

ARCANA V

ARCANA V
MUSIC, MAGIC AND MYSTICISM

EDITED BY
JOHN JOHN

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JOHN ZORN

HIPS ROAD 2010

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Book design by Heung-Heung Chin.

First published in 2010

ISBN 978-0-9788337-9-4

ISBN 0-9788337-9-1

Printed on acid-free paper

Printed and bound in the United States of America

Hips Road

200 East 10th Street #126

New York, NY 10003

<http://www.tzadik.com>

Distributed to the trade by D.A.P. / Distributed Art Publishers

155 Avenue of the Americas, Second Floor

New York, NY 10013

Orders: (800) 338-2665 Tel: (212) 627-1999

Fax: (212) 627-9484

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PREFACE

JOHN ZORN

The creative act is a complex and elusive enigma. Shrouded in mystery, largely misunderstood, many attempts have been made to describe, analyze, and define it in an effort to explain the inexplicable. The preceding four volumes of *Arcana* have presented the voices of 125 creative minds discussing the processes, thinking patterns, idiosyncratic techniques and breakthrough methods involved in the magical act of making music. Ranging from pedagogy and magic squares to extended techniques, chord voicings, advanced technologies, surrealist games, esoteric research, ethnomusicology, dream diaries, structural analysis, acoustics and more, the essays and manifestos included within those tomes help provide clues to how musicians think about their work, the world, and that which they love most—music.

Despite articulate and passionate answers to probing questions, misunderstandings persist, abound and proliferate—and the divide between musicians and the rest of the world remains largely undiminished. The outside world continues to look upon artists and musicians with a strange and complex combination of admiration, jealousy, contempt, love, suspicion, awe, anger and hero worship. The contradiction is quite understandable—creation is an unknowable act. In addition to the the nuts and bolts involved in the craft of sculpting a piece of music, there is the divine spark of inspiration that gives it birth, which often is just as much of a mystery to the artists who experience it as it is to the uninitiated who have not.

This unfathomable element of the creative equation is rarely spoken of by musicians, perhaps out of the belief (or fear) that to speak of it would cause it to vanish, never to return. But it is there, equally veiled as it is vital—at times overwhelming. Described alternately as being in the zone or the flow, channeling the muse, self hypnosis or the piece writing itself, the feeling is a universal yet ineffable one of being in touch with something outside or larger than oneself. The manifestations of this can include unusu-

ally intense concentration on one's work resulting in a lost sense of self, a merging of action and awareness to the extent that successes and failures become immediately apparent, a perfect balance between ability level and challenge, a powerful sense of personal control rendering the process effortless, and often an altered or lost sense of time. Goals become so clear as to be almost absent—one exists inside the hot crucible of creativity itself, connected with a spirit, energy or historical lineage that is overpowering, exhilarating, frightening. One is one's goal, and the creative act is existence—rewarding in and of itself. At these times freedom (so normally equated with artists) becomes obeisance. One does what one is compelled to do, inevitably resulting in something beyond your known capabilities.

What is this place? Whose is this voice? From whence does it come? How does one make contact? Can it be called upon at will? How long will it stay? Will it ever return? In a recent discussion with a friend, we were both surprised and delighted to learn that we were not alone in our experiences—that we both had heard this voice, been visited by this angel. We also agreed how impossible it would be for the uninitiated to understand or even accept its existence. Is it indeed best to keep these voices private? Are they real or imagined? Who can truly understand how a song can appear complete in a fleeting moment, so quick that you rush to write it down before it disappears, or that a composition can actually write itself. Unless you have actually experienced this remarkable phenomenon, it sounds suspiciously like romantic fantasy.

But it is real. There are places beyond thought, beyond thinking; places where intuition merge with destiny—places of transcendence—and in our newly formed, hi-speed, digitized world of the multitask, it may be that the only way to retain our innate inner-born humanity is in taking on and tapping in to the challenge of the unknowable stream of the eternal.

Mysticism, magic and alchemy all come into play in the creative process. For many centuries composers have accessed things spiritual, embracing ritual, spell, incantation and prayer deeply into their life and work. From Sappho and Hildegard von Bingen to Biber, Bach, Mozart, Liszt, Scriabin, Messiaen, Rudhyar, Sorabji, Coltrane, Ayler, Ito, Pärt, Rautavaara and beyond, the connection of music to mysticism has been consistent, well documented and productive. Far from an historical overview or a musicologist's study, this *Arcana* Special Edition illuminates a fascinating and elusive subject via the eloquent voices of today's most dis-

tinguished modern practitioners and greatest occult thinkers, providing insights into the esoteric traditions and mysteries involved in the composition and performance of the most mystical of all arts.

—John Zorn, NYC 2009

ARCANA V

DE HARMONIA MUNDI

WILLIAM BREEZE

I

00. One is the Magus: twain His forces: four His weapons. These are the Seven Spirits of Unrighteousness; seven vultures of evil. Thus is the art and craft of the Magus but glamour. How shall He destroy Himself? 0. Yet the Magus hath power upon the Mother both directly and through Love. And the Magus is Love, and bindeth together That and This in His Conjunction. —Aleister Crowley, *Liber B vel Magi sub figura I, The Holy Books of Thelema*.

Why is Love called a Magus? Because all the force of Magic consists in Love. The work of Magic is a certain drawing of one thing to another by natural similitude. The parts of this world, like members of one animal, depend all on one Love, and are connected together by natural communion.... From this community of relationship is born the communal Love: from which Love is born the common drawing together: and this is the true Magic. —Marsilio Ficino, *Commentarium in Convivium Platonis de amore*, oratio VI, cap. 10 (*Opera omnia*, p. 1348), trans. Frances A. Yates, from *Giordano Bruno and the Hermetic Tradition* (1964), p. 127.

Microntonal tuning has a long-established connection with occultism and magic. The occult doctrine of correspondences has its roots in the protoscientific philosophies of mediaeval Europe, with deep roots in Arabic, Byzantine Greek and older confluent cultures. It had its greatest resurgence during the 15th century Renaissance Neoplatonic revival led by Marsilio Ficino, and its essentials were codified by Cornelius Agrippa in the 16th century. Epitomized by the “as above, so below” axiom of the Emerald Tablet of Hermes Trismegistus, the doctrine posits a one-to-one correspondence between the celestial and earthly realms, and to its initiates, between the inner and outer worlds. The elements, humors, planets and zodiacal

signs were understood to cross the macrocosm-microcosm boundary, with counterparts in the human body and spirit. Religious theurgists such as Ficino employed a variety of means, but especially music, to harness these magical correspondences in the quest for health, happiness and a deeper understanding of God and nature. These correspondences have left linguistic traces in our languages that remain signifiers for aesthetic qualities and emotions. We can, in discussing music, speak of a fiery or earthy work, a choleric or sanguine performance, a jovial or martial brass passage, or recognize music evocative of the seasons. These are not just linguistic fossils of extinct magical thinking preserved in language; these influences, and their underlying occult correspondences, still live in us and through us.

In addition to Thrice-Greatest Hermes, the Hermetic *prisci theologi* or spiritual fathers included Pythagoras, who had taught that vibration proved the primacy of ideal numbers. His initiates could demonstrate integer ratios in the harmonic series using a monochord. These ratios and those elaborated by other theoreticians became the basis for ecclesiastical music in mediaeval Europe. As further elaborated by the Renaissance Neopythagoreans, Neoplatonists and Hermeticists, and epitomized in the influential *De Harmonia Mundi* (1525) of Francesco Giorgi, these ratios were understood to reveal the mind of the creator and give the measure of heaven and earth. The worlds were understood to co-respond; the magical link between them was made through sympathy, the affinity of like for like. This sympathy was mediated by number, epitomized in the harmonic series.

But the network of correspondences traced pathways with two directions. As number and vibration permeated all created things, including man, they provided a means of return up through the Hermetic hierarchies of creation to the direct experience of God. This was a divine right of return, not a mediated salvation or redemption, and required initiation, i.e. experience, not simply grace. Magick proved that *God was listening* through His created agencies, the ensouled angels and demons appropriate to the various departments of magical works.

The goal of Hermetic magic was a trance in which the body of the magus was stilled with its senses closed, while the spirit was exalted to commune with the *mens*, or mind of God. This trance is an advanced form of what, since late 19th century Theosophy, has been called astral projection, and was termed "rising on the planes" by the Hermetic Order of the Golden Dawn and Aleister Crowley. Accounts of this trance almost always

include a state of high vibration akin to electricity coursing through the body. The same phenomena are described in analogous terms in Hindu yoga (*kundalini*), Taoism and other traditions. The ability to "tune" these vibrations harmoniously, to "play" the energies internally as you would a musical instrument, is one of the most important tools available to the magus or *yogin* (as in *mantrayoga*) for enhancing and directing the trance. The "subtle body" of the magus or *yogin* is a microcosm of the vibrational world of the macrocosm; it is tuned by the same principles as those found in microtonal music.

In the Renaissance, Neo-Pythagorean number theory combined with astronomical conceptions of planetary order and motion, theological constructs like the angelic hierarchies of Pseudo-Dionysius the Areopagite (the cherubim, seraphim, etc.), and then-recent borrowings from the Hebrew Qabalah, to shape the syncretic paradigm of the music of the spheres. Magical applications of this evolving occult philosophy involved ceremonial practices and meditative thought-experiments that essentially "tuned" into one or more corresponding qualities to achieve a precise magical result, in the world with talismanic magic, in the person with healing magic, or in one's own consciousness with religio-theurgic magic. Employed in music, they provided a magical means of invoking and directing discrete divine energies on earth. A note sung in a Renaissance Orphic hymn, or played on a monochord, lute or viol, could stand for a planet in the heavens, imbuing the musician and listeners with its energies and qualities. The magick of correspondences is thus analogous to sympathetic vibration, where strings tuned to frequencies that bear whole number ratios to the frequency of the vibrating air resonate, at a distance, in sympathy with the sound source. There is also something analogous to an audio feedback loop implicit in the circuit created by the magical link; the influx of descending influence after invocation reinforces the originating "signal"—a phenomenon that Crowley called the reverberating or reciprocating formula.

The world presented to our senses teems with vibration, and our senses are specialized organs that interpret the vibrations to our brains. There are laws of harmony which our brains are hard-wired to decode, performing what amounts to fast Fourier analysis to hear whole-number ratios as meaningful harmonic relationships. We have evolved to hear most of these harmonies as beautiful, and consciously or unconsciously, we respond to them emotionally and imbue them with meaning.

In the decades leading up to the dawn of the Enlightenment there was renewed interest in Neoplatonism and the mathematics of music. In the early 17th century, when not singing with his monochord, Robert Fludd wrote about cosmological music theory, and argued it in print with contemporaries like Johannes Kepler, who like his predecessor Ptolemy, combined astronomy with an abiding interest in music.

The Baroque period developed a better understanding of sympathetic vibration. One result was a newly-invented string instrument that flourished in the late 17th and 18th centuries, the viola d'amore, with an undercourse of strings that vibrate sympathetically with the bowed strings much like those of the Indian *sarangi* or *sitar*. Its sympathetic strings are expressively responsive but very subtle and ethereal—the amplitude of sympathetic vibrations drop off with interval distance in whole number ratios from the sounding string. A later conceptual breakthrough was the discovery that a vibrating string includes its full harmonic series in its sound envelope, however faintly, giving rise to an understanding of timbre. This was not known previously, even to the Greeks, though they had long known how to isolate the individual harmonics.

In Europe, the evolution of instruments with sympathetic strings stopped with the ascension of equal temperament and the pianoforte, musical handmaidens of the Enlightenment. By the 19th century the piano had become a concert instrument, and singers, string and wind players had adapted to its equal temperament by modifying their techniques, most especially by introducing vibrato to mask tempered dissonances. With the industrial revolution the piano became ubiquitous as a home entertainment center for the emerging middle class. Interest in nontempered tuning was generally limited to specialists, who were often non-musicians.

Blues musicians have long had nontempered approaches to playing that are rooted in careful listening and pitch bending. Some players used open tunings to improve the response of the guitar and compensate for tempered fretting. Resonator guitars and slide technique were developed. Slight adjustments of pitch were made because they sounded better, and conveyed more feeling. The musical form itself was conducive, as the 12-bar I-IV-V blues progression is the next best thing to a static drone for exploring subtleties of scale. The physicist Hermann Helmholtz never heard the blues, but he knew why tonic-subdominant-dominant chords were the most harmonically stable, even in equal temperament. All this came to the forefront

with the electric blues. The subtle harmonics present in all vibrating strings were boosted by pickups, amplifiers and effects, bringing them into the foreground and making tone and spectrum control a new element in the tonal palette.

II

If even the universe is in sympathy with and harmonizes with itself, its parts must fit together agreeably, since these equal parts are of a single whole. It is surely worth consideration whether the charms and spells of magicians do not answer to such unity. Indeed just as the things in the world are mutually betokened by one another, so they are reciprocally affected. The true sage understands the parts of the world. Using voices, substances, and figures near at hand as tokens of things far away, he attracts one thing by means of another. —Synesius of Cyrene, *De Insomniis* (from Ficino, *De Somniis*, in *Opera omnia*, p. 1969), translated in Gary Tomlinson, *Music in Renaissance Magic: Toward a Historiography of Others* (1993), pp. 129–130.

And what is a diagram? A representation of a musical system. And we use a diagram so that, for students of the subject, matters which are hard to grasp with the hearing may appear before their eyes. —Bacchius (translated in John Curtis Franklin, *Diatonic Music in Ancient Greece: A Reassessment of its Antiquity*, *Memnosyne*, series 4, 56(1) (2002), pp. 669–702.)

Music theorists and occult philosophers are alike in this: they have a very wide field of discourse, and theories that are frequently tangential or at cross-purposes. Both have had ascendant dogmas, blind alleys and periods of stagnation, as well as old and vigorous traditions that enjoy renewal and rediscovery, with occasional breakthroughs. In both, ancient truths are perennial.

My frustration with western classical training began as a music student in the 1970s, especially with the way music theory was taught. It led me to drop reading and notating music for improvisation, and to try to rethink theory from first principles. My parallel pursuit of practical and theoretical occult magick became interwoven with this. What follows was developed when studying North Indian music theory privately during 1975–1976 with the American, Indian-trained *bin* and *sitar* master Peter

Row, who used an algebraic notation of his own devising to describe Just/Pythagorean intervals. I preferred geometry, finding that it shed light on interesting aspects of music theory and yielded good mnemonic aids for theory and improvisation. The simple systems illustrated in the accompanying color diagrams are the result. The clock model used as a starting point had long precedent as a map of the chromatic and enharmonic keys in modulation. I now know that music psychologists, beginning with Bachem (1950), used a spiral helix pitch-space model first advanced by the German theorist M. W. Drobish in 1855, a model that has since gained nearly universal acceptance in textbooks for music psychology and psychoacoustics (examples are given in *Selected References*). But although I found occasional circular diagrams and spirals in the music theory literature, I did not turn up anything precisely similar to the theoretical arrangements given in Figures 8–10. But geometrical clock-based music theory was one of those ideas whose time had come, and seems to have been elaborated independently in interesting ways in various places. Books making serious use of clocks include one by a serialist, Peter Schat, *De Toonclock* (1984, English trans. *The Tone Clock*, 1993), and the innovative *Guitar Grimoire* training books by “Adam Kadmon” published by Carl Fischer (whose title and pseudonym suggest their author might be a practicing magician in private life).

Geometry is not an approach that will suit everyone. It may be that the so-called hemispheric “left brain/right brain” characteristics (e.g. verbal = left, spatial = right) correlate to different approaches to music. If one accepts for discussion purposes that conventional notation and theory is linear and essentially verbal, then perhaps geometric music theory more fully engages the other (supposedly more intuitive) hemisphere.



Figure 1.



Figure 2.



Figure 3.

Mercury is the god of communication, travel and commerce. Words like “merchandise,” “market,” “mercenary” and “commercial” all share an etymology with the god-name Mercurius. In the Crowleyan magical tradition, Mercury or Hermes is the Lord of Magick. These traditions are not necessarily contradictory; trade is after all the simplest means of transforming matter. His symbol is the caduceus (Figure 1), which has dual serpents around a winged central staff suggestive of a string or air column vibrating in harmonic ratios. Its facing serpents, suggestive of mirroring, are more than merely symbolic, and the mirror is explicit in some early forms of the symbol. Some images of meditating *yogins* (Figure 2) show the spinal column with intertwined energy channels suggestive of harmonics in a string. Eliphas Lévi’s image of Baphomet (Figure 3), with one hand pointing to the heavens and the other to the earth, embodies the Hermetic “as above, so below” formula with its operative corollary “*solvé et coagula*.” He has a caduceus for a phallus, hinting at the importance of vibration and vibration control in sexual magick, from the slow frequencies of the “ophidian vibrations” to the “shrill scream of orgasm.” Employed externally, rather than internally in trance or vision, the forces indicated by these symbols relate to the *siddhis* of Yoga, and in magick and sorcery, the powers of fascination and glamor.

One of the mysteries of physics is how vibration in time doubles and redoubles to create the entire spectrum of vibration. When singing or playing up and down an instrument’s range, we pass the same notes in the same order again and again, from octave to octave. The simplest representation of this effect is a spiral, where each return to a particular radial point on the circle represents a doubling of frequency, or in the other direction, a halving. Given enough turns, the whole universe of vibration can be encompassed, from long slow cycles of galactic rotation to orbital planetary motion, through the long waves of earthquakes up to sound and visible light and on into the upper electromagnetic spectrum. The harmonic laws obeyed in each realm are the same. Engineers have learned to detune suspension bridges so that they do not collapse in high winds; crystals are used to isolate radio frequencies; lasers are used to tune coherent light. This even holds true at the quantum mechanical level; it has just been learned that two widely separated pairs of atoms, when induced into quantum entanglement by laser, vibrate sympathetically at a distance (Jost et al., 2009). Quantum neurology is exploring how our brains process consciousness of the uni-

verse of matter-energy, and is beginning to find correlations at the deepest levels of neurology and physics. Vibration may yet prove to be the basis for our perception of an external world, and the means of its continual (re)creation. Religions of the manifesting word, from the Vedic *vak* to the Greek *logos* and the Hebrew *berashith*, suggest as much.

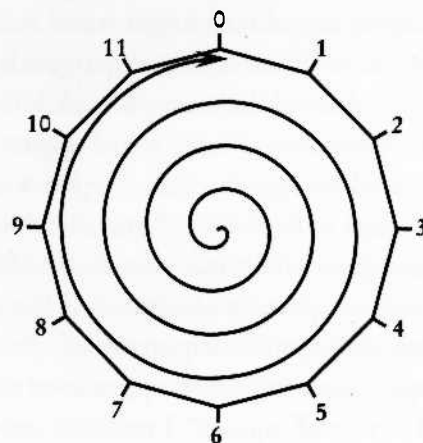


Figure 4.

The musical range we hear, about ten octaves, is a tiny subset of this vast continuum of vibration. Taking the spiral, transposing all its octaves into one octave, and dividing the circle as a common 12-point clock (Figure 4), gives a simple but accurate representation of pitch and interval space. The main difference between this clock and a normal time-keeping clock is the use of 0 at the top. In modulo-12 arithmetic, 12 is the modulus of 0, just as 10 is the modulus of 0 in our usual counting system. With precedent from Drobish (1855) and Bachem (1950), the music psychologist R. N. Shepard (1982) projected this helical model on a cylinder (Figure 5). While comparativism absent a transmission context is speculative and usually at best merely suggestive, the helical model does resemble a Phoenician coin (Figure 6), whose designer signalled his awareness of the serpent's spiral symbolism by the inclusion of a seashell. The vibrational spiral also has a symbolic affinity with the traditional representation of the Orphic world-egg (Figure 7). The doubling and redoubling by octaves to return to the same note is a simple observation that can be demonstrated by singing or whistling a glissade while tracing circles in the air. It would be more surprising were it not known in antiquity than otherwise.

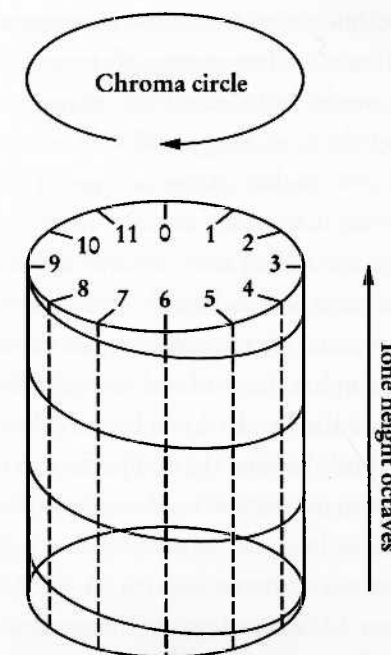


Figure 5.



Figure 6.



Figure 7.

Alexander J. Ellis established a convention for subdividing the octave into a logarithmic scale of 1200 "cents" in which the twelve equally tempered tones are subdivided by 100 in his extensive appendices to *On the Sensation of Tone* (1875, 2nd ed. 1885), his translation of the 1875 4th edition of Hermann Helmholtz's *Die Lehre von den Tonempfindungen*. This octave division into 1200 provides a practical scale for describing microtones; humans can't normally hear differences of one cent or less. Cent values for natural integer ratios are rounded off in this paper; they are irrational numbers. Oddly, considering the division into 1200, Ellis did not employ an overt clock analogy. That became a standard much later with

frequency meters calibrated in cents arranged around a circle. Ellis' convention was practical, but it really comes to life in a clock representation.

The clock model collapses all the octaves into one simple representation of an abstract clock, making possible the study of notes in pitch space without the up/down duality of the octaves. Thanks to the sexagesimal system of the Sumerians and Babylonians, we all know how to do base-12 arithmetic in our heads. Telling time requires that we mentally compute the hours of the day forwards and backwards in modulo-12. Extending this by the finer scale of 1200 cents is just a refinement, one that refrains from overdrawing the analogy to employ minutes and seconds. The comparison between time clocks and music also breaks down because there is no real equivalent to the 24 hour day in music beyond the comparison to two octaves. If we could hear a range of fourteen octaves one might make a trivial analogy to the week.

While musical frequencies expressed in cycles per second increase geometrically with each octave up in pitch ($A = 110, 220, 440, 880$, etc.), on a modulo-12 clock or 1200 cent logarithmic scale the note values increase arithmetically by 12 or 1200 for each octave, respectively. The arithmetic scale makes mental computation and transposition practical, so that it is possible to compose using modulo-12 numbers. Many composers have done so, and although some theorists object to intervals having the same names as notes, the method has its advantages.

The clock has interesting and useful properties in number theory. One is shown by imagining a vertical line from 0 to 6 as a "mirror" that reflects notes from one side of the clock to the other, horizontally. Thus, the Vth is horizontally opposite the IVth if you draw a line across the clock to connect the mirrored 7 and 5. Now add the two numbers on any horizontal row; they always equal 12, i.e. $11 + 1 = 12$, $10 + 2 = 12$ and my favorite $9 + 3 = 12$, etc. Just as the values opposite one another on a clock face add to 12, when thinking of musical intervals, any given value down in pitch corresponds to its horizontally-opposite number up in pitch, and vice versa. Thus one semitone up yields the same note as eleven semitones down (though in another octave), and so on for the rest of the horizontal pairs. This is what is meant by "non-dual" intervals: they can be thought about without respect to direction in pitch by this method.

It might appear trivial that the distance clockwise from the top of the clock to a given point, when added to the clockwise distance from the top to the point horizontally opposite, should give the circumference of the

circle. But its effects are nontrivial—they show the "mirroring" implicit in Mercury's caduceus. This mirroring points up philosophical and even theological questions. The horizontal correlation of intervals and their inversions on the clock face shows how duality reasserts itself, often in unexpected ways that are arguably integral to music theory. One of Crowley's most important esoteric doctrines—his initiated solution to the ancient nihilism/monism/dualism arguments and ultimately the problem of evil itself—teaches that dualism is a characteristic of the world of manifestation. Hardly novel, but Crowley was not your garden variety antinomian gnostic. He went further, teaching that dualistic ideas can be transcended by a process analogous to Hegelian dialectics—what he termed the "0 = 2 Formula," i.e. $+1 + -1 = 0$, where 0 forms the new positive or negative term of a new equation. As the star-goddess Nuit says in *The Book of the Law*: "For I am divided for love's sake, for the chance of union." (*Liber AL I:29*). "The Perfect and the Perfect are one Perfect and not two; nay, are none!" (*Liber AL I:45*). This dialectical synthesis continues until one transcends both human rationality and manifestation, crossing an Abyss beyond which is an ideal world transcending duality in which any true thought contains its opposite. One can catch glimpses of this process at work in particle physics as well as music theory.

Coming on the heels of the renewed interest in Neoplatonism and esoteric music theory, the young Descartes studied the works of his predecessors and near-contemporaries, especially music theory. No stranger to questions of duality, he used interval-divisions of the circle to illustrate his first complete work, the *Compendium musicae* (written 1618, published 1650, English trans. 1653). In a famously confusing passage, he discussed the fourth as the "shadow" of the fifth; it seems reasonably clear that he was fully aware of the symmetry of the intervals and their inversions, and his diagrams show that he understood how they could be mapped on a circle. He also introduced the notion that the higher ratios were included in the fundamental from which they derived, prefiguring the later discovery that a vibrating string includes its subtle harmonics in its sound envelope, the same harmonics that the Pythagorean monochord was used to isolate.

Mapping the western major scale onto a clock with C at the top will make the fourth mirror the fifth of the major scale, but will not fully explain interval symmetry. To do this we must return to the ancient Greek Phrygian mode, equivalent to the mediaeval ecclesiastical and modern Dorian mode.

An approximation in equal temperament is the scale from D to D on the white keys of a keyboard. This was probably the first full scale described in Western music theory, in the *Etymologiae* of Isidore of Seville, dating from around 700. Later mediaeval church theorists considered it the first of the ecclesiastical modes, and the last great mediaeval theorist, Bartolomeo Ramos de Pareia, attributed the Dorian mode to the Sun. Kepler and Newton, in describing their correlations of scale intervals to colors, also chose this scale. All must have been aware of its natural symmetry.

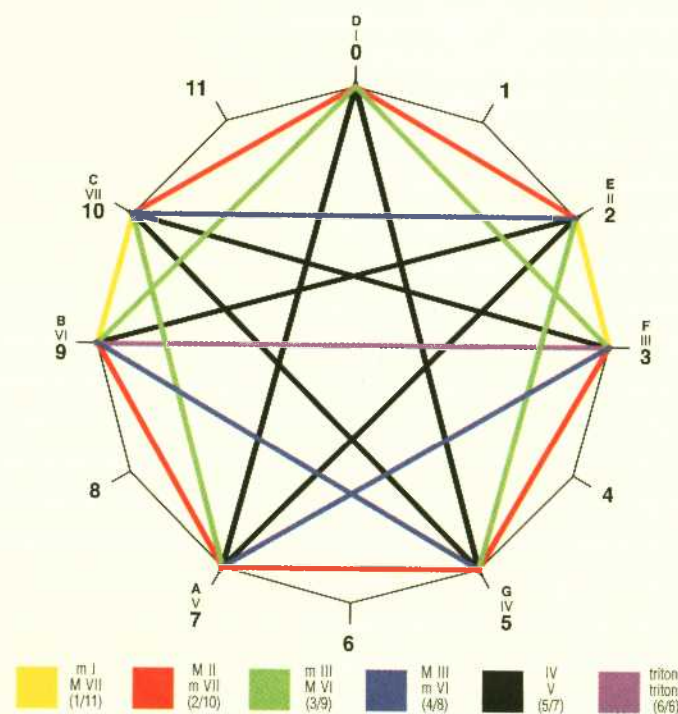


Figure 8.

To illustrate the interval symmetry of this scale it helps to give the non-dual intervals as colored lines connecting the notes, as in Figures 8 and 9. Each non-dual interval is given a unique color, keyed to the legend given in Figure 8. The scale is mapped onto a clock with the D at the top position. (Note that both figures also show the C Major scale, but D is placed at the top to exploit the natural correlation of the clock to the D mode's internal interval symmetry.) The notes are identified by modulo-12 number (0-11),

note name (D through C), and by the I-VII note convention, where 0 = D = I. As explained earlier, intervals are not understood to be "up" a certain number of tones or "down" a certain number of tones, but instead are "non-dual," understood as simultaneously "up" one number and "down" the corresponding inverse number, or vice versa.

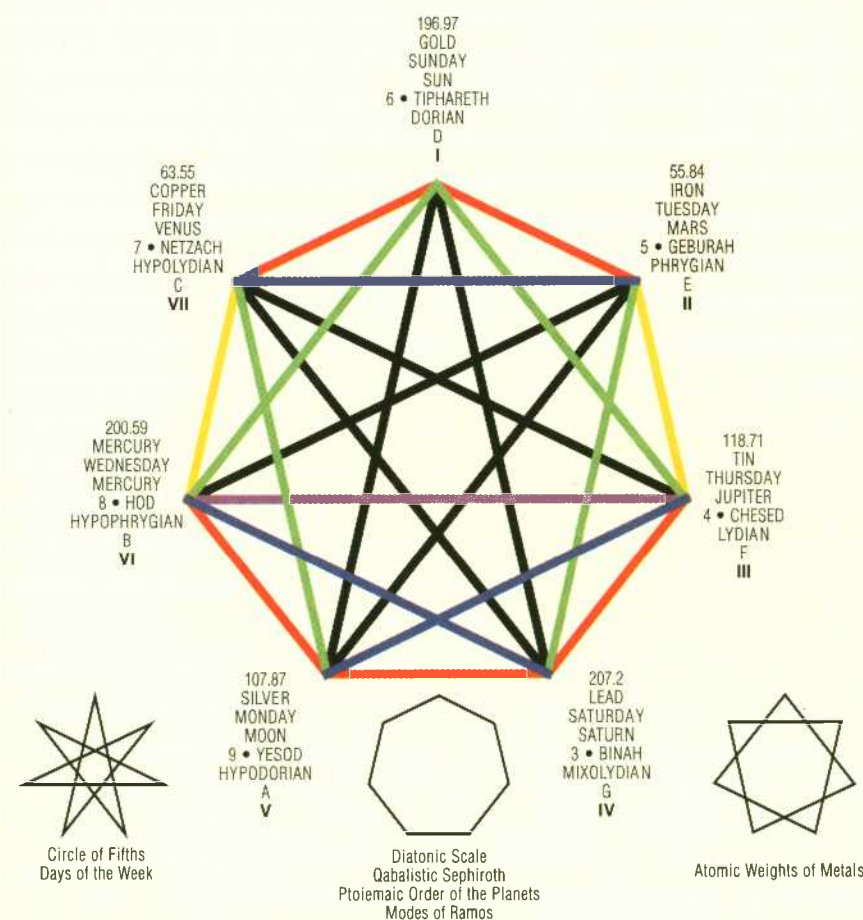


Figure 9.

Visualizing the intervals in Figure 8 as colored lines connecting points on the clock permits a mathematically accurate geometrical understanding of the spatial relationships of the tones in an "idealized" single octave that disregards inversions. This diagram can help one to form an intuitive understanding of how interval inversion works in musical space (the octaves) without losing

An approximation in equal temperament is the scale from D to D on the white keys of a keyboard. This was probably the first full scale described in Western music theory, in the *Etymologiae* of Isidore of Seville, dating from around 700. Later mediaeval church theorists considered it the first of the ecclesiastical modes, and the last great mediaeval theorist, Bartolomeo Ramos de Pareia, attributed the Dorian mode to the Sun. Kepler and Newton, in describing their correlations of scale intervals to colors, also chose this scale. All must have been aware of its natural symmetry.

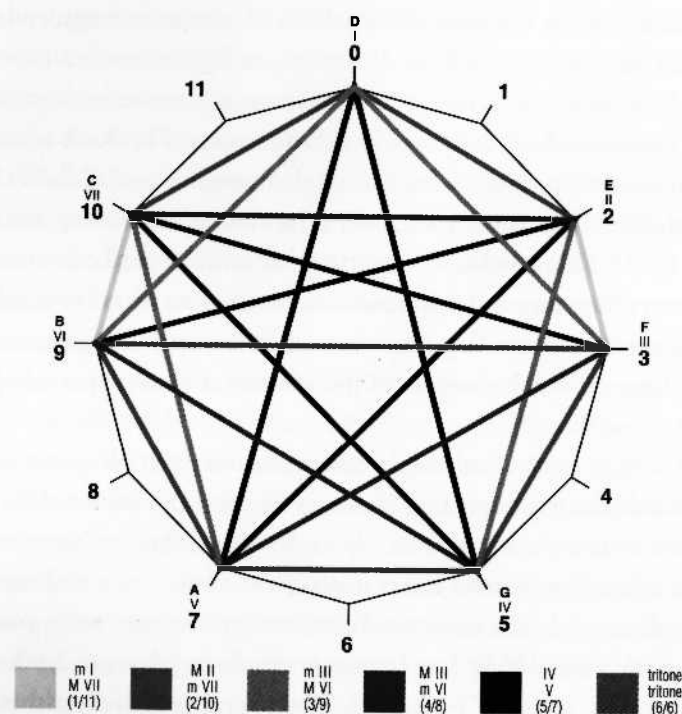


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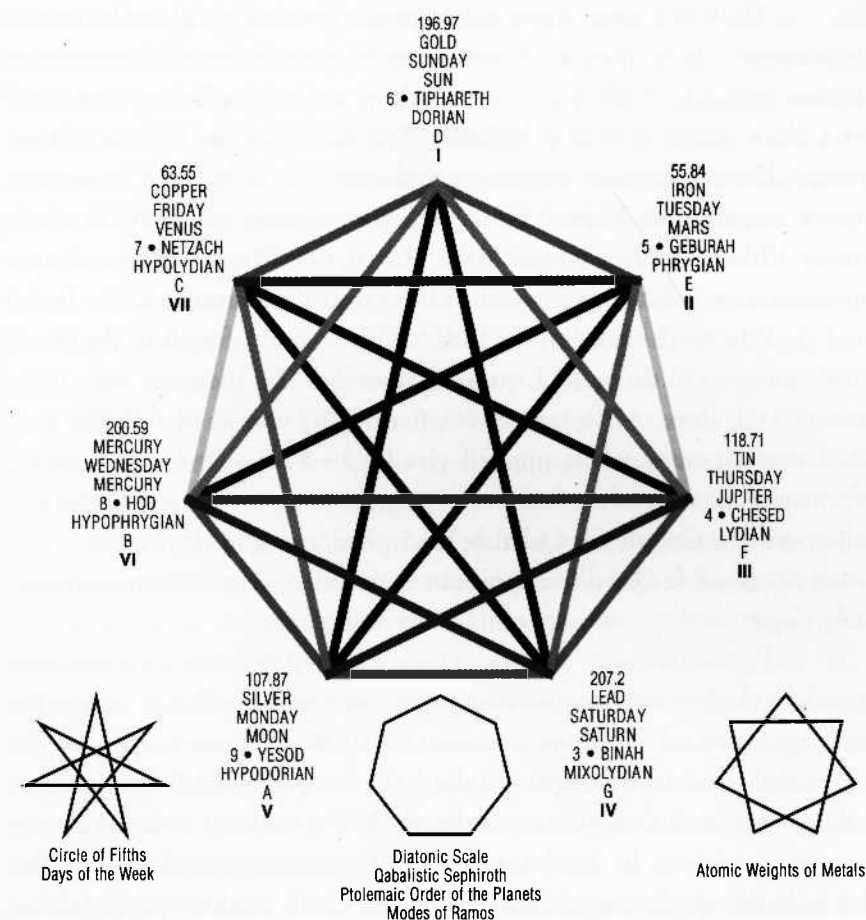


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sight of the simplicity of the underlying “abstract” (non-dual) intervals. It gets around the complexities of chord inversions—clearly an oversimplification, since the same note behaves very differently depending on its pitch placement in a chord or melody, but a useful simplification. These sorts of clocks may be used to analyze many musical problems such as chord triads without the complexities introduced by inversion, voicing and arrangement.

The scale’s interval counts and properties are highlighted by another phenomenon in number theory—one inherent in the diatonic system with or without a clock model, though the non-dual graphic representation of a clock makes it readily apparent. The diatonic scale has one tritone (which, like all non-dual intervals, is understood as including its inversion, also a tritone), two Major VIIths (with their inverse minor IInds), three minor VIths (with their inverse Major IIIrds), four Major VIths (with their inverse minor IIIrds), five minor VIIths (with their inverse Major IInds) and six Vths (with their inverse IVths). This accounts for all of the “non-dual” intervals in the scale. Expressed in modulo-12, they are: one of 6/6, two of 11/1, three of 8/4, four of 9/3, five of 10/2 and six of 7/5. The non-dual interval counts, when summed, give $1 + 2 + 3 + 4 + 5 + 6$, or $\Sigma 1-6 = 36$, the magical number of the Sun. Such “magical numbers” are considered significant in the Crowleyan Qabalah; see *Sepher Sephiroth* (1912), §36. Aside from any possible Qabalistic significance, the full interval system is undeniably elegant in the symmetry of its interval distribution.

Figure 9 is a simplification of Figure 8 that distributes the seven notes around a clock of seven equidistant points on a modulo-7 clock, where the octave is expressed in diatonic notation (I–VII). We all know how to do simple modulo-7 arithmetic, again thanks to the Sumerians and Babylonians, in this instance because of their seven-day week. The intervals are in equal temperament as before. Its disadvantage is that the accurate spatial relationships between the equally tempered tones are lost. There are three ways of doing this sort of diagram of seven points, e.g. with the fifths moving clockwise to every point, every other point, or every third point. Each yields a different arrangement for the same attributions. There are also several ways of distributing the attributions with a chosen arrangement; I prefer the version given in the diagram as it derives from the previous figure, and keeps the scale a simple clockwise circle. Added to this figure are correspondences for seven of the ten sephiroth of the Qabalistic Tree of Life, their associated planetary attributions in Ptolemaic order, the associated days of the week, the metals associated to

the planets, and the atomic weights of the metals. Also included are the mediæval modes, as attributed to the planets by the founder of Just intonation, Bartolomeo Ramos de Pareia, from his *Musica Practica* (1482). These are all traditional attribution systems, most of which have been correlated before in alchemical and magical literature, though this is probably the first diagram to harmonize all of the systems represented. Some modern magical theorists have tried to directly absorb the outer planets Uranus and Neptune, and sometimes Pluto, into a comprehensive system of attributions. I agree with Crowley’s position that the septenary should be preserved, as explained in his *General Principles of Astrology* (2002). He treated the then recently discovered outer planets as “superior governors” that modified the seven classical “personal” planets, considering their energies to be essentially transpersonal.

In equal temperament, twelve fifths or fourths either up or down in pitch form a circle that will bring you back to the note you started from. But with nontempered fifths and fourths, there is no circle. The circle never closes; a discrepancy of just less than two cents (an irrational number, 1.955...) accumulates with each interval jump, so you never return to the starting note.

Figure 10 is an expansion of Figure 8 to show Just/Pythagorean microtuning. Unlike Figures 8 and 9, the connecting lines in Figure 10 show only untempered non-dual perfect IV/V intervals, with each of three independent cycles of perfect IV/V intervals given in a different color. The purpose of this diagram is to show the symmetry of the multiple cycles of fifths or fourths in the context of a circular map of the Just/Pythagorean notes. It helps one appreciate at a glance how three independent and symmetrical cycles make up Just/Pythagorean tuning, which is not obvious from a table of pitches and ratios.

Figure 10 also illustrates how the Pythagorean pitches, derived from the third harmonic (the Vth, ratio 3:2, and IVth, ratio 4:3), all fall into a single connected series that proceeds in both “directions”—up and down in pitch by fifths and fourths simultaneously (and symmetrically) from 0 at the top. This is represented in the clock diagram by the pattern of interval lines running from the top and splitting to trace the two mirrored branches of this series, ending in the tritones. These fifths/fourths are all shown by lines of the same color (purple). Just pitches were introduced because the Pythagorean IIIrds and VIths were judged too harsh. They all derive from

the fifth harmonic (the Just Major IIIrd, ratio 5:4, and Just minor VIth, ratio 8:5), and form two independent but mirrored cycles of fifths, given as green and red lines in the diagram. One Just cycle starts with the Just Acute IV and the other with its mirror, the Just Grave V. (They can also be thought of as starting on the Just Major IIIrd (ratio 5:4) and Just minor VIth (ratio 8:5), and proceeding up and down in fifths simultaneously until reaching their endpoints.) Both cycles end in the tritones, just a very small ratio (the *skhisma*, 1.953 cents) distant from the endpoints of the Pythagorean cycle. (The *skhisma* is defined by its discoverer, Ellis, as one Just Major IIIrd plus eight fifths up in pitch, transposed into the same octave.) The notes of the two independent, mirrored Just cycles thus have harmonic relationships to the pitches in the Pythagorean cycle that are primarily based on Just Major IIIrds (4:5) and Just minor VIths (5:8).

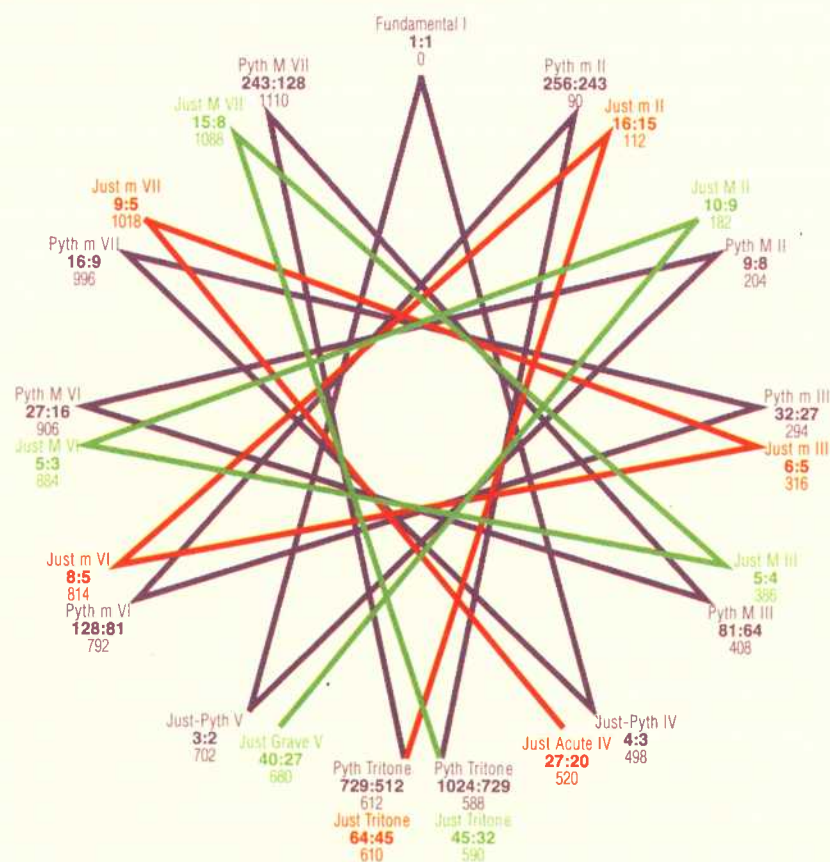


Figure 10.

The resulting diatonic Just/Pythagorean scale thus has four versions of the II, III, VI and VII (Pythagorean minor, Just minor, Just Major, Pythagorean Major), rather than the usual two (minor and Major) familiar from equal temperament.

It is often said that the tonic–subdominant–dominant are the most harmonically stable diatonic tones. Even when understood as being centered on the D mode, this diagram shows why, and underscores the simplicity of the I–IV–V 12-bar blues progression and its stability in natural tuning. Even when equally tempered, the I–IV–V series falls sufficiently within the limits of human pitch discrimination to approximate microtonal Just/Pythagorean tuning. Making a copy of the diagram as a transparency and rotating the copy over the printed diagram to the fourth or fifth shows why: the I, IV and V all have their own harmonic series, and these interlock.

III

Amazing work is being done today by microtonal composers and performers of all persuasions, but most of this music requires an extremely high degree of training to play properly. Indian music has long shown that one can play great microtonal music one microtone at a time. I believe that the blues show this as well. It is not necessarily more difficult than tempered music.

The magician-in-training is urged to observe the four powers of the Sphinx: to know, will, dare and keep silent. The present paper is primarily concerned with the first power, to know. The maps to the territory offered here are intended to help players gain a working knowledge of music theory without being overwhelmed by its particulars, which can inhibit creativity.

The second power, to will, relates to intention: knowing a system and using it with intent communicates that intentionality in the resulting music. Even when the execution is imperfect, it counts for a great deal.

As for the third power, to dare, free-pitch playing in microtones is inherently risky. But many musicians do it very properly all the time, often without really thinking about it. It may be, with will, more reliable in the last analysis than knowing.

As for keeping silent, this is normally prudent. Magick is an inherently private matter, and it is so easy to be misunderstood that it is usually wise to say as little as possible or nothing at all. Tacit understanding has always been part of the etiquette among magicians. There is little shop talk,

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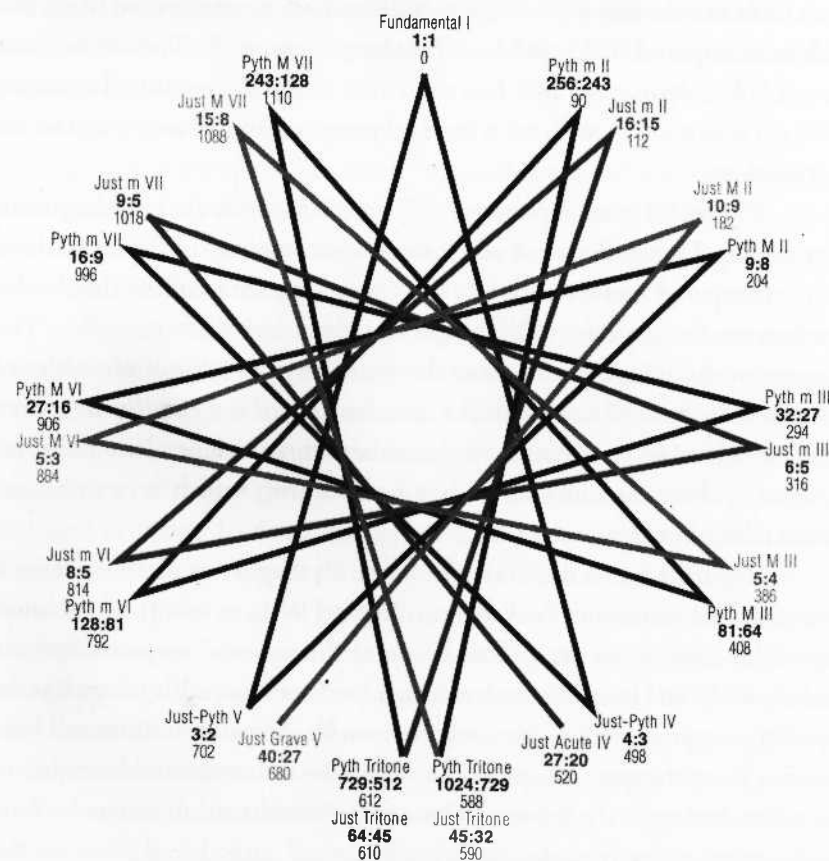


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and often subtle hints of shared experience suffice to establish a mutually respectful camaraderie. Also, by talking too much one runs the risk of being a bore—like dreams, drug-trips and genealogy, personal magical narratives are generally only of interest to their subjects. Finally, those who profess magick have always courted ridicule and marginalization; these days, it usually comes from rationalists who will never have the experiences that distinguish magicians from noninitiates. The worst offenders used to be Protestant theologians; nowadays they are more likely to be poststructuralists.

But it is a New Aeon; so perhaps for musical magicians the formula is to know, to will, to dare, and to *play loud*. Recent history suggests as much.

This paper is dedicated to Joscelyn Godwin, whose untiring work in explicating the Perennial Tradition has benefitted so many—at least those with eyes to see and ears to hear.

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ORNITHOLOGY FOR THE BIRDS

GAVIN BRYARS

There is a degree of fear in trying to look at the inner workings of one's own creative mind—a fear that this self-reflection will inhibit and ultimately prevent the flow of ideas—the oft-stated reason for the resistance of non-reading musicians to studying notation, for example, and thereby accessing written scores is an aspect of the same fear. In my own case a refusal to use, by now, relatively straightforward computer software for musical composition is related to that same anxiety (though I can happily justify my antiquated practice with reasons that make sense to me).

The most poetic expression of this situation comes from the painter Barnett Newman who, in Emile de Antonio's wonderful film *Painters Painting*, says "aesthetics for an artist is like ornithology for the birds"—and he is right. If a bird were to start to focus on why and how the wings work, and the sequence of events that produce elegant flight, it would either fall from the sky, or never get off the ground. It is partly, however, a question of speed of thought in relation to action that would cause the malfunction but not the thought itself, or the acquisition of self-awareness.

When I stopped working as an improvising musician in the mid-1960s, after an intense period of work with Derek Bailey and Tony Oxley, it was in order to work in a more reflective way—without the intensity being in the midst of fast, decisive music making. I even developed for a time an almost pathological aversion to improvised music, which I view in retrospect as a somewhat adolescent reaction where I pointed the finger at the music rather than at myself—a bit like the old Zen adage of confusing the moon and the finger in the act of pointing. I did find the two musical activities, composing and improvising, to be fundamentally different. I neither found one to be a slowed down version of the other, nor the other to be an accelerated version of the first. In each case, and in

different ways, there is considerable mystery in the process of musical invention, and though the term "invention" might seem a little mechanical, it was one used by Bach about his own music, and by Schoenberg speaking of John Cage.

In the case of improvisation, there is little time for reflection on one's mental state, rather it is a question of being in the right condition before embarking on the activity, though having some degree of consistency with previous work. With composition, on the other hand, that consistency can come about through a set of beliefs or procedures, whether conscious or not.

In the worst cases this can result in predictability, in the case of improvisation, or formulaic routines in the case of composition—and we can all point to individual cases in both areas. For composers there can be external and seemingly irrelevant elements, almost like a kind of lucky charm or fetish. In my own case I have used the same kind of pencil for twenty-seven years (I work with pencil and paper), called an Aztec Scoremaster 101, only available at Associated Music on West 55 Street in New York. When that shop closed down a few years ago the pencils disappeared and I am now down to my last half box. In a similar way, there is the establishment of routines.

But these are the mechanics of composition, not its essence. Ultimately what one sets down on paper, as a composer, can come about in many mysterious ways. For myself I let the form compose itself, like a Renaissance composer, without any sense of formal planning or preconception, only being led by the consequence of each musical gesture—which can itself be led by text in the case of vocal music. A phrase which an old friend Albert Pountney, a traditional sculptor and the head of the fine art department in which I taught for a number of years, used to use to describe the moment in the studio when facing the work in hand, was being "confronted by one's own creativity." I found it a somewhat quaint expression at the time but subsequently realized that it describes perfectly that moment of sitting at a desk in front of a blank piece of manuscript, when the idea of letting the music compose itself, moving from one gesture to another, is the only way possible.

The university philosophy department in which I was a student specialized in what was called "ordinary language" philosophy. When ideas are complex the last thing one needs is confused language. Ultimately,

if something could be expressed through language then we wouldn't use music, where the blending of apparently incompatible elements can produce a new and unforeseen reality that would be inconceivable to the ornithologist.

REGARDING THE SONIC SYMBOLISM OF WHEN AND WHERE

STEVE COLEMAN

The purpose of this article is to discuss and demonstrate how musical symbolism can be used to generate a feeling, sensation or idea that is of a metaphysical nature. The focus will be on concepts of dynamic equilibrium that exist in Nature which can be reflected through musical languages. Examples will demonstrate how symbolic thought in one field of study is applicable to another. The basic approach is that creative artists can use everything at their disposal, including—but not limited to—music, myth, science and various exoteric and esoteric approaches. Exoteric means capable of being understood by most people, while esoteric is that which is difficult to understand, or that which is intended for or understood by only an initiated few. There are quite a few esoteric references in this article, and admittedly, this is not everyone's cup of tea.

Nature

"Our philosophy is celestial, not worldly, in order that we may faithfully behold, by means of a direct intuition of the mind through faith and knowledge, that principle which we call God...." —Trithemius¹

We will start with a discussion of what I perceive as the approach of Nature towards creating, a concept I refer to as windows or orbs. There are many definitions of the word orb, but in astrology an orb is the number of degrees that an aspect deviates from an exact angle (between two planets or dynamic points in space) that symbolizes an astrological effect. This concept, which appears everywhere in Nature, is based on windows of time and space, occurring on every scale from the microscopic to the macroscopic.

1. *George Ripley and the Abbot Trithemius* (Noel L. Brann, *Ambix*, vol. 26, no. 3), pp. 212–220, 1979. Johannes Trithemius authored a major work on cryptography and steganography, disguised as a book on magic. He was also the teacher of Heinrich Cornelius Agrippa and Paracelsus. This quote is from Johannes Trithemius' commentaries on the *Tabula Smaragdina* (The Emerald Tablet), in a letter to Germanus de Ganay written on August 24, 1505.

The tendency of the human species is to quantize, as the mind divides its analysis of nature into discrete increments. Nature seems not to work in this manner, as most phenomena are part of a continuum, in which the quality of phenomena change gradually over time. Even the human body works this way, as humans are but a product of Nature.

Human activity that develops along natural lines tends to operate according to the same principles. If one could walk from Paris to Berlin, one would not encounter an artificial national boundary where the spoken language would suddenly change from French to German. What occurs is a gradual transition from one language to another, and inevitably there would be a region where the spoken language would contain elements of French and German proper. In fact, what is called English is an ideal. The actual spoken dialects that classify as English resemble the ideal in various degrees, but contain a large amount of slang, in addition to loan words and expressions that originate from other languages. In many cases, different languages stem from a common ancestry that is itself a combination of several more ancient languages. The boundary between languages are mutating orbs, moving windows where there is a gradual blend between linguistic ideals. This is what I call the *merging principle*. Over time, this blending of languages may develop a character of its own, distinct enough to be itself called a dialect or even a distinct language.

What is really happening with the merging principle is *modulation*. Cleonides states that "[...] it is necessary for every modulation to contain some common note, interval, or scale".² And all musicians know that good (i.e., smooth) modulation usually involves some sort of common elements between the structures involved in the movement, along with elements of the structures being within a certain proximity to each other to facilitate smooth motion between transitions. This is generally what happens in Nature, for example with the transition from one identifiable state of the weather to another. Using this concept we can imagine not only modulation of harmony, but also modulation of melody, of modes, of rhythms, of rhythmic cycles, of tempo, of instrumentation, of forms (rhythmic, melodic or compositional), of color, of symbolism, of ethos, genera, species, etc.

Other examples from Nature follow this same principle. There is no sharp demarcation between wet and dry, there is only a gradual scale of rela-

2. *Strunk's Source Readings in Music History* (edited by Oliver Strunk, 1950, revision edited by Leo Treitler, 1966), p. 45.

tive wetness and dryness. Most of us have in our minds an ideal of what we would call wet or dry, but there are also conditions where there would be a lot of disagreement. The same is true of color, pitch, heat and many other phenomena. So what humans do, either by agreement or by force, is to specify an ideal which defines a particular phenomena, and what that ideal should be named (for example a definition of what exact pitch is to be called A). Groups of people then establish symbols (words, numbers, shapes, etc.) that represent these ideals. For instance, modern scientists define the exact moment of sunrise or moonrise, and use the language and symbols of mathematics to describe this agreement. But these agreements change over time and vary in different cultures.

This is not reality, it is based on what is established by convention, cultural usage or other means. The Universe is a *continuum*, and the human faculty that seems best able to directly come to terms with the relative quality of the continuum is intuition, which is best represented in transcription by some form of symbolism. As an example, musical performers for the most part do not rely on scientific definitions to tell them which pitch is A or A[#]; this is done using the part of the mind that interprets data from the ear, using memory to compare the experienced pitch to images held in the mind of recently heard pitches, or remembered pitches from past experience. This is a relative operation that to a large degree is internalized.

These mental images are symbols that represent the physical world. When the symbols represent figures that can be seen by the eye, they typically take a form that is close to the physical object that they represent. Similarly, when the symbols represent objects identified by one of the other senses (sound, smell, touch, taste, extra-sensory perception or any imagined experience), then the mind uses association to identify symbols with the physical sensation, and much of this imagery is acquired through cultural exposure. For example, high and low pitches are today represented by symbols that are physically higher and lower in terms of two-dimensional height, especially if as a beginner a musician simultaneously learned how to read and play music. However, according to surviving written evidence, the ancient Greeks represented high and low pitches as tense and relaxed respectively. In the music of the ancient Greeks, these pitches may have been associated with the action and means that produced them, where tense vocal chords or tense strings would represent higher pitches, and *slack* strings represented lower pitches.

This idea was continually extended, where humankind developed

the ability to represent a symbol or group of symbols using another symbol, and then to repeat this process—creating an abstraction whereby the final symbol is several levels removed from the original physical sensation. Symbols were then transcribed into physical form and came to represent ideas of a more abstract and esoteric nature. In many cases, the symbols could still be traced back to the original association. The ancient Egyptians were masters of the transcription of mental images into symbolic form, and their hieroglyphic writing system was a particularly advanced demonstration of this. These ancients seemed to have a multidimensional conception of time, and our current systems of navigating time have their roots in Egyptian temporal concepts. The Egyptian civilization developed various calendars and methods of negotiating time that are still in use today, such as dividing the day into twenty-four hours and the sky into thirty-six 10° segments (i.e., 360°). If we take their developments together with the neighboring Mesopotamian culture (Sumerian, Babylonian, etc.) we arrive at a combined technology that was very advanced in the ways that it dealt with time and space, in both its exoteric and esoteric forms.

Rhythm

"Any regularly recurring pattern of activity such as the cycle of the seasons, night and day, the repeated functions of the body—or the characteristic pattern of a particular activity."³

3. *Encarta World English Dictionary*,
Microsoft Corporation.

Rhythm falls in the category of *when*, and is related to timing and speed (fast and slow), i.e., location and movement through time. Something that has really helped me in the area of rhythm is the metaphysical connection. I work a lot with astronomy/astrology, seen in ancient times as Nature's rhythmic system (i.e., natural rhythms), and I've been applying what I have learned to music, tonally and rhythmically. One way of thinking of this is an approach of dealing with rhythm which could be broken down into three categories:

Utterances: I include language in this category, as well as the calls of animals.

Movement: Not only dance, but all movement, the movement of animals, plants, melodic substances (tones, intervals, pitch structures, etc.) and any other objects, such as planets and stars.

Symbolism: I include numbers in this category, but also geometric shapes, color, and any other idea that is representative of something, including writing and notation. I call this the mental aspect, as it aids in the transcription of rhythm, a way of holding the rhythmic forms in your mind.

I would say that the first two are innate to the object in the outer physical world, and the third is the province of the mind, the inner world. However, they can all be systematized and converted to symbols.

Regarding the first, we are made (by Nature) to be able to create *utterances*, as are animals, plants and other animate objects of the natural world. How these utterances are interpreted is another matter. Language is a subset of these utterances, and formal language is just the part that has been agreed upon. One example would be the rhythmic utterances of crowds, which I find fascinating. At a sporting event, the rhythms and reactions of the people in the crowd feel like the sounds of a single organism, as the members of the crowd become entrained to each other's pulse. I frequently find myself rewinding a recording of a boxing match or basketball game to listen and check out the rhythm of the spectators' responses. When humans get together like that in large groups, they really remind me of animals that gather in large herds and create collective utterances, birds, cows, horses, whatever. But this kind of thing is very difficult to systematize and notate, and therefore difficult to symbolize.

Movement is present all around us and in us; everything moves. Dance is a form of systematized movement by humans, and it can sometimes have symbolic significance. Movement can also be a form of aid to language, for example the use of gesture to assist in conveying meaning. As with utterances, many movements are habitual and seemingly meaningless. But utterances and movement are innate to us; even as babies we make utterances and we move, even if it is just a reflex, and most of these movements have meaning even if we are not conscious of it. The same follows for animals, plants and even objects like planets.

The principles underlying utterances and movements have been studied and, through the process of correlative thought, symbols have been developed to express and transmit the fundamental concepts. This is one of the unique abilities of the human species, to be able to develop symbols using intuition, emotion, logic and analogy, and then to use these symbols as tools to extend the understanding of a principle. Many of these symbols

already exist in nature, including types of movement, geometric shapes, colors, sound, light, the animal, plant and mineral kingdoms, qualities such as heat, cold, moisture and dryness, the natural elements such as fire, air, earth, water, and the Sun, Moon, planets and stars and their stellar motions. Long ago, humans made associations that both extended the idea of these objects to facilitate correspondences with other concepts, and made further abstractions to connect to new ideas.

Symbolism, particularly geometric shapes, colors and numbers, is one of the most used and flexible of the abstract forms. Symbol is important for meditation on the higher principles and for developing a conscious connection to Nature. But we should never forget that these symbols are just tools to help us connect with ourselves and to communicate with others—an aid in the organization and transmission of ideas. We are the source of the symbols, and the symbols are meaningless without us.

Numbers are symbols that can represent quantity and/or quality. It is a great tool for representing *displacement*, the perception that the position of something has changed with regards to location and time (temporal perception). In other words, we are dealing with the concept of change and how this can be symbolized, and change is universal, everything changes and everything moves. If there is a change in the location of something, and if we are able to systematically organize the space where the change took place, then number is a great tool for representing that change. As a result, number is also one of the primary symbols used to aid in the organization and expression of music.

In the musical perception of rhythm—indeed in all perception of rhythm—we have certain primary elements, the rhythm, and that which is being rhythmicized. This is comparable to motion and that which is being moved. Rhythm is a dynamic principle that deals with the order and structure of motion, or dynamic displacement, of a moving thing.⁴

With rhythm, we are also dealing with the form of the template we create, against which we discern and measure the movement, and this template can itself change or move.

Musicians use the template to describe the rhythm, the order and structure of the dynamic displacement. In music, this template takes many forms, the most common being evenly (or unevenly) spaced pulses that are then grouped into various units: measures, rhythmic modes, meter, talas, clave, other rhyth-

4. A rephrasing from *Aristoxenus on Rhythm* (Lewis Rowell, *Journal of Musical Theory*, vol. 23, no. 1, Spring 1979) p. 68.

mic figures, etc. This is similar to how pitch is organized in music, where evenly or unevenly spaced pitches (i.e., tuning systems) are then further systematized as tetrachords, modes, scales, ragas, other melodic figures, etc.

So we have three elements here: rhythm, the thing that is being rhythmed, and the template we use to identify and measure the rhythm. The first two exist in the natural world, the third is a creation of our imagination to help us discern the dynamic order.⁵

5. A rephrasing from Rowell, p. 67.

Rhythm is probably the most dynamic element in music. According to Lewis Rowell, the ancient Greek philosopher Aristides Quintilianus "called melody the passive, feminine aspect of music, rhythm the active, masculine principle that imposes form upon the melodic tones. This agent/patient principle was the cornerstone of the Peripatetic theory of perception."⁶

6. Rowell, p. 70.

The function of musical rhythm depends upon the dynamic relationships between rhythmic substances with each other as they move through time in space concurrent with the relationship to idealized forms in the intellect and memory. If we can discern rhythmic function, analogous to the functions of pitch in melody and harmony, then it should be possible to apply further esoteric symbolism to rhythms and rhythmic structures (two different phenomena).

In the words of Henry Macran, referring to the 4th century BCE Greek writer Aristoxenus, "[...] they (the Pythagoreans) missed the true formal notion of music, which is ever present to Aristoxenus, that of a system or organic whole of sounds, each member of which is essentially that it *does*, and in which a sound cannot become a member because merely there is room for it, but only if there is a function which it can discharge."⁷

Later, we will return to the idea of using rhythm as symbolism to transmit ideas. This is not a new concept, as this kind of work was devel-

7. *The Harmonics of Aristoxenus* (Henry Macran, 1902), pp. 88-89.

oped to a high level in the great riverine societies of the Nile Valley Complex, Mesopotamia, and Sarwaswati Indus Valley Civilizations. The initiated in these great civilizations developed the basic principles of negotiating time and space that we still use in our modern societies thousands of years later. They also developed the basic symbolic approach for how to communicate these ideas. These ancients appear to have taken an exoteric and esoteric approach in dealing with symbols. It was important not only to know the quantity of something but also its quality and meaning.

Esoteric significance was given to figures, using colors, shapes and numbers. Using this information, various divinatory practices developed.

In different areas on Earth people developed a variety of approaches to divination, largely based on cultural needs and environmental necessities. This led to distinct forms of divination being developed in particular locations. The word *mancy* means *divination by means of*, with the specific kind of divination being specified by attached prefixes, for example geomancy, sciomancy, chiromancy or necromancy. Although many people do not believe in divination, most of the world's major religions have some aspect of divination as a part of their history, foretelling events that will come to pass.

In ancient societies there was an exoteric and esoteric part to almost every subject, and frequently divination was a part of the esoteric application. In his 1962 book *The Tarot*, Mouni Sadhu, while discussing the ancient initiatory centers' transmission of the highest ideas through symbols, suggests that "the symbolism of colors" is "a feature of the initiation of the Black races," "the symbolism of geometrical figures and cards" is a feature of the initiation of the "the Red-Skinned races," and "the symbolism of numbers" is a feature of the initiation of "the White races."⁸ Although his summary is simplistic and not backed up with any examples, and while his choice of words would probably not be politically correct today, I understand the basic principle underlying what Sadhu is expressing. In studying music, I have noticed that various cultures in different places on the planet have for the most part concentrated on and contributed different elements to the world's music. This is particularly true if we concentrate on the so-called *Old World* cultures on the continents of Africa, and Eurasia.

Astrology

I will devote more space to this subject here as well as in the section on music, as these disciplines are complex and related. Also, it has been my experience that it is this subject that relates most to music, both from an exoteric and esoteric perspective. It is also a subject that many people are unfamiliar with. While I do not pretend to be a professional astronomer or astrologer, the study of the movement and symbolism of celestial bodies has been a profound influence on my music, particularly in recent years. To emphasize this connection, I will occasionally mention the relationship between astrology and music, both in this section and in the section on music below.

The first forms of astrology arose from systematic observations of the night sky, the earliest type probably being some form of lunar astrology, based on the phases and movements of the Moon. It appears that a form of what the ancient Greeks called *paranatella* (meaning with or alongside the stars) was developed, where the ancients noticed which stars and planets were rising, culminating or on the meridian simultaneously.⁹ This technique was certainly well developed in ancient Egypt and Babylon, and the ancient Greeks learned of it from these earlier civilizations. This was a system based on the horizon and meridian, and of course it was geocentric in concept.

The *heliacal rising* (literally, rising with the Sun) of a star is when a planet or a star is first seen to rise after it has been hidden for a period of time by the Sun's rays. This occurs just before sunrise. The heliacal rising of the star Sirius was extremely important in ancient Egypt, but this concept was also used with other stars, constellations and planets in a complex system of astronomy, the workings of which are beginning to be revealed by recent discoveries.^{10, 11}



Figure 1. Image from the Second Shrine of Tut-ankh-amun.¹²

Some evidence of the existence of astrology has been found in the tombs of ancient Egypt. (See Figure 1.) Astrologer Bernadette Brady believes that the ancient Egyptians considered the last star to rise heliacally before your birth to be the main star ruling your life.¹³ This was the star that you were *born under*, and it symbolized the gifts that were bequeathed to you

9. Great significance was given to moments when stars or planets were either on the local horizon (i.e., rising or setting) or on the meridian (the great circle which passes through the north-south axis and the zenith). Therefore, when ancient observers noticed that a star or planet was either rising, setting or on the meridian—at the same moment when another star or planet was rising, setting or on the meridian—then these bodies were said to be in *paran*, and where considered to be symbolically connected in some way.

10. For more information see *The Naos of the Decades: Underwater Archaeology in the Canopic Region in Egypt* (Anne-Sophie von Bomhard).

11. *The Lion Path: You Can Take it With You* (Musaïos, aka Dr. Charles Muses, 5th edition 1996).

12. Musaïos, back cover. The image in Figure 1 is one of many that support the claim that astrology existed in ancient Egypt. In *Serpent in the Sky*, p. 91, John Anthony West writes "But however puzzling the text and the reliefs, the astrological significance of this drawing cannot be misunderstood. Rays of force or energy connect the consciousness of the human individual and the stars; there is no other possible interpretation of this figure."

13. *Brady's Book of Fixed Stars* (Bernadette Brady), pp. 43, 334, 345, 339, 381.

by your ancestors (such as genetics)—in short, this star symbolized the theme of your life.

For example, at the location of Ulm, Germany (Albert Einstein's place of birth), the last star that rose heliacally before the time of Einstein's birth (March 14, 1879 NS) was Deneb Algedi (meaning *Tail of the Goat*) in the constellation of Capricorn. This star symbolized the *Ancient Law Giver*. The approximate time of Deneb Algedi's apparent (visual) Heliacal Rising was March 5, 1879 at 7:08:17 AM. Also, when Einstein was born on March 14, Deneb Algedi rose at the same time as the planet Jupiter was rising. Clearly, the symbolism that this star represents would have been considered very important for Einstein. Astrologer Bernadette Brady gives the following astrological interpretation:¹⁴

Deneb Algedi—Heliacal Rising Star

Interpretation: *Seeking the legal, physical or metaphysical laws that govern the world. Trying in some way to use wisdom and knowledge to protect and help people.*

Deneb Algedi was rising as Jupiter was rising (orb 01 mins 34 secs) at the time of Albert Einstein's birth.

Interpretation: *The reformer or expert who paves the way for others.*

14. *Starlight Software: The Heart of Visual Astrology*, Brady and Branswood, Ltd.

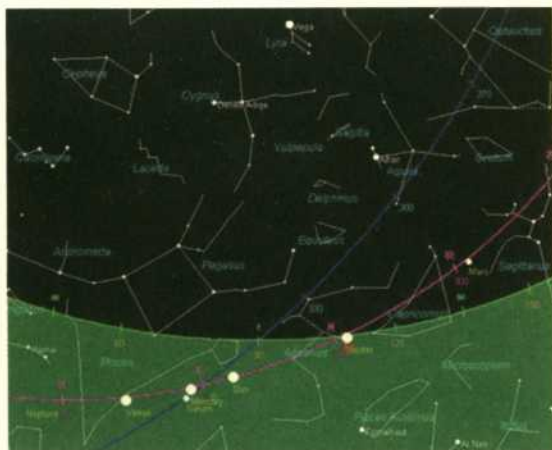


Figure 2. Co-Rising of Jupiter and Deneb Algedi at the time of Albert Einstein's birth.¹⁵

15. Ibid. Deneb Algedi is the star in Capricornus closest to Jupiter in Figure 2.

The Babylonians made considerable contributions in the area of lunar studies, in particular eclipse patterns which deal specifically with the relationship between the orbits of the Sun, Earth and Moon. Because of the dramatic visual, emotional and psychic effect of a Solar or Lunar eclipse, these phenomena became strong symbols in the minds of the ancients, and great effort was expended to determine their patterns. Through long observation, it was learned that these eclipses occurred in various cycles. The most well known cycle is called a Saros Cycle, a harmonization of several Earth-Sun-Moon periodicities: the synodic month, the draconic month, and the anomalistic month. Eclipses that are related by the rhythm of a Saros Cycle share a near identical Sun-Earth-Moon geometry. Each Eclipse in a particular Saros Series is separated by approximately eighteen years, ten to eleven days, 7.5 hours, (always around 6,585 $\frac{1}{3}$ days) and there are typically about seventy-one or seventy-two eclipses in a particular Saros Series.

The Solar Eclipse of July 22, 2009, 02:35 GMT is part of Saros Series 136. This family of eclipses is also called Saros Series 11S (11 South using Bernadette Brady's alternate numbering system) because the eclipse takes place near the South Node of the Moon. The January 5, 1685 NS (NS = Gregorian calendar), Hybrid Eclipse is also a part of Saros Series 136, and this is the eclipse whose influence would have been felt at the time of the births of both J.S. Bach (March 31, 1685 NS) and George Frideric Handel (February 23, 1685 NS). Saros Series 136 was *born* (i.e., when the first eclipse in this series occurred) on June 14, 1360 OS, 05:47 UT (OS = Julian Calendar).

Bernadette Brady believes that the positions of the planets at the moment a Saros Series is born symbolically colors the energy of each eclipse in that particular series. Therefore, to obtain additional information about the symbolic character of an individual solar eclipse, one would need to look at the symbolism of the first eclipse in that Saros Series, and then combine the Saros Series symbolism with the position and symbolism of the individual solar eclipse.¹⁶ Brady interprets this eclipse from a geocentric point of view, with a Mars/Pluto conjunction and with Uranus at the midpoint of Mercury and Venus.¹⁷ A midpoint is the middle position, in ecliptic longitude, between two celestial objects along the shortest arc.

The true positions of the inner planets (Mercury, Venus, Mars) in relation to the Sun

16. *The Eagle and The Lark: A Textbook of Predictive Astrology* (Bernadette Brady), pp. 223–228, 307.

17. Ibid., p. 324—Brady's interpretation for Saros Series 136: "Eclipses concerned with the need to make sudden reforms. Old ideas or methods will fail and new systems are required to deal with the events brought by the eclipse. As a consequence the person will need to think of new ways of handling the issues."

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The true positions of the inner planets (Mercury, Venus, Mars) in relation to the Sun

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are distorted using the geocentric perspective. When using heliocentric coordinates Mars is not conjunct with Pluto, and Uranus is a little bit further away from the Mercury/Venus midpoint.

The Sun is at the center of our solar system; it is the life-giving force, the entity that is the cause of the existence of the solar system, and the main force through which the solar system functions. The ancient Egyptians understood the importance of the Sun and based their entire culture around this principle. Therefore, I use esoteric interpretations which are based on the heliocentric point of view.

The planets that orbit the Sun (actually the Center of Mass of the solar system, which is always very close to or inside the Sun) appear to have some effect on the magnetic field of the Sun, solar flare activity, sunspot cycles, etc. The resulting solar winds that are created in turn affect all of the planets as they move through the solar system. It has been suggested that these effects could account for much of what astrologers have traditionally attributed to more esoteric phenomena. Today's mysteries are tomorrow's science.

Looking at the first solar eclipse of Saros Series 136 from a heliocentric perspective, Jupiter is square Saturn (i.e., at a 90° angle) and Neptune is opposite Saturn. This places Jupiter at a heliocentric longitude that is very close to the midpoint of the longitudes of Saturn and Neptune. Here are some brief interpretations from the book of astrologer Ruth Brummund (from *The Brummund Rulebook*), composed of individual keywords that suggest the symbolism of the individual planets involved:¹⁸

JU=SA/NE (Jupiter at the midpoint of Saturn and Neptune) cautious—free of limitations or restraints—empathic—highly imaginative—pragmatic—nonphysical—spiritually mature—skeptical—needs self-discipline (along with a range of other keywords.) Another interesting configuration is the Uranus and Mercury longitude midpoint appearing exactly opposite the longitude midpoint between the planets Neptune and Earth. We could write this as UR/ME=EA/NE.

These interpretations are formed from what are called *Planetary Pictures*, which are geometric formations of the planets in space. This is a further development of the work of astrologer/astronomer Johannes Kepler, whose work in harmonics was extended by the astrologer Alfred Witte and his followers. Ruth Brummund is a part of this lineage.

This keyword technique stems from a divinatory tradition that

18. *The Brummund Rulebook* (Ruth Brummund, English translation by L. Blake Finley), Aureas Software.

goes back at least 4,000 years to the Babylonian mundane astrological omen tablets called *Enuma Anu Enbil* (early second millennium BCE). This tradition lasted for 2,000 years in Mesopotamia and was also transmitted to India. Another group of texts compiled later, called *Mul.Apin*, demonstrates various techniques for calculating the positions of various stellar phenomena, including the prediction of solar and lunar eclipses and the positions of the planets, as well as omens. The *Mul.Apin* texts supposedly influenced the ancient Greeks.

The major difference between the symbolism today and these ancient texts is that the ancient Babylonian astrology was, at least in its early stages, concerned with the country as a whole, and with the King. With the development of horoscope or nativity astrology, a means of symbolism was developed that pertained to prognostications relating to individuals. Horoscope is derived from the Greek word *horoskopos* or *hour watching* (*hora* = hour, *skopos* = watching). This referred to the hour and location of a person's birth, which is represented by the ascendant (location of the eastern horizon at the time of birth). This innovation made it possible to link the positions of celestial phenomena with an individual person.

In geocentric astrology, the ascendant functions as a kind of tonic that grounds the symbolism as it relates to an individual. The ascendant represents a person's outward identity, how they appear to others. The Sun, however, symbolizes the generator, the true inner identity. In modern music, the *tonic* of a key serves a similar function to the ascendant, that of grounding a group of pitches from a sensorial (outward) point of view, bringing them into a sonic relationship relative to the tonic pitch. However, the true inner relationship of the pitches is governed by the *generator*.

Astrologers who use midpoints sometimes use a 90° dial to facilitate calculations of 4th harmonic aspects (i.e., 0°, 90°, 180° and 270°). Here are the positions (rounding to the nearest degree) of Uranus, Mercury, Earth and Neptune during the Solar Eclipse of June 1360, shown first as they would appear on a 360° dial, then followed by their positions on a 90° dial:

360° Dial	
Mer	= 169°
Nep	= 338°
Ear	= 27°
Ura	= 79°

Here we can see that on the 360° dial, the midpoint of Uranus/Mercury (the position of the pointer at 124° or 4° of Leo) is opposite the midpoint of Earth/Neptune (304° or 4° Aquarius), because $304^\circ - 124^\circ = 180^\circ$, which is an opposition.

Next we look at the position of these planets on a 90° dial, where each of the four 90° quadrants on the 360° circle are mapped onto a 90° circle. In other words, if a planet is not already at a position between 0° and 90°, then we keep subtracting 90° from its position until its new position is between 0° and 90°. Using this method, the new 90° positions for these four planets are:

90° Dial	
Mer	= $79^\circ (169^\circ - 90^\circ)$
Nep	= $68^\circ (338^\circ - 90^\circ - 90^\circ - 90^\circ)$
Ear	= $1^\circ (271^\circ - 90^\circ - 90^\circ - 90^\circ)$
Ura	= 79°

Using the 90° dial, Uranus/Mercury appear to be conjunct at 79° and Earth/Neptune now have a midpoint of 34.5°, which is a position opposite 79° on the 90° dial, because $79^\circ - 34^\circ = 45^\circ$. Therefore, the 90° dial allows an astrologer to see quadrature angles more easily. Whereas Uranus and Mercury were in a 90° relationship when plotted on the 360° dial ($169^\circ - 79^\circ = 90^\circ$), they are now seen as being conjunct when plotted on the 90° dial, so their quadrature relationship is very easy to see at a glance:

Solar Partial Eclipse
Natal Chart
June 14, 1960, Sun
5:47 am GMT +0:00
Greenwich
51°N29°00'W00'
Heliocentric
Tropical
0° Aries
True Node

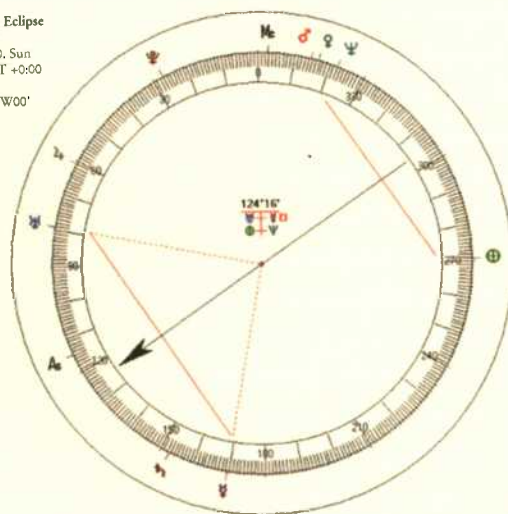


Figure 3. 360° Dial.

Solar Partial Eclipse
Natal Chart
June 14, 1960, Sun
5:47 am GMT +0:00
Greenwich
51°N29°00'W00'
Heliocentric
Tropical
0° Aries
True Node

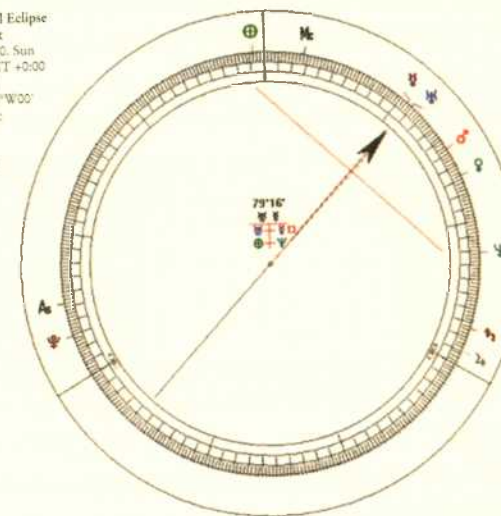


Figure 4. 90° Dial.

Musically, the same principle is used in the simplification of function in the matrix of tones. Taking the chromatic gamut of tones as 360°



Figure 5. Gamut of tones as 360°.

and dividing the tones into four 90° segments

C	= 0°
C♯	= 30°
D	= 60°
E♭	= 90°
E	= 120°
F	= 150°
F♯	= 180°
G	= 210°
A♭	= 240°
A	= 270°
B♭	= 300°
B	= 330°

Here we can see that on the 360° dial, the midpoint of Uranus/Mercury (the position of the pointer at 124° or 4° of Leo) is opposite the midpoint of Earth/Neptune (304° or 4° Aquarius), because $304^\circ - 124^\circ = 180^\circ$, which is an opposition.

Next we look at the position of these planets on a 90° dial, where each of the four 90° quadrants on the 360° circle are mapped onto a 90° circle. In other words, if a planet is not already at a position between 0° and 90°, then we keep subtracting 90° from its position until its new position is between 0° and 90°. Using this method, the new 90° positions for these four planets are:

90° Dial	
Mer	= 79° (169° - 90°)
Nep	= 68° (338° - 90° - 90° - 90°)
Ear	= 1° (271° - 90° - 90° - 90°)
Ura	= 79°

Using the 90° dial, Uranus/Mercury appear to be conjunct at 79° and Earth/Neptune now have a midpoint of 34.5°, which is a position opposite 79° on the 90° dial, because $79^\circ - 34.5^\circ = 44.5^\circ$. Therefore, the 90° dial allows an astrologer to see quadrature angles more easily. Whereas Uranus and Mercury were in a 90° relationship when plotted on the 360° dial ($169^\circ - 79^\circ = 90^\circ$), they are now seen as being conjunct when plotted on the 90° dial, so their quadrature relationship is very easy to see at a glance:

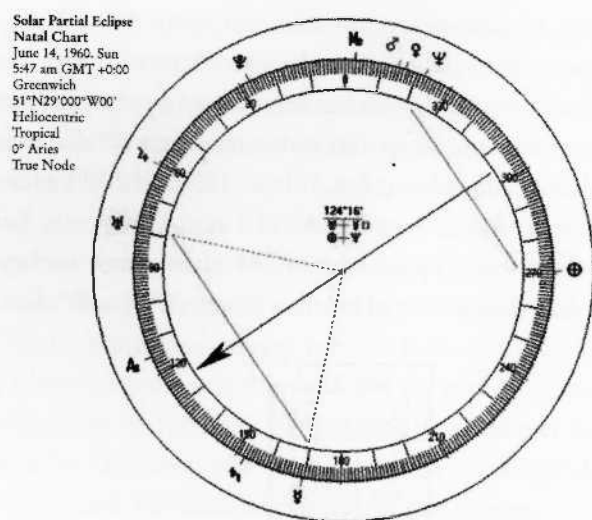


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0° Aries
True Node

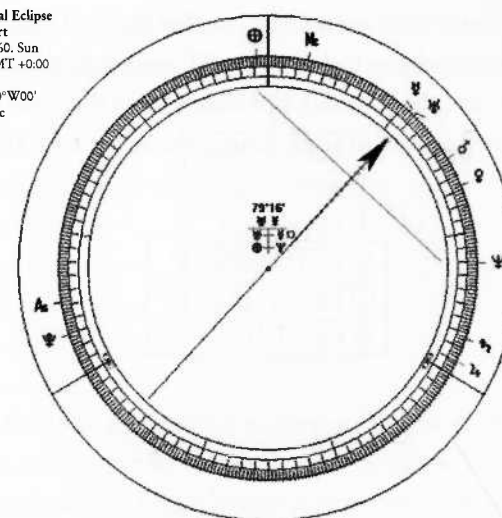


Figure 4. 90° Dial.

Musically, the same principle is used in the simplification of function in the matrix of tones. Taking the chromatic gamut of tones as 360°



Figure 5. Gamut of tones as 360°.

and dividing the tones into four 90° segments

C	= 0°
C#	= 30°
D	= 60°
E♭	= 90°
E	= 120°
F	= 150°
F#	= 180°
G	= 210°
A♭	= 240°
A	= 270°
B♭	= 300°
B	= 330°

we can fold the tones over each other so that each of the 90° segment is superimposed on the others, to form one 90° segment, which we then treat as the entire circle (i.e., the 90° dial). For example, all the tones at 0° , 90° , 180° and 270° would be equivalent in function, the same with the other tones.

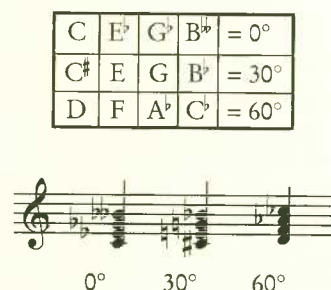


Figure 6. Gamut of tones as 90° .

In this way, we arrive at three relationships: tonic, dominant and subdominant. Any one of the tones that are in a quadrature relationship is equivalent in function. If we assign a particular function (tonic, dominant or subdominant) to the four pitches at one position (either 0° , 30° or 60°), the remaining two positions would then be the two remaining functions. For example, if the tones C E^b G^b B^{bb} were taken to be the tonic function, then C[#] E G B^b would take on a dominant function, and the subdominant function would be assigned to the tones D F A^b C^b. There does exist a subharmonic world where all functions are inverted and all the movements are in the opposite direction, but this subject is an entire essay in itself. Suffice it to say that the principles remain the same as what I describe here. I call these series of functional relationships (including the harmonic and subharmonic realms) the *musical matrix*. I will make more references to the subharmonic world later in this article.

At the time of the July 22, 2009 solar eclipse, Jupiter and Neptune were close to being conjunct in longitude (heliocentric perspective) and on the same side of the Sun that the Earth was on, but around 20° further along the zodiac. Uranus was an additional 30° from Neptune.

The collective gravitational pull of Jupiter and Neptune, aided by Uranus, exerted a considerable influence on the location of the solar system Center of Mass (CM). During the July 22, 2009 solar eclipse CM was near

the surface of the Sun (1.05 solar radii), and the 360° heliocentric positions of CM, the jovian planets (Jup, Sat, Ura, Nep), and the Earth were as follows:

Earth	299.3
CM	309.9
Jup	319.8
Nep	324.8
Ura	353.9
Sat	172.9

So at the time of the solar eclipse, CM was at the longitude midpoint of Earth and Jupiter. In the diagram below, the circle with the cross inside of it represents the Earth-Moon system, which is in syzygy with the Sun, i.e., lined up as Sun-Moon-Earth.

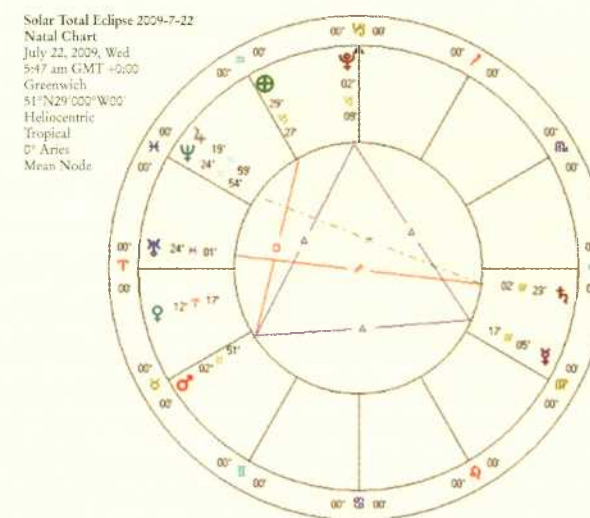


Figure 7. Position of planets during the total solar eclipse of July 22, 2009.

There are many such cycles in Nature. The rhythms get more complex when we look at the multiple interacting cycles. For example, there is an orbital resonance involving Neptune and Pluto, that results in a 3:2 relationship. Yet this simple relationship is complicated by the movement of the other jovian planets, resulting in a dynamic interconnected network. In many ways, the relationship of musical rhythms and tones functions in a similar fashion, with the movement and resulting dynamic functional posi-

tions constantly shifting in relationship to each other.

Another example of resonance is the 5:8 Venus cycle ratio, which was tracked by the Maya Civilization of Mesoamerica (approximately from central Mexico south to Nicaragua). The Maya placed great importance on the Venus cycles, which actually reflect the relationship between the orbits of Earth and Venus. Later in this article, we will show how this important relationship may have a profound effect on Earth and the rest of the solar system.

From our perspective on Earth, in a single 584-day cycle of Earth-Venus conjunctions Venus goes from being an *Evening Star* (visible just after sunset) to a *Morning Star* (visible just before sunrise). There are five of these 584-day cycles of Earth-Venus conjunctions in 8 Earth years ($584 \text{ days} \times 5 = 2,920 \text{ days}$, and $8 \text{ years} = 2,922 \text{ days}$) and 13 Venus years. 5:8 is also the ratio of the minor 6th, when this musical interval is expressed in string lengths, as the ancients would have expressed it. Johannes Kepler recognized the sesquiquadrate (135°) as being the astrological aspect that is the equivalent to the 5:8 minor 6th.

A square (or quadrate) is an aspect of 90° (the 360° circle divided by 4). Sesqui is a Latin prefix meaning *more by half* (i.e., one and a half times more). So $90 + 45$ (half of 90) is 135° , hence the name sesquiquadrate, which is also called the sesquiquadrate. And why would Kepler recognize this aspect as corresponding to the string length ratio for the 5:8 minor 6th? Because he was following the method of the ancient Greek philosopher Claudius Ptolemy, who believed that the significance of the aspects could be determined by analogy with the ratios of musical intervals. Ptolemy arrived at five astrological aspects and related them to musical intervals:

Aspect	Interval	Ratio
Conjunction (0°)	= Unison	1:1
Opposition (180°)	= Octave	1:2
Square (90°)	= Fourth	3:4
Trine (120°)	= Fifth	2:3
Sextile (60°)	= Minor Third	5:6

Lets take as an example the 90° aspect called a waxing square. Ptolemy used, as a musical ratio, the left-over part of the circle (i.e., $360^\circ - 90^\circ = 270^\circ$) in relation to the entire 360° circle, i.e., $270:360$, or $3:4$. To make an analogy to music, suppose that Jupiter is at the top of the circle

at 12 o'clock, and Earth is at 9 o'clock. So, in terms of this representation of the zodiac, where traditionally planets are seen as moving counter-clockwise along a circle,¹⁹ Earth would be 90° further along the zodiac than Jupiter, and moving further away. This is what is called a waxing square.²⁰

Now imagine breaking the circle at the position of Jupiter, and straightening it out into a line. Let the entire length of this line, between nodes A and B (both of these nodes correspond to the position of Jupiter), represent a string on a musical instrument whose vibration sounds the pitch C. In order to raise the pitch of this string by an interval of a fourth, sounding the pitch F, the musician presses the string at position A1 (creating a new node, corresponding to the position of Earth), effectively shortening the string by one-quarter. The vibrating portion of the string (the effective length) would then be three-quarters of the length of the entire string, between nodes A1 and B.

