## Intuition versus Rationality: Mistakes and Traps of the Western Approach to Composing and Playing Music

We need a civilization that can live fully and creatively in harmony with wilderness. Nature is not a place to visit; nature is home.

Gary Snyder

It is certain that we more and more urgently need music which can fully and creatively live in harmony with human nature, and which has the ability to play and therefore improvise. Music should not be practiced (in the sense of drilled) and "read"; instead, music should be enjoyed and played (in the sense of playful and joyful children's games). Music is not a place where children go to be chained to pre-calculated scales; music is their (and our) original home.

I would like to place the roughness and unkemptness of the highlands (including the joy of improvisation, searching, experimenting and references) in contrast to the contemporary "smoothened" position of music, confined to the rules and conventions of artificial music. That means, I would like to express the opposition between the chaos of nature and wilderness (such as intuition, improvisation, natural scales, and instruments that do not require such playing technique or practice) in contrast to the artificial world of music (read from sheets, using drill, interpretation, and calculated scales). To the people who may be interested, I would like to suggest further directions for research (stressing both apparent details and seemingly unconnected details).

## $Odd\ rhythms\ versus\ the\ prevailing\ regular\ stupefying\ thum\ thum\ thum\ rhythm.$

With some exceptions, all electric stimuli which flow in our brain from neuron to neuron move in irregular, that is, odd rhythms. The regular thum thum rhythm of the music of our civilization tends to lead to xenophobia and intolerance. Conversely, listening to ethnic music (with its irregular rhythms) contributes to tolerance.

## Natural church scales and unique Chinese pentatonics; tuning from Bali; also the principle of aliquot singing versus tempered (calculated) tuning.

"I must first say that there is no doubt that in this case the issue is not technical but philosophical. In studying the tone system, one will necessarily reach the point of asking the question: Where are the sources of our persuasion that the harmonious order which is referred to by all masterpieces through their excellence actually exists at all? It is shameful to learn that each chord of these masterpieces of many centuries has been out of tune and false from its very foundations. However, this means that music expression, that unique magic of tonal complements and harmony, was plainly based on a swindle. Yes, it was a swindle, although those with reservations speak of a compromise – but what a compromise, when most of us have already learnt that a pure music tone is really an illusion and that pure music chords do not exist at all. It is time to remind ourselves that there were happier times: in the times of Pythagoras and Aristoxenos, our ancestors were quite satisfied with the fact that they could play their purely toned instruments in one key; they were not tormented with doubts."

"They knew that divine harmony belonged to the gods. Then they realized that they wanted more. Their misguided self-importance created the desire to attain divine harmony. In a way, they succeeded; they authorized technicians, pretorians, and salinases to work on the issue, and finally, it was Andreas Werckmeister who solved the problem. He simply divided the divine system of an octave into twelve equal and profane parts. Of the two half tones, he created one false one, and out of the ten black keys, he used only five, thus consolidating the given status."

(The monologue of an old musician in the Bela Tarr film Werckmeister Harmonies).

Even according to the ancient people of India, humans are spiritually undeveloped creatures who do not deserve to have the rules of the universe, that is, harmony (chords). The classical music of India uses only rhythm and melody, which is why it has retained its qualities of healing.

The perfection of the "tuning" of the sounds of nature (the frequency intervals of atoms and molecules and of the world of galaxies as well) stands against the very complex theory and practice of harmony in western music (which requires many years of study).

For years, I have been using a plumbing pipe in my lectures to astonished scholars, musicologists and laymen alike to demonstrate that the more it spins, the higher a sound it produces, resonating in perfect natural intervals. Australian cello player and composer Sarah Hopkins (see the picture) is an example of someone who has been using such devices (called 'whirlies') in her compositions and recordings. Similarly, people who listen to the chirping of a particular little bird slowed down 84 times are very surprised by the fact that it sounds like the slow majestic tones of the bass register of an organ.

The simplicity of playing such instruments as the end-blown pipe, Tibetan bowls and Australian didgeridoo is in stark contrast to the necessity of laboriously learning at length to play and tune European musical instruments, which are made in such a way that they work best when playing just one precise frequency (that is, a tone or note).

The irregularly cut small metal strips in tambourines and African drums, the droning of the metal piece in a kalimba (mbira), the broad saddle in Indian string instruments (see the picture), the irregular shape and weight of Tibetan bowls and ting sha cymbals are examples of instruments that create a special effect in the human brain that contributes to the creation of an altered state of consciousness (learn the term entrainment).

The flood of tones of the Tibetan bowl, versus the one and only ideal and precise tone in western music; shrutis, micro tones in the music of India.

Western musical instruments strive for tone (frequency) precision: that only one single tone sounds at a time (with a maximum of one aliquot tone which then creates the "colour" typical for a specific instrument). Conversely, the Tibetan bowl (see the picture) provides a whole range of mainly attendant aliquot tones after just one strike. Although there are

more than 30,000 tiny cells of various length in the human ear (so that they react to the resonance of different heights of captured sounds), most people living in towns make use of only the lower third of their audio and aural possibilities. Hence, the sound of a Tibetan bowl (as well as a didgeridoo and the untrained voice of a Tibetan monk, for instance) is perfectly satisfying.

