized. So we can In fact if you look at the time line the invention of western tuning really prefigured all the major changes that lead to the industrial revolution and the great shifts in all the sciences and architecture. It was part of the basis for a new rational western view of the world know as reductionism.

**The cosmology of the quartertone systems was based on The Golden Mean on Phi and all the art forms were related to these ratios. This system created beautiful domes and arches that perfectly reflected the the overtone structure of the music of the spheres so when you sang inside the ratios of the musical modes bounced off the wall and created perfect geometric waveforms that were exactly tuned to the shape of the space and also tuned to have the maximum effect on the human central nervous system and on the focal points the Indians call Chakras. This cosmology also is reflected by the geometric patterns in the art work and in the calligraphy and in the incantation of the melismatic Koranic verses. The written language looks like what the music sounds like. This is the land of spiraling spires and eloquent ellipses. We all know about the Golden Age of Islam in Spain for the 9th to 15 th century. And it feels like here in Abu Dhabi something reflecting this is being created again today.**

Have you ever read the Thomas Wolf book **From Our House to Bauhause?** It's very funny and it makes you ask your self why you would want to like in a square box. The Troubadours brought back this music and poetic system to Europe during the crusades and it became the basis for the poetry of Languedoc during the period of Eleanor of Aquitaine. And even before that the great Kurdish musician and composer Zaryab traveled from Kurdistan across Arabia and North Africa all the way to Morocco and the courts of Spain with his codification of a similar version of MAQUAM know as Dastgah and this because the basis for Andalusia music where the modes were called Nuba. **This cosmology was influential in Europe up to the end of era of the Gothic Cathedral in the 16th century when things**

**And it is now coming back because we really need it to be a part of our lives.** Look at the Work of Frank Gehry and Zaha Hadid, Lamont Young Terry Riley and Jon Hassell.

**Imagine that you are threading a needle with a very small hole and that the thread is made of musical notes.**

The bigger fatter western thread has eaten too many McDonalds hamburgers it is prone to Diabetes and it can't fit thru the hole. **The quartertones are lean and mean and burning carbs. They're fast mercurial and magnetic. Once they get through the hole they produce a massively expressive sound. This is why this music sounds so hot.**

Hans Jennings developed his own simple proof of the relation of sound to form

by sending waveforms up into a surface covered with sand. The shapes look a lot like Islamic Geometry. Check out his books on Cymatics. Of course this has been going on since the Egyptians...

**The ney flute is one of the keys to unlock this ancient system and ney were found in Egyptian tombs for 2,500 BC. RUMIS GREAT WORK THE MASNAVI is based on the Ney. He says there is fire and tears in the soul of the reed.**

**The ney is one of the oldest human wind instruments Ney in Farsi means reed.** The biblical term is *bull rushes*. As in Moses was found in a basket among the bull rushes growing by the water. The hole on the ney for the major third is a quarter tone flat.

**My technique on the ney was enhanced by combining the circular breathing of the trance music with the Maquam system.** Normally there is no circular breathing when playing the classical Maquams. Also I combine stylistic elements from the Arabic and the Turkish styles and even some Persian motifs but the blowing sechnique used in the Persian style is very different and the tip of the ney needs to be slipped in between the two front teeth. Is common to shave of some of the front teeth if necessary. I also developed A combination of trilling and circular breathing that is very useful for building tension.

**Play NEY Play NEY TRILLS Play Fever Ride form Sheltering Sky**  
BRION GYSIN SITE Tell FIRST MET BRION STORY

HE INTRO DUCED ME TO Paul who became my second second father. I had read some of his his short stories and 100 Camels in the court yard but I really didn't know that much about him when I met him. I remember think that he would be dark and hard to communicate with based on his writing. But in person he turned out to be just the opposite.

He played me his music. He had been a student of aron copelands but his piano music sounded much more like ravel poulanc duke Ellington and it had interesting Spanish influences. He was very interested in Moroccan music and music from all over the world and he was very interested in what I was trying to do with Moroccan music.

SEE MONDO 2000 ARTICLE ABOUT PAUL AND BRION

It was his understanding and support that kept me going when I finally returned to the US at the end of 1979 and it was at his recommendation that Bernardo

Took an interest in my music and hired and unknown composer for his film THE SHELTERING SKY. (((((So I came to the music for the Sheltering SKY with all the influences I have mentioned above...))))))

The score ended up using extended collage techniques play Fever Ride...

Tell the Blind dancer story and the Kit and Port love scene story...