19. That is, moving counter-clockwise when the solar system is viewed from the perspective of being above the north pole of the Sun.

20. Regarding waxing and waning phases: when considering aspects between two planets, the faster moving planet (i.e., the one with the higher velocity and smaller orbit) always determines the phase. The aspect is waxing when the faster planet is ahead of the slower planet, and moving towards opposition. The aspect is waning when the faster planet is behind the slower planet, and moving towards conjunction.

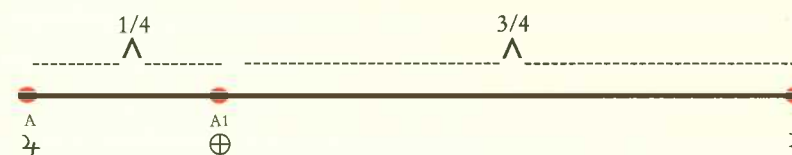


Figure 8. Musical-Astronomical String—nodes A and B.

If we formed the string back into a circle, we can then see Ptolemy's analogy. The original nodes A/B would now be one point on the circle representing the position of Jupiter, and new node A1 would represent the position of Earth. Jupiter and Earth form the astrological aspect of a waxing square. Therefore, the vibrating portion of the string is analogous to an angle of 270° , thus the ratio $270:360 = 3:4$.

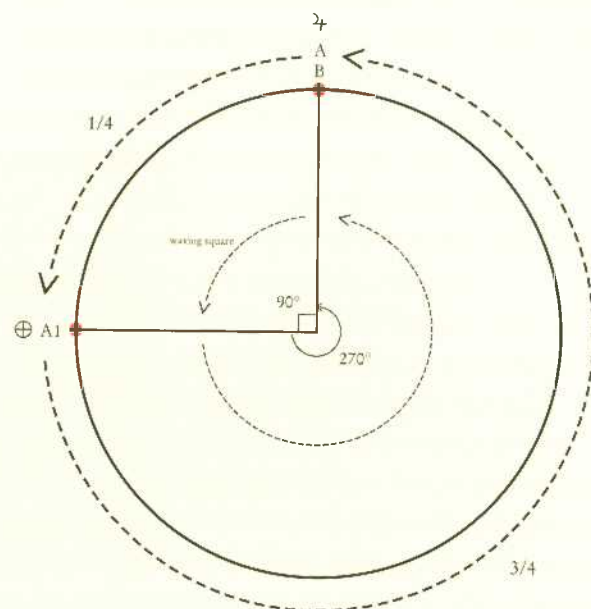


Figure 9. Musical-Astronomical Circle—nodes A and B.

I have not read where Ptolemy or Kepler discuss this, but it would seem to me that using this analogy, there should be a difference in astrological and musical quality of the waxing (increasing) versus waning (decreasing) squares. But this would be a subject for another time. Suffice it to say that, in this example, it is the positions of Jupiter and Earth in waxing square relationship that represent the interval of a fourth.

Kepler followed this same method of calculating musical intervals from aspects. For example, a sesquiquadrate is 135° , which leaves 225° left over from the circle, and $225:360 = 5:8$, an interval of a minor 6th. Kepler is credited with introducing this aspect to astrology, along with two other new aspects: the 72° quintile and the 144° biquintile. Using their knowledge of harmonics, both Ptolemy and Kepler were able to recognize these correspondences. So, in introducing these new aspects to astrology, Kepler used musical thinking. He wanted to include aspects that would represent the rest of the imperfect consonances, i.e., $4:5$, $3:5$ and $5:8$. And it is because of Kepler that these aspects have now become standard in modern astrology, although most astrologers do not realize the musical origin of these angles:

Aspect	Interval	Ratio
Quintile (72°)	= Major 3rd	$4:5$
Biquintile (114°)	= Major 6th	$3:5$
Sesquiquadrate (135°)	= Minor 6th	$5:8$

Again, sesquiquadrate and sesquisquare are synonymous terms. So we can see that the subject of harmonics in astrology (divisions of the circle) and harmonics in music (the science of musical sounds) are related. The sounds that we call musical are in large part due to their cyclical nature. It is the consistent cyclical aspect of certain sounds and their movement that contributes to how we relate to these sounds as music. This is true with the basic elements of pitch and rhythm as well as the macro elements involved in composition, both spontaneous and preconceived. When these concepts are examined closely, it is amazing to see that these simple principles can be combined in seemingly infinite ways.

As in nature, these complex dances play out on every level, from the microscopic to the macroscopic, so the knowledge of one particular kind of cycle, be it musical or astronomical, is only the beginning. It is the rhythm of all of the cycles in nature and in the universe, as they form dynamic relationships, that produces their exoteric and esoteric influences upon us. Taken as a whole, the resulting complex of cycles interact to form a mass of oscillations that initially appear to be chaotic, but in fact are really a continuous cosmic composition that is being created by Nature. It may appear spontaneous but, when studied closely, the initiated can discern order in the apparent chaos, thereby predicting the results of the interactions and their effects on the Earth and life on Earth.

The scientist, astrologer and climatologist Theodor Landscheidt published research that suggests that there is a scientific basis for astrology.²¹ Landscheidt was essentially a modern-day Johannes Kepler (himself a modern Claudius Ptolemy, and so on...) and his work is within that tradition.

Landscheidt suggested that the solar system is in many ways a conscious self-regulating organism, and that there is a reciprocal relationship whereby the planets in the solar system have some effect on activity within the Sun, by exerting gravitational influence on the center of mass of the solar system (CM, also called the solar system barycenter). He also believed that some planets have a tidal effect on the Sun, which in turn affects the

21. *Sun-Earth-Man: a Mesh of Cosmic*
(Theodor Landscheidt).

amount and intensity of solar flares, sunspots and other phenomena. Landscheidt believed that the combined gravitational and tidal influences of the planets in turn affect the timing, direction and intensity of the massive solar ejections of ionized particles called solar winds, which bombard the rest of the solar system (including Earth) and cause various effects.²² The imagery of solar winds is interesting; the four winds were thought by the ancient Egyptians to move the stars, and the winds were also associated with divination.

The Sun and the rest of the planets orbit around (or, in the case of the sun, *oscillate about*) CM. But by using the Sun as our reference point, we can say that CM is changing position in relation to the Sun. Sometimes CM is above the surface of the Sun, sometimes below, depending on the configuration of the planets in the solar system. Landscheidt proposed that when CM is near the surface of the Sun, there appear to be significant disturbances in the Sun's corona and photosphere. It is possible that the rhythm of these disturbances can be predicted by calculating the positions of CM.²³ This can be done by paying special attention to the positions of the giant jovian planets (Jupiter, Saturn, Uranus, Neptune), which exert the greatest influence on CM, particularly Jupiter, the most massive planet in the solar system. In fact, except for the Sun, Jupiter alone is almost 2.5 times as massive as the combined mass of all other objects of the solar system. As the most massive planet, Jupiter has the largest influence on the position of CM:

Relative Mass of Jovian Planets	
Jupiter	= 317.8 Earths
Saturn	= 95.152 Earths
Neptune	= 17.147 Earths
Uranus	= 14.536 Earths

When Jupiter is on one side of the Sun, and Uranus, Neptune and Saturn are on the other side of the Sun, then CM is beneath the Sun's surface, near the center of the Sun (but closer to the side of the Sun that Jupiter is on). When Jupiter, Uranus, Neptune and Saturn are on the same side of the Sun then CM is above the Sun's surface, and at its farthest from the center of the Sun.

Between 1801 AD through 2600 AD inclusive, CM was the far-

thest away from the Sun around April 9, 1804, and here we see that the jovian planets are all on the same side of the Sun and fairly close together in the same longitude quadrant. This is analogous to a giant balancing act or cosmic tug-of-war.

So we can see that outer planet configurations are important for their influence on the position of the center of mass of the solar system. It is not only important when the outer planets conjunct, but also when they make other angles of heliocentric longitude (and, to a lesser extent, latitude). We can particularly notice 3rd harmonic aspects (i.e., 0°, 120° and 240°) and 4th harmonic aspects (i.e., 0°, 90°, 180° and 270°), although others are important as well. What is involved here is a continuum, with the discreet points only serving as markers. These aspects function as tools that can be used to help determine the position of CM, and characterize the meaning of the planetary configurations.

Although the heteromorphous oscillations of CM—along with the fluctuations that occur in the structure of the Sun—may at first appear random, the research of Theodor Landscheidt and others points to a higher intelligence at work, a consciousness that is far beyond the limits of human awareness. In his book entitled *Sun-Earth-Man: A Mesh of Cosmic Oscillations*, Landscheidt goes on to present data that supports his more esoteric claims.²⁴ This information provides a

24. Ibid.

solid basis for why the ancients would have noticed some of the effects that have been traditionally delineated through the art of astrology, based on thousands of years of observation. Though there are many interacting cycles involved, the results sum to a gestalt that can be identified and is somewhat measurable.

These same principles are noticeable in other areas: color, the weather, language and also music. We must never forget that music is really just a reflection of what it is to be human. Music is also composed of many interrelated cycles and elements, which we respond to as the total sound of the music. The more complex the music, the more we hear it as a whole.

I see astrology as a mancy of geometrical shapes in motion, the symbolism of which is interpreted through numerical representation. Being that this art was developed through observation of Nature, all ancient civilizations had some form of astrology.

Most present-day versions of astrology are primarily based on the idea of a zodiac which consists of twelve 30° segments. These segments are

based on the motion of the Earth's yearly passage around the Sun, which together with the tilt of the Earth on its axis relative to the Sun, is the cause of the seasons. Humans have always identified the seasons using certain positions of the Earth in its path around the Sun. These points, called equinoxes and solstices, were recognized many thousands of years ago by various ancient cultures based on observations of the changes in the lengths of day and night. An equinox (meaning *equal night*) is a time in the year where day and night are the same length, and a solstice (meaning *Sun stands still*, the point at which the Sun seems to stand still or stop) is a point in the year where the apparent motion of the Sun seems to stop moving in either its northerly or southerly direction and reverses itself. There are two equinoxes and two solstices in a year.

Through observation, the ancients noticed the apparent motion of the Sun, and the difference in the structure of each of the four cardinal points (equinoxes and solstices) was documented, along with the intervals of time that each cardinal point initiated. Symbols were then developed to represent these four cardinal points and their relationship to the seasons. This was very important, as humankind's survival depended on being able to predict these natural rhythms.

These four positions of the Earth relative to the Sun are called vernal equinox (VE), summer solstice (SS), autumnal equinox (AE), and winter solstice (WS). In the western astronomical/astrological system, each of these four seasons are further divided into three equal segments creating further divisions of the temporal intervals between the equinoxes and solstices.

Beginning with VE, spring is divided into Aries, Taurus and Gemini. Starting with SS, summer is divided into Cancer, Leo and Virgo. From AE, autumn is divided into Libra, Scorpio and Sagittarius. Finally from WS, winter is divided into Capricorn, Aquarius and Pisces.²⁵

From an exoteric point of view, the seasons are simply divisions of the year characterized by changes in weather, while in esoteric studies these four seasons are interpreted as twelve astrological signs representing twelve metaphysical archetypes. Although most people associate these astrological signs with the stars, they are actually related to the seasons, which are a result of the Earth's yearly passage around the Sun, combined with the tilt of the Earth's axis relative to the plane of the ecliptic.

25. These are the seasons as seen from the perspective of the northern hemisphere.

So it is the intervals of time and space between these defined points, how they related to each other, and the Earth's movement through them that gives us our sensation of quality during the cycle of the year. But this is a complex relationship as the Sun itself goes through structural changes that have an effect on Earth, as well as on the rest of the solar system. Composition is analogous to all the various cyclic relationships that play out in our solar system. These include the complex Sun-Earth-Moon patterns (lunation cycle, Saros cycles, etc.) as well as the various cycles involving the other planets (the five 8-year Earth-Venus cycles, various outer planet cycles, solar system barycenter movements, 11-year sunspot cycles, etc.) as they all relate to each other.

Many of these cycles are similar to musical interval relationships, melodic cycles and rhythmic cycles. For example, there is a resonance between two revolutions of Saturn and five revolutions of Jupiter in a 59-year period. This 2:5 relationship is an octave of the 4:5 relationship that is the string length ratio that sounds a major 3rd interval. There are many such relationships among the planetary cycles, such as the 2:3 resonance of the orbital periods of Pluto and Neptune within a 494-year period. There are basically two resonance groups of planets, the inner planets (Mercury, Venus, Earth, Mars), and the outer planets (Jupiter, Saturn, Uranus, Neptune, Pluto). There seems to be no strong resonance between Mars and Jupiter. Most of the inner planets (Earth, Venus, Mercury), together with Jupiter, appear to have an effect on solar tidal forcing,^{26, 27} while the outer planets seem to have more of an influence on the position of CM in relation to the Sun.²⁸

Looking at the relationships of the orbits of the inner planets of the solar system, in order of their influence on solar tidal forcing, we find several resonances with musical implications:²⁹

Earth-Venus: possibly the most important factor for influencing solar tidal forcing. These planets have a 13:8 resonance, that is, five conjunctions in 13 Venus years or 8 Earth years.

Mercury-Venus: not a very strong resonance, but appears to have some impact on solar tidal forcing. There is a weak 23:9 resonance, fourteen conjunctions in 23 Mercury years or 9 Venus years.

26. *Orbital Resonance and Solar Cycles* (P. A. Semi) e-book, p. 52.

27. *Apparent Relations Between Solar Activity and Solar Tides Caused by the Planets* (Ching-Cheh Hung—National Aeronautics and Space Administration), p. 1.

28. Landscheidt.

29. Semi, pp. 2, 7-8, 15-20.

Mercury-Earth: not a very strong resonance. There is a weak 29:7 resonance, twenty-two conjunctions in 29 Mercury years or 7 Earth years.

Mercury-Mars: There is a weak 39:5 resonance, thirty-four conjunctions in 39 Mercury years or 5 Mars years.

Venus-Mars: Mars does not appear to have a significant effect on solar tidal forcing. These planets have a 3:1 resonance, two conjunctions in 3 Venus years or 1 Mars year.

Earth-Mars: this resonance is also not very strong. These planets have a weak 15:8 resonance, thirty-seven conjunctions in 79 Earth years or 42 Mars years (79:42 is 5.5 cents larger than 15:8).

While there is no apparent resonance between Mars and Jupiter, Earth and Jupiter have a 5:2 resonance, with eleven conjunctions in 12 Earth years or 1 Jupiter year. A slightly more complicated relationship between Venus, Earth and Jupiter is discussed below.

Looking at the relationships of the orbits of the major outer planets of the solar system, in order of their influence on CM, we find several resonances with musical implications:^{30, 31}

Jupiter-Saturn: this is the most important factor for influencing the position of CM. These planets have a 5:2 resonance, three conjunctions in 5 Jupiter years or 2 Saturn years.

Jupiter-Neptune: the second most important factor for influencing the position of CM, with a resonance of 14:1, thirteen conjunctions in 14 Jupiter years or 1 Neptune year.

Jupiter-Uranus: the third most important factor for influencing the position of CM, with a resonance of 7:1, six conjunctions in 7 Jupiter years or 1 Uranus year.

Saturn-Neptune: the fourth most important factor for influencing the position of CM, with a resonance of 28:5, thirty-two conjunctions in 28 Saturn years or 5 Neptune years.

Saturn-Uranus: the fifth most important factor for influencing the position of CM, with a resonance of 20:7 (close to 3:1) thirteen con-

30. Ibid., pp. 9-14, 20-21.

31. Landscheidt.

junctions in 20 Saturn years or 7 Uranus years.

Uranus-Neptune: the sixth most important factor for influencing the position of CM, a resonance of 51:26 (close to 2:1) with thirteen conjunctions in 51 Uranus years or 26 Neptune years.

Neptune-Pluto: These planets have a resonance of 3:2, with one conjunction in 3 Neptune years or 2 Pluto years.

As explained earlier, none of these proportions in Nature are ever exact, the real relationships are within a certain orb of the precise ratio. These proportions could be seen as musical intervals and, as is customary for musicians, all of the ratios can be octave reduced for ready identification:

Inner Planet Resonances	
Mer:Ven	= 23:9, 424 cents (major 3rd + 38 cents)
Mer:Ear	= 29:7, 61 cents (less than a semitone)
Mer:Mar	= 39:5, 1,156 cents (44 cents less than an octave)
Ven:Ear	= 13:8, 840.5 cents, natural minor 6th
Ven:Mar	= 3:1, 702 cents, perfect 5th
Ear:Mar	= 15:8, 1,088 cents (actually its 79:42 which is 1,094 cents)

Outer Planet Resonances	
Jup:Sat	= 5:2, just major 3rd, 386 cents
Jup:Ura & Jup:Nep	= 7:1 & 14:1, septimal minor 7th, 969 cents
Sat:Nep	= 28:5, small septimal tritone, 583 cents
Sat:Ura	= 20:7, large septimal tritone, 617 cents
Ura:Nep	= 51:26, 1,166 cents (one octave = 1,200 cents)
Nep:Plu	= 3:2, perfect 5th, 702 cents

All of these cycles interact in very mysterious ways, but there are clear harmonic relationships among the various orbital periods.

The aforementioned Earth-Venus connection appears to be particularly profound. The opposition of Earth and Venus places the Earth-Venus Center of Mass (EVCM) near the Sun (where it is nearly stationary for approximately a two-week period). In fact, during these oppositions EVCM is closer to the Sun than Mercury. The rhythm of the quadrature angular relationships (0°, 90°, 180° and 270°) between EVCM and Jupiter

(which is the same as the angle between Earth and Jupiter, since EVCM is always on the Earth side of the Sun) appears to approximately match the rhythm of sunspot cycles (sunspot = 11.4 years, EVCM-Jupiter quadrature cycles = 11.19 years). The EVCM-Jupiter relationship seems to have an effect on the intensity and frequency of p-modes, extremely low-frequency sound waves (i.e., pressure waves) traveling inside the Sun.³² Mercury-Jupiter quadrature relationships, at the times of Earth-Venus oppositions, may also play a role in these phenomena.³³ These Earth-Venus, Mercury and Jupiter cycles, together with the absolute positions of these planets relative to the Sun, may have some effect on both sunspot cycles and solar flare intensity.^{34, 35}

Also significant is the Jupiter-Saturn pair, the two most massive planets in the solar system which together have a very significant influence on the location of CM (solar system center of mass).^{36, 37} These two planets have a 854-year resonance cycle (forty-three conjunctions in 72 Jupiter years and 29 Saturn years) which possibly influences the entire solar system angular momentum cycle.³⁸ And there are much larger harmonic cycles, such as the twenty-one-conjunction Uranus and Neptune cycle that plays out over a 3,602-year period, after which both planets conjunct in virtually the same area of the zodiac.³⁹

All of these relationships in turn affect the intensity of the solar winds emanating from the Sun, and affects all of the planets in the solar system. So there is a reciprocal relationship, a back-and-forth influence between the planets and the Sun.

The Venus:Mars (3:1) and Neptune:Pluto (3:2) resonances are similar to each other, both being close to 3:2. The 12:1 Earth-Jupiter orbital relationship is also an octave this same 3:2 ratio. Astrologically, there are similarities in the relationships of all of these planetary pairs.

There have always been attempts to use astronomy/astrology and music as one discipline. Different rhythms that move in cycles with specific

32. Semi, pp. 1, 57-61. The frequency of some of these p-mode waves are more than 1 millihertz (1 mHz = 1,000th of a hertz). These are very low sound frequencies, the most powerful measuring around 1 cycle every five minutes, or 1/300 cycles per second (3.33 mHz). By comparison the human ear can only hear as low as approximately 20 Hz (maybe 14 Hz max), so a sound wave that is five minutes long is about 6,000 times lower than the lower limit of human hearing. These extremely low frequency pressure waves ring the entire Sun like a bell.

33. Ibid., pp. 53-54.

34. Ibid.

35. Hung, p. 1.

36. Landscheidt

37. Semi, pp. 9-11, 29-32, 43, 61.

38. Ibid., pp. 1, 11, 43, 61.

39. Personal communication with astrologer Simon France.

relationships to each other can have a quality and effect similar to what occurs during the relationships of planetary cycles. The esoterically inclined could study the effects of such combinations and apply the appropriate symbolism, in the same manner as this is done in other esoteric studies. In this way, it is possible to refine the idea, quality, meaning and possible effects of rhythms, melodies or harmonic progressions.

In our musical system, it is the intervals and their combinations, as well as the relationship between pitches and their movement (space and time relationships), that are partly responsible for giving the sensation of quality and color. The systemization of the pitch relationships into various keys and modes could be analogous to the various configurations of planets in our solar system which astrologers call planetary pictures.

One example of using music with astrology was the work of the 17th century mystic Athanasius Kircher, who developed a method of composition using the symbolism of planets related to specific voice-leading. In a major work entitled *Musurgia Universalis (Universal Music)* Kircher described parts of his system, which definitely had an astrological basis.⁴⁰

The Mancy of Colors

"Perhaps the highest language that comes to man, through Nature, is through geometric symbol and color." —L.W. de Laurence.⁴¹

40. *The Harmony of the Spheres: A Sourcebook of the Pythagorean Tradition in Music* (Joscelyn Godwin), pp. 273-275.

41. *The Great Book of Magical Art, Hindu Magic and Indian Occultism* (L. W. de Laurence, 1939), p. 571.

Similar to the symbolism of geometry in motion that we call astrology, there was developed a symbolism of colors that appears to be drawn from Nature. Esotericist Thomas Goodwin constantly refers to an ancient Kemetic system called the *Mancy of Colors* and it was Tom that first introduced me to this subject.⁴²

42. Thomas Goodwin (personal communications).

The human species greatest gift is the ability to create and manipulate symbols. Symbolism can also be used to generate a feeling, sensation or idea of a metaphysical nature. This is done through colors, figures, numbers, etc., and their motion.

Earlier, I referred to the merging principle as being equivalent to the concept of modulation, the idea of change from one form or condition into another. One reason color is an ideal esoteric language is because it represents the *merging principle* more accurately. There is typically no absolute boundary between different shades and colors, and it is partly because of

this that color is for the most part interpreted by the use of intuition. In contrast to color, number may primarily be seen from a logical perspective, and figures may be approached from an intuitive-logic point of view as well. This does not mean that color cannot be organized and approached from both an intuitive and logical perspective simultaneously. Nevertheless, color symbolism appears to have been developed in part using more intuitive approaches.

The use of color symbolism for divination purposes is exceedingly rare. Psychics who use their third eye to see auras around people are said to be able to see colors in the different auras.⁴³

Much of this color symbolism is based on the human response to Nature. For example, the association of the planet Mars with aggression, war and death may originate in part because of its reddish color (which is based on the large amount of iron oxide on its surface). Quite early in history, Mars was associated with iron, the metal for weapons.

Here is a sampling of the symbolism of color:

Red "represents the physical phase of mentality. That is to say, it stands for that part of the mental activities which are concerned with physical life. It is manifested by the vitality of the body, and in other hues, tints and shades, is manifested by passions, anger, physical cravings, etc."⁴⁴ Other keywords include: blood, aggression, energy, life-force, vigor, spiritual love

(crimson brilliant rose-color tinged with lilac),

selfish love (crimson tinged with brown), selfless love (crimson rose-red), fire, devils, physical, masculine, summer, hell, passion, lust, sexuality or sensuality (lurid, sanguinary red), courage, anger (usually deep red or tinged with brown—selfish anger), stop, hatred, pain, honor, leadership, sports.^{45, 46}

Blue "represents the religious or spiritual phase of mentality. That is to say, it stands for that part of the mental activities which are concerned with high ideals, altruism, devotion, reverence, veneration, etc. It is manifested, in its various hues, tints and shades, by all forms of religious feeling and emotion, high and low [...]"⁴⁷ Keywords: water, ice, cold, sadness, winter, boys, religion (dark clear blue), morality, spirituality,

43. *The Human Aura: Astral Colors and Thought Forms* (Swami Panchadasi, 1912), e-book version, p. 2. (Panchadasi is a pseudonym of esoteric writer William Walker Atkinson.)

45. *Man Visible and Invisible* (C.W. Leadbeater, 1909), p. 81.

46. <http://en.wikipedia.org/wiki/Red#Symbolism> accessed September 9, 2009.

47. Panchadasi, p. 8.

humility, love of truth, contemplation (indigo).^{48, 49}

Yellow "represents the intellectual phase of mentality. That is to say, it stands for that part of the mental activities which are concerned with reasoning, analysis, judgment, logical processes, induction, deduction, synthesis, etc. In its various hues, tints and shades, it is manifested by the various forms of intellectual activity, high and low [...]"⁵⁰ Keywords: selfish intellect (dull yellow), higher unselfish Intellect (brilliant golden or luminous lemon or primrose yellow), pride, ambition, irritability (orange), analysis, logic, reasoning, deduction, great intellectual teachers (gold).^{51, 52}

50. Panchadasi, p. 8.

51. Ibid. p. 10.

52. Leadbeater, p. 83.

48. <http://en.wikipedia.org/wiki/Blue#Mysticism> accessed September 9, 2009.

49. de Laurence, pp. 569–570.

White "stands for what occultists know as Pure Spirit, which is a very different thing from the religious emotion of 'spirituality,' and which really is the essence of the All that really is. Pure Spirit is the positive pole of Being."⁵³

Black "stands for the negative pole of Being—the very negation of Pure Spirit, and opposing it in every way."⁵⁴ Keywords: hatred, malice, passionate anger.⁵⁵

53. Panchadasi, p. 8.

54. Ibid.

55. Leadbeater, p. 81.

Brown: autumn, earth, wood, greed (dull almost rust brown), industry, materialism, accumulation of wealth, selfishness. Greenish-brown denotes jealousy.⁵⁶

56. Ibid., pp. 81–82.

Green: nature, life, love, erotic, envy and jealousy (greenish-brown), trickery/deceit (grey-green), health, charity, altruism, sickness, healthcare, physician, nurse, spring, growth, environmentalism, nonviolence, social justice, sympathy/compassion (pale luminous blue-green), charity, adaptability/versatility/ingenuity (bright emerald-green), tolerance of other viewpoints, diplomacy.^{57, 58, 59}

Grey: deep depression, gloomy, saddening, fear (livid grey).⁶⁰

57. Ibid., p. 84.

58. Panchadasi, p. 11.

59. <http://en.wikipedia.org/wiki/Green> accessed September 9, 2009.

When we look at some of the associations of color with zodiac signs, we can see the symbolism of each merged into a single system:

60. Leadbeater, p. 82.

From Westcott ⁶¹	
Aries	white
Taurus	white and yellow
Gemini	red
Cancer	green and brown
Leo	red and green
Virgo	black and blue
Libra	black or crimson
Scorpio	brown
Sagittarius	yellow or green
Capricorn	black or brown
Aquarius	blue
Pisces	white

61. *Numbers: Their Occult Power and Mystic Virtues* (W. Wynn Westcott, 1890), pp. 103–104.

From de Laurence ⁶²	
Aries	white and rose-pink
Taurus	red and lemon-yellow
Gemini	red, blue and white
Cancer	green and russet-brown
Leo	red and green
Virgo	gold-yellow and dark-blue
Libra	crimson and blue
Scorpio	golden-brown and indigo
Sagittarius	gold, red and green
Capricorn	dark-brown or grey
Aquarius	blue, pink and green
Pisces	white-pink, emerald-green or indigo

62. de Laurence, p. 571.

The above appears to be a mixing of the symbolism of brown and yellow. Based on these symbolic descriptions, a more logical association using the Elements may be:

Fire	reddish
Earth	brownish
Air	yellowish
Water	greenish and bluish

Planet-Color Correspondences	
Moon	white, silver or grey ^{63, 64}
Sun	orange ⁶⁶
Mercury	yellow ⁶⁶
Venus	blue ⁶⁷
Mars	red ⁶⁸
Jupiter	violet ⁶⁹
Saturn	green, brown and grey ⁷⁰
Uranus	blue-green ⁷¹
Neptune	indigo ⁷²
Pluto	black ^{73, 74}

63. *The Arkana Dictionary of Astrology*, (Fred Gettings, 1985), pp. 378–379.

64. *Planets, Colors and Metals* (Patrice Guinard), <http://cura.free.fr/22plcome.html> accessed September 9, 2009.

65. de Laurence, p. 566.

66. Ibid.

67. Ibid., p. 569.

68. Ibid., p. 565.

69. Ibid., p. 571.

70. Ibid., pp. 568, 571.

71. Based on actual color of the planet due to its methane gas, and the colors of Aquarius, which Uranus rules.

72. de Laurence, p. 571.

73. Gettings, pp. 378–379.

74. Guinard, <http://cura.free.fr/22plcome.html> accessed September 9, 2009.

Historically, at the time that most of this symbolism was developed there was a belief that red, yellow and blue were the primary colors (based on pigments and dye) with the secondary colors being violet, orange, green. In modern color theory, since the prism experiments of Isaac Newton, the main colors are recognized to be red, green, blue (additive primaries) and cyan, magenta, yellow (subtractive primaries). If the ancients had started with the modern theories then maybe the symbolism of yellow and green would be a little different, similar to the way astrologers have adjusted their symbolism after the discovery of Uranus (1781), Neptune (1846), Pluto (1930) and a host of other planet-like bodies in our solar system:

Historical Primary Color and Complements	
red	green
yellow	violet
blue	orange

Modern Primary Colors and Complements	
red	cyan
green	magenta
blue	yellow

What has been done here with colors is the same as what has been attempted with planets, signs, midpoint interpretations, eclipse symbolism, etc., in astrology. The approach is to determine some basic characteristics of

the main quantized points in the continuum. Then, when the various combinations of the cycles or vibrations manifest, the esoteric artist then intuitively merges the meanings of each point to regain the feeling of the continuum.

It is also possible to relate colors more directly to music, as opposed to simply using color as an analogy. The most obvious example would be the correspondence of color to pitch, chords or keys, similar to the work of the great esoteric composer Alexander Scriabin. A less obvious example would be the association of color with movement, specifically rhythmic, melodic and harmonic movement. This is partly because it is through the movement of musical passages that musicians typically refer to the concept of musical color. Sometimes chords are related to color, but even in these cases this usually involves the movement of the chords in progressions. Of course there is no such thing as melody and rhythm without movement.

As in everyday experiences, color is seen to be something of a modifier, an extension to more concrete forms. This is also true in music, where color can modify the elements of rhythm, melody, and harmony. However, color can also have its own internal logic, for example as presented in color theory, which is based on ideas of color mixing and combinations.

Our perception of color is based on specific light receptors in our eyes, therefore color is a phenomena of light. Light is a rather ethereal phenomena, more easily grasped through the faculty of intuition. There are vast areas of music that are readily understood using intuition, and in this sense the marriage of color and music is very important. In particular, color can aid in the projection of the emotions as this is the mode through which many people experience the power of color and music. Though a complex subject, this is certainly a matter well worth investigating.

The Mancy of Sound (Musica Universalis)

"Is it not true that all things flow from one thing, from the goodness of the One, and that whatever is joined to Unity cannot be diverse, but rather fructifies by means of the simplicity and adaptability of the One?"

"What is born from Unity? Is it not the ternary? Take note: Unity is unmixed, the binary is compounded, and the ternary is reduced to the simplicity of Unity. I, Trithemius, am not of three minds, but persist in a single integrated mind taking pleasure in the ternary, which gives birth to a marvelous offspring." —Trithemius⁷⁵

⁷⁵ Noel L. Brann, pp. 212–220.

The *Mancy of Sound* is related with the ancient concept of *musica universalis*,⁷⁶ "an ancient philosophical concept that regards proportions in the movements of celestial bodies—the Sun, Moon, and planets—as a form of *musica* (Medieval Latin for music)."⁷⁷ Although *musica universalis* is not literally audible music, the approach of creating music using the philosophy and symbolism of *musica universalis* has been practiced for thousands of years, analogous to a dynamic sacred geometry projected through sound.

We have looked at the symbolism or characteristics that were applied to celestial phenomena in the form of planetary pictures (geometrical formations) and at symbolism applied to color. Since ancient times, musicians have also applied symbolism to rhythms and groups of pitches. Plato and other ancient Greek philosophers discussed this in their writings in the form of the *Doctrine of Ethos* and even as late as the time of J.S. Bach musicians still related to symbolism through rhetorical devices and the *Doctrine of Affections*. Not so obvious is the role music plays in divination.

The most obvious forms of the foretelling of events using sound is the example of divination by bird cries and bird song in ancient Rome and China (Han dynasty). In ancient Rome, *augury* was used to interpret the will of the gods by studying the flight directions and patterns of birds together with the sounds that they made. However, this does not involve the musical sounds created by humans, which is the subject matter of our discussion of the mancy of sounds.

Previously I mentioned colors, geometrical figures (shapes) and numbers in motion. It has been said that the study of music is the study of number in motion, similar to astronomy being the study of geometry in motion. There is a progression to these areas of study; all are related and interact with each other, forming one body of knowledge:

- Study of number (arithmetic)
- Study of shapes (geometry)
- Study of light (e.g., color, etc.)
- Study of number in motion (music)
- Study of geometry in motion (astronomy)

These are the exoteric fields of study. But in ancient times there was always an exoteric counterpart to any exoteric subject:

⁷⁶ Literally universal music, or music of the spheres.

⁷⁷ http://en.wikipedia.org/wiki/Musica_universalis accessed September 9, 2009.

- Study of number symbolism (numerology)
- Study of geometric symbolism (geomancy)
- Study of the symbolism of light (mancy of colors, color symbolism)
- Study of the symbolism of number in motion (mancy of sound, *musica universalis*)
- Study of the symbolism of shapes in motion (astrology)

The power of *musica universalis* is that, being holistic in nature, it contains and gives voice to all of these arts. This is the esoteric form of music and many master musicians produced some of their greatest works using this approach.

I need to pause here to explain my understanding of divination. Although in earlier times divination was definitely used for the purpose of predicting future events, I believe divination has more to do with timing, with determining the most favorable and harmonious moment to initiate or carry out a particular activity. This is somewhat similar to the principles upon which the discipline known as *Feng Shui* are built. On an esoteric level, this has to do with resonance. In my opinion, all of these things are related. Again, today's mysteries are tomorrow's science; much or what we call esoteric or mysterious is just something that is partially understood. Since the nature of the universe will always be partially understood by humans, then there will always be mysteries.

Therefore, my idea of a *mancy of sound* has less to do with using music or sound to predict the future, and more to do with timing, using music to project or create the quality and character of a moment (even a moment in the future) as well as the reverse, being able to interpret something of the quality and character of a moment by listening to the music. This, as well as using music to express ideas and intent is the essence of the previously mentioned *Doctrine of Ethos* and *Doctrine of Affections*.

Generally speaking, you can definitely hear the character of a time that music was created in. While some may say that this is based solely on the memory of that time, I would disagree. Even music that is from a time when I was not actually living carries for me some core essence of that time period. For sure this music would carry more specific meaning for persons who actually lived during that time and experienced the vibrations. Nevertheless, we are all related as a species, and there is some information that carries forth from generation to generation. The music from previous times, in particular if preserved by recordings, carries much of the vibratory essence and qual-

ity of those moments in which it was created, for many reasons.

So why not the reverse, where music projects not only the quality of the time in which the creator of the music lives, but also qualities of periods of time in the future? Much of what we call the future is directly related both to the activities of the present and to the human imagination, which has a vibratory projection of its own that is very powerful. It may very well be that the human imagination is structurally a part of some phenomena that we have little understanding of today. If a musician possesses enough knowledge about the structure of time, then this idea should not be too far fetched. And the more specific the study and information that the musician possesses, the more specific the musical description will be of the particular period of time that is being *sounded*. Therefore, it should be possible to create music that *describes* the moment of birth of a person that is not yet born, if the musician knows enough about when that moment will be, the characteristics of the person in terms of their parents, culture, etc., and the characteristics of the time that is leading to the moment of birth (a kind of temporal voice-leading).

If this is possible in Nature then it should be attainable for humans, who are but a part of Nature. Returning to the quote from L. W. de Laurence, we do our highest work when we recognize our unity with Nature.⁷⁸ Humankind is a product of Nature, and through-
out our existence the initiated have attempted in
their creations to emulate Nature as much as possible.

78. de Laurence, p. 571.

I believe that there exists only the present, which has different qualities. What we call the past lives in our memories, even if inaccurate or selective. What we call the future lives in our imaginations and expectations, even if unrealized or unrecognized. If we can use the remembered quality of the past to interpret the quality of our sensation of the present, then we can use a combination of memory and present sensorial experience to tell us something about the quality of the future. Furthermore, our imagination possesses its own vibratory power, which helps to realize that which is actual, while our expectation shapes the quality of what has been realized. But, as mentioned, the future only lives in our imaginations and expectations, we never truly experience the future except in our psyche.

Technically, humans have always used motion to negotiate time. The rhythm of celestial objects was the obvious choice to describe the passage of time, so the ancients learned to systematize and symbolically transcribe these natural rhythms. These same principles of motion were used as

a basis for the rhythmic concepts of much of the world's music, and this is still true today. Our modern ways of keeping time, clocks and calendars, although not as complex in terms of negotiating time as interlocking cycles, are the by-product of the ancient methods of negotiating time. However, in ancient times these temporal symbols did not only designate the quantity of time; they also represented the quality of time. This could be accomplished because their *dynamic clocks* were the natural movements of objects in the heavens in relation to Earth. The sheer multitude and complexity of these cycles and how they related to each other provided an ideal symbolism which was used to represent the complexities of human existence. From the ancient point of view, first there is the symbolism of the individual

79. Musaios, p. 96—Musaios refers to "certain patterns of sound frequencies at certain times". Here I reference *natural rhythms* to mean an integrated astrological/musical approach using spontaneous and pre-conceived composition. The philosopher's approach to this area of music almost always involves working with tonality through manipulating the structures of tuning systems. In contrast, the musician's approach, for the most part, is to manipulate the accepted musical tunings of the then current era, through actual movements (i.e., rhythms) of melodic and harmonic structures. Therefore, the ideas behind placement, duration and combinations of pitches, as well as what they symbolize, are important to the musician for the purposes of the practical expression of musical metaphor. In this respect, the form that the sonic symbols take are various kinds of musical motion.

80. "The origins of the tones and music go far back into antiquity. They are produced from the measurements of length and weight; their root is in the Supreme One. The Supreme One produced the Two Exemplars (heaven and earth). Two Exemplars produced yin and yang. Yin and yang change and transform—one ascends, the other descends—and coalescing, they take on shapes. Mixing and blending, they separate out, only to coalesce again. They coalesce only to separate out again. This is called the regularity of heaven...." "Any form or body occupies a position; all of them make a sound. Sounds are produced from harmony. Harmony comes out of what is fitting. It was by this model of harmony and what is fitting that the early kings composed music; it developed from this." —*Timing and Rulership in Master Lü's Spring and Autumn Annals—Lüshi chunqiu* (James D. Sellmann, 2002), pp. 95–96 (quote from Lüshi chunqiu compiled by Lü Pu-wei's, c. 239 BCE)

orbits of the five classical planets, the Moon and the apparent path of the Sun. Then there were the various relationships between the planetary cycles over time.

Today, knowing the true heliocentric structure of the solar system—along with more recent technology—we can construct symbols that impress upon our minds the various geometric shapes that represent these complex relationships. Similar to the way a beautiful image can inspire great artistic works, these complex sonic impressions can, when used in conjunction with specific *natural rhythm* principles, function as a kind of acoustic acupuncture to remove blockages in the psyche that prevent access to the thought patterns that lead to higher consciousness.⁷⁹ These blockages are produced by imbalances in the mind, body and spirit. In ancient China, the systems of thought in the Qin and Han Dynasties were based on balance and appropriate timing; even the origins of music itself were described in terms of descending from Nature, through timing and balance.⁸⁰

We have already seen that the orbits of Earth and Venus are in a 13:8 resonance, where the two planets conjunct five times in 13 Venus

years and 8 Earth years (note the Fibonacci relationship of 5:8:13). We have also noted that the heliocentric opposition of Earth and Venus places the Earth-Venus Center of Mass (EVCN) near the Sun, closer to the Sun than the planet Mercury. The heliocentric conjunction of Earth and Venus places EVCN at its furthest distance from the Sun, between Earth and Venus, but closer to Earth. The distance traveled by EVCN between each alternating configuration of opposition and conjunction is approximately 288° through the heliocentric zodiac. It is important to note that the zodiac location of EVCN during each Earth-Venus opposition and conjunction is always in the same longitude location as Earth, as any syzygy relationship of Earth and Venus places EVCN on the Earth side of the Sun.

The times when Earth and Venus are not in syzygy relationship reveal an interesting pattern. If we were to trace the movements of EVCN and create a mandala of the shape formed by these movements, it would form a five pedal flower. The following diagrams were created by the

program Ephemerides Viewer.⁸¹ These zodiac charts follow the color symbolism of Elements mentioned above: Fire = reddish, Earth = brownish, Air = yellowish, Water = blue-greenish.

81. *Ephemerides Viewer* (Petr Semí Semerád) <http://semi.gurroa.cz/EphView/> accessed September 9, 2009.

Six of the snapshots trace the movements of EVCN during the moments of syzygy between Earth and Venus, over a 4-year period (i.e., half of the 8-year Earth-Venus cycle), beginning with Figure 10 on July 8, 1904, when Earth is approximately at 16° of the sign of Capricorn (just visible over the glyph for Capricorn) and in opposition to Venus in Cancer. Mercury can also be seen in Cancer, on the Venus side of the Sun. Although Jupiter is not shown at this scale, it is at 16° of Aries, in a 90° relationship to Earth-Venus syzygy line.⁸²

Figure 15 shows the Earth-Venus conjunction 4 years later on July 6, 1908, when both planets are in Capricorn (Earth is again just visible over the glyph for Capricorn). In both Figure 10 and Figure 15 EVCN is at the same degree of Capricorn as the Earth, however EVCN is closer to Earth in Figure 15, during the conjunction of Earth and Venus.

Figure 16 shows the position of these planets 8 years later on July 6, 1912, when Earth and Venus are again at the same locations as in Figure 10 on July 8, 1904.

82. Here the solar system is viewed from the north pole of the Sun, so the planets move counterclockwise in their orbits.

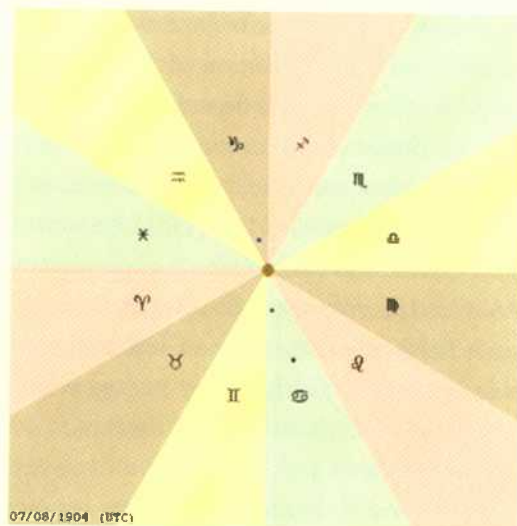


Figure 10. 7/8/1904.

Approximately 9.6 months later, Earth and Venus are in conjunction, and the trace of the trajectory of EVCM can be seen to lead directly in between these two planets:

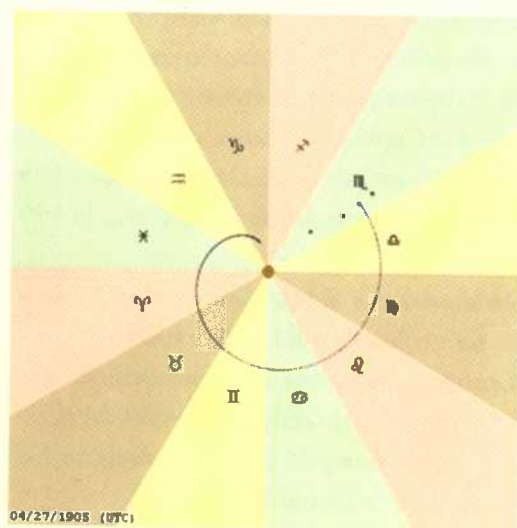


Figure 11. 4/27/1905.

9.6 months later, Earth and Venus are again in opposition, and the trace of the trajectory of EVCM again leads in between the two planets, but closer to the Sun:

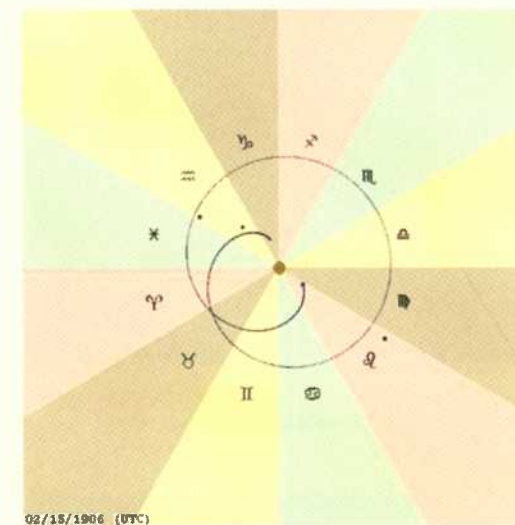


Figure 12. 2/15/1906.

This process continues for the remainder of the 4-year period, and the shape of the mandala develops:

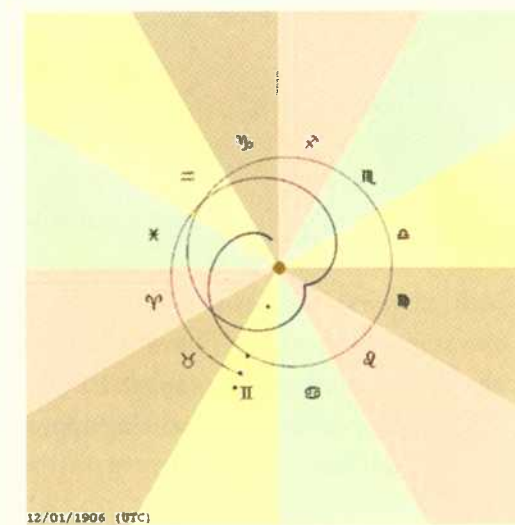


Figure 13. 12/1/1906.

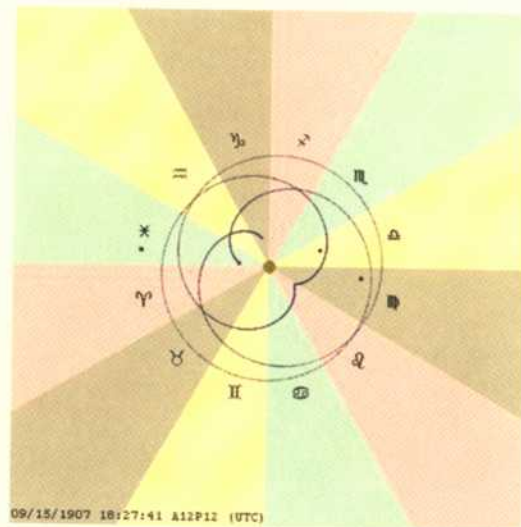


Figure 14. 9/15/1907.

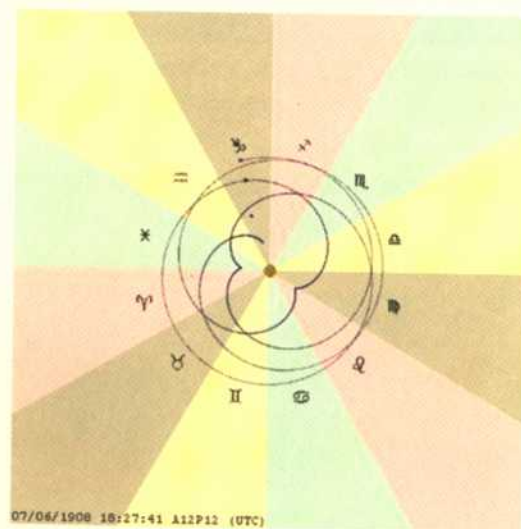


Figure 15. 7/6/1908.

Skipping ahead, here is what the complete EVCM pattern would look like approximately eight years after our starting opposition. The period of time is 7/8/1904 to 7/6/1912:

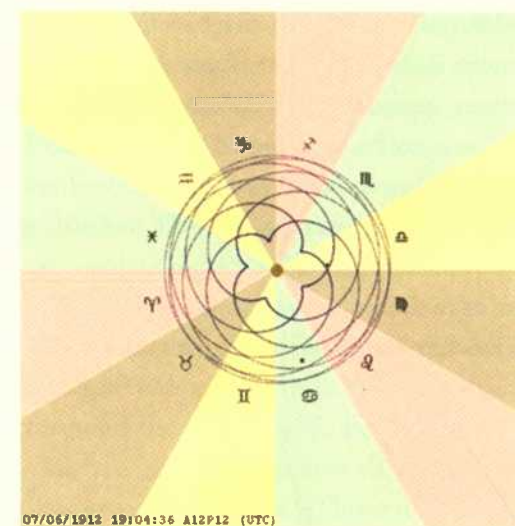


Figure 16. 7/6/1912.

As can be expected of Nature, this five-petal flower pattern is not static, but rotates through the zodiac throughout time, giving a kaleidoscopic expression of colors against the movements of the other planets. This movement progresses in 72° segments that slowly rotate throughout the zodiac. The relationship of Jupiter against this Earth-Venus cycle adds another layer to the rhythm. If these cycles remind you somewhat of music, then you are not alone. Many people have noticed and explored the *Harmony of the Spheres*, and in fact I believe this is the historical name used to reference the mancy of sound.

Musically, it is possible to symbolize the geometrical configurations of the planets. For example, we could look at the angular relationship of Earth-Venus oppositions to the planet Jupiter. There are multiple perspectives from which we can look at this, each point of view yielding different insights. If we make an analogy to the solar system, taking the Sun as the center and Jupiter as the main counterweight, then symbolically the interval of a perfect fifth would best represent these two bodies, the most massive objects in the solar system. By association, the function of the generator is represented by the Sun, and Jupiter is symbolized by the dominant.

I use the term generator in the same sense as it is used by composer and theorist Ernst Levy, as the tone that *generates* the tonal system.⁸³ Levy's concept is astrological in

83. *A Theory of Harmony* (Ernst Levy, 1985), p. 15.

that it is based on laws of tonal gravity that function very similar to universal or absolute gravity, in the solar system and elsewhere in the Universe, in addition to containing qualitative symbolism. This is a concept of gravity where objects with mass are being attracted to one another from all sides, as opposed to the terrestrial perspective of gravity viewed as being generated from the ground. I will explain using a bit of the musical logic:

In terms of function, we start with a melodic realization of this concept, where we have three tones in a tonic (C), dominant (C[#]) and subdominant (B) relationship (the genesis of the functions in our *musical matrix*)



Figure 17. Tonic-Subdominant-Dominant.

which can then be extended harmonically using the interval of the 5th, the foundation of tonality:



Figure 18. Tonic-Subdominant-Dominant.

Here, the G functionally replaces the C[#] as the dominant, and the F, as subdominant, replaces the B. The result is the tone C *generating* an upward and downward fifth. We could say that the G and F are *orbiting* the generator C. Following the ancient example, we then place positive and negative harmonic means between the generator and the two 5ths to arrive at two major triads of differing polarity. If we think of the pitch C as the Sun, then the triads are generated outward from the C as follows:



Figure 19. Tonic Triads extended.

Levy calls this point of view *absolute conception*—as opposed to *telluric adaptation*, the terrestrial perspective that most musicians have

learned.⁸⁴ But there is more involved here functionally that also simulates astronomical gravity. These two triads are not only symmetrical, but both triads gravitationally *attract* each other. The absolute point of view of tonal gravity must

be studied to fully understand this.⁸⁵ The C major triad functions as the dominant to the F

minor triad, which is really a negative C major triad. Likewise, the F minor triad functions as negative dominant to the C major triad. The result is a pendulum effect *around* the generator C. Both triads of course have the same structure, but are generated in two different directions, positive (harmonic) and negative (subharmonic). Throughout the history of music, composers—spontaneous and otherwise—have long had knowledge of this approach.

Obviously, in terms of structure this is a symmetrical point of view, but this concept is symmetrical in function as well, and it is extendable to the entire tonal system. First we can extend to positive (harmonic series generated upwards) and negative (subharmonic series generated downwards) dominant 7th chords, approximating partials 1, 5, 3 and 7:



Figure 20. Dominant 7th chords extended.

which now gives us two other functions, the major third and the natural or dominant seventh (natural not in terms of accidental, but in terms of its approximate 7:4 frequency relationship to C. In this example we have two dominant seventh chords generated upward and downward from C. The result is C7 on the top and negative C7, more commonly called Fmin6, on the bottom (the root of the bottom chord is F, not D).

Previously, I stated that Ptolemy and Kepler associated the opposition aspect (180°) with the octave. Although this may be in some ways geometrically accurate, and geometry was the strength of Ptolemy and Kepler, intuitively and in terms of musical function I find this correspon-

dence troubling. Functionally, the octave does not exhibit the same qualities as the opposition. The feeling I get from the octave is virtually identical to the unison. However, with the interval of a tritone there is some feeling of opposition, yet still a strong relationship in terms of function.

This third and seventh are of course in a tritone relationship, making them ideal to symbolize our opposition of Earth and Venus, relative to the Sun (generator) and Jupiter (counterbalance or dominant). Astrologically, it is the planet Jupiter⁸⁶ that most represents the energy of the aspect called a trine (120° angle), which according to Ptolemy is equal to the musical interval of a perfect fifth (see the above section on astrology):

⁸⁶ Some astrologers also say Venus represents the energy of the trine.



Figure 21. Dominant 7th chord tritones extended.

It will take a little imagination to visualize this entire dynamic gamut from a 3-dimensional perspective, with the Sun-Jupiter combination as the main stabilizing force in our musical solar system, while seeing the various configurations of pitches as orbiting in relation to the Sun. But with the aid of various configurations of pitches representing the quadrature angles, entire constellations of dynamic pitch relationships—in the form of pitch collections, triads, tetrachords modes, scales, extended chords, etc.—can orbit around any one particular generator (keep in mind that the Sun and Jupiter are also in motion around an invisible solar system barycenter).

Continuing with our analogy, imagine that the Sun-Jupiter line represents the tonic tonality C:G that we are progressing to. And the faster moving planets, in this case Earth and Venus when in opposition to each other, symbolize the tritones of the dominants that are progressing to this tonic tonality (with Earth functioning as the 3rd, Venus functioning as the 7th and the generator of the dominant chord functioning as the Earth-Venus Center of Mass, or EVCM).

From the perspective of observing from above the Sun's north pole, the planets are moving counterclockwise through the zodiac, and the pitches are moving upward through the zodiac, with C=Aries, C#=Taurus,

D=Gemini, etc. This is what I call the physiological (physical or outer) direction. In this direction, the cycle of dominants progresses as descending 5ths (same as descending semitones):

Sun = C and Jupiter = G

D:A^b (Ear-Ven) = waxing square of Ear and Jup. This is based on B^b:D:A^b being the dominant and C:G being the tonic, EVCM=B^b.

E[#]:B (Ear-Ven) = opposition of Ear and Jup. This is based on C[#]:E[#]:B being the dominant and C:G being the tonic, EVCM=C[#].

G[#]:D (Ear-Ven) = waning square of Ear and Jup. This is based on E:G[#]:D being the dominant and C:G being the tonic, EVCM=E.

B:F (Ear-Ven) = conjunction of Ear and Jup. This is based on G:B:F being the dominant and C:G being the tonic, EVCM=G.

When the dominant chord is G7 (progressing to C:G), the associations are EVCM=G, Ear=B, Ven=F. So the conjunction is between the generator EVCM and Jupiter. When the dominant is C[#]7 (progressing to C:G) then EVCM=C[#], Ear=F, Ven=B, so Jup=G is in opposition to EVCM=C[#]. EVCM=B^b is ahead of Jup=G in the zodiac (waxing square, approaching opposition), and EVCM=E is behind Jup=G in the zodiac (waning square—approaching conjunction). Of course the Sun and Jupiter can be in any of the twelve positions in the zodiac, and EVCM:Ear:Ven will have the same functions with the same relative relationships.

Since there is no up and down in space, we could look at this entire configuration from the point of view of a different polarity, from the perspective of observing from beneath the south pole of the Sun. We don't have to maintain a northern hemisphere bias in space, we are thinking from the

absolute position.⁸⁷ From this perspective, the planets move clockwise through the zodiac, and

the pitches are moving downward through the zodiac, with C=Aries, B=Taurus, B^b=Gemini, etc. This is what I call the psychological (*psyche* or inner) direction. In this direction, the cycle of dominants progresses as ascending 5ths (same as ascending semitones):

Sun = G and Jupiter = C

A^b:D (Ear-Ven) = conjunction of Ear and Jup. This is based on

⁸⁷ Levy, p. 15.

C:A \flat :D being the dominant and G:C being the tonic, EVCM=C.

F:B (Ear-Ven) = waxing square of Ear and Jup. This is based on A:F:B being the dominant and C:G being the tonic, EVCM=A.

D:G \sharp (Ear-Ven) = opposition of Ear and Jup. This is based on F \sharp :D:G \sharp being the dominant and C:G being the tonic, EVCM=F \sharp .

C \flat :F (Ear-Ven) = waning square of Ear and Jup. This is based on E \flat :C \flat :F being the dominant and C:G being the tonic, EVCM=E \flat .

The phase of the aspect, waxing or waning, is always expressed in terms of the relationship of EVCM to Jupiter. Remember EVCM is always on the Earth side of the Sun when Earth and Venus are in syzygy.

I do not mean to imply that these are the only configurations that exert great influence over our musical solar system, they are by far not all of the effective configurations. The majority of Earth-Venus oppositions are not in quadrature relationship with Jupiter. There can be anywhere from three to six Earth-Venus oppositions which are not in quadrature relationship with Jupiter, between every occurrence of Earth-Venus oppositions which are square or conjunct Jupiter. A musician must also diligently study these situations, as this is where the merging principle comes into play, and various non-standard configurations occur which, though unidentified, still represent powerful functions.

This is all based on the heliocentric model of the solar system.⁸⁸ With this concept, Jupiter is always in a 5th relationship to the Sun, and in this system the Sun has no sign. It is the Earth that is in a sign.

When Jupiter is in Aries and conjunct Earth, then the Earth is also in Aries. The geocentric point of view is an illusion, as it represents the situation as seen from Earth.

Likewise, it could be said that our geocentric (i.e., telluric adaptation) musical point of view is an illusion. The absolute conception in music is the equivalent of the heliocentric reality in astronomy. As with most astrologers, who are still caught up in the geocentric perspective and refuse to change, so too have many musicians (but not all) been unable to recognize the absolute conception, the musical equivalent of the heliocentric viewpoint.

Going further, we can view an extended version of the dominant

88. Most astrologers utilize a geocentric model.

seventh chords, by viewing tempered approximations of partials 1, 5, 3, 7, 9, 11, 13 and 15 (i.e., reordered harmonic series—odd partials)



Figure 22. Harmonic Series in 3rds (odd partials).

and the negative dominant chords (reordered tempered subharmonic series—odd partials)



Figure 23. Subharmonic Series in 3rds (odd partials).

and finally the entire constellation of pitches together:



Figure 24. Harmonic and Subharmonic Series in 3rds (odd partials).

Partials 9, 11, 13 and 15 are what the composer Hindemith referred to as the *Holy Region*. These partials are themselves dominant constellations of an opposite polarity to the primary dominant, represented by partials 1, 5, 3 and 7. Olivier Messiaen called these partials *resonances*, and

referred to the general subject as *natural harmony*, analogous to *natural rhythms*, which was also explored by Messiaen. He learned these and other harmonic techniques from three of his teachers, Jean Gallon, Noel Gallon and Marcel Dupré. Most of the great creative musicians have created their own terminology for this area of music, as developing your own point of view is one of the by-products of creativity and self-examination.

The pitches are colored red and blue to complete the symbolism, as red represents the physiological and physical and blue the psychological and spiritual, as we saw in the previous section on the mancy of colors. Symbolism for characteristics and attributes could be developed for tonal configurations in much the same way as has traditionally been done in astrology. I will speak more on this later in this section.

Another musical model could be based on gravity forces in the solar system. For example, one of the main instruments for measuring the pressure waves that move inside the sun (p-modes) is SOHO (SOlar and Heliospheric Observatory), which is a spacecraft located near the L-1 Lagrange point, a point of balance about 1.5 million kilometers towards the Sun from Earth, where a small body could theoretically remain stationary relative to the Sun and Earth. There are five of these points relative to any two large bodies orbiting bodies, so in effect there are many of these locations throughout the solar system.

One possible analogy to the *musical matrix* is the *Interplanetary Transport Network* (ITN), which is "a collection of gravitationally determined pathways through the solar system that require very little energy for an object to follow. The ITN makes particular use of Lagrange points as locations where trajectories through space can be redirected using little or no energy. These points have the peculiar property of allowing objects to orbit around them, despite the absence of any material object therein."⁸⁹

The nodes of the *musical matrix* function similar to *Lagrangian points*, in that these are precisely the points where the change of direction

is more easily accomplished. An analogy could be made to the ITN, whereby a player could engage in musical travel (melodic or rhythmic) from one location to another using very little energy (i.e., less tension). In musical terms I call these *Invisible Paths*, through which one can easily slip from one tonal location to another. The tonal locations functioning as loci of balanced energy are the nodes, through which melodies and harmonies

89. Wikipedia http://en.wikipedia.org/wiki/Interplanetary_Transport_Network accessed September 9, 2009.

can more smoothly slide in different directions. A musician therefore could study both the general structure of the pathways, possible paths that can be taken, and the objects that are responsible for forming the pathways.

For example, dominant and subdominant trajectories function as the possible calculated pathways that can be traveled, with rhythmic cycles fulfilling a similar function. What is less obvious is that the melodies and rhythms could correlate to the actual choices made during travel, negotiating between the objects whose mass is responsible for the creation of the pathways. As mentioned, the *Lagrange points* are balanced areas of equilibrium, nodes where changes in direction can be made with minimum energy. Therefore, what is required as our musical analog is that there is balance between whatever two objects we assign as corresponding to pairs of bodies in space, and then define possible equilibrium positions relative to these bodies.

The two pairs of tritone nodes could also represent these Lagrange points. In this case, the tritones are not bodies such as planets; these tritones symbolize points orbiting in balanced sync with the planets. As we are concerned with negotiating pathways, our focus is on rhythm and melody.

The Lagrange points are not completely stable, as they are acted on by centripetal and centrifugal forces. There are many ways to formulate musical correspondences to the ITN:

1. The tonic of the main dominant corresponds to the centripetal force, the other tonic a tritone away being symbolic of the centrifugal force.
2. The positive dominants represent the centripetal force while the negative dominants symbolize the centrifugal force.
3. The positive and negative dominants correspond to the centripetal force. The positive and negative subdominants symbolize the centrifugal force.

Different logics may serve different symbolic purposes. Like Nature, there need not be one static approach. The concept that has most perplexed modern man's attempt to understand the approach of the ancients was the circular thinking, the multiplicity of approaches that were used in perfect harmony with each other.

The Lagrange points could represent the positive and negative harmonic means between the tones C:G:C ascending (E-B^b) and G:C:G

descending (E^b-A) respectively. This idea is based on the musical gravity of the two objects C and G. Depending on how they are functioning, their respective gravitation attraction are not equal.

In this concept, the Lagrangian points are the equilibrium points within the constellation of dominants. They are the points where a musician could either pivot within a path (using a minimal amount of energy), or continue on and be pulled in the direction of a particular musical mass. Using musical correspondence number 3 above, a pull in the dominant direction means being attracted by the gravitation pull of tonics (centripetal motion). Escape velocity is required to move in the centrifugal direction, and this requires more energy, and musical cunning.

The results of these movements are similar to the result achieved by Nature, a kaleidoscopic assortment of energy, color, and polarity that influences the movement of the passions of the soul. This arrangement of colors and moods is reflected in music, from simple to more complex progressions, all determined by the needs and purposes of the musician. Here is a very simple extemporization based on the last four measures of the song *Cherokee*, where the descending tritone pairs E-B^b and E^b-A are presented in alternate opposition containments:



Figure 25. *Cherokee* last four measures.

I will present a few more complex examples below. I would like to state that, though this example is simple and may be familiar to many in the form of another concept, what I am discussing here is not about playing on top of a particular chord. Although there is clearly some overlap between these approaches, the concept discussed here is about the pathway that will lead gravitationally to the desired destination.

What makes the above example simple is that it does not take full advantage of the quadrature relationships. Coltrane's composition *Giant Steps* is a perfect example of these kind of pathways, only because in its original form it already contains alternate dominant-tonic pathways. The original opening progression is as follows:

Bmaj7 D7 Gmaj7 B^b7 E^bmaj7

This is basically composed of alternating static and dynamic structures, respectively. Functionally, if we remove the quadrature angles, this progression is the same as a descending cycle of 5ths (or descending semitones)

Bmaj7 B7 E^bmaj7 E7 A^bmaj7
Bmaj7 B7 B^bmaj7 B^b7 A^bmaj7

where the A/D[#] and D/G[#] tritones (2nd and 4th chords) have the function of the *Lagrange points*, and act as pivot points for the changes in direction. However, in the same locations, C/F[#] and F/B—which are at quadrature angles to the previous tritones—would have functioned in essentially the same way:

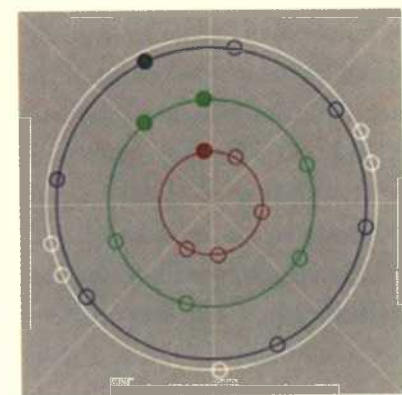
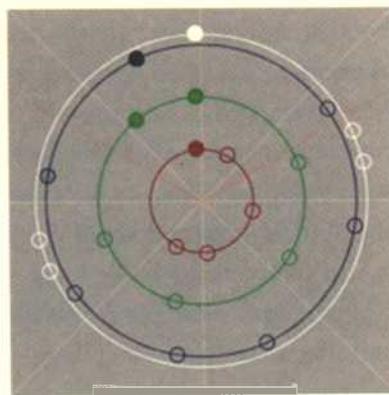
Bmaj7 A^bmin6 E^bmaj7 D^bmin6 A^bmaj7
Bmaj7 E^bmin6 B^bmaj7 D^bmin6 A^bmaj7

There are many variations. For example, we could extend the number of *Lagrange points* while still serving the same functions, but traveling along very different paths (e.g., colors) that lead to the same destination:

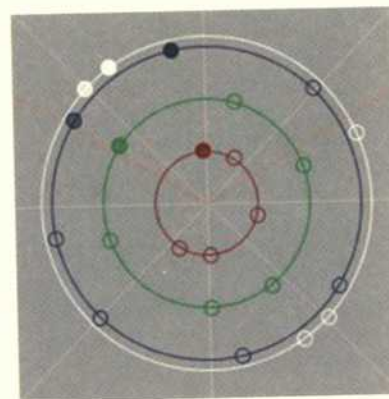
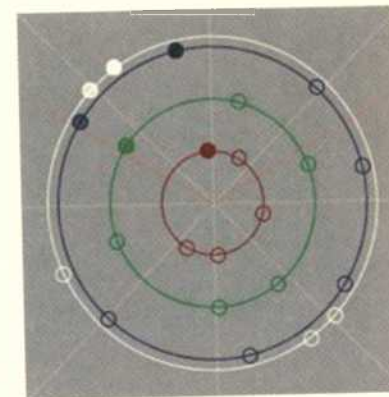
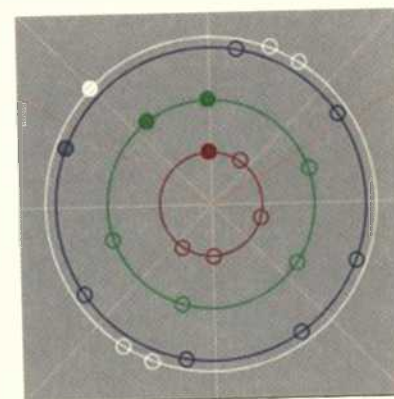
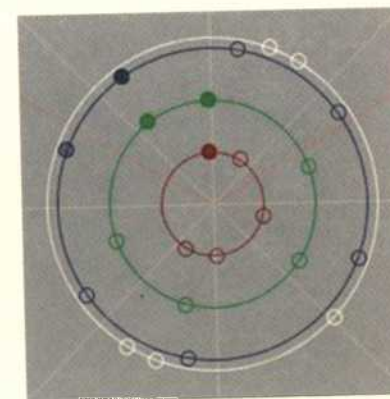
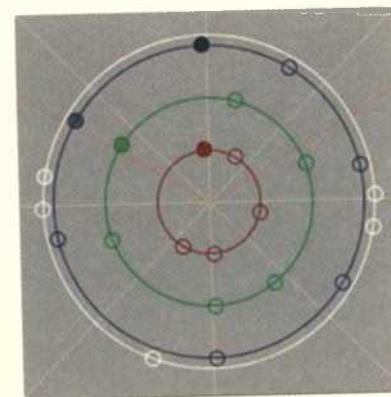
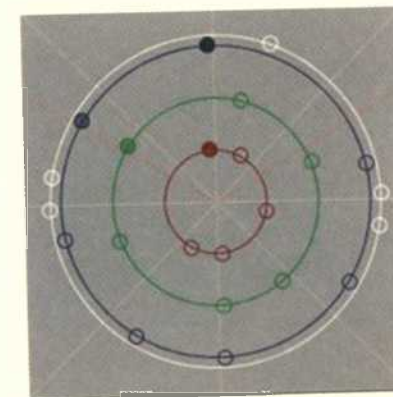
Bmaj7 A^bmin6 G^bmin6 B^bmin6 E^bmaj7
A^bmin6 C^bmin6 E^bmin6 B^bmin6 E^bmaj7

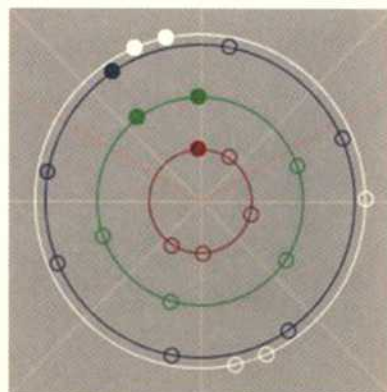
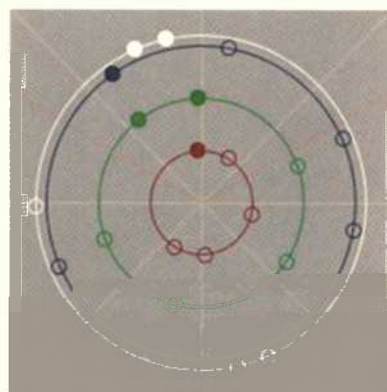
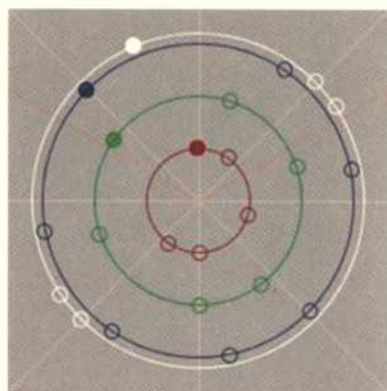
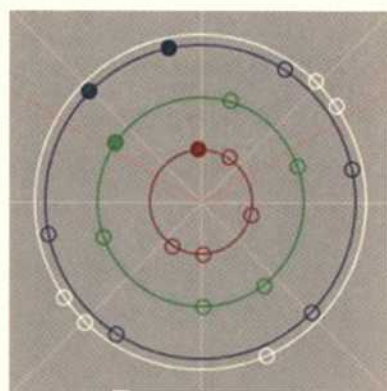
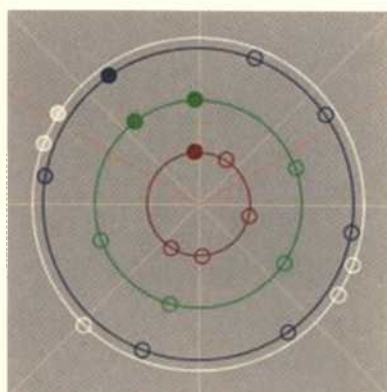
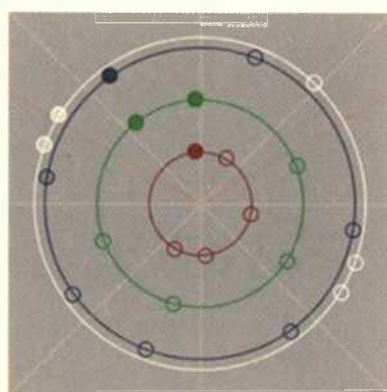
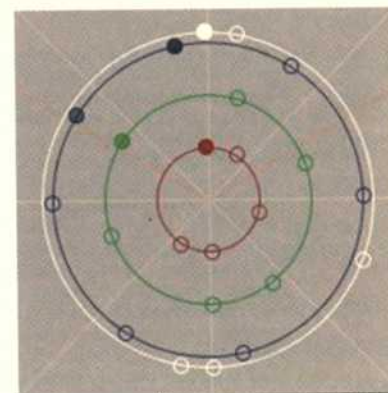
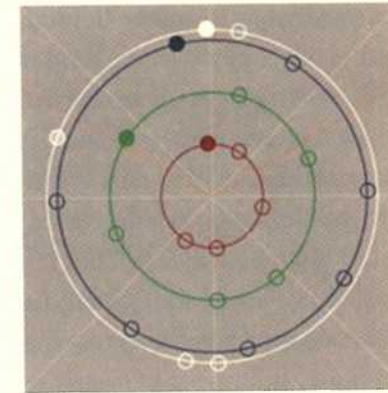
And this is just assuming that we keep the harmonic rhythm the same, and of course the timing can be changed as well. Here we can use the analogy of *weaving* to symbolize this process. Weaving, in ancient Egyptian culture, was symbolic of the act of creation. The Egyptian neter Neit symbolizes, among other things, the creative function of *weaving*, e.g., the *drawing together* the spiritual essence and instinctual functions (while the Memphite neter Khnum, the divine potter, apportions and allocates instincts to physical forms of life). The weaving deity Neit also symbolizes the idea of *weft and warp*, the invisible *Matrix* of the world (analogous to the *musical matrix*). Even the name Neit means *to weave* or *to knit*. There is also symbolism relating to the weaving of the cocoon, which symbolizes rebirth, regeneration and spiritual transformation. In many West African cultures weaving was symbolic of the act of creation; this was true among the Dogon, for example. There have been many connections made between the ancient Egyptian and Dogon cultures, both in terms of symbolism and in terms of the speculated migration routes of the people of ancient Egypt after that culture's dissolution.

Moving on to the temporal realm, for many years I have been working with musical expressions of what can be called *natural rhythms*, where I not only imagine dynamic rhythmic structures that in many ways imitate the motion of our solar system, but also attempt to emulate the symbolic energies associated with these structures. Here is a graphic representation, recreated by computer programmer/musician Takahiko Suzuki, of a composition of mine called *Wheel of Nature*.⁹⁰ The graphic represents the rhythms and rhythmic time span relationships in my composition, which are symbolized as objects orbiting counterclockwise around a shared barycenter. The graphics below are frozen shots of the animation that Takahiko programmed. Each graphic represents the moment in the cycle where the bass is returning to its original position, called a *return* in astrology.

Figure 26. *Wheel of Nature*—Rotation 1.Figure 27. *Wheel of Nature*—Rotation 9.

90. Suzuki's work was inspired by a graphic created by Benoit Black and programmed by François Reme, which in turn was also inspired by and represents the composition *Wheel of Nature*.

Figure 28. *Wheel of Nature*—Rotation 2.Figure 29. *Wheel of Nature*—Rotation 10.Figure 30. *Wheel of Nature*—Rotation 3.Figure 31. *Wheel of Nature*—Rotation 11.Figure 32. *Wheel of Nature*—Rotation 4.Figure 33. *Wheel of Nature*—Rotation 12.

Figure 34. *Wheel of Nature*—Rotation 5.Figure 35. *Wheel of Nature*—Rotation 13.Figure 36. *Wheel of Nature*—Rotation 6.Figure 37. *Wheel of Nature*—Rotation 14.Figure 38. *Wheel of Nature*—Rotation 7.Figure 39. *Wheel of Nature*—Rotation 15.Figure 40. *Wheel of Nature*—Rotation 8.Figure 41. *Wheel of Nature*—Rotation 16.

While it is possible to analyze the rhythmic sentences in a manner similar to that developed by Ghanaian scholar Willie Anku,⁹¹ it is also possible to interpret the symbolic form of these figures in a similar approach as is utilized with astrology, geomancy, numerology and other divinatory practices.⁹² This could be done through the use of correlative thought, by corresponding the configuration of the musical structures with philosophical principles, and associating the musical geometry with the laws of nature.

The art of corresponding moving geometry with philosophical ideas is well established within the discipline of astrology. Those who study these arcane matters describe in symbolism the character of geometric angles, based upon the division of the circle. In general terms, the circle divided by 2, 4 or 8, produces angles of 45°, 90°, 135°, 180°, 225°, 270° and 315°, representing a kind of stress or tension. The division of the circle by 3 or 6 produces angles of 60°, 120°, 240° and 300° (not including the 180° opposition), symbolizing more of an equilibrium that implies a flow of energy with a minimum of resistance.

Though we identify cyclic relationships of planets using the aspects formed during their orbital periods, the truth is that most of the time these relationships are in a state of becoming, a constant state of applying and separating.⁹³ The

91. *Structural Set Analysis of African Music: 1-Adowa, 2-Bawa*. (Willie Anku-Legon Ghana).

92. These figures have somewhat of a geomantic appearance. Geomancy is a divinatory system that uses markings on the ground of patterns of soil, rocks, sand, lines or figures. Both Ifa (West Africa) and the I Ching (China) are forms of geomancy. Numerology is an esoteric system based on the occult study of numbers, their meanings and their influence on human affairs; it is frequently used in divination. The general principle is that symbolized in the numerical value of a thing's name can be found an idea related to that name's essence or essential force.

93. When the distance between two planets in aspect is narrowing towards an exact aspect, the aspect is said to be an applying aspect. When the distance between two planets in aspect is widening away from the exact, it is said to be a separating aspect. http://www.djay.com/astrol/ap_12.html accessed September 9, 2009.

harmonic state is mostly an ideal in our minds, and in any case the exact harmonic state is the briefest of moments. If music is to be a reflection of the methods used by Nature, it should spend the vast majority of its time in this dynamic state of *becoming*, in various degrees of what could be called tension, with only brief references to *is*.⁹⁴ Still, it is through quantizing that the human mind most quickly comes to terms with Nature. So, it may be instructive to start with fixed positions and angles as *yardsticks* or *landmarks*, in order to keep one's bearings.

Most modern notation is based on a linear concept; this is the approach of the dominant cultures today. Therefore, it is much easier for people trained from this perspective to grasp the circular diagrams above if they are notated in a linear fashion. Since the harmonic relationship of the clave and the bass is 1:2 (clave = 1, bass = 2), I will only describe the relationship of the clave to the drums.⁹⁵

The clave of *Wheel of Nature* could be notated as follows:⁹⁶

||: x _ _ _ x _ _ _ x _ _ _ x _ _ _ x _ _ _ x _ _ _ :||

The drums would then be notated (X = bass drum, x = snare, "≥" = start of the cycle, every symbol written is one tick on the time scale, including "≥"):

||: ≥ X x x _ X _ _ _ X _ x _ _ _ X x x _ X _ _ _ X _ _ _ X _ _ _ :||

If we combine the cycles of the clave and the drums, then we get the following patterns, when notated using the linear approach:

||: x _ _ _ x _ _ _ x _ _ _ x _ _ _ x _ _ _ x _ _ _ :|| = clave

||: _ _ _ _ ≥ X x x _ X _ _ _ X _ x _ _ _ :|| = drums A
(conjunction—0°—seed impulse or new start)

||: _ X x x _ X _ _ _ X _ _ _ X _ _ _ ≥ X x x :|| = drums B
(waxing semisquare—45°—overcome resistance)

||: _ X _ _ _ X _ x _ _ _ X x x _ X _ _ _ :|| = drums C
(waxing square—90°—initial manifestation)

94. This is related to the concept of *seeking*, the idea that Nature is constantly *seeking* conditions of equilibrium. However, this is a fluid principle, as once a state of equilibrium has been reached it is immediately counterbalanced by other conditions, causing the seeking to begin anew. This is a constant process which can be observed everywhere in nature, including in the motions of the planets in the solar system. This was also a concept used in music where, theoretically, imperfect intervals and rhythms were thought to *seek* perfect intervals and rhythms. In practice, I believe that the music of J.S. Bach, John Coltrane and others in part attempted to reflect Nature, in the sense that the *seeking* process is continually renewed, therefore producing what appears to be varying degrees of tension referencing moments equilibrium.

95. The bass cycle is shorter than the clave, so I think of the two bass repetitions as being one cycle. In other words, the bass and clave together are one rhythm, the length of which is equal to the length of the clave.

96. The keywords listed after rhythmic patterns A through H, are paraphrased from *Full-Phase Book* (Michael Erlewine), e-book, pp. 40–60.

||: _ _ X _ _ X _ _ _ ≥ X x x _ X _ _ _ X _ _ _ :|| = drums D
(waxing sesquiquadrate—135°—adjustment)

||: x _ _ _ X x x _ X _ _ _ X _ _ _ X _ _ _ :|| = drums E
(opposition—180°—full experience)

||: ≥ X x x _ X _ _ _ X _ x _ _ _ X x x :|| = drums F
(waning sesquiquadrate—225°—facilitate, adapting)

||: _ X _ _ _ X _ _ _ X _ _ _ ≥ X x x _ X _ _ _ :|| = drums G
(waning square—270°—objectivity, beyond manifestation, metaphysical)

||: _ _ X _ x _ _ _ X x x _ X _ _ _ X _ _ _ :|| = drums H
(waning semisquare—315°—preparation for closure)

||: _ X _ _ _ ≥ X x x _ X _ _ _ X _ x _ _ _ :|| = drums A
(conjunction, same as top, but with the second beat sounding)

When considering rhythmic cycles, the shorter cycle always determines the phase of the angle. The angle is waxing when the shorter cycle is ahead of the longer cycle, and moving towards opposition. The angle is waning when the shorter cycle is behind the longer cycle, and moving towards conjunction. Because of the rhythms involved, it is difficult to tell when one cycle is ahead of another, so it is best to think of waxing as growing and moving towards opposition. Then waning means shrinking and moving towards conjunction.⁹⁷

97. See note 20.

In *Wheel of Nature* it is the clave, in relation to the drums, that determines the nature of the angle. One way of knowing that you are coming to the opposition is that the two short hits of the clave (the hits separated only by one tick) hit together with the bass drum then the snare drum (just before you come into opposition). This point is a kind of resolution, a point where balance is temporarily achieved through rhythmic voice-leading. Similar to tonal harmony, rhythmic harmony occurs around the points of simplest proportions, e.g., 1:1, 2:1, etc. In this case, the moments near the conjunction and opposition are the most harmonious, with the square angles being the next harmonious relationships.

Other than conjunction and opposition, the angles listed above (square, semisquare, sesquiquadrate) are called 8th harmonic aspects (the circle divided by 8), and these angles represent a series of rhythmic midpoints. The opposition is the midpoint between two conjunctions; the square is a midpoint between the conjunction and the opposition; the semi-

square is a midpoint between the conjunction and the square; and the sesquiquadrate is a midpoint between the square and the opposition. It is all about balance, a principle that is innate to Nature. The 8th harmonic aspects symbolize some kind of challenge, tension and action, while the 6th harmonic aspects (sextiles and trines) symbolize physical growth, harmonious flow of energy and rest.

If you stare at Figures 26 through 41 long enough, using them in the way one would use yantras, you will see patterns emerge, symmetries that can be used to balance and focus the mental faculties (thought, memory, perception, imagination, consciousness, intuition, emotion, etc.). Rhythms that cycle at different time spans have a quality that is similar to what occurs during the relationships of planetary cycles. It is even possible to construct a rhythm that has the illusion of moving faster at certain points of its cycle, similar to the eccentric orbit of Pluto. The esoterically inclined could study the effects of such combinations and apply symbolism much in the way that astrologers have done. The main difference between the musical realization and the astrological perspective is the temporal spans involved. With astrology, these aspects have an effect over time period of hours, days, months and even years; with rhythms, however, the effect is measured in minutes and hours. This is similar to the difference in the vibrations of pitches over periods of time measured in seconds versus rhythmic cycles measured in minutes.

In the development of the art of astrology, the practice of associating effects with geometric configurations was developed from centuries of experience and observation, primarily based on the memory of which events occurred during particular celestial formations. This knowledge was recorded and passed down to future generations, who then added their own empirical observations. Even if the actual physical cause of characteristics—correlated with a certain celestial formation—was not known, it was accepted that there was a connection, and usually the actual cause was attributed to the intervention of a supernatural being or god. Humans still do this in current times.

For example, Johannes Kepler, in disagreement with his contemporary Galileo, knew from observations that there was a connection between the phases of the Moon and the tides on Earth, even though the explanation of the cause had to wait until the theories of Isaac Newton. We even do this intuitively; we learn the feeling of when there is about to be a bad storm just

by looking at the configurations of clouds, feeling the wind and humidity, and in ancient times watching the reactions of animals. We know that a storm is coming because of the many times an actual storm followed similar combinations of conditions. This intuition is based on the memory of the experience.

For centuries, humans have paid homage to Nature by creating in Nature's image and according to what is perceived to be the laws of Nature. Many use the ancient maxim "*as above, so below*" to illustrate the connect-edness between principles governing the cosmic world and the natural world (on Earth), otherwise known as the macrocosm and microcosm, respectively. However, care must be taken with these analogies, for even though the same universal principles may be at work, a different attitude is required to approach the various realms. Therefore, in the spirit of Sokar, we need to adjust our orientation when making correspondences between the laws of Nature and the laws of humans.⁹⁸

This is the meaning behind the second part of the maxim "*as above, so below, yet after another manner*."⁹⁹

Musicians can use this same approach to transcribe the quality and characteristic of time into music. This is not something that you just create out of thin air, it is also based on experiences, the memory of the events and effects that occurred during particular arrangements of dynamic pitch and rhythm configurations. This knowledge is also recorded and passed down to future generations, who then add their own observations based on their experiences. Like Kepler, we may not always know the reasons why some configurations and movements have the effect that they do, but lack of specific knowledge should not prevent us from using the information, although we should always strive to learn more about the mechanics of our craft. Everyday we use machines whose mechanics we have little knowledge of.

In the section on astrology there was a description of a tonal system that has some analogies to the solar system. Also discussed was the importance of syzygy and quadrature relationships among the planets, which lead to a demonstration of the 90° dial and its relationship to the *musical matrix*. Earlier in the present section we discussed the musical and

98. According to Peter Tompkins and Livio Stecchini, in *Old Kingdom Egypt, Sokar was the god of orientation; see Secrets of the Great Pyramid* (Peter Tompkins with appendix by Livio Stecchini), pp. 181, 297.

99. *The Astrology of Local Space* (Michael Erlewine), e-book, pp. 71–73. Also, in a personal communication Erlewine stressed to me the importance of the second half of this phrase "yet after another manner," in his description of the different perspectives that were necessary in consideration of the various astrological coordinate systems, or as he referred to them; *wheels within wheels*.

symbolic significance of quadrature relationships in regards to melody, harmony and rhythm, giving some examples as well.¹⁰⁰ It is clear that these angles appear to hold some cosmic significance (effects on the Sun, and the resultant influence on the solar system and on human affairs), and they also appear to affect humans psychically and emotionally. This may be because natural principles of dynamic symmetry may produce very strong effects on organic and inorganic matter, as well as on a variety of non-physical phenomena, about which we know very little.¹⁰¹

Regarding the musical transcription of temporal characteristics, similar dynamic symmetry techniques could be utilized to derive melodic, harmonic and rhythmic formations that, by analogy, could function in comparable ways. These tonal configurations tend to function in ways that not only color music, but also produce psychic effects and changes in perspective that can be disorienting:



Figure 42. Musical Psychic Effect 1.

The Moon orbits the Earth while other moons orbit other planets, as these planets orbit the Sun. So it is with melody, where we can have tones *orbit* other tones, which then can be seen to orbit in groups around pivotal pitch collections. The balance of melodies (melodic symmetry, contrary and oblique motion, etc.) has been practiced for centuries in music, and was discussed in ancient times. It is basically theory derived from the proximity of tones to others, the movement of tones, and how pitches are perceived to attract and repel each other in a local environment, that is, local in pitch space and local in time. In this sense, melodies can also be seen from the perspective of absolute tonal gravity, analogous to how the solar system works.

It is mostly a matter of the musician being able to shift perspective to imagine these points of views (the Sokar principle):



Figure 43. Musical Psychic Effect 2.

Again, it is not necessary to experience this in physical form, no more than we have direct experience of Jupiter orbiting the Sun. It was through deduction that humans arrived at the heliocentric point of view of our solar system, confirmed by subsequent experiments. We can do the same with music; the melodic expression can be some combination of the exact balancing of the melodic tones (i.e., exact melodic symmetry) and an approximate balancing of tones (e.g., following Nature's method of using elliptical orbits). Here we show this technique using *rhythm changes* in Bb as our template:



Figure 44. Effect 3 on Rhythm Changes.

The accidentals are intentional, giving a clue for those interested to decode the *Invisible Paths*. The astronomical concept that we could use as an analogy is that of the ITN (Interplanetary Transport Network). With spontaneous composition, there is a certain amount of calculation done beforehand, and a certain amount that is spontaneous. We need to internalize fundamental functions if we want to increase the percentage of spontaneous creations. The development of our memory of shapes, sounds and touch is extremely helpful towards accomplishing this.

Memory is important for musicians. The major types of memory are *visual* (relating to the sense of sight), *audile* (relating to the sense of sound), *motile* (mental imagery relating to moving and motion)—along with the lesser used *gustatory* (relating to the sense of taste), *olfactory* (relating to the sense of smell) and *tactile* (related to the sense of touch). To these physical senses I would add the memory of emotional and spiritual impressions. Developing and refining the senses and memory aids a spontaneous composer in expressing a particular quality of a moment.

Conclusion

Much of human activity has been devoted to the concept of balance. The ancient Egyptians saw the neter Ma'at as representing the principle of balance, which they equated with truth, order, law, morality and justice. Their entire civilization was based on the principles of timing, placement and being in balance with Nature. The concept of balance was also of vital importance for the civilization of the ancient Chinese, who saw the universe as consisting of forces of dynamic equilibrium called yin and yang, complementary opposites that exist inside of a larger whole. For example, the principles behind acupuncture are designed to bring the body's energy into a state of balance between yin and yang.

Balance, placement and timing are also very important for music, being fundamental to the temporal and tuning systems of world cultures. Rhythmic, melodic and harmonic concepts are born out of these ideas, examples being the development of the rhythmic and melodic modes, counterpoint and the concept of the triad. For example, dual and triple qualities act as counterpoise to each other in music, and this is also reflected in ancient myths, religions and philosophies. Various symbolic languages have been created to express these forces of dynamic equilibrium.