Natural harmonizing and healing procedures of simple ethnic music versus the overly complex "western" symphonies composed for hundreds of musicians and thousands of strings and instruments. In other words, it is like the improvisation of a Romany violinist versus the drill and training of an obedient interpretation of music from notes.

It has been proven by measuring the activity of individual cells that while humans like certain music (emotionally), their body (as well as the body and mind of a newborn baby or prenatal baby still in the womb), or more precisely, their cells do not like loud, complex and fast music full of chords. The organism cannot cope with the flood of information. Conversely, it is evident that harmonizing music (which can positively influence the quality of cell membrane exchange, for example) is music that is simple, slow, in one key, intended and recorded positively, and tuned naturally.

Closed eyes and movements of the head and spine during the listening of music of Indians and other nations versus open eyes (to judgement and critique) and stiff bodies and necks of Europeans.

Even these days, I see school children (boys especially) being punished for not being still while listening to music. But everywhere else in the world it is a must: you have to move while listening to music! It is generally known that if we at least move the head (that is, the vestibule apparatus) while listening to music, signals reach the brain not only from the ears, but from the organs of motion as well. In this way, listening to music is more profound and effective. Moreover, when we open our eyes, the mind starts the process of evaluating, criticising and judging. It is only when we close our eyes that music can be of best (uncensored) effect.

Most of the songs on the radio and other media are limited to a length of 3 minutes, but for music to make some positive changes in the body of a listener, it must last for 6 to 8 minutes at least!

Our bodies are thus "tortured" because a song is taken away from us right in the halfway point of the tuning to the basic key, and exchanged for another song of a different tuning (causing us to lose energy). Although for years we have not been using old small vinyl records called "singles", whose capacity was limited just to 3 minutes, our mind's inertia blocks the return to the [previous] state when singing songs took longer than that. In India, concert ragas may even take up to several hours. In some cultures, rituals accompanied with music took and still take hours or even days.

The joyous play of "primitive" cultures and Indian musicians who improvise 80% of the time versus perfectly composed western music, which uses a structure tied to rules, music read and played from sheets, rehearsed, and is studied in a tense environment.

Western music ceased to be improvised and playful, as Europeans were deprived of the greatest joy of music with the reading of notes from sheets. It has been proven that women when talking involve both hemispheres of the brain, while men when talking use just the left half (in a very simplified, but provable way). However, when a man is playing music actively or when he is singing, both of the hemispheres of his brain are at work. From time immemorial, we men have needed music, which is also why it was men (shamans) who "invented" music, and produced and guided it for thousands of years. Music is a kind of "meta-language" for men, allowing for more than just the normal use of the brain. Until recently, the majority of professional musicians and conductors were men who specialized in producing, composing and conducting music. Since the invention of tablatures and then later of notes (in an attempt to play more, louder and longer), our music has been composed, read and played with the "eyes", that is, through the left hemisphere of the brain, which judges and limits (and therefore also censors).

The spontaneous singing of the Pygmies and pre-school children (every mother is a Mozart) versus children who are repressed in school (by theory, difficult training of instrumental technique, and more); numerous present day adults, including women, are unable to sing any song (because a teacher or ambitious mother reprimanded them for this; see the term bio acoustics in the 2006 colloquy proceedings). The style of learning and practicing in topclass form does not calm people; on the contrary, it brings about numerous negative health and psychological aspects.

Dagmar Pecková: "I know many naturally beautiful voices which were harmed by school. One woman went from having a universally astonishing voice that spanned over three octaves to becoming a choirgirl who could barely span an octave. (*Lidové noviny*, November 2005).

Magdalena Kožená: "I know of many examples of female singers who destroyed their voices. They sang a repertoire which was too dramatic. They had to sing louder and stronger, and this resulted in the knotting up of their vocal chords." (*Lidové noviny*, April 2006).

Bulgarian mezzo-soprano singer Vesselina Kasarova: "In opera it is like among cannibals. Impresarios ask for large percentages [of commissions] and many singers take pills to be able to stand such a demanding lifestyle. Not to mention plastic surgeries, because everybody must look perfect. There is great stress in our profession: we must travel all the time and perform, and we collapse in the fear that we won't be perfect." (*Lidové noviny*, August 24, 2007).

The healing and calming qualities of proper music versus broken chairs and turbulent emotions (after a heavy metal concert or a symphonic orchestra performance).

New age music, an energizing listening to Gregorian choir (in an ambient, almost inaudible way), and specialized recordings of the sounds of nature evidently harmonize the human body and psyche. Conversely, the opposite type of music – negative, exalted, recorded in a stressful environment, and produced in a loud rendition just for relaxation or protest (such as industrial noise, heavy metal and its new variations, and some protest forms of hip hop) – evidently harms both the organism and society.



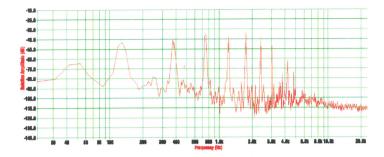
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Sarah Hopkins makes frequent use of whirlies and a whirling plumbing pipe in her compositions and harmonies, alongside with aliquot singing and didjeridoo sounds.



The record of the sound of a Tibetan bowl: in the area above -50dB, a total of seven untouched, clean and very beneficial aliquots can be seen.

The sound of the bowl is very "nutritious" (it supplies the body with life-long missing frequencies).