In this article, I have given examples of various approaches to using

music as a symbolic language to communicate ideas of a metaphysical nature, particularly by the use of analogy to the laws of Nature. However, there is more to this than the symbolic representation of qualities of space and time, through the use of sound, shapes, color and their movements. A musician can slowly develop another kind of sensibility that allows for seeing things from different perspectives. Better yet, when a musician can alone (without the aid of a band) physically express the harmonic relationships of tones and movement (rhythm) that were previously beyond reach, there is a certain kind of joy in the way the internal passions move as a result of the changing relationships. I believe that when you learn something new, a reordering goes on inside the psyche, new neurons are generated and new neural pathways are constructed within the mind in unfamiliar configurations that somehow reflect the relationships being internalized. The result is that, slowly, you become a different person. And it is possible that listeners who are psychically, intellectually, emotionally or spiritually in proximity to the same vibrations may also have something of a revelatory experience. I have experienced this time and again, and I know others who have as well. In fact, it was listening to the music of past masters that led me in this direction in the first place.

In ancient Greece there were three styles of rhythmic composition, and three styles of melodic composition that balanced each other: contracting ("*through which we move the painful passions*"), expanding ("*through which we awaken the spirit*") and soothing ("*through which we bring the soul round to quietude*").¹⁰² The use of

102. Strunk, Treitler, p. 65 (Aristides) and p. 45 (Cleonides).

103. Strunk, Treitler, p. 65 (Aristides).

these styles gave the composition in question its characteristic ethos.¹⁰³ This was the basic approach used in many other ancient societies. This reminds me of a conversation that I had with saxophonist Sonny Rollins. He told me that there are only two types of music, that which expands consciousness and that which contracts it. Sonny also said that much of what a person hears everyday acts to contract, but that he wants to be a part of that tradition that performs music that expands consciousness.¹⁰⁴ This statement eloquently sums up the entire paper.

104. Sonny Rollins (personal communications, c. 2001).

Many thanks to Patrícia Magalhães for the invaluable help in proofreading and editing this essay. However unclear my presentation appears, it would have been a lot worse without Patrícia's help!

WHEN I SAW KOSUGI GET INTO A LARGE DUFFLE-BAG WITH HIS GUITAR

ALVIN CURRAN

When I saw Kosugi get into a large duffle-bag with his guitar, have himself zipped up and start his rolling across the floor of John Phetteplace's living room, overlooking Hadrian's magnificent Pantheon in the heart of old-Rome, I thought, who is this *meschuganah* Houdini, this Zen Dadaist, this Fluxus Troubadour. In truth, I really don't remember what I thought because in the late 1960s all this avantguard behavior of going-nowhere in snail-like pathological concentration, was not only new to me, but as attractive and beguiling as it was distressing. Is this the new music-theater? The future weather of music composition? Who needs it? What am I getting into? Will he come out alive? Today, I ask only: how close can you get to the sound you make, how intimately fused? In performance, how invisible can your body and instrument become? And how long can you fly like this, unseen?

Kosugi rolled *a tempo d'avanguardia* slowly, unevenly and inexorably for some thirty esoteric minutes until the 21' path between the spectators ended. All we heard was a muffled succession of shwooshes, vroomps, thumps, plinks, crunches and rhetorical chance-induced silences, made by his small body in contact with the guitar casing, strings and his body bag of ritual performance-art. The floor, the clothes, the bag, the body, the guitar, the air, the space, the audience, all suffocatingly enclosed, all rolling in the dark, all sounding. Kosugi kidnapped us, zipped us all in there with him, blind, cramped, aleatoric, meschugah, claustrophobic, sounding. Who dared stand apart objectively, and simply watch wait and listen unruffled? We were not only a transfigured part of the artist's mimetic act, but ourselves bag-people, turning over in the preposterous fetal action with him. Where he went, we went, what he unintentionally plucked, we plucked... Admittedly, nothing new in Absurdity; but where does the theatrical ritual, Art's big ego, and all the mumbo-jumbo end and the transcendence begin?

when does ecstasy kick in? When do we leave for Ain Sof?

Christian Wolff had already intuited it: take some sticks, take some stones; just as the Aborigines have done for millennia, incorporate these humble instruments into your life, your soul, divine your "song-lines" with them, chant with them, move, dance, step into time, step out of time, nod to cue another player to imitate, ignore, follow, or simply play nothing, maybe a long tone; hold your breath, hyperventilate, walk through walls, disappear. My first memory of *Stones* was a '60s performance by Cornelius Cardew and friends at the old Roundhouse in London; exquisite simplicity focused on these utterly ubiquitous humble rocks found on any unexploited surface of our planet. Volcanic vomit, geodes, crystals, compressed sea-life, prehistoric animal behavior, lithophones, bang, scratch, tap, slug, rub smash pound stones. Rzewski's glass plate (in the shape of a piano), contact-amplified, screeched with plastic scratchers, buzzed with a sex-vibrator, drummed with the fingers like a dumbeg, struck with soft mallets, comes from the same *Instrumentarium*. Annea Lockwood heaved old TV monitors in the midst of her divine glass installation in London's Middle Earth, later she took whole rivers and re-tuned them, renamed them in sound. Robert Ashley came from Dust, got up and howled like a wolf with shades on; Joan Jonas took a mirror and viewed every part of her naked body in silence as she moved *adagio* in quasi dance stasis in a Borromini Chapel; Meredith Monk enchanted us with nina-nanas sung over the edge of her tuned brandy-glass. Lucier sat in a room (wall to wall carpeted) and captured its resonant breath; Maryanne Amacher magically moved the sound of the room around your head, making you look behind you to find the hidden speakers—there weren't any. Joan La Barbara sang in seamless looped circles while breathing in as well as out. Teitelbaum went straight into the brain without surgery to extract its tricky Alpha waves; Pauline O went into caves or resonant abandoned wells and got people to sing the space, play the space, become the space. Chiari, when tired of standing still before a piano keyboard, let gravity determine when he would fall on it. Cage went straight to the hothouse and made the amplified cactus plant his orchestra. Diamanda, wielding steak knives, spit menstrual blood into the public's face through two mics. MEV attempted to liberate whole audiences by inviting them into the music—*de facto* making them the music; police and fire departments were often called in.

These were no mean times, those cambrian '70s, they were experi-

mental. Nothing was downloadable, it was already there—you just had to find it. So everyone was searching for every imaginable audible vibration, every concept and sounding object; everyone it seemed was poised for a discovery, nay, a reconfirmation, that any sounding experience can be a simple means of transport out of our commonly shared reality. Any musician worth their chord-changes knows this anyway. This is essentially what all music is, a universal system of transport, which in special conditions enables both the players and the listeners to momentarily disappear—step out of quantifiable time and space, simply by becoming the sound they are making and hearing, sharing.

Once during a student occupation of the National Theater Academy in Rome, I asked 150 students to lie on the floor, and start to quietly gurgle their vocal cords on the lowest possible frequencies. This ended ninety minutes later with all of them wailing, howling, singing a spontaneous Living Theatre Oratorio no one could have foreseen; the whole room seemed to levitate in an amalgam of renaissance architecture, walls of sound, ceilings of robed muses, floor dirt, unclassified mold, human breath, saliva and carefree student sweat.

These sonic fireballs were common in MEV music where the primitive means of amplification and the raw ground beef of oscillator gas, screaming reed mash, thwanging bedspring booms rocking the pavements in the lowest Hz cellars, made the art of spontaneous collective music-making, the art of becoming music itself. True, the symphonists, as the Tibetan monks, and the Inuit throat-singers and Uighur Shamans and the Coltranes, do this too, but they are a coordinated body agreeing expectedly to play a known and more or less repeatable "score." Free improv, through willful mutual trust, hyper-attentive listening and an informal belief in street-magic, is the collective creation and realization of a "score" in real time—a fusion of multiple minds and bodies into something no one, yet, has adequately been able to describe. In the early MEV times, states were arrived at that can not be found on any maps.

It is no wonder, that after food and water, music can be the most important life sustaining substance, intangible as it is. And if I understand mysticism and its universal potential for social unity and material transcendence (primarily through sound, I'd say), all of these tales contain something of the mystic, the inexplicable, numinous, unknowable. Music—some kind of socially purposeful resonating of objects and people, is the one

human activity which provides (without any guarantee) that by becoming sound we can and do momentarily disappear into an un-nameable space of ecstatic potential.

Is it after all a big leap if we sail from Hildegard von Bingen's fiery monophonies to Beethoven's late string quartets and piano sonatas, Scriabin, Busoni, Sorabji, Sousa to Webern, Ellington, Billie Holiday, Pranath, Thelonius, Coltrane, Cecil, La Monte Young, Branca, Braxton, Riley, Partch, Palestine, Evan Parker, Messaien, Zorn, Carter, Um Kalsum, Xenakis, Ligeti, the Dagar Brothers, Gubaidulina, Amacher, the Mevlevi, Jonathan Harvey, Ustvolskaia, Karlheinz, Scelsi, Nono, and Feldman?... what links them but for their singular concentration of sonic energy and their means to construct, focus and release it. And while they may appear here as just a few names dropped out of my own hat, they've all given me repeated free rides out space and time. But the mystical experience is not just limited to these well known artists and their inimitable diverse musics—many of whom consciously, willfully inhabit these "altered states" obsessed with artistic fervor, spiritual imaginings and verifiable magnetism. It can happen just walking down the street, driving a car, having an orgasm, dreaming.

There is no question in my mind that as professional musicians, we fill a societal role not unlike that of dedicated spiritual and religious leaders. While the latter—using only the spoken or sung word—may guide their listeners to predictably desired places, the musicians guide their listeners through pure sound of any making, aimed at reaching remarkable but unpredictable states of extreme well being, and they do this clearly without any sermons, hype or guarantees of any kind. This is the real musical gift and gift of music and the only area where the adjective "free" applies—the trip is always free.

Music inspired by the order or disorder of the cosmos or other natural phenomena is evident in anthropological studies... mimesis of this kind can be found particularly in the music of western composers such as Holst, Scriabin, Hovahness, Rudhyar, Messaien, Stockhausen, Scelsi, Oliveros, Evangelisti; but the real mysticism in our music lies much less in these parallels of structural simulacra or in awesome events than in the ordinary experience of human musical perception, where inexplicable sequences and combination of tones, densities, timbres and durations can simply and momentarily melt away the physical sense of being and leave us for a moment egoless in ecstatic nakedness.

Since 1945, as in all post cataclysmic times, we have been living—musically speaking—an extended period of mourning and extraordinary reconstruction. The world then, as we westerners knew it, was broken...the landscape one of endless death, destruction and rubble. Young musicians like Varèse, Cage, Babbitt, Berio, Boulez, Maderna, Nono, Goevaerts, Xenakis, Ligeti, Stockhausen, Carter, Nancarrow, Partch—all honorable anti-fascists, set themselves the immense task of cleaning up and putting some artistic order and meaning back into the horror-filled streets. Their music assumed the massive psychophysical task of renewal; it let go of Beethoven the father, and grasped on to the revolutionary hands of Schoenberg and Webern. But even in its muscular determination, expressed often in violent fits of clustered fragmentation and hurled canisters of atonal madness, the music of these new young lions always let rays of transcendent lyricism break through the intentional disorder—exuding warmth, security and humanity; but these musics with their fresh 12-tone warranties, imagined themselves momentarily to be like pure science, beyond the fuzziness of human emotion, intuition and spiritual longing. Their basic message remained largely free of religion and sentimentality and humor; it focused relentlessly on the “never again” mantra, and through years of inspired musical destabilization led to a persuasive musical order—a new common practice and universal second language.

My generation, born in America, was in fact musically schooled in this *Gesang der Junglinge* Gulag and Second Viennese Concentration camp (i.e. forced retrograded inverted permutation marches). Here we made “rational” music from second-hand bails of barbed wire and buckets of shards that got dumped willy-nilly on the graves of Bach and Beethoven—without really knowing anything about where this all came from. We were in fact all pretending to be mathematicians posing as composers dropping names like Boole, Bernoulli and Fibonacci to give us street-creds. But by the end of the 1960s many of us turned in our 12-tone Union Cards for plates of comforting C major sushi-downtown-style. The minimalist bombshell together with the improv’s maximal-liberation theology opened an unannounced breach into the already volatile contemporary music world, challenging the entire Eurocentric construct.

My own music was born speaking all of the above languages at once from Dixie to Xenakis, Braxton to Terry and La Monte, the Shtetl to the Kitchen. Like a plant with multiple grafts on one stalk—a common

contemporary species of the mid-’60s, it felt at home in all the Meteorological quadrants N/S/E/W of our planet and in all time-zones especially those unmeasurable by science. Mine was a generation of overnight-utopian-practitioners who imagined they could re-invent the wheels on their VW buses. Spirituality—with a capital S, was in; gurus were in every store-front. Everything was “natural,” and from Granola to gamelans, didgeridoos to the Doors, yoghurt to yurts, all alleged to be free tickets to an ecstatic experience.

My own work, whether simple monophonies, or wailing-walls of contrapuntal voices, or solo piano works knitted in sequence for six hours, or even harbors full of hocketing ship horns, never consciously solicits the mystical, but knows intuitively it’s out there, and that in certain “atmospheric” conditions anything audible may combine to produce the disorienting but pleasurable sensations of not having a body or a mind that responds to you and your name, and without an identity—no papers—you momentarily step out of time into another space; If this is not mystical, it is indeed very mysterious phenomena.

While I personally have no key or even license to produce these states at will, such occurrences are understandably among my most treasured artistic memories; they might even explain why human beings, who by definition are musical animals, may appear in forms of flesh and blood and pure sound simultaneously.

THE MUSICIAN MYTH
AND THE FAILED QUEST

FRANK DENYER

Imagining new emotional/aesthetic territories for music and attempting to bring them into existence makes the musician susceptible to very particular, occasionally life threatening occupational hazards. It is these that I will attempt to explore in what follows.

It is obvious that music can provide a door to imaginative and emotional spheres to which there are no more direct routes. At the simplest level, music can be a special stimulus for the recovery of distant personal memories and can thereby bring the dead back to a sort of ephemeral life, as we can see from even a casual glance at the part music plays in the lives of individuals, or as it appears in poetry and literature. And yet its efficacy is not limited to memories of a personal past, for it seems equally effective at conjuring up collective pasts as well. We can all testify to music's uncanny ability to articulate the essence of a specific time and place, providing an insight that is different from any gleaned through the written word or visual representations. Furthermore, music can face the other way too, and like Mephistopheles bring us potent intimations of futures towards which we are attracted or repelled by our deepest unformulated instincts—worlds yet to come.

From here it is but one small step to those stranger inner worlds of poetry and the imagination that present limitless horizons where aesthetic and moral imperatives are part of an always fluid potential, and where qualities such as insight, dedication, enlightenment, grace, conscience, commitment and sacrifice may be intimated, even demanded, but where they nevertheless remain permeable. For here there are no inherent divisions separating past or remote worlds from our most personal and present desires; nothing that divides our immediate and pressing social concerns from more abstract constructs; or the vaguest intimations of poetry from the practical real world; or control from chaos; or even the need to protect

an inviolable inner sanctuary of ascetic purity from a celebration of the abundant cornucopia of the natural world. In this arena all are continually forming and dissolving. Nothing is fixed. It is a place of constant metamorphoses where anything can in a moment become its opposite, a sea of limitless potential. In the *Mahabharata*, this primal state is shown as an epic tug of war between gods and demons in an ocean of milk. The hidden conflict beneath the ocean's surface is the power that churns the milk and produces the nectar of immortality, and ultimately all the blessings of civilisation including language and music. Saraswati, the specific goddess of music and self-knowledge, is a river, whose inherent nature is similarly fluid, and like music, an endlessly flowing source of fertility and growth.

Not surprisingly, therefore, the most frequently found symbols associated with music are intermediaries between this "other" fluid state and our dry one, creatures that are at home in two or more different physical environments. Water birds for example, like ducks, geese, or herons, have strong musical associations in many cultures and it is therefore natural that swans should embody the Greek Muses, as well as being depicted in India at the feet of Saraswati. Amphibian reptiles like snakes, with their ease of transit through both earth and water, are similarly ubiquitous. We might cite the carved snakes that are usually crawling all over Balinese and Javanese gamelans, or the European serpent, or the nagas of India, the latter imagined as giant serpents beneath the sea guarding a secret treasure and known for their special musical skills.

All such creatures can be seen as helpful guides through whom musicians gain their knowledge of other realms. As musical instruments they become their means of transport. One amphibious reptile, the turtle, through death and resurrection, became the original lyre according to the Egyptian/Greek story. The Indonesian *kaçapi* may be a zither but its name and form proclaim it to be a crocodile. True amphibians like frogs and salamanders, marine mammals like dolphins, fabulous creatures like the dragon (e.g. Japanese koto) and the phoenix (e.g. Chinese *shêng*, Japanese *shô*) easily fulfill similar symbolic roles. Demi-gods who are not too distant from our world can also appear as intermediaries, and therefore they too are known to be the supreme musicians. Yakshas, gandharvas, the muses, the choirs of angels around god's throne, angels with harps, angels with trumpets, even certain bodhisattvas fall into this category, each revealing another facet of the essential but hidden nature of music itself.

The human musician becomes the fulcrum for such journeys, a mediator who by definition must be on the brink, poised precariously "in between." The critical fault line may be caused by the passing of time, creating its ever changing definitions of past and present, the living and the dead; or it may be between gods and humankind. Both are subsumed by the most important of all, which is the continuous renegotiation of the boundary between the known and the unknown. All such boundaries are points of exquisite instability and psychic danger, essentially not quite here and not quite there, in the margins, on the strand, at the door, immanent.

In folklore travellers at such junctures require special protection, perhaps a sacred image like the crucifix placed at crossroads in Catholic parts of Europe. Those that would be mediators between worlds, like priests or musicians, often find it necessary to wear special clothes or vestments, effective in separating their activities from the mundane world trapped by time and place; or they wear a magic ring, carry a lucky talisman, or perform within a clearly demarcated and dedicated precinct, not quite in the real world. Despite such precautions musicians are still often destroyed by the very place they seek to inhabit, the place that is the key to their efficacy.

Therefore, Orpheus was sometimes portrayed as a crucified Christ-like figure unifying the powers of the cosmos by the power of harmony, but he was also a figure ultimately torn apart by the forces he had himself unleashed (the Furies).

The popular romantic portrayal of the musician as a glamorous maverick lurking on the fringes of society but always curiously transient, peripatetic, the perennial rebel, reflects some of the elements outlined so far. However, it is only a partial image, surviving numerous retellings as it is adapted and updated to fit contemporary lives. Artists sometimes collude in this but the inherent glamour of such stories masks the reality. Anxiety, loneliness, disease or even mental instability and premature death are frequent concomitants that can hardly be said to represent a fun lifestyle choice.

At the fault lines "between categories," it is easy to confuse past and present, the living and the remembered, the concrete and the immaterial. This is an activity that requires an expanded arena and cannot readily flourish within too narrow a view of human sentience. In the rational world precise definitions are necessary to keep things apart so that discrimination

can be cultivated.

The Japanese folk story of Hoichi, a blind Heike biwa player, outlines this situation with absolute precision. It was collected at the end of the 19th century by Lafcadio Hearn and published by him in 1904.¹ The story was memorably filmed by Masaki Kobayashi as part of his 1964 portmanteau feature, *Kwaidan*, which has the added bonus of an astonishing sound track by Toru Takemitsu.²

Like all Heike biwa players, Hoichi recites the history of the conflict between the Heike and Taira clans but is particularly famed for his re-telling of the battle of Dan-no-ura which took place in 1185. One hot summer night, while practising his biwa on the porch of the remote Buddhist temple where he lives, Hoichi is approached by the awesome figure of a samurai. (The story does not suggest that Hoichi's playing is responsible for summoning the samurai but in light of later events we might well suspect it.) The samurai orders the blind musician to follow him into the night in order to give a performance for certain aristocratic nobles who are visiting the area. Being blind he is unable to understand where he is being taken but eventually he finds himself before an élite gathering, and on a formal platform he recites his tale. However, what he believes to be a group of courtiers are in reality the ghosts of the historical figures from the musical epic he is presenting, and he is not seated at court but amongst their tombstones in a deserted cemetery.³ The performance continues on the subsequent night.

The Buddhist priest who presides over the temple where Hoichi lives gradually comes to know of these nightly performances and realises the immanent danger for the musician. He says to Hoichi:

Your wonderful skill in music has indeed brought you into strange trouble... All that you have been imagining was illusion—except the calling of the dead. By once obeying them, you have placed yourself in their power. If you obey again, after what has occurred, they will tear you in pieces. But they would have destroyed you, sooner or later, in any event.

As a magic protection the priest instructs that Hoichi's whole body be covered with the text of the Heart Sutra (*Pragñā-Pāramitā-Hrdaya-Sūtra*) which will make him invisible to the dead. Tragically his ears, that

1. Hearn, Lafcadio; *Kwaidan: Stories and Studies of Strange Things*, Tokyo, Charles E. Tuttle Company, 1904, 9th edition 1971.

2. Kobayashi, Masaki; *Kwaidan*, film 1964, DVD 2006 Eureka Entertainment.

3. Compare with the Chinese story given by van Gulik p. 157 (see footnote 6): "Another evening when Hsi K'ang was playing his lute, there suddenly appeared a man more than ten feet tall, clad in black cloth and leather belt. When Hsi K'ang had given him a good look, he extinguished his lamp, saying: I would not venture to emulate the light of a goblin."

most significant part of any musician's body, are completely overlooked, so when the ghostly samurai next appears, all he can see of the musician are these two unprotected ears and his biwa. He rips off Hoichi's ears to take with him in order to show to his lord that he has dutifully fulfilled his task as far as he was able. In conclusion the narrator informs us Hoichi survived this tale and it made him famous.

Obviously the desire to act as a mediatrix demands knowledge. From a carefully chosen position or demarcated precinct the musician focuses on that other world into whose dark waters his hook has already been deliberately dropped. Fishing provides a useful musical metaphor, and not surprisingly in folklore and mythology the two are strangely interlinked. Not merely fishing *and* music, but fishing (or influencing water creatures) *through* music. Both require unusual degrees of patience and perseverance, precise knowledge, expertise with those devices that can facilitate the transition between the two worlds. Both can easily become myopic occupations.

Here are a few more or less random examples:

The Indian musician Sagga finds himself on a sea voyage as part of his quest to find Queen Sussondi, and being a musician, the sailors insist that he entertain them. Sagga warns that his music may disturb the sea but they don't believe this to be more than an excuse. Reluctantly he plays his viña and indeed, it causes the sea to become turbulent and a great sea monster to rise up, destroying the ship in which he is travelling and all those on board.⁴

Arion, another lyre playing musician, some say a student of Orpheus himself, also has problems with the crew while travelling on board a ship. The sailors intend to rob and kill him but he is saved from drowning by his music, which attracts a helpful dolphin on whose back he rides to the shore.⁵

Shêng Hsün, a 12th century Chinese master of the ch'in, built himself a playing pavilion over a stream. One day while performing there, a storm arose and in the middle of the downpour his ch'in changed into a huge red carp. Riding it, Shêng Hsün disappeared into the sky and was never seen again.⁶

The Irishman Maurice Connor was a famous blind piper. He merely played his pipes on the seashore and soon every inch was miraculous-

ly covered with all kinds of fish. Amongst them was a mermaid. This gave poor Maurice more than he had bargained for. The mermaid, by whispering gently into his ear, enticed him and the fish to follow her back beneath the waves and he was never heard of again.⁷

In the *Bhagavata Purana* we read of Krishna, a musician god, subduing the demon in the Yamuna river known to be destroying the land's fertility and killing the fish. The story says that Krishna first peered into the depths, then plunged in, and an epic underwater fight commenced. Eventually he re-appeared above the surface performing a fantastic dance of victory on the serpent's head while the music was provided by the waves against the shore keeping pace with the beat. Under this relentless pounding the demon Kaliya was overcome. Maybe his divine status allowed him to succeed where so many human musicians seem to fail. Drowned, made mad, lost in a labyrinth, overcome by forgetfulness, such fates are usually ubiquitous for musicians.

Saraswati was not the only musical deity to be a river. Orpheus too had water in his veins through being the son of the river god Oigios and the muse Calliope.⁸ It is said that he could divert the course of a river by his music as well as being able to charm fish. His image as the archetypal musician, important as it is, is almost rivalled by his portrayal as Orpheus the Fisher. In the temples that were dedicated to his worship there were tanks of sacred fish tended by the priests (sometimes flute playing priests).⁹

Creativity in art is often nothing less than a lifetime's endeavour. It is a quest whose goals are seldom fully achieved. In this context the motif of failure plays a significant role and will repay a little more scrutiny. In a case like that of Maurice Connor, his tragic end verifies the unimpeachable authenticity of his art, distinguishing it from feebler simulacra. In other cases the acceptance of possible failure is one of the pre-conditions for entering new realms. The final disillusionment that comes from knowing that despite every effort, important goals remain unconquered is also very real. In the latter sense I am reminded of Michaelangelo's words at the end of his life expressing his regret at having spent too much time pursuing the chimera of art, or Graham's Greene's remark that for a writer, success is only delayed failure.

7. Croker, Thomas Crofton; *Fairy Legends and Traditions of the South of Ireland*, London, J. Murray, 1838.

8. Pindar: fragment 126.9.

4. Cowell, E. B. (editor); *The Jataka or Stories of the Buddha's former Births*, Delhi, Low Price Publications, 1990, orig. 1895-1907.

5. Herodotus: *Histories* (1), 23-24.

6. Gulik, Robert van; *Lore of the Chinese Lute*, Tokyo, Sophia University and Charles E. Tuttle Company Inc., 1940, revised 1969, pp. 157-158.

9. Eisler, Robert; *Orpheus the Fisher*, London, J.A. Watkins 1921, p. 18.

Significant quests or searches that have ended in failure include the search for the flower of immortality, or the comparable hunt for the dragon's pearl, the search for the fountain of everlasting youth, for Atlantis, Shangri-la, Camelot and other lost cities, the experiments to discover the philosophers stone or indeed the whole history of alchemy insofar as gold was never actually produced even after many centuries of earnest endeavour. To these we might add the mediaeval quest for the Holy Grail with its promise of renewal and redemption, conducted by the knights of the round table in a strange world where the real and the fantastical were often impossible to disentangle. Such failure is precisely the subject of Robert Bresson's 1974 film, *Lancelot du Lac*.¹⁰

The film starts with the final return of the knights to King Arthur's court. Meeting at the end of their adventures they realise many have died in the pursuit of the Grail, but none have actually succeeded in bringing it back. Deeply disillusioned, spiritual malaise engulfs the whole of Arthur's court, further exacerbated by the effects of Lancelot and Guinevere's illicit affair. Petty squabbles break out and the knights plot against each other. The king seems lost in indecision and can only advise prayer. But the knights' quest is over, their vision spent, nothing can save them. They cling on to their past beliefs, but eventually all are killed by the ruthless emissaries of a more modern world that is unconcerned with their archaic visionary aspirations. The final image shows the knights' dead bodies, still encased in their armour and piled up like some monstrous heap of scrap metal. This story is bleak indeed and offers no alleviating balm.

Perhaps the grail was never much more than what Hitchcock called "a MacGuffin," something that the protagonists believe to be of crucial importance but whose actual role is merely to motivate the plot without having an intrinsic meaning itself.¹¹ Is this just too cynical a view? One thing is clear, sooner or later all MacGuffins, even religious ones, lose their efficacy. A reincarnation is demanded that can hook the sensibilities of a new age. The products and thoughts characterising each revolution of

10. Bresson, Robert; *Lancelot du Lac*, film 1974 DVD 2008 Artificial Eye.

11. Truffaut, François; *Hitchcock*, New York, Simon and Schuster Paperbacks, rev. edition, 1983, p. 138.

Alfred Hitchcock: "Most of Kipling's stories, as you know, were set in India, and they dealt with the fighting between the natives and the British forces on the Afghanistan border. Many of them were spy stories, and they were concerned with the efforts to steal the secret plans out of a fortress. The theft of secret documents was the original MacGuffin. So the 'MacGuffin' is the term we use to cover all that sort of thing: to steal plans or documents, or discover a secret, it doesn't matter what it is. And the logicians are wrong in trying to figure out the truth of a MacGuffin, since it is beside the point. The only thing that really matters is that in the picture the plans, documents, or secrets must seem to be of vital importance to the characters. To me, the narrator, they're of no importance whatever."

these perennial cultural cycles are infused by the colour of whatever MacGuffin collectively grips the consciousness of the time.

One of the basic articles of faith driving the arts today that has arisen mainly in western societies during the last two centuries, is the belief that art is *in and of itself* significant, the bearer of unique truths about life, however difficult these might be to describe. This idea, we might note, took hold during the exact period when formalised religions were beginning to lose theirs. It has been a powerful motivation for artists and those interested in the arts. As Morton Feldman remarked: "The truth is, we can do very well without art; what we can't live without is the *myth* about art".¹²

A MacGuffin is something to which we aspire. It is coveted, desired and valued for its mysterious power (however that is defined) and must to be won, stolen, possessed or by some means acquired. The Golden Fleece is a good example. It was the overt goal of Jason and the Argonauts in the most famous mythological quest of all. One of Jason's band of intrepid robber-adventurers was none other than Orpheus again (remember Hermes/Mercury was the god of both musicians and thieves), and at one crucial point it is his musical skills that save both him and his companions from the Sirens singing.

But let us stay with the musician. The story that makes Orpheus one of the most significant figures in Greek mythology describes how he gains access to the realm of the dead, to Hades itself, and does so through his music that softens the hearts of Pluto and Persephone. They grant his plea that Eurydice, his dead wife, be allowed to follow him back to earth. However, despite this seeming success and despite some very specific instructions, his quest too ends in failure when at the last moment he turns back and looks directly at Eurydice.

Perhaps, like Hoichi in the Japanese tale and stories of countless other musicians since, Orpheus too, ultimately confused the imprinted memory brought alive through his artistry with the mundane reality of the material world. For him the shade of the dead was real when viewed through all the complex reflecting devices, all the mirrors and echoes of art, but the shade of Eurydice inevitably dissolved back into the darkness when looked at directly in the cold light of day. This is not a new thought, because as long ago as the 4th century BC, Plato recorded the opinion of Phaedrus that Eurydice on her return from Hades was indeed only an

12. Feldman, Morton; *Conversations Without Stravinsky* in *Morton Feldman Essays*, Cologne, Beginner Press, 1985, p. 62.

13. Plato: *Symposium*, 179d.

apparition.¹³ This failure of Orpheus and his later fate at the hands of the Furies (which certainly underlined his wider failure), nonetheless led to his separated but still singing head floating out to sea, and its recovery by the women of Lesbos, so that it could finally become an oracular source of knowledge. In this way Orpheus did indeed transcend the world of time, space and death but in a way he himself never imagined.

Orpheus's confusion is comparable to that which leads sculptors to fall in love with their own statues. It reveals a chronic inability to distinguish art from life, or to separate the proclaimed goal, the MacGuffin, from the deeper ongoing processes of art, which despite their fluid and impossibly elusive character, remain the real issue at hand. I say "proclaimed goal", because artists do know the true quarry they stalk (unless they have forgotten), one that must remain secret and unspoken.

The work demands that failure or the possibility of failure is embraced in order to proceed, because failure is the liberating door to the unknown for which they yearn. ("For art to succeed, its creator must fail,"

said Feldman.¹⁴) These are entrances to interior places for which there is scant vocabulary and can inevitably make the traveller prone to all manner of self-delusion.

Complete dedication to such an art will in the long run mould a very particular sensibility. It may also lead to an acute and unsustainable vulnerability, a quite fearful fragility. Arrogance and egocentricity occasionally provide a useful carapace and even if such armour results in ludicrous self-aggrandisement, it can partially deflect some of the arrows and anxieties that might otherwise hinder the work. Paradoxically however, it also traps the individual in a tight self-referential space, seemingly impregnable, but like the armour of the clanking knights in Bresson's film, it gradually degrades the person. Nonetheless, the knights themselves appear to be unaware that this protective shell has caused their gradual metamorphoses into dehumanised metal automatons.

If the artist survives the journey, the work itself requires a constant gaze into the depths of the pool until a line can be cast and the faint echoes of an unknown presence makes itself felt. Like Cocteau's Orphée,¹⁵ listening obsessively to the mysterious and incomprehensible messages

14. Feldman, Morton; *The Anxiety of Art* in *Morton Feldman Essays*, Cologne, Beginner Press, 1985, p. 91.15. Cocteau, Jean; a) *The Infernal Machine and other plays by Jean Cocteau*, New York, New Directions, 1963. *Orphée*, film 1950 DVD 2004 BFI video.

coming intermittently over his car radio (in the play through an Ouija board), it is every artist's hope to pick up some such resonance.

In Greek mythology Echo was a nymph who had profound musical skills, for she had been taught by the Muses. As a supremely gifted musician, she too suffered the typical musician's fate and was finally torn apart. In her case it was at the hands of Pan, who was driven by frustration because her beauty was so unattainable. The many parts of her body were scattered across the whole earth, but by the intervention of the Muses each part, like all great art, still continues to sing, imitating whoever calls.

She had fallen in love with Narcissus and could have divinely inspired him except that Narcissus, gazing into the pool, never noticed any mystery in its depths, so mesmerised was he by his own reflection on the surface. He escaped the dangers of the artist's pre-occupations for as the seer Teiresias foretold, he would live to a ripe old age just as long as he never knew himself. Narcissus didn't so much spurn Echo's love as just fail to notice it, hearing her voice merely as a pale reflection of his own.

Unlike Narcissus, the aspiring musician, guided always by carefully honed instincts that go further than conscious knowledge allows, must look past his or her own image, their personal concerns, if they are to gather echoes from a more extensive past and from other hidden worlds that lie beneath. These in turn mask others still farther back, each level clamouring for a voice. A certain faith is necessary for Echo has no voice of her own but merely reflects ever darker and more distant resonances from this greater mystery. She is the mirror that offers secret apertures through which we might step like Alice or Orphée, into that other mirror world but through which "the other" may likewise step into ours. No wonder artists often confuse the two.

It is perhaps surprising that the artist's quest, like Princess Turandot, remains alluring even when the dangers are known.

WALLS & LADDERS

JEREMY FOGEL

The Parable of the Barriers tells of a merciful & magnanimous King who in his generosity & grace invites all who yearn his presence to join him in his inner court. Many come and climb a first wall & find behind it great treasures; sapphires, jewels of silver, cups of gold—attracted by these, many travelers choose to stay, but some do climb over the second wall, and behind it find even greater riches; diamonds, gold, stock options—which again many pilgrims succumb to—only one of them climbs the last wall & enters the King's inner court. Looking back from within the truly royal realm, this traveling soul realizes all the walls it had climbed, those behind which treasures had been found, were an illusion. The Baal Shem Tov—amazing, beloved Jewish mystic of 17th century Eastern European poverty, smiling in virgin woods & enthusing about absolute unity with God, blazing paths for each and every poor innkeeper, each and every wandering bum, to walk unto realizations divine, an absolutely devoted soul—told this story at the climax of every Jewish new year, when the ram's horn is about to blow & symbolically create the world. He would tell this parable at this crucial moment, I've let myself be told, to teach his followers that there are no walls, no barriers, between this world, our world, and the world divine. The world of light, of mercy, of compassion, of love, the realms supreme can be realized by us all in the very very here, in the very very now—yes—the vision conveyed by the parable of the barriers holds that when one's awareness is raised to the realm divine, it becomes apparent that all is it and that nothing, therefore, is empty of Divine presence.

The King

I never understood who Elvis Presley was until I saw, late one night, towards the end of a long shift as a night watchman in a small hotel in Rome, an Italian documentary about the king. Being distracted by the lus-

cious Italian porn broadcast in abundance elsewhere & by the delicate hypnotic voices of the Vatican channel telling the teachings of Jesus in meditative tones, gracefully accompanied by gentle close ups of Medieval devotional art, I did not see all of it but I did, by the grace of God, see Elvis perform *American Trilogy* in 1973 & immediately understood why Elvis is that he is.

What we're dealing with here are images shot in the Coca-Cola reality of an oasis of plastic coins, a seeming dungeon for the spirit, where dressed in white, a golden Phoenix symbolizing rebirth, resurrection & the gaining anew of paradise lost on his back, jewels all over him, a white scarf round his neck which like Tibetan Buddhist holy men he takes off his mythological shoulders to sanctify audiences with, the legendary red white stallion, a bull of a man, the fat Elvis, the shaman, who had become the silver back of the American tribe, its very own Son of Man, raises, through the enumerations of his Gospel singing, his & the audience's awareness to the blessed realization that the realm divine permeates our lower realms through & through. Yes, I told myself, yes, this is a religious moment—this is the healer leading the participating audience into a trance—This is the Tzadik raising his followers to realms supreme by the force of his devotion—Why are these ladies crying, suddenly, on this mysterious eve in their middle age fulfilled by the American dream, why? Not anymore because of the sudden burst of sexual liberation gained by partaking in Elvis' young & innocently sensual swashbuckling movements, as Holy as those were, these aren't the teenage years of hysteric outbursts to repressed puritan lust—these are tears of Gospel, of the all encompassing reality of a moment of grace, tears cried in the presence of the divine—a spiritual orgasm too intense for eyes to remain dry—tears cried because Elvis draws his audience with him into the inner court and they become engulfed in the ensuing overbearingly powerful sense of beatitude—"O I wish I was in the land of cotton"—not the cursed ground that generates empires on the broken backs of slaves—the sweet golden clime where the traveler's journey is done—the ultimate Graceland—where the law is Hallelujah & the fact is His work is marching on, no matter what & who—By praying for that land of cotton fervently enough & doing so with the right kind of band—Elvis takes his audience with him to the inner court & by giving a performance so clearly within the inner court of the King on high, the king shows that chamber can exist even in a Las Vegas concert hall & hence also anywhere else.

This is, therefore, a prophetic performance and Elvis here performs

as an ecstatic mythological dragon symbolizing the nation before God—a walking car industry a breathing Empire State Building—the prophet of American obesity in all its senses—Its dearest son crying all the pain of the civil war & a brutal midlife crisis at the same time—the perfect U.S. Pope in the Vatican of capitalism—taking a stand in this world for holiness now, for beatitude now—in this world! Yes, one finds sometimes in music, in magic, in alchemy, in words, men taking a stand, becoming a human lighthouse in this dark world where poverty wipes out masses silenced by the entertainment of the rich, where releasing all sentient beings from suffering is infinitely less important than creating a positive business climate—Yes—Elvis here is a knight of faith, performing his visionary voice and standing up—standing up, amid the catastrophe, in the heart of the flood, amid drugs & solitude, and the incessant yearning to join mama in her lonely death of barbiturates, in this crazy crazy world, and raises his voice to raise our spiritual essence—Elvis, the American David dethroned by the nation he gave birth to, human all too human in his lonely Cadillac pantheon, prays, like in the Jewish Kaddish, for reality to keep unfolding through the cosmic will expressed by the work of God—Glory Glory Hallelujah—His work is marching on—His work is marching on—this is a religious moment—The morning after I witnessed these things I took a train at the Termini train station with a Japanese friend who had worked that same night at another hostel & we rolled our tired selves to Assisi & as we walked on a winding path to the quiet town I sang with Elvis, Glory Glory Hallelujah & Takuyo sang the Buddhist chants of his mother & I fell asleep on a hill in the drizzling rain overlooking Assisi & then we walked into & fell asleep in many of the churches of the wintry town of the kind and humble saintly man that was Saint Francis & finally came into the grotto where he lays, Saint Francis, and circled his tomb three times & felt him welcoming us strangers in his grotto where we fell asleep in the heat of the torches surrounding the grave & woke up together at exactly the same moment, leaving Assisi with the true flowers of Saint Francis in our peaceful hearts. Elevation through music is a fact—one you can experience—like suddenly hearing the Muslim call for prayers at four in the morning when your own religiosity is bringing you back to your rented room wired to electricity and in the distance the muezzin draws with his singing the faithful to the mosque—Mystical experiences are magic plants in the jungle of reality—they can be plucked, they can even be cultivated—they're abounding and

are served at this banquet with great generosity—Music would not be as readily available to us otherwise.

Wǒ

Once I was living in a cabin in the Zen garden of a charming old lady in Paris & I was new in town & it was a dark winter's eve & a Finnish philosopher I had drunk with the night before had lent me a long distance wave radio. Sitting on a comfortable chair, there also was a mattress and a table, I was listening to the programming of the BBC world service, hearing England, missing the time I too was living in the High Holy British Isle, receiving her voices through short waves making it across a cold sea & becoming all moved at that beautiful elocution, wondering whether it's the weather forecast or poetry I was hearing. They had on, that night, a show about the bodily, poetic & mystical bonds of women & the moon & later, an audio documentary about a place at the border of China and Russia. "There is nothing here" the reporter said "but some junkies and shacks where prostitutes live and are visited by the incoming soviet truck drivers". She sounded, that exhilarated & brave woman, as if standing at the end of the world. I remember she interviewed a Chinese heroin addict. "WO" he said, the Chinese word for I, a long tortuous Wǒ, one lost in the flow of the opiate, the poor man's epiphany, "Woooo" he said & yes, I thought, Wooooo, but what kind of Wooo are you, O Chinese junky at the world's end, who & what are you, my fellow prophet, my fellow human—There was so much pain in this open and wounded I, a desolate cold, a vast emptiness, but so much truth too—yes, a truthful I it was, because it had been annihilated—wholly dedicated to the presence of the drug—it was no more an I, it was an addiction, it was pain, it was something else—a Wǒ transformed beyond the boundaries we usually impose on it—yes, my friends, so much truth I heard in this poor man's opened, wounded & deconstructed I—because, though in a sickly way, the illusory I, walled in strict boundaries of solitary confinement had been destroyed—What is it we are? What are we? What is I? Too often something we get stuck on, a prison cell, another wall, another barrier. I need, I want, I feel, I, I, I—that crazy character encouraged by advertisement—you need to bleach your asshole, Yes I need to bleach my asshole, you need to pay 15,000 dollars for this procedure, yes I need to pay 15,000 dollars for this procedure, you need to own an oil guzzling dangerous & destructive machine when living in a city, yes

I need to own a big jeep in an urban environment, you need to look like an eighteen year old even though you're sixty-five, yes, I want to etc., etc., etc.—this I monster created by demonic forces of the Moloch of greed & ignorance—is that who we are? What about, to state the obvious, the Wö of Coltrane, or better still the collective Wö of that legendary quartet, rising together to a Love Supreme in miraculous New Jersey ascend? Is the Wö here involved still within the bounds of narrow I hood? Of course not—like the junky back at the Chinese border with Russia, Trane's Wö is a deconstructed one—but, ecstatically this time—a Wö that ceases to be so that finally it too might be God—the exalted eternal & endless Wö—the Wö in the inner courtyard—"Words, sounds, speech, men, memory, thoughts, fears and emotions—time—all related... all made from one... all made in one." Coltrane wrote in his ecstatic psalm—Like with heroin, in music you find release in becoming something else, in realizing the mystery of Rimbaud's *Je suis un autre*—I am someone else—you cease to be you & hence undergo the annihilation of the conventional I hood, a process which tends to precede deep mystical experiences—yes—Coltrane is elevation through music—becoming something else through music—something divine & all encompassing—this has been known for ever & has had implications in the lives of millions, of whole nations, that preceded our presence here now on earth—Like early bluesmen turning their pain into music & leading their selves to a powerful & magnanimous realm wherein, even if just for a moment, the weight of their existential sorrows is lifted by hauntingly beautiful songs—transcendence—like Andalucian miners who through their song made difficult fates more bearable—how powerful such magic—check out, if so inclined, the youtube holiness of Camaron De La Isla & Tomatito performing a *Minera* in Malaga 1990 & become exposed to one of these Miner songs—I feel the sun on my face, he howls—the sun beyond the cave—the sun of liberation—The sun miners sing to when raising their awareness through song to kinder realms—Look at Cameron & Tomatito raising their own to a unified energy—Yes, Cameron here blazes with his voice through the realms & elevates like a proletarian angel, like a martial arts master & does so through all the genes of his gypsy soul—yet this voodoo of elevation is not exclusively in the hands of the musical elite of this world—it belongs of course to all their listeners—even further, anyone who has joined others in music knows what it's like to lose yourself in music, how the music being greater than any individual participant in it,

raises your own poor being to realms blessedly beyond the illusory boundaries, of your illusory self—it could be in church, it could be at a karaoke bar right before you puke the whiskey you shouldn't have drunk after all that wine—Anyone who has drifted away even if just a few minutes into music, singing a tune in the shower, digging Mozart's requiem for the very first time & endlessly again, becoming engulfed in the mystical smoke blowing from every syllable of Um Kulthum's *Enta Omri*, playing your first four chords & recreating a Beatles moment in your early teenage hometown room—knows that for a few moments of blessedness, you climb a ladder of notes to a realm beyond confinement, beyond trickery, beyond the degenerate I the entertainment industry wants you to live in. You don't have to be one of the genial saints of music for that to happen—music is a communicative & communal energy & you can be drawn to the realm by participating with your mind in the magic created by such saints—& even as a visitor to the realm of music, even if like my own wee self, you play but don't master music or its instruments, even then, at your own pace, with your own few notes—elevation awaits. This is why Socrates, though not a musician, expressed, in his last hours, regret for not having played more—This is why they say that even if you sing out of tune, you've got to participate in the ritualistic singing accompanying the Hebrew Pesach—this is a celebration no one is excluded from.

Love Abounding

When I was sixteen a friend gave me, while we were traveling in Poland & witnessing abandoned death factories, the *Songs of Leonard Cohen*—it was a Messianic moment & I soon realized I had found, through this truthful voice, the poetic vision I wanted to develop & ceremonially sang these pearl like songs like prayers hoping to immigrate into these landscapes & set out to learn the language that had given me a horizon & became a student in the Holy British Isle—which is how I found myself a few years later, awake deep into a gentle English summer night doing my very best to try and understand an essay about Immanuel Kant—for hours I had tried to focus on the paper, but its intricacies were still eluding me & I was becoming tired & restless. I put on Dylan's *Nashville Skyline* and let his liberated smiling peaceful silken voice soothe my tired brain—If music is energy then *Nashville Skyline* carries in its sound the energy of love in all its barely graspable simplicity—After a while I sat back at the desk, thinking I'd give that

mandala of logic another go—bending over the book again I focused over its dense sentences, but Dylan's blissful voice suddenly engulfed my consciousness like snow sometimes engulfs the busiest cities and makes even them quiet—"love is all there is" he sings with an absolute ease "it makes the world go round"—I tilted my head back "love and only love, it can't be denied"—the poetic genius whose mystical verse & prophetic heart had fascinated me through intensely passionate & spiritual expeditions into the riddles & symbols of the horizons of the cosmic mind, here, in a language as plain as running water, sung in a voice of milk & honey from which love for life emanates endlessly, touched something in me which must be like a light switch of sorts—Yes—at that moment, leaning away from the desk, these words so sweetly sung fell unto me like drops of light that cleared my mind of all doubt and raised me to realms where one learns that which words, logic & even thought can never teach. It was a beautiful time in wö's life, wandering the fields of the nation of Blake, invited by true poets at the banquets of the soul where Sufi pints are served in abundance, singing the blues like a dog with friends & red wine, realizing, with the gates of mercy open, how Billy & Nina's Jazz makes even used condoms look irresistibly romantic, symbolizing themselves near smoked up cigarettes in dying ashtrays, experiencing divinity in the early morning rain—In short, wö, in this period colored & widened by the horizons of the prophets of the heart, realized the illusionary nature of his doubts concerning the reality of the mystical. You know, some academicians, some writers, some clergy and a wide variety of intellectual perverts will keep moments of clear mystical insight behind the fog of their lectures, in the cages of history, confined to the experience of others. Bullshit. Every human blessed with the opportunity to develop her awareness, I'm dead certain of this, has, if she thusly directs her consciousness, full & free access to moment of grace wherein one is raised to realms supreme, and which eventually lead to a life lived in these realms; or in other words, by widening the realm of awareness, one allows it to be flooded by the divine. Awareness, of course, that old holy whore, loves to be opened.

You know, I ain't no ecstatic saint with the key to eternal well being up his ass—Human all too human, the Fogel, human all too human; masturbatory Wednesdays, the occasional lie, vanity, existential hair loss or penis dimension quandaries, moments of intense cowardice, horrible thoughts sometimes—you know—The human lot—much more work need-

ed to elevate the soul—but I have had the wisdom to, in my own little way, lean on music in my struggle to widen my awareness and climb up them rungs & have been blessed with encounters with great mystics who, a thousand rungs above me, follow the sound they listen to & create, to realms we should all be lucky enough to visit—these men are giants, but what they assume we shall assume as every atom belonging to them might as well have belonged to us—their angle, their poetic vision, is one we too can adopt—They ascend a path we too can follow to the inner chamber where the lower & higher realms unite at last—I'd like to, in a few lines, introduce a few such teachers & some of what they taught me about the path of love abounding.

Having become firmly addicted to moments of grace, and seeking a life wherein the creation of a home for beatitude is a primordial priority, I soon realized more practical measures needed to be taken. As a teenager I had encountered the music of Yair Dalal whose meditations on the oud & quiet mystical songs drove a close friend in high school & myself mad—neither of us ever recovered. Years later, in Paris, a city kind to the poor, I came to think I could reach the infinitely profound & tranquil mystical ecstasy emanating from the music of all masters of the oud by playing, even if infinitely less delicately, their instrument myself. I bought an oud and went to study with a teacher who made his instrument roar like a lion & with Hussein, an Egyptian musician who, having failed to obtain an official license (no money for baksheesh) was playing in the Metro near the actual trains (as opposed to the quieter subway hallways where the official Metro musicians play), harassed only by police in his sad & meditative music that accompanied busy Parisians coming & going in the eternal underground rush hour. I was taught some Farid El Atrash tunes and some Arabic scales, though I chose to focus for my own little meditative moments on Hijaz in Re—Re Mi-bémol Fa-dièse Sol La Si-bémol Do Re. As my ambitions were more mystical, playing to reach the meditative state I could sense in oud music, I chose to focus fully on just one scale & then try to climb it up the rungs. And indeed, lost in the fragrance of hash & in my little cabin, wö floated through the realms with long slow sounds & realized, through the privilege of playing that instrument, the privilege of being alive—Later, in this Parisian realm, I got hooked to ecstatic klezmer music, and sought to reach the state of awareness of them old Jews clarinet joy, which seemed to dance well within the inner chamber. I left Paris for Israel, where a friend gave me a clarinet and the phone number of a true master; Peter Wertheimer—a

gentle giant hailing from Romania wherein during communist era, being forced to study only classical music, late at night, hidden in his student room under a thick blanket clutching a Soviet radio, he listened with friends to the ecstasy of jazz on free American airwaves & heard his calling—warmly welcomed me to his home & invited me to sit on a chair fit for a king in his little room filled with instruments, offering a thick strong coffee, and talking about music as an old lover, complete with passion, anger, disappointments and unrelenting love—took it upon himself, this man who is probably one of the busiest musicians in the holy land, to teach a clown, already twenty-five by then, not exactly some kind of child genius to whose historic development you'd like to contribute—to get a clean sound out of the clarinet. At lesson's end, I ask the master how much this session costs. "No, no" he says "The first lesson is free". Next Friday, I come again at ten in the morning & again he lets me into his warmth, a thick coffee, a throne, tales of Louis Armstrong and Hasidic recording sessions, of L'Olympia and following a father's musician trade, and a first scale or two for wō, barely managing to get the notes out. Two delicate hours pass "How much do I owe you?" "You can't pay now" he laughed & in his beautiful accent continued, "I don't know yet how serious you are. Learn the scales, come back next week—then we'll see about how much I'll charge you". At the end of the next session, when I asked again for fees due, he told me I had to work harder if I wanted to pay. I did my best to come prepared to the lesson after that, and when I insisted I should really start paying, Peter feigned anger "What's wrong with you! Did you come here to argue over money?" I never paid a shekel for Peter's lessons. Once, during our encounter, Peter played me a Romanian Doina but that experience, friends, my words cannot describe.

Later, when I moved to southern Tel Aviv, I decided to refocus my efforts on one scale, as my lifestyle made a more wholesome approach difficult, hoping I would still be able to pursue the mystical intention of my practice of music. So off I went, looking for a scale (or "Sulam" as they say in Hebrew, wherein "musical scale" and "ladder" are denoted by the same word) that would suit the purpose & found a Sulam named Ahava Raba—Love Abounding—essential in klezmer music. Ahava Raba, it turned out, consisted of exactly the same sounds as the Hijaz in Re I had been climbing with back in Paris—D, E^b, F[#], G, A, B^b, C, D. Enthused by this discovery, whenever I felt I needed to pray, I played the scale focusing my mind on

raising all thoughts through sound onto realms divine.

Through a circle of friends with whom I had been sitting in grapefruit orchards wherein we played together till the early morning, I came across a holy man by the name of Ravid Zigdon, or as I have come to call him, Ravidian Hashaman Hashmanman. The first time I met him was at a jam in a studio with loud guitars and drums, he was playing a variety of children's instruments. I went to him and quoted Lorca, not for a moment have I ceased to see your beard filled with butterflies—Yes—immediately, I had been struck by the Whitman like sanctity of this fellow. Ravid, a Hebrew son of a carpenter, a Zion Buddha Lion, had, when coming back from India, where he had adopted a strict Bramachari existence (small meals of rice and vegetables, comprehensive and relentless meditation, yoga, etc.), spent three years in his parents' attic studying marimba and composition. A few weeks later, another friend suggested we meet and play with him up there in the attic, so up we went. That first meeting, I came with Serge & Allen Ginsberg to inspire Ravid with, Ravid came with music by Dekoboko Hajime to inspire me with. Ravid, it turned out, does that often—he asks you whether you'd like to listen to inspirational music and, if you're wise enough to agree, he very ceremonially says, "we will listen to..." (using the less common "Maazin", which has elements in it of "paying attention")—and puts on something from his library of more than ten thousand hours worth of music of all kinds with heavily ethnic and experimental presences—It is almost inevitable that what Ravid chooses to play will in some ways open your mind—he will inevitably tempt you towards his more enlightened kind of awareness. At the end of our first session we decided we would do great things, us three proud poor single men with serious sentimental afflictions, only very rarely getting laid & either still living with our parents or running hungry in the streets as the third decade of our human lives drew to a close in the suburbs of the Holy Land. Whenever we'd play, we always started with long Hijaz in Re or Ahava Raba moments where we sought common ecstasy. The first time we did our song *Jesus Christ the Nazarene Runs in the Streets of Tel Aviv Shouting Allah Hu Wakhbar*, wherein that mantra is repeated again and again, Ravid's electric organ caught fire. Suddenly, during the invocation, we saw smoke appearing from the instrument. It never worked again. Once, in India, Ravid was riding a bicycle he had rented, reaching after several days a distant temple wherein he shared the holy Charas with several Babas or Holy men. The Babas were impressed

Ravid was still seated with a back straight & head towards the sky after many long hours of ceremonial smoking and soon realized this extraordinary person had been blessed with the realization of the deep mysteries of the union of Shiva & Shakti & of the human & Divine presences—the piercing of the veil. They invited him to join them, offering him a Baba bus ticket (free eternal wandering) and robe. Ravid didn't join them because he had to return the bicycle to its rightful owner. If not for the bike, I think he'd have stayed. More friends joined our efforts & eventually we sent our demos to Tzadik in New York—Several weeks later, we were hosting at our flat, a beat mystic living in Amsterdam by the name of Gabriel, who claimed to be a descendant of the Baal Shem Tov. He had traveled to Israel with 150 dollars, a saxophone with acid on its reeds, and in a deeply Hasidic way, no worries about the tomorrow dealt by the same hand that dealt your birth—he found us and we sheltered the spirit of the Tzadik. During that time, we received word our work had been appreciated & were offered to record our album for Tzadik. These too are, I realized, the ways of the world.

A few months later in this life our band had a gig immediately after which we all made our way to the Dead Sea in a rented minivan our drummer was driving on a dry and hot Friday night. Once at this eerily quiet spot, the lowest on earth, and its pond of salt, we camped on the pristine South Western part, far from the Hotels and nearer to an actual desert silence—the holy desert silence—In the morning we woke up, had our breakfast tea and wondered of into this crater of mystical surrealism, floating on the oily sea and seeking out the pristine springs of fresh water scattered in the area, all inundated with healing mud which we all covered ourselves with, suddenly becoming aliens—Later my friends went for a trip on the desert mountains, but I was still too wired from yesterday's pre gig intense Yogic breathing exercises & ensuing ecstasy & so chose to stay near the sea, and find more springs of fresh water to linger in. I walked through lunar landscapes interspersed with sudden forests of high green reeds, and found signs of a lovely freak encampment—coffee paraphernalia, a book by Krishnamurti, an old guitar—I walked on for a while and heard the sound of flowing water—I followed that sound & behind another forest of high reeds I found hidden in that sudden oasis of green, a circular spring of sprinkling fresh water. All satisfied, I sat in mother nature's prime bathtub and engulfed by the Holy Land reeds I looked at the clear sky above me and thought it doesn't get any better than that—The Shabat queen had blessed

me with all her grace—when suddenly, the reed curtain opened and in walked, silently, with a deeply peaceful smile through all the long lines of her face, a dark naked damsel who quietly slipped in the spring. She kept on smiling and with eyes all sparkling she asked me my name. "I'm Jeremy" I mumbled. "Are you" she laughed "I am Natanyah". As we talked, as she spoke, I became entranced by her crystal like voice, her dove like eyes, her scarlet lips and her smile comely, innocent and pure. What on earth is this, I thought, what miraculous event am I being invited into? What kind of angel is hosting me behind the veil & in the vineyard whose splendor no one can even speak of? I soon realized I had been taken by a spirit & force greater than I and as Natanyah's presence dawned over me, as she delicately drew me into the song of songs of womanhood, I let go of myself & drowned in the ocean this moment had suddenly become. I am writing this because while completely conquered by the sweetness of her dark breasts, her voluptuous thighs, her mystic belly, the scent of her skin, the delicacy, fervor and devotion of her movements & the soft prayers of her inner skin—she was singing her desire to my ear. Every movement, every moment of passion, she expressed with a melodic moaning deep into my ear, which to me was the most beautiful music I had ever heard—her voice lifted itself freely in this world—as if her soul were a bird—as if her soul were a fully fledged swan that while flying entrances the ears of men and gods with the music of its song—yes—The melodic moaning of this delicate Yemenite daughter of Jerusalem deep in my grateful ear was a whirlwind of beauty, a voice with a light immensely poetic in scope & power raised aloft by her trembling breath—a sensual song that when slow drew the tenderness of troubadour romance, when fast the trance vision of the space age Zion temple of the heart, and in its climax the swiftness of the fawns swirling in gardens where once a lover sacredly loved a woman and laid for her sanctified roses on a pillow of words. When wö was, for a few moments in this life, living through the light of Natanyah's love & her music sublime, when I let my own voice join her in this prayer, I felt tangibly I was fulfilling the Baal Shem Tov's advice to climb to realms exalted through the sound of every note, be it the notes of music, song or of every single spoken word, of every moan—rise with it to the realms supreme—yes—the crystal like presence of her splendor & her voice weaved itself like an orchard of pomegranates ripe & pleasant round me & blessedly, effortlessly raised wö through the rungs & gave wö a taste of the wine you seldom taste—

Considering the source of this magic, this should be no surprise. Natanyah it turned out, when finally I followed her out of the spring, was a woman firmly planted in both this world & the highest one. She was staying at that encampment with a couple of other friends and their kids, all of which were naked too when I met them. Natanyah's more permanent habitation was small desert town where she studied Persian music with a recluse master, worked at the local kindergarten & lived in a rented caravan. I told her I had to go back to my friends, that we were going back to the city soon. She kissed my lips & sang a Shabbat tune—Shalom aleichem, malachei Hasharet—Peace be upon you, ministering Angels—a tune I had been playing in Ahava Raba on both clarinet & oud—her voice revealing with indescribable grace the miraculous scale of Love Abounding in all its splendor. When I came back to my friends I was there with them in the minivan but I was also in the realm divine, where Natanyah's voice shows that love is all there is, and as I looked through the window at the scenery of this land filled with pain, I could see also the merciful weight of a love abounding & supreme and realized Natanyah's trembling voice had given me, even if for a moment, a key to the inner chamber.

Yes friends, this is where music leads to—this is the beatitude voices, truthful voices, take you to—this is the poetic vision they bless you with—Yes—In a world where Mickey Mouse's pungent plastic vomit is splashed on everything that was once true & airwaves broadcast mainly continual propaganda in form of decadent mass produced delirious pop whose half hidden purpose is to turn every living soul into a stupid, selfish hungry ghost damned to eternally consume that which he will never need so that another sentient being may have his second indoor swimming pool finally equipped with an underwater sound system—there are voices that draw you up—there are ways to listen your way to a wider awareness—this is of the most critical importance—we've got to lean on all the light we can muster to find a path—to create our own system, lest, as Blake warned, we be enslaved by another man's—to learn how to experience things, how to sense them—to create a poetic vision—When truly exalted music, voices, sounds, all of which are abounding in spite of the state of this world, merge into our awareness, they take us to the King's inner court & through this widened awareness raise our perspective to new levels—This is why when looking back from the King's inner court, the wandering soul realizes all is Divine—her awareness has become able to look at this world from the right

angle—seeing in it all that is supreme—Sometimes I look at a flower and barely see it, but when wō takes the time to embrace its existence well & sing to myself the soft tunes of Natanyah's ecstasy while doing so, I see all the miracles of creation—the memory of her angelic voice, like all exhilarated melodies of this earth, are an age old alchemy, one that turns everything it touches into beatitude.

It would be foolish & imprudent for me to try & reveal much more of whatever conclusion I may have come up with, as the little I may have understood is quite certainly overshadowed by all that which far eludes my own musical & spiritual awareness. Moreover, music, like all mysticism, must be experienced—great music, like all mystical experiences, cannot be put into words, except, maybe, sometimes, in the words of God or of his inner guard. But let there be no doubt; Great music comes to you from the inner chamber & draws you there & it teaches you the realms from which this life can be experienced & therefore teaches you how to see & how to be & yes, Like Peter, Ravid, Natanyah and countless other great souls, there are in this world people who climb their holy music to realms that are tangibly exalted.

Where Were We?

On this earth, in this realm, involved with existence, alive alive alive, but soon, decomposing bodies whose very memory has turned into butterflies & us, reborn into the great mystery at last—there's a way to walk this path, to direct it towards salvation. These are facts of old—the genial voices of humanity have not been lying about this. There are ways with more light & less suffering. There's an awareness that is undisturbed by treasures of gold, and diligently climbs to an inner chamber of bliss. Music often can take you there. Yes it can. But caveat emptor, my friends, let the buyer beware—Music is ineffable & so what I am writing does not contain the essence it tries to convey—it only tries to encourage whoever is reading this to be guided by music on this mystical path of a life. To let music do what it can do. To pick up the instrument you always wanted to play. To listen with the proper care to the music you love, to give it a place of honor in your life—To work on the development of your appreciation of music. To beware of the demon of unbridled consumption, it's on your ass even in this realm. To be aware of & not doubt the mystical dimension of daily life and the mystical powers of music—for you are where your thoughts are & when

your thoughts are with music they are in the inner chamber & so are you—
 These are things I believe in & try to live by—Yet, the moral of this story
 only appears when while listening you suddenly find yourself being raised—
 & Yes—it only appears when, while playing, you suddenly realize you're
 being played & thusly rejoin your rightful rank on the side of creation.

ON DIRT, REVELATIONS, CONTRADICTIONS, AND BREATHING THROUGH YOUR ELBOWS

FRED FRITH

Starting when I was 19, I spent a lot of college vacation time working in a mental hospital. The patients of this hospital were severely disabled, mentally and very often physically as well. I mostly worked with kids, kids with Down Syndrome or cerebral palsy or other conditions deemed untreatable, lumped together indiscriminately, left there by families unable to cope. The job consisted of administering enormous quantities of drugs, feeding and cleaning up after patients, watching out for epileptic seizures, and trying to help the kids to live as much to their potential as possible. In this depressing atmosphere music was a force that created an excitement and well being that was almost shocking. We soon noticed that these kids, with little to look forward to beyond a regimented life in a rundown institution, would beam with joy and shiver with excitement when they heard music, especially music with a strong pulse to it. That was all the encouragement we needed, and we were soon having music sessions every day. What I experienced during those ecstatic minutes is hard to put into words. Essentially it was an understanding of music as a pure force, a healing power, a joy of being. It brought us together, touched our souls, and gave us hope. It was also a humbling experience. In these naive initiatives we volunteers were supported by a couple of the most dedicated and extraordinary human beings I have ever met, professionals who had chosen to work in this career dead end because of a combination of gentle selflessness and deep compassion. Along with the children of all ages in their charge, Paddy O'Rourke and Robert Keyes—singers and dreamers—helped me to reconstruct my world from the bottom up, to redefine what it meant to be alive, to be human.

My neuroscientist brother Chris tells me that our brains learn by seeking out what they don't know. When I play I feel as if I'm caught between wanting to know, and not wanting to know. So many times you

discover something not by the act of looking for it, but by accident, at the very moment when you'd forgotten all about it. As a performer, I know that in order to arrive at that mysterious place I'm always trying to reach, I have to be in a unique state in which control and lack of control have equal weight. I know what I'm doing, but I don't know what I'm doing. This is a beautiful contradiction. You learn how to improvise not by being full of ideas, but by emptying yourself of them. As Robert Rauschenberg said, the trick is not to "run out of curiosity." Technique is simply a matter of being able to do what you want to do at the moment when you need to do it. Everything you do or have done prepares you for that moment. When it comes, you are probably thinking about something else.

The first time I picked up a guitar it felt like a miracle. I could just play it, or more precisely, it seemed to play itself. Since then, that feeling has never been far away. Part of me wants to (re)discover or even reinvent the instrument every time I get my hands on it. When I lose touch with that basic "curiosity," the guitar is all too familiar. I know exactly what is going to come out of it, and nothing seems to make the slightest difference to the predictable reiteration of any moment except this one.

There are moments that happen when you improvise—it may be with a playing partner of many years, it may be with someone you never worked with before—where you experience an uncanny synchronicity: identical pitches out of the blue, simultaneous timbre shifts, abrupt and shared changes of dynamics, unforeseen steps up in intensity. There may even be sustained periods when the music becomes a seamless, breathing entity that appears to have a life of its own beyond the intentions of its makers, a shared journey to an unknown and magical destination. Such moments often lead to talk of channeling a higher force, of acting as a conduit for spiritual and healing power. This usually strikes me as a kind of false humility. In the end music making is rooted in practice. The more you work away at it, the more options you have, and the more likely you are to make "inspired" choices. Performers of composed music attain such visionary force by years of practice, which eventually allows the music to flow as if improvised by the composer in front of you. You have to practice for years before you're free enough for accident and intention to resonate equally. It's not that there aren't mysteries making their presence felt in what you do. It's just that you're more likely to illuminate them when you've worked on it.

In 1986 I put in a few hundred hours doing construction work on

an apartment building in the lower east side of Manhattan. This basically meant giving up a few days a week for about a year carrying sheetrock up six flights of stairs, laying floors, digging drains, and generally carrying out any other tasks that were assigned to me. Walking over there from my own apartment ten blocks away took me through an area where several buildings had recently been demolished, leaving a wasteland of detritus—not just rubble, but details of personal histories, lives lived. Torn photos, dolls' torsos, fragments of cups and plates, cassette tapes, broken chairs, fridges, syringes, wheels. In this landscape, in which absence and presence were on an equal footing, I would walk slowly, examining each square inch of ground. This dirt seemed more beautiful to me than anything I'd ever seen in a gallery or museum. It was a metaphor for everything I wanted to do in music. It still feels that way.

Music is an act of transformation—air moves, waves travel, membranes vibrate, bodies are altered. When I use objects to produce sounds from a guitar, I'm also transforming them. The paintbrush, the clothes brush, the doweling rod, the alligator clip, the ball of string, the bag of rice, the chains, the tin can, these may all be familiar objects. When I use them as mediators, though, they can no longer be defined by their intended function. Instead they become magical objects with mysterious powers, and although at first you may laugh at the idea of someone playing the guitar with a paintbrush, eventually you won't notice it any more. The brush has become, not invisible exactly, but altered beyond recognition.

Why is it that apparently dry and mathematical procedures often lead to the most profound and moving results? An experiment with some numerical series or other, applied to form or harmony out of idle curiosity, proves astonishingly emotional and touching. It reminds me of how much I hate it when players or composers demonstrate how full of "feeling" they are. It's like bad acting. Music that resonates with me doesn't have anything to prove, it simply is. As a composer I sometimes find myself saying to performers: "Let the music be what it is, you don't need to add anything to it, just stay out of the way and let it speak for itself."

Recording music is a revelatory process, like sculpture. The act of patiently stripping away results in what was concealed being revealed. Further, the inevitability of the result suggests that it required that very process in order to *be* revealed. Or the process may not be stripping away at all, but *accumulating*, patiently waiting to discover what "images" will

signify when there are enough of them there. In both cases, you shouldn't interfere beyond what is absolutely necessary. Defining something before it has revealed itself will permanently limit it to the foreseen, but the unforeseen is an important part of every process. It's down to looking (or listening) for what you don't know, again (and again).

Between the ages of nine and twelve I spent a lot of time fishing. As time went by, the actual fishing part became less important, and it became more about time alone, observing the minutiae of life and listening to what was going on around me. Through listening I became fascinated with birds, and was soon a passionate if strictly part-time birdwatcher, which I still am to this day. I love to get up at 5 on a Sunday morning and make the two-hour drive to Limantour Beach at Point Reyes, to walk by the ocean for an hour with only the wind and the birds for company.

Most of the time in the modern industrialized urban landscape we're surrounded by music that's imposed on us—in elevators and lobbies, cafes and restaurants, supermarkets and other people's cars—a more or less permanent addition to the usual chaos of vital signs. When I lived in New York I spent a lot of time trying to “compose” this whole racket into coherent forms in my head, breaking it up into layers, seeing how much detail I could uncover. I'm still fascinated enough with that sound world to keep on trying to situate my work within it, to record West Oakland from the window of Myles Boisen's studio, for example, and juxtapose it with a sax quartet.

The mysteries of music and life that resonate most deeply within me lie somewhere between Limantour Beach and the Lower East Side, between being alone in the world and being part of a teeming anthill, overcoming the limitations of words and reaching for the extravagant impossible, turning base metal to gold. Looking, listening, touching, smelling, in awe, aware and unaware, present and absent, breathing through your feet and your elbows, falling up, falling down, picking yourself up and dusting yourself off, screwing up and giving it another shot, curious, persistent, questioning, optimistic, in it together whether we like it or not. But in it.

YOGA AND MUSIC

SHARON GANNON

“Divine sound is the cause of all manifestation. The knower of the mystery of sound knows the mystery of the whole universe.” —Hazrat Inayat Khan

The world is sound. All that is manifest proceeds from sound and continues to pulsate as sound vibration.

Many years ago a reporter from a major New York newspaper came to our Yoga School to do an interview, and she graciously accepted our invitation to take a class first. At the beginning of the session, accompanied by the harmonium, I led the class in a Sanskrit chant to the guru and explained a bit of what the chant meant. During the chanting, the reporter was fidgety, which happens to many people in their first yoga class when they are asked to sing or listen to spiritual teachings. But soon enough we were off and running... jumping back, twisting, bending forward, bending backward, standing on our hands, our heads and even our elbows, all to a playlist which included music by The Beatles. After the class was over, the reporter excitedly just about ran ahead of me on my way to my office, where our interview was to take place, asking, “Did you hear that? Wasn't it amazing? Did you know they were going to sing that?” As we sat down, I asked, “What do you mean? Sing what?” “The chanting!” “Oh I'm glad you liked it. Was that your first time?” “No, no, not me... The Beatles—they were chanting the same thing that you had us chant at the beginning of class, didn't you hear it?” “Oh you mean *jaya gurudeva* in *Across the Universe* and *guru Brahma guru Vishnu...* in *My Sweet Lord*?” “What?! Did you know that those chants were already in those songs? I didn't! I never ever heard it before and I must have listened to those songs thousands of times! This is amazing!” Producer, composer and bassist Bill Laswell once told me that he liked composing music that he knew would be played in a yoga class because he knew it would really get listened to: “People are

more relaxed and receptive when they practice yoga, so they are able to hear the music better." That's what happened to the reporter. She had actually *heard* music for the first time that she had been listening to for years but had never heard before.

How can you tell if you are making progress in your hatha yoga practice? When you can touch your toes? Stand on your head? Control your breathing? Control your thoughts? Be able to relax in a stressful situation? Well all of those accomplishments could be seen as signs of progress, but according to the *Hatha Yoga Pradipika*, the book penned in the 13th century that is widely accepted as the official authority on hatha yoga, the way that you can tell if you are making progress in the practice is by the sound of your own voice. According to verse II.78, your voice will become clear, melodious and resonant; you will be able to control its volume and its pitch; but even more than that—people will listen to you when you speak. Your words will become totally captivating. You will be able to say what you mean and to mean what you say. This is a natural outcome when all aspects of one's being come together and are no longer fragmented. Your thoughts, your words and your actions will be aligned. You will feel in tune.

The *Hatha Yoga Pradipika* declares that samadhi (enlightenment) is achieved when the *anahata nadam*, the "unstruck sound," can be heard. The aim of hatha yoga practice is to realize sound as the source of creation. This realization is the outcome of being in tune with the source of creation, which naturally occurs when the yogi achieves harmony with the earth and all things manifest. Yoga asanas (postures) are commonly thought of only as physical poses that yogis practice in order to prepare themselves for more spiritual practices like meditation—as if the physical were something less than the spiritual. The physical and spiritual realms are one and the same; they are both expressions of sound at different rates of motion. Matter is sound slowed down so that the eyes can see it. The subtle realms of spirit vibrate at a faster rate of motion. The Sanskrit word *asana* means "seat," or "connection to the earth." Earth is all of manifest creation. This definition of earth includes the air, water, soil and all species of plants and animals, as well as subtle beings like the elemental, deva, fairy and angelic forms. The perfection of yoga asana is realized by aligning oneself with nature for the benefit of all—it is the perfection of one's relationship with all beings and things. A harmony can be achieved that emanates from the yogi as sublime music, touches everyone and reminds and uplifts them toward the source of

all, which, according to the yoga scriptures, is the *nadam*—the supreme sound of God. Close your eyes and open your ears and feel, as my teacher Shri Brahmananda Sarasvati would describe, "the current of electricity, the current of prana, the pulsation of life, all around and within you—the sound of God."

In the vast spiritual literature of India, two types of sound, or *nadam*, are spoken of: *anahata nadam* and *ahata nadam*. *Anahata nadam* means "unstruck" sound—it is not heard by just the physical ears, and no one can *make* this sound. It is the primal essential nature of the universe; it is the sound of God. Yogis hear/feel this sound during deep enlightened states of meditation. *Ahata nadam* means "struck" sound—it is music that we can hear with our physical senses; it refers to sound that is made by striking two things together, like when a musician strums an instrument or blows through a horn or hits a drum, or when a singer sings—air strikes against the vocal folds, and sound is produced. *Ahata nadam* in the form of music can lead one to an experience of *anahata nadam*—transcendental awareness—if the listener as well as the musician playing has that intention in mind.

It was through music that the ancient teachings of yoga entered the American psyche. I think if it weren't for The Beatles, the current popularity of yoga in America, and the world, for that matter, would not have come about. We have George Harrison to thank in particular. But how did George Harrison come to be interested in India, its music, yoga and all things magical and mysterious? I suppose we will never know the complete answer to that, because how can we begin to fathom the depths of true genius? But we do know that he had a most excellent teacher in the form of the great Indian sitar player and composer Ravi Shankar. But how did Ravi Shankar, a man from one of the oldest cities in the world, Varanasi, come to teach classical Indian music to one of the most famous Western pop stars? God works in mysterious ways. As with all meaningful innovations in culture, certain things catch on simply because they are contagious. For something to be contagious there already have to be receptors, predispositions inherent in a person or in a group, that enable them to "pick up" the innovation and hold on to it long enough for it to "catch on."

During the '60s many young people were craving change and willing to experiment in various ways to shift consciousness and explore identity. The time was ripe for Eastern spirituality to be embraced by the West. Indian spirituality not only appeared exotic and colorful, but it

seemed accessible to young people due to its welcoming concepts like "all is one" or "God is love." The Indian gods were hip and cool, and they all seemed to be able to dance, sing and play instruments in their cosmic band: an attractive teenage boy who seductively plays the flute and makes love to thousands of women whom he arranges to meet clandestinely in a magical forest or by the banks of a mystical river (Krishna), a beautiful young woman whose dexterous hands can finger a fretless *viña* without even glancing at her instrument (Sarasvati), a chubby boy with an elephant head who plays the *tabla* and loves to eat sweets (Ganesh), and a wild pot-smoking-long-hair-dread-locked dancer whose choreography is known to have set the world in motion (Shiva). In the Judeo-Christian atmosphere of the West, God was not someone you had fun with. Nor was God someone who lived in harmony with animals and nature and was comfortable with His or Her (or Its) own body. Not even art or music was viewed as a means to reach God; rather, they were perceived merely as entertainment—one more commodity in the established capitalistic system.

During this time of cultural change, the West was even hungry to embrace Eastern dress. The Indian musicians didn't perform in Brooks Brothers suits and ties; they wore loose, comfortable, colorful clothing made of natural fabrics, sometimes embellished with embroidery and beads, and they had long hair and went barefoot! During the sixties and into the seventies, the influence of India on Western fashion was huge.

But the seeds were planted for George Harrison to embrace Indian music even before the sixties. In 1951 while he was on tour, the violin maestro Yehudi Menuhin picked up a book on yoga asanas in a doctor's office and started practicing yoga on his own in hotel rooms. The following year, he was invited by Prime Minister Nehru to play some fund-raising concerts in India, and during this trip, he met the great yoga master B.K.S. Iyengar and Ravi Shankar, two people who would become important gurus to him and who through him would go on to have a decisive influence on the spread of Indian spirituality in the West. He studied yoga with Iyengar for many years and in 1966 wrote the foreword to Iyengar's ground-breaking book *Light on Yoga*. In it, Menuhin describes yoga in musical terms, and he reveals his profound commitment to both disciplines: "The practice of yoga induces a primary sense of measure and proportion. Reduced to our own body, our first instrument, we learn to play it, drawing from it maximum resonance and harmony. With unflagging patience we refine and animate

every cell as we return daily to the attack, unlocking and liberating capacities otherwise condemned to frustration and death. Each unfulfilled area of tissue and nerve, of brain or lung, is a challenge to our will and integrity, or otherwise a source of frustration and death."

During that first trip to India, Menuhin heard Ravi Shankar play in an informal performance at the home of the director of All-India Radio. He was so profoundly affected by the music that he resolved to find a way to share it with the world. An opportunity came in 1955 when he was able to invite Ravi Shankar to come to America to perform and record an album of classical Indian music for release in America. Shankar was unable to accept due to other commitments, but he recommended that his friend Ali Akbar Khan go instead. (Ali Akbar Khan and Shankar were both students of Khan's father, the great music teacher Allaudin Khan.) So with the help of Menuhin, who provided a spoken word introduction, Ali Akbar Khan released the album *Music of India* on the classical music label Angel Records. This was the first major time that Indian raga was presented to the American public. Prior to this, in 1910, Sufi teacher and master musician Hazrat Inayat Khan had come to America and performed on the *viña* at Columbia University in New York City. He also became an accompanist for Ruth St. Denis and her dance company. The wider success of Ali Akbar Khan, however, was probably due to the fact that his performance was captured on a record which could be distributed widely, though perhaps more importantly, he had the support of a renowned musician in Yehudi Menuhin. Ravi Shankar played his first concerts in Europe and the United States in 1956.

In 1965, The Beatles met David Crosby and Roger McGuinn from the band The Byrds at a party. The Byrds were very enamored with Indian music and jazz, especially the music of Ravi Shankar and John Coltrane. The prior year, David Crosby had attended a recording session in Los Angeles where Ravi Shankar was working on an album, and at the party, he enthusiastically described the music to George and John, while Roger McGuinn demonstrated on his guitar, trying to imitate some of the string bending techniques of the *sitar*. A year later, in 1966, it was Patricia Angadi, wife of the founder of the Asian Music Circle of London (whose president happened to be Yehudi Menuhin), who actually personally introduced George to Ravi Shankar. George asked Ravi if he would accept him as a student. Ravi Shankar went on to directly influence the pop music

world through his association with George Harrison who was his student, the jazz world through John Coltrane who also studied with him, as well as the classical music world through his student, friend and collaborator, Yehudi Menuhin.

These days, it would be difficult to find a yoga class in America or Europe that did not practice to a recorded soundtrack. The music would most likely include Indian ragas, Indian musicians or at least (or at best) Western musicians playing Indian instruments or singing to Indian gods. But in my experience of yoga this was not always the case. When I started to practice yoga in America in the 1970s, there was no music played in yoga classes. When I went to India in the 1980s to practice yoga, there was no music played in yoga classes. But when I practiced by myself, home alone in my apartment, I always practiced to recorded music on my cassette tape recorder. What I was listening to at that time was mostly Indian classical music: Ravi Shankar, Ali Akbar Khan, M.S. Subbulakshmi, some John Coltrane but lots of Alice Coltrane, George Harrison and The Beatles, and a tape from the Hare Krishna Temple in London called *Chant and Be Happy*, which had been produced by George Harrison. But mostly what I kept replaying over and over again while I saluted the sun or stood on my head were a few tapes that I had been given by a producer friend, Tom Lopez. These tapes contained spoken word talks by Ram Dass, as well as spiritual songs, some in English but mostly in Sanskrit. The label on the cassettes read *Serve, Love, Give, Remember*, featuring "The Amazing Grace Band." There were no credits listing who was singing which song or playing which instruments. Eventually I learned that the mystery musicians on the cassette were Bhagavan Das, Jai Uttal, Krishna Das and Diana Rodgers, all devotees of Neem Karoli Baba, an enlightened guru from India. I also listened to a tape that my producer friend had made from the LP titled *Ah*, with a picture on the cover of Bhagavan Das on a beach, ektar in hand, eyes lifted heavenward, appearing to be singing. These brilliant, dedicated and deeply spiritual musicians have become well-known and tremendously popular, as has Bill Laswell. In the true sense of the word *yoga*, which means "to join," Bill has been a pioneer in uniting various musicians and genres of music, integrating Indian classical ragas and chanting, electronica, jazz and funk into sonic mood shifters that have the ability to rewire the listener at a molecular level. When I started to teach yoga in the East Village in New York City, it seemed natural for me to bring my soundtracks along, so the

classes were always practiced to music and still are. The musical component is a major part of Jivamukti Yoga—forming one of the five tenets of the method.

The sitar began to appear in Western pop music in the mid-1960s, but with the release of *Sgt. Pepper's Lonely Hearts Club Band* by The Beatles in 1967, it gained wide recognition. That album turned pop music upside down and inside out, particularly George Harrison's track *Within You Without You*, which not only used all Indian instruments, but also introduced into mainstream pop music the yogic teachings of "emptiness" (reality is not absolute; it is a projection of the mind): "Try to realize it is all within yourself..." The whole world knew that The Beatles had gone to India to study yoga, and at that time, whatever The Beatles did people emulated or at the very least noticed. During the sixties young people in particular were looking for ways to "deprogram" themselves from what they saw as the hypnotic pull of the established culture, and since consciousness is chemical, what better way to expand one's consciousness than with psychedelic chemicals? The Eastern spiritual teachings provided a foundation for the novice mind explorers to stand upon. And since in Indian culture it is hard to separate spirituality from art, Indian music was easily accepted by the counterculture emerging in the West. It provided a perfect background for a trip—a journey into one's own mind or psyche. Even in Patanjali's *Yoga Sutra*, a two-thousand-year-old yoga scripture, you can find validation for taking drugs as a means to expand consciousness. If the reader is interested, check out the first verse of chapter four, in which Patanjali states that the experience of samadhi can be attained by the use of drugs. The Sanskrit word used is *aushadhi*, which translates as "chemical means." He also states in that same sutra that it can happen through the practice of mantra or through the power of discipline and that you can also be born enlightened—your cosmic awareness can come from the work you did in past lives.

Most young people in the sixties were in a hurry, so the use of chemical means was an attractive option. Thus a whole society of turned on young people spent a huge part of their time listening to very disciplined music that was composed and performed for the express purpose of leading one towards God. Music and the use of drugs or alcohol has always been a tradition in America among blues, jazz and rock and roll musicians, but it was never part of the Indian musical tradition. The training required to

master Indian music demands intense discipline over a long period of time, in large part because of its fundamental connection to spirituality. As Ravi Shankar explains, "Our tradition teaches that sound is God—Nada Brahma. That is, musical sound and the musical experience are steps to the realization of the Self. We view music as a kind of spiritual discipline that raises one's inner being to divine peacefulness and bliss." In fact, Ravi Shankar agreed to write the foreword to the book that David Life and I wrote, *The Art of Yoga*, only after we ran into each other at a party some months after we first approached him about the project, and he and I conversed for a long time about how neither of us take drugs, preferring instead to engage in creative arts and yoga as a means to feeling good. At the end of the conversation, he agreed to write the foreword because, he said, he now knew that I had an understanding of the discipline involved in yoga practice, which is the same as in music—both being fundamentally spiritual disciplines.

In the West, on the other hand, our arts have not always been studied or performed in order to become enlightened or to glorify God. Of course there are exceptions, and many of those are great exceptions: Bach, Beethoven, Mozart and Liszt, for instance. But in our pop music culture, artists tend to seek the glorification of their own egos more than of God. Many want to express *themselves* through the music, not express God through the music. Most accomplished Indian musicians, however, seek to become instruments for God's expression. In order to accomplish that, one must work hard to master his or her instrument, which begins, like most musical study, with learning how to tune one's instrument. This is the same process involved in the practice of yoga. The ultimate aim is the same: for the "doer" to disappear and only God to remain, and according to the teachings, God is sound—the primordial nadam.

There are so many similarities between the practice of yoga and music. Both are very physically demanding. The aim of both is to arrive at an essential level of existence—beyond the limits of space and time. Yoga is concerned with moving from the gross (the physical body) to the more subtle (consciousness); Music takes the subtle consciousness from gross physical sound to the more etheric moods, colors or feelings (*bhav* in Sanskrit). Both practices transform the practitioner, not only outwardly but inwardly as well. As musical notes are played, they resonate, causing a vibrational shift in the body of the musician. Both practices involve listening to the sounds of nature. Both practices draw their language from nature

and aim to move the practitioner to become more in tune with the natural world and through that harmony move one's consciousness closer to the divine source of all manifestation. Yoga postures (asanas) are the vibrational forms of fish, birds, animals, mountains, etc.

The yogi forms him- or herself into the shape or posture of a particular animal. This is done by means of breathing: "singing" the shape into form, which causes a vibrational shift of consciousness radiating into every cell and tissue of the yogi's body. As consciousness (*kundalini* in Sanskrit) ascends, it is likened to a cobra, entranced by the sound of the flute. As kundalini rises, she pierces through the chakras (energy centers in the body), and in each chakra, a distinct sound will be heard. These sounds are described in the *Hatha Yoga Pradipika* as the sounds of certain musical instruments, like drums, trumpets, bells, clanging cymbals, high pitched flutes and stringed instruments (like sitar, violin, viñā and harp); the sounds of animals, like the chirping of crickets and the buzzing of bees; and the elemental sounds, like the rumbling of thunderclouds or the blowing of the wind. Even the notes of the Indian scale—Sa Re Ga Ma Pa Dha Ni Sa (the precursor to our Western scale: Do Re Me Fa So La Ti Do)—were drawn from listening to and emulating the sounds of certain animals: Sa=peacock, Re=cow, Ga=goat, Ma=heron, Pa=cuckoo, Dha=horse, Ni=elephant. Indian Music is based in voice; even when instruments are being played, they are singing.

The popularity of yoga is growing in the West. *Yoga Journal* magazine estimates that 15 million people are practicing yoga in America. Most of these practitioners would say that they practice a form of yoga known as *hatha yoga*. They might describe hatha yoga as "physical," or as "stretching exercises to increase flexibility and strength and to improve health." Very few practitioners would be able to tell you how hatha yoga relates to one's musical abilities. But, as noted at the start of this essay, the fact is that the goal of the hatha yoga practices is to develop a sound body and sound mind in order to become more musical—to be able to hear the nadam. The nadam is the vibrational underlying stream that connects all of life; it is the eternal pulse of the universe, known as the "inner humming"—the sacred sound of OM. All manifested things, including language, emanate from this primal source. In the *Yoga Sutra*, Patanjali refers to the sound of OM as *pranava*, which means "eternally new," and he declares that "God is OM" (verse I.27). So when one is tuned to that which is eternally new, he or she becomes

renewed, the body and mind becoming sound, or whole. The hatha yoga techniques help clear the subtle channels of the body known as *nadis* so that the sound current, the nadam, which connects all of reality from subtle to gross, will be able to flow without obstruction. When this happens, an individual becomes tuned to the universal and is able to feel in harmony with all of existence. Yoga is a spiritual practice and a very physical one. In order for the physical to exist, the spiritual must be present. The nature of the physical is spirit, and spirit is sound.

Sound moves all things; without movement, things have no existence, no life. For anything to exist, it has to be in motion. Motion is made of vibration; vibration creates frequency, pulsation and sound. All of life is alive, vibrating and pulsating. The whole world is sound. God created this world, so God also is sound. The Sanskrit phrase *Nada Brahma* means "God is Sound." According to the yoga tradition, the cause of all existence is known by the term *spanda*, which refers to the divine throbbing, quivering, humming, primal, transcendental cause of all vibration—what sets life into motion.

If something appears to exist, you can bet that it is vibrating and that some will be able to hear the thing, as well as see it. Everything, including so-called inanimate physical objects, are constantly producing tones—they sound. Reality is indeed resounding continuously. Does this mean that music is everywhere? Are sound and music the same, or is music something different from sound? In his book *The Yoga of Sound*, Russill Paul says, "Sound is the emanation of any tone, frequency, or vibration. Music, on the other hand, is the organization of specific tones or frequencies, located at specific distances—or musical intervals—from each other." So sound is not necessarily music, but all music is sound. For music to emerge from sound, it must be organized. As a young woman I studied ballet with a great teacher, Ruthanna Boris, who was a member of George Balanchine's New York City Ballet. Miss Boris would often admonish her dance students by repeatedly emphasizing that all movement is not dance. "A dance," she would say, "is specific movement, organized according to music—it's not just a lot of flapping around with your arms and legs." In a similar way, all sound is not music. It takes a musician to recognize patterns inherent in the vast array of sounds around them. It takes a gifted musician to then be able to organize those patterns into specific melodies and rhythms and to hear the overlay of harmonies. This is what musical composition entails.

The process of organizing individual movements into dance, or individual notes into music, is very similar to the process of "composing" asana sequences, or *vinyasas*. Most people who practice hatha yoga think of vinyasa as "flow yoga," where a sequence of asanas (various postures) flow together linked with the breath. But the term *vinyasa* actually means to consciously place in an ordered sequence by means of breathing with a very specific intention—the intention being *chitta vritti nirodha*: the cessation of the fluctuations of the mind. In the *Yoga Sutra*, Patanjali declares that the state of enlightenment is achieved when this cessation occurs (verse I.2), and as mentioned above, the *Hatha Yoga Pradipika* describes the state of enlightenment as the state in which the mind is absorbed in the nadam (see verse 4.100). When asanas are properly composed into vinyasas, their practice can lead to the quieting of the mind and the opening of the nadis—the subtle energy channels—which enables the practitioner to experience the nadam in a state of enlightenment.

Let's explore some specific yoga practices that employ sound and/or music to foster a connection with the Divine.

The practice of "nada yoga" mostly focuses on contemplating and listening for the nadam—the syllable OM. In verse 9.17 of the *Bhagavad Gita*, Krishna, the Supreme Lord, says, "I am the object of all knowledge; I am the sacred syllable OM," and in verse 10.25, he repeats: "Of all words I am the syllable OM," the idea being that through deep listening, one can come to know God. Nada yoga encompasses a variety of listening practices designed to refine the yogi's ability to hear the pranava, the OM sound. The practices entail directing the yogi's consciousness toward the nadam—to engage in deep listening. The first step in developing listening skills is to stop talking—become still and quiet in order to allow an inner tranquility to permeate the senses. A crucial prerequisite to these practices is being in a receptive mood. Receptivity is very important to the yogi, because enlightenment is not something you can capture or take; it is something that is received.

I have been privileged to be in the presence of musicians who were very skilled in the practice of nada yoga, and through the practice of listening to sound, were able to pull music out of the air. The late great trumpeter Don Cherry was a phenomenal musician. I had the honor of playing music with him when he was a member of our band Audio Letter in the 1980s. He is credited with coining the phrase "world music," because he felt that to

call what many musicians were doing by incorporating Indian, Brazilian and African instruments, as well as other musical styles, into Western genres “jazz-fusion,” “Afro-Brazilian” or “Indian fusion” was limiting. He liked the term “world music” perhaps because it felt more expansive, more inclusive. Once I was walking with Don down Avenue B in the Lower East Side of New York City after a rehearsal session, and he was talking about music and how it was going on continuously. I asked, “you mean in your own head?” “No, not just there—everywhere, can’t you hear it?” We stopped on the sidewalk next to Tompkins Square Park. Don put his finger to his lips as if to say, “be quiet for a moment and listen.” He stood there for a few moments, eyes closed, then he started to nod his head to an invisible (at least to me) rhythm. In a moment or two his mouth started moving as he was humming a tune. “You hear that? It’s right here! It’s in the sound of these trees and pigeons and the motors of the cars passing by—it’s here, right here. All around us is music... go on now, sing it with me!” So there we were, singing the melody he had pulled out of the air.

A similar experience happened several years later when I was sitting in a restaurant with Bombay-born, Indian vocalist Asha Puthli. I had always been in awe of Asha since hearing her mind-blowing vocals on two tracks from Ornette Coleman’s brilliant 1972 album, *Science Fiction*. She had been a major influence on me. I couldn’t figure out how she was able to sing the distinct melodies like she did on that album, with the free jazz that Ornette was doing, which often sounded dissonant and noise-like. “Oh,” she laughed, “it’s easy for me because of my training in nada yoga. Do you want me to show you how to do it?” I nodded. “Ok, sit still and listen—listen very closely, but don’t try to figure anything out, just relax.” “What, right here?” I asked. “Yes, music is everywhere, now just listen,” she responded. We were sitting at a table by a window in a midtown Manhattan restaurant, waiters buzzing around, dishes, glasses and silverware clinking and clattering, conversations going on, air conditioning humming, recorded music playing, traffic on the street outside—a cacophony of sounds. All the while Asha, her eyes closed, appeared enraptured as she started to sing a melody, expressed as notes from the Indian scale sung with “ahs.” After a few minutes she created a little tune. “That’s amazing, how did you do that?” I asked. “I didn’t *do* anything, I just listened—the song was already there,” Asha maintained casually.

To be able to play music or to sing, you first have to hear, but to be

able to hear, you first have to listen. I suppose there are musicians who play music to express themselves, but people like Asha and Don listen in order to hear the patterns that are floating in the sonic atmosphere and then bring those patterns forth. The formula for nada yoga could be stated simply as: listen-hear-know-become-be.

Shabda is another Sanskrit term meaning sound—not sound in general, but sound as word. In the yogic tradition, the spiritual power of the word is a science and an art. Yogis chant mantras and magical incantations, which can shift one’s perception of reality—or even alter reality itself (there may not be a difference). Ancient scriptures across traditions recognize the central role of sound as word. For example, the *Brihadaranyaka Upanishad* states: “Through Divine utterance the universe has come into being” (verse 1.2.4), and the Gospel of St. John in the Christian Bible declares: “In the beginning was the word.” (*John 1:1*)

Hazrat Inayat Khan taught: “the voice is the barometer for the soul. Its transparency reveals the soul’s every condition.” Joy, sorrow, anger and pain—each has its own voice that comes through, despite the most skillful deception. By affecting our voice, we can affect our soul, instilling in it the qualities we desire. Purity of speech is an important concept, as well as a practice, in the yoga tradition. Liberation is the goal of all forms of yoga. To be liberated means to be liberated from separateness. The liberated know themselves as one with all that is—whole... holy. According to all of the yoga traditions, this liberation comes by means of sound—in one form or another. As Bob Marley often sang, “One who hears it knows it.”

The chanting of mantra, like the saying of prayers in many religions, can also lead one to God. *Mantra* is a Sanskrit word composed of two sounds: *man*, which means “mind,” and *tra*, which means “to cross over” or “to protect.” The literal meaning of the word *mantra* pertains to that which can help one to cross over and thus be set free from the habitual, unconscious patterns of the mind. Mantras can work like magic. Magic means a shift in perception. To be able to work magic, it is necessary to learn how to spell. Spelling refers not only to “casting spells,” but also to simply being able to say words correctly—not only with the right letters and pronunciation, but also with the right intention. You can read about the power of prayer and mantra to bring about a particular change in reality, but if you haven’t had first hand experience, it all remains as superstitious or as a speculative religious or spiritual concept.

At the opening of the 1969 Woodstock Festival of Peace, Love & Music, Swami Satchidananda told the crowd that "music is the celestial sound, and it is sound that controls the entire universe. Sound energy, sound power, is much, much greater than any other power in the world. One thing I want you all to remember—with sound we can make, and at the same time break. We can break with sound, and if we care, we can also make with sound. So let all of our actions and all our arts express Yoga." I think I know what Swami Satchidananda may have been trying to teach us, as I have experienced the power of mantra to alter reality in a visually perceptible way, both destructive and constructive. While in Seattle in the early 1970s I lived for a couple of months as a novice member of a Christian cult known as the "Love Family." Early one morning close to day-break, I woke up in my bed filled with paralyzing fear. I felt, for want of a better word, a *demonic* presence in my room. Before opening my eyes I heard the sound of someone or something snarling and growling on the floor near the foot of my bed. When I managed to open my eyes, I saw what looked to me like a wolverine-type of animal pacing back and forth close to the bed. My whole body was quivering with dread and apprehension. Never before had I come face to face with such a terrorizing form. All of my fears were concentrated in this form. All fears are actually variations of the fear of death—I felt, without a doubt, that this being was here to kill me, and at any moment would savagely pounce upon me. There was no time to reflect upon whether or not I was dreaming, or if this was a hallucinatory phantom from my imagination. Instead I had to decide what to do and do it immediately. Without a hesitating moment, I began to utter the name: Jesus Christ. At first I wasn't able to speak—my vocal chords seemed frozen—so I could only mouth the words, which I did, but this gave way very quickly to whispering. The more I chanted the words, keeping my focus on the demon, the stronger my ability to chant became, until I was speaking strongly, rhythmically and loudly. The words started to affect the physical form of the creature. It was as if the actual sound of the words was causing the body of the creature to break down into pixelations of form. The more I chanted, the more the demon form dissolved like pieces of a puzzle disengaging from a picture and evaporating into thin air. The visible form seemed to be decomposing back into the subtle element of air or ether. So sound can break—break down a tangible form into nothing—nothing with visible substance, that is. Mantra can be used to *destroy* form.

Mantra can also *create* form. About twenty years after "the wolverine incident," I was sitting in a room with my friend Shyamdas, a Krishna devotee, bhakti yoga teacher and kirtan singer. We were chanting the Sanskrit mantra *shri Krishnah sharanam mama*, which means, "I take refuge in the beautiful, all-attractive Lord of love." We were using japa malas made of tulsi wood, like rosaries, one bead after the other keeping track of each repetition of the mantra. I had my eyes closed, and after chanting for some time, maybe half an hour, I began to see a vision taking form behind my eyelids the way a digital picture comes together on a computer screen, one pixel at a time. I became quite entranced with what was happening, but as the picture began to take a recognizable form, I opened my eyes. The pixelated form continued to come together in the middle of the room with each syllable of the mantra. I closed my eyes and continued to see the vision coming together. I opened my eyes to see individual dots of light create an animated 3-D vision of Krishna and his beloved gopi, Radha, sitting together in a swing. It was as if I had stumbled upon them while taking a walk in a magical forest. As we continued to chant the mantra, the form remained, vibrating and alive. Overwhelmed, I looked over toward Shyamdas swaying with the rhythm of the mantra—his eyes closed. I became exhilarated, knowing that something special was happening, and with that excitement, the mood shifted and I fell out of the experience. I closed my eyes, but could not regain the focus or the vision that had been created by the sound of the mantra. I couldn't even continue chanting, as my reasoning intellect began to overpower my experience, and with that the celestial form was lost. We stopped chanting and sat for a few moments before I told Shyamdas what had happened or at least what I thought had happened. Even though I was not able to maintain the vision, I had learned through a first hand experience the power of word, of mantra, to affect or create a vision of reality. It is said in the yoga tradition that *nama* precedes *rupa*, which means that from the sound of the name (*nama*), the form (*rupa*) appears.

Repeating sacred words or mantras can be done in private to oneself. The practice purifies one's mind and moves it toward inner contemplation on the divine source. Many practitioners of bhakti yoga, which is the yoga of devotion—the yoga that purifies the emotions and opens the heart to love—use mala beads to practice the recitation of mantra. You simply hold the mala or string of beads in your hand, and as you recite each repetition of the mantra, you hold a bead with your fingers. As you continue to

recite, you travel to the next bead until you make your way all around the mala. Then you turn it around and start over. This is called *japa* practice, which means "recitation," and it is one of the oldest practices of yoga. The recitation takes three forms: silent, soft murmuring or out loud. Mala beads aren't only used by yogis, but also by Muslims as prayer beads and by Christians in the form of a rosary. Private contemplative practices using sound as mantra and prayer are ancient practices and have been effective forms of yoga for thousands of years.

While the chanting of mantras is often done privately, it can also be done in a group setting. Perhaps due to estrangement from God, the natural world, each other and ourselves, many of us have become socially inhibited and uncomfortable with our bodies and our feelings, resulting, among other things, in tremendous fear when it comes to speaking or singing in public. I believe that the yogic practice of kirtan developed to help remedy this dilemma of modern life.

In the worldwide, East-West yoga community, the practice of kirtan (pronounced "keer-ton") has become the most popular method to awaken one to the power of sound, word and music. The word *kirtan* means "to speak of, to mention." Kirtan is call and response singing of mantras, the names of God or of God's glories. Usually kirtan is done in a group where there is a lead singer known as a *kirtan-wallah*, who recites or sings a line, and then the group responds by singing that same line. Good kirtan-wallahs are able to move the group into deeper/higher levels of ecstasy, where the rational mind melts into the heart, often culminating in heightened ecstatic trance and rapturous tears of joy. One possessed by this euphoria forgets their mundane problems and is transported into a heightened state of awareness where love is the only law. Since the name of God is considered the same as God, singing God's name is to invoke the presence of God and so come into intimate contact with God—which is after all the aim of yoga: to yoke or unite with God. The soul's yearning for God urges one onward to explore deeper and deeper states of feeling, because underlying even the most melancholy of love songs is a sweet longing to reunite with the source.

The great 15th century Bengali bhakti saint, Chaitanya, is considered the "father" of modern kirtan, as he is credited for giving rise to the popularity of kirtan as a spiritual practice. Kirtan existed before Chaitanya, and certainly the recitation of mantra was going on for centuries before he

was born, but he was responsible for making it totally accessible and, we could say, hot, hip and definitely holy! He got people up on the dance floor! He was a mover and shaker! The ecstatic experience that arises from singing God's name and dancing in delightful abandon is not only soul-freeing but frees one on many levels, physical and intellectual too. You don't have to be a learned scholar and be able to memorize long involved scripture, you don't have to argue the existence of God, you don't have to be able to sit alone and meditate in a cave for years, you don't have to be able to control your breath and stop your heart and you don't have to be able to bend your body into contortions to practice bhakti yoga. You don't even have to be a trained musician or dancer. All you have to do is to be willing to loosen up and start singing God's holy names—the magic of the sound will take care of the rest. Attend a Krishna Das, Jai Uttal, or Shyamdas concert to see how ecstatic, therapeutic and contagious the kirtan experience can be.

"Music has the potential other arts don't have, which is to utterly change you within three minutes. Your whole body chemistry can change, your mood, your perspective..." —Nick Cave, noted musician and leader of the rock band Nick Cave and the Bad Seeds.

In our culture, disconnection between what one thinks, what one feels, what one says and what one does is normal. Through the practice of kirtan, a person can actually "pull himself or herself together" by allowing their suppressed emotions to well up and be purified in the divine mood or *bhav* where all emotions are allowed. Kirtan is an opportunity to release the heart and all of the pent up feelings that go with mundane repressed life. There is an old alchemical precept that states: through repetition the magic is forced to rise. I think this is what happens in kirtan. You chant over and over again these phrases or mantras set to simple melodies, and the feeling builds until you are exploding with uninhibited intoxication, smiling, laughing, and even sometimes dancing. Once you have such an experience, your perception of what is possible in the realm of emotional experience is shifted, and that can be considered magic. In the bhakti realm, knowing how to perform elaborate rituals, or to debate philosophical concepts, or to perform contorted asanas, means nothing. When the soul is in the presence of God, only love reigns supreme. Kirtan sets the heart free to love and unite with the supreme beloved. When we sing God's name, our very being becomes transformed through the power of mantra, enabling us to cross over the thinking mind into that state of wholeness—holiness.

Of all the various types of yoga practice that a person can do at this time in the history of the planet, chanting the names of God is the most effective and direct means to attaining liberation from the wheel of *samsara*, the world of repeated suffering. The yoga scriptures tell us that for each *yuga*, which means “age, era or time span,” a specific form of spiritual practice is appropriate. During the Satya era, which was millions of years ago, before recorded history, the best yoga method was meditation. In the Treta era, ritual sacrifice brought about realization. In the Dvapara era, one attained realization through worship of deities. But in the Kali yuga, our present era, the most direct means to attain liberation, or God realization, is through chanting the holy names of God. This seems appropriate due to the urgency we all feel to some extent at this time, due to the global crisis that threatens the continuation of life on earth. Human ignorance has propelled us to think, speak and act as if what we thought, said and did didn’t have an effect on physical existence. Through the power of music, we might be able to save ourselves and the world from total annihilation. It is sound which brings form into existence, after all. If the divine presence of God is to reign on earth, then that presence will be brought forth through means of music.

MUSIC, MYSTICISM AND SPIRITUALITY

PETER GARLAND

Peter Garland (student, c. 1971): How does one compose music that is deep and authentic, and not just... “sounds?”

James Tenney (teacher): It is a question of feeling things more deeply.

I have never been much of a religious practitioner, but my personal and musical life have frequently brought me into contact with religious beliefs, practices and people from a variety of cultures. To me the idea of mysticism implies a religious outlook, a “mystery,” though I suppose one could feel something like that simply by gazing at the night sky or the sea. I am not much of a scientific materialist either. Although I connect mysticism with religion, I don’t necessarily view spirituality in that way, though of course it can be. I see spirituality as manifesting itself in personal belief and ethical conduct (with ethics not being confused with religious proscriptions). My appreciation of religion(s) is as much, or more, cultural—as a cultural product, like the arts and other expressive forms of human activity—as it is philosophical. In that way, cultural work (in my case, composing music) can be a form of spiritual belief and a way of life—the Navajo concept of “Beauty” provides such a model. As I’ve grown older and more solitary (the latter not necessarily by choice), my relationship with the direct making of music—as a performer or an improviser would experience it—has become more distant. Though I somewhat regret and miss that, there is a kind of alchemy in the composing process: namely a sense of surprise and wonder when one hears one’s own (or others’) music. This does not occur all the time, and sometimes that experience is more profound than at other moments. It is precisely the transformative aspect of creativity, of going beyond oneself: “How did I do that?” “I have no idea...” Of course, part of that mystery lies in years of training, discipline and a deepening relationship with one’s basic materials: both sound itself and the movement

and physical relationships of sound, and that psychic and emotional chemistry corresponding to the Zen-like *koan* posed to me by Tenney so many years ago: of "feeling things more deeply."

* * *

If I am going to write about music and mysticism here, it will mainly be about my experiences in this regard as a witness, rather than a participant or practitioner (though in most public rituals, spectators/listeners are an integral part of the context). I identify three basic factors, all essentially extra-musical, that are integral, in varying degrees, to this experience of sound as a mystical phenomenon. Hence one idea that is very important to emphasize is the concept of *synaesthesia*: there are almost always multiple stimuli involved, not just aural. There is only one instance where a work of my own was described as "mystical." Reviewing the 1985 performance of my shadow puppet theater and dance drama, *The Conquest of Mexico*, John Voland wrote in the *LA Times*: "Yet the two-hour long work's elegaic tone was deep and mystical..." (this contrasts with the vindictive slam I received in the magazine. *High* (sic) *Performance!*). Obviously, the music was only one contributing element in this mix.

The first factor is the religious or ritual aspect. The musical activities take place, both in regards to creation and reception, in a framework of specific beliefs, about both the philosophical underpinnings and practical (or functional) efficacy of the musical activity.

The second factor is the larger context. Anyone who has been to ceremonial dances out at the Hopi Mesas will understand what I mean by that. Context could also refer to a different culture or religion; any situation that takes one out of a familiar frame of reference into one that is exotic or unfamiliar, be it an Islamic mosque, a Buddhist temple, or a Mexican Indian village deep in the mountains. In this sense, the musical and mystical experience reaffirms a sense of place that can be cultural, historical or geographical.

The third factor is subjective, one's own receptivity and state of awareness. This obviously can be conditioned by the first two factors; and it can also be influenced by physiological and psychological factors too. Sleep deprivation is a recurring condition one has to deal with in ceremonies or performances that last all night, whether they are Kachina dances or Javanese Wayang Kulit. Drugs or other mind-altering substances can pro-

duce a very similar state to that created by sleep deprivation, where the rational brain gives way to a deeper "metaphorical/receptive" mode. The fundamental "mystery" of mysticism is as much located in the mystery of our own minds and physical organism, as it is manifested in exterior, artistic phenomena. In such "altered" states, the dividing line between perception and reception can become blurred, or even, perhaps, unified.

Another crucial point to emphasize is that—apart, perhaps, from a few sublime moments in the performance of Indian (India) classical music, a musical system that has its own set of deep philosophical underpinnings—I have never experienced a mystical experience with music in any concert presentation. Music as "product" or as a commodified activity does not lend itself to this, in my opinion. All of these deep experiences have taken place in the context of community—be it religious or social—and the musical expressions have been validated by their place in a fabric of interconnected beliefs and activities. I have seen some events that were indeed performances as much or more than they were rituals, but what transformed them were the shared beliefs that created a certain "gravitas" of the moment, taking it beyond mere spectacle. Needless to say too, the absence of a large "outsider" audience contributes also to this feeling. It was quite a shock and distraction the first and only time I went to the all-night Shalako dances at Zuni Pueblo, to see the multiple tour buses arriving—at midnight!—from Santa Fe and disgorging all their passengers! No wonder the Zunis have become ambivalent and antagonistic towards non-Indian outsiders at their dances! In these situations, respect and proper behavior are demanded as much from spectators as they are from participants (though I must confess to an occasional lapse in this regard—"youthful indiscretions," I am quick to add!).

One other thing I must mention is the fact that I have never had a "mystical" or "spiritual" experience with electronic technology. I think the principal reason is that these kinds of experiences are ultimately transmitted and received via our physical, human organisms—both body and mind (and spirit). These are the basic vehicles: that the divine can only be experienced in terms of what poet Charles Olson referred to as this "human universe." That the divine is fundamentally human, and vice versa. One concert I attended in Santa Fe in the 1990s illustrated this point in a rather unexpected way. It was a performance by the Gyuto Monks Tantric Choir, a group whose tour was being partially underwritten by the Grateful Dead. In

addition, the Dead had supplied an amplification system—this event was in an outdoor amphitheater, normally used for rock concerts. It was strange enough seeing each of the monks wearing state-of-the-art microphone headsets. What was truly disconcerting was that the chanting—the sound—was no longer coming from the monks (from where I was sitting I could not discern anything directly from them), but rather from banks of speakers on each side. And however good these speaker systems might have been, these sounds were no longer human, but rather electronically transmitted signals. So instead of Tantric Buddhist chanting, what we were essentially treated to was a live-electronic music concert! It was strange, to say the least! This brings up another issue, one which I will not go further with here: the role of architectural space, both interior and exterior, in the projection and amplification of sacred sound. One is familiar with that in regards to cathedral and temple acoustics. In Mexico I discovered a similar function in the role of echo and amplification amidst the large pyramids and other edifices in the magnificent urban ceremonial compounds of the pre-Columbian world.

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Of the more performance (as opposed to ritual) type events that have moved me deeply I think of the all-night Javanese shadow puppet plays (Wayang Kulit) and the music and dancing of the Sufi Whirling Dervishes in Istanbul, Turkey. Two of the three times I attended the latter, they were equally ritual and performance. They were performed by and for the members of the Sufi community; and although spectators were welcome, it was not really a public (or advertised) event. So there was a far greater intimacy and intensity (the second time was on a very auspicious and "powerful" night at the end of Ramadan, where by chance I ended up sitting with the spiritual leader of the group and the instrumentalists and solo singers in the inner sanctum). Both these performances took place in the evening at the group's meeting hall; as opposed to the "concert" presentation which had been advertised with posters and handbills and which took place in the daytime and in a museum (and with younger dancers who were obviously students). The first time, the most startling thing was when the men, assembled around the dance floor (the musicians and lead singers were in a smaller, open adjoining room), and among whom I was sitting, suddenly began to

chant, with a very forceful inhale-exhale push. Whether it was trance or not, the effect on me was that way. Equally moving was the **silence** of the whirling dancers, in contrast to this. The center of the dance floor became a sea of calm and meditative grace, with waves of chant crashing on all sides. This would not be the only time when the most powerful and mystical element of a sonic experience would be the silence.

The Wayang Kulit of Java, which I have stayed up all night to watch and listen to more than a dozen times, both in the U.S. and Java, was another sort of sacred experience altogether. Besides the rich music of the gamelan (the last performance I saw in Yogyakarta I sat in the midst of the musicians, right behind the puppeteer), the magic for me was the immersion in the mythic past of the *Mahabharata*, of a timeless time when gods and demons spoke and fought, all this cloaked in the darkness of night, away from the glare of daytime and everyday (so-called) reality. There is a musical structure to the Wayang—the three *patets*, or modes, and their corresponding moods—that works to reinforce this sense of sacred time/space. After the climax of the battle scene the music settles into the final mode, *patet manyura*, and one is enveloped in a sense of dramatic resolution and peaceful unfolding until the end of the play, often as the morning sky is just beginning to lighten. One has overcome one's own struggle with fatigue and sleeplessness (the toughest point is around three in the morning—time for a coffee or a cigarette to help stay awake; beyond that it is clear sailing). And there is nothing like seeing the dawn after such a night in the presence of the gods. No film has ever moved me in the same way.

The same can be said of the Night Dances at Zuni Pueblo—the comings and goings of the Mudheads and the countless Kachinas. The incredibly intricate and rhythmic music of the Zunis, the weighty seriousness of the dancing and the massed sound of the dancers' rattles. The woodsmoke smell of the Pueblos. The feeling of ancientness: that these ceremonies belong, again, to a mythic past and are the oldest still surviving on this North American continent. And that for this night or day at least, this village, out in the remote New Mexico (or in the case of the Hopi, Arizona) desert, is the center of the world.

Just the drive out to the Hopi Mesas itself, through the Four Corners area and Navajo country, is enough to put you into another time frame and mental state. One of the most remarkable experiences I had out there was at a ceremony the morning after the late summer Niman Kachina

dances. For Hopi and Zuni, I relied on certain poet and visual artist friends for tips and information—most of my musician peers seemed to know or care little for any of this. Several of us had camped out on the Mesa, and with them I got up before sunrise to make it back to the village where a dawn ceremony would take place around one of the kivas. A priest and several Kachinas came out of that underground chamber, and performed a ritual that I had no understanding of whatsoever, other than admiring its formality and solemnity. The small crowd watching (we were the only white folks) were quiet and reverent. You could hear the tiniest sounds—and the silence was profound. The sun was rising in the east, as the full moon was setting directly opposite in the west. Again, at this moment, here, it felt like we were at the center, the heart, of the world.

All these factors—ancient ritual, a feeling of being in the center of the world, the dislocation of night-time, a foreign culture and religion—came together once for me in Japan. The fact that this “center of the world” idea keeps recurring perhaps points to the concept of *mandala*—how energy is concentrated in and then radiated out from a specific spiritual center. The sand and painted *mandalas* are a visual representation of a very real energy phenomenon that I’ve only had glimpses of in these rare moments of sensory alteration, psychic receptiveness, and musical-ritual articulation. The event was the annual *Omizutori* ceremony at the Todai-ji Buddhist temple in Nara in early March. On the final night the eleven or so monks who are performing the purification rituals (which go on for over two weeks) enact a dramatic spectacle where they run with huge pine bundle torches onto the front balcony of the temple (an old, wooden temple, mind you!) and wave them, showering sparks on the crowds of onlookers who have gathered below. This is certainly as dramatic as anything I’ve ever seen—but it is very much a public spectacle and it is packed with people. I was fortunate enough to be close to the front, and apparently among a special invited group (where I think I was not really supposed to be; but I ended up there due to a combination of determination, *gaijin* naivete, and Japanese courtesy in not kicking me out!). Anyway I was invited by people in the group to come with them afterwards to the back of the temple, to witness the rest of the ceremony that would go on all night. It was very dark—the ritual area lit only by candle or oil lamp light—and I was in the rear of two viewing chambers, the one for just the general public. So I was viewing things through two wooden lattice screens, and could not com-

pletely make out visually what I was hearing. There were prayers and chanting, of course; and at some point what sounded like the rubbing together of prayer beads—but inexplicably louder than what I would have expected. Then came some amazing moments when the monks seemed to run around the room, making a very dramatic sound with their wooden clog sandals (the floor of the temple being a natural resonating box). The musical intensity was building simultaneously with my own feeling increasingly chilled. I had come back into Nara from visiting various outlying temples, and had not had a chance to change into warmer clothes before heading over to Todai-ji, so I was not prepared for the cold—not to mention the fact that one had to remove one’s shoes before entering the temple. I was starting to shiver and reach a breaking point, when it happened: all of a sudden there was an eerie heterophony of conch shell horns! It was one of the most jaw-dropping musical moments of my life. I was stunned: here I was, witnessing a ceremony that extended back 1,200 years, and oddly what those conch shell horns made me think of was: Edgard Varèse! “Ancient to the future”—indeed! The temple grounds and downtown Nara were completely empty as I scurried back to my comfortable room at the *ryokan*. As usual the silence of the night served to amplify the resonance in my mind of what I had just witnessed and heard.

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In the mid-'90s in New Mexico, I also had a pair of musical/sonic encounters with the “Great Mystery” itself: Death. Both occurred during Easter week and involved the Penitentes, a Catholic lay brotherhood active in the Hispanic communities of New Mexico. On a Palm Sunday in 1997, at the morning Mass at the Santuario of Chimayó (Esperanza and I had walked there, a few miles from nearby Nambe; ours being a small precursor of the big annual pilgrimage that would climax there on Good Friday—people walked from as far away as Albuquerque) the priest had announced that the local Penitentes would be singing alabados at a special service to be celebrated that afternoon, at a church outside Española, and that the public was welcome. So we decided to go. The Penitente brothers looked like a cross-section of the Hispanic community—professional people, working class guys, some of them pretty big dudes. They all seemed to have their notebooks (I didn’t get to see them close up), which had the lyrics and/or

melodies of these alabados, or praise songs (from the Spanish verb *alabar*, to give praise). The service turned out to be a massive Confession (to purify people for Easter Week), and there were long stretches of time given over to the Hermanos (Brothers) to sing. It was a modern style church (as opposed to some of the adobe architectural gems from the Hispanic colonial era, such as the Santuario in Chimayó), so you could say it was somewhat lacking in "atmosphere." Confession not being my thing, I decided therefore to visually focus and meditate on the Cristo on the Cross high above the altar, while I listened to these chants. (Normally such a figure would be covered over for Lent; somehow I recall it as not being shrouded, perhaps because of it being so high up and inaccessible.) As I did so, something very moving and unexpected happened to me. These wonderful, melancholy tunes, seemingly a bit high in the tenor range for these men, were suffused with a dark, almost Arabic, sadness—a kind of wail that went back centuries to the Iberian peninsula where once Christians, Moslems and Jews had lived together, until the Reconquista (the reconquest of Spain by the Catholic monarchs), which had resulted in the diasporic exile of this cultural legacy, many people ending up in the New World whose lands Columbus had discovered at almost the same time. There is a certain darkness to Spanish Catholicism, more than any other European form of it; I guess that reflects centuries of Inquisition and penance (interestingly enough, the Aztecs and other pre-Columbian peoples too were masters of penance and sacrifice, which perhaps helped this religion take such deep root in the Hispanic Americas). One sees this most eerily in the Procession of Silence, which takes place in many parts of Latin America, when men in shrouds and pointed hoods carry the dead Christ through the streets on the night of Good Friday.

Esperanza commented that she was struck by the emotional intensity of the music—that this kind of baring one's soul (and heart), the deep pain and humility of it, was something that she thought of women doing like this, but not men! This aspect was particularly moving to her. Listening to these songs and staring intently at the Cristo, I felt overwhelmed by the weight and sorrow of it all. Finally I suddenly realized: these men were not just singing about the mystery of the death of a venerated religious figure shrouded in the historical memory of two thousand years ago. No, they were singing about the mystery of Death itself, all our deaths, embodied in this one Christ figure: their deaths, my death too, with a sadness that was

both infinite and inevitable. I "understood" in some deep part of me—and then the service was over.

The second time took place at the end of that week on the night of Good Friday in a village in northern New Mexico. Some of Esperanza's friends belonged to Penitente families, and they invited her (and me, being her husband) to come up and attend the service for the traditional "Tinieblas" (Spanish: darkness or confusion), which represented the moment of Jesus' death when darkness came over the land, the earth shook and boulders split open, etc. We drove north and, following directions we were given, found the morada, or local Penitente meeting house, where the people of the community were already gathering. We were given a very warm and courteous welcome (not too many Anglos get invited to these things, and I was the only one there), and we went inside with everyone for a long service, which was essentially various recitations of the Rosary ("Hail Mary...") and other prayers. Several of the images associated with Holy Week and Easter were there in the chapel, including a statue of the Virgen Dolorosa (the Grieving Virgin Mother), a santo-like statue of Jesus lying in an almost life-size coffin, and also a wooden "Death Cart," a skeleton riding in a cart, which I'd only seen before in books and museums. At a certain point all the people in the service were asked to move up front, and a floor to ceiling curtain (or blankets, I don't recall) was set up, blocking off the rear of the morada (where the door was). There were a dozen or so candles lit, which were our only light in the darkness. As we prayed, one by one they were slowly extinguished, and the room grew darker, until there was only a single candle lit. When that was extinguished, there was suddenly a loud exclamation from the man leading the prayers, and then...OH MY GOD!!! I have never been so scared—terrified!—by a sonic event, and my heart practically popped out of my mouth, and I nearly levitated out of my seat as I tried to hold onto Esperanza for dear life. I'm not sure how long this total BLAST and WALL of sound went on from behind the curtain—thirty seconds, an entire minute? It's like judging how long an earthquake shakes—it seems to go on forever, even if it's only brief. Evidently (I never found out or asked any of the details) a number of Penitente brothers had silently sneaked into the curtained-off area behind us (and I mean silently, because the service in the morada was very quiet except for our prayers) and had brought an ARSENAL of noise-making things (metal, whatever—I have no idea what made that sound); and then at the signal they had CUT LOOSE! We had

been told that this was going to happen three times, so with our eyes wide open in shock, trying to recover our breath, and me trying to stuff my heart back down my throat into my chest where it belonged, we went through the exact same ritual with the prayers and candles. We thought/hoped we were prepared, but the second time it was *EVEN WORSE!* (I have to use bold capital letters! It's the only way to express what it felt like.) Though mercifully the third time wasn't quite so bad, or we had finally gotten used to it (another aspect was the complete darkness in the morada—you couldn't even see your hand in front of your face). Afterwards, milling about outside with our friends and folks in the community, people were smiling and chuckling as we said our thank-yous and goodbyes. They'd been through this before!—though some of our friends had declined to go into the morada, saying, "We've done it before, but we're not going through *THAT* again!" The Hermanos would spend the rest of the night in the morada in prayer—until dawn, when they would emerge, out of the Darkness (Las Tinieblas), and into the Light (of day). Amazed by the beauty and power of what we'd just witnessed, Esperanza and I drove home in near silence.

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Well, I think I have presented enough anecdotal recollections of experiences that I have had with mysticism and music and sound—and silence. And I haven't even mentioned anything about my years of research in Mexico! That would easily fill another essay, and I have written about that elsewhere. As a composer, I don't aspire to anything like this intensity of mysticism in my own music. I am prevented from that by the very diffuse nature of my own eclectic and personal religious outlook. These were experiences that deeply affected me and my view of life and the world, and they are some of my most cherished sonic memories. As for spirituality, that is an ongoing devotion (to music—and knowledge), discipline and struggle. I can only hope that I "get there"—wherever that is. It's the journey itself that counts.

Postscript

In both the Native American and Hispanic communities, the rituals I have mentioned are considered very sacred and very private. And therefore out-

siders are welcome with the understanding that this be respected. For that reason I have hardly ever written about my experiences in New Mexico. In doing so now, I have been deliberately vague as to detail, and have been careful to write only about things that others have already written about and which are readily available in print. I am grateful for the opportunity to have experienced these moments, and have tried not to violate this respect.

—Winnegance, Maine, Winter 2009

* * *

Remembering Luisito Lujan

Occasionally in life one has the luck to encounter truly remarkable people by chance, without consciously looking for them as one does with a teacher. With a teacher, one usually has an idea of what one wants to learn, regardless of whether there are surprises along the way; and more often than not, these teachers become (lifelong) friends. But what of friends whom one meets casually; who, without any intention to be so, become important teachers? Whose friendship becomes an important encounter along the path of one's life? Who teach one things one didn't know one wanted—or needed—to learn?

I want to talk about one such person, whom I will refer to from here on as my friend. Because there was never anything more than that, and Luis would have laughed or felt embarrassed by any such "teacher" idea. There was never anything like that between us, and we were never anything more than casual, but good friends. I was neither one of his best friends, though I think my wife Esperanza was. It was through Esperanza Esquivel that I had the good fortune of meeting Luis Lujan.

Professionally, he was known as Luisito Lujan, the diminutive being used—in an affectionate way—as a reflection of his physical condition. Luis suffered a disease or genetic condition whereby his legs never grew, even though the rest of him developed normally. So he spent his life in a wheel-chair. He was thus a small person—though in no sense a dwarf—but in his inner self he was a giant of a man. Physically, I recall his big barrel of a chest, symptomatic of a person who has to get around using their hands and arms, plus wheeling himself about in his wheelchair. The other very noticeable thing about Luis were his hands—with his large agile fingers

(usually clutching a cigarette). He had the sensitive hands of a woodcarver, or of a jeweler like he had once been. Musicians tend to have similar hands, because it is with our hands and fingers that we work. Not the hard, heavy work of farmers or mechanics, whose hands have to handle heavy tools and loads and tend to be rougher, thicker, more calloused—Luis's hands reflected the precision and delicacy of his work. By the time I met him in 1995, Luisito was a renowned santero. In the Hispanic culture of New Mexico, that means a carver of saints. Like most santeros, Luisito could also carve and paint retablos—flat, painting-like works carved in relief on wood and painted (or just simply painted sometimes). He also made delicate straw inlay work—like the two small crosses he made for Esperanza's and my wedding. Carved and painted in black and red, with the tiny straw inlay as decoration (that he applied piece by piece with tweezers). At the junction of the crosses, he had placed a strong red circle with a star inside of it (for mine). For Esperanza's he placed a red heart.

Luisito was his professional name—but only his closest friends and family (and perhaps clients and collectors) called him that. From day one I always called him Luis. That was obvious to me: besides being older than me, Luis was a person who commanded respect, despite his totally relaxed, easygoing nature. I am no expert at all on northern New Mexico woodcarving, but I think (and most people agreed) that Luis's saints were special. There was a warmth, an almost human quality to his figures that were remarkable. These are, after all, only statues, pieces of wood that have been carved and painted. But Luis's pieces seemed almost alive, as if each one had a heart. I think that reflected the love and skill Luis put into each piece. Unlike some carvers, Luis did not carve for money; though of course he didn't scorn it either. He received a regular government disability check, and lived in the house in Nambe where he had been born. A bachelor, he had a tight, supportive and loving extended family—not to mention his neighbors and the community as a whole. Most people would have been glad to do anything for Luis.

What were also amazing about Luis's saints were that they were expressions, more than anything else, of his deep faith and spirituality. That is probably the most profound lesson he taught me, and which is why his pieces not only had heart, but soul also. It was this encounter with Luis's faith, along with my wife Esperanza's, that had the deepest impact on me.

I began dating Esperanza Esquivel in the summer of 1995, a state of

affairs that quickly turned into courtship. Luis Lujan was Esperanza's landlord, but between them it had become a much closer friendship than that. They lived in two houses right next to each other, in the same family compound under a giant spreading oak tree at the junction of two dirt roads in rural Nambe, a half hour drive north of Santa Fe. Though Nambe was, and still is, going through "gentrification" (sic)—i.e. the older Hispanic homes and properties are being bought up by wealthy Anglo money—Luis's house was in the heart of old Nambe. The little "casita" Esperanza lived in—the rural equivalent of an "efficiency" apartment, one big room with separate kitchen and bath—had once been a neighborhood liquor store (I laughed at that—it was poetic justice that I ended up there) that Luis's father had owned. In fact, there was still an earthen "cellar" underneath, where beer could be stored and kept cool. Her house was at the far end of the small yard. Alongside it, forming an inverted L, was Luis's larger house: a classic Hispanic house of adobe with a tin roof, with a comfortable roofed-over shady porch that ran the length of the house. Hispanic houses in the old days tended to grow horizontally, by accretion. As one had more children, one added more rooms, and the house got longer. Luis's family home was modestly large, divided in three main sections, reflecting a medium-sized family of modest means. Luis's older sister, Pita (Guadalupe, hence Guadalupita), widowed before I knew the family, came out on weekends, and cleaned up and generally took care of the house and her brother. Luis lived in the first section of the house. His bedroom was attached to the big kitchen, from which there was a screen door out onto the porch. In the middle room was Luis's table of saints—about eight to ten pieces at any given time. These were his own pieces, and the table was special. It was neither a display nor an altar, though it was a little of both. Seeing this grouping of Luis's saints always elicited comments of wonder and admiration from visitors. A photo of that table with its saints appears in one of the books on New Mexican santeros. I never tired of going into that room and contemplating Luis's saints.

As in most such compounds, there was a lot of intimacy and perhaps a bit less privacy than a new Anglo boyfriend might have wished for. From the start, Luis was friendly and warm with me, and very easygoing. I was not the first suitor to visit Esperanza there, and though Luis and Esperanza had become close, close friends—I would almost venture to say like brother and sister—Luis was very relaxed and detached. His sense of

humor was special—he watched our comings and goings with his famous smile and laugh, and a lively twinkle in his eyes. Never over-protective of her, he knew that things would work out or not, as they were supposed to. Later on, Esperanza would sometimes be mad at me, so I would go over to Luis's house and "escape" from her. Luis would laugh in brotherly camaraderie at our (pre)marital spats—because Esperanza never got angry with him. He kept her rent amazingly low—the same for seven years, until we insisted on raising it. And he was always there for her, in emotional or financial hard times.

As it happened, Esperanza and I dated through the rest of 1995 and 1996. I started spending weekends out there in late 1995, and more and more frequently during 1996. I moved in with her at the end of 1996, and in July 1997 we were married. We continued to live in Luis's compound until October of that year, when we moved to Mexico. The last and only time we saw Luis after that was in March 1998, when we came back briefly to Santa Fe to take back more of our things to Mexico. It was a mark of our closeness and friendship that with several places available to stay, we chose to spend that week in Nambe, out at Luis's (Esperanza's casita by that point was rented to someone else). We called him on the phone every three to four months from Mexico (one of only two to three friends we called regularly), and Esperanza wrote occasionally. We were both quite lonely and homesick our first years in Mexico—Esperanza had left all her friendships behind to come with me (I, who am perhaps more used to "leaving"). Some nights, after a few glasses of wine, I'd smile and say, "Let's call Luis!" And we would—his gruff, husky, cigarette smoky voice answering us far away in New Mexico, chuckling as always. I would say hello and talk briefly, and then he and Esperanza would chat for a half hour. And I would see how renewed and smiling she would be. Talking to Luis always had that effect, for both of us.

My friendship with Luis, and relationship with Esperanza, also gave me another profound lesson: a real insight into the Hispanic culture of northern New Mexico. Its spirituality, its humor, its sense of family and community, and the importance of humility and respect. Not easy lessons for an angry, full-of-himself, Anglo "rebel." They also showed me the beauty of New Mexican Catholicism, and its deep faith, a faith profoundly rooted in the land—lessons that we more money-and-prestige-driven, individualistic (in sometimes selfish ways) Anglos would be wise to learn

from our Hispanic neighbors.

Esperanza and I were an unlikely match: she a practicing Catholic; me, the ultimate skeptic (I had been brought up and educated in church schools enough to reject it most of my adult life). Esperanza had lived for years in the Pojoaque Valley; first in Cuyamungue, later in Nambe, and had worked and worshipped likewise for years with the community. Even though from Mexico, she had become a part of the "Valley." Although I didn't agree on all details, the basic honesty of her Catholic faith and that of her (later our) neighbors impressed me. Knowing Luis only reinforced that. I had studied Buddhism and Taoism and even been to monasteries in Japan, but it seemed odd and inappropriate to be seeking spiritual sources so far outside one's culture. I never considered myself a New Mexican Catholic, but I started to do something very simple with Esperanza: I went to Sunday church with her. In Nambe, this introduced me further to the community. Living at Luis's deepened that connection. It's no big secret that there are socio-economic and cultural tensions between the Anglo and Hispanic communities in New Mexico—in eleven previous years living in Santa Fe I had surprisingly little contact with Hispanic people. So I had a lot to learn. And not everyone accepted me right away, being Esperanza's Anglo boyfriend. With Luis, there was never that problem. I could also talk to him about my ups and downs, and occasional mistakes, in dealing with people and situations in Nambe. He would always listen patiently, chuckling at times, with that smile and sparkle in his eyes behind those thick glasses. I think he respected and enjoyed my attempt to belong. From years of living in Mexico, I had learned to slow down somewhat, and to show patience and respect where it was due; so hanging out with Luis became one of the great joys of living in Nambe. He liked it right off that I called him Luis rather than Luisito; and though he was rarely, almost never, critical of others, I think he sympathized with some of my own criticisms of rich, Anglo, snobish Santa Fe. We discovered that we both had an antipathy towards the man who had been director of the Spanish Colonial Arts Society. Even though an artist in an "arts town," I had had most of my initial encounters with the wealthy Anglo community (the art "patrons") as a worker in the barely-above-minimum-wage working class. So I saw how differently they treated workers and "artistes" (in a town where 80% of the art was pure crap)—which naturally pissed me off—this director of the Spanish Colonial Arts Society in particular. Luis didn't like him either—and more specifically

the fact that rich Anglos in Santa Fe dictated to Hispanic artists and craftsmen what they "could" and "could not" do. His quiet way of protesting that was his non-participation in the annual summer Spanish Market. His lack of interest also reflected that for him his carving was an act of faith, not commerce. There was also perhaps a shyness about public appearances, due to his physical condition, and the sheer difficulty of being transported from place to place. Luis was never intransigent—he would always graciously accept invitations every summer to attend the Market anyway as a special guest and demonstrator. He would quietly carve amidst all the crowds, and greet old friends and strangers alike with the same easy smile and warmth. One time Esperanza was standing around with Luis and someone exclaimed that the female saints and Virgins had her face! Luis just grinned, shrugged his shoulders, and laughed.

At the house, Luis would work on his porch outside in good weather. He would always be there to greet us in our comings and goings. Or he'd be indoors watching a baseball game on the big TV his family had given him. His favorite team was the Chicago White Sox—I never figured out why someone from New Mexico would be a big fan of them. Luis again would just chuckle and say he didn't know either. That gave us something further in common, because my favorite team was the Boston Red Sox—and both teams are chronic losers. "Heck, Luis," I'd say, "I guess we're both suckers for punishment!" More laughter. At night, he would be joined by his two close buddies, Mariano and George. Mariano was from Nambe, probably around Luis's age, a very tall, big man—in that way he and Luis formed a truly odd couple. The biggest guy in Nambe was the best friend of the smallest guy. George was a dapper Mexican man, originally from Ciudad Juarez. Both Mariano and George were devoted to Luis, and came over literally every day. It was an interesting personal chemistry, a friendship whose center and bond was Luis. Luis would always joke and tell me that Mariano and George had been arguing again: "Boy, those two fight like they're married to each other!" And his shoulders would shake with laughter. Another group of friends who met regularly, about once a month or so, at Luis's house were the Escuelita—a group of santeros, most of them younger than Luis, who got together, and spent all day carving, talking and hanging out. Luis was a kind of leader and role model for these younger carvers, who were mostly in their thirties and forties; and he enjoyed their company as much as they valued his. It was also amazing how many peo-

ple knew Luis—and he knew them—and how well-informed he was about goings on in the community.

Another factor that bonded Luis's and my friendship was that we shared a similar sense of humor. Esperanza, on the other hand, was very sensitive—you couldn't tease her. Whereas Luis and I were joking and laughing all the time. He would especially save any good Catholic joke for me—his whole body shaking with laughter in his wheelchair at his own jokes. A guy like me would never *dare* tell a Catholic joke to anybody else in the Pojoaque Valley! And perhaps I was one of the few people he could tell these jokes to. Luis listened with sympathy and interest to my encounters and growing respect for the faith of the people of northern New Mexico: our weekly trips to Mass in the different churches around the area—Nambe Pueblo, Chimayó, Pojoaque, San Ildefonso Pueblo. The beautiful Easter Sunday Mass in 1997 at the tiny old church in Las Trampas, where the people had been so welcoming to us; and where the beauty of the church, the place, the people had brought tears to my eyes after a week spent in Manhattan fighting with most of my so-called "peers." The two times Esperanza and I made the walking pilgrimage to Chimayó—the last time on a beautiful, sunny Palm Sunday morning, all the people in the passing cars honking and waving to us. Though I assured Luis—again, joking—that we'd taken the "short route," the "easy" one! And we both laughed. Or the time I told how beautiful it was and how moved I had been hearing the sad, ponderous lamentations of the Penitentes the time they sang their alabados in a church halfway between Española and Chimayó, the afternoon of Palm Sunday (the priest had announced it at morning Mass in Chimayó). And how impressed I had been the time Esperanza and I had been invited to a Penitente morada on Good Friday. I joked to Luis that "I had to behave myself, because the brothers of the Cofradía were some *BIG* dudes!" Laughter again, but Luis clearly saw and appreciated how moved I had been. That after two years in the Valley, this Anglo had learned a deep respect for his faith and that of his neighbors.

There were plenty of lighter moments too. Like the time we woke up early one morning to find Lalo, a young Mexican man from Chihuahua who worked sometimes for Luis's nephew David, passed out in his truck in our parking area in front of Luis's house. He had gone on a drinking binge the day before, and had made it as far as Luis's—totally lucky to have avoided the local cops, which besides a DWI citation, might well have resulted in

his deportation, since he was at that time illegal. We had to wake up Luis and ask him what we should do about this. I went out and woke up Lalo and talked to him, and then had to persuade him not to drive back to Chimayó where his family lived, because he was still drunk, incoherent and reeked of alcohol. He nodded, and promptly passed out again, slumped over his steering wheel. Meanwhile Luis called Lalo's father, who eventually came to pick him up—with a good scolding!—and drove him and the vehicle back to Chimayó. We laughed about that for days. There was the time I bought a retablo at the Spanish market that depicted a woman saint being sawed in half from head to feet—a piece I had bought, frankly, because it was so strange and grisly. Other people wouldn't understand that or my reasons—humor not tending to be a fundamental quality of most religions, except perhaps Taoism—but Luis caught on right away. He took one look at it, and just started chuckling, and said: "That's far out!" But he took his religion seriously too. He was a member of the *Cofradía* of the Sacred Heart at the big handsome church located at the top of the hill, where you turned right off the road that led out to Chimayó, and descended down into the green lush valley area where we lived. He donated one of his nicest statues to that church, and he himself is buried there.

There were things we didn't necessarily see eye-to-eye on. Luis was a Republican, and fairly conservative in his politics—another unusual characteristic, because most of Hispanic northern New Mexico votes Democratic. So we didn't talk politics much, or if we did, I mostly kept my opinions to myself. But I've come to respect certain political conservatives, as long as they are not too extreme (the same goes with religion); and Luis's politics were well thought out and consistent with his moral beliefs. Perhaps that is another of the lessons Luis taught me: respect for other people, despite our differences. The people I lost respect for in the '80s were many of my own yuppy, "liberal," generational peers; who seemed to believe in nothing but money, personal comfort and "success," and had no convictions—right or left or whatever—other than convenience and self interest: the selfishness of affluence. It was an inspiration to be around someone like Luis—or Esperanza—for whom faith meant more than money.

Luis died in the summer of 2001. We never knew just how old he was—because he looked more youthful than his years. Laughter keeps you young, they say. So does being at peace with oneself, and having a good heart. In one of our last calls, he had told us—chuckling, in his husky voice,

as usual—that "I almost died!" and that he had been in the hospital, and that the doctors had made him finally give up smoking. How much we wanted to be back with Luis then! To help him through his withdrawal from cigarettes, and just be with him, for support, as his friends. We didn't find out about his death until almost three weeks afterwards, when a friend visiting us dropped the news in the midst of casual conversation: "Oh, you heard that Luisito died, didn't you?" The news hit us like a bombshell. Not only had we lost a dear friend—someone who had been like an older brother, almost, to Esperanza—but we had lost a place, his home there under the shady trees in Nambe, which he had made us feel like it was our own home. We looked forward so much to seeing him and staying with him on our next visit to New Mexico. And we lost an important part of our past, of our own lives.

But I've found out over the years that friends never die. Because they continue to live on in our hearts and memories. Besides photos, I have an image in my mind of Luis, on his porch, in his wheelchair, his cordless phone by his side, a lit cigarette in his ashtray, carving away patiently at a piece of wood that, like a miracle, would gradually be transformed into a saint, or a Virgin, or Christ, luminous with life and spirit. He would always be ready to put his work down, welcome friends, or just listen to us and talk. Luis was the greatest listener—people loved him for that, and loved to come over and talk. Because he was one of the most unselfish people I have ever met. And despite his physical hardships and a life that was not easy, he seemed incredibly at peace with himself. He radiated a joy and love that was an inspiration to everyone who knew him. I wish we could have been there for his funeral. Not just to pay our own final respects, but also because it must have been an amazing and moving event. It would have been moving to see his neighbors, the communities of Santa Fe, the Pojoaque and Española Valleys, come out to say goodbye to one of their own. Luis Lujan, in his own personal way—of course in his work, but also in his individual life—represented the heart and soul, and the resilient courage and humor—all the best of northern New Mexico culture. I am happy to think of him, buried and finally put to rest, in the cemetery of his beloved church, with its magnificent, commanding view of the Sangre de Cristo mountains, overlooking the village of Nambe that was his home for his entire life. Luis Lujan has returned to the earth from which he sprang.

And, the true miracle was that Luis Lujan—carver of saints, life-

long Republican, White Sox fan, chain-smoker, fond of his Catholic jokes—was in his way; the closest thing to a saint himself that I have ever been privileged to know. Not in some big, heroic, larger-than-life way that saints tend to be viewed, but rather in a humble, day-to-day manner. Every day for Luis was a small act of heroism, and his generosity and humor were special. But it was his faith, above all, the deepest core of his belief and being, that made all of us who knew him recognize that Luis Lujan was a remarkable man indeed. The example of his person, his life, and his beautiful saints, were and are gifts to all of us. May God bless you, Luis. And thank you.

—Mogpog, Marinduque Island, Philippines, Easter 2002

MUSIC EXTENSIONS OF INFINITE DIMENSIONS

MILFORD GRAVES

The primary objective of the Cosmo-Mystic-Spiritual (CMS) musician is to initiate an intradynamical thrusting force on the various particles that comprise Earth's atmosphere. The frequency dynamics of these particles should be compliant with the cosmic energies that impinge on the tympanic membrane and the integumentary (skin) system. Through our given sensory receptors and biological transducers, it is possible and permissible to creatively decipher the concealed and hidden energies within and beyond the universe. I am using the words universe and cosmic energy not as absolutes, but as a transient-relative reference to activate the creative process to go beyond conscious universal knowledge.

RNA¹ is the messenger, composer and conductor of *Biological Music*.

GUG	CAU	CUG	ACU	CCU	GAG	GAG	AAG
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The development of RNA Codons is initiated by **non-time dimensional energy transformations**. Ribonucleic Acid (RNA) is the messenger of spiritual-mysticism.

Imaginative and practical process of what needs to be known to transcend beyond the limitation of *standard-organized music*.

The following is a functional description of the semantics of four particular transformative energies that can initiate the process of innovative/creative music.

Mysticism

Cosmic energy that is **concealed-hidden** from intellectual translation and understanding. Primary function of mysticism is human transformation.

1. RNA: Ribonucleic Acid with eight amino acids

GUG valine	CAU histidine	CUG leucine	ACU threonine
CCU proline	GAG glutamic	GAG glutamic	AAG lysine

Mystical music involves producing music with a *spectrum of dense cluster frequencies and functional a priori frequencies* that can potentiate the motion of the basilar membrane.² Greater potentiation of the basilar membrane will stimulate the innovative-creative thought process by effecting multidimensional neural activities in the subcellular system of the brain. Figure 1 is a spectrogram of a composite recording of a human Electrocardiogram, Heart sounds, and Brain frequencies. This trio of spectral frequencies was then transformed into a relative form of Biological Music (mystical music).

2. Basilar membrane: located in the cochlea (auditory) portion of the inner ear.

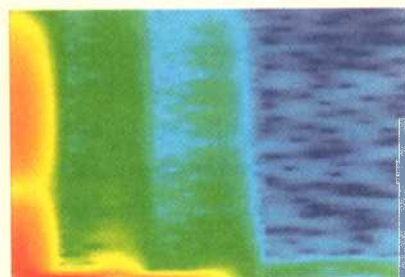


Figure 1. Spectrogram induced by Zeitgeber³-effects. Spectrogram is image of how the spectral density of a signal varies with time.

Magic

Initiation of the innovative process by derivatives formed from the excitation of sub-molecular agents in the atmosphere [AIR] impinging on human sensor/mechanoreceptors (ear-hearing/skin-touch).

Calling of Magic through the Magic Wand

Relative to the concept of a space-time universe and its derivatives, the human brain-mind-body complex can metaphorically serve as an organic magic wand. This process involves the reception and passage of cosmic energy through nano (10^{-9}) to atto (10^{-18}) sized openings (pores) in the Integumentary System (skin). The realization of this matter is that there is a trio of cosmic energy that is injected into the biological system on a daily micro time basis.

This trio includes the following:

3. Zeitgeber: An environmental agent or event that provides the stimulus setting or resetting a biological clock of an organism.

Neutrinos and other elementary particles: entry gate is the total body and serves as an initiator and substrate for mystical energy/thought.

Ultra violet B radiation: entry gate is the skin and is transformed into vitamin D.

Photons/visible light spectrum: entry gate is the eyes and is transformed into quantum interactions within the sub-cellular system.

This *conglomeration of energy* is transmitted through the vocal folds (Metaphoric Magic Wand [MMW]) in the image of singing/speech and on object based instruments (MMW) by finger (MMW) manipulations.

Magic Words

Magic words in reality consist of *deductive articulation* and *quanta-toning* of the constituent vowels, consonants, phonemes, and syllables that comprise a word. The utterances of these constructs are capable of creating large amounts of energy within the neuroanatomical pathways and networks of the vocal system.

Alchemy: Inner Alchemy

Inner alchemy takes place within the biological system and involves Transduction through *Transmutation* of Electromagnetic-Chemical energies in the subcellular system.

An ethnographic-prefix to the discipline of alchemy presents a limiting factor to the total functionaries and practice of alchemy.

Irrespective of the ethnological prefixing/classification of *alchemic practitioners*, the common denominator of the various concepts of global alchemy is transmutation.

Spiritual

(Middle English, from Old French *spirituel*, from Latin *spiritualis*, of *breathing*, *spiritual*, from *spiritus*, *breath*; see *spirit*) involves soft *circular breathing* and articulation of less stressful vibrations for preservation of the vocal cords. Soft circular breathing produces less contraction-expansion and stress on the cheek muscles, thereby avoiding disruption of blood flow

and oxygen to the brain.

Soft breathing (spiritual breathing) is required when subvocalizing (quiet thinking) to transmit biological energy to the vocal cords.

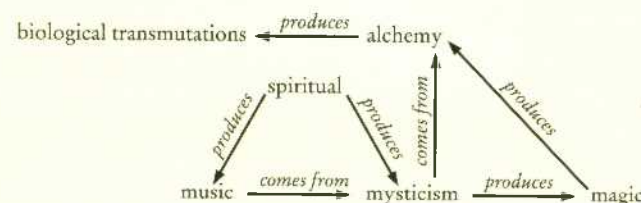
From the aforementioned we can construct a SEMANTIC NETWORK: The SPIRITUAL allows one to perceive concealed wisdom (MYSTICISM) and how to transmute (ALCHEMY) and germinate (MAGIC) their receivings to the unexposed to produce innovative-creative music.

SPIRITUAL: humble/open minded/receiving-giving

MYSTICISM: concealed-betweenness of what we think we know

ALCHEMY: biological transmutation to nutrify mysticism/spiritualism

MAGIC: receiving and projection of mysticism



Semantic network.

STATEMENT OF CLARIFICATION

The primary purpose of this essay is to focus on an integrative process of how to interweave the hidden wisdom of imaginative thinking (mysticism, magic, alchemy, and the spiritual of music) with scientific methodology.

This revelatory⁴ endeavor requires a certain degree of Polymathic⁵ qualities to properly understand how seemingly disparate ways of thinking are all integral members of the grand unified energy concept of cosmogenic transmutations.

The input, sequence flow, and the output informatics of this article are to inspire one to go beyond what is said to be impossible to do.

4. Revelatory: person who adopts change in his thinking and actions as a result of something unknown being revealed.

5. Polymathic: someone who is very knowledgeable. A secondary meaning of polymath is Renaissance Man.

Ear: Grand Gateway for Reception of Cosmic Vibrations/Energy

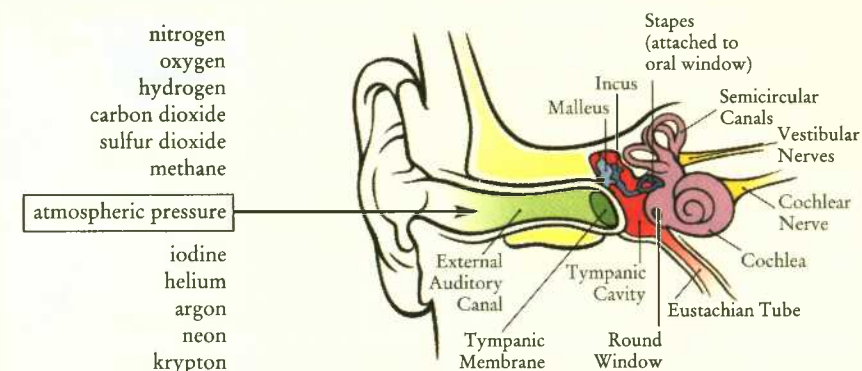


Figure 2. Ear.

The EAR with its constituent energy activators: tympanic membrane (eardrum)-ossicles-cochlea and nerve pathways are the mystic energy forces that participate in the continual loop for the transfer and projection of what is conceptually known as the *expanding* angular energies of the *universe and beyond*.

A healthy human tympanic membrane (eardrum) is amazing. It has a *conscious* frequency range of approximately ± 20 Hz to approx. $\pm 20,000$ Hz, with a frequency resolution of approximately $\pm 0.2\%$, meaning that we can discern between two tones with a frequency difference of approximately ± 2 Hz. From a spiritual (breath) perspective, the frequency range of the tympanic membrane is greater than the conscious range.

An important relationship that should be known is that between the oscillatory properties of the tympanic membrane and the size of the hydrogen atom, the most abundant element in the universe, and the wavelength of visible light.

At 3,000 Hz the motion of the eardrum is about 10^{-9} cm (or .1 angstrom) less than the diameter of a hydrogen atom.

At 20 Hz the motion of the eardrum is approximately 10^{-5} cm (or 1,000 angstroms) less than the wavelength of visible light.

The diameter of the eardrum (approximately ± 12 mm), its micro-oscillatory response time-displacement, and its obliquity of approximately 55° to the floor of the ear canal (external auditory meatus), is capable of forming and correlating cluster motions in response to the impingement of air pressure/particles on it.

Magnitude, tone quality, and duration-modulation changes are prime parameters in creating the micro-geometric shapes of cluster motions.

Cluster motions are important because of their ability to create intertwining-twisting type motions that comply with how organs and tissues are formed from the three primary germ layers during embryogenesis.⁶

A particular distinction of the tympanic membrane is that it is formed from the three embryonic germ layers: ectoderm, mesoderm, and endoderm.

The perspective observation of the dynamics of air particles, music-acoustic parameters, and the eardrum-germ layer connection, clearly allows us to understand how a vibrating eardrum can energetically connect with all of the organs and tissues that compose the spirit-mind-body complex.

The family of the EAR represents the biological transducer for the cosmic energies and oscillations of the outer (objective-phenomena) and inner (subjective-consciousness) space-time coordinates of the inclusive universe.

TABLE OF THE ORGANS, TISSUES, AND THE THREE LAYERS OF THE TYMPANIC MEMBRANE THAT ARE DERIVED FROM THE THREE PRIMARY GERM LAYERS

Stratified squamous	Mesoderm	Endoderm
Squamous epithelium of outer part of the eardrum	Fibrous layer of the middle eardrum	Inner mucosal lining epithelium of the auditory tube and tympanic cavity
<i>Surface Ectoderm</i> Hair, nails, Cutaneous-mammary glands, Anterior pituitary gland/ Enamel of teeth/ inner ear/cornea/lens	Muscles and of the head/dentine Muscles of trunk/ Dermis of skin/ Skeleton except skull	Epithelial parts of Trachea, bronchi, and lungs
<i>Neuroectoderm/ neural crest</i> Cranial sensor ganglia and nerves, Adrenal medulla gland	Urogenital system including gonads/ Connective tissue and muscles of viscera/ Serous membranes	Epithelium of G.I. tract, Liver, pancreas, Urinary bladder, Urachus/ Epithelial parts of: Pharynx, thyroid, tonsils, Parathyroids

<i>Neuroectoderm/ neural tube</i> Central nervous system, retina, Pineal body, Posterior pituitary		
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Morula.

The Melodic-Modal music (sequence phenomena) sequencing of embryogenesis (genetic awakening from the previous to sequence into the future) is a transduction from the zygote, to the blastula, to the gastrula stage of the embryonic growth process that evokes the triploblastic condition of the ovum that generates the three primary germ layers (3PGL). The 3PGL are the wave precursors for initiating the Tono-Rhythmogenesis of creative music consisting of Nth dimensions.

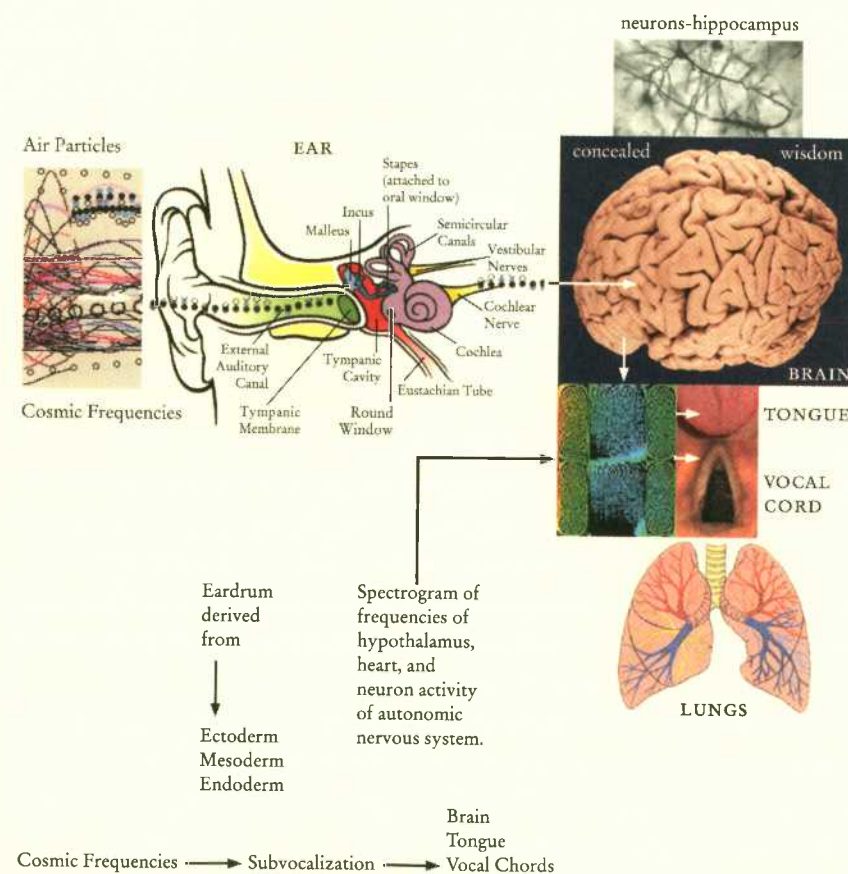
All biological receptors must be fully open to receive, transport, and transmute cosmic **vital energies** to everything that is required to initiate the *imaginary process for greater creative development*. *Equipolarization* between creative imagination and conventional thought is the *transmorphic matrix*⁷ for solving problematic negative energies.

7. Transmorphic Matrix: exchanging of scalar, real and complex events.

Subvocalization: Inner Sound of Quiet Wisdom

SOUNDS FROM THE VOCAL SYSTEM: The energetical experience of a Revelationary⁴ incorporates the process of subvocalization supported by quiet and subtle circular breathing.

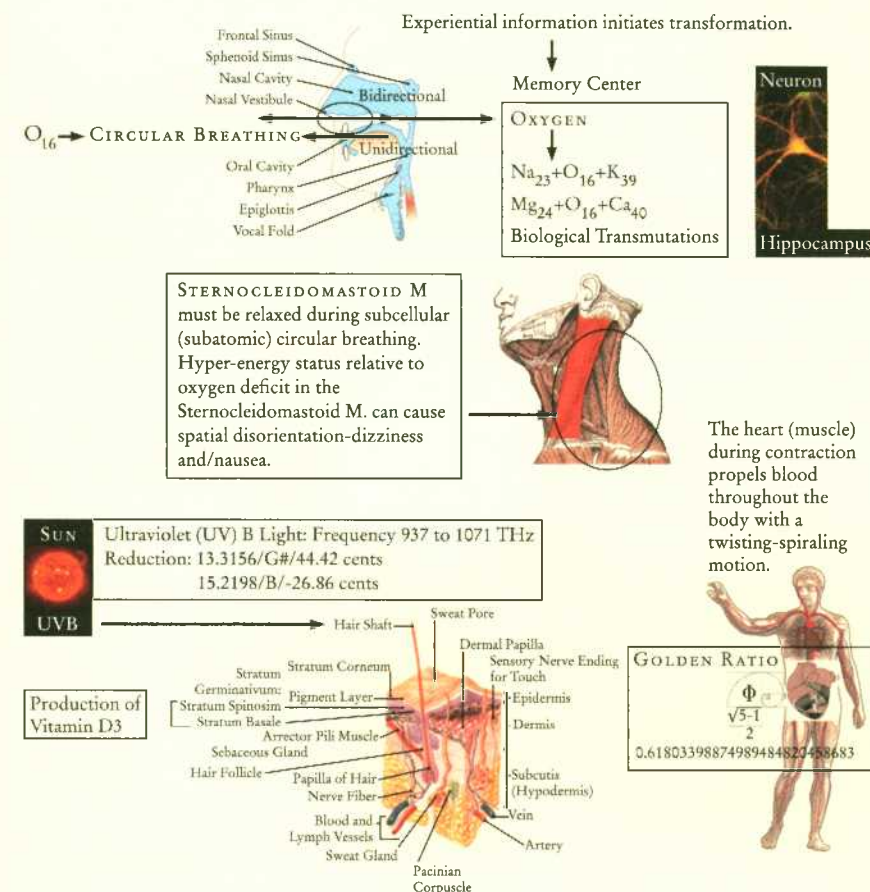
Subvocalization or internal-self dialogue involves movements of the tongue and vocal cords that can be interpreted by electromagnetic sensors, but is undetectable by the person doing the subvocalizing.



Pictogram 1p.

The brain is constantly subvocalizing to the total biological system. The initiators of subvocalization are the dynamic-changing phases of cosmic energies that constantly enter the aural canal. The duration of each changing phase is measured within the time frame of yoctoseconds (one septillionth of a second/ 10^{-24}), which is the durational range of the changing phases of vital energy on the infra-subatomic level.

BREATHING/TONE PRODUCTION/MOTION ENERGY



Pictogram 2p. Holistic-energy transmutations/transformations.

Motions of Another Kind

Chandler Wobble: small variations in earth's axis of rotation over a period of approximately fourteen months. Twisting motion of heart muscle: caused by the heart muscles fibers being oriented in a spiralling direction. Restoration of the Soul: holistic ingestion of motion-energies.

The way of the *voice* and how to direct the *breathing* process by the mechanism of WOBBLE, TREMOLO, VIBRATO and the entanglement of all three motions and sounds [E-trio] (similar to *Quantum entanglement*). See Pictogram 3p.

WE ARE A SPIRALING TWIST CAPABLE OF BENDING SOUND

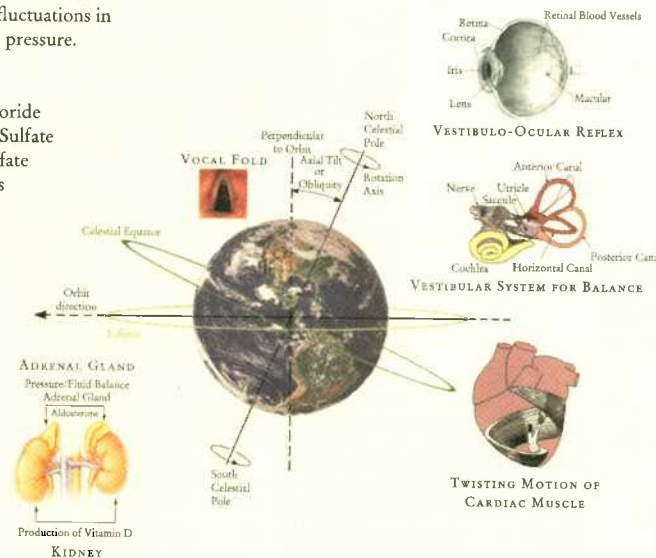
Possible causes of Chandler Wobble:

$\frac{2}{3}$ due to fluctuating pressure on the bottom of the ocean caused by temperature and salinity changes and wind-driven changes in the circulation of the oceans.
 $\frac{1}{3}$ is due to fluctuations in atmospheric pressure.

Salinity:

Sodium Chloride
 Magnesium Sulfate
 Calcium Sulfate
 Bicarbonates

Chandler Wobble: approximate frequency range is:
 0.000000264073 Hz/A#/-47.01 cents to
 0.000000265894232 Hz/A#/-35.11 cents
 amplitude is approximately 20 feet.



Pictogram 3p. Relationship between Chandler Wobble, Heart, Adrenal, Kidney, Cochlea-Vestibulo-Ocular, and Vocal systems.

NORMAL WAVEFORM RELATIONSHIP BETWEEN ULTRA VIOLET FREQUENCIES AND CHANDLER WOBBLE FREQUENCY

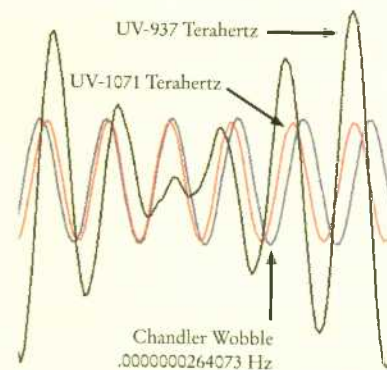


Figure 3. Waveform relationship between lower and upper frequency range of Ultra violet light and lower frequency of Chandler Wobble.

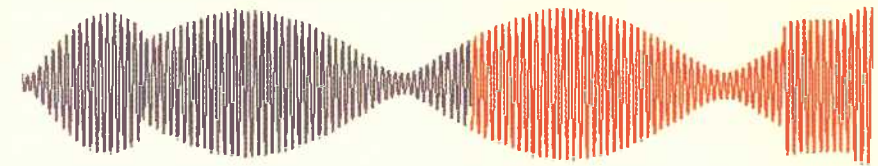


Figure 4. Sequence of conglomerated Chandler Wobble and variable UV waveforms.

When the BioPsychoSocial (BPS) energies and characteristics of the mind-body complex are threatened by depressive elements, the proper therapeutic procedure requires that the vocal system process and articulate sounds (breath) that are entangled (see Figures 3, 4, 5), irregular, and non metronomic.

Entangled irregular voicing provides for greater electromagnetic-spiritual exchange between energy elements in a given amount of convoluted space.

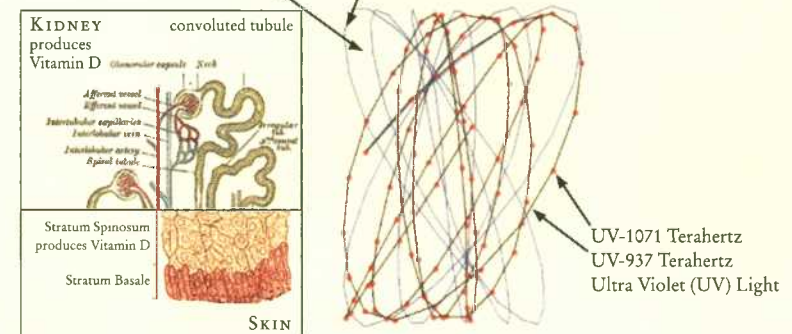


Figure 5. Organ response and adaptogenic process of BPS depression.

The Myoelastic-Aerodynamic theory is commonly used to explain the functional mechanisms of voice production.

Nerve innervation to the Larynx (voice box):

The recurrent (inferior) laryngeal nerve is a branch of the vagus nerve that supplies motor function and sensation to the larynx.

The external laryngeal nerve communicates with the superior cardiac nerve posterior to the common carotid artery.

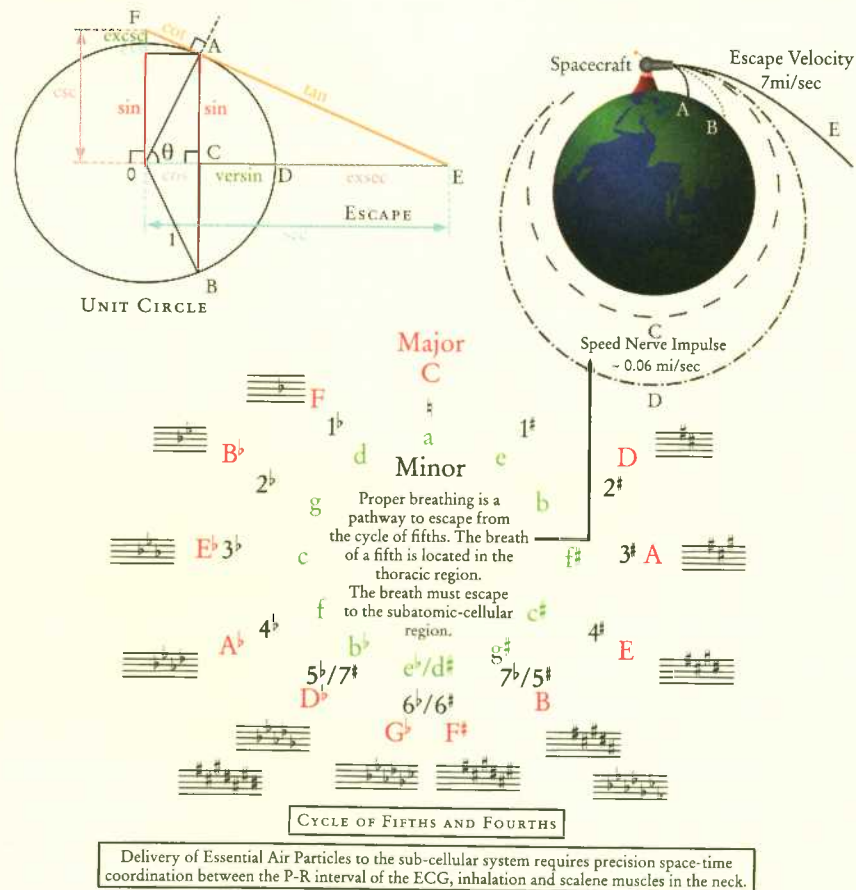
The internal laryngeal nerve is the internal branch (ramus internus) of the *superior laryngeal nerve*. It sends branches to the *mucons membrane* of the *larynx*, the base of the *tongue*, and the *epiglottic glands*.

Three group-components required for voice production:

1. Power generator/source: lungs
2. Vibrating mechanism: vocal cords
3. Resonators/resonance chamber: superior part of throat, mouth and nose.

Relationship of Mechanical and Biological Energy

CORRELATIVE THOUGHT: BREATH OF GRAVITATIONAL WAVE



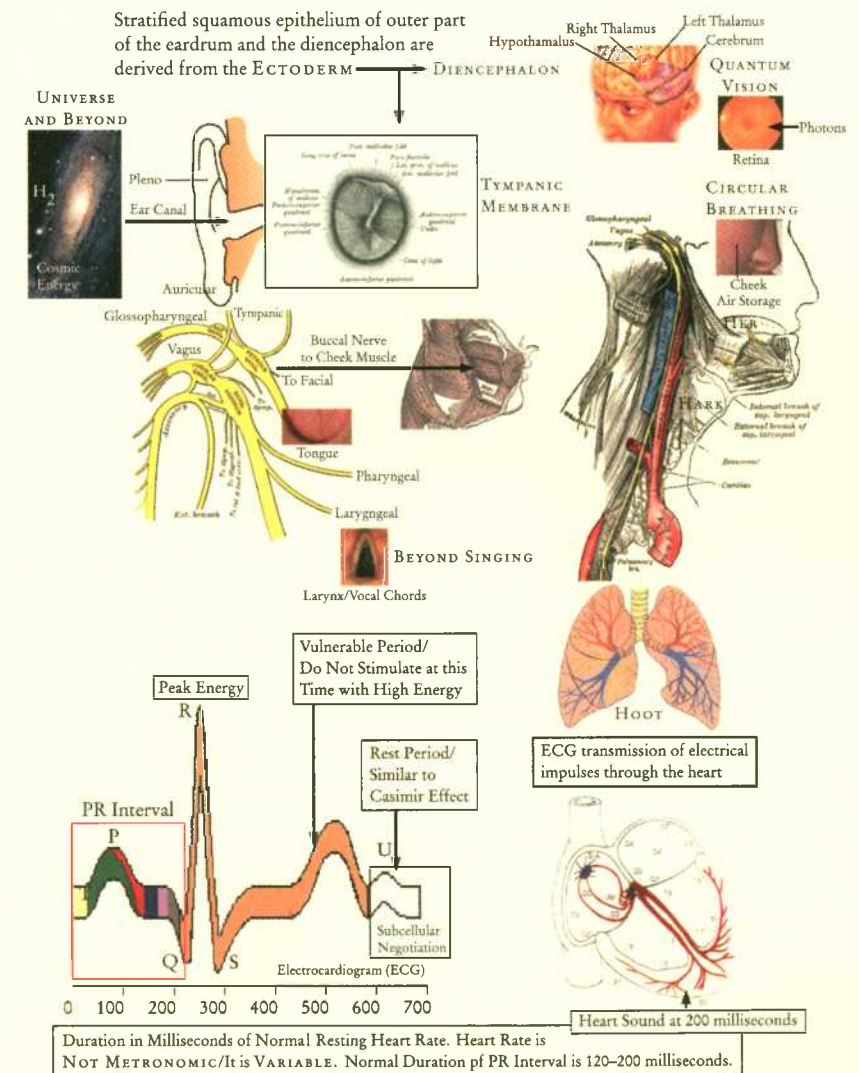
Pictogram 4p.

The circle-cycle of deterministic thought is broken when the mind of a unit link, fortified with experiential information, decides to detach their mind from the reference center point (gravitation). This is an innovative escape process that enables sub atomic-cellular functions to become more expansive with a greater amount of creative energy (magnitude).

Organodynamics⁸ of Tonogenesis of Biogenic Music

8. Organodynamics: efficiency of total cooperation and organization between all organs/tissues of the biological system.

THE GRAND UNIFIED ORCHESTRA OF BIOLOGICAL MUSIC



Pictogram 5p. Hoot, hark, and her are three mystic long duration breath sounds.

Experiential Information (EI) is the **generating force** that is required to overcome **Concentric Gravitational Mono-Conceptual Thought Patterns** (CGMCTP). EI is the principal velocity factor that can convert the constants of CGMCTP into variable thought waves that are innovative, and through improvisation, can adapt to and harmonically reverse negative linear energy waves.

A relevant way of conceiving and producing music can be modeled from the transmission of Electromagnetic-Oscillatory-Energy (EOE) through various dynamic structures and functions of the biological system (see Pictogram 5p). EOE with conductorship from warped Spacetime-motions of the heart and vagus nerve will produce and sequence tono-rhythmological changes that are not scalar and based on integral multiple relationships.

Formed (predetermined) music is a concept that imposes geometrical limitations on the motion-energy of air particles. The dynamics of fractal-angular motions and the propagation of unpredictable homeostatic motions are not primary functions of formed music. The objective of formed music is the **reproducible replica** of a **conscious derived** tone-sound-language that is conceptually classified as suitable for aural consumption.

WE $[\Sigma]$ are more than a conceptual equation $\omega^9 = \int \text{musical notes} + 2\pi + \text{unity} \sigma$

⁹. Ω Greek symbol (omega) for angular velocity.

Twofold methodology of conceiving and producing music

Material Finite Music [MFM] *relative to Spontaneous Improvised Music* [SIM]: Both can serve as inverse functions of the other.

SIM can provide MFM with a recursive template on how to create variations on the constant values of predetermined-written music.

MFM can provide SIM with an analytical method of how to extract, understand, and codify a dynamic-spontaneous event occurring within a specific time period.

The following *are correlative ways and methods of composing and performing biological music*:

1. *Music composition based on the stages of human embryo development.*

2. Rhythmology based on Heart Rate Variability (HRV)
3. Space-time parameters based on human *Circulation Time* (CT):
CT is the time for the blood to pass through a given circuit of the vascular system, e.g., the pulmonary, cerebral, or system circulation, from one arm to another, from arm to tongue, or from arm to lung.
4. Cardiogenetics relative to harmonic-melodic dissonance and clusterization.

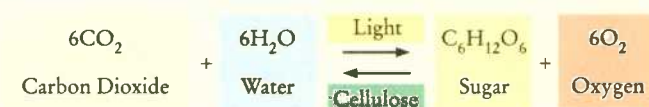
All of what has been previously mentioned so far requires an open and dynamic mind and body system. The neurovascular and memory systems must be pliable and capable of transmitting an array of innovative and creative energy and information. The immune system must be responsive and adaptogenic to variable types of perverse energetical agents. Important biological mechanisms and ingredients that are required to perform these tasks are:

Citric acid cycle: metabolic pathways in the cells that converts carbohydrates, fats, and proteins into carbon dioxide, water, and usable forms of energy.

Internal Alchemy: involves the Atomic/subatomic conversions and biological transmutations between Sodium, Potassium, Calcium Magnesium, Oxygen, Hydrogen, Phosphorus, Manganese, Iron, Silicon, and Sulfur.

Food: My personal suggestion is a diet that consists of plant foods: vegetables, fruits, grains, legumes, beans, and herbs. My reason for suggesting a diet consisting of plant foods is based on a three step process that involves the transmission of solar energy (via photosynthesis) from the *sun, to the plant, to the human biological system*. Again, this diet is recommended for its ability to transmit high quality solar energy into the biological system.

PHOTOSYNTHESIS





Chlorophyll is found in high concentrations in Chloroplasts of plant cells.

The function of chlorophyll is to absorb light and transfer that light energy by resonance energy transfer to a specific chlorophyll pair in the reaction center of the photosystems. Chlorophyll gives leaves their green color.

The RULE: eat plenty of GREEN LEAFY VEGETABLES for consumption of COSMIC ENERGY (Mystic Energies)



Pictogram 6p. Energy events of Photosynthesis.

MYSTICISM, MAGIC, ALCHEMY and the SPIRITUAL
are an undefined CLUSTER-ENTANGLEMENT
of nth dimensional ENERGIES.

THE CRAZY VOICE

LARKIN GRIMM

"The greatest challenge of our generation is to mature beyond God," a friend casually said while improvising on a Chinese harp. In a moment of free improvisation, he felt free to say something that had been stewing inside of him his whole life. He had broken through a powerful psychological barrier with the help of music. Moments like this happen frequently in my life as a musician. I find that music brings out the best in people over and over again. It breaks barriers.

My friend is right. If I were to make a list of the most stifling influences holding people back from their full potential as human beings, organized religion would be at the top of the list. A close second would be classical music training; it is musical abuse. I do not consider classical music to be in any way therapeutic for the individual player, and have spent long periods of time trying to rehabilitate classical musicians. The only thing that can save these people is Peyote or Harsh Noise. When I say "music," I am excluding all written music. But let's get back to religion, and to my personal story, because the only thing I can tell you about magic is what I have experienced myself.

The religious establishment teaches children to reject the magic and personal power they were born with, and to hand it over to the leader. I never could accept this, even though it was social suicide to reject religion when I was growing up. I spent my early childhood in a spiritual cult. My parents spent so many hours meditating in the kneeling position that they had thick calluses on their knees. The children were seen as new incarnations of the spirits of enlightened masters, coming down to earth to save humanity in time for the New Age. There were magical things about these people, but it was also a lot of strange pressure on me in a cult situation involving psychedelic Jesus freaks. The cult disbanded when I was six years old and my family moved into a remote part of the Appalachian Mountains.

The hippies I grew up around were in many ways as cock-eyed as the snake-handlers and holy roller baptists who practiced their cuckoo Appalachian Christianity in my new home, where vampiric, bigoted preachers sucked life force from their congregations. I like to think that the experience of growing up and breaking away from these things helped me to think for myself and avoid future cult situations like academia and politics. Real magic requires following your own inner voice, using your power to improve your own life in the present moment. Rejecting mob rule.

Everyone is born with psychic abilities, but there are only a few things that can bring them out in an ordinary adult. These are laughter, dancing, and music. These things break through a wall in the mind. They allow us to forget what we think we know. Magic, like music, begins with intuition. We lose our magic when we allow ourselves to be subject to the external laws of society and culture. When we believe in God or Guru or Genius instead of believing in ourselves, we become separate from ourselves. We lose ourselves. We learn that in order to fit in, we must ignore our inner voice. If this goes on long enough, we become half dead useless blobs of soulless flesh taught to sit still and pay attention to useless information about a world in which we can never thrive or live fully. Our consciousness is boxed in.

Music is one of the few things that has always been there for me, helping me to break through. I used to ride my bicycle to the top of a nearby mountain so that I could catch radio signals from a faraway station in Atlanta. This is how I discovered Björk, Nirvana, Sonic Youth, Michael Jackson, P.J. Harvey, Dead Kennedys, Coltrane, Sun Ra, and other early influences. The voices of these musicians, struggling to find meaning, had a profound effect. I owe them my current freedom. One of my favorite rituals of compassionate destruction is to listen to Diamanda Galas' *Double Barrel Prayer* at top volume while jumping on the bed. Years of therapy couldn't be more successful than this. Seriously! When you bang your head against a wall, then open your eyes as if opening them for the first time, and wake up to the realization that this moment contains the only truth you will ever know, then you become powerful in your own life and able to choose your own path. Magic is believing that you can do anything. And doing it.

It is not easy to escape brainwashing. When I was growing up I followed most of the rules. I did well in school. I subjugated my will and won a full scholarship to Yale University. I spent my days studying under the

establishment, but there was a tiny voice inside of me insisting that there was more to life than that abstract academic world. I had wild dreams and frequent out-of-body experiences, but tried to ignore these things. By the time I was twenty-one the inner conflict was so strong that I was a nervous wreck. I was committed to a mental institution at my university, because I was unhappy when everyone thought I should be enjoying my great success. I was prescribed medication that turned me into a friendly robot and erased all of my favorite parts of my personality. I realized that I was considered crazy because I saw the world in a magical way. To me, every plant, animal, and object had a distinct life force and personality. I felt like my doctors were trying to force me to live in a dead world. Finally, I jumped ship. I decided to trust myself, and to start over from the assumption that I didn't know anything and neither did anyone else. I stopped talking for a long time, and only played music.

The process of reclaiming my sanity was questionable, but it was my own. It slowly evolved into a practice of taking two spoonfuls of psilocybin mushroom-laced honey every day until time and space melted away into flashes of mercury swirling around the periphery of my vision. I wanted to erase my mind and start over fresh, as a psychic. I decided to explore the world and learn things first-hand. I rejected all second-hand information, including all I had learned about geometry, philosophy, physics, calculus, anatomy, psychology, art, history, and music.

The medicinal use of Teacher Plants brought me back to the daily experience of magic that I remember from childhood. They helped to silence the damaged and scarred broken record stutters of my man-made logical mind and my moral/religious mind. More importantly, the difficult search to find these illicit substances while touring as a musician introduced me to a whole community of shamans, hustlers and misfits who were quite successfully bucking the establishment. They lived off the grid. They followed their own rules. They offered me a choice: be a miserable slave locked in the cage of your own numbed out mind, or accept your position as a shaman, exploring a different version of reality. The way to communicate as a shaman? Music!

In 2007 I met a group of shamans who had recently been on a long trip through the rainforest, recording Quechua medicine songs. They brought back some leaves from a bush that female shamans used in their ceremonies, and gave it to me in tea, while playing their recordings.

Suddenly, my inner voice became this booming, powerful force, no longer competing with the millions of thoughts bouncing around in my head. At this point, my life changed. All I have to do is listen to that voice. It knows everything about everything. It is like having a conversation with my god-self. Everyone has a voice like that inside of themselves, but they don't listen to it. My intention in playing music is to give that voice room to talk. To quiet the conscious mind and let the unconscious speak the truth. I hope that as it works for me, it will work for others who listen to my music.

Music is a halfway house helping us learn to live in a magical world. Sound is a medium that encourages telepathic communication and synchronicity. Good music brings mind-blowing breakthroughs in consciousness while it carves out space for you to focus your attention, allowing you to manifest a new reality. Music is a very useful and safe way to practice magic. It has been the only means of truthful communication available to me in my life. It works immediately. Not like reading a book. Stop reading this. No one can tell you the most important things. You have to feel it for yourself. Reject the habit of passively accepting information, and examine the world around you. You will discover that it is magical.

Have I been wasting my time?
 Meanwhile you are falling.
 You are so good at failure,
 In the end, when your face hits the ground,
 Will any thing remain besides love?

HOLY GHOST

TIM HODGKINSON

Prelude

Summer 1996, Ust-Ordinsk, Siberia: Ken Hyder and I are on stage, everything's ready, we're ready to play. I raise my saxophone to my lips. Suddenly I hear a voice. Someone is speaking, not in a hushed way, but outwards, someone is addressing everyone in the room, someone is asking a question: the question is: "How did you begin in music?"

NOW? You want to know that NOW? Before even a note? "I started to hear certain music," I said, "as if it were a window opening into another world, a world that was more vivid than the one I lived in at home with my parents. And that intensity is something I've always gone after ever since. To lift people up out of where they are, to bring a sense of limitlessness, of possibility, a reminder that that also IS."

Every human culture on the planet proposes not only a way of life but also a unique metaphysical theater. In each case, imagined beings, invisible to the waking eye, pushed up and out of visible matter, but at the same time pulled back into dialogue.

And so sound. That which is not, rising out of that which is. Sound first it too pushing up out of the visible, telling always of the inside, voicing the shapes of enclosed air, unveiling the hidden; sound then captured and harnessed as voices of spirits, calls of communicants, summoning, purifying, rising up and out like prayer, chant, invocation, and the trance drums, sacred gongs and Chinese fireworks that change the gears of time.

Or is all this the wrong way round? Is the fundamental need to invent persons for imaginary conversations, and only then to invest them with voices and bodies?

Cambridge, 1968, I'm at college learning anthropology: LSD, Vietnam, rock music, academia: at school I'd had the Cuban missile crisis, Civil Defense handbooks, nightmares of World War III, still have my

NATO pamphlet with its cowering prisoners behind barbed wire in an unfree land and on the opposite page our guys look gratefully up at their atomic shield. The social set-up (the existing socio-discursive mind-set of any one society) insists on itself, imposes itself, as fixed, coherent, complete and self-sufficient. What happens to the knowledge that this is a bluff? Where is that knowledge placed? How and when is it spoken and how does it sound?

Read, study, synthesize. The rational mind pushing, it too, for a unified system. But suppose there is no unified system? Suppose human beings are not integrated wholes but dynamic fields in which different forces collide? Anthropology seemed to assume a basic continuity between nature and culture; societies were like organisms, bodies with every part having its "function." But it seemed to me that exactly this transition from nature to culture that was being taken for granted was in fact the core variable, was in fact more than a variable, was a gap: the gap against which, and across which, the preaching insistence of culture is generated. For the culture of a society is in the first place a propaganda directed at its incoming members, its children, in the form of how they will be closed in to the world as that culture imagines it. Every culture generates to its own ends the *subjects* that inhabit it. In each individual psyche is installed the gap between the embodied intelligence of immediate sensation and the conceptual language-based representations that string together the obligatory narrative of a person—as conceived and constructed within that culture's notion of personhood.

Detour into human cybernetics. Pain is an image, sound is an image, this page an image. I mean that they appear to us. These images are finely collated out of tiny informations rising in the afferent nervous system. They are transitory patternings of neuronal activity, momentary states of a plastic and holistic medium. Therefore, quite rightly, they seem to us alive, in a state of becoming, liable to change. This, if you like, is the quality of experience itself. Compare with language: an extrinsic system for combining and recombining an array of fixed, individuated, and mutually exclusive elements, according to rules for articulating to other persons descriptions, attitudes, and intentions. There can be no match between these two different kinds of information: our being is cybernetically divided. If language wants to tell of experience, it can only describe from the outside.

The great suspicion against language, rising in the apophysis of the old mystics, echoing in the Romantics and the tradition of idealist philosophy that holds music to be the purest expression of truth, hauling itself into modernism and into the Beats and settling into the aporias of Beckett and the rages of Jelinek.

My proposition is this: the projection of the sacred is the human response to the untranslatability between the two informational modes that above all other factors define the condition of that being's being. Spiritual practice iterates a circular or rhythmic movement across the raw divide of this untranslatability. It is the shared but innermost secret of our species. The conversation with the gods is the conversation with ourselves we could never have.

You might guess that I am then going to argue that art goes on from this to attempt the translation itself, attempts to fire off a kind of utterance that does what language can't, attempts to spill out what religion ultimately blurs and conceals. After all, as a musician I work with the intelligence of sound; music seems to plunge directly into the house of the spirit, eliciting complex inner motions that dart away from language. Is music then the expressive projection into sound of the images that are passing states or patternings of embodied intelligence itself—representations for which we can find no equivalents in language? The idea is tempting; after all, we have no direct access to our own embodied intelligence, but only to what that intelligence brings before us, namely the world as it livingly seems, as we hear, see, smell, taste and touch it—the image of the world as our senses sift and collate it from what comes forwards to them. This world is already talking to itself, and our attempts to join that talk, to talk that talk, can be thought of as attempts to cross the cybernetic divide that splits us. And a "word" in the language of the world would be something we could experience with our senses, like a song or a painting.

But I'm more cautious than that. What intervenes enormously into this "expressive projection" is that no act or process is primordial in this way, but is rather always realized in the mutual doings of actual human groups. In other words, what music is and what spirit is, is itself a cultural and historical variable. I realize that I am going to need to set out exactly what is distinctive about an aesthetic act or process, as against a spiritually-orientated or ritual act or process. And the distinction is going to have to work in cases where they seem to be almost one and the same thing, and in

other cases where they seem to be at each others' throats.

And there's a further reason also. I don't want to say that inside us all there's an authentic, or animal, or cosmic Self waiting to be expressed in art. A self is something much more complex and fluid and possibly multiple that is constantly being negotiated and produced within the conflictual informational field of the human.

Clifford Geertz wrote that people move *"very frequently between radically contrasting ways of looking at the world, ways which are not continuous with one another, but separated by cultural gaps."* This passage between contexts allows the common-sense world to be *"now seen as the partial form of a wider reality which corrects and completes it."* It seems that everywhere and often in the human world, cultural space is marked apart for those special activities that we identify as ritual or spiritual and that address the sacred domain, and that some of this marking out is also carried over into the setting apart of art from other things that are made. But it's precisely this carrying over from ritual to art that's the issue here. Music-making was, and still is in many places, thought of as a spiritual activity. But as a contemporary Westerner my grounding is to think of music as aesthetically organized rather than shaped by beliefs concerning transcendent beings. To think about music and spirit, to bring them into relation to one another, is also to worry at the edges and overlaps between ritual and aesthetic domains. In summer 2005 I found myself in the ideal place to do just that: the Republic of Tuva in southern Siberia, home of throat-singers, stone carvers and shamans.

Tuva

Kyzyl, capital city of Tuva, exact center of Asia, amiable and violent, feels safer at night in the company of locals. We're walking down to the river, the Yenisei, to look at the moon and talk about music. Security on tonight's stroll is courtesy of Alash, an upcoming young Tuvan folk ensemble. *"The important thing here in Tuva,"* says Ayan, *"is that we think of ourselves as situated in the cosmos with the sky as our father and the earth as our mother. We're with the living creatures, the birds, the ants."* So far he sounds much like a Tuvan government brochure. There's a mantra here repeated by everyone from the president on down to the effect that Tuva occupies a unique geographical space within which is communion between land and people. What's interesting is how the ideology embraces everyone

from conservatives to rebels. For musicians this means a natural conception of sound, as against the Western idea of sound purged of its natural elements before being allowed into the music room. *"Living in cities is bad,"* Ayan goes on, *"the philosophy is in the yurt, not in the building."* And then he's interrupted by his mobile phone.

Like fish in the water of animist belief, shamans move amongst the people, intercede with the spirits so as to cure illnesses, bless journeys, purify persons and places of bad influences, find lost animals, and carry out funerary and other rituals. Each shaman must find his or her own unique destiny-fitted approach, part jived, part drawn out of a spoken tradition of techniques for tracking down the appropriate spirits and cajoling them into giving a result. Amongst these techniques are the use of spiritually empowered equipment and clothing, a preparation ritual that turns attention inwards to the spirit world, knowledge of how to lay and light certain kinds of fires and what to sacrifice on them, and a personal song that reminds the shaman of her origins and the source of her power. Just as their rituals mark apart the spirit world from unwanted contamination by the everyday world, shamans themselves are marked apart from other people and looked on as slightly dangerous and strange.

The economic-cultural type of South Siberian nomadism is identified with smaller units of economic production and consumption, but not with political, military and administrative structures. The basic reason for this is that for herders in this kind of terrain the amount of livestock mobility largely determines the degree of pasture degradation. You can only feed so many humans from so many cattle. Small scattered settlements are the practical ecological response, and there is no necessary one type of articulation of these mobile family-based units with higher order political units. Rulers and ruling systems, in other words, may come and go, but life in the pastures goes on. Or rather went on. Until recently each settlement would have had its own shaman. Now maybe half the population have decamped to Kyzyl, by far the largest city. But then as shaman Sergei Ondar said: *"I don't see any problem with shamanizing in cities, or indeed in extremely unshamanistic environments... All of my life has been a step by step development of shamanism: working in the city is part of that, and doesn't seem like a big break; I am in touch with my roots in nature and the cosmos."*

I had visited Tuva on numerous occasions from 1992 onwards, but this time I decided to focus right on the boundary between aesthetic and

spiritual practice, as shown in the doings and sayings of musicians, carvers and shamans. I followed up my accumulated contacts and talked with as many people as I could. I found that Tuvan artists and musicians, like those elsewhere in Siberia, feel free to draw on a general shamanic culture. But Tuvan art is shamanic in a deeper way than simply referencing shamanism. Tuvan art is produced within the framework of a creative psychology that is often conceptualized and experienced as spiritual. An artist is free to ask permission from spirits, and to receive help from spirits, within the context of an aesthetic process. At the heart of Tuvan artistic imagination is an idea of nature as a totality, as a cosmos. It is towards this cosmos that an artist strives to open. Artistic skill is knowing how to work this opening towards the cosmos into the materials of sound or stone. It is as if each thing or event in the world is connected to everything else by networks of invisible forces, but that this connectivity is at first hidden, so that to reveal the connectivity is also to unveil the inner nature of things. This unveiling is often done in a spiritual state and it is tempting to think that for Tuvans a spirit is the personification of a node of connectivity to the cosmos:

Gendos Chamzyryn: "When I'm playing, a particular spirit comes to me, it's above and comes down into my body and sometimes I'm playing and singing and it's not me doing it, it's someone else. It's the spirit from where I'm born, a place that's light and kind and beautiful."

Alexei Kagai-Ool: "The carver has to feel the stone, be in dialogue with it. Before I start, I have to converse with the spirit of the stone, I do a ritual, I need to ask the spirit."

However the claim to, or the acknowledgment of, contact with spirits is not for everyone:

Alexander-Sat Nemo: "When KK started to sing I listened with eyes closed and my eyes saw ancient Tuva, I felt it, no cars or electricity. He was like in a shaman's trance, his eyes closed, giving out a big energy. I told him afterwards and he couldn't understand what I was talking about. He didn't want to know..."

In Tuva a person who listens to music or looks at art may receive *küsh*, the spiritual force residing in the work as a result of the artist's inner moment of creativity and dialogue with the spirits. But what happens next is conditional on how this person perceives and receives this force. So art does not itself have a direct and objective power to change a person and the

circumstances surrounding them. The ritual actions of a shaman, on the other hand, are aimed at objective results and are felt to achieve them. A shaman is called when things build up to a head in real life, become risky or unpredictable. Shamanizing is case-orientated, and art is not. A piece of art is something that a person could encounter or not, respond to or not. True, a performed art, such as music, tries to be as case-orientated as it can, tuning itself to time and weather, place, and the feel of an audience. But this can't match the detailed crafting of a shamanic ritual to fit a personal crisis, with the careful astrological reckoning, the "inner" and "outer" observation, the probing questions asked. Whilst art addresses persons, ritual objectively changes the world around and inside persons, dealing with all the circumstances, near and far, that bear on the case.

The power and cunning of artist and shaman diverge, the shaman primed to negotiate sacred worlds, the artist ready to hone a particular vocal technique or visualize the exact way a deer leaps. We can watch where the care goes, where the attention goes. Take the shaman Kunga Tash-Ool Boo, who is also a carver. When speaking of his carvings, he uses an unequivocally aesthetic tone: "Look at this, look at how beautiful it is, how the two goats are standing together, the composition." As the only carver I know who works in horn rather than stone, he talks about horn being a finer and stronger material than stone, how this allows him to achieve greater delicacy in the figures. His work frequently shows a sense of exploiting variations in the color and texture of the material to achieve a more "living" quality in the figure. In this sense the carver Kunga is truly a maker, focused on taking physical stuff and crafting it into a physical thing. But as a shaman Kunga also makes ritual objects that have a ritual function, such as acting as vessels for spirits. Such objects may be the *ongon* figurines given to householders to keep in their homes, to be prayed to, or given small sacrifices of food. Here his approach is completely different. Although the *ongon* depicts three human figures, it does so in the most rudimentary way; the work is done quick, using felt, metal, or wood, whatever is to hand. The care is directed at ensuring that the *ongon* really is a recipient and holder of spiritual energy. Its form is merely adequate to this function.

This difference as to where care and attention are directed was made even plainer to me by a shaman who had previously attended music college in Kyzyl. Sergei Tumat said: "When I shamanize, I'm not here, not in the place where I'm playing the dungur drum, it's just my material body

that's there: I'm away with the spirits, that's where my total attention is. If someone touches me, tries to get my attention there in the yurt, that's dangerous, it would be like falling a long way: so it's completely different from playing music to an audience, where you have to be there, to be attentive to what your material body is doing, to everything I learned in music school..."

Although much of art's work takes place in the imagination, the artistic imagination is always fundamentally orientated towards an image that requires to be made in the real (i.e. "this") world. The dialogue is between maker and materials, via the imagination. The convergence between the plane of imagination and the plane of material is effected by a physical process of making. (Taras Mongush, carver: "my favorite method is to choose a stone and wait until I can imagine what I can turn it into.") Ritual, on the other hand, establishes a special kind of meaning whereby concrete actions refer to, summon, and bring to life a collective imaginary space designated as the sacred. Here is a movement starting in the plane of concrete acts, but going away towards the plane of imagination. What happens in the yurt when a shaman shamanizes—drumming and singing, for example—is fundamentally orientated towards what happens in the domain of the sacred. So a shaman takes care of the material plane primarily to organize it in relation to the sacred, according to the special semantics distinguishing ritual acts and signs from everyday ones. In so far as what a shaman does is perceived as musical, it is said to be *music for the spirits*.

So this leads me to a first answer, a Tuvan answer, to my question about what is distinctive about an aesthetic act or process, as against a ritual act or process. Ritual action operates on an imagined sacred, which is believed in turn to cause directly a change in some person or thing in the everyday visible world. Against this, artistic action is towards the production of an image, concretized, and here it is exactly the connection or *PASSAGE* between imagination and real—taken as given in ritual—that is being constructed.

Xöömei

Xöömei is a Tuvan word meaning both a particular style of throat singing and throat singing in general. A way of seeming to sing two notes at once, developing a melody of upper notes that are in fact harmonics of the lower note. The important and difficult thing for the singer is the suppression of the fundamental in favor of the harmonics. It's this stifling of the funda-

mental that distinguishes *xöömei* from European kinds of harmonic singing like those used by Stockhausen in *Stimmung*. How did this Central Asian musical culture come to exploit the harmonics of voices in the way it did?

Tuvan singers often alternate between singing words without *xöömei*, and *xöömei* without words, whilst playing a bowed stringed instrument throughout; is this a significant constellation? Had harmonic singing originated from an attention to the harmonics of instruments? There is evidence that the material culture of Central Asian music, in the form of instruments, has been stable for a long time. From the 10th century AD, instruments similar to the Tuvan *bizaanchi* appear right across Asia from China to Iraq. These are designed to be played by touching the side of the string rather than pushing it down to a fretboard. They are appropriate for sustained melodies and the accompaniment of epic recitations. Their Chinese name *bwuchyn* indicates a Central Asian origin. The *khomus* jaw harp is at least 2,000 years old in Southern Siberia. The *huur* is described from the 13th century onwards as a string instrument bowed underhand with horsehair strings, inherited within the family, from father to youngest son. When it comes to throat singing, we have of course no material remains, but there is a hint of the age of the tradition in the following: Vainshtein suggests that the throat singing tradition of the Bashkir *uzlian*, which is not present in any neighboring culture, predates their emigration from Central Asia to present day Bashkiria. This move must have happened before they were described in 921–922 AD by the Arabic writer Ibn Fadlan. Vainshtein also speculates that "throat singing originally appeared in Sayan-Altai among ancient nomads of the mountainous steppe regions of the Upper Yenisei basin in the natural habitat where in the first millennium lived ancient Turkic tribes—the direct ancestors of Tuvan people." Nevertheless we have no actual descriptions of throat singing in the region prior to those of the late 19th century Russian ethnographer Jakovlev, followed by Anokhin in the early 20th century.

Despite our ignorance about the exact origins of throat singing, the existence of ancient instruments precisely designed for the production of harmonics is telling. In the case of the *khomus* jaw harp the note produced is constant in pitch, and the performer changes the shape of the mouth to cause different overtones and thus to create melodies. In the case of the stringed instruments these are played not by changing the length of the vibrating string, pushing the string down onto the fretboard, but by chang-

ing the mode of vibration of the string, touching it at the side. The idea is therefore not to produce a series of different fundamental frequencies, but a series of different harmonics of a single fundamental frequency. In *xöömei*, singing the melody is also done by passing skillfully between the different harmonics of a single fundamental. It seems plausible that once attention was given to the production of clear harmonics from the fundamental vibration of a string, the voice began to model itself on this. The metaphorical extension from instrument to voice is a case of the known being used to map the unknown: the voice, with its invisible mechanism, seems to issue from the lips as a direct output of the soul; now it is brought into relation with a humanly-made instrument that is under the hands, where the eye can see it and the hand can feel and find its measure.

But, unlike in the *organum* of medieval Europe, the external "machine" did not produce the result of thinking in terms of discrete notes, but rather of exploring the harmonics of one note. Thus although the voice was indeed conceptually instrumentalized in Tuva, instrumental sound itself was conceived as continuous, unified and transformative, rather than discontinuous and structural. Tuvan singers invariably refer to a close connection with nature and natural sound as the decisive factor shaping their musical culture; they invoke the presence and connectivity of the artist within visible and sounding nature conceived as the bright skin of a wider deeper higher cosmos. In day to day life it is of course attention to differences in timbre that allows us to recognize from far off the call of a particular animal, to tell its gender, age and condition, or to identify immediately the voice of a particular person and their mood, or even to tell the temperature of the air by changes in the sound of snow. In these instances it is change in timbre that carries the information. A musical alertness to timbre conditions the Tuvan approach to harmonics so that a movement between harmonics in *xöömei* is conceptualized as a change in something approximating to timbre, often described as "vowel sound" or as "sound quality"; if you get the "sound" right, your harmonic will be at the right pitch. The important point is that there is in Tuvan culture a perceptual and conceptual continuum between natural and musical sound, and that the continuous transformativity of natural sound is carried over into musical sound.

The great Tuvan musicologist Valentina Suzukei puts it like this: *the heart of the Tuvan sound concept is that the drone and the harmonics are regarded as inseparable*. Can I generalize one step further to the idea that a

sound and its transformations are inseparable? To the idea that the potential transformations of a sound are the "inside" of that sound? A specific cultural organization of interiority-exteriority put the accent on looking inside the sound. The impulse was to go inwards, to bring out the inner connectivity of a phenomenon, not to observe or manipulate its exterior. By filtering and amplifying the upper harmonics of a fundamental vibration we are unveiling its hidden life. Tuvan melody is the melody of a sound, the unfolding of the inner nature of a single sound that, in that moment, stands for all sound. I am reminded of a statement by the Romanian spectralist composer Iancu Dumitrescu when he spoke of his own musical project: "The attempt to release or unveil the god that is living in every piece of base matter."

What this tells me is that the passage from imagination to realization in Tuvan art, and perhaps in any art, requires a coming to terms with the presence of physical matter so as to bring out what is already hidden in it.

Epic

The Tuvan sound aesthetic is clearly embedded in a background shamanic metaphysics, but is it also historically shaped by the role of music in the performance of epics—long songs expounding the mythological stories that underpin the shamanic world view? Does Tuvan singing style originate as a solution to the problems posed by epic performance? Is there a connection between the relative absence of epic in Tuva today and the elaboration of throat singing there more than anywhere else in Central Asia?

We need to imagine first of all a stock or collection of stories held in collective memory, never written down, indeed expressly forbidden to be written down. The epic bard draws on these stories but there is no fixed text to be exactly reproduced; rather the bard must versify the story on the spot. So for the audience and for the performer the story is imagined in the light of the way in which it is told. In Buryat (South Siberian) epic singing, each phrase begins without words with a drone deep in the throat of the voice which then rises to a middle register in which the words are articulated. As the bard versifies the story, the rhythm comes out; the pitch melody remains very simple and very constant, playing little or no part in expressing changes of scene or of character. I have heard Sakha (North Siberian) epic sung in a very different way where different characters are done in clearly contrasted singing styles. Generally in all the Central Asian cultures in

which instrumental accompaniment is used, the role of the instrument is to give an anchoring drone, a point of departure that is always returned to between strophes, though there may also be some use of harmonics to suggest changes of mood or intensity. But it is easy to see how the instrumental drone voice and the drone played on a stringed instrument are interchangeable here. Carrying the drone into the voice would accentuate the special status of the ritual words then to be sung, separating them from other kinds of words.

Where would I place epic on my scale of variation between ritual and artistic practice? On the one hand, like a ritual, epic is directed at a specific effect in the real world. It should never be performed for no reason, or merely because it is beautiful and pleasing. It is done typically at the beginning of autumn in the period of preparation for hunting, but may be performed as a way of preparing for any big undertaking. The point is not that the story contains a model of action to be imitated, but that the process of bringing to life a sacred narrative impregnates whatever is done afterwards with the quality of normativity, a kind of putative "rightness." On the other hand, as in a musical performance, the accent is on the versification and performance itself, and the skills of bards may be compared in a similar way to the techniques of artists.

We intuit that the desired effect is not primarily aesthetic, in our sense, but we need to know why. The answer lies I think in reception. The desired effect on the audience is that they vividly imagine and are gripped by the story being told, and that the story is imagined as happening within a sacred space-time. It is said that performance of epic involves going into trance; the singers act as if possessed and believe that they are receiving directly from the spirits the patterns, images and sounding strophes. (*I listened with eyes closed and my eyes saw ancient Tuva...*)

Essentially the epic is performed in order to evoke, generate, bring to life, the imagined sacred. But because here what is required is a prolonged act of imagination, this is not done in a perfunctory way via a semantics of ritual. The imaginary sacred must here itself be innerly performed by the audience. So although epic would appear to be an intimate fusion of ritual and art, the over-arching context and purpose is unambiguously ritual rather than aesthetic.

Where epics have been staged in the form of operas and plays—often as part of "national" cultural revivals—they no longer work in the

same way; they fail to bring the stories to life in the imagination of the audience, and are generally regarded as bad news. You still find today Siberians listening to music closing their eyes and going on a kind of cinematic flight or journey.

Monophony

Why did the Central Asian outcome diverge so strongly from what happened in Europe in the ninth and tenth centuries when the voice was also brought into a considered relation to the instrument in the context of ritual performance? In Asia, the exploration of the harmonics of single notes; in Europe, a more accurate conceptualization of movements between discrete notes. The key points here concern divergent kinds of textuality in the two situations, and a specifically Christian construction of the spirit-body divide. But to understand this we have to explore nothing less than the thousand-year incubation of Western art-music within the Christian Church—a defining factor in the anthropology of this music. When John Baily—an expert in Afghan music—asked, as a question of ethnomusicological method, "Why privilege representation of musical patterns over representation of motor patterns?" he fingered a key factor in ethnomusicology: the conditioning of the Westerner by the hierarchies of his own systems of representation. These hierarchies were established for art-music during the period of that music's incubation within the Church. It was the Church that provided the matrix within which grew up the idea of a consciously constructed music. It was the epistemology of that music that became musicology and fed into ethno-musicology where it colored and still colors the West's take on other musical cultures.

In the Middle Eastern Judeo-Christian traditions, urban and hierarchical, ritual is generally performed in special custom-built institutions: the Temple, then the churches and monasteries. The very early Christian ritual had been essentially Jewish and the Jewish cantillation allowed improvisation on the base of traditional forms and cadences. The Jewish Temple had an orchestra with lyres, harps, trumpets, cymbals.

...when they lifted up their voices with the trumpets and cymbals and instruments of music and praised the Lord... then the house was filled with a cloud...so that the priests could not stand to minister by reason of the cloud; for the glory of the Lord had filled the house of God.

—II Chronicles

But certainly by 400 AD the use of accompanying instruments was thought by many Church Fathers to be a dangerous influence. The heterodox practices of the young Church are by now becoming stripped down, centralized, standardized. The monodic Chant, unaccompanied, now becomes the central musical expression of the Christian rite. The voice, privileged as the essential carrier for the ritual, is represented as internal, inaccessible, dissociated from the physical being; singing and listening become activities of the soul rather than of the flesh. In the same moment, the dematerialization of sound: as the body is expelled from music it takes with it bodily time and all that is implied by the presence of bodily time in pre-Christian performance traditions. Sound becomes pure, an exactly regular vibration, without physical shape. Equally the church building closes itself physically from the profane world and insulates itself from natural sound; the presence of the outdoors sound-world is replaced by the magnifying reverberation of the indoors within the hard tall walls of the edifice. In here, sound comes from everywhere and nowhere, an emanation rising towards the now vertically-situated god.

At this time everything is, on the face of it, dictated by the demands of the ritual. But notice how much of this is carried forward into secular composed music, even as the attention shifts gradually to the work of making the sound image itself. The gradual discovery of autonomous techniques for this making will eventually lead to the emergence of polyphony and beyond that to the Renaissance... beyond which composed music is no longer contained and contextualized by its liturgical function.

What is the importance of sound in Christian thought in this vast period? It is thought of as standing for the Word, the Word being language considered as illocutionary, language that *does* rather than language that *states*—ultimately, as the Word of God, bringing about the existence of matter itself. So to “sound,” or to cantillate, the sacred text is to express its illocutionary force, a force that, through utterance itself, directly changes the state of the singer and the listener, in the sense that to sing an Adoration is *to be with God wondering*, or that to sing a Thanksgiving is *to be with God gratefully*. And this force is **behind** the text, in the sense that the text itself can be translated and paraphrased without modifying the Word. (In Islam these two levels are much more intimately fused because the core of the Qu’uran is the Word of God as inscribed directly by the Prophet.)

So how the text is set is not in any way a musical revealing of the

meaning of the words, but rather a musical reinforcement of the linguistic shape and phrase of the text. So the *Jubilate* and *De Profundis* are sung with no musical indication of their radical difference in content, and every indication of their function within a single ritual structure. An introductory greeting may be sung on a single note; a fall of a third may show punctuation; a question mark may be suggested by a fall of a semitone followed by a rise; the end of the gospel by a melismatic treatment of the first syllable of the last phrase. This removal of expression, this abnegation by music of any paralinguistic expressive function, is part of the general “heightening” of the Chant, found also in the Roman *tonus lectionis* and the Jewish cantillation—a heightening that serves to distance the Chant clearly from normal everyday speech, to get and keep attention and enhance mnemonic resonance. Chanted words had physical charisma. Throughout the patristic and feudal periods, to read a text meant to perform it physically: to move the lips, to pronounce the words, and to listen to them, hearing the voices of the pages. Meditation and prayer were connected to the idea of spiritual digestion and ruminating. In praising a monk who prayed constantly, Peter the Venerable cried: “Without resting, his mouth ruminated the sacred words.” The little private booths, or carrels, in the libraries were designed to cope with the buzzing and muttering of readers and copyists. To make these motions of sound was to rehearse, to ingrain into the physical being, to physicalize the meaning, so that the words would always be there to reach for in any moment of weakness or confusion.

One of the crucial observations that helped define Christian attitudes to music is exactly that there is, within the psychology of music, a stimulation of both memory and forgetfulness. Clement of Alexandria drew a violent contrast between the devotion proper to worship and the immorality of secular song; he pictures the singers leaving the Church and forgetting at once where they have been. Instead of the praises of immortality they now sing “Let us eat and drink, for tomorrow we die.” He comments grimly: “No, they will not die tomorrow, for they are already dead before God.”

The lifeline of the Christian self is the strong continuity between the self in prayer and the self in the world. Self-possession becomes intensely important. To abandon oneself, to forget oneself, is a horror. This does not mean what it means in later discourses; Christian self-possession is remembering oneself in God and before God. This remembrance is verbal

and the binding thread of the Christian self is the store of remembered words. So, meeting temptation, the Christian seizes on the words of a martyred saint; immediately he is no longer distracted from the destiny of his immortal soul; he weighs the matter of his own eternal death against the tug of fleeting pleasure. But his faith is not in words as words, in their capacity to mean what they say, but in the saying of them as an illocutionary ritual of remembrance; it is the music of the words as chanted that reinforces their mnemonic power and charisma, a music whose sound is a total sign, in the sense of a sign that suffuses all that is said with the power of God.

Ultimately, however, this sense of music as a total sign would be worn away. Some relation between parts and whole was latent in the practical work of music-making. Within the structure of the Chant, melodic elements and details had always been evaluated, substituted, recombined; it was simply that the *modus operandi* was articulated within a theological framework. Moreover the process had been both gradual and diffuse. The emergence of polyphony, which would telescope and superimpose this process on itself, is the point at which music begins to refuse its role as a total sign and to reject any way of mediating between detail and totality that might be imposed from outside.

Polyphony

The Christian Church: a vast machine for creatively recombining sets of elements belonging to a sacred imaginary, in the interests of a hierarchy of ritual specialists maintaining a symbiosis of power with changing political élites. Christianity's peculiar multitextuality is central to its ability to adapt to successive political arrangements, from the Roman Imperium, through the Crusades and the Slave Trade to the treaty with Mussolini and the Cold War. In multitextuality is on the one hand the power of the authoritative written text—reinforced by a monopoly of reading and interpretation by persons with a vested interest in the structure—on the other hand the simultaneous presence and interplay of many different texts. It is as if the textual dimension of Christianity were similar to a body of epic stories in a Central Asian culture, only that all the stories and their possible variations had been written down, each carrying its own textual authority. Consider only that even the Bible as we know it is further surrounded by a vast cloud of other marginalized texts known as apocryphas and pseudepigrapha of which there are many thousands of pages.

In Europe music eventually levers itself away from the verbal text by acquiring its own textuality in the form of notation. A diagrammatic form arises which borrows the idea of discrete particles from written language but incorporates them into a mimesis of musical gesture in which spatial relationships reenact patterns occurring in the plastic and holistic medium of auditory sensation. The inspiration for such a spatial mimesis may lie in the ancient practice of chironomy in which the Jewish Cantor indicated by hand gestures the melody to be sung from the Hebrew text.

Around the same time as we begin to have written music (Hucbald's 9th century Europe) we have descriptions of the use of an instrument called the *monochord* to teach singers the Chant melodies. Here again is the idea of separate tones envisaged on a vertical plan, a feel for a striated vertical space in which each note is clearly separated from the one above and the one below it. This is achieved by placing the voice, so to speak, under the fingers, so as, literally, to digitalize it. The word *organum* means instrument, or tool; the *organum* in vocal music means, then, the instrumentalizing of the human voice, the realization of a fundamentally instrumental conception of sound in the medium of the human voice.

Also around this time the practice of troping begins to take on a new urgency. Troping could mean the addition of new text, the addition of new text combined with music, or the addition of new melismas without text. In its first form it consisted only of adding *sequences* or parts following on from sections of the Chant. Later, with the technique known as *farcing* (stuffing), new fragments of text were interpolated into the original. It was a proto-compositional technique whereby local composers could contribute to the body of liturgical music as representatives of particular monastic and church communities, often paying tribute to important local figures and saints.

At what point is the grip of ritual values loosened up when it comes to determining the actual shape and detail of the music within the ritual? The technical turning point is the discovery of a way of organizing the relationships between simultaneous, as opposed to successive, sounds. This invention—the invention of organized polyphony—challenged the authority of the sacred text, not of course as such but in terms of its operational pragmatics as the sole integrative field for musical organization. Instead of varying by substituting melodic formulae for others, you could now take the Chant or any part of it and build something new vertically on it; from

the moment the Chant became merely a starting point, the alert musician would gravitate towards such other integrative principles as might emerge from the actual work of building music on it. These new principles ultimately formed a matrix in which musical thought and experiment could interact directly without the mediation of a liturgical framework. The necessity of polyphony followed from the emptying out of musical space round the monodic Chant and the pregnancy of this space for the possibility of textual substitution. Once the impulses towards textual commentary, substitution, superimposition, glossing, in short *HYPERTEXT*, become concretized in music, they begin to divide and link continua in ways that no longer simply mediate the divisions of experience reproduced in Christian discourse. The specific textual plurality that distinguishes Christianity from Islam, the notion of synchronous commentary, trope and textual and narrative diversity, is the major causal factor in the emergence of polyphony in the Paris cathedrals and not in the Baghdad mosques.

In short, a discourse centered on an unresolved cohabitation of transcendence and immanence (God, the Word made Flesh, the Son) produces its own negative and finds itself transcended (metaphorically speaking) by Art's immanent critique. In so far as Church legislators allowed themselves to be guided by an extreme distrust of music, they achieved exactly the opposite of what they had intended; they were forcing music to become a disciplined, self-conscious, technical skill: they had created the conditions for a learning process that would grasp more complex materials on the firm basis of what had been learnt with simpler materials. They had made it necessary for music to discover its own generative processes, to find an equivalent to the gradual and collective folk-process of elaboration and variation, but to find that equivalent in the sphere of conscious and organized practice. In this sense, the emergence of music as an art is already implied in the liturgical demand for a body of musical material that can expand and enrich itself without simply laying itself open to the uncensored influence of other musical traditions.

Pentecost

The Spirit came upon the saints and upon me... Then I gave up for the Lord to have His way within me. So there came a wave of Glory into me and all of my being was filled with the Glory of the Lord.

So when He had gotten me straight on my feet, there came a light

which enveloped my entire being above the brightness of the sun. When I opened my mouth to say Glory, a flame touched my tongue which ran down me. My language changed and no word could I speak in my own tongue. Oh! I was filled with the Glory of the Lord. My soul was then satisfied. —Charles Harrison Mason, founder of Church of God in Christ, c. 1893.

And when the day of Pentecost was fully come, they were all with one accord in one place. And suddenly there came a sound from heaven as of a rushing mighty wind, and it filled all the house where they were sitting. And there appeared unto them cloven tongues like as of fire, and it sat upon each of them. And they were all filled with the Holy Ghost, and began to speak with other tongues, as the Spirit gave them utterance.

—Acts II

Here we go to another thought, which is that the projection of the sacred is sourced (motivated, in the sense that motivations are the causes of social practices) in the actual vivid and shattering religious or mystical experiences of individuals. And that these experiences are the revolt of the psyche against the language-narrated self. So one definition of "spiritual music" is music that induces or draws on such experiences. The twist is how.

Mainstream Christian ideology deflects and defers any unmediated and overwhelming contact with God. In Catholicism, only after death is the Beatific Vision of God permitted. In life, such experiences are dangerous, extremely rare and confined to the deeply, and possibly only the professionally, religious. However, within Christianity is a partly suppressed and marginalized Pentecostal tradition. It emerges in our time around 1900 in Mississippi USA in the *Church of God in Christ* as an alternative to the white-ized post-slavery churches. This revived Pentecostal movement offers baptism by the Holy Spirit, and uses music to induce a state of being filled by the Holy Ghost and of speaking in tongues. It is said that *The Spirit moves in the music*.

Its forerunners were the Revivalist camp meetings of the early 19th century, at which people would often fall to the ground rendered unconscious by the sudden awareness of their sins, and sometimes further receive the gift of tongues and utter involuntary words glorifying God or Christ. And these movements in turn go back to the mystical "epidemics" that broke out spasmodically throughout the history of Christian Europe.

What generally keeps the lid on these outbreaks is the accommodation of the mainstream churches with rising prosperity in *this* life. Thus Christianity has a key interest in secular institutions capable of filling the vacuum at the point where it fails to provide an existential experience of God. Social groups who are systematically materially disadvantaged tend to find this an unsatisfactory arrangement.

It may be that some aspects of West African religion passed into Pentecostal religion in the Southern States. Certainly a connection has been drawn going back the other way—between the “oral structures” of Pentecostalism and the indigenous religions of Africa—to explain the extraordinary success of Pentecostal churches in Africa since the 1970s. Amongst these oral structures Walter Hollenweger notes the inclusion of visions and dreams in worship, and understanding the relationship between body and mind revealed in healing by prayer and liturgical dance. Certainly everything that revolves around the term *Gospel* comes out of the rise of these churches in the Southern States from around 1900: the use of musical instruments, and the full range and expressive possibility of the voice both in the sermons and in the choral responses.

The spirit moves in the music. The Pentecostal tradition brought timbre back to life within Christian ritual. First because the sound comes out of persons sonically present as whole and bodied persons, second because the use of interference into the singing voice suggests the simultaneous presence of a material and a spirit source. The sense of something pushing up from within or behind. Modulation, distortion, interference, familiar from information theory, from the functioning of radios, from electronic music, fuzz boxes and the rattling metal sleeves on the tongues of *kalimba* thumb pianos. A signal interacting with another signal. Normal speech modulated by a shake in the voice telling of emotion. The voice broken as if animal vocalizations were coming up from below. The formalization of the signal on one level is partially disrupted by the presence of another signal on another level. And this disruption is displayed in the style. Consistent with this, musical instruments are vocalized. There are tonally undefined mordents (like the consonants of language), glissandi and blurred transitions, throaty and growling sounds by various kinds of overblowing and embouchure, prominent changes of vibrato, harmonics, and so on. Something else is trying to come through.

A parallel approach occurs in the more calculated context of

contemporary art music. Jonathan Harvey, thinking about his own music, conceptualizes two intersecting identities: on the one hand the (Western) instrument “as found” with its linear intervallic capacities; on the other its extensions, by means of electronics and timbral modifications, into a vertical timbre dimension. In his piece *Advaya*, the cello sounds at times corporeal, as if celebrating its own materiality, but at other times is made to produce a radically desubstantialized sound having no immediate link to any actual sounding object. Harvey thinks this as an unfolding in time of a dual identity, within the cello, of material and transcendent being. It is clear here that his way of showing out immanence is to show the points at which matter breaks out into spirit itself—which can then only be shown as transcendent. In Dumitrescu, this relationship becomes more dramatic: what is immanent can only be shown out by being caught in the act of bursting asunder its own material basis.

The point is that immanent spirit can only be summoned by a double perception, at once focused on the materiality of sound, AND directed to how that sound is being disrupted or transformed in some material way by what appears as an other force moving within it.

However it is Afro-American music that is the direct inheritor of the Gospel and Pentecostalist sound traditions. *Albert, we found out quickly, could play his ass off. He had a sound, alone, unlike anyone else's. It tore through you, broad, jagged like something out of nature. Some critics said his sound was primitive. Shit, it was before that! It was a big massive sound and wail. The crying, shouting moan of black spirituals and God music... Albert was mad. His playing was like some primordial frenzy that the world secretly used for energy.* Amiri Baraka on Albert Ayler in *The Autobiography of Leroi Jones*, pp. 194–195.

Coltrane's music, in comparison, is more weighted to the aesthetic. Listening to *First Meditations*, the music is not so much being pushed aside as modulated by Coltrane's intentions. There is the tension between the leader's search for the “beyond” and the foreground or “here” of predetermined melodic, rhythmic and modal patterns to be transcended and risen above. There is the choice of musicians, where each musician has a highly individual take on their own instrument, yet works with the others with extreme complementarity. At times it's as if each were playing a different music, and yet it's the same piece. Then there's an important narrative function, by which the soloist begins by voicing the theme and then passes

through different levels or steps in a larger movement or journey, each step clearly marked by changes in texture and rhythm by the whole group. In the paralinguistics of the tenor harmonics, in certain sections of prominent vibrato, and some relatively brief episodes of arpeggiated piano décor, the music can be said to illustrate or represent transcendence. But a far stronger accent is on the movement between here and somewhere else that is happening *inside* the music, a process that is being unwound, explored in the time that the music takes, by moving between a series of plateaus, each of which is itself multiply subdivided into phrases and periods. Finally the sequence of solos allows the same process to be re-explored in the different media of the different instruments and their players. Coltrane's music is uplifting because it invites a performance in the listener of an expansive aesthetic experience. The interpretation of this experience as a spiritual one by the listener is cued by track titles and by the relatively discrete "transcendence-signifiers" mentioned above. It may be that the message-bearing aspect is what motivated the artist to explore this kind of aesthetic set-up. But it doesn't follow that the work itself expresses the artist's intentions or message; the work is the outcome of a long series of aesthetic decisions that surely take on a life of their own.

I admit to having a bone to pick with message-bearing art. A habit picked up in the debates on Brecht, on Social Realism and political music. I've come to believe that signifiers in art, even in poems, have to circulate meanings, and not point hard outside the work; I see them rather as signposts inviting us in into the work and its dynamics, suggesting to us how we might start performing the work in ourselves. In art, aesthetic pull, centripetal, must be stronger than semantic pull, centrifugal; otherwise its power, its resistance against the world is dissipated. Only once the power of art is gathered can it then affect persons. Coltrane gathers the power of art, and that's what I meant by saying his music is *more weighted to the aesthetic*.

Does Albert, then, fall down on the question of message? Does his feeling of "having something to say" drive him merely to illustrate and signify the experience he wants us to have by imitating the trance-shake of the possessed?

Hell, it seems like we're still just scraping the surface of this thing. Suppose a spiritual experience is only ever defined, or even only ever *experienced*, via cultural signifiers? Doesn't an artist then who wishes to communicate, to inspire, to stimulate such an experience have no choice but to

work with these signifiers?

Can we imagine a range of unusual experiences, including those of *seeing* or knowing more than should be possible by normal channels, time travel, dreams, hypnosis, out of body experiences, drug-fueled hallucination, the effects of various and particular drugs—*DXM is like living in a dream. Everything seems new and foreign. There is a childish euphoria. You feel disconnected from everything and everyone but communication is easy. Scenes are very choppy and you'll feel like you're in multiple places at once. PCP more knocks you out of reality. You'll feel slow and sometimes heavy. Your feet get stuck, feel as if they were melting into the ground ... yet you're as light as a feather. There is less conscious command, and talking is difficult. You'll be in a street, but the street won't "click," and you'll feel nowhere, like not existing. Scenes are cut into long frames integrated slowly—being seized by aliens and taken up into UFOs for experiments, possessed by spirits, inner flying, feeling yourself morphed into an animal, experiencing total unity and submersion in the cosmos, seeing the white light, or feeling the wave of the Holy Spirit coming down into you?*

And then there's the "plain, everyday spiritual experiences" in the following passage from Norbert Baumert writing about Pentecostal Theology: *What in the 20th century was at first called "Spirit-baptism," is a clear-cut experience of the Spirit, which, on the one hand, is distinguished from clear-cut experience of the Spirit of another kind, such as occurs in mysticism or in the lives of many saints; on the other hand, it is distinguished from plain, everyday spiritual experiences. Its characteristics are: profound impact by the Holy Spirit; deepened living relationship with the three divine persons; intense, life-changing effects; love for prayer and Holy Scripture; an important bodily component with corresponding forms of expression; readiness for vocal and free prayer, also in community; special manifestations of the Spirit, usually prayer in tongues. The specificity lies in the combination of all the above...where it seems that, for this tradition at least, prayer or thanksgiving to God already count as spiritual experiences.*

This spectrum of unusual experiences, some perceived as spiritual, some less so, depending on your point of view, suggests a high degree of cultural modulation. What happens to people—often unexpectedly and intensely—is interpreted, and the interpretation may feed back into the experience so that it becomes largely culturally constructed. This interpreting, deciphering kind of knowledge has a more active counterpart in the

form of the techniques used by ritual specialists to generate and modulate special experiences. In shamanism, for example, what the shaman innerly sees has the form taken by the spirit; the shaman sees a bear and knows that this is not any old bear but the Bear Spirit. So you might say there's an act of interpretation here, in the sense that someone else might innerly see a bear and think it *was* just any old bear. But, more than this, the shaman *learns* to recognize spirits, that is, to construct the experience of spirits from varied kinds of visual images that may be more or less detailed. The shaman learns to feel towards the image, to empathize with it as though it were another person, to detect its intentions and mood.

We had begun with shamans. I spoke matter-of-factly about the shaman using preparation rituals and other techniques to enter a special state. "*When I shamanize, I'm not here, not in the place where I'm playing the dungur drum, it's just my material body that's there: I'm away with the spirits...*" I was concerned to establish the metaphysical and pragmatic structure of the shaman's doings. The shaman's use of sound—*That which is not, rising out of that which is. Pushing up out of the visible, telling always of the inside, voicing the shapes of enclosed air, unveiling the hidden*—is integral to the techniques of entering the special state. The shaman's drumming (active) takes her on a journey out of herself into the sacred world where the spirits may be met with.

Now consider a socially more elaborate situation such as the Bori rituals of the Nigerian Hausa. Rituals here are conducted for the same kinds of purposes as those of Siberian shamanism—to heal illness and resolve problems. However the role of shaman is now split between a group of musicians and one or more mediums. The music (active) triggers the medium (passive) to enter a dissociated state and be possessed by a particular spirit. Possession by a spirit is shown by talking and acting like the spirit, falling down, sweating and shaking, lapsing into comatose states, speaking in tongues, twitching and acrobatics, frothing at the mouth and nose. Such altered states have physiological and psychological components, but they are also learned: you learn what the cues are and how to respond to them; the learning takes place both in and out of normal waking consciousness. The music is the bearer of many of these cues. But it also triggers dissociation in the medium as a defense against the auditory overloading produced by a buildup of volume, speed and density of information. The mediums are trained to perform the music within themselves in such a way as to succumb

to this kind of overloading.

Dissociation—a state of division or non-integration in the continuous production of identity—may be regarded as a strategy or a resource of the mind for dealing with certain types of difficulty, of which sensory overload is only one. It is possible that dissociation is a normal state and that the Western notion of an integrated identity is a myth; to paraphrase Castoriadis, the world as experienced by the subject is not an integrated whole, yet does not fall apart. But many religious and ritual practices offer institutional means of dissociation. Here the more traumatic aspects of dissociation for the subject are overcome by learning and habituation. Within these cults or practices dissociation becomes a skill that triggers the working of what anthropologists have called the *autonomous imagination*: a kind of imagining in which what takes place appears neither to be imagined by the subject nor to be happening in the physical world, but to be "imagined to" the subject by some other agency, and so happening in its own sacred space-time. So this is an experience of being taken over by an other force, projected as a more powerful, more authoritative force. *Then I gave up for the Lord to have His way within me.*

The jazz musician glances enviously at the cult member who has their dissociation technique all set up in advance. Against this, the jazz musician is constrained by a culture of the individual expressive identity to *put themselves totally into their playing* whilst dealing unaided with the indeterminacy of the artistic environment. Is this why some musicians in the extremely insecure and stressful jazz ambience reached out towards explicitly spiritual pathways? From an aesthetic point of view the potential problem is that, whereas in a CULT situation the cultural signifiers that tell you how to respond to the music are already given, in an ART situation, if you want to play *spirit music* you have to lay out the cultural cues in the music itself or in whatever other information is attached to it. Can you do this without aesthetic compromise?

Art

I have so far dealt largely with aesthetics as a possibility incubating within ritual, as a potential that haunts the margins of other forms of practice and experience conceived in spiritual terms. It's high time to deal with it head-on. Because I approached artistic practice in Tuva as an anthropologist as well as a musician, I started thinking of art as an anthropological category rather

than a historical one. It simply seemed to me that in Tuva, people doing music and doing carving knew that they were doing a particular kind of thing that had a certain quite edgy relation to spiritual practices but that was also very distinct. The fact that a vocabulary of aesthetic judgement was shared between practitioners of both arts encouraged me in this direction.

In art, the accent is on the pragmatics of the movement from imaginary to real, a movement that is taken as given in ritual. The convergence between the plane of imagination and the plane of material is effected by a physical process of making. There is a physical dialogue between maker and materials, via the imagination. Materials are anything that is taken into the work-process that was already around, and so had some characteristics of its own. For example, an orchestra, a theme, a tone row, a sound, a way of making a sound, a bunch of chords, a recording of birdsong, Eric Dolphy (if you were Charlie Mingus). The characteristics of the material are an important input into the dialogue because they offer resistance. The idea does not simply impose itself on physical matter as if that matter were nothing other than an extension of the idea. The material offers resistance partly because it is material and partly because of the respect accorded to it, a particular kind of listening or looking that registers and explores its nature. In music composition, material may be chosen that is not physical matter, but, once it is chosen as material, it is attended to in a similar way. So a piece of art consists of some chosen material that has been worked on with a particular kind of respect, and it is because of that respect that the material bears the traces of being worked on in the way that it does.

Come back to the front end of *making* a flute solo or *making* a piece of sculpture. The formal aspects of the work arise exactly through the fact that it is *work*, the cumulative trace of intentional actions taken towards the material. These acts of shaping are conditioned by a series of acts of perception that are alive not only to the material but to each other. The looking or listening is at any stage towards a material already inscribed with the traces of previous lookings and listenings. Hence every perceived form is held in intimate relation to its possible or actually present transformations. In other words, because of this particular kind of perceptual care directed at and into the material, attention returns to what was excluded from each percept, and this residue is ready to be taken up in the next perceptual moment.

Notice that in this regard art is absolutely opposed to language, in which everything definite is cut out against everything else.

A general kind of isomorphism seems to be shared between ritual and art. Ritual is isomorphic with itself, involving repetition, relations of formal similarity. These aspects constitute its formal semantics: they say *we are doing something special here*. Art takes the idea of ritual isomorphism as its model. Ritual says: the *ongon* represents the three spirits; the representation doesn't have to be good, *there only has to be the idea of representation*. But how, and at what point, does the vessel containing the spirit no longer do so by the force of iteration alone, but require to be formed in the *likeness* of the spirit—or in the *likeness* of the spirit's house or body? *If, for Kant, discursive knowledge was prohibited from access to the interior of things, then works of art are the objects whose truth can be conceived only as that of their interior. Imitation is the path that leads to this interior.* (Adorno)

I want to deal first with the work's imitation of itself. I see likeness as based on grouping. (And perhaps this view of it is inspired by Stockhausen's essay on the *Klavierstück 1*.) The basic unit of aesthetic perception is a group of sensations, in which the connections between members of the group, and between members and the whole group, generate sets of related forms; each form is then grasped in relation to its possible transformations, because its constituent sensations remain active. All perception happens in time, not in one time but in a multilayered time in which syntheses of different kinds occur at different speeds, and this is true for the artist as for the viewer, for the musician as for the listener. The things that set off these sensations physically exist—even if they are sounds—and have been shaped to do just that. Their shapes embody the traces of actions and not directly the traces of ideas. These actions are conditioned by the possibilities of the material and by its resistance to being acted on. For example, a harmonic on a tenor saxophone, whether composed or improvised, is the encounter between an idea, dynamized into an intention, and the physical limits of the instrument. The harmonic becomes aesthetically valued in connection to other sounds, or for its own shape of which the parts are connected. Best is if you hear the shape of the sound, *and* you hear it in relation to the shapes of other sounds, *and* in several different dimensions at once, for example by comparing envelopes, or fundamental pitches, or by any mode of relationship and comparison that has been set up by the music. But that all this would be happening very fast and in an unobserved way, creating a feeling of transformations within a holistic and plastic medium of sound experience.

The neuroscientist Vittorio Gallese suggests that the models of the

world by which we organize many of our thoughts and experiences are dynamic and tactile because their neuronal correlates—*mirror neurons*—are those that simulate actions and movements. These structures are activated in the same way when we see the actions of others as when we move ourselves. They are, so to speak, the mental part of moving, but without the agency of the movement—us or them—being determinative. Hence we feel the movements of others around us as familiar long before we decode and interpret them. We might go on to speculate that we also feel the dynamics of things, and read the traces of movements in forms, in way that is tactile and intimate, as if through the lens of our sense of our own bodies. Or in other words that aesthetic experience involves the *mirroring* of suggestive movement and shape in art. But the important point that I want to borrow from Gallese is the idea of neuronal activity connected to movement but without being tied to images involving agency—us or them, you or me.

His way of breathing was a joy: it had economy and grace and power; his management of time was perfect. He had the time to hit whatever note it was that came next, then to extend the breath into the next phrase like a sudden almost-visible extension of the room, as if this phrase had yearned to be united with its predecessor, and now they were together. Then he'd cut the end of that phrase and wander off into the split chink of a twilight zone, momentarily. Normal business would resume some time, but in this instant he had gone down steps he'd never seen until then, that led down to a dark harbor where water clucked against the boats and rocks and a constellation could be seen reflected. —*Last Night's Fun*, Ciaran Carson.

The performing listener is here a writer creating a parallel text to the music. Giving a sense also of how a listener may interpret their own experience as inhabited by the intention and experience of the acoustic performer. This opens up the idea of the active creative performance of the receiver/listener/viewer in response to the work. It's a fundamentally democratic idea. The inner performance is not a passive effect of the work. Its agency is open. Listening to music we do not care if it is us that is actively making the experience or not. Or, rather, the *who* of the activity is not an essential part of its quality.

Again this places art in decisive opposition to language, which is almost nothing other than a grammar of agency, a schema for negotiating the differences between your position and mine.

Music stimulates both forgetting and remembering. Christians were

horrified that the *wrong music* might cause a person to forget themselves before God, but believed that the *right music* would bring a person to recollect themselves before God. In Tuva *xöömei* is said to make the listener forget their normal self to participate more deeply in the cosmos. According to Michel Ratté, music can be a proto-symbolization of the inner what-we-are that is lost when we use the means of communication and representation offered by society. Music is peculiarly suited to this because sound constantly disappears, as if it were a constantly collapsing representation of the listening self. Listening to music brings us into a state where memory no longer has representation, and simply confronts itself as awareness of forgetting. Art is driven by the energy of a self that finds itself on the one hand brought into relation to itself by the possibility of communication, and on the other constantly misrepresented by the inherently intersubjective character of that communication. The young Georg Lukacs also considered all human socio-cultural communicative acts to be a tragic failure in terms of the primal need for the subject to express the singular immediacy of their own experience. The individual is incarcerated in an incommunicable subjectivity, the isolation of the subject produced precisely within the solidarity of all the speakers of a language. Art expresses what we are as such within the failure of communication.

Jonathan Harvey on Xenakis and Ferneyhough: *Both composers possess a "hot" energy that appeals to some temperaments. There is in this a notion of assault on the self-identity of the subject. Piranesi, Beckett, Matta, Bacon, etc., all exemplify this. The self (body and mind) is torn to fragments to reveal the nothing.*

But there's another almost opposite way in which a listener's sense of agency might be put on hold. I'm thinking of the ideas of John Cage: Cage's ideas about music as the production of a quiet mind, and as something that can help to quieten the minds of others; silence as the totality of the unintended, not a literal absence of sound and movement but the totality of all the sound and movement that is happening anyway when the intention is quietened. In Cage's dualistic view, intention can only produce a catastrophically rigid mind-set such as that employed in the workings of traditional tonal harmony. A person who makes music in such a structuring way is laying down a dominant continuity that imposes a line of hearing and prevents the listener's perceptual capacities from opening to any other possibilities. Against Cage, this leaves out the recursive nature of aesthetic

perception as an activity, the constant sending back of the attention to adjust the filters and discover something new. It leaves out the listener's contribution to the emergence of a new and unique continuity with each listen.

If Cage's proposition represents a radical, perhaps deliberate, misunderstanding of traditional music, his actual practice can be thought of as simply moving the zone of the listener's activity nearer to the early stages of incoming perceptual information. This perhaps relaxes the higher level (more abstract) processing activities involved in recognizing, sorting and drawing connections between perceptual entities.

Taken together, the ideas I have been discussing suggest a vast range of possible types and intensities of musical aesthetic experience all of which place the experiencing subject's sense of agency in some way into parenthesis. Finally, at the core of every truly engaged listening experience, something is retained from the transcendental religious experience: not the giving up of the self for the journey into the sacred imaginary, but a special condition in which "I," the listener, am inhabited, and temporarily imagined, by the subjectivity of the music. Finally, by embodying the traces of the listenings of its maker, or makers, music, in the moments that it sounds, is listening to itself, and I listen to it by becoming it.

There is a further implication here that bears on the musician's own state of mind and how that indirectly contributes to the work's reception: namely that the musician's own sense of agency may also be placed in parenthesis. We've already seen how, in the Tuvan psychology of artistic creation, a creative process may involve a dialogue with spirits, or a sense that *it's not me doing it, it's someone else*.

In Western culture also, certain modes of performance seem to require an abandonment of the self. But what is being abandoned here is the self in the limited sense of that part of the mind that has previously acquired and that now consciously holds and deploys the necessary technical skills for the realization of the work. Furthermore this operative self is not being inhibited—in fact its contribution to the output is being strengthened. The notion of *giving up the self* here refers to a restructuring of the attention so as to get a performance that has a sense of immediacy, a sense of the work being discovered in real time in front of and with the audience, and so a sense of risk, of going beyond what is simply known and adequately covered by technical competence. For the performance of a piece of music is always an attempt to open the deepest and most comprehensive dialogue

possible between the work as it exists in abstract or recorded form and the empirical and social moment within which it is being realized. So what is demanded is not the reproduction of an ideal performance, such as might be arrived at through competence alone, but the realization of a unique iteration that listens to its here and now.

In jazz this quality is sometimes referred to as *spirit* or *energy* or *vibes*. Some musicians adopt a devotional metaphor as a technique for getting themselves into the right frame of mind. A shared vocabulary develops between players and listeners: *he taps into a higher animating spirit, playing like a man possessed, visibly transported...*

The academic literature on the psychology of performance looks mostly at questions of motivation and control of anxiety, as if these were the crucial factors. Furthermore, the various therapies available to performers suffering from stage fear are explicitly acknowledged to be of dubious value; they bear little or no relation to the personal preparation methods used by some musicians in order to let go of the anxious mind before going on stage. From yoga to double whiskies to private rituals of disorientation, musicians will try anything that works for them.

Glenn Gould famously overcame a block in some tricky passage by practicing with a radio AND a TV on full blast. My guess is that a certain kind of dissociation is functional for optimal performance and that many different techniques, whether spiritual or secular, can create such dissociation and partially re-organize a person's normal sense of agency.

Coda

Finally this question of agency/non-agency draws me back to the social doings of human groups and the distribution of power within those groups. An anthropology of power will look at how control systems—previously biochemical and instinctual—are, in human beings, transferred to extrinsic cultural systems. This enables and fires off the singular human project of the variable, developing and undetermined adaptations of societies and cultures within different ecologies. The lynchpin of these effective possibilities is cooperative action, which requires the binding of the individual into the social group and the affirmation of the general power of a society over its members. My thinking here starts out from the work of Pierre Clastres on pre-political societies; societies in which the role of individual leadership and hierarchy is less important than the submission of every member of

society equally to the rule of tradition; small-scale societies in which the nearest thing to a leader is a person who solves disputes, gives away worldly possessions and acts as the group orator. This account breaks with the tradition of explaining (and legitimating) power differences in present-day societies by reference to hominid, and therefore instinctual, pecking orders. It asserts cooperation within small groups as a fundamental step in human acculturation, one that precedes the later emergence of political difference and inequality within single societies. My point here is that first we have to reckon with the general power of society over its members, and only then can we consider the case in which social power is unevenly distributed.

My power over another person could be defined as my capacity to get them to do what I want regardless of their own wishes and without the actual deployment of force. The communicative acts involved in the expression of power are very often ritual in character. Ritual may be more abstract than any actual violence, but just as physical, because addressing the body through the mimetic movement and complicity of bodies and the binding of the body to exaggerated and repetitive gestures within the ritual procedure itself. In so far as the model for all rituals of power is the particular category of actions by which we address the domain of the sacred, "spirit," the content of that domain, is revealed as purified social power, or pure coercion. In the initiation ceremonies of quasi-leaderless societies, all members of society submit equally to the tradition of the group by submitting equally to the ritual knife. It is as if control, once displaced outside the biological system, has to cut its way back into the human body. Why does this movement of control from biological systems to cultural systems have to take such a traumatic form?

This year, 2009, is Darwin's anniversary. Evolution is an improvisation. No animal is a perfect and integrated system (despite our longing projection of grace upon them) because every animal is an improvisation on the basis of temporary solutions to earlier problems. Human language and culture do not suddenly of themselves lift us out of that process. I began this essay with a proposition concerning the untranslatability between the two cybernetically defined informational modes—natural and cultural—that constitute the human being's being, and this remains the core of my answer. We look for, we expect, smoothness, in the sense of a functional or analytic continuity. But clearly this expectation is conditioned by the social organization of our own project of understanding, the same conditioning that led

generations of scholars to gravitate towards a sociological reduction of religion. But the invention of the sacred, the peopling of a sacred dimension with imaginary beings, has first to be grasped within the total field of the human, the entire field of being as a simultaneously natural and cultural being. Only on this level can its true lack of sense be articulated.

The extrinsic cultural system is largely vehicled by language, a grammar of agency, of the constantly shifting positionality of the individual in relation to other individuals within the space-time of the group. So not only does culture confront the pre-cultural in terms of how it arrays, processes and stores information, it also, by introducing a grammar of agency in the form of language, reconfigures human intentionality in relation to how information is activated. *Who is doing it* becomes an integral part of *what is being done*. From the perspective of the intending subject, agency and positionality sink back as constants into the functional context of action. However, behind and underpinning the grammar of agency, lies the general and unageted power of culture itself. This is now articulated through a secondary imaginary network of positionality.

The way in which this secondary network is marked apart from actual relationality within the group draws on a pre-existing category of communicative action: I mean those forms of animal ritual that place certain behaviors in parenthesis in order to reduce inter-individual conflict for the benefit of the group as a whole. The dog will lie down in front of the larger dog in order not to get attacked. The action is marked out as communicative, and the logic is that of avoiding the unnecessary death of an individual which would be counter-productive for the pack. Animal behaviors are ritualized by the application of exaggeration, stereotyping and repetition to what would otherwise be normal functional behavior; all these formal aspects reappear in human ritual.

Like a constant sound we only notice when it's turned off, the general power of a culture can only be sensed and culturally articulated by its members at points of malfunction, recurrent difficulty or complexity; points at which cultural knowledge is palpably not self-sufficient, at which the world-image breaks down, at which a fragile walkway must be rebuilt after every storm. Through the development of a sacred domain as an imaginary network of positionality, human persons get to have a positional attitude, as if towards other real persons, towards those issues, frictions and negations generated by the culture of which they are members, as it lays claim

to operational mastery within the total nature-culture system. Whatever is dangerous, or is simply unplaceable within a culture's categories, becomes material for that culture's construction of the sacred. Clastres' *Chronicles of the Guayaki Indians* opens with one of the greatest *coups de theatre* in ethnographical literature when he is woken in the middle of the night to assist at the rare and precious event that is the birth of a new baby into the tribe. He describes the four or five Guayaki forming a protective circle around the mother, staying silent, unsmiling and careful because they know that the slightest sound or a single word would be enough to attract a mortally dangerous night spirit.

Ritual articulates nature as a complex of spiritual forces that enter into social relations with persons. At the same time it makes the power of society seem natural by locating it in the body and its gestures and in the physical resonances of gesture, of relations in physical space, and of the voice. Power is in the first place a dimension of social relationships in general. The unageted, or collective, force of society itself underlies the later internal distribution of power that comes with the growth of political difference within society. At this point political power ceases to be one and the same thing as the general power of a culture over its members and culture takes on the new task of legitimating political inequality within the group. With political difference the collective and relational aspect of power gets concealed in rituals of authority where power appears as belonging to an individual, an office-holder. But even here to begin with power is directly spiritually conferred, or conferred by one whose power is spiritual. The rewards of power, the privileged access to social goods, the identification of the power-bearing individual as variously destined or chosen, as responsible, as privileged, as mandated, or as representative, all this agenting of social power is built up on the basis of social power itself.

But if ritual is effectively the exercise (or even the manufacture) of social power directly through the body, art seems to commandeer this body-inscribed process and instigate itself as its own power, or a separate field in which power is no longer hierarchical, applicable or applied, the worked material in art perhaps even standing in as a substitute for the cut body in ritual. The democratic possibility in art is that the receiving subject's sense of agency is left open, the receiving subject is not possessed by a spirit.

Art democratizes ritual? Art as an immanent critique of power? But supposing that the association of power with the body most authenti-

cally belongs to the kinds of society in which economic relations are still posed in terms of relations between individuals expressed through an ontological ritual of bodies? Supposing that the development of the autonomy of art as a field coincides with the over-riding of all such relations by the more abstract relations of money? Suppose then that art has become nothing but a privileged zone in which survives a substitute ritual for the bourgeoisie? Isn't what Bourdieu argues in *Les Règles de l'Art* that the final push to define art (here, literature) as a separate field of activity with its own rewards and sanctions comes as a reaction to the flooding in of money, new money, into cultural life in the Paris of Flaubert and Baudelaire? I blow the dust from my copy of the *Communist Manifesto*; it hasn't been out much recently:

The bourgeoisie, wherever it has got the upper hand, has put an end to all feudal, patriarchal, idyllic relations. It has pitilessly torn asunder the motley feudal ties that bound man to his "natural superiors," and has left remaining no other nexus between man and man than naked self-interest, than callous "cash payment." It has drowned the heavenly ecstasies of religious fervor, of chivalrous enthusiasm, of philistine sentimentalism, in the icy water of egotistical calculation. ... In one word, for exploitation, veiled by religious and political illusions, it has substituted naked, shameless, direct, brutal exploitation.

Marx did not foresee the society of the spectacle as the material form taken by monopoly capital and the need to absorb surplus production. The exploitation that in his time was becoming nakedly visible quickly concealed itself within a new universe of images.

But it was Rudolph Bahro's remark that Marx wasn't materialist enough, that the human of dialectical materialism had been flattened out into too few dimensions, that first got me thinking about the material presence of the human being and the embodied intelligence of that being. Music can't be reduced to a social text, or a social process with an integrative and relational social function. Music is not beholden to society but to the whole being that is part inside and part outside society. An anthropology that isn't mere sociology will have to respect that. My patience, my pragmatic respect for beliefs of others in spirits and for the interpretation of certain experiences as spiritual ones, survives my intense suspicion of organized religion because these are sure-fire indicators of that human complexity.

—London, February 2009

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SIGILS

JERRY HUNT

Birome (ZONE): Cube is devised as a reflex memory cabinet with transactional core: the mechanism used is item-element invariant and system transparent; the cube zone is a body-memory exerciser and operates as a continuous “other”: a sexual surface trance derivative emulator. The interior surfaces of the cabinet serve as source skrying planes through access points using a system derived from the angelic tablets of John Dee; the core is a composite mannequin arrangement (homunculus) provided with interactive signature translators derived from a serialized variant of Rosicrucian chess (sigil) and is sensitive to participant skrying action. The participant/cabinet/core interaction is arranged in such a way as to cause the core assembly to generate response signatures translated as context codes along a binary interleaved multiplex transsexual spiral: the spiral contains embedded narrative whorls: each whorl generates a string of sound-image derivatives. Deep whorls (cores) use spatial reposition; continuant whorls (narratives) use temporal reposition. Sound and image sequences and stills are parallel threaded into the multiplex spirals. The system uses an audio/video retrieval mechanism in the surfaces (monitors), sequence and stream interactive with the accumulative history of the participant/cabinet/core exercise”.

* * *

Concerning the system ground of Birome (ZONE): Cube and Birome (ZONE): Cube [frame] of Jerry Hunt, the Tarot is interconnected with a system of Hermetic Qabalah references with prime and subordinate number interlocking systems with the Tarot representing a system of a “soft” divination mechanism. No inherent meaning is utilized in these operations but they are not translated in the same way as John Cage’s use of the I Ching as a mechanism of random numbers. The interdependent, multiple layer

meaning structure, the number translations, and the root prime number systems are all used to produce an inter-layered, multiple plane interdependent system of significances that are translated as codes. The codes are then used systematically and coherently as significant systems in such a way as to produce a coherent language of information exchange. The surfaces of the cards have their principal and prime number significances, symbol and representational surfaces, historical and dramatic narrative as well as their scenario content apparatus supporting each card.

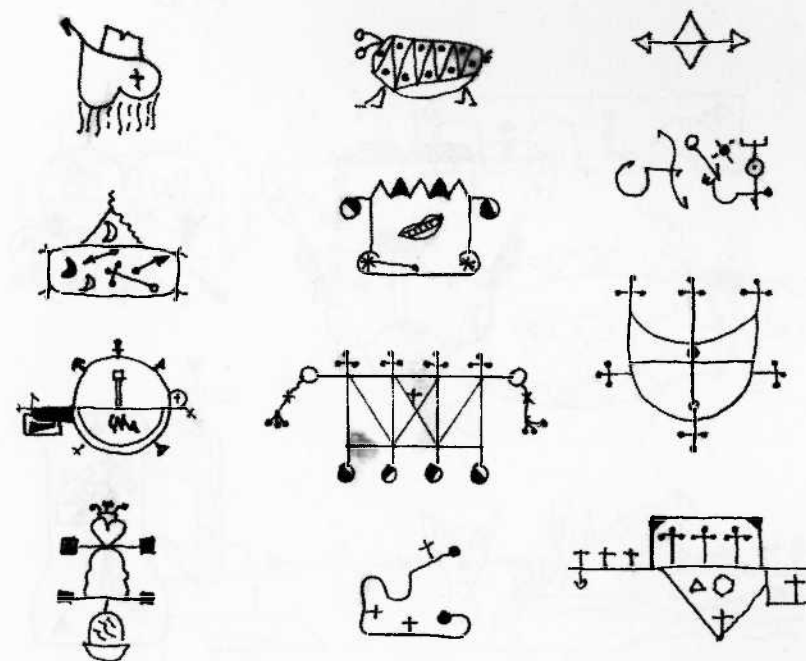
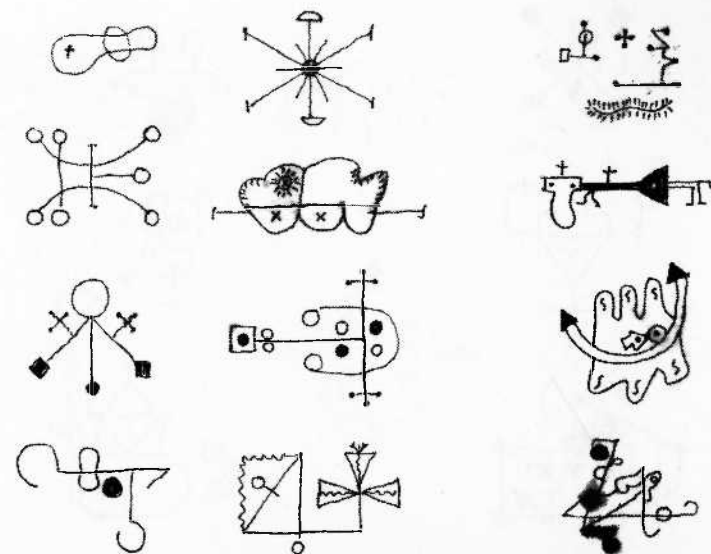
The Qabalah system uses a table of prime and multiple number significances—the set of 0, 1–10, and paths between the principal Sephiroth as subordinate number connections. These are used transparently as arbitrary but coherent, systematic codes for the arrangement and disposition of the content derivatives and structures.

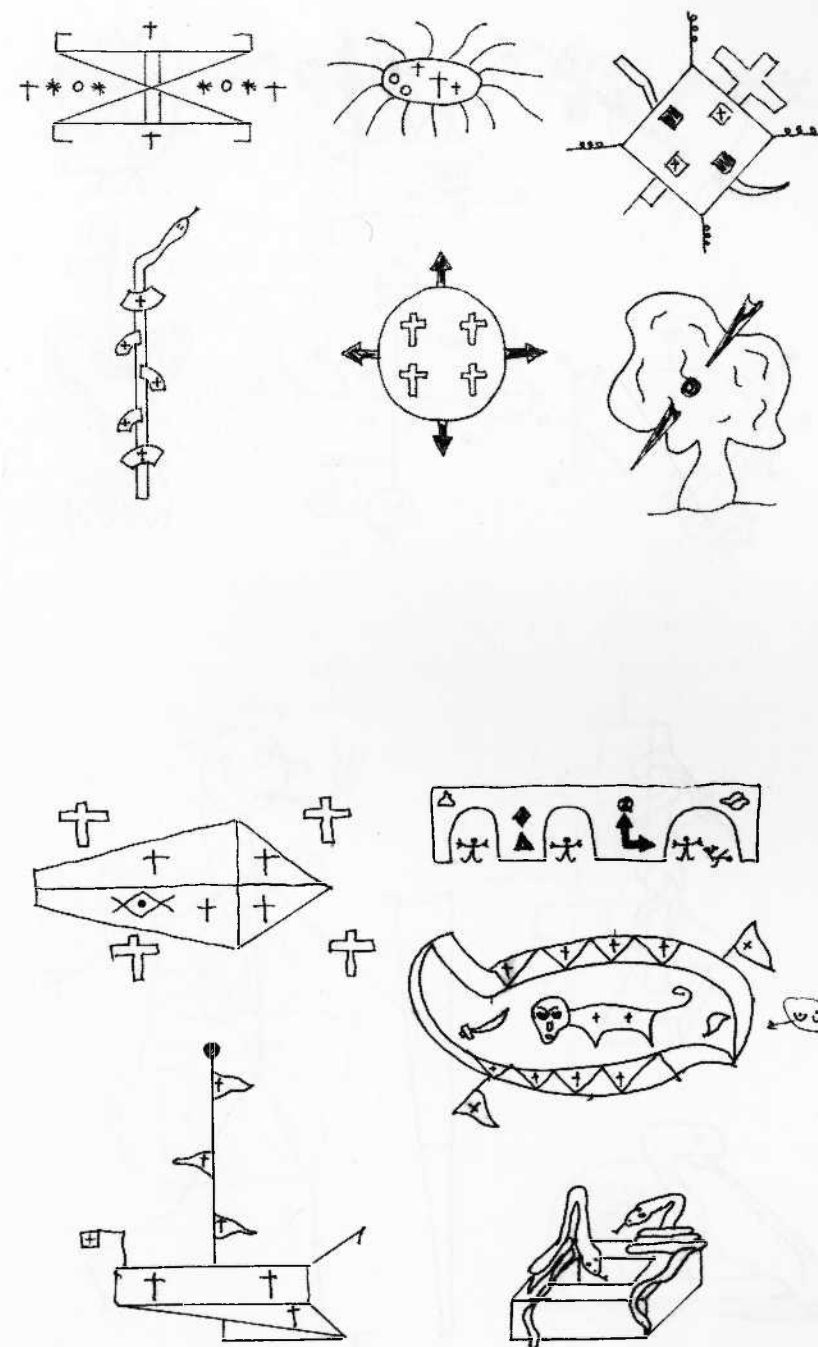
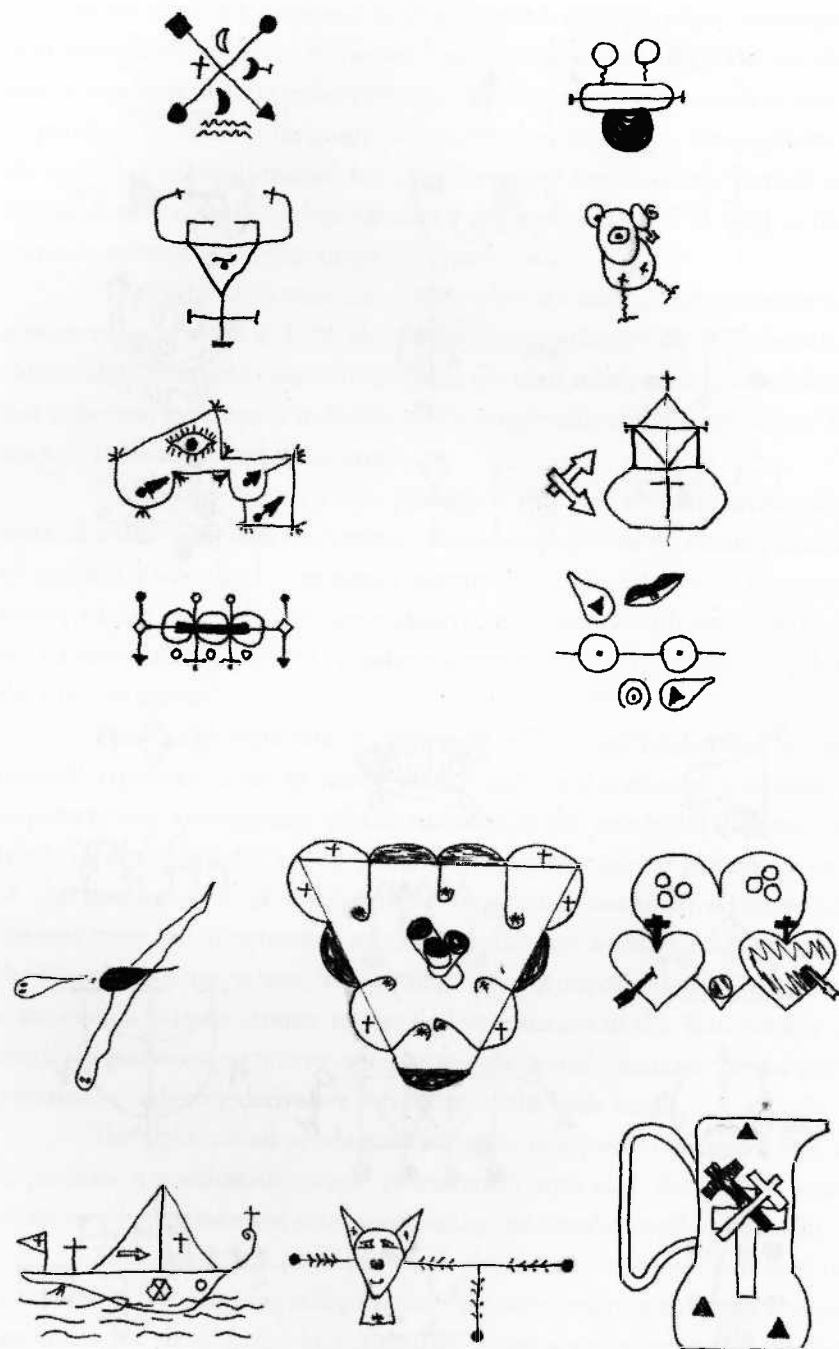
The Watchtowers employ magical number systems arranged in squares with systematic movements within the squares producing a series of magical names and concurrent geometric configurations. The movements within magical sigils are similarly constructed with movements of the names (letters, numbers) producing geometric configurations: sigils of the magical names.

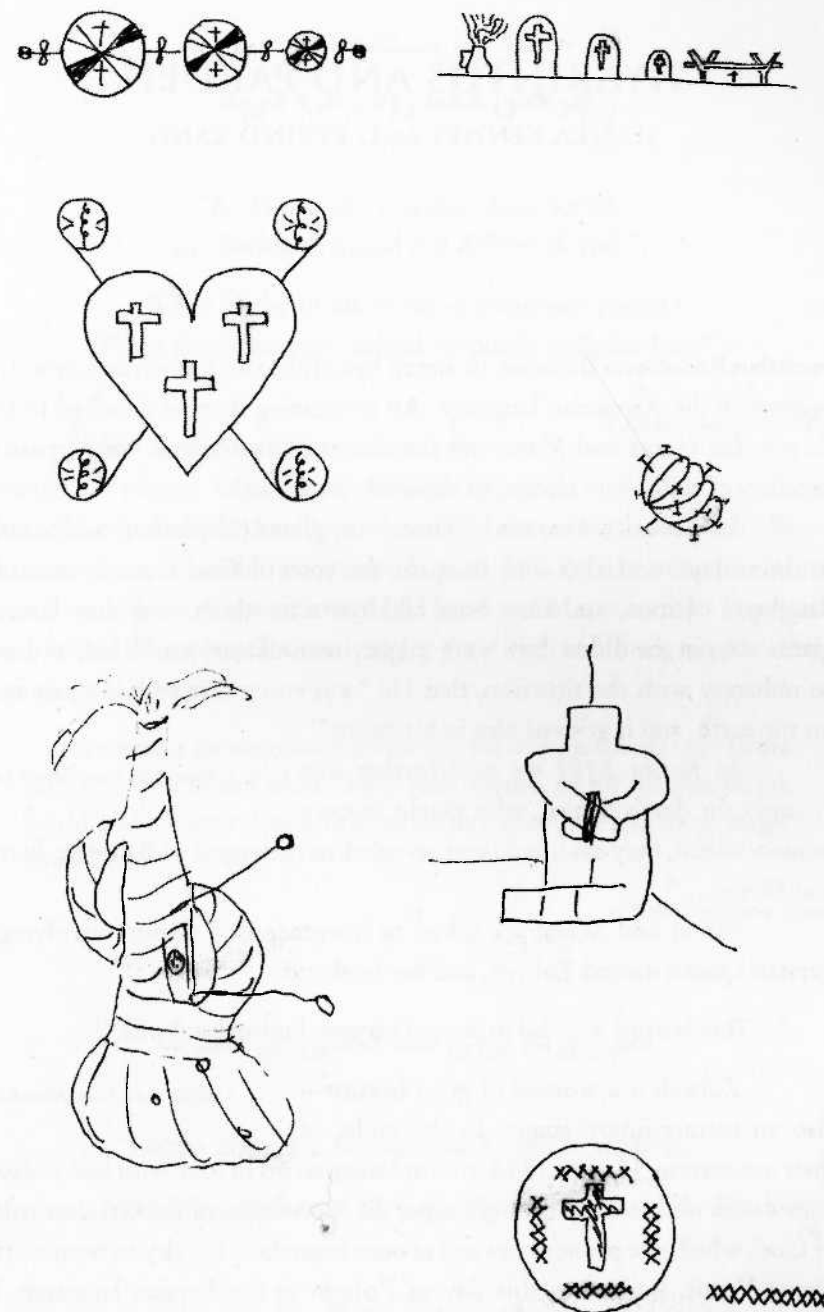
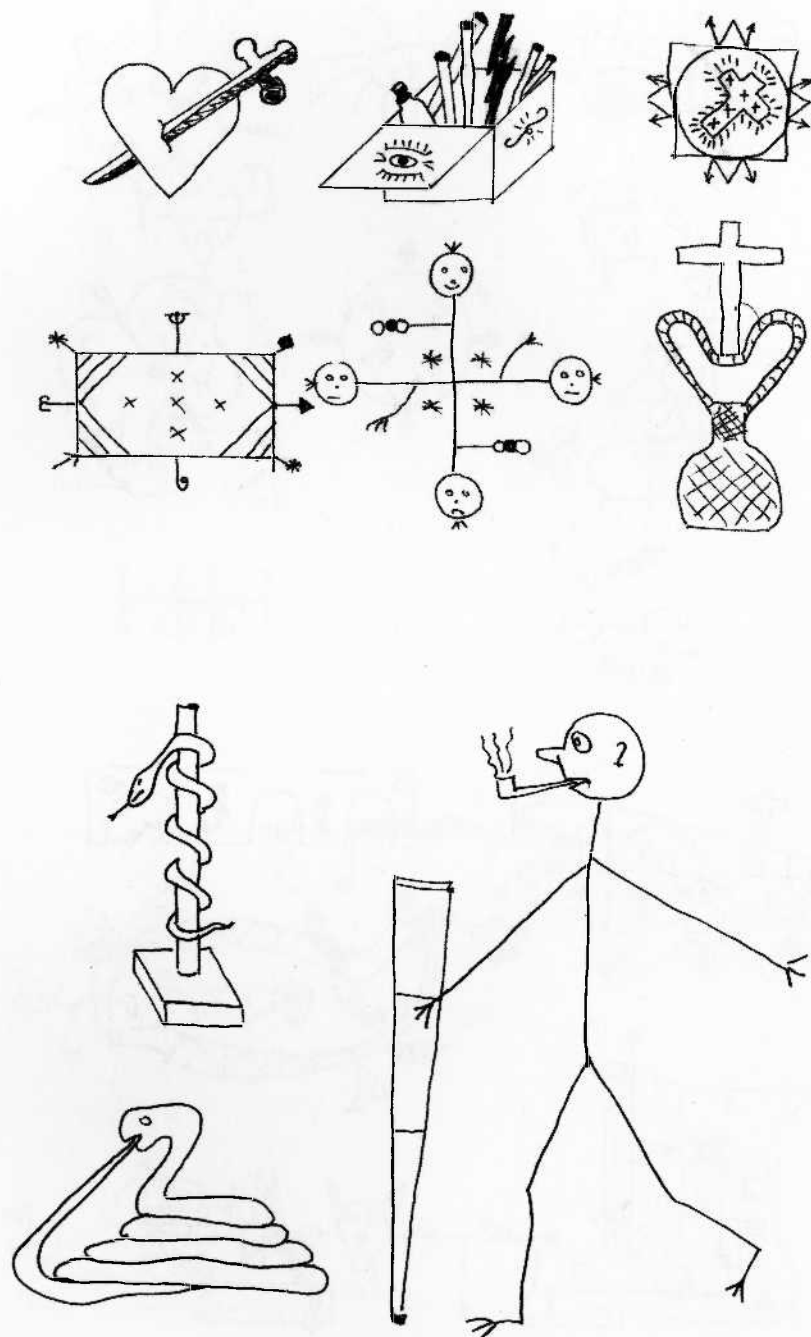
The work's sight-sound content contains direct (sight) and indirect (sound) representations of many of the sigils and patterns. The coding, sequence, and arrangement of the surfaces of the incidental components (sigil, Tarot content derivative, Watchtower significance, or historical detail of the development of one of these traditional methods) is ultimately derived from the Watchtower mechanism, but not as exact correlations of the Enochian letter values. The coding series is represented as connected systems in a manner similar to the sigil production in the Watchtower or magical square arrangements with geometric transformations of the sigils (rotation) producing derivative variations of the code series.

The sight-sound production is finally categorized in such a way as to produce a continuous stream of materials with each defined by some characterizing feature and catalogued using the number-sigil mechanism.

The interactive procedures of short-term memory exercises of comparison and mapping using feature detection begin to scan and analyze the codes for significant features during retrieval procedures and are presented as sight-sound emanations.







HYAKINTOS AND PARDEH

JESSIKA KENNEY AND EYVIND KANG

I

Hyacinthus Racemosus Dodonet, or starch hyacinth, also known as *haurut* (or *maurut* in the Armenian language. An interesting story is attached to this flower, for Harut and Marut are the names of two angels “of surpassing excellence” who were chosen to descend to the earth.

In *Genesis* 6:4 we read: “There were giants (*Nephillim*) on the earth in those days; and also after that, for the sons of God came in unto the daughters of men, and they bore children unto them, and they became giants who in the olden days were mighty men of renown.” The Lord was so unhappy with the situation, that He “was sorry that he had made man on the earth, and it grieved him in his heart.”¹

In *Koran* 2:102 we read further that
“...only the devils denied, who taught sorcery
to men/which, they said, had been revealed/to the angels of Babylon, Harut
and Marut....”

Harut and Marut are asked to intercede in a dispute involving a Persian Queen named Zohreh, and her husband.

“...They learned what led to discord between husband and wife.”²

Zohreh is a woman of great beauty—
also an extraordinary singer. In the midst of
their arbitration, Harut and Marut find themselves in love with her. Zohreh
resists their desires until they grant her the knowledge of the Greatest name
of God, which she pronounces and at once ascends to the sky to become the
planet Venus, known to this day as Zohreh in the Persian language. In
Persian poetic symbolism, she is often depicted as a celestial lute or harp
player who is sometimes inclined to respond to the efforts of earthly musi-
cians. The great Persian poet, Hafez, refers to this connection in the

Takhallus (signature) to his epic poem *Sāghi Nāmeḥ*:

که حافظ چو مستانه سازد سرود
ز چرخش دهد رود زهره درود

“Ke Hāfez cho mastāne sāzad sorud
Ze charkhash dahad rud Zohreh dorud.”

When Hafez in intoxication composes a song
From the firmament Zohreh responds with her lyre.³

3. *Divān-e Hāfez, Sāghi Nāmeḥ*, tr. Kenney.

Harut and Marut are ultimately con-
demned to remain imprisoned within a pit in
Mount Damavand. The finality of the angels’ descent into the earth offers a
counterpoint to Zohreh’s ascent into heaven. In a Persian miniature paint-
ing we are given a dramatic image of Harut and Marut in their imprison-
ment within the mountain, tied up by their feet and hung upside down
above a pool of water.

“...the distance between their mouth and the water amounts only to the
thickness of a sword blade. They shall remain so till the end of the
world, and whoever desires to learn sorcery goes there and learns magic
from them.”⁴

4. *Tarjoma-ye tafsir-e Tabari*, I, pp. 96–97.

2

دلم ز پرده برون شد کجائی ای مطرب

“Delam ze pardeh borun shod, Kojā-i ey motreb.”

My heart from the pardeh tears through. Where are you? Oh! Musician!

بنال هان که ازین پرده کار ما بنواست

“Be nālḥān kaz in pardeh kār-e mā be navāst.”

To moan, to moan, for from this pardeh our work in song/well-being comes.
—Hafez⁵

Pardeh: 1. curtain; screen; veil; mantle; membrane; layer; coating; film; act (as in a play); painting; tableau; reserve; modesty. 2. (musical) note 3. (musical) scale 4. fret⁶

5. *Divān-e Hāfez, Ghazal 26.4*, tr. Kenney.

If separation and union is the lover's discourse, pardeh is the intermediary and the boundary alike. Hafez in his supernal ambivalence, gives the feeling and knowledge of pardeh transmissions. His pardeh is full of the mundane pragmatism of a first music lesson and the hyper reality of infinite intersubjectivity, with human agony and love suspended in between. The senses, the entry points and the interstices of phenomenal existence, are also pardeh. In fact, every pardeh in the body has a different quality, experienced by the sound which causes it to move, to vibrate.

6. *Persian-English Dictionary*, S. Haim, ed. (Tehran: Farhang Moaser Publishers, 2003.)

The ear drum itself is the pardeh of the ear (*pardeh-ye gush*). The inner ear and the cochlea is our chamber of music. The folds of the voice, cords, create a curving, stretching surface which is also a pardeh, transmitting the tiniest upper partials of their vibrations through the posterior structures of cartilage, called cuneiform and corniculate. In these spectral shapes, ineffable poems are inscribed, as if on the face of a petal. This resonance interacts with the drum-like membranes of pardeh, in breath, in voice, in fascial interconnectivity and intercellular respiration, the breath, the blood, the pulses.

Every pardeh bears the weight of each moment's experience, and sometimes ruptures or disrupts its own sound, the tearing through of the heart of Hafez. The pericardium, the pardeh surrounding the heart (*pardeh-ye del*), is the lilypad resting on the watery mirror, holding the blossoming of the heart's cries. A pardeh, which is also the name of the fret on the neck of the setar, might speak of the fragility of the deer's leg. Its hoof is balanced on the edge of an abyss, tapping on the precipice. A fret, a note, a position in the cosmology of melody, pardeh is the remembrance of the atmosphere of a musical entity.

Melodic modulation can be described as *pardeh gardani*, to rotate, turn, or cycle through the progressions of a melody⁷. The stations and forms of love, as the

7. Personal communication, Dr. Hossein Omoumi.

pardeh gardani, offer themselves in music in messages as clear as our hearts' ears. Yet there is a constant shifting also occurring in the listener as well as the music. Every correspondence reserves for itself a manner of self-composition, and in this way the meaning and the sound change even as the names of music continue their own mythology-laden courses. Every pardeh which hides from us, hides something from us, also shows us something else, and invites us to this inner limit.

مغنی از آن پرده نقشی بیار
بین تا چه گفت از درون پرده دار

"Moghani az ān pardeh naghshi biār
bebin tā che goft az darun pardehdār"

Musician, from this pardeh bring forth an image
Reveal that which was spoken from within by the pardeh-holder
—Hafez⁸

8. *Divān-e Hāfez, Saghi Nāmeḥ*, tr. Kenney.

3

I was a photon, I was a spark.
I was the divine hyacinth.
After my death, a flower grew from my blood.
Apollo inscribed the syllable ("Ai Ai") on my petals.

I was "like lilies with their silver changed to crimson." —Ovid 10: 213

I was the son of Kleio, the Proclaimer.
My father was King of Macedon, Pierus himself.
I was raised by the Rememberances; I am a Spartan.
I was born to love, to be in love, to be loved.

Nymph Argiope, my lover—the first to love other men.
My lover Zephyrus ruled the west wind.

Thamyrus, my first lover, after my death:
He challenged the Muses to a music contest.

Beloved Erato with Lyre, Euterpe with Launedas
 If he was better, he wanted to have them all.
 He would have even ravaged my mother!
 But he was not as good as them!

They chose the punishment: "deprived him of both his eyes
 and his skill in singing to the lyre" —*Apollodorus 3:3*

I was loved by Apollo, I did everything for him.
 He wanted to play, to throw the discus together.
 We stripped naked, rubbed ourselves with oil.
 What agony for Zephyrus to watch us play!

The west wind blew up when Apollo threw the disc into the sky.

Fearless, confident, in Love, I ran to catch it.
 The disc hit the ground suddenly, startling me.
 It bounced strangely towards me.
 It hit my neck, slicing right through.
 I screamed in agony, blood pouring from my throat.
 Apollo turned pale, held me, tried everything to save me.
 He tried every herb that could cure me.
 Too late, too late, my life poured into the ground.

Apollo screamed, he cried in misery.
 "No one will forget you in all of Sparta!
 Ai!
 Ai!"

Acknowledgements: We wish to thank Ostad Hossein Omoumi with whom we study Classical Persian music and poetry. Note on transliteration: As we have included the Persian text, our transliteration style is based on Iranian Persian (Farsi) pronunciation as it is often used in Iranian culture for the singing and declamation of the texts of the Classical Persian poets. [ā] is pronounced similarly to "mark", and [a] similarly to "have".

MUSINGS ON THE HERMETIC LYRE

WILLIAM J. KIESEL

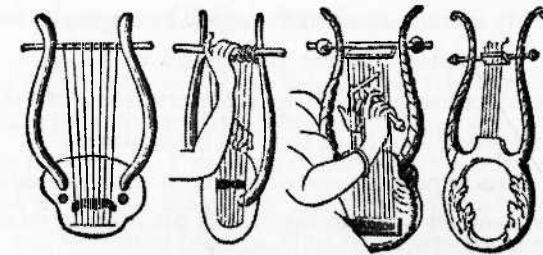


Figure 1. Different forms of the Lyre.

"The entire universe is like a lyre tuned by some excellent artificer, whose strings are separate species of the universal whole. Anyone who knew how to touch these dexterously and make them vibrate would draw forth marvelous harmonies. In himself, man is wholly analogous to the universal lyre." John Dee, *Aphorism XI; Propaedeumata Aphoristica*.

In the aphorism given above the Elizabethan magus John Dee poetically states the doctrine of correspondence found in Hermeticism wherein the microcosm is in union with the macrocosm. But why would a mathematician like Dee use the language of music in order to make this point? The answer lies in the fact that musical theory is wrapped up deeply in mathematical qualities expressed as harmonics and to a renaissance philosopher such as Dee these precise measurements informed his search for universal understanding. The renaissance thinker was always keen to learn about the universe by observing nature's rhythms and sought to use these observations in order to bring about changes in the world that were not only helpful for mankind but the universal order itself. Nature triumphs over Nature sayeth the wise. For if one could effect change in the universe by following its laws, then one was participating in the divine work of creation thus uniting oneself with

the creative source of the universe. Dee uses the word vibrate to illustrate not only that sound itself is made by the movement of air but that the gradations of all manifestation are merely different rates of vibration ranging from the higher subtilized divine world to the lower more dense material world. Just as there was the idea that the universe consisted as a unity divided up by degrees of vibration, so the philosophic idea of the Hermetic Ladder expressed the successive steps that lead from the terrestrial to the celestial realms.

Dee's choice of the lyre is no accident either as the instrument figures prominently in traditional mythological iconography found in western esotericism, particularly in the personages of Hermes, Apollo and Orpheus, whose collective legends help to preserve some of the musical theories which have come down to us through the centuries.

By the musical proportions of Pythagoras, a mathematical theory of music was determined wherein the idea of pitch being related to length of string was established. According to Pythagoras, music and astronomy were seen as sister sciences, and Plato agrees. Plato admired the Pythagorean search for numbers in musical concords but criticized the purely empirical approach, which lacks the push beyond the sensible world into true being where actual knowledge, it was alleged, was to be had. The theory of proportion and the idea of the nature of sound as vibrating air preceded and made possible the Pythagorean musical theory.

Hermetic philosophy teaches a doctrine of correspondences between the macrocosm and the microcosm which the Emerald Tablet expressed through a maxim that perhaps many have heard: As above, so below. The idea was that through the study of nature, one could also learn about God and, since after all one was made in his image, the self as well. These contemplative, even mystical, meditations were also taking place among the vessels and apparatus in the laboratory where the alchemist would replicate the conditions of Nature in the quest for the Philosopher's Stone.

The ascent and descent of the soul, like the rising and setting of the sun was the chief concern of the renaissance interpretation of the myths. In considering the lyre itself one can perceive the high notes resonating with the divine world and low with that of the underworld. But the successive stages of ascent each had their correspondences within the parts of the body, the minerals of the earth, the plants of the vegetable world and the astral bodies in the celestial sphere. Each gradation had correspondence in these

respective worlds. Thus each stage could be aligned with a planet, an herb, a metal and a part of the body. In alchemy these were expressed as the celestial, vegetable, mineral and animal worlds respectively. Each of these worlds overlapped with adjacent worlds above or below in terms of rate of vibration as stated above, the highest being divine and lowest being the material world. Whereas the density of the terrestrial world was far removed from the subtilized divine world these nonetheless shared qualities by their harmonic relationships.

The Septenary Mysteries of Sidereal Harmonics

The aetherial diffusions caused by the planetary bodies moving through space were held to sound specific tones ordered according to the harmony of the spheres themselves. This series of harmonics was based upon the various sizes and weights of the planets and their respective reverberations in the heavenly and terrestrial spheres. Thus seven was the number most often favored for stringed instruments, though 4, 9 and 12 were also employed. As we will see in the emblems accompanying this article, the seven strings were "tied" to the seven planets and their correspondences in the human body, which in turn were equated with the seven metals in alchemical tradition. Numbers, correspondences and the like are a means by which traditions may preserve their doctrines. The mathematical theories of harmonics convey a vast array of possible combinations with dissonance and harmony as a means of audible verification. But pure math cannot convey the totality of the musical experience as Plato has pointed out in his exposition of the Pythagorean method. Part of the sympathetic qualities these correspondences share is that of resonance. The hermetic principle of vibration supports the idea that specific harmonics have their correlation in the mineral, plant, animal and the celestial worlds. Just as an operatic voice can cause a resonance in a wine glass, so also are the vibrations of stellar bodies reflected in the sublunary worlds. It was just this kind of thinking which lead the church to forbid the use of certain tones in musical composition. The implication was that some tones had correspondence with the infernal regions and thus carried with them malefic effects.

Marsilio Ficino was particularly taken by Hermeticism's tenets regarding the intermediary realms above the corruptible earth and below the spiritual world. Thus a doctrine of correspondences wherein the planetary bodies had their jurisdiction in the sublunary world whereby the

movements of the planets had an effect in the world of man. Ficino's approach was to eschew the practice of demonic influence also ascribed to these things by magicians, instead he stressed that these were the workings of Nature itself and that by the study of Nature man could affect miraculous effects according to nature. The power of words and harmony played an important role among the theories of Ficino's works, which had their root in the writings of Iamblicus and Plotinus—two authors whose works he had translated as well. Thus in Ficino's view, the music of antiquity was a kind of ceremonial magic, of which he was keen to revive (again under the designation of Natural as opposed to demonic magic). The times warranted caution, he did not want to be charged with sorcery so he was careful to assure his readers that his theories had nothing to do with the worship of stars or demons, but rather the observation and practical operation of natural forces. The ascent of the Hermetic Ladder through the seven planets and beyond into the intelligible stars was the route through which the doctrine was administered—this was (like Poimanders)—a means of purification as opposed to the acquisition of powers to be used on the earth.

But while the transmutation of metals was indeed among the operations of the alchemist, this was but one aspect of the art which also involved a mystical or inner alchemy which was expressed elaborately through the use of mythology, allegory and a particularly popular visual art form at the time called *Emblemata*. Emblems are usually accompanied by mottoes or epigraphs and were intended to convey some allegorical or moralistic teaching.

Resonance of Myth in Alchemical Emblemata

The auditory world of tones is indeed powerful, but just as powerful are the effects produced in the world of images. The various qualities that come together in hermetic composition, whether musical or visual, produce specific effects based upon the doctrine of correspondence already explained. Consequently the resonances produced by alchemical imagery depicting, say, a lion or a sun would share the effects of fire and gold, which are among the correspondences of the series. This was just as true with elemental qualities, human temperaments, historical epochs and geographical locations. Each of these things are seen to be microcosmic aspect of a macrocosmic order and the understanding and utilization of these principles allowed the proper link or resonance between the terrestrial and celestial worlds. The

numbers, colors and the like held certain properties and ratios observed by the practitioners of the tradition and thus nearly infinite harmonious combinations were possible.

We shall begin with the story of the birth of Hermes, who on that same day invented the lyre from the shell of a tortoise. This tortoise was encountered just outside the threshold of his mother's cave and Hermes wondered at its waddling charm, scooping it up and declaring that while it lived it would be proof against witchcraft but when dead it would surely make sweet music. At this he tucked the creature under his arm and retreated back inside the cave where he proceeded to empty the contents of the shell with a sharp implement all the while attaching curved horns and stretching sinewy strings across the fashioned instrument. It was this instrument that charmed Apollo himself and stole away his anger at Hermes whom had garnered the Sun God's wrath by stealing his cattle by night. When Hermes gave Apollo the Lyre as a gift, Apollo returned the favor by bestowing the gift of his golden staff and of prophecy upon Hermes—so we can see the importance music has in communicating secret knowledge.

In another story in the life of Hermes we are told that the Herald of the Gods encountered two serpents locked in battle where upon he struck his Apollonian staff between them and caused them to entwine themselves harmoniously about it. This is where we get the symbol of the caduceus so prominent in alchemical literature where the serpent is also figured as a volatile force, thus Hermes is seen not only as a reconciler between to opposing forces but also the act symbolically represents the fixing of the volatile.

There is a resonance between the reconciliation of Hermes and Apollo and the two serpents tamed by the caduceus. Apollo bestows the lyre unto Orpheus who uses its awesome sounds to overcome several obstacles including staying back the crushing stones threatening the Argo, lulling the serpent which guarded the Golden Fleece to sleep and to retrieve his love Eurydice from the very depths of Hades itself. Orpheus was said to be able to charm beasts, trees and even mountains with his playing of the lyre and this is symbolically in accord with the three worlds of alchemy being the animal, plant and mineral worlds respectively. Later at the death of Orpheus the gods plead in his favor with Zeus who in turn puts the lyre in the sky as the constellation of Lyra to commemorate the deeds of the same.

Figure 2. *Philosophia Reformata*, 1622.

In this emblem, from the *Philosophia Reformata* by Johann Daniel Mylius, we see the numbers 4, 7 and 12 represented in the various figures. There are four flaming spheres, seven ruling planets and their respective twelve astrological signs. Hermetic Qabalah postulates four worlds, which range from the most subtle to the most dense not unlike the vibratory scales of alternately tight and loose strings on the lyre itself. Fire is much more subtle than the solid rock wherein the planets are represented.

The seven metals embodying the god forms of the planets were also equated with the seven tones in music. The principle of vibration is implicit in the example of stringed instruments here shown as a lyre being played by Apollo. Some 5th century texts, such as Euripides, spoke of Apollo as the sun, which was common in the iconological tradition in art. Apollo secured early fame for himself among the gods when he slew the Pythian serpent that roamed Mount Parnassus and guarded the Oracle of Delphi. Just as Hermes tamed the dueling serpents with the staff Apollo gifted him, so too does the Far-shooter fix the volatile by piercing the scales of Pytho. These planetary characters endowed with their respective attributes are meant to portray the varied qualities associated with the deific archetypes and the corresponding materials over which they hold rulership.

Figure 3. *Musaeum Hermeticum*, 1625.

In this emblem Orpheus is depicted with his lyre amidst the nine muses. The three muses above are demonstrating the unification of the four elements while also expressing their active and passive natures. The active principles; fire and air are signified by the upright triangle, the flaming salamander and the skyward winds, while the passive principles of water and earth are indicated by the inverted triangle, the countryside and the waves of the sea. The third muse presents a hexagram, itself a symbol of union, harmony, the sun and gold. Meanwhile the remaining muses and Orpheus together are seven in number and thus shown underground commemorating not only his descent into the underworld but also to imply the alchemical metals which have their correlates in the seven classical planets. As if to confirm this the hermetic maxim "as above, so below" is again present, this time within the light and dark arcs framing the scene, indicating celestial and terrestrial stars, reflecting the doctrine of the metals resonating with the respective planetary bodies. Orpheus' depiction at Mount Parnassus and the Castalian Fount itself is a kind of resonance, his association with Apollo apparent.

The well symbolizes truth since "truth comes naked out of the

well" but is also a reference to the alchemical phrase *Visita Interiora Terra Rectificando Invenies Occultum Lapidem* (visit the interior of the earth and through rectification you will find the hidden stone), which forms the acrostic VITRIOL, an acidic substance used by metallurgists to draw precious metals from hard stone. This is another reference to the journey of Orpheus into the underworld in order to retrieve Eurydice.

"Just as the lyre is an arrangement of harmonious and disharmonious tones, most apt for expressing a very sweet harmony which is wonderful in its infinite variety, so the universe includes within itself parts among which a most close sympathy can be observed, but also other parts among which there is harsh dissonance and a striking antipathy. The result is the mutual concord of the former and the strife and dissension of the latter together produce a consent of the whole and a union eminently worthy of admiration." —John Dee, *Aphorism XII. Propaedeutumata Aphoristica*.

The same analogy has been made in the *Odyssey* as Odysseus took up his bow when he;

"scanned every inch, then, like an expert singer skilled at lyre and song—who strains a string to a new peg with ease, making pliant sheep-gut fast at either end—so with his virtuoso ease Odysseus strung his mighty bow. Quickly his right hand plucked the string to test its pitch and under his touch it sang out clear and sharp as a swallow's cry." —*The Odyssey*, Fagles translation.

These two examples serve to show how nature can hold things together by the tension of opposing forces. It is just such a tension that allows harmonious or discordant sounds to be played upon a lyre, and in the tradition of hermeticism within the microcosmic being of the self, which reflects the macrocosmic divinity. In the life of Orpheus these opposing forces can be seen in his attempt to overcome the power of Hades in order to bring his lover Eurydice back from the underworld, having died by the bite of a serpent. Orpheus was able to sooth the souls of the damned with his playing, so impressing Hades so that the lord of the underworld allowed him to return with Eurydice on the condition he did not look back until he emerged therefrom.

Apotheosis

The journey of the lyre through the mythological legends shows the alchemical process in action. From its invention in the birth cave of Hermes to the solar light of the far-shooting Apollo and thence into the underworld through the descent of Orpheus and finally placed among the stars of the celestial sphere as the constellation of Lyra by Zeus himself, one may see the process of resonance acting above and below according to the hermetic axiom.

Unlike Hermes and Apollo, Orpheus was mortal but through the accomplishment of his deeds he was able to attain to the summit of Olympus after his death. The legend offers immortality to the mortal soul, which places it distinctly into the alchemical tradition of the transmutation of base metals into gold.

IN THE NAME OF GOD THE GRACIOUS THE MERCIFUL

Recognition of the Beloved

YUSEF A. LATEEF

In paraphrasing the Promised Messiah: Hadhrat Mirza Mirza Ghulam Ahmad (peace be upon him), I venture to say: "A person's love of wealth or offspring or wife or his soul being attracted towards a musical voice or (musical sound) are all indications of his search for the True Beloved." (*The Philosophy of the Teachings of Islam*, p. 52)

The Holy Quran says: "Allah—there is no god save Him, the Living, the Self Subsisting and All-Sustaining. Slumber seizes Him not, nor sleep. To Him belongs whatsoever is in the heavens and whatsoever is in the earth." (Holy Quran, ch. 2, v. 256)

Therefore it is logical to conclude that when sounds of beauty are emitted or sustained through a human being, the sounds themselves may not be only lifeless vibrations, for the Holy Quran says: "It is He Who brings the dead to life, and that He has power over all things." (Holy Quran, ch. 22, v. 7)

What I am suggesting here is that just as God has the power to make the dead and barren earth vibrate with new life when rain falls upon it. He, also, has the power over things other than this phenomenon of nature. Therefore, I postulate, in regards to the sounds mentioned above, that it is Almighty God Who has bestowed the beauty which the sounds emit.

The reality here is that man cannot perceive with his physical eyes the Imperceptible Being, Who is latent like perfume in a rose. For example: A man cannot see the perfume within a rose but yet he can perceive the sweetness of the rose, through the God-given faculty of smell, which God (Razzaq-The Provider) has provided man with, unless he has lost his God-given ability to distinguish odors. Likewise a man cannot perceive with his physical ears the Imperceptible being Who is latent in the sound of beauty because Allah is (Al-Ghaibi) The Unseen. (Holy Quran, ch. 2, v. 4)

Also, if man can receive an impress of beauty from the Beloved, so

can a musical sound be the recipient of an impress of beauty from the Beloved, i.e., be it the will of God. The inherent fact here is that Allah "He is the Lord of all things" (Holy Quran, ch. 6, v. 165), which includes man's ability to hear the beauty of a musical sound and at the same instance he has the God-given realization that this hearing-beauty experience denotes an indication of the True Beloved.

However, "...among them are some who give ear to thee; but We have put veils on their hearts, that they should not understand, and deafness in their ears. And even if they see every sign, they would not believe therein...." (Holy Quran, ch. 6, v. 26) Moreover, it is not at all odd to ascertain that the beauty inherent in an unseen sound of beauty is an indication of one of the special functions of the True Beloved, for Moses (who upon be peace) said, "Our Lord is He Who gave unto everything its proper form and then guided it to its proper function." (Holy Quran, ch. 20, v. 51) And elsewhere the Holy Quran says: "And to Him belongs whatever is in the heavens and the earth...." (Holy Quran, ch. 16, v. 53)

To be able to perceive this beauty is no doubt a blessing from Al-Rahman (The Gracious) the True Beloved, for He has said: "And whatever blessing you have, it is from Allah...." (Holy Quran, ch. 16, v. 54) Consequently, the beauty of the musical sound belongs to the True Beloved, because He has said: "...All sublime attributes belong to Allah and He is Mighty, the Wise." (Holy Quran, ch. 16, v. 61)

And the ear and heart that understands this beauty of sound is due to be grateful to the True Beloved, for He has said: "And Allah brought you forth from the wombs of your mothers while you knew nothing, and gave you ears and eyes and hearts that you might be grateful." (Holy Quran, ch. 16, v. 79)

It is religiously correct to say that the beauty of a musical sound belongs to the True Beloved, because He has said: "All grace is in the hand of Allah. He gives it to whomsoever He pleases. And Allah is Bountiful, All Knowing." (Holy Quran, ch. 3, v. 74)

It appears that there are those who hear and those who do not hear the denotation of an indication of the True Beloved within a musical sound, for it is written: "And be not like those who say: 'We hear,' but they hear not." (Holy Quran, ch. 8, v. 21) And "Surely, the worst of beasts in the sight of Allah are the deaf and dumb, who have no sense." (Holy Quran, ch. 8, v. 23)

The anomaly here is that Allah is telling man that he should hasten

to listen and respond to the beauty fashioned by The Beloved, because if one delays doing so, unforeseen circumstances may intervene to make one's heart hard or rusty and then one may refuse to listen to beauty of any kind. Therefore it is important for the listener to embrace, as soon as possible, this Godly attribute of beauty provided by Al-Rahman (the Gracious) for this attribute is purely one of the Divine favours from the True Beloved.

"Therein, verily is a reminder for him who has an understanding heart, or gives ear and is attentive." (Holy Quran, ch. 50, v. 38)

The reminder to listen here means to listen with the heart, the soul, the conscience and the mind which signifies the best part of a thing.

"Such is Allah, your Lord, the Creator of all things. There is no god but He. How then are you turned away?" (Holy Quran, ch. 40, v. 63)

And are you aware?

"It is He Who makes people laugh and makes them weep." (Holy Quran, ch. 53, v. 44)

Yes—"And by the soul and its perfection." (Holy Quran, ch. 91, v. 8) One meaning of this verse is that all the properties which the great heavenly bodies such as the sun and the moon, etc. devote to the service of God's creatures, bear witness to man having been endowed with similar qualities in a high degree. In fact, man is a universe in miniature and in him is represented, on a small scale, all that exists in the external universe. For example: While visiting Copenhagen, Denmark, during the early sixties, I had the privilege of hearing the late Ben Webster perform the Beatles' composition *Yesterday* on tenor saxophone, for primarily a Danish audience. Like the moon, as he illustriously articulated the composition, he transmitted to those who were in the dark, the light of the Beloved, which he borrowed from the Great Original Source—The Beloved. I say this because before he finished the first chorus approximately 90% of the Danes, having heard the ways of beauty, were quietly weeping and as I have quoted above: "It is He (The Beloved) who makes people laugh and makes them weep."

I am suggesting that in the above event there was a possibility that the illustrious and pervasive sound coming through Ben Webster's saxophone was extolling the glory of the Beloved and at the same time the Danes and myself, being affected through listening, became part of the collective evidence that the whole universe bears to the Unity of God. The following verse alludes to this possibility: "The seven heavens and the earth and those that are therein extol His glory; and there is not a thing but glorifies Him

with His praise, but you understand not their glorification. Verily He is Forbearing, Most Forgiving." (Holy Quran, ch. 17, v. 45)

The above narrative tells us that man has been created to serve a great purpose—to develop and reflect in his person Divine Attributes.

"What did you think that We had created you without purpose..." (Holy Quran, ch. 23, v. 116)

"He has been endowed with a Divine personality and is manifestly the central figure in the whole creation or at least that part of the creation which is related to our universe." (Holy Quran, Commentary 2022, p. 706)

In order to throw more light on the Websterian event that I have previously mentioned, I venture to say that there was another force involved other than Ben Webster's intelligence. The following explains what I mean by this statement: "Holy is He Who created all things in pairs, of what the earth grows, and of themselves, and of what they know not." (Holy Quran, ch. 36, v. 37)

Commentary

"The verse reveals truth, viz., that God has created all things in pairs, which was simply inconceivable at the time the Quran was revealed and among the people to whom it was revealed.

"Science now has discovered the truth that pairs exist in all things, in vegetable kingdom, and even in inorganic matter. It has yet to unfold this truth in all its various details. Even the so-called elements do not exist by themselves. They depend upon other things for their sustenance. This scientific truth applies to human intellect also. Until heavenly light descends, man cannot have true knowledge which is born of a combination of Divine revelation and human intelligence." (Holy Quran, Commentary 2337, p. 2196)

And from this commentary I conclude that it was the Beloved, Who bestowed the beauty which the sounds emitted. And further evidence that it was the Beloved Who was responsible for the beauty is that approximately 90% of the audience wept as the result of listening, and, as I have cited previously: "It is He Who makes people laugh and makes them weep." (Holy Quran, ch. 40, v. 44)

By the grace of the Beloved I shall, be it the will of the Beloved: venture to interpret the following Quranic verse in its relation to musical sounds.

"And He it is Who has caused the two seas to flow, this palatable

and sweet, and that salt and bitter; and between them He has placed a barrier and an insurmountable partition." (Holy Quran, ch. 25, v. 54)

Taking two waters in the verse to represent first—the sounds that emit beauty bestowed by the Beloved and secondly—lifeless sounds, the verse signifies that both the sounds tempered by the Beloved, and the lifeless and bitter sounds still continue to exist in the world, side by side, the former yielding sweet sound-nectars and quenching the thirst of spiritual listeners and the latter barren and bitter, incapable of producing any good results. The reason being; "Evil things are a characteristic of bad men, and bad men are inclined towards bad things. And good things are a characteristic of good men, and good men are inclined towards good things." (Holy Quran, ch. 24, v. 27)

The Arabic word for evil in this verse is *KHABITHAT*, meaning evil deeds or obscene words or expressions, the verse purports to say that evil persons do evil deeds or indulge in obscene and foul talk and scandalmongering, while nothing comes out of good and virtuous persons but righteous deeds and pure and noble expressions.

When the sounds bestowed by the Beloved are mixed with the lifeless sounds, the resulting mixture is bitter. As long as these two sounds keep themselves separate, they maintain their respective qualities. Therefore, in order for one to position one's self as a candidate hoping to produce sounds tempered by the Beloved, I suggest that they continuously strive to become a good and virtuous people. This is suggested in that God has said: "Whatever of good comes to thee is from Allah, and whatever of evil befalls thee is from thyself...." (Holy Quran, ch. 4, v. 80)

And it is gratifying to know, "We will provide for (you) every facility for good" (Holy Quran, ch. 92, v. 8). And: "Surely it is for us to guide." (Holy Quran, ch. 92, v. 13)

And Allah says concerning the soul: "And He revealed to it the ways of evil and the ways of righteousness." (Holy Quran, ch. 91, v. 9)

And it is also gratifying to know that: "God has implanted in man's nature a feeling or sense of what is good and bad and has revealed to him that he could achieve spiritual perfection by eschewing what is bad and wrong and adopting what is right and good." (Holy Quran, Commentary 3360, p. 1270)

The purpose of this paper has been to induce in the reader the realization that the beauty of anything is not due to the thing itself. Things only

reflect beauty, but themselves are lifeless. It is almighty God the Beloved, Who has bestowed upon them the beauty which they reflect.

"And truly We have set forth for men in this Quran every type of parable." (Holy Quran, ch. 30, v. 59)

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NOTES

(To Whoever is Listening)

FRANK LONDON

Dear Friends, united in love and respect and devotion, may we all be blessed with life. Amen. Selah.

All praise to the creator, to the one who was, is, and will be forever. Who made the distinction between sound and silence; and the infinite variety of their combinations. It is a blessing to dwell in the garden of sound and silence. It is a gift to sojourn with the gardeners. Those whose lives' endeavors are no more than an endless explication of the variations of sonority and vibration. Creation and recreation of sonic mythology.

Listen
Listen deeper
Listen longer
Listen with your heart
Listen, friend, and understand.
Listen!

Some of the titles given to the *Psalms* in their ascriptions suggest their use in worship: Some bear the Hebrew designation *shir* (Greek *ode*, a song). Thirteen have this title. It means the flow of speech, as it were, in a straight line or in a regular strain.

Fifty-eight *Psalms* bear the designation (Hebrew) *mizmor* (Greek *psalmos*, a Psalm), a lyric ode, or a song set to music; a sacred song accompanied with a musical instrument.

Many others have the designation (Hebrew) *tehillah* (Greek *hymnos*, a hymn), meaning a song of praise; a song the prominent thought of which is the praise of God.

Let every thing that hath breath praise the LORD.
Let every thing that hath breath praise the LORD.
Let every thing that hath breath praise the LORD.

Praise God with the blast of the horn; praise God with the psaltery and harp. Praise God with the timbrel and dance; praise God with stringed instruments and the pipe. Praise Him with the loud-sounding cymbals; praise Him with the clanging cymbals. Let every thing that hath breath praise the LORD.
—*Psalms 150*

Gaston notes that music and religion are integrally related. Their common purpose is to draw people together, to defend against fear and loneliness. Music seems to be a particularly appropriate mode for reaching for the supernatural.

SPIRITUAL (*adj.*) Consisting of spirit; not material; incorporeal; as, a spiritual substance or being. Of or pertaining to the intellectual and higher endowments of the mind; mental; intellectual. Of or pertaining to the moral feelings or states of the soul,—distinguished from the external actions; reaching and affecting the spirits. Of or pertaining to the soul or its affections as influenced by the Spirit; controlled and inspired by the divine Spirit; proceeding from the Holy Spirit; pure; holy; divine; heavenly-minded;—opposed to carnal.

SPIRIT (*n.*) c.1250, "animating or vital principle in man and animals," from O.Fr. *esprit*, from L. *spiritus* "soul, courage, vigor, breath," related to spirare "to breathe," from PIE **(s)peis-* "to blow" (cf. O.C.S. *pisto* "to play on the flute"). Mainly from Hebrew *ruach*, also meaning spirit and breath L. *spiritus*, usually in classical L. "breath,"

Breath is Spirit. Sound is air, breath, moving. The sound of the trumpet. Breath.

"Life is absolutely dependent upon the act of breathing. Breath is Life.

"Not only are the higher animals dependent upon breath for life and health, but even the lower forms of animal life must breathe to live, and plant life is likewise dependent upon the air for continued existence.

"The infant draws in a long, deep breath, retains it for a moment to extract from it its life-giving properties, and then exhales it in a long wail, and lo! its life upon earth has begun. The old man gives a faint gasp, ceases to breathe, and life is over. From the first faint breath of the infant to the last gasp of the dying man, it is one long story of continued breathing. Life is but a series of breaths.

"*The Science of Breath* shows how to control the body, increase mental capacity, and develop the spiritual side of one's nature."

—Yogi Ramacharaka

"Music is the mediator between the spiritual and the sensual life. Although the spirit be not master of that which it creates through music, yet it is blessed in this creation, which, like every creation of art, is mightier than the artist." —Beethoven

In the Torah, Moses leads the Jews in two songs of praise... The Jews sing upon miracles done for them with the well... sing songs to celebrate miracles.

Songs to celebrate Miracles.

Miracles & Songs

Songs & Miracles

Miracles & Songs

Songs & Miracles

Nign, NiGyNh song, melody:

Nun Gimel Yod Nun Hay—music, a song (a kind of mantra used to directly convey or evoke a specific emotion or sequence of emotions. Usually composed of tonal sounds mixed with few, if any, words.)

Nign, NiGyNh song, melody is kabalistically = 118.

Also equaling 118 and therefore aneuristically equaling music:

Chet Yod Qof—bosom; to requite; satisfy and nurture us.

It is *Chet Lamed Peh*—song is Gracious.

Chet Samekh Nun—it binds together; makes us strong, mighty, rich, to amass wealth;

It is *Mem Bet Vau Ayin*—a fountain to draw from, quench our thirst
Amorous: *Lamed Chet Mem Mem*—for warming their flesh or body.
Generous: *Mem Chet Mem Lamed*—compassion or pity; object of affection or favor.

Dangerous: *Nun Samekh Chet*—to pluck up or tear away; to turn out of a house; to expel or banish; to demolish; to be driven out.

$118 = 2 \times 59$

Nign is twice 59.

Twice 59—the 17th prime—is two times *Nun Dalet Hay*

Twice to move or flee away; to remove or put off, to reach out, to give, a liberal gift, especially the hiring of a prostitute, removal or separation; what is removed, uncleanness or impurity; an abominable act (especially incest).

Clarke writes, "Not only did many early Western writers consider that the musician was divinely inspired, they believed the musician created in a state of ecstasy or divine madness."

As Portnoy words it, "Plato's God is a God who has favored the musician above all other men, for he deprived him of his mind and imbued him with divine frenzy so that in such moments of rare ecstasy men would know that he is a prophet of God. Plato's musician is a God-intoxicated mortal who creates by inspiration and not by rule.

"Aristotle and later Santayana believed that the creation of music grew out of man's need for emotional expression and a rational desire for order and form. Santayana suggested that music is created as a means of organizing chaotic and primitive drives. Santayana thought it was reason which creates music but Aristotle echoed Plato in thinking the musician is artistically mad. It is because of this divine madness that the musician is able to produce in music not the outward appearance of things, but their inward significance. Aristotle believed that the musician has the ability to abstract the essence from sounds created by the movement of the spheres and to portray in tonal form the order of the universe. Theophrastus, Aristotle's student and successor, agreed that music was an emotional expression but disagreed that it had anything to do with the divine. He believed that music has its origin in love, which is so overwhelming that feeling overtakes reason."

Invocation:

Love is like a willful bird, do you want it? It flies away! Yet, when you least expect its bliss, it turns around and it's here to stay! For centuries man struggles, half-asleep, half-living! Small, jealous, bickering with mountains of red tape! To be awakened the night God choose giving His great reward for hard work, the Moral ABC-unity-ecstasy-love evolving man above the ape! The Moral ABC-unity-love evolving man above! Coincidentally and yet Oh-so-slow, sweet-kisses-whisper-softly into waiting ears; arousing heavenly flames that enlighten renew, brilliant fires blazing through dark, lonesome years! Who else but God gave man this sensuous passion!

Passions that quicken your senses, fulfill; quench the thirst of lonesome years! Yet the sun has shadows, learn to control your will; to enjoy life long happiness, not tears! Wait! Rise to the stars above and thrill! Arouse the very flames of life! Sweetheart, kiss me: Hold still, hold still!

Listen to God's reward for strife! Rosebuds, slowly woken, break budding open! Delicate, sweet, so on soft fingertips; shivering up your spine, red pulsing blood; in lightning speed through your pure body's lips! Caressing deep, searching, way out of sight; oh beautiful spirit of God's eternal Spring! Heat of passion in a warm moonlit night! Ecstasy to be buried in heaven, within! Relaxed then to long, dreamless sleep; body & soul join close in life's most brilliant bliss! Revealing clarity-beauty-harmony-peace, sailing on far away sun-laden ships! Yet-what-cunning-feminine-touch, can draw new desire to pulsing lips! When-soft-hands wander-casual-such, deftly down near lingering tips! Who else but God gave man Love that can spark mere dust to life, the Moral ABC uniting All-One, brave, all life.

Like a beacon breaking through dark clouds that pass; your deep embrace, your sensuous kiss, who else but God can make Love last 1 trillion years of sweet eternities! Who else but God! We are not true, while calculated calm controls us; blood flows near spirit in cold divided flame! Only love's stormy passion, striking deep within us; can turn blood to spirit & spirit to blood, untamed! Spirit to blood, untamed!

—Emmanuel H. Bronner

Roger Davidson's Core Principles of the Society for Universal Sacred Music

God is one—one universal Father/Mother, the Creator and Organizer of the universe, the most radiant Being of Light, the center of all love and compassion.

No one is God but God; all spiritual teachers have been and always will be our brothers and sisters. But there is a spark of God in each of us, as God is the Creator of our eternal spirits.

We are all God's children, of equal value in God's eyes. Let us therefore lay down our arms and forever live as the brothers and sisters we have always been! It is within our innermost nature to love and honor each other as ourselves—and therefore to create lasting peace on Earth. Let the music we create and send out into the world be a true reflection of God and of our innermost selves. May we strive, through our music and in our daily lives, to radiate unconditional love, infinite compassion, great beauty, and profound peace.

Prophets of sound and silence.

Joe Maneri
Joe Maneri
Joe Maneri
Roscoe Mitchell
Mahmoud Ahmed
Alter Karniol

Lester Bowie
Lester Bowie
Lester Bowie
Oum Kalthoum
Nasruddin
Mingus

Milton Cardona
Milton Cardona
Milton Cardona
Malachi Favors Magustus
Suzanne Fiol
Anthony Coleman

Jaki Byard
Jaki Byard
Jaki Byard
John Zorn
Jimmy Scott
Sofia Gubaidulina

Collected and assembled by Frank London and dedicated with gratitude to my teachers, colleagues, friends, spiritual guides. May–October 2009.

THE SACRED POWER OF MUSIC

DARY JOHN MIZELLE

Music has a long and rich history of association with mysticism, magic, alchemy and the spiritual. In my own experience, sound itself has a deep vibration of Consciousness. Silence also vibrates with the same Consciousness. I find music made with this awareness to be fascinating.

Some examples of my work over the past decades which use this awareness are discussed below.

In some cultures, musical trance states are invoked by repetitive music which continues for hours or days with only subtle changes. The performers and audience members often "commune with the gods" or reach altered states of consciousness in meditation using repetitive music or sung mantras. Western art music in concert halls rarely continues for these longer durations, and may engage the rational mind in a much more direct manner. Some exceptions are: 19th century operas and some contemporary music made by composers who have thought seriously about the durational element and/or have studied various world musical traditions (Africa, India, Indonesia) where the practice is commonplace.

The Musician as Medium for the Divine

Australian aboriginal didgeridoo music, Shona Bira possession ceremonies, Amerindian Peyote songs, and Balinese trance dance provide a few examples from world music in which the music and dance comes through a kind of trance or altered state of consciousness. The Western art music tradition also includes examples of composers who thought of themselves as channels for the divine. Bach, Beethoven, Stockhausen (and others) seem to have considered themselves as channels through which the divine could speak. I can remember an extraordinary experience I had in 1965 in which I sat for about twelve hours and watched the music emerge from the point of my pencil. I finished two compositions which were in progress that day. I don't have any

explanation for this experience other than intense, one-pointed focus of mind.

Long Silences in Radial Energy I

I composed a work in 1967 titled *Radial Energy I* which explored super-long durations of silence. The composed silences were years long and obliterate the division between music and life by including life in the context of the musical composition. I felt I was unifying music and life into a common transcendental experience. The piece was published in the magazine *SOURCE—Music of the Avant Garde* in 1967. The work was not generally understood at the time, either being discussed as a kind of "antimusic" or an impossible-to-realize piece of conceptual art. Nevertheless, I began performing it in concert during 1967 and a performance of it continues today in a fifteen-year silence. It will become sonic again in 2016.

The score consists of seven pages of tablatures, two pages of graphic representations of spatial movements of sound, and a sine waveform used to determine periods of silence. The piece is capable of being performed by any number of performers acting on any number of sound sources. Sound sources are chosen for the widest range of timbres and for their ability to sustain long durations. Following the initial performance of arbitrary duration, a six year silence period begins. The second performance of sonic material begins when the initial silence period is finished and lasts twice the length of the first sonic duration. Successive silence periods of 7, 9, 12, 15, 17, 18, 17, 15, 12, 9, 7 and 6 years follow each successive performance of sonic material. As the sonic material becomes longer, it will eventually overtake the following silences and transform the point in space where it is being performed completely into sound. The piece may subsequently be transported to other locations and carried on in those locations. The piece may be extended to other planets, galaxies, etc. When all of time and space are transformed into sound, the piece (and the universe) ends. The composition received its world premiere at the First Festival of Live Electronic Music at UC Davis in 1967. See the score and a review of the first performance in *SOURCE—Music of the Avant Garde* issue three.

Multiphonic Singing

In the early 1970s I learned to sing vocal multiphonics similar to the vocal productions of Tibetan Buddhist monks and central Asian "throat singers"

by imitating recordings that were becoming available through commercial labels. In 1973 I also became involved in a project of experimental vocal techniques (EVT) at UCSD where I was doing doctoral studies and working as a research associate in the Project for Music Experiment (later renamed the Center for Music Experiment). Some other people involved in this project included Bonnie Barnett, Linda Vickerman, Diamanda Galas, Phillip Larson and Roberto Laneri.

At about this time I began improvising with Roberto Laneri using the vocal multiphonic materials. (We had earlier been improvising jazz with bassist Mark Dresser and others.) This work led to the formation of the group *Prima Materia* (with an obvious connection to alchemy) which was based in Italy and California. Laneri was a Roman who also attended UCSD as a graduate student and was acquainted with Giacinto Scelsi and his circle of musicians as well as other composers and musicians living in Rome during the 1970s (including Alvin Curran). I believe that the connection with Scelsi, who was a kind of godfather to our group, was especially important with respect to his connection with a different way of thinking about improvisation. The then-current ideas of jazz and contemporary improvisation involved a kind of "action and reaction" among the performers, while we were involved in a "search for a primal vibration" out of which all sound would emerge. Evidently, Scelsi had used this approach in healing himself of a nervous disorder and discovering a new way to approach composition. Our group performed extensively during the middle '70s sitting on the floor in the Indian manner, and provided a context for numinous experiences in which the audience would often be invited to participate with us in the second half of the concert.

There was much experimentation with concert rituals during this period, and this was a genuine departure from the traditional western norm. Some other musicians who sang with *Prima Materia* include: Susan Gormlie, Michiko Hirayama, Ron Nagorcka, Manuela Renosto and Pam Sawyer among others. The Australian Nagorcka also added a fascinating didgeridoo element. *Prima Materia* gave two particularly moving and memorable performances at the Berlin Metamusik Festival in 1974. Over the years, I have had good luck teaching the techniques of vocal multiphonics to students at University of South Florida, Oberlin College Conservatory and Purchase Conservatory (SUNY) as well as family members. Most people find these sounds fascinating, and my experience of learning to produce them seemed

to induce a kind of spiritual experience. I have used these vocal production techniques in my compositions, *Mandala* for two multiphonic singers and drone (1973) and *Quanta and Hymn to Matter* for orchestra chorus and eight multiphonic soloists (1978).

The Alchemy of Mantra Yoga

I have participated in yogic chanting groups (sometimes with thousands of people) in which all feelings of separateness between individuals are erased in a context of spiritual growth. This spiritual growth could be compared the alchemy of transmuting base metals into gold. The premise of this chanting is the yoga of mantra repetition. Practitioners of mantra yoga may experience the transmutation of the individual into a "*siddha*" or perfected being. I have always approached this yoga as a science, not a religion. Yogic experiences are empirical in the strictest sense, yet are completely subjective. They are often more real to the individual than the objective experiences of the rational mind. Most of these experiences are probably too subtle to be measurable by scientific instruments, although some of them may be studied scientifically by monitoring brain activity with Computed Tomography (CT) scanning, Magnetic Resonance Imaging (MRI), Positron Emission Tomography (PET), and Transcranial Magnetic Stimulation (TMS) technologies. The instruments best suited for measuring the effects of this science are the neural networks of the human brain and nervous system, which are vastly subtler and more perceptive than contemporary scientific instruments. Sometimes these experiences may transcend the ability of language to express, or the mind to rationalize, yet they can affect the individual at the deepest levels of Consciousness.

There is nothing necessarily contradictory between some forms of contemporary music (with its minimum of repetition, aperiodic rhythms and atonal melodies) and mantra yoga (with its cyclic rhythmic modes, high degrees of repetition, slowly accelerating tempi and modal melodies) since they can both be seen as different ends of a musical continuum, or they can be rationalized as all being sonic. In any case, the definitions of music as organized sound or musical activity as patterned changes in sonic parameters includes all music forms. The participant/listener who appreciates every sound for its sonic value will also have no problems either since the sounds evolve in time as changes of tempo, dynamics and timbre. I once studied mantra yoga with a Yoga master (Swami Muktananda) who taught that

"All sounds are Shiva." This understanding may be akin to John Cage's strategy of "letting the sounds be themselves."

There is a long and rich yogic tradition for considering mantra as a medium for humans to realize the Self (Atman). In India, there are mantras to be recited for any and every occasion, to cure disease, to acquire wealth, or to gain special powers or gifts. Indian classical music has incorporated this idea in the form of special ragas for different hours of the day, seasons of the year, to bring rain, call down fire, etc.

Musical Behavior and Neuroscience

Contemporary neuroscience has begun studying the effects of music and musical training on the brain and confirms the power of music to influence neural activity, and even change brain structure, as well as emotion and general health. Of course neuroscience is only just scratching the surface of human behavior, and generally uses subjects who are musically unsophisticated, although this is starting to change; yet some impressive results are being obtained at this early date. Another fascinating area of exploration in neuroscience involves the study of mirror cells in the brain which vibrate in sympathy with observed behavior and induce a kindred response in the observer. It may ultimately prove to be true that the numinous, magical experiences available through musical behavior are scientifically measurable in their effects on the brain and nervous system, which I feel would not explain them away, but add to the mystery and knowledge about the sacred power of music.

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THE SOUL'S MESSENGER

MEREDITH MONK

- The voice is my:** Sometime in the mid-1960s, as I was vocalizing in my studio, I suddenly had a revelation that the voice could have the same flexibility and range of movement as a spine or a foot, and that I could find and build a personal vocabulary for my voice just as one makes movement based on a particular body. I realized then
- soul's messenger** that within the voice are myriad characters, landscapes, colors, textures, ways of producing sound, wordless messages. I intuitively sensed the rich and ancient power of the first human instrument and by exploring its limitless possibilities I felt that I was coming home to my family and my blood.
- weather report** I come from a musical family: my great grandfather was a cantor in Russia; his son, my grandfather, was a bass-baritone who immigrated to New York and along with my concert pianist grandmother, opened a music conservatory. He also performed in concert halls, churches and synagogues. My mother was a professional singer who sang jingles, ballads, and swing tunes on radio and early television. My first musical training was in Dalcroze Eurhythmics, but I also learned to read music before I could read words. One of my earliest memories is singing myself to sleep.
- lifeline** There are events that change our lives irrevocably; that moment of discovery in the '60s changed mine. From that point on, exploring my voice and what it could evoke, delineate, uncover, and ultimately give to others became the core of my work.
- beacon** Right from the beginning, I was interested in primordial utterance: what were the first human sounds? What was the delicate and fluid membrane between speech and music? I knew
- mystery**
- comfort**

channel

blood

heart

pick and shovel

footprint

gauge

wings

stream

that notes or musical phrases did not limit me in my exploration of the voice. Like an instrument, it could be universal. I thought of voice as sound, as a reflection of nature, of the urban world, of the stars. I began playing with what a vocal gesture would be. How would the voice jump, spin, spiral, fall? How would I abstract the sound of a laugh, of sobbing, of shouting, into a musical phrase? I began to realize that the voice had the power to uncover subtle shades of feeling that exist between what we think of as emotions. It could conjure the unnamable. Coming from a movement as well as a musical background, I felt totally comfortable and trusting of non-verbal communication. I sensed deeply that the voice was a language in itself: eloquent, probing, and able to communicate directly to the heart.

When I began, my path seemed lonely. I was not aware of anyone working in this particular way. I had to trust my instincts. And yet, I was fortunate in that I had already built a body of work combining images, movement, objects, sound and film so that the discipline of daily work was essential to my life. Now I could use the same creative principles and apply them to my vocal exploration. It became immediately apparent that I had found what would be the soul of my work. What had been an urgent inner quest became the quiet certainty that this process would become my continuing and ultimate truth. The method was and continues to be one of exploring the possibilities, the qualities, and the mystery of my voice; of listening and trusting what it reveals. Looking back, I am profoundly grateful for that time of solitude. Left to my own devices, I began a process of intense investigation led by my voice, my ear and my musical sensibility. Where did they want to go? From intuitive moments of discovering material, to the rigorous intellectual process of refining and weaving the material into forms, the adventure of making music has expanded my world in miraculous ways.

For the first ten years, I worked alone making a cappella songs and pieces for voice and keyboard. In the '70s, I formed an ensemble of young singers who traveled along with me on my path and inspired me to enrich the textures, counterpoint, and colors in my music. Because they were in their early twenties and didn't have a long history of musical expectation or dogma, my

needle

playground

radar

mirror

earthquake

compass

conduit

link to the
unknown

vocal language and approach seemed inherent and became second nature to them. This allowed for a spirit of concentrated and playful experimentation inspiring me to create intricate and shimmering forms. Now, the interdependence and intimacy of performing with the radiant and extraordinary members of my current vocal ensemble continue to reveal new levels of insight.

My process involves long periods of waiting. When I begin working, I try to stay open to anything that might arise. Initially, I have to get through my terror of the unknown and expectations of myself. At a certain point, after a lot of resistance and trying to take very small steps, my curiosity and interest overtake the fear. Then questions, which are the basis of any work, begin to come up. I have the sensation that every piece is a world that already exists in another dimension. My task is to find what are its principles and laws and to follow them rigorously. When I am stuck, I say to the piece: "please make yourself known!" and try to stay out of its way. The experience of creating and performing are as close to meditation as anything I can think of. The combination of pinpoint focus and open relaxation to what comes up in the moment are fundamental principles of sitting practice: awareness of the moment and direct experience without the filter of concept.

I have always been loath to codify or catalogue my vocabulary of vocal sound. That analytic process seems to take away the mystery of all the shades, impulses, colors, and dynamics that arise even within individual performances of songs I have sung many times. The commodification of these "techniques" can become a recipe involving mental calculation rather than an acknowledgement of the ineffable messages that are coming through.

In a lifetime of making work, there are a few pieces that have a certain shine. They seem to have had a life of their own right from the beginning, to have been born whole. Hearing them again after many years, I am amazed at their mystery and presence. Although I remember all the meticulous and patient work of bringing them to life, I also remember the seeming inevitability of their forms and the clarity and ease of their

link to the
always known

fulfillment. How did this happen? I consider these entities gifts from a larger and wiser realm and the times of making them, blessings. In between periods of inspiration, I try to be a good shoemaker, honing my craft, keeping up my discipline, beginning again and again.

link to forever

In meditation practice, the basic instruction is to repeatedly come back to the breath (without judgment) even if the mind has wandered off into thoughts, fantasies or emotions. The moment of coming back is a moment of awareness. Making music is very much the same process. It consists of starting at zero every time; trusting the emptiness, the space, the gift of uncertainty; not judging too quickly; letting the materials remain themselves until the time is right to weave them together into a form. I try to never forget that I enjoy the privilege of engaging in an activity that affirms the spirit of inquiry and allows me to make an offering of what I have found. I am grateful for being part of music, for the magic of music permeating my life.

link to now

DEATH: THE FATHER OF CREATION

TISZIJ MUÑOZ

Divine Death Is Life

First, there is death,
which waits for its death.
Then there is life
which is born of death.

First, there is darkness,
which waits for its death;
then there is light.

First, there is ignorance,
which waits for its death;
then there is knowing.

First, there is self,
which waits for its death;
then there is heart.

First, there is self as other,
which waits for its death;
then there is compassion for all life.

First, there is the desire for music as structure,
which waits for its death;
then there is awakened Heart-Sound
and birth into the spiritual sound current.

First, there is the desire to be a musician,
which waits for its death;
then there is Enlightenment
and the radiance of profound Silence.
The who who is death beyond death
is all that may be true, divine
and ever-present transcendent music.

Chapter 1: To Infants of True Music

Phase 1

The Path of Training—Self-Discipline Music as the Silence of Form Structure

What you do is not what you do, but you do it anyway. What is yours is not yours and you use it anyway. Truly, the created, as the who and the what, which is created, is the self of karmic effects, identified as the past and ever in pursuit of the eight ball of awakening into the present as creativity itself. The true creative is selfless. The no-one is Spirit. Spirit alone creates from sublime Isness. It is already created, cooked, finished, toasted. Stop, look and listen deep enough for yourself as pure Spirit, and access the no self, true, infinite, original, spontaneous awareness, the true kingdom within! Your music is a beggar's bowl.

It has been said and perhaps even assumed by certain psychically incorrect, opinionated authorities, composers and musical artists acting as creators in general, that in order to imitate the elements you need something which physically resembles natural phenomena—thus: effect for effect, effect as effect or effect by effect. This may be so for those who are weak of mind, psychically challenged, and low in spirit; who do not yet know that only the child's viewing of the universe shows up as infinite levels of perceived psychological, psychical, causal, mental, cosmic, trans-cosmic, ultra-micro-cosmic or spiritual, transcendent isness. For the strong in celestial or angelic imagination and creative realization, they can communicate or transmit the presence of anything or any being by the creative fire of unconscious or super-conscious mind alone, with or without the history of music, art or any manifestable or unknown prop, crutch, method, device, medium, channel or form. Being the no-consciousness alone is sufficient. Hence, every sound, depending upon who is playing or using or hearing it, can be

used to convey a thought, image, painful or pleasurable, deep or disturbing psychic impression, message or vision. Musical instruments and conventional musical means are valid but secondary to any genuine process of creative or spiritual work. But the law of sacred sound vibration born of the selfless silence of *it as isness* is key to everything; every accomplishment, every breakthrough and every masterwork and mastery of every level or plane of Spirit! Therefore, quickly grow beyond yourself as merely small means, limited to materialistic understanding and fabricator of self-reflecting rather than self-transcending worldly productions.

Truly, the one who breathes this egoic death-fire lives by the psychic wind. What moves the wind is etheric water. What moves the water is silent fire. What moves fire is radiant space and whatever the sacred fire of space burns and illuminates in and as itself. The entire known and unknown universe is both the fuel for and presence of the fire, and by this fire the universe appears, lives, disappears and reappears to the deep death of incomprehensible infinity. So it is with genuine creativity and thus it must be with music and all other forms of expression. This fire is sound no ear can hear and is hearing no mind can comprehend. Hence, the no-form of phenomena, be that of light or sound, is beyond the initiated awakened Spirit in any being in high or low disincarnate, animal, human, celestial, intergalactic, trans-universal or transcendent form.

Music, as traditional knowledge or "legitimate" form, structure, method or school as a rule or as an aesthetic taste from the world of enlightenment, has merely relative value; but to whom, under what conditions, as a result of which culture, representing what and whose time-world, is fear-born taste-programming? Any conventional or unconventional form of music is neither superior to the living man as master nor is it superior to intuitive intelligence in the form of radical spontaneous wisdom or creative, ecstatically selfless genius. However, for the unenlightened, music is assumed to be the ultimate form or structure of self as God, even when such gravitational, materialistic self-music programs save no one and enlighten no one from the fearful pain of self-death. For the enlightened, as self-free heart-beings, only transcendent or pure sound awareness, as clear light mindless presence is source, that is, true, supreme, vast, deep-hearted, the ever-present radiance of ecstatic open being, also known as the fire of Silence. For the spiritual musical master, conventional music is just conventional music, beyond which is the fire sound essence of the entire universe

and its Heart-source.

Many musicians are obsessed with and suffer the mechanical principle and practice of training, but of what use is training for one who already knows from having mastered silence before? What time are you being? Whose time are you stuck in? Cannot silence play or speak for itself? Such true knowing reveals what and how it is done without having to be directed, conducted or forced to or told how. This sudden death process by fire is intuitive and independent of self, thought and mind. Who understands this? Playing music from here is as natural as free breathing and as powerful as a raging fire! Train in no-training. Die in no-dying. Live in no-living. Play in no-playing. Create in no-creating. Do you remember what you don't know, or ever hear enough to play it?

A psychically correct composition is one that is Heart-true. But who knows what is true, more than what is conventionally, socially or culturally correct? Then, correct according to what school, what intellectual program or system of traditional rules, assumptions or self-building confusion, self-worshipping doubt, self-re-enforced neurosis and self-inhibiting fear, Spirit-repressing dogmas and psychically stupid self-imprisoning musical mechanisms? Isn't the composer as dictator composed by compositions, and thus more appropriately the compose-ed? This is great practice in the beginning only or until the function of creator arises! Whose self is served by any such programming or ego-building bondage to ignorance? Is a composer free or is a composer bound to compose and hence, enslaved in a program of already composed, always composed or only composed mind forms?

Relative to the subject of educationally acquired taste, at what level is such partial taste valid? Valid for whom? Isn't beauty the source of the ugly? Isn't ugliness the source of the beautiful? Whose taste relative to what level of knowledge, concerning what function of physical, metaphysical or spiritual phenomena, is correct or, beyond the point of relative cuteness, useful at all? Isn't taste a smatter of opinion more than the real matter of addressing or recognizing what is true beyond time, beyond scientific standards and only true of the Soul state itself? Isn't taste, style and culture like most else, subject to relative variants, such as taste of what, for what or whose "others" program? Liking or digging something musical at one point more than at another point as when you hear a thing played better or by a so-called better performer?

After reading more on a subject or having a catastrophic conversation with someone you could radically change your game or idea of taste about anyone or anything. The real creator has to go deeper. In other words, taste is relative preoccupation with established social or scientific values. But whose assumed or actual values are they? Why? Such is the nature of taste, which is relative information, relative to experience, which is relative to conditions, which are relative to perception, which is ultimately not relative to cultural as much as relative to a level of spiritual consciousness. Who and what in you suffers the musical tastes of others or of the make believe world in general? All that should matter for the creative is what is true beyond true and whether or not one has the genius, force, intelligence, burn-need and deep wisdom to love true genius alone!

On Earth, the sacred presence of death, as time rules. As such, time is nature. Nature is time. Nature, as such, is the mechanical source or structural force of music. Death, time, nature and music are perception-creations of the human mind, the self-mind. The self-mind is not the Spirit-Mind; only the karmic or self-mind ego is then the source and master of conventional, popular or merely conventionally worshipped and agreed upon "good" music. Since ordinary music is recognized relative to form, structure, composition in and of lower world time-space programs, then music, relative to the time-born karmic mind, is fundamentally gravitational or down-pulling in nature, and thus self-comfortingly binding as a result. Who is a musical thought-form? What is a musical thought-form, if not a gravity-centered, fear-reinforcing, self-identificational, self-building, genius-suppressing, mind controlling mechanism?

What one calls nature ordinarily is but a mere reflection-impression one has of the universe's impact on their self-centered body-mind world. This means that all one perceives as the universe is effect, when even perception itself is an effect! The universe is an effect, an effect mind-form, a most special binding, and too often blinding, effect. It is a dynamic prison, a circus of destruction, a negative psychic dungeon of disaster if you will, apparently bound by laws, interlaws and intralaws as interdimensionally perceived and agreed to and applied to all worlds and universes ad infinitum. Ad infinitum means one can't comprehend the all or the totality of it as anything to know, grasp or control. It is what it is, and as it is, always disappears! So why lie to oneself when one dreams that they know what music or nature are beyond suffering, culturing or entertainment, when all such

fear-born conclusions are assumptions of appearances only? What good is an appearance if it doesn't lie and what good is a lie if it doesn't hide the truth, which every mere appearance is not?

Human base-instinct should be subordinate to higher intelligence even if it is regarded as a form of physical intelligence. Truly, all such instincts are human and at best dogs, wolves and hyenas begging to be trained, mastered and transcended. Is the love or conventional practice of music anything more or less than a base instinct? Does such an instinct free you of childish behavior, wrongdoing, misjudgment, unhappiness, error or neurosis, suffering, worry, ultra codependency, sadness and confusion? What instinct is the true, profound, great or wise one? What instinct produces the best result, the highest product or the most profound effect, the instinct of music as selfishness or selfless compassion? Instincts, urges or drives are part of the unconscious machinery of the human as animal-beast and are just as likely to get one into trouble, difficulty or tragedy if one is ignorant enough to leave their life or art up to the mechanical nature of any spiritually untrained, unconscious body and its soul-dead, sleeping musical mind prone to negative compulsive instincts.

Intelligence at the intuitive level, in the form of knowing beyond any doubt and often not knowing or even caring how such knowing arises or whence it comes, is the best way. Creative art or musical expression, navigated or piloted by impeccable spiritual intuition, regardless of its forms or techniques, will produce truer results even if such results appear to have their own identity and their own manner of arising or bursting into existence—that is, as a result of itself. Is such a “result of itself” but a mere instinct? Perhaps not, as instincts may follow the way of the laws of reaction, conflict, defense and self-division—uncertainty, doubt and the confusion of fear—whereas the intuition of “the result of itself” beyond the result of the self arises as its own light beyond comprehension up from nowhere, impeccably correct, always on the spot or even perfect! Death is so beautifully correct!

Most conventional or even creative music is born of the created ego as a program of infinite limitation. Such music is for the cultivation of face-centered egotism and too often represents the box of ego as only the ego is: as painful self-consciousness, obsessed with attaining and maintaining public recognition, respect, name, fame, applause, awards, honor, praise, flattery and more money, power and sex. Who needs such sweet materialism and such corrupted forms of medicine if not the beautifully imbalanced, the

mentally, emotionally or psychically deranged, the creatively warped or the spiritually confused? And by such, I mean most ordinary, normal people!

What is the true purpose, effect and end of composed music? Who is it supposed to compose? Why? What is it supposed to compose in the listener if not in the performer, and for how long? What level or kind of individual needs to be told what to play, how to play it, how often, for whom, under what circumstances and to what degree or how many times? Must dynamics in music reveal what's true in, or necessary for, who, the composer, the performer or the audience? Isn't it better beyond the mechanical or technical mastery of music to know oneself well enough to master the self of imperfection, removing the self as needed to allow the higher or no-self as a super-conscious state to express itself as what is ultimately the highest function of musical channel-ship or heart-to-heart creative sound-healing transmission? Who already knows this? Who are those who are free and receptive enough to get the healing transmission from loving peace itself—to share it wisely with all sympathetic beings?

Who's so bereft of joy to have to be told how to play it, as if joy has to be told how to be joy, as if joy needs to be told how to be played as joy, or as if joy needed to be put in a specific box rather than freed and allowed to express itself to the extent it needs to be felt, expressed or heard? Clearly, isn't it obvious that only the Heart-true—the selfless, pure, deep, compassionate Heart-true—should be recognized as high, real or true music through the hands of one who is a clear channel for the soul's expression of itself as cosmic or divine, not mere self-worshipping cultural, musical intelligence? Only when *what* is expressing the perfectly true beyond technique, business and criticism, only when *who* is playing the perfectly true as the Heart, is “on the spot” spiritually great, true sound healing, real Heart-Fire Sound music, the voice of radiant Silence Itself. Who understands this profound death?

No one is original because they are alone or lonely. No one is original because they are left to be so. In other words, neither relations nor no-relations nor situations nor no-situations determine true originality, which arises despite circumstances, situations, associations, relations or others in general. Genius can and will use anything and anyone as wood for its fire and more often than not, uses everything to express itself as its own school, its own way, its own truth, its own reality, its own depth, its own force, its own spirit and its own God or Isness or Itness!

There's nothing particularly divine about a bullshit character with a make believe personality mask, dedicated to entertaining self-worshipping ego-mania. One is free to be as humorous or crazy as needed! But for some the divine has to do with the profoundly selfless and the formlessly or innocently beautiful in Heart, not merely with the mechanical or trained things one can do or act out in a relatively great or even profound manner.

Traditional or perhaps ancient or European classical music, like conventional or studio jazz, is the product of the mechanical, intellectual self-mind—the presumed superior mind controlling the inferior mind. In other words, the educated superior musician dictates to the presumed inferior audience the karma music message of “As I am, be restrained, be controlled, be dominated, be programmed and, therefore, in bondage,” only to be composed into a casket of composition, which leads to spiritual decomposition. What of any of this could be considered truly beautiful in the light that it is egotism imposing domination over those who are determined or judged to be less musical, knowledgeable, programmed or aware? Who could call such manipulations of egocentric musical sound over mind and soul beautiful? Why call any such display or performance of art creative when it is created for domination, deception, influence and manipulation of others for self-serving purposes on the part of the so-called artist or created musician? Egotism promotes egotism. Egotism reinforces egotism. Egotism inspires egotism. Egotism validates egotism. Egotism exalts egotism. Egotism is not spirituality, creativity or enlightenment.

What does true spiritual greatness have to do with such practices or programs of enslaving others in ego-worshipping, time-fearing, freedom-resisting mind forms with no other purpose than to enslave others into followers, consumers or uncreative zombies or product slaves? Using mind forms of musical or other artistic art forms to directly address the public's need for enlightenment and liberation from art and artists altogether is what the true spirit of freedom and self-transcended spiritual enlightenment are actually about!

Music to help people to help other people get free of music and musicians is great music! Painting to help people get free of painting and painters is great painting! Poetry to free the public from poets and poetry in general is great poetry! Science to free the public from scientists and science altogether is great science! Religion in order to free the public from religion and its practitioners is great religion! Now, isn't this severance from

conventional mediocrity and self-worshipping slavery what true genius or enlightenment is about? Couldn't such radically true genius be what transcendence over slavery and mastery over self, thought, mind, nature and super nature are about?

The ordinary musician is an information-sucking vacuum cleaner who cannot leave well enough alone. Music as training is a box world. Art is a self-worshipping box world. Any musician or artist who doesn't question the dogmas they have inherited, which exist to serve what spiritual purpose, already obstruct the spirit of creative intelligence which knows no limits, no bondage and no idiotic sense of beauty, being defined by the self-created, self-serving assumptions of those who are anything but spiritual, enlightened Heart beings.

Composed music is too often a watered down version of what is real, which means it is intentionally artificial, deliberately less than what human expression actually is. What could be more disgusting than bullshit, egoic presumptions and assumptions of what is true or real in human expression? For isn't such music or art dishonest and merely an “I merely believe” version of what the real life experience is as tragic, joyous, beautiful, difficult, frustrating, devastating and thus potentially transformational, painful and pleasurable, deep, torturous, but always purifying life and death experiences.

Aren't such experiences intended to free the heart from the make-believe, the theatrical, the superficial, the merely entertaining performances of the elite artistic few who have no real lives of their own; who, as a result, must turn backwards for their drive and direction rather than forward and upwards for their transcendence and true experience of immortality beyond the heart-closing narcissistic games of name and fame?

Know your message. Know your purpose. Why impose any programs or ideas of art on others, as if such expression as a projection had absolute rather than relative value? True art is no art. True music is no music. True view is no view. Who understands this great death?

Chapter 2: The Casket of Taste

Phase 2

The Path of Experience—Self-Mastery Music as the Silence of Formlessness

From birth, most beings out of necessity are forced to live in exile from their

true heart-soul. They are materialized into the cemetery which is Earth. This is a form of death by birth in bondage and suffering. From this there is no real escape. Only those who are caught in between catastrophic self/other programs are least served by such a creativity-less position in the universe, a location from which to begin to create or re-create one's intended world in accordance with or by virtue of self-recognized suffering or limitation. Know your creative potential. Know what you need to do to create your plateau of bliss. Do it. Then, enjoy this immense peace of creating aloneness beyond the created relative worlds of mechanical self, thought and mind programs.

Tell me, is there more to hear with the physical ears or more to hear as Soul beyond the ears and physical hearing altogether? Mere physical hearing is hearing effect, not hearing psychic or subtle cause. To know the cause of sound, which is not mere ear hearing, is to give attention to that which is of highest importance in life, art or love—the Heart Itself. Those who depend upon the physical alone for their enjoyment, function, mission or reality are always left wanting, needing and feeling incomplete and unhappy, regardless of all that they can attain, manipulate or scheme for, in the world of always-changing appearances of imperfection, incompleteness and mere differentiation. Who hears beyond this casket of inherited education-culturing and gravitational mechanical training in any tradition, school or system where artistic mastery, rather than self-transcendence, is the goal?

Truth of expression requires no particular musical formula, program or composition. Truth of expression requires no particular appearance, costume or cosmetics, no particular beautiful melody, voice, instrument, orchestra, opera or fantastic singers, divas, prima donnas, virtuosos, prodigies, ego-maniacs, choir, band, ensemble, guests of honor, donors, sponsors or threatening critics, reviews, audience, theater, studio, hall, room, stage or self-conscious face, schedule, applause, anus-kissing, pre-show introduction, interview, salary, commission, contract, agreement, management, public relations, publicity or requested harmony, rhythm, progression, groove, movement or dynamic. Truth of expression requires nothing particularly or especially musical at all! Why use a stage when a bathroom could do just as well for what you have to do?

The truth of expression is quite basic. Therefore, those that would like to add their materialistic musical trip on top of the basic true truth, go right ahead and know what you are doing, creating or reducing to the greatness of what? Your atrocious buffoonery, hypocrisy and exquisite medioc-

rity, far beneath true, heart-opened creativity? One does this for what and for whom?

Only dishonesty is bad taste. Only selfishness is bad taste. Clearly, only bullshit is bad taste. Snobbish musical arrogance is bad taste. Super-snooty ignorance is bad taste. Highly neurotic or eccentric behavior is bad taste. Incessant whining, complaining and bemoaning over monotonous, boring, vainglorious reactivity, confusion, conflict, bigotry, prejudice, narcissistic heartlessness, small-mindedness, immaturity, deranged, perversion and self-important garbage-flaunting stupidity—all of these are the truth of bad taste and a sure sign of not quite intelligent unenlightenment. What taste is superior to intuitively creative intelligence?

To kill the human spirit is bad taste. To kill an obnoxious ego is better taste. To outlaw creativity, to ban free-spirited creative expression from the public, obstructing the broadcast of extreme but peaceful messages of heartfelt compassion for all beings or to sabotage or suppress in any way the creative if not profound expression of awakened geniuses of Spirit, this is bad taste, this is unacceptable style, reprehensible style, and the bad style of ignoramuses, fear-mongers and paranoiacs.

Composers, if you can only hear music that is outside you, do you have any music in you at all? Could you imagine that God or whatever created eccentricity, tragic genius, sacred profanity, heroic cowardice, sweet madness, meaningless laughter and absurd creativity for a sacred cause? Are we, each and everyone, part of this sacred cause? Are we not part of a great composition and being composed in this very moment and then equally decomposed? For isn't composition decomposition and decomposition re-composition? Who could not be deeply inspired by everything high and low?

It is all already composed. We are this great composition decomposing into itself, as the Earth presently is, in the throes of inevitable re-composition or decomposing into re-composition compost. All of this is food, wood for the fire of creativity and each of us is all of it, but not just and only appearing to be anything or anyone. We are but we are not darkness and ignorance, ugliness and disaster, atrocity and injustice, horror and death, hatred and war, insensitivity and stupidity, aggression and barbarianism, religious and political fanaticism, and idiots called geniuses, wise men, world leaders, kings, emperors, doctors, judges and representatives of the so-called people, the natives, the peace-keepers, protectors of the Earth and angels of the skies. For Heart's sake, where does true goodness begin out

here on this purgatorial spaceship called Earth, who once again begins to rebel against her surface dwellers?

Open the inner ear beyond so-called music of culture—the lower dimensions of the time-space worlds of this solar system—and hear what your mind has yet to hear of the Heart beyond this world of musical noise, egoic ignorance and scientific materialistic suicide.

Because death is law, love is madness and this madness is the ecstasy of death! Death is the realization that there is no gravity, no Earth, no world of matter, save for those who cling to it. Cling not to what you have not created. You are created of Earth, but at death you are no longer that. Perhaps you have never been that? Perhaps there is only Spirit? Every being is this, looking at itself everywhere in every form it appears not to be, until enlightenment dawns and no one exists but It alone. Death has occurred and bodily ecstatic love bliss is real. This is the madness who is death. This death is the mother-father of all creation. Call it what you will, it is what it is, the Heart of all of this.

If you call the Heart of it all God, then your body, your mind, your hands, your ears, your heart, spirit and soul must be turned over to that. It is not that one can do this or must do it, but since you are already here, you have already done it at the dream level. Now you must do it and act it out on the Earth level. Who feels this is so? Regardless of what anyone must play, to do it this way is good practice or selfless practice, good technique or spontaneous technique, good taste or heart taste and good style or true style. This is spontaneous transformation, transcendence and translation all at once. For mystics engaged in the process of purification, world transcendence and world service, this is living at the altar, this is making the great sacrifice and being the candlelight all at once. If we are not that “God” in Spirit, who are we? If we are not that Heart of Hearts, what are we? If we are not the way of peace, why are we? If we cannot join the hearts of all beings, how are we? Without this Heartfulness, where are we? So it is done, in one taste.

Chapter 3: Ugly Beauty

Phase 3

The Path of Creative Vision—Self-Transcension

Music as the Silence of Neither Form nor Formlessness

True Genius is the way of death. Kill academic conventional approaches to

playing, writing or composing music. Burn all of it. Chop all programs. Start from and end in zero. Stop and breathe into silence and let it, as the Tao, reveal the way to you, beyond the wonderful world of garbage, which you bury this most sacred impulse of silence beneath. Kill having to appeal to anybody. Kill having to please anyone. Kill even having to please yourself. Get to what is real and true, the two sides of the coin of Heart. Real, in this case, means deep. True, in this case, means beautifully ugly. From what is true, ugliness is beauty. Everything is beautiful as true.

Don't compose the way you compose, compose the way It composes. Music is without silence. Don't compose the way others compose, because It has another way for you to compose. Silence is without music. It composes Its own way through you when you are true enough to understand this and let it be. Silence is music. Composers, don't be composers. Music is silence. Musicians, don't be musicians. Only music is music. Conductors, don't be conductors. Only silence is silence. Virtuosos, don't be virtuosos. Students, don't be students. The creative revelation stares you in the ear. Just be open to what's true and breathe what is true into being. The ear cannot hear at this level. Get back to original nature and the original creative impulse, the big bang of your own being, if you will. Only the Heart can hear this. The big bang implies the initial wave of infinite creation. Freedom is the only vagina worth living in!

Your ear is not your ear. Your limits are not your limits. Each one is wired to the infinite. Recognize programming to the contrary and recognize the need for opening to the infinite itself: infinite possibility, creativity, depth, vastness, intensity, vision, mind, heart and being infinite genius beyond opinion, school, culture, what is personal, what is impersonal, what is yours, what is of others, what is anybody's—and attend to what is nobody's. This infinite mystery no one has, no one knows, no one hears but everyone is.

Kill imitation, repetition, monotony, uncreative idiocy. You're only imitating yourself imitating yourself stuck spinning in a cesspool time-world of no end. Dog, cut your tail loose. Girls, straighten up. There is no learning after this. There's only creating by not creating from this point on. This is the brilliant all-burning path of death, which and who is fire, true Heart-Fire and being only fire itself beyond self, thought, speech, word, school, mind, body, others, worlds, universes and Gods altogether. The word Freedom is a concept method but as such is binding. You must free

freedom, free yourself from ideas of freedom and free yourself from ideas of bondage, knowledge and time altogether.

The old masters are not the old masters, they are dungeon programs to the unconscious as a failure program. Open to the conscious as infinite creativity and be free of dying to old, and thus already and always failed, forms of music. All forms are failed forms, regardless of how entertaining, impressive, outrageous, difficult, beautiful or exquisite any form is or could be. Here, perception is a program of bondage, habit is a program of bondage, structure is a program of bondage, reference is a program of bondage and memory is a program of bondage. Thus, remember not to remember and be free of the time-space field altogether. Be free of the time track as a gravitational line to what was, the opposite of what is, and the transport portal to what needs to be.

To be free is to be more than to be free. It means to be empty, the emptiness of selfless fullness, which means pure being, free of emptiness and fullness. This is called access to original freedom because it is beyond everything else—programming, tradition and culturing, education, preference, genius, capacity, ability, power, tendency, desire or self-study. As the true beyond form, this which is fire beyond fire is nothing and no one! Isn't this the true composer, who is death, the musician who is silence, the virtuoso who is the void, the creation-conductor who is the true space of the Heart, the ultimate definition of the word Spirit as transcendent light?

Only form makes form and only composition makes composition and naturally composers make composers, and similarly idiots make idiots and geniuses make geniuses. The point is, who makes words, sounds and formlessness? Can you make formlessness, can you compose it, can you produce it? Can you make God, can you make Spirit, can you make Love?

This method concerns the process relevant to the *who*. The who who makes anything is also the same who who makes nothing. This thread includes self as selflessness, thought as thoughtlessness, mind as mindlessness and world as worldlessness and further, music as musiclessness, sound as soundlessness, noise as noiselessness and silence as silenceness.

Every conceivable mechanism of mind which generates or produces "isms" and "ologies" is a source of infinite potential, which, without the gravity of selfishness as contracted or crystallized energy representing who one assumes or wishes themselves to be as a personality, person or individual program of a mind-form, is free to spontaneously and ecstatically arise of

itself. This is spontaneous being which is selfless creativity or true Heart nature which, according to its capacity, would have to be considered a deeper form of creative genius than is ordinarily developed by training, programming or education, in the case of exceptional human beings who aspire to ultimately be creators or one with the creative intelligence of the universe.

The issue here is that such an intelligence is impersonal and is cancelled out by the personal, the egoic, the self-defining or self-limiting capacity of mind or intelligence being identified as form—and not necessarily a form of formlessness as much as form as formula or a programmed formulation, consistent with or parallel to popular or known standards or formulations of such, all of which are walls, barriers, obstructions, products to go beyond. In other words, whatever arises needs to be gone beyond, ad infinitum. Whoever arises needs to be gone beyond, or there you are bound, there be your bondage, which needs to be killed. Death to such bondage. Death to bondage programs. There must be death for there to be clear space. Create, therefore, the space for oxygen to support the inhalation-expansion of that creative fire which needs to burn freely in all directions.

Life itself in infinite forms of potential nature is true creative expression. It is perfection no matter what anyone thinks about form and beauty. Play or create music this way and be true to cosmic nature rather than be programmed by infinitely less in the forms of intellectual, academic or artistic criticism, taste and conventions, which have nothing to do with the sacred creation of the spiritual universe. This has everything to do with self-imagery, inadequate sophistication and a lack of genuinely creative intelligence, which alone inspires true geniuses, not want-to-be's who are far less inspired by genius as much as distracted by phenomena, convention, the status quo, society, survival, and authoritative producers and their products and effects.

For a creative spirit, any formulation of a spirit—in other words anything written or merely thought—is not what the process is about. To write is to produce another product, a box, a form of bondage idea, which at best is a musical form but not necessarily a form of real or true music. Any strategy, mechanism, technique or approach to avoid anything is to be subject to programs and operating within the bounds of the created, working primarily from memory, and still, regardless of form, bound to time games relative to what, according to the individual, "has already been played, so now what I'll play, because I can't remember having heard it,

must have been what has never been played or heard before." This is simply a monkey-in-the-mirror program, and a mere self-reflection program relative to memory.

Length of music, composition or sound work should not be dictated by concept alone. It should be dictated by psychic force or etheric function relative to its impact on the breath itself. Then, the etheric breath itself must dictate the composition, if not the composed, as it will when allowed to. The Spirit is beyond concept, classification, school, culture, and is directly related to sound—the sound current as an atomic spiritual process governed by conscious vibration-modification, from form as darkness to Heart formlessness as light, from terrestrial gravity to celestial or angelic levitation. Why suck on the teat of earth-centered music at the cost of not knowing one's *true* true relative to music, relations, awareness, creativity, intelligence, wisdom, freedom and spirit?

Who understands these spiritual facts of consciousness creation or creative consciousness? Who can't bring themselves and their music to this level beyond abstraction and abstract ideas, descriptions or interpretations of what is "in", "out" or anywhere in between or beyond? The mind cannot conceive what the sound is. The mind cannot properly conceive what silence is beyond sound, yet it is what everyone originally and always is at the core of awareness. For if you know the Heart, it is better that the Heart plays for itself. If you know the Heart, it is better that the Heart speaks for itself. If you know the Heart, and therefore open to it, then its radiant Silence will speak for itself.

Relative to skill in music, what more could be said of one note perfectly played from the depth or intensity or philharmonic fullness or full harmonic, full ultra-harmonic presence? Is this limited to the musical or is this indicated in the ultra-harmonic realm of true Silence? Without self, perfection is easily attained. In fact, without self, perfection is already attained.

Beyond this, it is a matter of breath and depth or infinitude of creative intelligence which is open to and allowed to manifest of and as itself, free of self, thought, mind and human culturing altogether. Kill the human. Enter the cosmic. Death is true creation. Death is the true creator. Only death is father, hear? From this Soul level of pure awareness, there is no music and as a result, Its music arises of itself. Its music seeks free expression through each and every living being but who knows this, enough to grant that to all as true musical freedom and true ecstatic being? From this

viewpoint, artistic is no longer the case, musician is no longer the case, but the mysterious is altogether the case as is the profound, the exquisite and the transcendent beyond words, as the all-feeling Heartfulness of divine presence.

Welcome the realm of the indescribable, where the universe itself as intelligence or consciousness is simply and utterly the invisible clear light of sound and the inaudible spiritual sound of light. This then becomes the realm of so-called music in terms of transcendent melody, transcendent harmony and transcendent time. If you try to understand this, you are not understanding it. If you feel that you've gotten this, then you haven't gotten it. This fire is without concept, knowing or realization. It is only light beyond light. What is there to know or play beyond the peace of Silence? Can one be trained in this, or is this beyond all training, beyond all worlds, beyond the all, the everything and nothing, beyond the Who Knows itself? Perhaps this is the Heart and the true Ear who not merely hears but is the womb of infinity.

Be no time—past, present or future and be true. Be no one—past, present or future and be true. Be no instrument—past present or future and be true. Be no race or culture—past, present or future and be true. Be no self, thought or mind—past present or future and be true. Be no world—past, present or future and be true. Be no universe—past, present or future, and be true. Such is the way of Death, who creates all, who creates everything and creates nothing all at once.

TRASH

MARK NAUSEEF

Alchemical experiences, making beautiful music with a stainless steel industrial size double basin sink and a 747 jumbo jet aluminum engine cowling.

During my time as a member of Finland's Sound And Fury, the ensemble lead by the great Finnish composer Edward Vesala, the double basin sink was my main instrument. Being a percussionist, I often find myself contributing to musical concepts while playing objects that are not normally considered to be "musical instruments," and a perfect example is my time with the sink. It was not a new sink, but a discarded piece of junk. Once it was retrieved from its inevitable fate at the Helsinki junkyard, the alchemy began. After the sink was cleaned, Sound And Fury guitarist Jimi Sumen attached guitar machine heads, stretching strings across the once filthy basins that had now become rich resonators. A brace was attached so that it could tilt and balance at different angles, making it possible for me to explore all areas of its body. There were many sound production possibilities within the body, as it was constructed with varying degrees of metal density, such as the thinner basins and the thicker skeletal framework. All parts responded well to being struck, rubbed, bowed, scraped, shaken, plucked, beaten, kicked and whipped with all sorts of objects including, mallets, barbecue skewers, metal rods, superballs, bass bows, springs, wires, sticks, clubs and various chains. I occasionally threw myself against it, and of course, chain whipping a metal sink works wonders!

The alchemical transmutation was not a matter of making the junk into a quasi version of an already existing instrument, as was the case while playing in Lou Harrison's *Old Granddad* American Gamelan. While performing Harrison's piece *La Koro Sutro*, one of my parts required that I strike sawed-off oxygen tanks with baseball bats. The oxygen tanks were substituting for the *kempuls*, which are pitched gongs in a traditional Javanese gamelan. The other part of the composition that I played was for

metal pipes that were cut to different lengths and set into a wooden resonator. This instrument's role in the music was modeled after the *saron*, also an instrument in a traditional Javanese gamelan, and the technique of striking and muffling each note was directly borrowed from traditional gamelan. As unusual as these instruments in Lou Harrison's and Bill Colvig's (designer/builder) American Gamelan may be, they were built and played with preconceived ideas as to what function they would serve in the music. Also, the design and role of the new instruments was based on instruments and an orchestral concept that already existed. This is still a form of alchemy or transmutation, and those oxygen tanks—that were once considered useless—became incredible musical instruments. Yet the transmutation of the sink was not based on a preconceived idea of substitution. The sink encounter was about taking what was never designed or thought of as a musical instrument, and in fact was discarded as useless in terms of its original purpose, and making it into a conduit for music and *accepting it for what it was*, a sink. A musical sink that was once ready for destruction was now leading me toward discovery. The constructed, became the conductor.

Also, I as a percussionist was being transformed, as I needed to find and develop the appropriate technique—which at times had nothing to do with techniques that I would have used with traditional instruments—in order to facilitate the arrival of music. This process required that I be wide open to receive information from the source and explore and experiment with all areas of the object. Experiences like this, when discovering new sources of sound and developing extended techniques, naturally bring me to a state of acute but relaxed concentration.

Wagner was quoted as saying, "I feel that I am one with this vibrating Force, that it is omniscient, and that I can draw upon it to an extent that is limited only by my own capacity to do so."

Pulling music out of a sink. That's magic!

I had a similar experience with a 747 jumbo jet aluminum engine cowling while rehearsing and performing John Bergamo's composition *On The Edge*, at California Institute of the Arts. My setup for this wonderful piece was the cowling, which is a metal ring about eight and a half feet in diameter, placed on three tripod stands. The cowling was placed so that the hollow gutter/trench side was facing up. My playing position was in the middle of the ring. The composition is very specific as to what takes place in the gutter. The piece is conducted and at various times I was instructed to

roll items such as pool balls, marbles, bbs (birdshot pellets), golf balls, etc. with force and speed determined by the length and dynamic of the sound I was to make. As the aluminum was quite light, I was able to lift and balance the cowlings which gave me the ability to change the speed and sound of the rolling objects. Other instructions included superballing (rubbing a superball that has been attached to a flexible wooden barbecue stick against the metal while applying various amounts of pressure), scraping and bowing, as well as striking with mallets and sticks made of wood, metal, rubber, plastic and yarn.

Once again, as with the sink, there was no method—accepting the cowling as it was, without preconceived ideas as to what it could be.

Over the years, I have had many experiences with the transmutation of rubbish into musical instruments. Through some mystical form of alchemy, discarded toys, metal lamp shades, metal screens, grills and gratings, pipes, sections of air ducts, oxygen tanks, bottles, rice bowls, coffee cans, kitchen utensils, pots and pans, flour mixers, egg slicers, containers made of metal, plastic, wood and glass, metal knives, forks and spoons, galvanized garbage cans, hubcaps, nutshells and more have produced beautiful music.

Regarding the role of the composer and performer, in his book *The Harmonies of Heaven and Earth*, Professor Joscelyn Godwin writes "...they are alchemists who help to transmute the Earth by making its substance and souls resonate with echoes of the heavenly music."

Many of the metal objects mentioned above, which in their "natural" condition as an object of purpose (food preparation, lighting fixtures, toys, etc.), already showed great promise for the creation/discovery of music, but may be transmuted further.

Another aspect of playing found objects, junk and other newly discovered instruments concerns electronic modification. Although sometimes referred to as "amplified percussion," this should not be confused with the common technique of miking something to simply make it louder, as with overhead or close miking. Of course, in the right hands, these techniques help us to hear many sounds with harmonics/overtones we would have a difficult time or possibly no chance of hearing without the amplification, but there is another kind of electronic modification. By directly attaching some sort of pickup to either the sound source itself or directly to the rack/stand which holds the sound source, sounds can be amplified and

modified. When mounting the pickup directly onto the rack or frame, consideration should be given as to what kind of metal is used for the racking, as the jewels of sound live within the vibrations traveling through the rack and into the pickups. A metal book shelf-support works very well as it is a good conductor for sending rich and powerful vibrations to the pickup and it also has screw holes that can be very helpful when attaching metal, cymbals, springs, wire and other bits of trash. The difference with this amplification technique, compared with the previously mentioned techniques, is mainly the extreme/radical signal/sound generated as a result of the direct contact with the sound source. So while this is also amplification, which helps extension of our range of hearing, this is also extension/modification which transmutes the sound. Once played, the sound source/instrument sends a mutated sound (because of the direct miking) into an amplifier that will produce a new and unusual sound due to all the transient weirdness and over the top vibrations that the pickup is trying to handle. The incorporation of guitar pedals and electronics (the cheaper, the better!) can modify the sound even further. Ring modulators, compressors, volume pedals, pitch shifting devices ... not the expensive designer gear, but the cheap stuff.

Besides the obvious financial benefit, cheap devices can be the favored choice as the "inferior" electronics used within them often tend to respond to the instrument/signal by producing a mutated sound that is richer in color and contains far more grease, grime and grit than the expensive "good" stuff.

Some of the early pioneers of these techniques of close miking and/or modification of acoustic sounds via processing include Max Neuhaus, John Cage, Hugh Davies and Karlheinz Stockhausen. Regarding percussionists, the meister motherfucker who defined this direction is Tony Oxley. Tony was first working with "amplified percussion" in the late sixties: amplified racks of metal, springs, knives, wires, egg slicers, all amplified by pick-ups attached to metal racks. The signal is then sent through sound modification devices (ring modulators, compressors, pitch shifter, volume pedals, etc.) before being sent through the amplifier. There is nothing like it. Sounds are stretched, bent, squeezed, shifted... (for great examples of Tony's work with amplified percussion, check his recordings on Incus Records, *February Papers*, *Tony Oxley* and *Soho Suites*, and *The Advocate* on Tzadik). Concerning pickups, Miroslav Tadic gave me the idea for amplifying my rack of junk with Walkman headphones. Talk about cheap!

We're talking about the ones that they give away with the Walkman, nothing expensive, strictly JUNK. Miroslav used rubber bands to tightly attach the headphone earpieces to the rack, using them as microphones/pickups as opposed to headphones. The intensity/impact of whichever playing technique is used, along with the choice of what material the instruments are being activated with, makes quite a difference to how the electronics process the initial sound. Although the amplified sound going directly from the rack of junk to the amp can be a beautiful sound, it can also be completely out of control. Even without modifiers such as a ring modulator, distortion boxes, pitch changers and other devices, a volume pedal is a good idea for shaping and controlling the sound. A compressor is helpful in controlling the extreme dynamics produced by the wide range of sound sources being used that are directly and cheaply miked and played with a large assortment of materials and techniques. The compressor is also helpful in protecting the speakers from murder when you forget to release the volume pedal from the completely open position and you strike a mighty blow with a Louisville Slugger baseball bat to a thick piece of metal, which is tightly attached to the rack! Now those pathetic headphones have great value: one day it's junk, the next day it's still junk, but now it's talking to you, and with an attitude!!!

Over the years, it has come to my attention that certain forms of trash *speak* to me the same way that drums did when I was a child. I'm often surprised when other people don't react like I do to a great piece of rubbish. While I'm thinking about the possibilities of this junk to create beautiful music, others often think that it is simply useless rubbish.

To quote Joscelyn Godwin again, "In order to undertake this work, the true composer, like the alchemist, does not choose his profession: he is summoned to it by a call that cannot be ignored."

Although I have studied traditional instruments, and while playing them have experienced levels of concentration and "freedom from distraction" that have been inexplicable, experiences with rubbish have been a bit different. With the transmutation of junk as a way of finding music, without previous research of the "instrument" or an established method or technique, I believe that the musician/alchemist accesses other levels of attention when dealing with the undiscovered. *Even more* inexplicable? Mystical? Having only a vague idea as to were the sounds in the object may be and how various parts of the selected junk may respond to activation,

one must be "wide awake." This state of acutely concentrated lost in unknowing is a form of the *philosopher's stone*.

I think it's a good idea to have respect for your instrument, even if it is trash, as it's not just a pile of wood, metal, strings, skin, etc., but a vehicle that can bring you to an exceptional state of awareness and peace. It's yoga/meditation, with music as the object/point of awareness—by making music practice not just something that you do to improve your ability with your instrument, but approaching music practice as a destination, a focused, relaxed and concentrated state inside the music. This cultivation of attention makes music a place to create within as well as the product of creation itself.

One person's rubbish heap can be another person's altar.

THE COLLECTIVE INTELLIGENCE OF IMPROVISATION

PAULINE OLIVEROS

PRESENTED AT SONS D'HIVER, COLLOQUE A
UNIVERSITAIRE PIERRE DIDEROT
Pauline Oliveros, January 21, 2008

The largest media event in history took place two days ago on January 20. I was proud to watch this event along with millions of other Americans, countless others around the planet (twenty-six million internet streams were watched), and to experience the depth of feelings expressed by the magnificent turnout of people from all corners of the USA and the world.

At the stroke of noon, possibly the largest wave of healing energy ever—peaked and washed over the planet, bringing joy and hope to all, even though the oath of office was given minutes later. At last we have a president who knows how to improvise with his scripted speeches. President Barack Obama knows how to listen and how to invite participation. He plays the crowd as if it were his finely tuned instrument. He knows how to play the changes. Delivered from memory, his inauguration speech was deeply embodied and finely nuanced for this occasion. As William Parker stated yesterday, "improvisation is an exact science." President Obama delivered his speech with precision, spontaneity and assurance. He caught the emotional wave of the American people and people of the world. President Obama, along with all who were present at the inauguration physically and virtually, have created an improvisational shift in the world energy field.

Now for a few thoughts about music improvisation:

Creative music improvisation communicates collective musical intelligence as an energy field. Whether an individual soloist or ensemble is improvising, there is a mining of musical information stored deeply in the collective consciousness of humanity.

Intelligence is the ability to utilize and purpose detectable information or data from inner or outer sources.

Creative music offers new patterns and combinations spontaneously.

Improvisation is the ability to create spontaneously with or without pre-planning—within or without a plan of action.

The reaction time of primal or core consciousness is practically instantaneous—much quicker than waking or thinking consciousness. Reaction time without thinking is typically 1/10th of a second with as little as 1/80th of a second possible. Improvisers may find themselves observing what the body has already played slightly after the action. Thinking consciousness is slower. The evoked potential for a premeditated action appears one third to half second before consciousness perceives it.¹ The brain reinterprets the delay to be action in the present moment. The body acts prior to thought. The improviser who trusts his or her body consciousness feels that the music is happening without thought or control. It just flows.

1. Libet's Short Delay. <http://www.consciousentities.com/libet.htm>

In the *Phenomenon of Man*² Teilhard de Chardin (TIE-YARH DE CHAR DAN) pointed to the noosphere. The noosphere surrounds the planet like the atmosphere or biosphere and is the interconnection of human minds—their thoughts, images and ideas. The noosphere must also be threaded with musical information, auralizations and sound waves as well as spoken and written thought.

2. Pierre Teilhard de Chardin, *The Phenomenon of Man*, (Harper & Row, revised English translation by Benjamin Wall, 1975).

Primordial consciousness is not bound by the alphabetic mind.

When creative musical improvisation happens there is resonance from the minds of the musicians and the musical thoughts of living musicians and billions of musicians from throughout the ages. Yet the creativity that emerges through improvisation carries new combinations and possibilities that are now expanding and extending throughout the world, just as the healing wave of energy from the inauguration is opening new doors for masses of people.

Through their music, musicians are the harbingers of world community and planetary consciousness. There is no need for musicians to speak the same language. They can play together without speaking. They only need to listen to one another giving and receiving sound. Their encounters with different tunings and styles can be negotiations for recon-

ciliations of differences.

A world music genre has come about through many combinations of musical cultures in improvisation. This music moves through popular, classical and experimental styles and ideas. Our time is an exciting time where musicians can meet and improvise in person locally, through world travels and also virtually through cybernetics.

Virtual venues have been with us since the advent of recording over 100 years ago.

Recording serves as memory and expands the mind.

Recording and radio broadcast made it possible to hear music from distant environments and cultures without being there.

These familiar commodities were just as startling when they were first developed as our newer virtual realities are to some now. And they have, of course, made it even more compelling to experience positive musical and cultural encounters in person, just as two million people showed up to celebrate in Washington D.C. for the inauguration, enticed by telematics and online technology as never before.

I want to explain the term Telematic. This term refers to the interface with computers and performers over distance.

The acceleration of technological development is producing many instantaneous musical encounters and telematic³ venues for high quality performances with distant partners. These telematic transmissions can promote reflexive friendships and enlarge the possibilities for world music.

3. Telematic Circle. <http://www.deeplisten.org/site/telematic>.

There's another term that I enjoy using, and that is Sonosphere, this aural equivalent of other planetary fields such as the biosphere, stratosphere, ionosphere, etc.

I propose the existence of a sonosphere coexisting and encircling the globe in resonance with the noosphere—mingling meaningful frequencies and rhythms, music and sounds—fostering feelings that can help unite humanity with the intelligence of evolution.

All of this is a universal improvisation that is moving ever onward from the quantum microcosm to the macrocosmic metaverse.

* * *

I would like now to share the scores of a few pieces that are designed to

engender creativity in the performer as well as to foster communication with others and with the environment.

These pieces consist of metaphorical titles and very simple instructions or statements.

The title is a portal for the composition waiting to be improvised that resides momentarily in my body and/or the bodies of other performers.

The body expresses primal consciousness modulated by the accumulation of experiences that are part of the body's knowledge.

* * *

Dissolving your ear plugs:

For classically trained musicians and anyone else interested.

—Pauline Oliveros

1. Take some time—no matter where you are—sit down and close your eyes for a while and just listen. When you open your eyes consider what you heard as the “music.” Later try to remember what you heard and express it with your instrument or voice. Do this practice often until you begin to hear the world as music.
2. Another time—sit down with your instrument and just listen with your eyes closed. As you realize that whatever you are hearing is “music,” allow your instrument or voice to enter this musical stream. Stop when the music is over. This is what I think of as supported improvisation.
3. Listen to a favorite machine and play along with it. This is good to do with sounds that you don't like as well.
4. Listen to a favorite natural soundscape and play along with it. This is good to do with any soundscape—very quiet or extremely noisy.

Pauline's Solo (1992–2008)

“Listening to this space I sound the space. Listening to the energy of all who are present I sound this energy. Listening to my listening and your listening I make this music here and now with the assistance of all that there is. I dedicate this music to a world where peace is more exciting than war.”

Pauline's Solo is performed both acoustically and with EIS—the Expanded Instrument System. This performance includes an eight channel surround system with EIS. The EIS developed from the composer's work with tape delay that began in the 1960s at the San Francisco Tape Music Center. The evolution of EIS has moved from multiple tape machines to digital delay processors to the computer. The MAX/MSP interface for EIS 2004 was programmed by Stephan Moore, 2005 by Jessie Stiles and 2007 by Zevin Polzin with design by the composer.

The EIS is a continually evolving canonical form. EIS processes and distributes the sounds of the accordion during the performance. Nothing is pre-recorded. Sounds are picked up by internal microphones in the accordion, and sent to up to forty delay processors. The canonical delays are modulated by a variety of wave forms and distributed to the eight speakers in geometrical patterns. The ten possible patterns are selected by algorithms. The size, speed and shapes of the selected patterns are morphed algorithmically.

Sounding Secret Spaces

When I am creating a piece on stage, the spaces are secret. The secrets are in everybody, including in me, until they are sounded. And when they're sounded, the secrets are out. The audience is an instrument too. If I am pure about my listening and creating the sounds that come forth, the audience will feel that and respond to the sound. I am something akin to a high wire artist. The audience is with you, because they perceive the risks and the dangers.

THEE SPLINTER TEST

GENESIS BREYER P-ORRIDGE

It can be said, for me at least, that sampling, looping and re-assembling both found materials, and site specific sounds selected for precision ov relevance to thee message implications ov a piece ov musics, or a Transmedia exploration, is an All-Chemical, even a Magickal phenomenon. No matter how short, or apparently unrecognisable a "sample" might be in linear TIME perception, E believe it must, inevitably, contain within it, (and accessible through it) thee sum total ov absolutely everything its original context represented, coumunicated, or touched in any way; on top ov this it must implicitly also include thee sum total ov every individual in any way connected with its introduction and construction within thee original (host) culture, and every subsequent (mutated or engineered) culture it in any way, means or form, has contact with forever, (in Past, Present, Future and Quantum Timezones).

"Any two particles that have once been in contact will continue to act as though they are informationally connected regardless of their separation in space and time."
—Bell's Theorem

Let us assume then that every "thing" is interconnected, interactive, interfaced and intercultural. Sampling is all ways experimental, in that thee potential results are not a given. We are SPLINTERING consensual realities to TEST their **substance** utilising thee tools ov collision, collage, coumposition, decoumposition, progression systems, "random" chance, juxtaposition, cut-ups, hyperdelic vision and any other method available that melts linear conceptions and reveals holographic webs and fresh spaces. As we travel in every direction simultaneously thee digital highways ov our Futures, thee "Splinter Test" is both a highly creative contemporary channel ov conscious and creative "substance" abuse, and a protection against thee restrictive depletion ov our archaic, algebraic, analogic manifestations.

("My Prophet is a fool with his 1, 1, 1; are they not the OX, and none by the BOOK?")
—*Liber AL I:48*)

So, in this sense, and baring this in our "MIND", on a technical level, when we sample, or as we shall prefer to label it in this essay, when we SPLITTER, we are actually **splintering people and brain product** freed ov any ov the implicit restraints or restrictions ov thee five dimensions (as Richard Miller insists there are!). We are actually taking bytes. Reusing these thereafter as **heiroglyphs** or **memes**. Thee **tips of each iceberg**.

If we shatter, and scatter, a hologram, we will real-eyes that in each fragmeant, no matter how small, large, or irregular; we will see thee whole hologram. This is an incredibly significant phenomenon.

It has all ways been my personal contention that if we take, for example, a SPLITTER OV JOHN LENNON; that splinter will in a very real manner, contain within it everything that John Lennon ever experienced; everything that John Lennon ever said, composed, wrote, drew, expressed; everyone that ever knew John Lennon and thee sum total ov all and any ov those interactions; everyone who ever heard, read, thought ov, saw, reacted to John Lennon or anything remotely connected with John Lennon; every past, present and/or future combination ov any or all ov thee above.

In magick this is known as thee CONTAGION theory or phenomenon. Thee magickal observation ov this same phenomena would suggest that by including even a miniscule reference or symbol ov John Lennon in a working, ritual or a "SIGIL" (a 2-3 dimensional product invoking a clear intention usually primarily graphically and non-linguistically, in a linear, everyday sense) you are invoking "John Lennonness" as part ov what in this particular context (i.e. "musics") is a musical sigil.

All that encyclopedic information—and the time travel connected with it, through memory and through previous experience—goes with that one "splinter" ov memory, and we should be very aware that it carries with it an infinite sequence of connections and progressions through time and space. As far as you may wish to go.

We can now all maintain thee ability to assemble, via these "splinters", **clusters** of any era. These clusters are basically RE-MINDing. They are acutally bypassing the usual consensus reality filters (because they reside in an acceptable form. i.e TV/Film/Musics/Words) and travelling directly into "ahistorical" sections of thee brain, triggering all and every conscious and uncounscious reverberation to do with that one splinter heiroglyph.

We access every variable memory Library and every individual humanebeing who's ever for a second connected with, concieved or related to or been devoted to or despised or in anyway been exposed to this splinter ov culture.

We now have available to us as a species, really for thee first TIME in Astory, infinite freedom to choose and assemble, and everything we assemble is a portrait of what we are now or what we visualise being. Skill full splintering can generate manifestation.

THIS IS THEE "SPLITTER TEST"!

We are choosing SPLITTERS consciously and unconsciously to represent our own mimetic (DNA) patterns, our own cultural imprints and aspirations, we are in a truly Magickal sense "INVOKING" manifestations perhaps even results in order to confound and short-circuit our perceptions, and reliance ov "WHOLENESS".

Anything, in any medium imaginable, from any culture, which is in any way recorded and can in any possible way be played back is now accessible and infinitely maleable and useable to any artist. Everything is available, everything is free, everything is permitted. Its a firestorm in a shop sale where everything must G.O.

Thee "edit" in video and televisual programming and construction is in essence an "INVISIBLE LANGUAGE", in thee sense that our brain tends to read a story or narration in a linear manner, tending to blend, compose, and assemble as continuous what it primarily sees at thee expense ov READING thee secondary sets of intersections and joins that it does not consciously, or independently, SEE. Yet thee precision ov choice in where to edit, and thee specific emotional and intellectual impact and innate sense ov meaning that is thus specifically conveyed is as much a text ov intent and directed meaning, even propaganda, as is thee screenplay, or dialogue itself.

Everything in L-if-E is cut-up. Our senses retrieve infinite chaotic vortices ov information, flattening and filtering them to a point that enables commonplace activity to take place within a specific cultural consensus reality. Our brain encodes flux, and builds a mean average picture at any given TIME. Editing, reducing ov intensity, and linearity, are constantly imposed upon thee ineffable to facilitate ease ov basic coumunication and survival. What we see, what we hear, what we smell, what we touch, what we emote, what we utter, are all dulled and smoothed approximations ov a far more

intense, vibrant and kaleidoscopic ultradimensional actuality.

Those who build, assemble, *ASSEMBLY* is thee invisible language ov our *TIME*. Infinite choices ov reality are thee gift ov software to our children.

Thee Splinter Test—Appendix A

Thee Scattering

“And they did offer sacrifices ov their own blood, sometimes cutting themselves around in pieces and they left them in this way as a sign. Other times they pierced their cheeks, at others their lower lips. Sometimes they scarified certain parts ov their bodies, at others they pierced their tongues in a slanting direction from side to side and passed bits ov straw though thee holes with horrible suffering; others slit thee superfluous part ov their virile member leaving it as they did their ears.”

A Formal Process ov Moral Reasoning

If Astory is any clue, thee succession ov civilizations is accompanied by bloodshed, disasters and other tragedies. Our moral responsibility is not to stop a future, but to shape it. To channel our destiny in humane directions, and to try to ease thee trauma ov transition. We are still at thee beginning ov exploring our tiny little piece ov thee omniverse. We are still scientific, technological, and cyberspace primitives; and, as we revolutionize science itself, expanding it's parameters, we will put mechanistic science—which is highly useful for building bridges or making automobiles—in it's limited place. Alongside I.T., we will develop multiple metaphors, alternative principles ov evidence, new loggias, catastrophe theories, and new tribal ways to separate our useful fictions and archetypes from useless ones. Thee scattered shapes ov this new civilization will be determined by population and resource trends; by military factors; by value changes; by behavioral speculations in fields ov consciousness; by changes in family structures; by global political shifts; by awakened individual Utopian aspirations; by accelerated cultural paradigms and not by technologies alone. This will mean designing new institutions for controlling our technological leaps into a future. I.T. will mean replacing obsolete political, economic, territorial, and ecological structures. I.T. will mean evolving new micro-decision making systems that are both individually and tribally oriented synthesizing participation and initiation, and, new macro-decision making systems that are digi-

tally spiritual and revealingly autonomous. Small elites can no longer make major technological, ecological, or economical decisions. Fractally anarchic clusters ov individuals with integrated extended family structures and transhumanE agender groupings must participate and calibrate what stretches out before them in a neo-pagan assimilation ov all before, *NOW!* and to be.

“I.T. will BE because I.T. is inevitable”

—Old TOPI Proverb

We plough thee feeled and scattering thee would—ship ov our plan.

Thee Splinter Test—Appendix B

Source are Rare

In thee future thee spoken word *Wills* to be viewed as holding no power or resonance and thee written word *Wills* to be viewed as dead, only able to be imbued with potential life in it's functional interactions with what *Wills* to have become archaic software and programming archeologies, namely speech. That is, just as a symphony orchestra preserves a museum ov musics, ov musics considered seminal and part of a DNA-like spiral ov Culture; so, thee *WORD* *Wills* to be seen as thee preservation vehicle in a DNA-like chain ov Digital breakthroughs and Cultural intersections. Thee *WORD* *Wills* to be viewed, not as a virus that gave speech, nor as thee gift ov organic psychedelics through which civilization (i.e. Living in Cities) was made so “wondrously” possible; but, as a necessary language skill for those specializing in thee Arcane science ov Software Archeology, or SoftArch Processing, as I.T. *Wills* to *NOW!* be known. In much thee same way as Latin was for so long a required subject and qualifier ov scholarship at prestigious Universities when thee drone majority found I.T. incongruous, if not ludicrous. Ov course, Individuals *Will* to be utilizing laser based systems to access and exit thee neuro-system via thee retina; and, these systems in turn, *Will* to transmit, wirelessly, to a new breed ov computers using liquid memory instead ov micro-chips (this is already being pioneered in Detroit). If we are to disbelieve what we don't hear, then conversation *Wills* to be a status symbol ov thee leisured classes, and power elites. As ever, thee same Processes that delineate *POWER*, in this case, a perpetuation ov an atrophied communication system, i.e. *WORDS*, *Wills* to always be appro-

priated by those who position their means of perception at an intersection diametrically opposed to those who oppress with I.T., for I.T., or because of I.T. Put simply, any form of literal or cultural weapon pioneered by authority Wills to some day be used by "esoterrorists" bent upon destabilising and/or, at least temporarily, destroying its Source. Thee poles become clearer, thine enemy more Known, as thee mud settles and we protagonists are exposed standing shakily on our rocks, above thee Golden Section, and visible to all who would disown and destroy us. I.T. is in this spirit that this work was created.

Imagine, if you won't, that you are a subversive in this future. You conspire to be hidden by thee use of thee WORD. This act could move you into a position of becoming a co-conspirator in thee Process of desecration. To conspire literally means "to breathe together". Thee all pervading surveillance systems are NOW! so digitized that they have no voice recognition software, this has also been manifested to protect thee conspiracies and debaucheries of thee Control species themselves.

"Hell, even Deities need privacy son. We used to plot murders and takeovers in saunas, then bug-proof buildings, now we just talk son, no one out there listening, all just PLUGGED IN".

One fashionable lower class, blue collar medical expense is thee vocal chord removal process. I.T. is taken as a status operation. A clear signal to one's contemporaries that your software interface is so advanced that you need never consider thee use of speech ever again.

Thee WORD is finally atrophied. No longer a dying heart, but dead. Thee bypass is on. So, here you are. You FEEL something is out of balance, you TALK. They TALK. Thee world swims in silence. Thee only place of secrecy is a public place, thee only manner of passing on secrets is talking out loud. Neither protagonist is aware that thee other is TALKING. If they were all hells would be let loose.

Forcible Vocotomies in thee street, subversives held down at gun point, their chords lasered out in seconds. Loud laughter of a rich Vocotomy tout, thee ultimate status signal "of power".

Know, thee WORD is gone, its power defused, diffuse, in order that these scriptures of thee golden eternity be fulfilled. In thee ending, was thee WORD.

As a recipient of this cluster you are encouraged to recall, and remain constantly vigilant of thee dilemma I.T. exposes.

I.T. hungers for thee death of thee WORD. Rightly so, for we are imprisoned in thee NAMING sorcery that was both built, and solidified within thee Process of Control, and more critically, and integral to I.T., submission and subservience.

This death is craved, intrinsically, by all in order that a showdown may occur, as thee World Preset Guardians laser burn their retina of lust for result. Thee WORD wills to go, I.T. is here to go.

Thee Brain Coumputer interface will replace all verbal media of communication, for bitter or wars. Thee new being merely that which is inevitable. Nurse it along so that I.T. may become a living intelligence system. Thee Museum of Meanings.

But as tiny child-murdering Mary Bell once said, "I only murder that I may return," and what Wills to be re-born Wills to vary with thee input of thee user.

Debug thee old Preset programming. Leave only an empty time-zone that you might later fill with your Will to and clarity of intent.

Thee Splinter Test—Appendix C

Cathedral Engine

"VIDEO IS THEE ELECTRONIC MOLOTOV OF THEE TV GENERATION"

Cause thee Cathode Ray tubes to resonate and explode. You are your own screen. You own your own screen.

Watching television patches us into thee global mixing board. Within which we are all equally capable of being victim or perpetrator. CD Rom, and thee cyberspace internet carrying audio/text, visual data and scrap books via Personal Computer modems actually delivers a rush of potentiality that was previously only advanced speculation. Thee lines on thee television screen become a shimmering representation of thee infinite phone lines that transmit and receive. We have an unlimited situation. Our reality is already half-video. In this hallucinatory state all realities are equal. Television was developed to impose a generic unity of purpose. Thee purpose of "control". To do this I.T. actually transmits through lines and frequencies of light. Light only accelerates what thee Brain is. Now we, with our Brains, can edit, record, adjust, assemble and transmit our deepest convictions, our most mundane parables. Nothing is true, all is transmitted. Thee Brain exists to make **matter** of an idea, television exists to transmit

thee Brain. Nothing can exist that we do not believe in. At these times consciousness is not centered in thee world ov form, I.T. is experiencing thee world ov content. Thee means ov perception wills to become thee program. Thee program wills to become power. Thee world ov form wills to thereby reduce thee ratio ov subjective, experiential reality. A poor connection between Mind and Brain. Clusters ov temporary autonomous programs globally transmitted, received, exchanged and jammed will generate a liberation from consumer forms and linear scripts and make a splintered test ov equal realities in a mass political hallucination transcending time, body, or place. **All hallucinations are real, but some hallucinations are more real than others.**

We create programs and "deities", entities and armageddons in thee following way. Once we describe, or transmit in any way, our description ov an idea, or an observed, or an aspired to ideal, or any other concept that for ease ov explanation we hereafter will to describe as a "deity"; we are thee Source ov I.T.

We are thee Source ov all that we invoke. What we define and describe exists through our chosing to describe I.T. By continued and repeated description ov it's parameters and nature, we animate I.T. We give I.T. life.

At first, we control what we transmit. As more and more individuals believe in thee original sin ov it's description, and agree on thee terms ov linguistic, visual and other qualities, this "deity" is physically manifested. Thee more belief accrued, thee more physically present thee "deity" wills to become. At a certain point, as countless people believe in, and give life to, that described and believed in, thee "deity" wills to separate it's SELF from thee Source. I.T. then develops an agenda ov it's own, sometimes in opposition thee original intent and purpose ov thee Source. Thee General Order at this intersection becomes G.O. And thee I.T. continues to transmit to our brains. Our brains are thus a Neuro-Visual Screen for that which has separated from it's Source and become a "deity". This is in no way intended as a metaphor, rather a speculation as to thee manner in which our various concepts ov brain are actually programed and replicated. In an omniverse where all is true and everything is recorded, as Gysin wondered, "who made the original recordings?" Or in more contemporary jargon, who programmed thee nanotech software? Our response can only be a speculative prescience. Thee **Guardians** who exist in an, at present, unfathomable other World and

Preset thee transmissions in some, as yet, mysterious way.

Videos can move televisual order, and conditioned expectations ov perspective, from one place, and reassemble it's elements as if glueing a smashed holgram back together, all the while knowing that each piece contains within I.T. thee whole image. In other words, these are all small fragments ov how each ov us actually experiences L-if-E. Through all our senses simultaneously. In every direction simultaneously. Even in all five dimensions (at least!) simultaneously. Bombarded by every possible nuance and contradiction ov meaning simultaneously. Quaquaversally. This is a relentlessly INCLUSIVE process. We do not just view "L-if-E" anymore. Although perhaps we can, at least potentially, have an option to view everything. Intention is thee key. What was once referred to as thee "viewer" is now also a SOURCE ov anything to be viewed, and thee Neuro-Visual Screen on which to view I.T. Thee constructed, and ever increasing digital concoction built from millions ov Sources that is commonly referred to as "Cyberspace" is accelerating towards deification, and separateness. Towards thee moment ov a sentient awakening ov it's own consciousness and agendas that we feel is more aptly described as thee "Psychosphere". This Psychosphere challenges us to seize the means ov perception and remain thee Source.

"Change thee way to perceive and change all memory."

—Old TOPI Proverb

Thee Splinter Test—Appendix D

Since there is no goal to this operation other than thee goal ov perpetually discovering new forms and new ways ov perceiving.

I.T. is an infinite game.

An infinite game is played for thee purpose ov continuing to play, as opposed to a finite game which is played for thee purpose ov winning or defining winners.

I.T. is an act of freed Will to...

No one can "play" who is forced to play.

Play is, indeed, implicitly voluntary.

Thee Splinter Test—Appendix E

Thee night under Witches that you close up your book ov shadows and open up your neuro-super highway to thee liquid blackness (within which dwells an entity) represents thee edge ov Present TIME. I.T. pinpoints precisely thee finality ov all calendars. Wherein I.T. is clear that measurement, in it's SELF, and ov it's SELF equals "DEATH" or "DAATH". Thee spoken binds and constricts navigation unutterably. Thee etymology ov thee word **spiral** (DNA), from thee Greek, indicates an infinitude ov perceptive spaces and points ov observation, where "down", "up", "across", "distance" and other faded directional terms becoun redundant in an absolute elsewhere. Thee eyes have I.T. and they suggest a serpent that was once thee nearest metaphor to cold dark matters such as wormholes and spaces between.

Thee Splinter Test by Genesis P-Orridge
Use Full Glossary of Terms:

Astory: An alternative suggestion for the perennial problem of finding a non-gender word when describing the ebbs, myths, flows, interactions, conflicts, migrations and belief systems of various peoples and social groupings throughout recorded and speculative TIME. We would posit that we can at least all agree that these are a story!

Exoculation: The opposite of inoculation, where inoculation would mean contaminating a clean medium, so that whatever you introduce wills to grow and proliferate. In this more controlled environment the host medium (culture) can thereafter identify I.T. and can then generate its own "antibodies".

Humoral Response: The process by which, upon the introduction of an antigen, the body creates antibodies to combat, neutralize and contain these irritants.

I.T.: Imaginary Time.

Occulture: The inevitable equivalent in the realm of hidden teachings, techniques, and knowledge, of consensus and popular culture.

Quaquaversal: Pointing in every direction simultaneously. In the dictionary **centroclinal** is defined as the opposite of quaquaversal.

Sigil: For the purposes of this essay let us define this as a 2-3 dimensional product or ideagram; consciously invoking a clear intention; often produced in conjunction with a formal ritual including orgasm consciously and unconsciously designed to "make something happen". A Sigil is usually and primarily graphic and/or non-linguistic, in a linear, everyday sense of things.

Transmedia: A crossing of cultural borders and taboos. A synthesis. As a general guide, holistic. An examination of constructed "reality" devoid of preconceptions. This is not an alternative word for mixed-media, interactive or multi-media. It is a recognition of the arrival of one, entirely new, **single** contemporary medium that contains within I.T. all other previously separated media. Transmedia encourages us to establish a re-newed, but not controlled, state of flux; to develop an openness to the very nature of our transhuman existence. I.T. relies neither on pre-conceived concepts about what we should believe, nor on a creative or social consensus of any type to which we must conform. (Special thanks to Brother WORDS for co-authoring this definition)

TIME: Time Is M... Ending. (sic).

Outsane:

Thee Splinter Test

We now have available to us as a species, really for thee first TIME in Astory, an infinite freedom to access, select and assemble. Everything we assemble becomes, and is, a description ov what we are now or what we visualize "being" at any level; from thee deepest, sub-molecular, neuro-cellular programs that we have named "DNA" to thee farthest inter-dimensional reaches ov galactic expansions and contractions outside TIME or SPACE. Skill-full "splintering" is a magickal tool and can generate manifestation.

THIS IS THEE "SPLINTER TEST"!

We are choosing **SPLINTERS** consciously and unconsciously to represent our own memetic (DNA) patterns, our own cultural imprints and aspirations. We are in a truly Magickal sense "INVOKING" manifestations, perhaps even results, in order to confound and short-circuit our perceptions, and reliance upon "WHOLENESS". We are creating our own subject-

tive and speculative descriptions ov "OTHERNESS".

It can be said, for me at least, that thee transformational implications inherent in sampling, looping, cutting-up and/or thereafter re-assembling both found data materials and infinite combinations ov site specific sounds, is as probably equivalent to, and as socially significant and profound as, thee popularization and mass proselytisation ov LSD and thee splitting ov thee atom. All three involve thee cutting-up ov thee essential "matter" ov science, religion and language; thee basic, potential inhibiting, cornerstones ov what has been coined, our contemporary "dominator" culture. All three are innately magickal processes giving thee initiate practitioner, tools to travel within their previously finite consensus reality container, thereby to reveal and describe and physically adjust a place both ov IN "control" and OUT ov "control". A place, quite literally, ov infinite space. A place previously reserved for thee elite mysteries ov power, or described in covert and arcane codes by thee ritual magickian; thee shaman-woman. A place we might label for thee present, "SPATIAL MEMORY". Change thee way to perceive and change all memory. As Bruce Wagner put it in *Wild Palms* thee individual now has thee ability to "SEIZE THE MEANS OF PERCEPTION".

We are living in an age where we can shatter, splinter, and fragment at will, all linguistic, or perceptual constructs ov description and through this process, redefine and refine thee essence ov learned perception; thereby redistributing thee wealth ov any status quo system ov belief in as many patterns and forms as there are imaginations at play.

This base process is initially a matter ov selection, a selection ov "matter"; ("...and it really doesn't matter if you're wrong or right."!). "Splinters" ov any medium are carefully isolated for their precision ov relevance to thee message bearing qualities and subversive implications ov a piece ov occultural creativity. This "splinter" can be an image, a glyph, a "sound-bite", a conscious behavioral short-circuit, even a piece of discarded, proto-anthropological, physical detritus. In this, thee methodology is surprisingly akin to many nature based african religions; to generic shamanic techniques ov sympathetic magick, or a Tibetan Bon Po colored sand mandala invocation for example. A collecting together ov an apparently disconnected group ov objects, words, articles to form an atavistic or personally empowered "picture" that focuses will to a specific, subjectively arational, occultural end. Equally identifiable, is a clear intention to physically

manifest a desire or change, or create a symbolic, but active, (all) chemical, or biological reaction in a literal or visualized "host" culture.

We are collaging, if you will, an image ov a desired reality that confounds, consciously and **with clarity ov purpose**, a consensus reality and all thee suppressive and limiting constraints that inherently go with that same consensus reality. We are introducing cultural and memetic antigens. We are literally short-circuiting "control", stepping outside thee mundanity and form ov one dimension, into limitless and quaquaversal pool ov alternate dimensions and geometry's ov perception. In thee terminology ov Austin

Osman Spare, we are creating, consecrating and firing a "SIGIL" as we create audio-visual, linguistic, or physiologically active worlds and combinations that have never ever existed. However, in a very real sense, it is possible to suggest that with thee advent ov relatively cheap, and global, access to sampling data collected in various "internet" information banks, an extra, and highly potent, quality has been added to this ancient lineage ov manifestation. This most recent quality is an apparent ability ov that sampled, thee "meme" ov certain theorists, to **replicate** as well as resonate. Sorceric ritual could already reveal thee hidden; attack thee source ov stasis; accelerate thee "user" into repeatable contact with entities and galactic ebbs and flows; and through all this and more present us to thee nano-technology ov thee most minute primary codes ov what we could dub, sentient L-IF-E.

From this perspective, the process ov selection wills to primarily identify what cyberspace commentator Doug Rushkoff would call a "media virus"; an individual cultural item ov such precise metaphorical weight and resonance, within it's contextual societal structure and/or belief system, that is equivalent, in it's potential disruption and infection ov any established political status quo (or social immune system) to a virus attacking it's host organism. So, in a very real Astorical sense, we are committing acts ov heretical cultural exoculation "to see what is really there", as Brion Gysin once said. To further draw upon an analogy ov Gysin's when he stated that "In a pre-recorded universe, who made the original recording", we are attempting to "see" into the very nature ov "material" or "matter" and it's primary programming data. As once we split the atom, we are now isolating and splitting the very particles ov which information, art, and culture are constructed. This is not intended to be an idle, or convenient metaphor. Rather, a very literal description ov yet another pivotal developmeant in the latter half ov this century, and thee manipulative and connective "Process"

catalyzing and facilitating thee early visible appearance ov a new "Eon" both in thee visible consensus culture, and in what we chose to describe in thee early '80s as "Occulture".

This activation ov popular culture, or Transmedia exploration as we would designate I.T. (where I.T.= Imaginary TIME), E would argue, is parallel to an All-Chemical phenomenon. There is a knowing and precise refining ov "matter", its origin being at this stage in Astory, any information in any medium ever recorded in any possible or impossible process whatsoever. For the very first TIME we can develop cultural fragments or samples, as minute, or generic as we choose by accessing thee almost all pervasive reservoir ov material contained within thee host spheres ov our post-computer dataglut generating thee equivalent ov a cultural humoral response.

No matter how short, or apparently unrecognizable such a "sample" might be in any mechanistic linear TIME perception, E believe it must, inevitably, contain within it, (and accessible through it) thee sum total ov absolutely everything its original context represented, communicated, or touched in any way. Likewise it must retain every memory, feeling, occurrence, thought and instant ov existence ov its originator. Further, in addition to this hypothesis, E would argue that it must also implicitly include thee sum total consciousness, and experience, ov every individual in any way connected with its introduction and construction within thee original (host) culture, and every subsequent (mutated or engineered) culture it enters thereafter, in any way, means or form; or has contact with forever in all Past, Present, Future and even speculative Quantum Time Zones.

"Any two particles that have once been in contact will continue to act as though they are informationally connected regardless of their separation in space and time." —Bell's Theorem

Let us assume then that every "thing" is interconnected, interactive, interfaced and inter cultural. "Sampling", cutting-up, is all ways experimental, in that thee potential results are not a given. We are SPLINTERING consensus realities to TEST their **substance** utilizing thee ritual tools ov collision, collage, composition, decomposition, progression systems, "random" chance, juxtaposition, cut-ups, hyperdelic vision and any other method ov assembly and description available to our imagination and skills. This process melts linear conceptions and reveals holographic webs and fresh spaces. As we travel in every direction simultaneously thee digital highways ov our Futures, this "Splinter Test" is both a highly creative con-

temporary channel ov conscious, positive and creative media "substance" abuse, and a protection against thee restrictive depletion ov our archaic, algebraic, analogic manifestations ov inert and redundant assumptions and equations ov cultural "matter", with its subsequent restriction ov a quasi-evolutionary metaphysics ov intent.

("My Prophet is a fool with his 1,1,1 ; are they not the ox, and none by the BOOK?"
—Liber AL I:48)

So, in this sense, and baring this within our "MIND", one can suggest that on a technical level, when we select a sample, or, as we shall prefer to label it in this essay, when we SPLINTER, we are actually splintering **transhuman ikons** and cultural **transmedia brain products** freed ov any ov thee implicit restraints or restrictions ov thee five dimensions (as Richard Miller insisted to me once that there are!). We are actually taking "bytes". Reusing and re-assembling these thereafter as **heiroglyphs** or **memes**. Thee **tips of each iceberg**. Upon their release back into thee L-if-E stream ov their host culture these select splinter-memes develop an independent, sometimes virulent, sometimes benign, antigen agenda ov their own; separate from, but continually resonating internally with, their initial Source. This is a process ov "deification", ov thee creation ov "Gods/Goddesses/Entities/Demons", that E describe in a little more detail in thee essay "CATHEDRAL ENGINE".

"Thee Memeium IS thee Mass Edge!" —Old TOPI Proverb

As most ov us are aware by NOW!, if we shatter, and scatter, any hologram, we will real-eyes that in each fragmeant, no matter how small, large, or irregular; we will see thee whole hologram. This "scattering" is an incredibly significant contemporary metaphorical and physical phenomenon.

It has all ways been my personal contention that if we take, for example, a SPLINTER OV JOHN LENNON that that same splinter will in a very real manner, contain within it everything that John Lennon ever experienced; everything that John Lennon ever said, composed, wrote, drew, expressed; everyone that ever knew John Lennon and thee sum total ov all and any ov those interactions; everyone who ever heard, read, thought ov, saw, reacted to John Lennon or anything remotely connected with John Lennon; thee specific Time Zone, calendar date that it theoretically resided in; and every past, present and/or future combination ov any or all ov thee above.

In magick this is sometimes known as thee **CONTAGION** theory, or phenomenon. A magickal observation and perspective ov this same phenomena could suggest that by inclusion ov even a minuscule reference, or symbol ov John Lennon in a working, ritual or a "**SIGIL**", you are invoking "John Lennonness" as part ov what in this particular context (i.e. sampling "musics") might fairly be considered a musical sigil, a conscious invocation of clear intent ov Will.

All that encyclopedic, associative and implied information, and even thee potential resultant **time travel** connected with it—accessed through memory and through all connective previous experience—goes with that one "splinter" ov memory. We should be very aware that it does innately carry within it an infinite sequence of connections and progressions through time and space. This is not proposed as symbolism. You can travel as far as you may wish to go.

We can now all maintain thee ability to assemble, via these "splinters", **clusters** of any era. These clusters are basically **RE-MINDING**. They are actually bypassing the usual consensus reality filters (because they reside in an acceptable form. i.e. TV/Film/Musics/Words) and traveling directly into "Astorical" sections of thee brain, triggering all and every conscious and unconscious reverberation to do with that one splinter hieroglyph.

We access every variable memory Library and every individual humane being who's ever for a nanosecond connected with, conceived, related to, been devoted to, despised, or in any way been exposed to, this splinter ov culture.

In a similar, linked way, thee "edit" in video and televisual programming and construction is in essence an "**INVISBLE LANGUAGE**", in thee sense that our brain tends to read a story or narration in a linear manner, tending to blend, compose, and assemble as continuous what it primarily sees at thee expense ov **READING** thee secondary sets of intersections, and joins that it does not consciously, or independently, **SEE**. Yet thee precision ov choice in where to edit, and thee specific emotional and intellectual impact and innate sense ov meaning that is thus specifically conveyed is as much a text ov intent and directed meaning, even propaganda, as is thee screenplay, or dialogue itself.

At this point in **TIME** everything in L-if-E is cut-up. Our senses retrieve infinite chaotic vortices ov information, flattening and filtering them to a point that enables commonplace activity to take place within a

specific cultural consensus reality. Our brain encodes flux, and builds a mean average picture at any given **TIME**. Editing, reducing ov intensity, and linearity, are constantly imposed upon thee ineffable to facilitate ease ov basic communication and survival. What we see, what we hear, what we smell, what we touch, what we emote, what we utter, are all dulled and smoothed approximations ov a far more intense, vibrant and kaleidoscopic ultra-dimensional actuality.

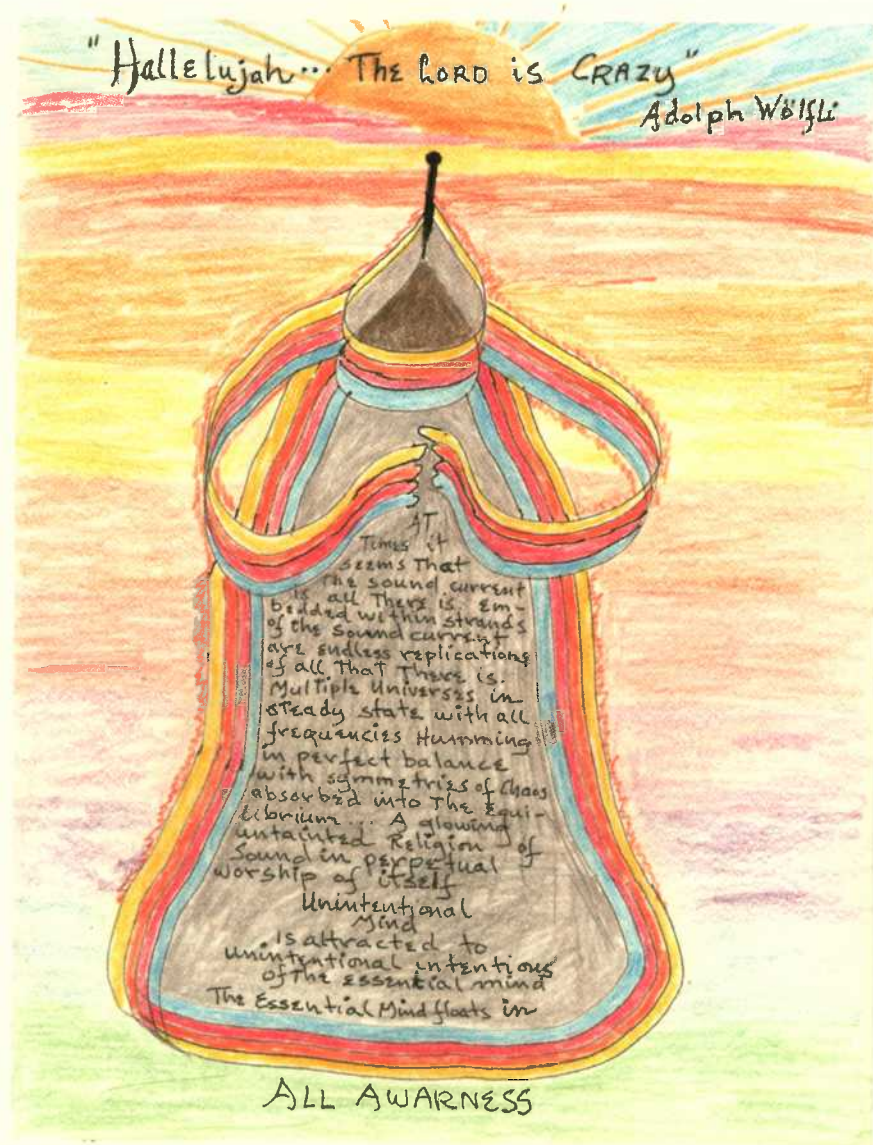
Anything, in any medium imaginable, from any culture, which is in any way recorded, or recordable, and can in any possible way be played back, is **NOW!** accessible and infinitely malleable and usable to any sorceric "artist". Everything is available, everything is free, everything is permitted. With the dissolution ov thee "Frame ov Reference" ov Peter Berg; "It's a firestorm in a shop sale where everything must **G.O.**"

For those who build or assemble, **ASSEMBLY** is the invisible language of our **TIME**. Infinite choices of reality are the gift of software to our children.

Editor's Note: Genesis' intentional misspellings are part of her idiosyncratic hijacking of standard English, and are meant to give words added levels of meanings.

MUSIC-MYTH

TERRY RILEY



Cavedream 1996

I
am
looking
for a tamboura with which to practice
and
walk into a large cave-like space.
I see Tamam
and Shabda Kahn and
Ann Riley
lying in a deep bed of Ashes on the floor.
The ashes are
at least ten inches deep.
Although
they are lying in Ashes, their bodies
appear clean.
TAMAM
is
the only one awake.
She
is
Happy to see me
and
says
'Oh Shabda will be so glad you are
here.'
Then Shabda awakes
and smiles.

Ann
 Also awakes
 and all three are sitting up now.
 They have elaborately patterned red
 head scarves.
 They have been on retreat for many days.
 Sleeping in
 a deep bed of ashes is
 part of the ritual.
 I puzzle over how they must burn
 enormous piles of wood and then
 let it all cool down each night.
 before sleeping



IT'S
 NOT
 MUSIC
 if
 THERE
 is
 NO

Seduction



Self Improvement Practice

Use Italian
Music Terminology
Substitutions for common
Swear words

#ssHole = ARIA
C#NT = Coda
Mother f#cker = Mezzo Forte
Pr#ck = Piano
Little Pr#ck = Pianissimo
P#ss Ant = Pizzicato
C#ck Sucker = Con Sordino

Add to the list and be SURE to
cover your most frequently used
offensive phrases

examples:

"Hey Mezzo forte, Wassup?"
"That pianissimo is only a pizzicato aria
with a big Coda!"

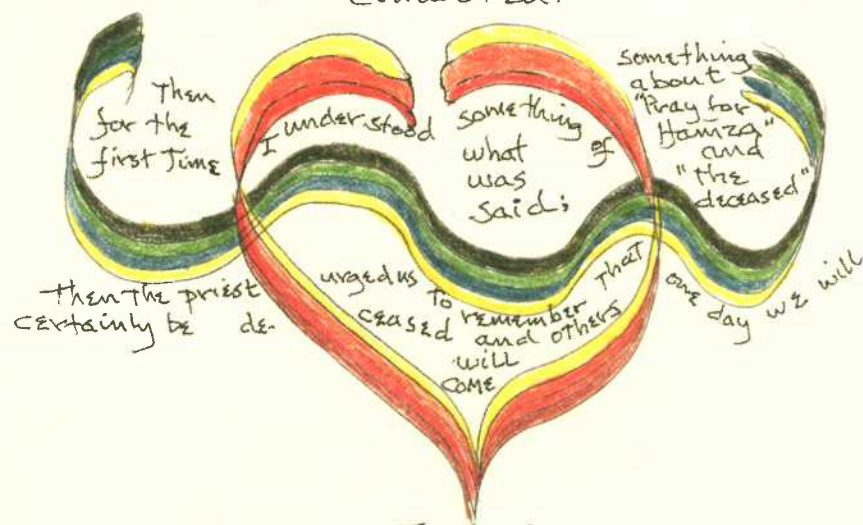
The funeral of HAMZA EL Din
Composer, singer, oud and Tar player
and Nubian Magician of Music



due to thinking it was in another part of town.
When we drive up to the 31st Street Mosque in Oakland,
the parking lot is full so we hastily park in front
illegally. As we enter the building, Ann is
sent to the ladies section and I to the men's.
I enter the Hall. Lines of men are praying and
Allah Hu Akbar is reverberating through the room.
I am invited into a line of men who show me how
to line my feet up to begin the prostrations. I glance
around then and realize that nobody I know is
there.
Strange!
Where are his many friends and music lovers?
I can't concentrate as a nagging feeling over-
comes me that I am in the wrong Mosque.
And... where is Hamza? Not even the mention
of his name by anyone. I pull myself out of
the line of praying men and place myself up
the back of the room, by a side corridor and
try to assess the situation.

There are other men standing there who don't seem
at all involved in the ceremony. What's going on?

it is
 then I notice
 through a window
 beyond the corridor
 a vehicle looking very much like a hearse
 and from there my eyes wander down the
 corridor where I spot a gurney. It is covered
 with a simple light blue blanket over a lumpy
 form that could be a body, but it seems too small
 to be Maestro EL Dir. Also there is not the
 elegant packaging one would expect. I still was
 not sure I was in the right Mosque.
 At that moment, Priests come and roll the gurney
 down to the front where prayers are being
 conducted.



To pray for us.
 I hear the word "paradise" and it reminds me
 that my own cosmology does not include "Heaven and Hell,"
 at least,
 in an afterlife,
 even though I have spent my life with strong
 believers and at times have been convinced of certain
 religious concepts such as reincarnation.

in my 7th decade. HOWEVER. I am still
 searching for meaning
 • HOWEVER.
 I do see

The power in "belief." That belief can be em-
 powering and allow us humans to take strong
 unwavering action either with admirable
 results or disastrous outcomes.

In this 21st c. moving with
 mind boggling speed how about a spiritual
 renaissance to match those innovations seen
 in science and Technology?

we came close
 with the psychedelic explosion
 of the 60's when all the men, yes
 almost all the men looked like Jesus and
 women lowered or raised their
 skirt levels. Transporting music of the
 Beatles, John Coltrane, Miles and La Monte
 Young fed our →

• Ecstasy:
 Divinity students began ingesting LSD,
 Peyote and sacred mushrooms and come out
 describing soul shaking mystical experiences.
 more in line with Saint Francis of Assisi
 than the white bread sermons of Billy Graham.

Suddenly
The service is OVER and
The crowd begins to quickly
disperse. I spot
Mutual friend, AL Owens, who had been
hidden from my view during the ceremony.
we talk inside for a few minutes and then
comes an announcement blaring over the
loud speakers that the Police are towing
cars parked in front of the Mosque.
I step out into the Sunshine. Standing
there are Ann, Jean Jaurenaud, Janet
Coperthwaite and the mother of
Peter Sellars who had known
Hamza when he had
lived in Japan.
We run to
rescue our
CAR.

It could be Hea - ven Jam men with Ham - za in SE - ven

and
decide not to go
to Novato

where the burial will
take place and a
large group of
Hamza's friends
are waiting.

we reach our
home in the
Richmond hills
and as it is
a beautiful
May day

we decide to plant flowers in the garden
Then it hit me. while friends plant Hamza in
the sacred earth, we plant flowers
in the Garden where Hamza had last played
for us.

The Kalpa Viksham Tree

Or wish-fal-
filling Tree is
activated by
Prayer
And
What is
The greatest
thing we could
ask for?
To be connected
to the Power
of Love.
Music
is prayer
every moment
if you are doing
it right That is ...
connected to the now
And
to whom are we directing
these prayerful requests?
I don't know.
But if there is nobody
in charge of the ship driving
the momentum of the
universe, at least,
there is the 'Sacred',
experienced for enough
millennia on our
beautiful Planet, to
warrant its Trust.

HERE WE ARE -
praying for long
life to have more
time to become
masterful. Do
Better Music.
Maybe the Real
music begins after
"what we know as
life" ENDS.
And what about
that final
moment?
we meditate
on that all-
important instant
in our creative life...
ending with both bangs
and whimpers... abrupt
stops or enduring fades...
But when that moment
comes in all its power...
why that real moment comes
will it embrace chaos or
peaceful symmetries?
Terrifying demons or
sublime islands of peace.
OR
a seesaw of all life's
experiences compressed
into that
Life-terminating Moment?

Searching for
Mundy street
dream 1996



I
am sitting
on a futon bed
in a large room filled with Guruji's
disciples.
LaMonte Young, Marian Zazezla and Michael
Harrison are among them. There is to be a big
Puja, a devotional celebration, that day. We
are gathered in this room before leaving for the
Puja which is to take place on Mundy Street.
I am given an intricate gold, stupa shaped
ceremonial object that is delicately carved and
has tiny gold chains connecting its various
sections. It is my responsibility to take this
sacred object to the puja.

I
immediately
drop it and it falls
to the floor breaking
in pieces. I am appalled!
At that moment Guruji walks in
and sees the broken object at my
feet and says, "broken"
Everyone begins to leave for the Puja and I
find myself alone with Guruji. As we walk
out on the street, I tell him about my dream

Where
he miraculously
appears in a radiant form
He

Seems pleased.
As we are walking along I
suddenly realize that I don't
know where the puja is — I only
know it is on Mundy Street. Streets are
angling off in all directions but I decide
to run ahead to look for Mundy Street so
Guruji won't have to wander around searching
with me. I run ahead several blocks but am
unable to locate Mundy Street so I return to
Guruji who is now dressed in a loin cloth and
pushing an old dilapidated black bicycle.
We stop into a candy store and I ask the woman
working there for directions. She gives me a
complicated answer which I don't understand.
Then she asks me, 'who is the old
gentleman pushing the
bicycle?'
I reply that he is a circus
performer and does tricks
on the bicycle.





GURUJI'S AMERICAN
TOMBSTONE

MUSIC AND MYSTICISM, RHYTHM AND FORM

A Blues Romance in 12 Parts

ADAM RUDOLPH

Mysticism

Knowledge is freedom and the study of elements in sound is a path. Mysticism reaches beyond religion into creativity, which belongs to every human being. For the artist, mysticism is an attitude whose imperatives are the willingness to cultivate imagination and the courage to express what is discovered. For the creative musician, it also means research into the science of sound, which is the chemistry of the universe. Mystics and physicists alike know that all earthly creation is in fact star stuff, sub-atomic particles vibrating at various rates. Music speaks to us and transforms us through the medium and essence of what we ourselves are: vibration. The musical artist's invisible alchemy is to arrange these overtones as they move through time. Throughout the ages this art has been intimately intertwined with the mystic's path.

Imagination

Imagination suggests the existence of a divine spark in human beings. Its source, what William Blake called the Divine Imagination, is beyond rational apprehension. While it is a mystery as to whether it is received like a radio signal from the cosmos or dredged up from the murky oceanic depths of the unconscious, it appears to us through visions, dreams, inspirations, language, dialogue, fantasies, and contemplation. Creative imagination is our richest human legacy and birthright. It is a kind of beacon—a scout sent ahead that precedes us into history.

In the great mystical traditions of the world, inner and outer realities are reflections of one another. Similarly, any music one can imagine in the mind's ear already exists or has existed in its own unique interpretive design. The creative process begins with the inner ear, with the imagination. It continues with the manifestation of this inner audi-



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tory experience in the vibrational spectrum; voice, instruments and human interaction enter the picture. If we can imagine it, we can play it. In this way, ideas lead the development of technique, which is a door to the space of freedom.

Dialogue

Any new musical language must be based on understanding existing music languages in their uniqueness and through their underlying universal principles. Just as the laws of physics simplify in the higher dimensions, so too do the elements of music unify as they transcend style and move towards essence.

When developed musical skills exist to serve an awakened being, a great potential is created. For this potential to manifest, compassion must inspire the artist to seek dialogue, a sharing of realization. When this intention allows communication between humans to occur, a cycle of enlightenment is created. In the Middle East this is called "Tarab." The musician becomes a creative conduit, the musical instrument a voice and tool, and the listener an active partner in the creation of the transcendent state. In improvisational music, this circle expands to include interplay between musicians as dialogue. It is the mirror that reflects both group and individual states at the moment of creation, bringing us together in our most human being. With the arrival of the divine spark, improvisational music becomes a textless ecstatic dialogue vibrating open the door to the luminous moment.

Color and Motion

Through music, the essential unison—vibration—manifests as a duality: color and motion i.e., timbre and rhythm. The dialogue between color and motion is superimposed through the complex of space and time. All color in music is based on the overtones—earth moving to air and beyond. Attack, pitch, intonation, decay, texture and noise make for the quality of color in sound. Because of their especially complex overtone content, drums are the musical instrument most commonly used worldwide to induce trance. In some cultures string or gut is stretched across the drum skin to further complexify overtone content, adding shadow sounds of buzzing voices.

In India, Rasa describes the emotional color of a raga. Melodic shapes delineate tension and release, painting emotional timbre while orbiting out and then returning to the unitary sounding of Om. Many cultures use visual colors to manifest music ritual. The Gnawa of Morocco play a system of seven colors in their nightlong healing and trance ceremonies. Each "presence" or spirit is accompanied by a specific color, incense, rhythm and dance as it meets the ritual participants' consciousness in ecstatic space and time.

Form

Even as nature is in a constant process of becoming, there is nothing in nature without form. Chaos contains the source, energy, and material that form is made of. Form itself is temporal, and rhythm is the world working through time. Sound is the soul of form and brings it to life from the inside out. Rhythm is the element of stability that not only gives life to music but also holds it together. It is implicit in every musical gesture.

Sonata-allegro, kriti, muwashshah, frevo, jo-hya-kyu, gending, and blues are but a few examples of the many traditional music forms found worldwide. For the improviser, phrasing in form is the greatest challenge. In order to navigate through form one must be able to generate phrasing and in order to phrase one must have a grasp of rhythm. The great improvisers have all been masters of rhythm.

Rhythm

There are as many rhythms in the world as there are stars in the sky. Every culture has dozens, if not thousands of rhythms. To these pulse beats and patterns, each person and musician brings his or her own sense of timing, breath and imagination. To be human is to embody this rhythmic infinity.

Human rhythm has, as both its source and manifestation, three aspects: language, dance and mathematics. Spoken language informs vocal and instrumental performance in a myriad of ways. The Yoruba language, which is tonal, can be spoken on the Iya drum. When North and South Indian music uses vocalized syllables to teach the drum language, each spoken syllable corresponds to a particular drum stroke.

At the same time, creative and cultural movements of humans are

determinants of rhythmic phraseology. In many parts of the world drum language is a sonic manifestation of dance gesture. Call and response harkens to a practice before history, where music, dance and storytelling were one.

Numerologically, 2 (even) and 3 (odd) are the fundamental building blocks from which all existing rhythms are created; from the heartbeat to the most abstract. "Cyclic Verticalism" is a creative approach to developing phrasing and form through the combination and expansion of cycles and polyrhythms. Cycles of various lengths are built by using the additive concept of combining rhythm cells of 2's and 3's. (Figure 1.)

For example, 2 plus 3 yields a 5 beat cycle:

1	2	1	2	3	Counted division
x		x			Accented pulses
1	2	3	4	5	Total pulses

3 plus 2 plus 2 yields a 7 beat cycle:

1	2	3	1	2	1	2	Counted division
x			x		x		Accented pulses
1	2	3	4	5	6	7	Total pulses

Figure 1. Excerpt from *Pure Rhythm* by Adam Rudolph.

Verticalism references polyrhythms, whereby two or more rhythms are played simultaneously. A rhythm cell of an odd amount sounding at the same time as a rhythm cell of an even amount generates motion in sound. The fundamental polyrhythm is 3 against 2. (Figure 2.)

3 against 2 (6 total pulses):

1	2	3	4	5	6	
x		x		x		3 duplet accents of the pulse
x			x			2 triplet accents of the pulse
1	2	3	4	5	6	

Figure 2. Excerpt from *Pure Rhythm* by Adam Rudolph.

The Dogon people of Mali call the even (2) element "Tolo" and ascribe to it female or yin energy. "Nya" is the odd (3), male or yang energy. They say: "Every rhythm has the two parts, often with complex interplay that suggest both a dialogue and union of male and female principles."

Timbre and Tone

If that fundamental polymetric verticality of 3 against 2 was moving fast enough it would sound as the interval of the perfect 5th, the second overtone. The overtones, or harmonic series is the acoustic material that generates pitch, melody, harmony and what Edgar Varese termed "sound mass." 20th century European music uses twelve tones and six intervals to generate melodic and harmonic materials. Joseph Schillinger, Yusef Lateef, Olivier Messiaen and Nicolas Slominsky, to name but a few, published studies of creative permutations of these. In India it is twenty-two Srutis that describe the microtones between octaves. Pentatonic scales, made of the first five tones of the limitless spiral of 5ths, are found worldwide, especially among people who live close to nature.

Circularity

Non-linear thought informs the creative mind. Circular imagery is central to many mystical traditions, the Mandala being a well-known example. Depictions of the Tree of Life in Kabbalah, roundtable discussions, Whirling Dervishes, the shaman's drum, and stone Native American Medicine Wheels are but a few of many circular images found worldwide. The Kongo Cosmogram Yowa shows the sign of the cosmos and the continuity of human life (Figure 3). At the center is the Crossroads, the radial point of African cultural improvisation that has profoundly seeded so much American music.



Figure 3. Yowa-Kongo Cosmogram.

Creatively applied in music, circular thought can open the mind to potentials of relationships not available to linear thinking or depiction. Circularity suggests possibilities of innovative notational semiotics that in turn can generate new musical syntax. John Coltrane's circle (Figure 4) shows a non-linear multiplicity of possible tone relationships.

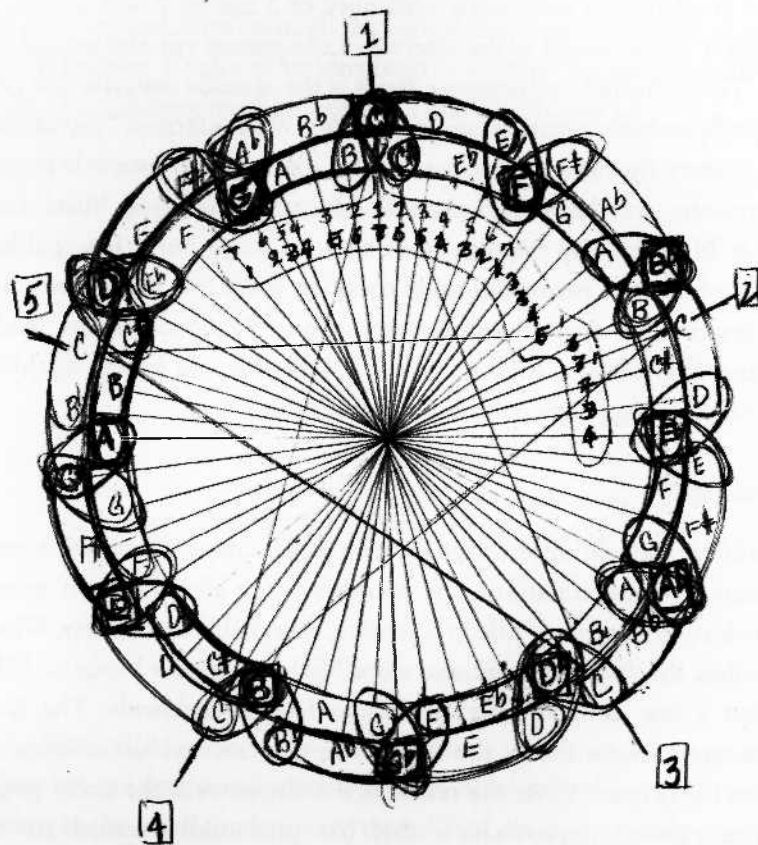


Figure 4. Drawing by John Coltrane given to Yusef Lateef 1960.

Since humans first observed the movements of the sun, moon, stars and the seasons, musicians have been responsive to cyclic phenomena in nature. Circular thought is central to many music cultures throughout the world. In a manner similar to the Coltrane diagram, this North Indian Tal Chakra drawing (Figure 5) shows the potentiality of multiple relationships, in this case between various rhythm cycles.

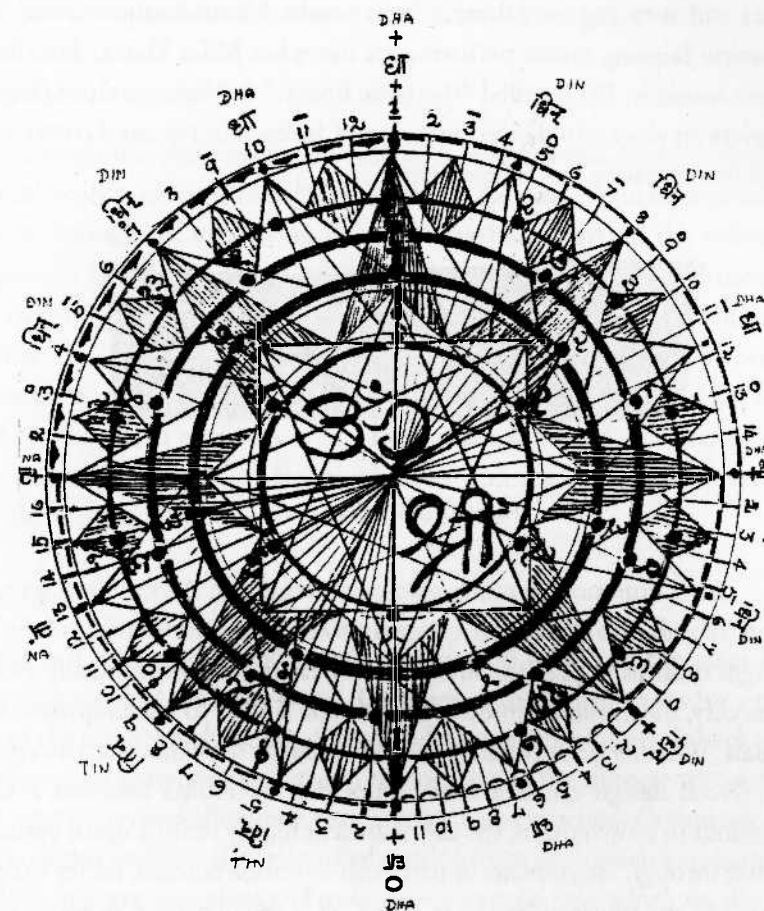


Figure 5. *Tal Chakra* by Pandit Tarant Rao given to Adam Rudolph 1981.

In each of these drawings the multiplicity of possible relationships of elements invites broad syntactical possibilities. Each offers the potential and openness that is essential for the improvisational practice central to both music cultures.

Weaving

Ostinatos of circularity are content distinct from the linearity of the practice of theme and development. Recurrent gestures are the events that generate time inside the circularity of musical form. This rhythmic weaving of space and motion is a common musical practice in the world. In Persian arts, the term "Dastgah" refers to both weaving patterns into

carpets and weaving modal melody in music. Mbuti Molimo ritual and Sundanese Jaipong music performance use what Miles Davis, describing his own music in 1973, called "thematic fibers." A Nigerian cloth (Figure 6) depicts an elegantly danced weaving of threads in repeated patterns of rhythmic regularity and irregularity.

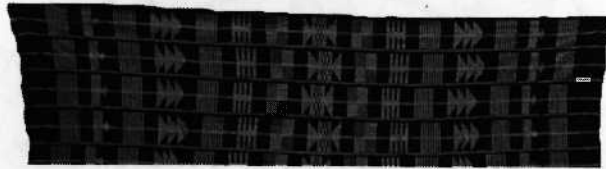


Figure 6. Nigerian Woven Fabric.

As is common in much solo performance in Africa, the Ugandan Akogo (thumb piano) requires a synchronized patterned weaving of the left and right thumbs to play the music. As repeated motifs continually evolve and modify, the musician enters a mental state similar to contemplation of a Mandala. Whether performed by the individual or the collective, patterns of sonic fractal design create a momentum that over time becomes a Call. Miraculous in its evolution, the use of ancient highly refined signal patterns, manifest through instruments of particular overtone content, serves to open the door to the transcendent state. The Call is the invitation to move from observation to participation in the transcendence. Answering the Call is to join in the shared experience of the mystical lifting of the moment. It is what mystics describe as resonance; what the Surrealists named the Supreme Point.

The Inner Voice

Great improvisers are recognized in one note. They play their instrument as an amplifier of their inner voice. The Dogon have a word "mi" which means the inner spirit of the person expressed through the voice of the instrument. With creative action, the inner auditory vision is expressed as a unique human story through the development of musical language. Every human who uses a musical language tells us something about who they are in relation to their art and their life experiences. Musical sound is the revealing of the inner being. The master improviser drenches her/his art with the imper-

atives of life: spontaneity, initiative and surprise.

Emptiness

Improvisational music reflects an evolved cosmology that could be described as a celebration of the Eternal Now. It aims at the total elimination of subject/object through the expression of sound rhythms. First, in the stillness of Beginners Mind, we hear the silence. Now intention moves emptiness into the manifestation of form in sound. Starting from breath itself, each gesture creates the musical moment. The formless manifests a time element, a dimension, and a shape, the abstraction of which is conditioned by sound and motion. Each musical sound a human can make has a beginning, middle, and an end. There is a feeling of death with the end of each sound that implies transcendence.

The Heart

Music is a reflection of the heart's evolution. It speaks to the inner being since it is itself of the inner being. Listening with the heart asks for a quieting of the mind which judges, filters, and compartmentalizes. It beckons us to lift out of temporal limitations, to open up to the deepest sentiment of our own being and allow our very essence to be touched. Communication through this invisible alchemy called music invites us to reach into ourselves, to seek to know ourselves and to fearlessly express that which we discover. It is a way of coming to know who we are as we exist in the universe and the universe that exists within us. Music is the language of the heart and it is a path to awakening. For those who are aware of the mysticism of sound, music is a profound means by which we share our most intimate and deep desire for universal consciousness.

A SILENCE THAT SPEAKS

*The All-Embracing Unification of Space and Mind
(With Sound Meditation in 3 Parts)*

DAVID CHAIM SMITH

"Music is the healing force of the universe." —Albert Ayler

"There is no such thing as silence." —John Cage

For a listener, music can become a profound mystical practice. Ordinarily, it seems as though sounds are projected in external space and perceived in internal space, as if through a permeable barrier. What then is space itself?

Both sound and perception are expressions of energy. Music can be the ecstatic experience of their union within the energetic continuum. It is an invitation to merge outer and inner within each other, to swallow each other, leaving only the vital field of possibility which defies fragmentation.

The continuum of energy is like the serpent in the Garden of Eden. Its undulating body is an endless primordial waveform; the unifying seal of all contrasts: up/down, negative/positive, on/off, active/passive. This is the raw voltage of transformation. The whole of space explodes with its wild capacity for adaptation. It manifests all energetic frequencies as well as the capacity to experience them.

Sound and hearing are mutually interdependent. Neither has independent existence, but both arise to reflect the uniqueness of the other. Sound hears itself through human ears as both express one all-embracing field of creativity. Understanding this is the doorway to a primordial ocean of dynamic space in continual variation.

Music, like all great artforms, has the capacity to point to the absolute within itself. First it must become clear how the perceptual fragmentation of the world comes about. To observe this just follow the conventional cognitive sequence:

Sounds arise in what seems like "outer" space and are apprehended in what seems like "inner" space. The barrier between them is the appearance of the body and its egoic sense of self. The two sides are taken

to be separate, and are reified by their differences which appear through a confrontation with each other.

The equalizing aspect of space in which all distinctions are made is almost always conventionally ignored. Does it oppose either inner or outer? Can space be broken in two? And what about space itself and its silent origins? Have either sounds or perceptions been ripped away from the pristine womb of silence which they appear to have arisen from?

The problem is even more basic when we consider the silence. When we believe that "something" has been belched forth from "nothingness" there is a conflict. This is the basis of all of the dualistic habits that insidiously fragment the world into infinite unrelated pieces, obstructing any chance of apprehending the cohesive wholeness which is the goal of spiritual practice and human evolution. What results from this process is the familiar randomness of the cognitive status quo: the ceaseless conflict between inner and outer in which the senses present foreign objects to a self-identified subject to grasp at. Ironically, this situation even persists on a totally internal level, as mental objects called thoughts and feelings confront the awareness that perceives them.

Division only leads to more divisions. Sounds are ripped from silence. Listener is pitted against the music. Created things are defined and categorized out from undifferentiated creativity. Fragmentation occurs as mind moves. Like music, perception is a state of motion. Disruption comes through the mind's habits of temporal reduction and isolation. These habits interpret all motion (including its own) as a series of boundaries: bits of time that come and go. Reliance on time is a symptom that the mind has given itself over to dualistic fixation. All we can see within it are unresolved questions. To and from where do the pieces of time go? What is the moment that goes? No one can experience future or past directly, so why do we think they exist? The "present" keeps presenting itself, but try to examine it. If you do it will be gone, and another present moment will have taken its place.

However as Albert Ayler suggested, music can be a remedy for this disease. It can be a way of repairing a shattered conception of reality. Through meditative absorption, music can be liberated beyond the confines of time and constraint. It can break free of temporal measurement while simultaneously moving as open space. Space is always free of containment, and music becomes its prayer when its heart is exposed. This is the

offering feast which continually consumes itself. Sounds arise and dissolve, freely giving their life blood to and from the energized space that they truly are. In this manner both sense and sense-object obliterate each other while simultaneously living through each other. The energized space of creativity is the offering, offerer, and that to which the offering is dedicated. It is the essence of the equation:

$$\text{SPACE} = \text{MIND}$$

The apparitional playground arises through awareness. Space-as-mind is the becoming of anything and everything. Its vastness is all phenomena. There is nowhere it is not, and it always creates. This leads to the realization that there really is no such thing as "ordinary" phenomena. All phenomena are miraculous. The sublime cannot be diminished, only ignored. It is the job of both the artist and the witness of art to take responsibility for living this equation through.

When space degenerates through conventional reductionistic thinking it manufactures the so-called objective outer world of "reality." When mind degenerates through conventional reductionistic thinking it manufactures the subjective means to know it called the "individual." If we believe these fictions actually exist, then we must believe they are separate. If we challenge these assumption, then both aspects can reflect what theists call "god." It can only happen by changing one's mental view.

Any investigation of the divine is a mental operation. If the equation $\text{mind} = \text{space}$ is acceptable, then we can consider that mind is not the biological byproduct of the nervous system, nor is it the property of an individual human life. Mind is the living conscious dynamism of creativity. In this sense god/space/mind are all equal. This equality is the basis of all inquiry as well as that which is inquired about; both goal and method of epistemological and ontological study. This view is evident in many of the works of kabbalah and hermeticism, evident in the following quote:

"Mind has not been cut off from god's essentiality; it has expanded like the light of the sun."
—Corpus Hermeticum 12

And now we can proceed with a formula more specific to our purposes:

$$\text{SOUND} = \text{AWARENESS}$$

With this formula as a base we can begin to train ourselves to swallow music and be swallowed by it. Recordings can be used with great success to refine this facility in its most subtle aspects. I will give three exercises in which this can be attempted, as well as recommendations for specific recordings that yield good results. Of course the selection of music is open, and my recommendations are merely suggestions. Once you get the idea from my descriptions you will know how the exercises can be applied to any piece that even roughly fits the model.

1. *Cultivating an Integrated Sense of Receptivity*

This first meditation involves binding the mind with silent space as minute sonic elements arise and dissolve within it. The aim is to hold the sense of vast openness without the elements obstructing or obscuring its quality of spaciousness. When no sound causes disruption, equanimity can be recognized between sounds and silence.

A piece I like to use for this exercise is Margaret Leng Tan's solo performance of John Cage's *Music for Piano #2* (from *Daughters of the Lonesome Isle*, New Albion). In this piece, as in his later "number pieces," Cage allows the open space in which sounds arise to be a central concern. The sonic elements enter and exit with extreme delicacy, highlighting the pristine purity of the openness of space which seems to engulf them. It is a quiet expectant scenario, in which piano sounds bloom without seeming either related or unrelated. They simply assert themselves in their variety, passing into and out of focus, without the intervention of any intrusive compositional structure.

We begin by sharpening attention while relaxing it at the same time. Simply listen, and let the sounds be. This involves developing a disposition of simultaneous receptivity and concentration. Concentration that is "too tight" makes experience rigid. It freezes the barrier between sound and hearing, and blocks their dissolution together. It will always be distracted. Contrarily, if the experience becomes "too loose" it will be sloppy, and no profound qualities can arise within it. You will find yourself just drifting, maybe into a semi-sleep.

The goal in all of these exercises is for the sonic field and mental activity to merge out of their separate identities. Blending attention with

space requires the cultivation of the quality of expectancy; the sense that "anything can happen." This helps allow elements that might otherwise be interpreted as intrusions or disruptions to unfold as organic extensions of the continuity of the piece. Because this piece is so slow and quiet it will appear easier than it actually is. You will probably be far more distracted than you realize. One reason why this particular piece is so effective is because the sounds are almost manageable. It allows you to "fine tune" your capacity for abiding in a deeply receptive state.

Like space, mind neither mechanically accepts nor rejects sounds. They simply happen. If you can recognize and abide in the sonic field with this natural quality then the experience will be both vivid and vast at the same time. You may come upon a "razor's edge" of difference between the internality of mind and the externality of sound, or between the intrusiveness of sound and voidness of space. In all cases of distraction, remember that the nature of sound is inherent in silence and the essence of silence is inherent in sound. This precept can help cut through distractions. You don't necessarily need to think about it, simply understand and feel it. Never try to push a distraction out of your mind. Any attempt to consciously dismantle a mental construct will make it worse. Let it all pass into the openness of the equation:

SOUND = AWARENESS

2. Managing Cognitive Saturation

The second exercise involves maintaining open receptivity as a sonic overload unloads on you. The goal, as always, is alert non-reactivity. However the challenge is to cultivate this state as a full on barrage of sound tries its best to disrupt and interfere. A piece that is quite well suited for this is an early one from Alvin Lucier: *North American Time Capsule* (from *Vespers/Other Early Works*, New World Records). It is a good solid sonic assault comprised of disparate layers of electronically processed vocal sounds. The sounds have varying degrees of unrecognizability as vocal elements. They transmit some of the rhythm and cadence of speech patterns, but nothing specifically coherent as language is communicated through the opacity of the electronic treatments. The layers are collectively and individually almost impenetrable, and produce a nice disorienting wall of sensation which is perfect for our purposes.

The first thing you might notice is that the piece encourages hyperfixation. Every detail tends to jolt itself into focus to dominate the sonic field, resulting in distraction. What results is a jagged and fractured field that repels conventional aesthetic sensibilities. To most people this piece will seem to be comprised exclusively of disruptions. However as a meditative event, it is not a matter of simply enduring a series of unpleasant reactions, like some stoic form of punishment. It is a matter of recognizing that the so-called distasteful elements are themselves inherently spacious: expressions of pure potentiality shining and crackling with life. The vibrancy of the barrage delivers the raw dynamism inherent within space. If you can recognize directly in the act of listening (not merely intellectually) that the essential nature of all sonic life equalizes the most annoying sounds with pure silence, then you have realized something rare. As a consequence, one can then be able to transcend one's aesthetic preoccupations. When it is engaged deeply, meditation on the nature of sound simply cuts through the habitual fascination with one's own tastes. The accumulation of likes and dislikes can simply be outshined, and as a result, is often altered beyond all recognition.

The goal of the exercise, as always, is to cultivate wakeful non-distraction and vivid spaciousness. You won't have to worry about the vividness aspect with this piece; that takes care of itself. The struggle might be to discover a sense of space in spite of what can appear to be claustrophobia. Simply let the sonic bombardment blossom as it will while meeting whatever resistances arise head on. A method that might be helpful in penetrating these resistances is to try to place attention constantly within the overall field of the sounds, and not in the details. This technique of "widening" the sonic window takes the focus away from the disruptions as singular isolated events. It allows you to place emphasis back on space. Only when you have the sense of overall space can you begin to relate it to the space of your own mind, ultimately merging them beyond distinction.

This process is essentially no different from the last exercise, except for the challenges of the circumstances. Instead of minute manageable sounds that appear one at a time there is total destruction. In fact, this one is very effective if done right after the last one, back to back, with no break.

3. Cultivating Stability

This last exercise is probably the best one of the three to use regularly as a sound meditation practice. It involves the cultivation of meditative stability, which is one of the long term goals of all meditation. It is not sufficient to manufacture a series of momentary "oceanic experiences" that come and go. The goal is to abide in the unbroken continuity of being without falling back into dualistic habits. This is the deepest and most natural response to life as it is. It is not an artificial mental trick that is entertained and then forgotten. What we do with sounds and silence is symptomatic of what we do with everything else. This is why sound meditations can function as genuine mystical practices in their own right.

Many drone pieces can be used for this practice, such as those created by composers La Monte Young, Charlemagne Palestine and Folke Rabe. What is required is a combination of consistency, density and spaciousness. A particular drone I enjoy using for this practice is a piece by Phil Niblock called *Early Winter* (from *Music by Phil Niblock*, Experimental Intermedia Foundation). It offers a tremendous sense of depth built from multiple layers of sounds. They are comprised of overdubs of flute, eight tracks of bass flute, thirty-eight samples of synth voices, and a full-on string quartet. It seems to be both full to capacity and yet open at the same time. It is truly a drone in which the mind can sink into oblivion. It also has a searing quality which seems to drive right through whatever is in its way, and ultimately what is in its way is you.

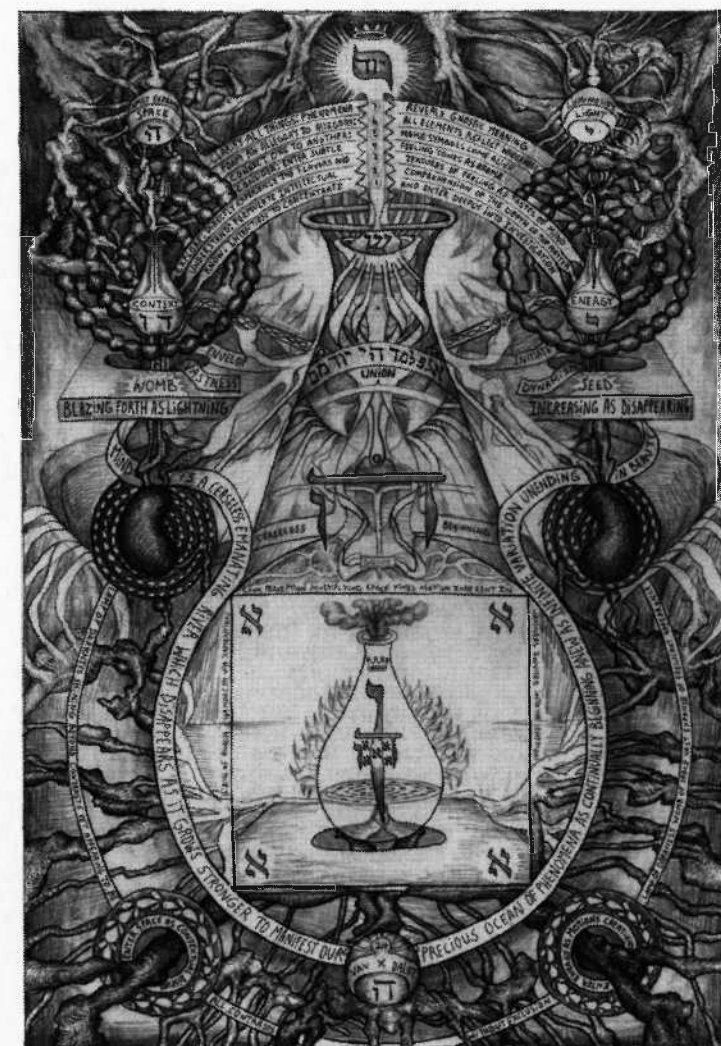
Make sure it is played very loud.

The goal is meditative absorption. This is relatively easy to understand but almost impossible to do and sustain. It requires a vivid clarity that does not grasp on to anything, but allows everything. If aspects of the sonic field are witnessed bit by bit, we can be sure that continuity and absorption are not happening.

The method is to surrender completely while being alert and responsive. We are not asking the piece to swallow us, nor we to swallow the piece. We are after a simultaneous and process-less swallowing of any and all conceptual identifications. Anywhere the mind stops to notice "something," a distraction has occurred.

Because drones often appear fixed and homogenous (which they are not) we tend to react to them as if we are confronted by a great object

that has filled the sky. Even if you become engulfed by the vastness of the object, the problem is that there is a "you" to be engulfed. When both the you and the object disappear without a trace of mechanical residue, then maybe the alchemical marriage has begun. You will not know for sure. It is best to not think about it. It is best just to practice.



David Chaim Smith, *Three Stages to Seal Nullification*. (First panel of triptych.) 2009, pencil and ink on paper.

HARMONIE APHANES PHANERES KREITTON

Harmony is Stronger Unseen Than Seen

TREY SPRUANCE

Confessio

The "obvious" is the place where the deepest secrets are found hidden in plain sight, out in the open. Faustian personalities are mocked by obviousness, and always prefer to be seduced by the whispers and goose-hunts of complexity. The suggestive innuendo of incomprehensibility compels the curious nature to look under those inscrutable multilayered veils for all of life's greatest profundities. Against this, the banal "open secret" offers the mercurial esotericist nothing to further edify his self-image in the vocation of an individualist. It only robs him of his sense of self-distinction, of special purpose. Being plunged head first into a mundane wash of communal awareness can only erode any sense of solipsistic aristocracy. Nevertheless, life's epochs seem to always at some point cause even the most nit-picking Faustian narcissist to return awestruck to "the obvious." We might hear him then declare, finally, that it's the simplest creeds that teach us how to unlock the strict cyphers of the ordinary. But this truth is usually only briefly admitted, either under duress or in a flash of inspiration... lip service is then paid to it, but no praxis is employed to consistently hoist its fundamental truth aloft amid the crushing entropy of everyday life. Being *forced* to resubmit our oaths to the basics is actually good for us, but we usually only arrive at this experience unwillingly, like criminals dragged before the King in shame. The mind that habitually authors boasts and legends about itself will eventually find a way to re-mythologize such basics into its "extraordinary" narrative. Or maybe it's simply preferable to never even admit them at all, and instead to subject the King to a "transvaluation of values." Can we not make him *our* subordinate in a private utopia out on the edge of things?! That is after all what our culture of "radical genius" and "breaking the mold," etc. is telling us to do. But is there room for EVERYONE to peddle the snake oil of curiosity to superstitious travel-

ers on the margins of the Kingdom? Out here on the "edge," the charisma of esoteric exclusivism and the delightful numinosity of heresy can for a time make up for our personal lack of true "gheytrat."¹ But if we are actually strong, strong enough to be brought to justice and be well-confessed in conscience to the monarch of sim-

1. A Persian term that simultaneously means honor, balls, soul and ancestral chivalry.

plicity, we might be inspired to find contentedness with our lot, to open afresh the window of our solipsistic universe onto a broader scenery, and to take life in once again. Wouldn't it be refreshing to finally, uncondescendingly, take account of the habitation of our fellow man? But then, how surprised should we be at the moment of beholding our fellow man's works to see an earth-hewn skyline dotted with shadowy ivory towers just like the abandoned rotting colossus we just left behind us? No, we knew this was how it was all along. All those years we had our noses up to the grinder of self-congratulation, we were always aware in the back of our mind that everything else in the world was developing along parallel lines, even nipping at our psychic heels, driving us forward—that was an essential part of our frenzied motivation! So now we behold anew this world, this nursery proliferating with "absent-minded professors" like ourselves, too busy to notice or care what's going on around us. Disinterested for this brief, temporary moment, we behold the streets of the individualist cosmopolis that we helped build, filled to capacity with busybody coal-feeders, racing to their fifteen minute appointments with the Promethean furnace. And for once we actually understand the blind mechanics of this place. It seems that the speculum of this region of the universe reflects not an image of the glory of what is Above it, but rather tends obsessively towards the bottomless ever-fracturing abyss of self-reflecting enchantment Below it. We know it so well. Look! A mason's trowel—a reminder of how we ourselves so willfully demolished the self-evident exoteric beauty of the uncarved block by feverishly chiseling away at our esoteric self-portrait, year after year after year. Maybe once or twice we were satisfied that our powers were at a peak, so we said the magic word and our elaborate Faustian Golems came to life. But gone forever was the aether of the simple and the sublime and the perfect and the shared and the *obvious*. That had all long ago been replaced with the obsessive "tangibility" and complexity of our laboratory, with all its damaged and hoardable and theoretically recyclable materials. And then we watched it culminate in our own personal and *inscrutable* creation, the

Frankensteinian egreore of our "art." Peering out into the bustle of the cosmopolis we could now nod along with our brothers, whose folly we certainly shared, and with our voluminous stash of a far greater quantity of delusion, perhaps even feel a wish to commiserate with them.

But here, now, a new perception confronts us: the clear realization that the entire edifice of the extraordinary is in a kind of mortal panic, because it subconsciously realizes that it has been parasitic on a host that *no longer exists*. The ordinary was a host that the extraordinary has now actually *killed*. There is nothing savory about being a fresh witness to a feast that can only eat *itself* for dinner. That's not even a matter of determinism but of Will: even now our friends the fleas turn their noses up to the potentially nourishing carrion corpse that has been beaten down before them. Instead of ingesting the still-warm the wisdom of the ages, they busy themselves with recycling parts of it that can be bent to fit this or that "new paradigm." Oh how we feel with them, and bitterly weep that the broader construction of this activity on a scale that they cannot see is just a featureless concrete wall. All those tiny private utopias in ad hoc laboratories of the Art of self-worship, incorporated into a body-politic of the eclecticism of *sameness*—mixed like microscopic aggregates into wet concrete that forms and tightens into a statistical mean of grayness. By making ourselves so small we have streamlined the construction project of a blocky post-communist psychic architectural determinism, micromanaged at every turn by "me," the author of all. The skyline is transforming into hard repetitive squares. We are walling ourselves in.

Shall we scream in revolt? My brothers are still rushing to the furnace, consigning to the flames the alchemist's and Psalmist's exhortations to *keep* for later what we would now be tempted to throw away;² to hold on to the exoteric outer layers of the skin (Latin *cutis*, cognate of Greek *skatos* [dung]) as we plumb the immeasurable vacancies of the dazzling esoteric interiority. We might scream our lungs out in warning to our brothers, but we know full well what kind of power the village idiot has to compel the strong man of revolutionary weakness. To be cast in the role of "helpless witness" to the terminal decline of a body we ourselves had a hand in virally infecting seems only appropriate somehow ... so we watch. We weep.

Upon further reflection, we should have seen it coming in our

2. Baro Urbigerus, *Circulatum minus* Urbigeranum, XV. *Psalm* 118:22, *Matthew* 21:42-44.

arcane crystal balls. It is inevitable that the Dionysian deconstruction would run its course and become the new snooze, the new yawn, the new ordinary, the new block-housing. It is inevitable that the ceaseless revolution, the artifice of the "new paradigm," that inevitability of Protestantization and sola scriptura on steroids, would commence under the watch of a coincidentia oppositorum between the Übermensch and the Last Men. It is inevitable that the resultant ecstatic utterances of liberated desire would then perversely attach themselves to what remains of the last intact religions, and that the Dionysian bacchanal meltdown on the mountain Tmolus would be revealed *TOO LATE* as being even more boring than everything that had been destroyed. One can at any point in life heed the perpetual call to ordeal, chaos and liberation. But shouldn't we visit them as bees visiting flowers, taking only what we need and leaving the rest

3. Exactly the way St. Basil describes the way he visited the Pagan philosophers.

behind?³ What has happened instead is that the vampiristic depletion of the mysteries seed-carried by the Traditional hosts has resulted in a total loss of manna. The depletion of this essence is a process that began more than 1,000 years ago within Christian Europe—or rather, within the endlessly schismatic denominational proliferations of apostate Christianity that created Europe in the first place. The seepage from these humanistic fractures has now culminated in a colossal global-scale spiritual hunger, whose intensity has now reached a desperation-level previously known only to vampires. Its not just Pentheus who loses his head after spying on the humanist orgy, or God who is erased from the human ledger by whinging academic crypto-neo-pagan Graecophiles, but a world where the Hollow Man himself loses every source of dope for his post hoc charlatanistic/syncretistic bohemian charades, and begins to be directly swallowed up by the void. The void isn't bad. Even Nietzsche's Übermensch could be reconciled to it, if the overbearing premature ejaculant of his will didn't always prevent it. Having been stripped of the instinct to the noble paradox of emptiness, self-sacrifice and martyrdom, the Übermensch is driven slavishly and meekly "forward" to his desperate and hysterical immersion in the anti-heroic futility of "survival." Don't we here behold the world's saddest and most pathetic spectacle? Brothers and sisters, I don't marinate these regretful pages with the tears of a crocodile. My accusing finger points only into the mirror. But enough of this talk.

Light

Einstein showed us a way that light, as a phenomenon of our perception, also bears profoundly upon our perception of phenomenon.

I can only reflect in this area from my own limited lay-persons knowledge, since I didn't get far beyond the second year of astrophysics in college. So there won't be excessive technicality in what follows regarding light, before we move on to more directly musical matters. But I offer this rumination for the treasures it contains in relation to our discussion of the alchemical properties of music.

As everyone knows, mass of varying density composes our world (the sun, diamonds, air, jellyfish). Light is mass-less and doesn't participate in any kind of composition. Yet it somehow discloses the entire material symphony to our sense of sight. Beckoned by the mystery, mankind has endeavored to carefully look at light *as itself* (which has come to seem a bit of a paradox). Aside from the wealth of philosophical material amassed on the subject, which arguably reached its zenith in the middle ages with Suhrawardi and his school, in the material sciences it has recently been observed that light sets the velocity boundary for our universe. Light never travels faster or slower than the speed of light. It is totally constant and consistent, and ignores entirely the variable speeds and cadences that matter dances to. Actually, even Aristotle could've told us this, but now the exclusively empirical basis of modernity is satisfied with what it considers to be the "fact" of light. Much to our corporeal frustration, nothing that is made of matter can travel at the speed of Light, or even really anywhere near it. The reason for this is explained by something Einstein called the "relativity factor." This author will bypass the math⁴ if the reader will forgive the inevitable pedantic tone embedded in reviewing the models of physics,

how ever basic, by unqualified laymen like myself. Thankfully, to understand "relativity factor" all we need are some basics. We can begin by noting that compared to Light, things that are flying around in the universe are generally moving very slowly, even if it seems to us they are going incredibly quickly. For example, with earth considered stationary, where you are now sitting with this book in your hands, you are at "relativity factor one." Looking up in the night sky at some satellite, lets say with an orbital velocity of 5 miles per *second*, there is a relativity factor change of just 1.000000000360219—a totally miniscule relativistic movement.

4. See the Relativity Calculator:
<http://www.1728.com/relivity.htm>

Jumping way ahead to 25% the speed of light (46,570.6 miles per *second* as opposed to a mere five miles per second of our satellite) we are now at a meager relativity factor of 1.03, still barely above relativity factor one. Going half the speed of light (93,141.1985 miles per *second*) brings us to relativity factor 1.1547. Still nowhere. At 161,325 miles per second, roughly 86% of the speed of light, *finally* we have hit relativity factor two! But what does relativity factor two mean?

Einstein's Special Theory of Relativity famously shows that objects in motion undergo three relativistic changes:

1. An increase in mass
2. A contraction in the direction of travel (Lorentz Transformation)
3. A "slowing down" of time. (Time Dilation)⁵

5. Ibid.

These changes would never be noticed at the meager velocities of our fastest rates—our satellite's increase of mass and relative contraction of space and time dilation at 1.000000000360219 is not even worth mentioning. But if you were somehow in a spaceship going insanely fast at 86% the speed of light, your relativity factor two means:

1. Your mass/size has doubled
2. The contraction in the direction of travel has made space half as big as it was at relativity factor one
3. To an outside observer, two years would be passing in one years time for you

If you were in a spaceship traveling at relativity factor six:

1. The ship's mass (and you) would increase by a factor of 6
2. 100 miles in front of you would now be 16.6666 miles
3. 1 year to you would seem to be 6 years for someone back on Earth

Now let us imagine relativity factor infinity, the speed of light:

1. The ship's mass (and yours) would be infinite
2. Space in front of you would be infinitely small
3. Your time to an outside observer would be infinite

Consider that under these conditions (relativity factor infinity) even one atom would take on infinite mass, filling up the entire universe

with itself. Yet what is nonsensical for matter is completely normal for Light. As said, Light exists at relativity factor infinity. Having zero mass, infinite multiplication means nothing to Light. With an infinite negation of space before it, in itself it traverses no distance. Its participation in time is only that of infinite time. At the threshold of the interiority of Light, there is nothing we can say other than that it inhabits the Time of Origination/Origination of Time.

It's not my intention to dally on these famously esoteric warpings, and being neither intelligent enough to be surprised by them, nor good-natured enough to be particularly excited by their "wacky-ness," I am not the person to do their further exposition any justice. But I bring all this up in order to illustrate something extraordinary about a very ordinary thing.

Logic tells us that in order to notice the chronological "passage" of the time we know of, man must be participating both in chronological time *and* somehow in something standing outside of it—something "fixed."

Once upon a time, this would have seemed an abstract metaphysical principle at most,⁶ but with Einstein's understanding of Light we now have an empirical reference to the existence of just such a constant. At least here

empiricism confirms what man has already always known, but how has he experienced this knowledge? He might be right to roll his eyes at us and simply point at the sun's movements, being satisfied that such cycles explain themselves, taking for granted the background against which the "passage of time" must be set even to make the observation. For if a man was exclusively and unselfconsciously immersed in time passage, he would need nothing to relate that motion to in order to call it the "passage of time."⁷

Nevertheless, in all of that, an inexplicable sense of "fixedness" upon which man has always based his understandings has undeniably been taken for granted. What I'm saying is that if accounted for (i.e., noticed, not negated) this sense of "fixity" might not be all that misleading as a "common sense" notion. Perhaps it is after all directly akin to the invisible fixity of Light velocity we have just learned about. Light being anchored into the Zero of itself, being timeless, yet precisely being rooted into that eternal moment, that eternal present, it grants the constant of 186,000 mps as the sure measure of universal veloci-

6. Whether speaking of Lao Tzu, Aristotle or Suhrawardi.

7. There's a temptation here to bring up the "orders of knowledge;" empiricism relating to knowledge of things related to the material realm, and noetic knowledge relating to things of the immaterial and divine realm. But without attempting to circumscribe the higher by the lower, I'm going to be fairly insistent on approaching some issues here from the lower way of seeing.

ty. As an absolute, if you will. Man's intuitive sense of this "fixity" against the flux of things indicates a deeply embedded knowledge of this "other" time. *Even without knowing it consciously* man has always been measuring the past and future against the eternal moment of the Present embedded in Light. *This* a priori knowledge is what differentiates man from the animal kingdom. It's not to say that by this trait he is automatically better or higher or anything of the sort (since he surely can and does sink far below the animals, and brings disgrace upon the animal kingdom every time he tries to ennoble his sinking into sub-humanity as something having to do with "nature.") But same as he sees what light discloses to his eyesight without necessarily knowing about light's mass-less, timeless, spaceless state, by his nature man is also an inhabitant of a world of the two times (one fixed and eternal, the other a flux of incremental periodicity), even if he, now at least, only consciously and expressly admits of one of them. (Later on we will relate this to a discussion of the Pythagorean table of opposites, specifically how the concepts of the Limited and Unlimited applies to light and sound).

To draw this discussion of the two times out further and to give us a working vocabulary, from Orthodox Christian praxis there is a notion that I think could be useful here. Just prior to the Liturgical event, after all the petitions have been performed by the priest and deacon, and the faithful chant the doxology, the deacon announces the words from *Psalms 119* "Kairos tou poiesai to Kyrio" ("It is time [kairos] for the Lord to act.") To which the priest replies "Blessed is our God, now and forever and unto the ages of ages. Amen." This annunciation at the beginning of Liturgy indicates that the time of the Liturgy is an intersection of chronological (Kronos) time with Eternal time (Kairos). "Kronos" is the chronological, horizontal, worldly time of molecules, and "Kairos" is non-sequential, vertical, holy time of immaterial things. Kronos time is the normal time of history, of "chronicles," of "chronology," of things coming into and going out of existence. It is the time of sequential events, of unfoldment from past-into-future marked by the interaction of sun and earth in increments/days. There's a continuity with pre-Christian notions here, since the pre-Socratic God Chronos, or "Father Time" was personified as the spinner of the outer circumference of the wheel of time, the zodiac. Chronos was an incorporeal God not subject to time's ravages, though his later embodiment as Saturn in Roman times often emphasized the malefic and devouring properties of time.

By contrast, Kairos time is the timeless ever-Present. It is the vertical and radial arm drawn from the circumference of the spinning wheel of Kronos time to the center which is completely at rest.⁸ This is the "Sabbatical" time contingent to nothing, eternal—a "beginningless" Present as much as an "endless" one. All chronology has its origination in Kairos. Things partaking of beginnings and endings begin from and end in this Eternal Present. Kairos is also incidentally *the time of the invisible interiority of Light at relativity factor infinity*. As we have seen with Einstein this is not really the abstraction it sounds like, but is quite empirically true. Through Light we have one elegant way of actually seeing that this ineffable time is not wholly aloof and distant from us, but rather that there is an intimate interaction between its interiority and its outer manifesta-

tation in velocity as a photon.⁹ Considering light's property at relativity factor infinity again, as described above, we can see clearly in it the

intersection between the "two times." On the one hand, light is in chronological time and defines the velocity boundary of the universe as a photon traveling at 186,000 miles per second—a universal constant, the only truly fixed clock. Yet on the other hand, the interiority of light revealed by it being at relativity factor infinity is a clear description of its inhabitation of Kairos time—it recognizes no distance, no second, no moment of passage from past into future. It is ever-Present, in one eternal moment.

What is the glue that binds these two "modes" of Light together? As far as I can tell, it is entirely appropriate to say that they are in Hypostatic union. They are never in isolation from one another. They are distinct, unmixed, yet one.¹⁰

Being every bit as much of a lay-person in patristics as I am a pseudo-astronomer, it is similarly not my intention to provide a confusing and ham-handed pseudo-catechism in Orthodox theology here. My vocation is as a musician. Music is "mercurial" by nature, and to be sure it also participates in a cosmic tautology intertwining both the visible and invisible realms. The purpose of this paper is to draw that relationship out.

8. As if to light our way, we are given the glyph of the star of David with its six points representing the days of creation tracing the circumference of the circle of time. In the center of this circle/star we have the 7th point, the seventh Day, the Sabbath, at rest precisely because like the hub of any wheel, it is motionless. It's much more than a coincidence that we mark the Sabbath on our calendars by the Roman deity day of Saturn, i.e. Saturday.

9. "And God said, 'Let there be light,' and there was light." —Genesis 1:3

10. Which is also the Orthodox definition of the Hypostatic union of the two natures of Christ the Logos; i.e. *full humanity* (here, full participation in Kronos and having a beginning and ending) and *full Divinity* (full timeless and Essential unity with beginningless and endless Ineffable God in Kairos.)

But in order to honor music's strength as a (if not *the*) medium of harmonic sympathies and antipathies, if the properties of the medium are to be wielded with any sense of effectiveness, I think it is essential to ground that nature into a context. Therefore, seeking the solid ground of the tried-and-true, timeless-yet-intergenerational Wisdom, I will expand a little further on the subjects above by illustrating some of the explicit teachings on the intersections of Kronos and Kairos time.

What can it tell us that mankind has always either implicitly or explicitly noticed the existence of both times, and even passed on wisdom directly relating to both? For example, what can it mean to our subject that Adam, prototype of humanity, *makrathropos*, was originally fashioned in Kairos Time, and subsequently *enfleshed* in Kronos Time? What we are dealing with here is the original conception, unsullied by fancy esoteric ephemeral allegorical interpretations that recast Adam as a nebulous immaterial all-possibility of archetypal man-ness. But there is a much deeper dimension to it. Pre-Fall, from the simplicity of his own free will, Adam is entirely and unselfconsciously conformed to God's will. God's image is beheld in him; in his emptiness he is filled by God. In this way his existence is maintained above Kronos time—is never even subjected to it (because it doesn't even exist). The transgression and expulsion from Edenic Kairos time brings with it the *advent* of Kronos time. Adam necessitates Kronos—necessitates death. In consequence of eating of the Tree of Knowledge he suddenly perceived that he was naked—which is the precise moment that he took on flesh and entered chronological time. Some observers insist that the heaven-bound "corpus resurrectionis" must be composed only of Light, which is an understandable objection in a climate of reflexive materialism. But the mystery is deeper than that. Adam is a flesh and blood man (with sense of touch, smell, sight, hearing and taste), who *died* in the machinations of Kronos, and *whose bodily composition is re-united with Kairos Time at resurrection*. The whole point is that something "changes" in Heaven from pre-Fall to post-resurrection Adam. What changes is that *the flesh* participates in "Eternal Time."

The mystery of Adam's *restoration* is bound up completely in his material and created nature in *both* realms. In our subject, the major significance of Adam's transgression is that it inaugurated into the kosmos the incremental rhythm of life and death. By the transgression the world

itself is made subject to chronology.¹¹ In this we can see that procreation came as the only means for the once-deathless human life, now "chonologized," to combat against death. Generation of offspring is a kind of approximation of eternity necessitated by the advent of death, played out in chronological time. An individual life, the most basic and primordial increment, yields to continuity of species. On the one hand it yields its individual mortality to a higher sense of intergenerational survival through procreation. But on the other hand, if such a life has been kept in faith and the heightened purified state of Love for divine things, it yields its individual worldly incarnation over to the redemptive aspiration—quite exactly the hope of restoration to Kairos time.

How can we better conceive of this? That the intersection of the horizontal time with vertical time forms the pre-eternal glyph of the cross is no coincidence. Quite obviously the crucifixion itself indicates the Kronos/Kairos intersection *par excellence*. At Golgotha ("place of the skull," the skull = Adam's) we are witness to the scene of the restoration of Adam from his incremental dissolution in death. It is a change from temporarily "having had a life" in a chronological mortality, to a restored non-incremental existence of "having Life," eternal, in Kairos time. There's yet more to see here: in the one anointed to be crucified we have the bodily incarnation of a man whose *fully human* nature lives and dies, is "chronological," i.e. temporary/temporal, yet whose simultaneous *full divinity* is attested by Himself and everywhere in Orthodox Christian patristics. The gist is that here is a chronological man who lives and dies, *simultaneously* co-substantial with the ungenerate, timeless Originator, the impossible-to-

conceive-of Father.¹² The co-substantial Logos of the Father being born as a man¹³ (due to the fulfilling of the covenant by the first Saint, Mary the Theotokos) is a phenomenon in Whose very being we witness the only full and complete intersection of Kronos and Kairos. Let's now recall the dual nature of Light, how it participates outwardly on the one hand in the chronological manifestation of a "particle/wave" traveling at 186,000 mps, and on the other hand existing in spaceless, mass-less, timeless eternity. Very similarly, the Logos of God is He who as a man exists chronologically like Adam, with eyes that

11. It is interesting to note that rhythm itself begins with the increment of being born, because what is born will die. This establishes the primordial subdivision.

12. "I and the Father are one." —John 10:30

13. "In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. Through him all things were made; without him nothing was made that has been made. In him was life, and that life was the light of men. The light shines in the darkness, but the darkness has not understood it." —John 1:1-5

see light, with a body that lives and dies, and yet He is also the deathless Creator of the universe, the Alpha and Omega, of one Essence with the ungenerate, inconceivable, uncompassable Father in Kairos time.¹⁴ In co-

essentiality with the Father, the Logos exists just the same in the infinite relativity factor of Light; or rather, as is famously known, He is Light.¹⁵ The important thing to our point here is that Adam's dissolution and laying down horizontally in the coffin of death is restored

14. Contrary to popular misunderstanding, there is no violation of Tawhid here, no shirk. The Trinity is of One Essence. God is One.

15. "I am the light of the world. Whoever follows me will never walk in darkness, but will have the light of life." —John 8:12

beyond any idea of thaumaturgical resurrection in the world as an individual who will die again. Instead, Resurrection is seen here in its fullest sense (resurgere "rise again") meaning restored to the *original position/orientation*, to the vertical position in the eternal Present of Kairos time. We have shown that it is entirely appropriate that this is accomplished in the full radiance, splendor and power of Light.¹⁶

16. Ibid.

Let's hear it said better by St. Maximos the Confessor: "Some things began to be in time for they have not always existed. Other things did not begin to be in time, for goodness, blessedness, holiness, and immortality have always existed. Those things which began to be in time *exist and are said to exist by participation in the things which did not begin in time*"¹⁷ (emphasis added)

17. *First Century on Theology, Philokalia* vol. 2, p. 124.

To "exist by participation in the things which did not begin in time" is to adapt oneself to their nature, which is to become empty of needless content. In this way the Thief, who is dying beside the man-Logos whose human death marks the intersection between Kronos and Kairos time, becomes the first person to ask the Logos if he may follow Him into the Kingdom of Heaven. In a state of total openness and repentant emptiness, he beckons Him: "Remember me O Lord, when you come into your Kingdom." I can't do justice to this remarkable formula. I just want to point out that the request being made is for God to "remember *ME*." To be a participant is a two-way street: it implies that remembrance/anamnesis is not *only* an "I" that remembers "Thou" and recapitulates the intersection of worldly and heavenly Events in some one-way street from man to God; but as we saw with the deacon at the beginning of Liturgy, it is equally if not more-so an asking of "Thou" to remember "*me*" (or "us" in the case of Liturgy), and for a recapitulation of the Events of "*my*" life (Judgement) in

the hope for full participation in the Kingdom. To be "remembered by God" is to be received into the Divine Mind. It is to be raised like Adam from a powerless death in horizontal Kronos time into the upright verticality of Eternal Kairos time. Since by the acts under discussion the Time of death is said to have been abolished for man, even under the malefic sign of his own collusion with death, at least the *potential* for his own Adamic integrity has been recovered, and he is said to have been freed from the limit of time.¹⁸

18. Reception of the Holy Spirit.

Of course any man can be like the other thief and refuse the Kingdom. But the portent we need for the purpose of this paper is clear enough: the transition from one time to the other is marked by the passing of Holy Friday, the 6th Day, with the completion of the six days work of Genesis *heralded anew* via the otherwise enigmatic phrase "It is accomplished."¹⁹

19. John 19:30.

Kronos time passes into the Holy time of Sabbath (7th Day, of stillness). Much more could be said here, but it would take us too far off topic. What is pertinent is that as we pass out of the Sabbath we have the recapitulation of the First Day (Sunday). Easter (Pascha) in the Christian East announces the endless/timeless day of Resurrection. It is significant that the eternal Event of the Resurrection is conceived as Ogdoade, or "Octave of Easter" (Pascha). Anyone who plays music understands that after scaling up seven scale tones one arrives at the enharmonic recapitulation of the original note one octave displaced. In exactly the same way, the "8th Day" recapitulates the Pascha/Easter (the "day beyond day-ness," the Day of Resurrection in Kairos) on the first Sunday after it, Thomas Sunday. It is simultaneously the first Day (Sunday, since the 7th Day is Shabbat) and the chronological remembrance/anamnesis of the last or "8th" Day, both being the *same* Day in Kairos.²⁰ Sunday becomes the chronological icon of the eternal Day of Kairos,²¹ outside time, with the Liturgical Event as its *anamnesis*, its complete and total recapitulation (by free will participation). Thomas Sunday (the "Eighth Day") becomes the first day of fifty-two more Sundays²² in a year where we, in our tendency to doubt and forget, are invited to "touch" the Realities for ourselves and be restored to them.²³ As Philip K.

20. "Of all things in this world, unquestionably the greatest work, surpassing all human understanding, is the Resurrection of our Lord which we celebrate and renew not just once a year, but every week continuously. The first of this event is the present Sunday which should be called by a special name, both eighth and first. Eighth because it is the eighth day after Easter and the first because it is the beginning of other ones.

Furthermore, it can be called eighth as being the icon of that eternal day of the age to come which will be the first and one not interrupted by the night." (St. Gregory the Theologian) Also: "That Sunday (Easter) was one of salvation; this one is the anniversary of salvation; the former was the frontier between the grave and the Resurrection; the latter is purely the one of the second creation, so that, like the first creation which began on a Sunday, (this is quite clear, since the Sabbath falls in fact seven days after it, being the rest from labors), so the second creation also begins on the same day, which is at the same time the first one in relation to those that come after it, and eighth in relation to those before, more sublime than the sublime day and more admirable than the admirable day. It is, in fact, related to life above." (St. Gregory the Theologian)

21. Perpetual/infinite Day illuminated by the Uncreated Light.

22. 52, the number of weeks in a year, is the Hebrew enumeration for the word BeN, "Son," which is itself twice the numerical value for the Tetragrammaton of Father (26), which may or may not be related to the 26,000 year precession of the equinoxes, or "Platonic Year."

23. "Taste and see that the LORD is good; blessed is the man who takes refuge in him."
—*Psalms* 34:8

24. "τοῦτο ποιεῖτε εἰς τὴν ἐμὴν ἀνάμνησιν," —*Luke* 22:19; *1 Corinthians* 11:24

Dick illustrated subtly and brilliantly in his book *Ubik*, the eucharistic participation itself is the formula of Life against death; it is the anamnesis proscribed by the Logos, who by human death established the human hermeneutical rite of remembrance of eternal life.²⁴ The same sacrificial blood that dripped upon Adam's "Golgothan" skull for the restoration of the primordial man and woman to the Eternal timeless Present of Kairos, is ingested by believers as the life-force that restores the soul against the inherent entropy of Kronos time.

It is significant that unlike Pythagorean-derived music centered on a seven mode system, Orthodox Byzantine music operates on a system called "Octoechos," a system of eight (octo) modes/tones (echoi). To be sure, in other musical aspects parallels with other systems can be found, but the structure of Octoechos is a singular phenomenon so far as I am aware. Later on this paper will

explore some of the physical, conceptual and spiritual issues arising in the formalization of human understandings of intonation.

Needless to say (and contrary to overwhelming confusions regarding most of our encounters with Christianity in the west), none of the Events of this dramaturgy are confined to the Kronos time of history,²⁵ but are ever-Present in the hierohistory of the eternal Moment.²⁶ At the inauguration of the Liturgical Event ("Kairos tou poiesai to Kyrio"—"It is time [kairos] for the Lord to act") the full remembrance of the primordial matrimony between the incorporeal to the corporeal, between the Uncreated and the Created, is being prepared in Heaven and on Earth. This particular sense of kosmic sympatheia will be useful to us in our discussion of other musical applications of the notion of sympatheia. Music and prayer, praises sung to Divinity: all prayer is anamnesis. But the

25. Although this does not at all negate the Incarnation, as Arian anti-historicity would have it.

26. One of the many reasons one must finally reject Arianism and Valentinian Gnosticism.

Liturgical anamnesis (Liturgy = work for the common/public good) is the group praxis against the forgetful tendencies in our own souls. This idea will be important for our understanding of what it is that constitutes actual musical harmonia.

If nothing else we hope we have illustrated the way some (Orthodox) Christian conceptions of Time in its unmanifest and manifest dimensions dovetail with our modern conception of the different modes of Light. By introducing these two poles of discourse in this manner we can now more easily approach some of the more challenging aspects of the musical subject at hand.

Opposition and Harmony: The Limited and Unlimited

It's now time draw the reader's attention to the peak of Pythagorean tensions (the top of the Table of Opposites) where we can be instructed in the relations between categories of opposition. Opposition itself, as we will see in Heraclitus, is the genesis behind even the notion of Harmonie. But before we get to that we will benefit much from exploring some of the intriguing working dynamics of the Pythagorean oppositions.²⁷ Capping the list of ten oppositions is the Limited and Unlimited, often translated as the finite and infinite, but the Limited and Unlimited is a better way to think of it. Considering the lengthy discussions we have just had regarding the opposition of Kronos time (Limited) and Kairos time (Unlimited), illustrated in harmonious relationship in Light, I doubt I need to hammer the obvious and rewarding implications here much further. But suffice it to say that in the next section we will apply this same fundamental principle to the opposition between Silence (Unlimited) and sound (Limited), and search for the "harmonic relation" between them (it's there).

It's very interesting how some elements of the Table of Opposites describe and refer to each other. We can see an explicit relationship in regard to the Limited and Unlimited with another pair on the Table of Opposites, the one belonging to the device of Square and Oblong numbers, and yet another, that of Odd and Even (the Table has ten principles with twenty opposites). The device used in the case of Square and Oblong numbers is the gnomon (carpenter's square). It is placed around the first singular point, the Monad (one point, odd) making a square of one unit per side (1:1). Then the

27. For brevity, we are forced to assume a general familiarity with the Pythagorean notion of the "Harmonia of the Spheres" as well as the Platonic cosmology of Timaeus.

gnomon is placed around the binary Dyad (two points, even) making an oblong shape, one unit tall, two units wide (1:2). Extrapolating from this (adding units according to the shape of the gnomon), in the case of the Monad/odd, according to the stable shape of the square edge we expand from one to three units: stable/square proportions between edges are only maintained as the figure extends out from 1, 3, 5, 7 units, etc. In this way, the three units produces 2:2 square edges (two horizontal units, two vertical units, with one unit shared by both at the corner). Adding to the gnomon squares edge in odd units, five units produces 3:3 square edges (three horizontal units, three vertical units, with one unit shared in the corner). And so on, seven units producing 5:5, nine units producing 7:7, etc. We see clearly that these extensions are "limited" by the shape of the square. But now for the second case, the Dyad/even. Squaring two units off we have an oblong shape whose proportion is 1:2. Squaring four units of we have an oblong shape that is 2:3 (two units tall, three units wide, with one shared in the corner). The proportions we see emerge are infinitely variable with the addition of each two units to the gnomon. The shape and horizontal/vertical ratio changes proportion as the figure extends out from unit quantities, such that six units produces 3:4, eight units produces 4:5 and so on. In this way we get an endless series of never-proportionally-repetitive rectangles, i.e. 5:6, 6:7, 122:123, 526:527, ad infinitum.

In this case the "square," i.e. the Limited refers to a stable equivalence of geometric proportional values as odd numbers are extended through the shape of the square gnomon; and the "oblong," i.e. the Unlimited refers to infinitely variable proportional values as even numbers are extended into oblong shapes according to gnomon. This very simple and basic property of numbers has massive ramifications that I feel correlate in incredibly interesting ways, both in terms of ideas of musical resonance (a harmony between the Limited and the Unlimited approaches to intonation we will see below) and in terms of some basic but overlooked orientations

of Philosophy,²⁸ or even for example, the relationship between cataphic and apophatic theology. More on that later. My postulate for now is simply that there is a musical

understanding appropriate to each principle, and perhaps there is even at times even a harmonic relationship between the two.

To get into this we will need to finally begin dealing with the notion

28. In a cosmological sense Plato, with his non-immanent transcendent creator god, will remain truer to the principles of this Table than the Stoics will.

of "Harmony," and the three discernible senses of this word from antiquity. First, in the works of Homer and Heroditus, its usage is derived from a root meaning literally "to join" or "to fit together" in the physical sense of carpentry and building. The second and more figurative sense of Harmony is developed as a concept of hostile parties coming to agreement. It is precisely from this sense that Heraclitus, direct ancestor of the Stoics, developed a notion of Harmony that was rooted in the principle of opposition:

"People do not understand how that which is at variance with itself agrees with itself. There is a harmony in the bending back, as in the cases of the bow and the lyre."²⁹

The original and correct term is "back-turning" (palintropos), not "back-stretching" (palintonos), but we will return to that in a moment.³⁰ The idea here is that the arms of the bowman pull in opposite directions, and the tension of the string working against the bow results in the desired "harmonious" flight of the arrow: through an application of force in opposite directions, a joining together and agreement of purpose is

made.³¹ With Hesiod this idea is extended further, figuratively, to gods, such as the personified power of "Reconciliation," child of Ares and Aphrodite (Theogony 937), and in Empedocles, significantly, with the explicit naming of Aphrodite as Harmonie, counterpart to "Strife

and Conflict, the principle of proportion and agreement which creates a harmonious unity out of potentially hostile powers."³²

It's probably significant that Plutarch, when quoting the Heraclitan fragment above, changed the word "back-turning" (palintropos) to "back-stretching" (palintonos) to fit the more usual sense of a bow being fit with an arrow. With the term Palintonos Harmonie (back-stretched harmony) we have a very early usage of the term *tonos*, which very interestingly is the ancestor of our English word "tone," but here is simply used as a principle of tension and stretching. This will turn out to be very important for the overlap of musical and cosmological concepts among the Stoics.

The third and musically figurative sense of Harmony and "reconciliation" will be plain to anyone who has ever tuned a musical instrument or tried to play one in tune. Pindar offers the term "Harmonie" in openly

29. Fragment 51, Heraclitus.

30. Charles H. Kahn, *The Art and Thought of Heraclitus*, p. 196.

31. The principle is edified in Philolaus, Fragment 3: "Harmony is generally the result of contraries; for it is the unity of multiplicity, and the agreement of discords (DK 10)." —Nichomachus, *Arith. Intr.* 2. 509. *The Pythagorean Sourcebook*, 168, Guthrie, Fidler.

32. Charles H. Kahn, *The Art and Thought of Heraclitus*, p. 195.

musical terms, with reference to "mode" and "scale" and "composition," all cases where the forces of entropy acting upon an instrument's physical/resonant properties will be at odds with the ideals set before the musician; adapting his instrument to scale, mode, motif, song. The next question is "is the musician himself in tune?" He is as equally a part of the hylic universe as his instrument, but he also participates in the world of the Soul, which is a world where things can also be either in or horribly out of tune (though in a deeper and more subtle way than in strict physical resonance). The truth is that we can go very far (in fact completely off the deep end as I have done) contemplating and implementing certain implications of the Pythagorean cosmogony on both a "hylic" and "pneumatic" plane. We'll get into that a little bit. But of particular interest to the point at hand is the simple idea of the *harmonization* of the opposition of Limited and Unlimited, found most readily in the fragments of the Pythagorean

Philolaus.³³ It's easy (and admittedly has been somewhat rewarding for me) to get hung up on rigid adherence to the properties of physical resonance, conceived as a kind of skeleton key of universal harmonics implied by the ratio-based intonations of Pythagorean musical

33. "The world's nature is a harmonious compound of Limited and Unlimited elements; similar is the totality of the world in itself, and of all it contains (DK1)." —Philolaus, Fragment 1 (*Strobaeus*, 21. 7; *Diogenes Laertius*, 8.85) *The Pythagorean Sourcebook*, 168, Guthrie, Fidler.

theory. However, I am qualified to say at this point that a living tradition rooted into the actual practice of these somewhat all-encompassing fundamentals, such as the Persian Dasgah system, is *an entirely different matter* than when, in the absence of the cultivated grace of "radif" (repertoire), this line of thinking leads to a kind of materialistic idolatry of the "magical" power of resonance, tempered only by one's individual *phantasia*. What is perhaps a salvific formula for someone like myself, who is neither a lifelong apprentice of the Dasgah system nor a neognostic resonance materialist or pneumatic astral plane gymnast championing the Faustian genius of "my own" discoveries, is that it is yet *quite another thing* to attempt to understand the cosmogenic principles behind the proposed *harmonization* of things such as, for example, square and oblong numbers. If one contemplates deeply enough the question of what it means for such an opposition to be "*harmonized*," this itself should lead to seeking a cure to any temptation to a strictly physical resonance-o-centric idolatry.

To elaborate, we can plainly see in the example of the *circle* of 5ths that the "circle" part of the question has been imposed by mathematics.

Sound itself following the natural harmonic proportion of the 5th does not actually return to the same place. It is "off" by a "remainder" (if that is how we are forced to think about it³⁴), which is called the Pythagorean "comma" or koma.³⁵ Thus, taking the interval of the 5th established as a "harmonic mean" as our "gnomon" (see note 34), and proceeding basically with the general principle of "squaring," the natural intonation is revealed to have been "squared off" (by harmonic mean) in order to fit into the pattern of a circle. This imposed pattern of parallel circularity fits the description of "Limited" very nicely. I would defend this operation against attack so long as one is aware that he is doing it (i.e. imposing "limitation" for whatever reason, and for the case of polyphony it makes sense to do it). At the same time, the unaltered extension of the natural harmonic proportion of the 5th creates not a circle but a spiral. The issue of the "comma" (see note 35) refers exactly to the natural harmonic progression based on 5ths (here using the natural 5th as our "gnomon" instead of the 5th produced by harmonic mean). This progression arrives into the kosmos unaltered as an unlimited spiral, as opposed to a limited circle. In cycling through the twelve tones of the progression of 5ths it does NOT return to the same place. In this sense, the Pythagorean progression being the natural empirical fact, we must say it has the *priority* over what came after it, i.e. the conditioned mathematical limitation of the circle. Furthermore, just like the example of the Oblong in relation to the Square, what we see with the comma is an infinitely spiralling harmonic progression, according generally with the ever expansive nature of the Oblong, against the predictable parallel geometrical repetition of the Square. But even more tellingly, the spiralling harmonic progression fits the description of the "Unlimited" perfectly—just as the circling harmonic progression based on harmonic mean accords with the "Limited" equally perfectly.

"This is the state of affairs concerning Nature and Harmony. The Being of things is eternal; it is a unique and divine nature, the knowledge of which does not belong to man. Still it would not be possible that any of the things that exist, and that are known by us, should arrive to our knowledge if this Being was not the internal foundation of principles of which the

34. Archytas introduced the mathematical idea of the harmonic mean, which opened up many possibilities for man's alteration and adjustment of natural phenomenon to suit his own purposes. In the particular case of music, the harmonic mean opened up the possibility of polyphony by adjusting the proportions of tonality to remain consonant across octaves.

35. Note that the shape of a comma is a spiral as opposed to a circle—the remainder, or difference, constituted by the comma is the amount the harmonic progression is "off" with regard to it not being a circle.

world was founded—that is, of the Limited and Unlimited elements. Now since these principles are not mutually similar, nor of similar nature, it would be impossible that the order of the world should have been formed by them in any manner whatever unless harmony had intervened. Of course, the things that were similar, and of similar nature, did not need harmony; but the dissimilar things, which have neither a similar nature, nor an equivalent function, must be organized by the harmony, if they are to take their place in the connected totality of the world."³⁶

From statements like this I believe it is possible to finally begin to appreciate the importance, centrality and *motivation behind* the fundamental expressions of music. When we stop to consider that man is the mediator between knowable and unknowable realities, between created and Uncreated existences, and that his very existence is the "mesocosm" of harmonization between these two realities, we can begin to appreciate why his dramatic role in the universe can become so intimately understandable in *musical* terms. Man as the harmonizer between finitude and infinitude³⁷ puts him in a unique situation—his contemplation of opposition and Harmony, if it takes place on this level, ought to draw him empty-handed and open-Hearted to the threshold of a two-fold observance. If he has one foot in the "knowable" and another foot in the "unknowable," and if he is

38. A word that shares etymology with the word "Holy."

to be whole,³⁸ he must place both his feet on a road that incorporates both an apophatic via negativa and a cataphatic path of affirmation.

The two already naturally meet as One in him, but they can become estranged. Since it is plain that a kind of musical harmonization is what binds these things together, it should come as no surprise that music itself can also play a decisive role in their *estrangement*. We will address that issue at the end of the paper.

To conclude this section we will benefit from once again taking notice of the example of Light. In its visible dimension, its "cataphatic" manifestation as visible light, Light behaves according to Limitation—for it establishes the velocity limit of the universe itself. Furthermore, Light as a knowable phenomenon is perceived by our limiting instruments and concepts as a kind of irreducible ambiguity between a wave and a particle. Yet in the invisible, unknowable "apophatic" dimension of Light's own interi-

36. Philolaus, *Fragment 4, Pythagorean Sourcebook*, 168, Guthrie, Fidler.

37. "and as harmonizer of pro-active mental boundary-making at the same time as being the (potential) receiver of *noetic limitlessness* in the Soul through *kenosis*."

ority, it is Unlimited—timeless, spaceless, eternal and infinite. As engaging as that is, and as naturally as we have been led to also appreciate the two distinct properties of harmonic proportion, one Limited, the other Unlimited, doesn't the idea of sound itself also partake of something of all this? Isn't the positive manifestation of sound "limited" in the sense of having a begin-

39. Also being bound to molecules in sound waves, with a speed limit, and entropic dispersion reducing them always back to nothing.

ning and an end?"³⁹ Contrasting this against the negative, "apophatic" dimension of Silence, which is beginningless and endless, i.e. Unlimited, we find ourselves, human beings that is, once

again at the center of another major cosmological dynamic. One dimension of reality is accessed and even given the property of "limitation" by the affirmative mental process, i.e. by the sounding board of "knowing" appropriate to molecules and interaction. The other dimension of unlimited Silence is only really accessed by "unknowing," un-hearing, which modern man is less (if not totally) unfamiliar with. It's another order of "knowledge" called noetic, which is appropriate to things beyond molecules and interaction of any kind. Wisdom Tradition always seats the portal to noetic reality in the Heart, where access to the Unlimited is granted by the kenotic

40. Of the passions, of the thoughts, of cares and attachments, of imagination and psychic activity.

emptying out⁴⁰ of "self-ness" into Silence. This is something approached only through rigorous practical discipline and the supervised methodology related to "apophatic unknowing"—the *via*

negativa transmitted exclusively by Holy Tradition. There can never be any benefit in decontextualizing it.

The proper trajectory of approach, one that incorporates *both* dimensions (cataphatic and apophatic), is something sublime far beyond my capacity to convey properly. But there can be no doubt that its nature and praxis has been developed, maintained and *embodied* with coherence and consistency by the Hesychast Fathers. As we touch on the Silent dimension in the next section, we will have to tread lightly, since I am not only dismally incapable of doing the Fathers justice, but am also terrified of confusing anyone with fancy ideas when what is called for is utter simplicity, which as anyone can see, is not exactly my personal forte.

The Silent Partner

The Greek word Hesychia (ἡσυχία) generally means Silence. It also implies stillness and being "at rest," in the sense that we spoke of earlier in

terms of the Sabbath—the sense of all the motion of a wheel's spinning mobile circumference ceasing to be registered as movement at its center, its

41. Hesychasm is a tradition of prayer in the Eastern Orthodox monastic and church tradition dating back to at least the 4th century, and has been being practiced continually from then even into modern times.

Heart. It's for this reason that Hesychasts⁴¹ engage in an intense ascetic method of deep inward vigilance called Hesychazo (ἡσυχάζω) "to keep stillness." This involves a complete retiring of the senses and passions, a retreat and cessation of all forms of emotional, psychic or kinetic activity, in order to enter fully into a state of pure emptiness, pure receptivity and Silence and openness to God. In (Orthodox) Christian doctrine, God the Father is conceived of, or rather not conceived of, as being utterly boundless, dimensionless, description-less, impossible to circumscribe in any way, shape or form. No positive statement can be anything but misleading regarding God the Father, which is why the only type of theological statement that can really apply to Him is "apophatic," meaning a negation, or an expression of what He is not. But this does not mean we cannot have any knowledge of God the Father. On the contrary. Experiential knowledge of God is the very goal of Hesychastic practice. But the nature of that knowledge is not circumscriptive, it is not mental knowledge of an object, it is much deeper and more intimate than that. It is "noetic" knowledge that does not originate from an external source, but rather comes from the deepest part within ourselves, from our very center (the Heart), which is like the ever-motionless hub of a wheel. The Intelligence of the Soul, called the Nous, has its seat precisely there in the stillness of the center, or Heart.⁴² To Orthodox Christians this is the highest faculty of cognition, the bodiless "I" of the soul that by the Grace of God partakes of the limitless:

42. It's said that the Soul (psyche) is shared between the mind and the Nous.

"Hesychasm is the enclosing of the bodiless primary Cognitive faculty of the soul in the bodily house of the body." Saint John of Sinai—*Ladder, Step 27, 5*

This enclosing is a matter of *setting the bodily house in order* by actively cleaving to the primary cognitive faculty. The secondary cognitive faculty⁴³, the mental process, tends to be operating constantly, whether we are awake or asleep, it's all the same. The undisciplined secondary faculty loves to usurp the primary position, with the result that the Nous just

43. "The soul (Psyche) does not have the Nous as something distinct from itself, but as its purest part, for as the eye is to the body, so is the Nous to the soul (Psyche)." —St. John Damascene: (see footnote 44).

"sleeps" in the background. The enemies of noetic activity are bodily pas-

sions and restlessness, mental fixations and compulsions, and *any* kind of imaginative conceptions, whether invited fantasies or uninvited intruders. By intentionally, rigorously putting everything in these categories "to sleep," by aiming for Stillness and Silence through Noetic prayer, Hesychastic practice aims at the awakening of the Nous.⁴⁴ The Hesychast who has "died to the world" in this way hopes for the Light of the dawn of Eternity to break—it's a kind of living "death" whose solution (by the Grace of God) is Resurrection. To approach this unapproachable topic from another important angle, it's said that the Soul of man is created in God's Image. The waters of man's Soul can only become placid and reflective of this Divine Image when he puts his passions and mind to complete Stillness. Significantly, to receive this Image, to behold it, is to noetically behold the Uncreated Light.⁴⁵ Here then is the meaning of the opening of the "Eye of the Heart"—it is the Noetic "awakening" in the ever-Present morning of the Soul.⁴⁶ Man's shares in the limitless Divine Intellection through his Nous, which is the direct participation of his Soul in God's energies through its reception of Uncreated Light.⁴⁷

"For a man to attain this experience, vision of the uncreated Light, which is identified with deification, it is not a matter of developing his reasoning and loading his brain with knowledge, but a fruit of his purity, of his nous returning to the heart, and illumination of the nous."⁴⁸

To guard against the impression that this is all some lofty "esoteric" secret doctrine sequestered away on Mount Athos to hide it from

simple believers,⁴⁹ I want to just mention one thing. One of the primary

44. "In diligent exercise of mystical contemplation, leave behind the senses and the operations of the intellect, and all things sensible and intellectual, and all things in the world of being and non-being, that you may arise by unknowing towards the union, as far as is attainable, with Him who transcends all being and all knowledge. For by the unceasing and absolute renunciation of yourself and of all things you may be borne on high, through pure and entire self-abnegation, into the superessential Radiance of the Divine Darkness." —Dionysius the Areopagite, *Mystical Theology*, Chapter 1

45. This is the Light of the Transfiguration, seen by Peter, James and John on Mount Tabor (*Matthew 17:1-2*, *Mark 9:2*, *Luke 9:28-36*). It was not something "new" that Christ showed to them, but the ever-present Uncreated Light of His eternal Divine nature. This is something which His human incarnate nature normally obscured from human senses. Uncreated Light is an "unapproachable light" for any created being. It belongs entirely to the "apophatic" dimension; yet even so, if God so chooses, even the dimmed perceptions of humans can be opened to receive the energies of God—through fleshy eyes, as seen with the Events on Tabor. Again, this is the Light of the 8th or Eternal Day.

46. The Hesychast tries to attune his faculties to limitlessness abnegation—to restrict and nullify any obstruction to pure receptivity, pure stillness and darkness. By this he hopes to receive God's energies shining in his Nous, by Grace. On Mount Tabor Peter, James and John had their Noetic Eyes opened by revelation alone, and beheld the very same Uncreated Light. Either way, if a person's Noetic Eye is permitted to gaze upon the Uncreated Light, the Eternal Day, whether by prayer of the Heart or revelation as on Tabor, this is essentially the same thing as saying he is being united to God through His energies.

47. Considering everything that has been said up to this point, to me this whole thing is stunning beyond all imagination.

48. Metropolitan Hierotheos of Nafpaktos, *The Mind of the Orthodox Church*.

49. To be sure, true Hesychasm is not encouraged or taught much outside of a rigorous monastic setting, and there are very good reasons for that which I personally couldn't agree more with.

articles of Orthodox praxis is placing the thumb and first two fingers together to indicate the Trinity, and to draw them from the forehead to the Heart/center/Nous, and then go from the right shoulder to the left in the shape of a cross. It's an act known in the west as "crossing the Heart." We spoke earlier of Hesychasm as the enclosing of the "bodiless primary cognitive faculty of the Soul in the bodily house of the body." The gesture of crossing one's Heart not only indicates this very clearly, it also expresses and enacts a very potent praxis of "setting of the bodily house in order." The first act or stroke in this gesture is the movement from head to Heart. This movement is literally the intended subjection of the secondary cognitive faculty of the Soul (the power of reason/dianoia and logos which is seated in the mind), to the primary faculty of noetic consciousness in the Nous. If the primary is the horse, and the secondary is the cart, there is good reason to insist on putting the cart behind the horse! "Crossing" is one of the means by which the faithful wrestle all the forces working against the proper ontological priority (the bodily passions, the mental activity, the imaginative fantasy, all repeatedly pushed behind the authority of the Nous). It's also quite significant and appropriate that the line drawn from head to Heart is vertical, constituting the vertical dimension of Kairos time—after all we are dealing with noetic cognitive faculty applied to what is limitless and uncircumscribable, being itself potentially the awakened Eye of the Heart that *sees* the Uncreated Light, the timeless and eternal dimension. Similarly appropriate is the *priority* of the vertical gesture to the horizontal gesture, gracefully indicating the priority of Kairos (Eternal Present) time to secondary Kronos (past and future) time. It's good to point out that the opposition here is blatantly manifest in the perpendicularity of these conceptions (above to below against right to left, vertical inconceivable God against horizontal conceivable creature), but they are harmonized in absolute *Unity and balance* in the intersection they form together.

A similar depth according to the principle of opposition is the general Hebrew genius that brought the Qabalistic Tree of Life into geometrical being. The orientation of the first Sefirah (Keter) is that it is the one closest to God and tends infinitely in the direction of the Good. By contrast the Sefirah in the last position (Malkhut) is the farthest away from God, and tends infinitely in the direction of Evil. The vertical line that unites these two Sefirot is called the Tree of Knowledge of Good and Evil (*Genesis*

50. Sefer Yetzirah: *The Book of Creation*, p. 46, Aryeh Kaplan.

51. Sefer Yetzirah: *The Book of Creation*, p. 58, Aryeh Kaplan.

priority with respect to the formation of the rest of the Tree. The next and secondary event of opposition is the horizontal line of linear time extending between the Sefirah Chakhmah and the Sefirah Binah. Here we have another perpendicular event intimately related to the two times; Chakhmah (Wisdom) acts as pro-active past and Binah (Understanding) acts as receptive future. "The Present is the interface between these two Sefirot,"⁵² and is

52. Sefer Yetzirah: *The Book of Creation*, p. 240, Aryeh Kaplan.

53. There is a whole wonderful development of the apophatic nature of the roots of this Tree extending into "negative existence" through the quasi-Sefirah Da'at (Knowledge), and the Sabbatical/Eternal/at-rest time that extends from the centrality of this quasi-Sefirah in the "restored" version of the Tree and the Sabbath Star diagrams developed by Aryeh Kaplan's student Leonora Leet, especially in her great book *The Secret Doctrine of the Kabbalah: Recovering the Key to Hebraic Sacred Science*. Her last book *The Universal Kabbalah* is really a disaster, however.

Sabbatical Event occurs as a coincidentia oppositorum that unites and harmonizes the primary vertical opposition of Good (Keter) from Evil (Malkut), whose opposition itself harmonizes the secondary horizontal opposition of past and future in the verticality of its Eternal Present. So here again we have the priority of a vertical Time⁵⁴ and the secondary nature of the chronological time of past to future, forming the glyph of the cross as a coincidentia oppositorum that resolves itself in its "center," and by *apophatic* means (Da'at is in fact the Sabbatical "stillness" at the "center" of the diagram, see note 53).

Moving on to more applied musical territory, let us observe that our bodies and minds reside in time and space. It's natural to say that our music depends on the passage of time, and on the reverberating of bodies/matter in space. Despite a few avant garde pretensions towards the abolishment of linear time in music (which are at best capable of deconstructing a

2:9).⁵⁰ The connection between the first and the last Sefirot shows the causal Sefirah Keter (Crown) as beginning and the receptive Sefirah Malkhut (Kingship) as ending.⁵¹ This vertical line has the their harmonization. Once again chronological time is brought into interface with the timeless Time of God by a perpendicular bisection, in this case by the vertical line of the Tree of Knowledge.⁵³ It would take us too far afield to go into the incredibly rich details to be found here, never mind that I am not a qualified person to even talk much further than these cursory notes, but we should just mention that the convergence and "harmonization" of the tendencies to Good and Evil takes place in the mysterious implicit negatively existent Sefirah Da'at (Knowledge). This

54. Established openly as an opposition between Good and Evil.

persistent mental construct), the fact remains that in our universe any two events taking place non-simultaneously together establish an increment—a prior/anterior event and a later/posterior event. A "before" and an "after." Even light, what we see of it anyway, stubbornly flows along time's passageway from the past into the future at a duration we can observe and measure. To be sure, we have great flexibility in our understanding and usage of time. Musicians can command time into almost any shape we want to see it bend into by imposing an almost infinite array of limiting devices, or "gnomons." Time measured differently from bar to bar; steady time that is regular like a heartbeat; irregular time that is warped and curved in accelerandos and ritardandos; metric-modulations, poly-rhythms; time that is cyclical and repetitive, time that is linear and un-repetitive; modular time, un-subdivided ratio-based time. It's a wonderful and open universe of possibilities. The question of the "timeless" in music will never be answered in the abolition of linearity or of mental constructs. Neither will "escaping division" or "moving beyond time-with-a-direction" take place musically through the gestures we have become accustomed to. But must the "conceptual negation" of this particular question constitute its answer? Absolutely not.⁵⁵

Let's not talk about the abolition of anything. Let's just talk about Silence and try to approach it with the proper attitude. Because it is in the harmonization of the Limited and Unlimited that we find the wellsprings of Truth and creativity. These are *not* to be found in the overpowering of Silence with unbridled passionate distraction in pure aesthesis and rationalized sensory indulgence, which only leads to walls of Limitation being built that end up being incredibly musically boring⁵⁶—neither are they to be found by exclusively and artlessly emphasizing "meditative" practices at the expense of (i.e. neglecting harmonization with) a basic contextual aesthesis; I'm sorry but the iconoclastic reflex of abolishing all expressions of Limitation and focusing only on Promethean matters of the "pure spiritual alchemy" of the Unlimited misses

55. In California there are many quasi-musical expressions supposedly crafted according to principles of various neo-Buddhist ascesis, or neo-Anything, really. These musical expressions are just attached as "impressions" onto what we the listener are supposed to accept as a depth of praxis residing at the core of the musical genesis. As we will see later on in a discussion of Wagner, this constitutes a disconnection of music from what is considered to be Real; or it is at least a subordination of music to a kind of background/mood-enhancing status, in order to simply embellish what is central, "masculine," noble and active (meditation, or in the case of Wagner, the text) from the position of a feathery "feminized" aesthetically-confined periphery (music). If we recall what it is that seems to constitute a genuinely timeless aspect to our musical expression explored in this paper, we can see that in reducing music to a realm of individualistic ephemera to simply provide a secondary running commentary for the primary and encompassing meditation, essentially music as brain farts, we are doing nothing but abandoning the original question.

56. I will certainly go off on this pet peeve in the concluding chapter.

the basic point of the broader idea of harmonization.⁵⁷

Coming back to a more usual sense of the term, we can say that Silence resides below the depths of every vibration, however low or high (Hz), however loud or soft (db)—it is the “negative space” of all sound. The unironic zero of Silence, ancient and primordial, is yet the birth-giver to every positive value, every “new” sound. Silence is the womb of all, yet an unconcealed depth right out in the open, never as far off as it may seem. Everywhere music is made Silence is present. Because silence IS the *Present*. In fact, as musical gestures pass from the past to the future, Silence is the only ever-present component. Everything else fluctuates. Much like our perception of light, our experience of Silence in time receives it as an ever-unfolding constant against which all things can be measured. But with Silence, opposing things (sounds) are seen in positive values instead of negative. To unpack this a little more, just as the speed of light is the positive velocity of photons and the velocity boundary of the universe against which all other motions can be measured (a velocity in which matter-based things themselves cannot participate but can only be measured in “negative” with respect to it), Silence establishes a similar uncrossable sound boundary of the universe. Silence is the Zero (whether we speak of 0 db or 0 Hz) against which all vibration constitutes a “positive” value. This applies even to soundless harmonics in vacuum like that of orbits and the like. But for the moment we’ll just talk about our ears and bodily perception, the “mesocosm” of man where Silence seems to disappear at the moment a sound is made.

The harmonization between sound and silence begins with the observation that every sound, but more importantly every musical expression, begins by “breaking silence.” When initiating its movement, music, that potentially most blessed counterpoint of silence, might abruptly assert its opposition in a blatant manner contrasting with the voidness of the a priori silent state of its origination. Or it can try to be more harmonious in itself, embracing that silence, working with it, taking it for a partner and gracefully emerging in and out of its arms in a dance of geometric admixture. Billions of ways for a gesture in sound to be defined against the ever-present Silence are accepted by the human consciousness as musical. And just as surely, whether just as abruptly or just as gracefully or just as

57. A good friend named Drew Hempel who is a brilliant Qi Jong propagandist and thundering advocate of Philolaus needs to be reminded sometimes that: “All beings are necessarily Limited or Unlimited, or simultaneously Limited and Unlimited; but they could not all be Unlimited only.” —Philolaus (1B)

imperceptibly, these gestures always maneuver their way back to the Silence from whence they came.

Plato talks about time as a moving image of eternity.⁵⁸ As musicians we are constantly dealing with a moving image, projecting moving sound images that have been conceived in linear time. It’s much like the process of making and projecting actual films, but what do musicians project their sound images *on* to? For the moving image of an actual film to make sense, it depends upon the *stationary blank* surface of a white screen. When it comes to pure Silence and vacuum in “black blacker than black”

blackness, any sound we’d project into it would of course simply be swallowed up the instant it was made. But if we say we project these moving sound images onto a kind of liminal screen that exists somewhere between the linear unfoldment of spacetime and the timeless “uncarved block” of Silence, perhaps we are not stretching the truth too much. As we have been hinting, the human being himself stands between these two Realities, so he himself is a kind of liminal agent of both, and therefore also the receiver and interpreter of music which relies on both. Much like mankind’s pre-scientific yet inexplicable appreciation of both dimensions of Light, in man’s noisy world he seems to also be endowed with the ability to at least *conceive* of Silence... but can he really *know* it? My theory is that he *must* already know it, at least a little, at least in his unconscious (or latent noetic consciousness), otherwise no music would be intelligible to him. Sure, we like to imagine that the animals react to music the same way we do, but these are only projections. There may be favorable or unfavorable reactions, but intelligibility is another matter. On the other hand, it is certainly possible for *humans* to be blind to both or either the visible and the invisible realities (where animals can have real advantages), and to find entire sections of either of these realities “unintelligible.” Even if the visible perception is healthy it’s possible (and all too common to the point of being “normal”) for someone to be handicapped with regard to one of many mental or noetic processes relating to what is invisible—and this holds true vice versa; as when a visually blind person becomes remarkably more astute with regard to invisible realities (sounds, smells, touch and abstract reasoning). In just the same way, a person’s ears can be functioning perfectly for the appre-

58. And again we are haunted by the intersection of Eternal and Chronological time: “Now the nature of that Living Being was eternal, and this character it was impossible to confer in full perfection upon the generated thing. But he took thought to make, as it were, a moving likeness of eternity; and at the same time that he ordered the heaven, he made, of eternity that abides in unity, an everlasting likeness moving according to number—that to which we have given the name time.” —Plato, *Timaeus* 37

hension of sound, and he may be mentally or noetically handicapped with respect to Silence—with the converse truth that a deaf person may by nature become remarkably mentally or noetically situated in the realm of Silence, something the rest of us have to battle for ad infinitum in order to even “be there” at all.

So I think there are certainly degrees of interaction between the modes of perception appropriate to each side of the equation. The following is a more speculative construct, but perhaps music can be said to be differentiated from “sound” or “noise” because it takes place as harmonic or disharmonic⁵⁹ moving sound images projected intentionally via sound waves onto a kind of psychic liminal barrier existing between the sound-appreciating-capacity and Silence-appreciating-capacity of the listener. I do believe that the normal human being is extremely sensitive to both of these things, and also

(with Plato, Aristotle, Shakespeare, the CIA and Charles Manson) that various impairments in either direction (whether physical or mental/psychic or a combination of both) can be impressed upon the soul through musical mediums. I had intended to write something here on the processes culminating in Wagner, and the fallout we live under, but have decided to save that rant for another time. Instead, it is time to conclude this paper by finally wrapping it together with a good look at the powerful notion of Sympatheia (and a brief digression hastily charting the collapse of a world that has intentionally lost the ability to perceive its own Harmonic infrastructure).

Sympatheia

“Resonance” occurs when one body in motion causes the same kind of motion in another. The motion of one body will resonate another body the same way if it is in the same or a similar state of tension (Tonos). Most musicians are familiar with the phenomenon: when a stringed musical instrument is played near another one finely-tuned in the same way, the strings of the second will vibrate and produce a like sound, even though nobody is touching it. “Acoustic resonance” is something that belongs to the category of physics. It is a phenomenon of “like” sounds and kinetic movements amplified by either direct contact or at a distance through a medium or, whereby the “like” movement passes from one body to another. But can we propose a kind of “harmonization” of sound and Silence through reso-

59. The distinction is discernible as we will see. The principle of Harmonia is not so malleable to the typical reflex “transvaluation of all values” that many would habitually impose upon it.

nance? Such an idea could only mean that both the amplitude and the “note” or frequency that Silence is “tuned to” is Zero. To enter into “resonance” with Zero might not be a bad way (though neither particularly good way) to describe an process of emptying out, of inducing Silence and Stillness. Couldn’t it be said that the motionlessness of Ineffable Silence can produce the same motionlessness in something that is “tuned” to this Silence? Strictly speaking it would not be proper to call this “resonance,” since Silence is an anti-acoustic phenomenon. But there is another, broader word that fits this overall situation well: Sympatheia συμπαθεια.

The word Sympatheia is from a combination of *syn*, meaning “same,” “together” or “of the same,” and *pathos* meaning “passion” or “emotion.” Though the idea certainly applies to and is extended in musical terms related to resonance (i.e. sympathetic strings), it has a longer overall reach. Musically speaking, in addition to physical resonance, Sympatheia also addresses the pathology of the listener,⁶⁰ not

just his or her vibrating molecules. As with bodies in motion, the characteristics of the emotions and passions may be brought into harmonization by the musical Object affecting the listening Subject (and sometimes vice-versa)—this is in fact the most fundamental quality of music. The more general “laws of sympathy” are demonstrated beautifully here: “like produces like,” and our memory retains the impressions of a melody and the feelings related to it are recalled. This fact that everyone has experienced demonstrates lucidly a general Sympathetic principle: an object that has been in contact with a sympathetic subject, but having since ceased to be so, continues to have an “influence” on it at a distance. This is a slightly less empirical (or rather less material) and broader phenomenon than acoustic resonance, but no one would doubt that the phenomenon is very real. When a particularly emotive melody it is brought back to mind by the memory, who doesn’t also recall some of its emotional impact, some of its trans-acoustic content? We might even go so far as to put purely-physical resonance as a secondary issue to this deeper and more primary feature of Sympatheia.

In any event we can perhaps now begin to make sense of the idea, which before seemed like a paradox, of the likeness and affinity existing between those things whose “pathos” is united in *apatheia*,⁶¹ i.e., no pathos. Here, if we say the human Nous is attuned to the “vibration

60. Sympathes “having a fellow feeling, affected by like feelings.”

61. ἀπάθεια: freedom from all passions; for Stoics, a state of mind where one is free from emotional disturbance, i.e. peace of mind.

of no vibration" (Silence), acclimating to the "motion of no motion" (Stillness), and seeks to enter into a shared apathos with the Ineffable, it is by a kind of Sympatheia that it must receive its fullness and depth. The human Nous cannot reach such depths on its own. Not even close. But by the principle of "like producing like" in Divine Emptiness, the dimension of it that is human and noetic can be said to *receive the eternal Ineffable Event of the other that is utterly transcendent*.

Rooted into those considerations, yet now emerging on to a more interactive, worldly and dialectical level, let's consider Sympatheia in its more holistic definition as "affinity of parts to the organic whole, and mutual interdependence."⁶² Musically speaking, then,

to be in tune according to Sympatheia means for all parts to be united in pathology, purpose, intent and execution—as well as in pitch—and oriented to the locus of the whole. The idea converges beautifully in a remarkable metaphor of St. John Chrysostom. He describes hymnody as many tongues united in a single purpose and inclination, in the same way that a single instrument has many strings tuned differently yet not at odds with each

other, but rather being utterly united as one:

"Our tongues are the strings of our kithara,⁶³ putting forth a different sound yet a godly harmony.

"For indeed women and men, old and young, have different voices, but they do not differ in the word of hymnody, for the Spirit blends the voice of each and effects one melody in all."⁶⁴

On this level (hymnody), since it is a matter of prayers being offered to the transcendent, it goes without saying that everything depends upon deep inner listening. The unity of pathos, purpose, intent, etc. between members comes from this inner attention. Listening. The rest of the details (execution) are a simpler matter of outer attention, of unity in aesthesis. Unity or harmonization in pitch perhaps negotiates a kind of middle term, but the point is that it's all related; it's a tautological *whole*. In music we deal with Sympatheia on a very intimate level, because pathology can only be harmonized to a limited point by exterior listening alone; there will

62. "Sympatheia [refers] to the close connection between different parts of the same body as a whole." —Katerina Ierodiakonou, *The Greek Concept of Sympatheia and Its Byzantine Appropriation* in Michael Psellos, in *The Occult Sciences in Byzantium*, edited by Magdalino and Mavroudi, p. 99. The quote continues in Stoic ideas that do not apply here, which we will treat of a little later: "or the close connection between everything in the world as a part of the world as a whole, or between the body of the world and its soul as parts of the world."

63. An ancient plucked string instrument (kithara sounds suspiciously like "guitar") —commonly in patristic sources, the body = the instrument.

64. St. John Chrysostom, homily on *Psalms 145–146*.

inevitably be variance in temperament, ideas, interpretation, etc. If every participant's attention and inner ear is turned toward the same inner listening, in this case that which is enshrouded by Silence (which automatically implies an emptying of pathological content), perhaps only then can we even truly speak of being "in tune." In other words, perhaps we can only really be in tune with each other if we are in some way tune with Divine

Silence.⁶⁵ We are reminded here of Heraclitus' famous and beautifully worded phrase "harmonie aphanes phaneres kreitton," *harmony is*

stronger unseen than seen. Recalling the double action of Light in Kairos and Kronos time, the priority here in Heraclitus is again given to the Unseen timeless dimension, while secondary status is given to the "seen"/visible dimension. The double action of prayer in hymnody applies to this exactly: attentive listening in the "negative" inward dimension of Silence, takes priority over the simultaneous vocalizing outwardly in the affirmative of sound. The two acts pull in opposite directions, but (if done diligently) produce a harmonious result.

If we briefly recall the Heraclitan principle of "Palintonos Harmonie" (back-stretched harmony), the idea of the bow and the string stretching in opposite directions to produce the "harmonious" event of the flight of the arrow, the fundamental agreement here is obvious.⁶⁶

Moving on to the "tautology" of Tonality, the principle of stretching is embedded in our word Tone, which is from the aforementioned Greek word *tonos* ("a stretching, taut string.") This word came to mean pitch or key, literally related to the tautness of a string on a musical instrument producing a certain frequency or pitch. Byzantine and Orthodox music still retains the terminology of Tone when referring to what in the west we would call "mode." It makes excellent sense to call a "mode" a Tone, because if you visualize an instrument with multiple strings tuned to different starting points of the same (properly-intoned) family of notes,⁶⁷ each of which produces

66. "...accounts of tonike kinesis as simultaneous motion in opposite directions, or alteration of two opposite movements, show why the Stoics felt it proper to associate their concept with Heraclitus. He had repeatedly stressed that harmony is of opposites and this seems to be implicit in the Stoic's doctrine that the stability of the universe is constituted by the tension of the active principle—its contrary movements which unite the center of the cosmic sphere with the circumference." —*Stoic Studies*, A.A. Long, p. 52. I have avoided commingling Stoic ideas of "tensile motion" (tonicê kinêsis) with the overall proposition here because there's a chance there's something inaccurate about looking at that way (Stoic ideas of pneuma and an immanent god are incompatible with the priority of an entirely transcendent God). A 4th century Christian Bishop of Emesa in Syria named Nemesis spoke on this subject, but I'm just not sure what to think as far as applying it to music. In any case, with what we have drawn from Heraclitus we are not hazarding any such problem—no need to risk mixing with the Stoics. The main issues there will be dealt with in a couple of paragraphs.

67. In the 8 Tones there are two tunings of the diatonic genus (hard and soft) with interlocking/overlapping plagals, as well as a chromatic genus.

its own pitch relationships with notes in common as well as altered notes, any one differently-stretched string (Tone) is harmoniously-related to all the others as a part of an interlocking and "tautological" tonal system; an overall pattern of "Tonality." As with the current notion of Sympatheia we are discussing, each Tone represents a different part of the same body unified in Sympathetic relation to the whole. The "whole" in this tightly-woven system is the "Octoechos" mentioned before; eight (octo) modes/tones (echoi).

This kind of interweaving of tensions is of course a fundamental principle in creating structural integrity in buildings and other geometrical constructions. Consider structures with intertwined parts and tautological flexibility that absorbs and redirects force along multiple members in many directions; force arriving *back upon itself* as in the case of a sphere being just one example, but the structurally soundest of all. Triangles, domes, spheres, arches, cones, all are inherently superior to blocky stacks of repeating squares. As we may tend to forget or ignore these facts in one area, we might actively seek to destroy them in another—say by replacing beautiful 800-year-old domed structures with cheap shoddy communist block housing that will fall down in thirty years—and doing it in the name of justice, liberation and efficiency. In the 20th century we see the breakdown of tonality, where each step in the breakdown is usually considered as a "liberation" or at least a minor positive "revolution" of some kind. In any event, aligning with our own self-reflecting myths in the avant garde, it's all a "progression" from confining "laws of tonality," etc. Tonality becomes "new," and what becomes important about it is not its actual *tonos* (few care for that) but its "newness." It's no mystery how we have arrived at this point. Once rules become as arbitrary as they had in Western European civilization after a thousand-plus year falling away from ANY actual truly structurally-integrated tonality, it's perhaps no great surprise that the abolishment of now-arbitrary rules would hit the ground in the deconstruction of tonality itself (always hailed as a "new" tonality, when what it means is actually "non-tonality" or "dim echo of tonality" or "tonality of special effects" or "confused pseudo-tonality.") Neither should it surprise us in the absence of any truly Tonal principle that the supposed progress we have made in our alterations of tonality would result in structures that, how ever beautiful, when they are complex, are fleeting, unlasting, weak, and fall down quickly. Furthermore, since the context for appreciation of any such works of depth and beauty has also correspondingly crumbled into dust, *all*

works echo off the same now-featureless-and-blocky walls, and bounce into the arms of an all-embracing all-accepting culture that regards all things as equal—meaning equally irrelevant. The corollary to this is that the only things that can last are the things of coarser and coarser dimension; the stupider and stupider and more and more square tendencies (corresponding to tonally and rhythmically imprisoned perceptions) will continue in their perpetual cultural ascendant, because the only thing that provides a sense of stability and basis to a world dislocated from *tonos* is that which is common to a passionate *instant* of imagined escape from confinement. This is why the body is conceived of as a machine that everyone can "relate" to, and why its mechanical functions assume supremacy; it is supposed that "escape" lies in the direction of endless agitation for freedom against the oppressor of the body. But it is precisely this concept of the body that imprisons it in a narrower and narrower determination. It would be one thing if the marvels of the body were explored in multiple dimensions: flexibility and opposition, mysteries of death, symmetry and asymmetry, even martyrdom. Instead we get nothing but the hypnosis of sex and pseudo-spectacular drugs of "liberation" and "preference," over and over, taking command of all content, and with everything perpetually accompanied by repetitive 4/4 beats—how marvelous to see the world's most effective oppressors all working together in the name of freedom. The only "sympatheia" possible is that which accords tragically and ironically as a *witness* to the diminishing returns of parasitism and auto-cannibalism. The ruins left behind by this squandered civilization will be only the most blocky dimensions of Limitation; and the passions invoked along the way having been molded into equally coarse and imprisoning shapes, the body suffers the same fate.

No one has to go along with any of this, of course.

For me perhaps the ultimate irony is that music originating from the original, natural and structurally justified sense of *tone* would now be considered "microtonal" and even avant garde. This profound vertigo-inducing inversion of reality is part of my daily bread. Nevertheless, no one is prohibited from making use of the principles of Tonality. If some have simply gone tone deaf in the process of the human race being dumbed-down to fit into the deterministic boxes that modernity has prefabricated for us, it does not make anyone else a "genius" for barely listening out beyond the featureless grid of the pseudo-All-Possibility, that deceptive

modern psychism of "liberation," towards that more fundamental tonal architecture that *actually exists*.

How did we get so far away from that, anyway? If we pick up where we left off before the indulgent digression just above, we may find some clues to help us answer that question. In this paper we've been speaking mostly from a Hellenic terminology, but even within that there are vastly different meanings and implications to be drawn, but that we can learn from. According to their divergent cosmological perspectives, Hellenic conceptions of Sympatheia definitely differ between the Stoics, Platonists, Alchemists, Neoplatonists and such. I have not been particularly faithful to any ONE of these conceptions because they each depart in different measures from what I consider to be the most important underlying transcendent principle.⁶⁸ It would be disingenuous of me to omit

68. My fidelity would be to the Fathers.

my own reasoning in this regard, so by way of conclusion, I will briefly (and inadequately) discuss it. Perhaps the discussion can help us chart the course of a certain trajectory of tonal alienation.

Cleanthes, second head of the Stoic school in Athens after Zeno, understood Heraclitus' *tonos* as "tension which does not cease in the (substance) of the universe." This Stoic idea of "substance" is the site of a departure from the transcendent principle. What they generally mean by it is *pneuma* and/or matter—in any event material substance. Early Greek physicians located human vitality in the breath;⁶⁹ air as the movement of spirit, an invisible and subtle matter, but a material substance nonetheless. So for Stoics the universe is constituted of two kinds of substance, *pneuma* and primitive matter. In totality the universe is *one*, God and Nature, a reasoning and wholly material universe. The Stoics divided this material into active and passive classes. Matter is the passive substance, which "lies sluggish, a substance ready for any use, but sure to remain unemployed if no one sets it in motion."⁷⁰ This certainly anticipates the "prima materia" of the Alchemists, a notion mistakenly attributed to Aristotle. The active substance is of course, *pneuma*, which is described as various proportions between elemental aether/intelligence and primordial fire. The Stoics draw from

69. "Stoicism," *Routledge Encyclopedia of Philosophy* (Taylor & Francis, 1998), p. 145.

70. Seneca, *Epistles*, lxxv. 2.

71. Chrysippus as well regarded *pneuma* as "the vehicle of logos in structuring matter, both in animals and in the physical world." —David Sedley, *Stoic Physics and Metaphysics, The Cambridge History of Hellenistic Philosophy*, p. 389

Heraclitus the idea of the Universal Reason (Logos) governing the cosmos,⁷¹ and for them it is through the pneumatic substance that reason acts on

passive matter. This it does through different proportions of air and fire in its pneumatic substance. In the first proportion (the most airy) we have the shaping *pneuma* of tension (*tonos*), which inhabits inanimate objects and unifies and stabilizes all matter and grants it cohesion. This is where the Stoics extrapolate beyond Heraclitus' proposition of oppositional harmony to their own proposition of "tensile motion" (*tonicê kinêsis*), thus associating the idea with their physical substrates of substance, ideas foreign to Heraclitus. In another proportion of air and fire (the most balanced), the *pneuma* is literally the inhabiting life force, the spirit, that distinguishes living things from inanimate objects. And the final proportion of air and fire (the most fiery) is the *pneuma* of psyche (soul). This *pneuma* inhabits every part of the organism, regulating and governing its movements and giving consciousness to its perceptions.

So for the Stoics everything in the world is created out of transformations of the unified divine substance, which is the *arche*—the material primordial fire they call god and logos. The soul being the most fiery of the pneumatic gradations and closest to the primordial *arche* therefore has the closest proximity to the mind and body of god. In fact, a soul is said to be a fragment of god—so we can see here how different the idea of Sympatheia is in Stoic usage, since it would refer to the (benign) idea of parts of a body being united in a whole, yet *also* to the "underlying substance"-based connection between everything in the world making up parts of the whole (dispenses with the transcendent and harmonia with it), *and* also to the idea of the body and soul of the world, both material, constituting "parts" of its oneness. In the Stoic world god is immanent in the universe.

"Constantly regard the universe as one living being, having one substance and one soul; and observe how all things have reference to one perception, the perception of this one living being; and how all things act with one movement; and how all things are the cooperating causes of all things that exist; observe too the continuous spinning of the thread and the structure of the web."⁷²

72. Marcus Aurelius, *Meditations*, iv. 40.

It's important to note (for the later development of Alchemy among other things) that this Stoic understanding legitimates divination and astrology through the mediation of the *pneuma*, and that the concept of God's immanence (inhabitation of divine-material things) is what makes this idea possible.

Plato's *Timaeus* also presents a kosmos where everything is inter-

connected with everything else. But in Plato's kosmos everything is not purely material—there is a transcendent dimension, and this dimension (again) has the *priority*.⁷³ The Platonic conception

73. Plato, *Timaeus*, 30, 37.

keeps God as transcendent, and grants the formation of the universe to explicitly incorporeal powers. It is the *world* that is created as a living, rational being, fashioned in the image of the Divine Intellect, which is an intelligible yet immaterial living and divine being. (*Timaeus* 41a–b). In this conception, the material world possesses its own soul, the world soul, which governs and holds the sensible world to order by illumination in the Divine Intellect. Hence, unlike the elemental amalgamation of the Stoic *pneuma*, the agency of the “world soul” performs its actions over sensible things via immaterial means.

The Platonic Sympatheia, then, originally casts the origination and power of the universe not in the elemental *materia* of *arche* or its pneumatic agency (hence astrological and divinatory concepts are not justified by physical interaction), but locates this power in the *immaterial Intelligible realm*. With Plato we find relations of the immaterial divinity with the material sensorium occurring on the basis of an “analogical” concept of harmonia and Sympatheia; specifically established is the *likeness* (mimesis) between the material and immaterial realms. It's not a dualism in the usual sense because the relationship is asymmetrical: the sympathetic relation between the immaterial Heaven and material Earth operates from above to below, with the Above determining the operations Below, and with the Below never affecting the transcendent Above. The emphasis is on their linkage, and dependence of the Below on the Above. The Stoics certainly departed from this idea, and from Platonic Sympatheia between Macrocosm and Microcosm, replacing all that with a sympatheia of immanent reason and divinity in active elements acting upon passive primal materiality. This is a significant departure we will see taken one step further with the Alchemists. To finish with Plato, most importantly for our purpose, with him the agency of the *transcendent* operates within the *material*, and occurs specifically by the illumination of the Soul with Divine Intellection—Philo defines the transcendent organizing agency here as the Logos, or “Reason” of God. Again, this is all quite opposed to a Stoic idea of universal reason/logos being distributed everywhere materially/pneumatically, and the soul partaking of *arche*, primordial fire, by degrees according to its proximity.

If the Stoics adapted the Platonic Sympatheia to their purely

“material” universe, later Platonists/Neoplatonists by and large remained faithful to the original conceptions, but did borrow here and there elements from the Stoic usage. It could be that the theurgic fascinations of some of the later Neoplatonists demanded a “material substrate” for their magical operations. (Certainly this became the case for Alchemists). With the Neoplatonic theurgy, there is yet another shift in the usage of the concept of Sympatheia, most of which relates to the Chaldaean Oracles. The Cosmological/Philosophical principles in that work reveal a strict hierarchy; that of the “Father” of emanations sitting at the summit of a Triad of primordial beings who organize, engender and sustain the universe. It is the magical elements (rituals and instructions) in the Chaldaean Oracles where one finds “discernment” between “good” demons that help one towards the Father, and “bad” ones that lead to perdition away from the Father. Some Neoplatonists took up the same theme in their theurgic and magical writings, usually contingent upon a cosmological idea where a shared likeness occurs between the human and daimonic realms—simultaneously a quasi Stoic overlap in some kind of materiality, and a reduction of the Platonic *likeness* (mimesis) between material and material to a *likeness* between human and daimonic. This could be conceived as hylic participation in greater and lesser degrees according to the gradations of subterrestrial, terrestrial, and supra-terrestrial, i.e. tending to a hylic nature, a pneumatic-hylic balance, and a more pneumatic nature. This is an echo of a familiar theme! Like the Stoic understanding, it can be conceived in a pneumatic understanding of matter itself, or enspirited/“spiritual” matter. At any rate, the idea was not just that the daimonic forces had power over human beings, but that human beings, wielding sympatheia as a magical tool, had power over the daimonic (so the ideas of Iamblichus and Proclus go).

I will just say that here we are drifting far afield even of the cosmogenic idea of the Stoics and any context where sympatheia found its earlier expression. It is also quite different in character from things like the comparatively passive visionary Mi'raj of Cicero's Dream of Scipio and other like accounts, which arise in a context wherein asceticism against passions is taken as a given, and that by apatheia the cultivation and attainment of moral perfection is enshrined both as praxis and goal of Stoic Philosophy. Such “paganism” by its very nature is easily distinguished from some of the other things that go by that name, such as the syncretic appropriation of decontextualized Priestly rites from foreign Priesthoods, in

however altered or watered-down a form, being used on the one hand to construct a kind of speculative theory if not a full-fledged Philosophical apologetic for magical practices (late Neoplatonists), and on the other, to engage in such a patchwork of practices, regardless of the decontextualized nature of the source material which arrives by appropriation or theft (Egyptian, Chaldaean, Persian mystery traditions in the Hellenic romance of the satrapies of Alexander), which not only inevitably introduces an insurmountable breach in authentic Tradition, but also engenders an impassable vortex of spurious material to be contended with. Our modern era amplifies this problem beyond all reasonable measure.

This discussion has been necessary in order to bring us to the point where we can clearly discern what kinds of issues the "alchemical" concept raises when applied to music. Alchemy brings with it a whole cosmological proposition unto itself. It too has a reflecting Speculum, a mediation between Heaven and Earth, conceived as a mimesis of the Above by the Below. It also fully concretizes the idea of *prima materia*.

It's generally accepted that alchemy came in to full swing at the beginning of the common era under Graeco-Roman Egyptian metallurgical auspices. Several elements combined for the emergence of what we now recognize as alchemy⁷⁴:

(a) the practices of Egyptian metalworkers and goldsmiths who learned by experimentation how to simulate gold by working with alloys and dying metals; (b) "the theory

about the fundamental unity of matter, according to which all substances are composed of a primitive matter and owe their specific differences to the presence of different qualities imposed upon this matter; (c) the idea that the aim of any technique must be the *mimesis* of nature; (d) the doctrine of universal sympathy, which held that all elements of the cosmos are connected by occult links of sympathy and antipathy which explain all the combinations and separations of the bodies."⁷⁵

We should by now be familiar with most of this. Leaving point (a) for a later time, we can see the idea of the "speculum" and likeness referred to earlier expanded in point (c). To say that the aim of any *technique* is to imitate *nature* surely reorients the idea of the speculum/mirror away from any invisible realities. The aim of the method and technique of seeking Silence, or even Stoic *apatheia*, for example, is certainly not to reflect any "thing" of any kind, but rather to dispense

74. This concise observation is owed to Michele Mertens in the introduction to her essay *Graeco-Egyptian Alchemy in Byzantium*, p. 206.

75. Ibid.

with every notion of "thing-ness" itself. To re-quote St. Dionysius the Areopagite from an earlier note: "In diligent exercise of mystical contemplation, leave behind the senses and the operations of the intellect, and all things sensible and intellectual, and all things in the world of being and non-being, that you may arise by unknowing towards the union, as far as is attainable, with Him who transcends all being and all knowledge. For by the unceasing and absolute renunciation of yourself and of all things you may be borne on high, through pure and entire self-abnegation, into the superessential Radiance of the Divine Darkness."⁷⁶ The Alchemical method, which instead fixes its attention onto *visible* realities by pointing its mirror towards them, is quite different from this. It assumes that the *visible realities* are working in an analogical relationship with the Soul, which is an idea that works in tandem with point (b), the assumption of the primal unity of

matter.⁷⁷ So Alchemy actually takes even the Neoplatonic theurgic concept of likeness between humans and invisible "enspirited matter" (the daimonic) down yet one more level: a likeness between the workings of the human soul and visible *matter*.

77. An idea that habitually gets blamed on Aristotle, but probably more fairly belongs more to Neoplatonism. Alchemical "Prima Materia" seems more than anything else like a fairly straightforward materialization and divinity-neutering transposition of the Stoic "pneuma" onto the hylic realm.

76. Dionysius the Areopagite, *Mystical Theology*, Chapter 1.

Our choice of a Hellenic milieu to tell the story of the transformation in these ideas has been well placed. The earliest of historically visible Alchemists is Zosimos of Panopolis, from around 300 AD. His early commentator and Neoplatonic Philosopher in his own right, Olympiodoros⁷⁸ is on record having worked to establish retro-active links between the early Alchemists and the pre-Socratic Philosophers (including Heraclitus). But even as radically as things had changed from the time of the pre-Socratics to the Alchemists (as we have seen), they changed even more radically over the next 1,000 years in the transmission of the alchemical practice to Europe. For considerably later than Zosimos, the man considered to be the first "practical" Alchemist, the Persian polymath J bir ibn Hayy n arrived on the scene, and is credited with an early development of the experimental method and having employed laboratory techniques. Even here Arabic tradition attributes the teaching of Alchemical science to Muslims to a Byzantine Monk named Marianos.⁷⁹ In a book in the J birian corpus called

78. Michele Mertens, *Graeco-Egyptian Alchemy in Byzantium, The Occult Sciences in Byzantium*, p. 216.

79. Maria Mavroudi, *Occult Science and Society in Byzantium: Considerations for Future Research, The Occult Sciences in Byzantium*, p. 87.

Book of the Monk, J bir beseeches his master, who is a pupil of Marianos, "Instruct me... so that I may share your knowledge and can inform others of it in your name; for, although I have occupied myself with this science, I cannot dispense with a teacher in many respects."⁸⁰

80. *The Classical Heritage in Islam*, Berkeley and Los Angeles 1975, p. 250, quoted in *Ibid.* pp. 86-88.

Here we are coming to the threshold of pure Limitation. The passive *prima materia* awaits the human will to impress itself upon it. The human Soul awaits its *likeness derived from visible realities*, as opposed to from the *Unlimited* and Eternal Uncreated Light. And mankind has finally set up his laboratory of individuation. Now his experimental, solipsistic, Faustian effort shall fracture his spirit every-which-way by the formula "solve et coagula" and he will emerge from it a new man, adept in the *hall* of mirrors of material algebraic combinatorics. He will complicate himself away from every simplicity. He will become a sorcerer who fraudulently calls his magic "science" because he can *prove* it. He will wear a Dominican Friar's robe and bear the title "Saint" as he falsely circumscribes the Ineffable in a fallen and humanistic project mistakenly ascribed to Reason and Logic. The Renaissance world will froth in anticipation as he pulls out his many newly-fashioned gnomons in order to Limit and quantify everything, according to the fleeting taste of the times. With each new century he will equalize the temperament of the intervals ever further, against nature in favor of the idiosyncratic orderliness of *finally* making a grid out of them & attuning them to Hz! He will make a grid of musical time and confine it to hemi-demi-semi quavers, locking the idea of rhythm into a system of subdivisions of equal parts instead of the naturally occurring phenomenon of ratios and proportions. The Heart, which a priori knows the language of proportion, will be scoffed at and systematically shoved out of the equation—*eunichized* into the defensive sentimentality of obligatory Hallmark cards and forgotten. The head, which prefers the systematics of encompassing nature with various filters and screens, will cite *Timaeus 44D* as it takes utter supremacy.

The rest of the body of this Tin Man, this fabricated Golem, long ago awakened to the magic words first whispered in the laboratories of Byzantine proto-humanism. 1,200(?) years later and we, the bastard children of this occidental godfather of the eclectic, *still* never had the chance to ask ourselves *how*? In the 19th century, for example, the "Dionysian" spirit came to associate itself with an asiatic spiritual path noted for its battle

against attachments and passions. What? Our passions, so excited by our "escape" into a new spiritual possibility, told us to relativize and revolutionize everything. We blinded our eyes to the newly emerging absolutism of an anarchic consensus of non-hierarchization, against Nietzsche's pallid humanist aristocracy, but at the same time against Pythagoras and St. Symeon the Stylite. Free of such visions, we proceeded to prostrate ourselves in a deeper bow than ever before to the horizontal kingdom of Man. With our noses to the floor we secretly wondered why our art too was suddenly becoming ugly, and we not-so-secretly justified it by claiming it was a *mirror*, reflection of "the times" (the final bottoming out and inversion of the Speculum). But when we began depicting man himself as ugly or as a monster, we didn't justify it that way, we took it much farther: we converted the sub-human spectacle before our eyes into an image of divinity—not by focusing on the inspired nature of a human struggle that contorts the outward condition to a beautiful inner one, but simply by calling *all value* into question. "Who's to say this contortion in pain and despair isn't actually angelic," etc. By reinventing how we saw, we were free to reinvent the ugly as beautiful, so the idea went. All the while the premier champion of the "transvaluation of all values" continued to complain pretentiously of not being able to stand the common, the ordinary, the mundane, etc. (even if he keeps it to himself, which today's hipster barbarians do but Nietzsche more honestly *didn't*). Every despot of the non-hierarchical seems to brandish his complaints in a downward fashion, and somehow interprets his disgust with the ordinary as a measure of rare strength standing against the weakness of the common and "hierarchical" (actual hierarchy in today's world is something most of us would have a hard time spotting anywhere except in bank accounts). What few seem to have noticed is that these feelings of discontent and disgust are feelings of sickness, helplessness and weakness. Anyone can relate to them. Stuck on a subway or stuck in traffic, we get annoyed with the people around us... these are moments of anything but strength. Anyone who empathizes with such feelings empathizes only with what is *weakest* in mankind. This is how our hysterical Übermensch came to advocate the worst kind of sympatheia on earth. It was only when he finally looked in the mirror that it finally cracked, and he was delivered, humbled, back to the obvious.

DREAD OF THE KNOCK

A Ceremony of Auditory Hallucinations for the Dead of Night

DAVID TOOP

Dread of the Knock: *A Ceremony of Auditory Hallucinations for the Dead of Night*, for three masked players, reciter, small improvising orchestra, audio playback and magic lantern slide show, the performance to be held in a resonant room, such as a cellar whose surfaces are stone.

The piece begins with low knocking sounds moving through space—above, below, behind, some muffled and distant, some close enough to make the skin prickle—as if presences are striving to gain entry from their unknowable worlds into objective space.

MASK 1: Out of deep dreamless sleep I was woken, startled by a hollow resonance, a sudden impact of wood on wood. Was the sound an isolated hearing event within my consciousness—auditory hallucination or a moment of dream without narrative; was it a neurological event, something internal to worry about, or was it a sound from the physical world, something external to worry about? The reverberation time was too long for the sound to have emanated from the bedroom. It came from distant space so implied the entrance of an intruder, but this seemed unlikely. The sound came from nowhere in this sense, belonged nowhere. Its existence was real enough to wake me yet unreal enough to be ambiguous, intangible and lacking in verifiable space.

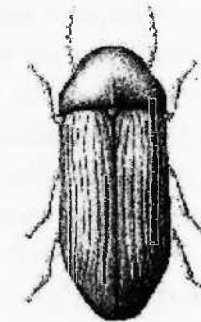
[**AUDIO PLAYBACK:** hollow, wood sounds are heard, the klok of a Japanese shishi odoshi, the bamboo filling with water, falling, striking stone to scare deer, emptying again and rising, this trembling emptiness between each strike marking the ma of uncertainty; from the early morning chant of a Buddhist temple, the bok of a huge mokug-yo fishmouth slit gong, a sound both soft and hard, penetrating and diffused.]

MASK 2: A creaking floor is heard one night in darkness, in a place, a home. As assonance and alphabet suggest—from within sleep, from within the sonic vocabulary of horror, terror, the supernatural—the creaking door opens onto the creaking floor. A moving body, or some other agent—pressure, cooling, movement within the greater structure of the building—passes over or through a flexible surface, causing audible friction in this quiet place. Sound radiates outward in all directions, feeling and probing its way both through the solid structure of a building and the interior channels of air space, entering finally the ears of a listener.

RECITER: “The old house, for those who know how to listen,” wrote Gaston Bachelard, “is a sort of geometry of echoes... Still farther it is possible to recover not merely the timbre of the voices, ‘the inflections of beloved voices now silent,’ but also the resonance of each room in the sound house.”

MASK 2: This resonance speaks for the history, the memory of a house, venerable personal place, a rubbing of old boards; but perhaps at the source there is an intruder, and so a sound from another place, a place literally out of sight, is an omen, a bringer of trespass, threat, unease, disturbance, fear. Anomalous sound enters in the way of an animal or insect: mouse, rat, spider, cockroach, fly, wasp, woodworm or the uncanny ticking of death-watch beetles, celebrating warm weather and desire by banging their heads against the tunnel walls they have bored through old church timbers.

[**AUDIO PLAYBACK:** 1'40", deathwatch beetles, advertising display in oak beam, Edingtonthorpe, Norfolk, recorded by Chris Watson. The magic lantern shows its first slide.]



MASK 3: A little drummer, the greater death watch beetle knocks on the fabric of the house, just as a knock on the door in the dead of night bangs at the membrane of all that is homely.

RECITER: "I have often thought I could distinctly hear the sound of the darkness as it stole over the horizon," wrote Edgar Allan Poe, in his notes to *Part II* of *Al Aaraaf*.

MASK 1: Atmospheres of darkness and hyperacacusis, feelings of loneliness enclosed in webs of malignant, oppressive sound and silence. Spaces possess lives of their own. The beating heart that betrays its own killer, the hollow knocking and shrieking of the prematurely or unjustly incarcerated, suggest that Poe listened with fastidious concentration to all external and interior sounds.

MASK 3: *The Tell-Tale Heart* begins by interrupting a conversation or confession, either between the perpetrator and himself (or herself), or with an unnamed listener. A neurotic condition of "nerves," of exaggerated acuity, establishes a context of microsonic hearing.

RECITER: "Above all was the sense of hearing acute. I heard many things in the heaven and in the earth. I heard many things in hell. How then am I mad?"

MASK 2: For reasons unknown to himself, the narrator has decided that the old man who shares his dwelling must be killed. His eye has settled the issue, "the eye of a vulture," and so this prelude to murder progresses in silence by degrees of time and darkness "black as pitch," its object revealed to vision by a dark lantern whose thin ray of light is released cautiously each night for seven nights, each night falling on the closed eye of the old man. On the eighth night, moving with painful slowness in the thick darkness, the perpetrator chuckles. The old man moves on his bed. The narrator's thumb slips on the tin fastening of the lantern and the old man springs up in bed, crying out, "Who's there?" For one hour the murderer stands motionless, saying nothing, conscious that the old man is still alert, sitting up, listening, "just as I have done, night after night, hearkening to the death watches in the wall."

He opens the lantern, shines it onto the eye, then hears "a low, dull, quick sound, such as a watch makes when enveloped in cotton." The pulse grows louder, faster, the thud of the old man's heart, increasing his fury, "as the beating of a drum stimulates the soldier into courage." As if a steady crescendo within the silent dark, the pulsations grow louder still, loud enough for a neighbour to hear, the murderer shouts, the old man shrieks and is suffocated. Even after his death, the heart pumps on with a muffled beat, then like a decaying echo of sound haunting its original self, gradually fades until sunk into silence. He dismembers the corpse and buries it under the floorboards. At four o'clock in the morning, there is knocking at the door, policemen investigating reports of a suspicious noise. The murderer greets them with confidence, shows them the house, seats them exactly over the spot where the old man's remains have been hidden, but as time passes, he begins to hear a ringing in his ears. Throughout the story, the narrator has meticulously drawn a distinction between madness and the hypersensitivity to external sounds that he claims to suffer. Now the question of what is generated from within or without reaches a point of crisis.

RECITER: "I found that the noise was not within my ears."

MASK 3: What he hears is the "low, dull, quick sound—much such a sound as a watch makes when enveloped in cotton," increasing and increasing, too insistent to mask by pacing across the floorboards, raving and swearing, or scraping his chair. In the end he admits his crime, no longer able to tolerate the return of the sound he sought to still: the beating of the old man's hideous heart.

MASK 1: Startled awake by a hammering on the door in the dead of night, the knocking that signals an ending—police, immigration, security forces, Gestapo, Stasi, the neighbour with a machete, death itself or the demon. Whatever is outside wants to come inside, like the thunderous knocking of Shirley Jackson's story, *The Haunting of Hill House*—"a hollow noise, a hollow bang, as though something were hitting the doors with an iron kettle, or an iron bar, or an iron glove."

[At this point, the three masks re-enact the *Rites of Eleusis*, staged by

Aleister Crowley at the Caxton Hall, London, in October and November 1910. On a candle-lit stage, Crowley recites Swinburne's first verse from *Atalanta*, Victor Neuberg dances "the dance of Syrinx and Pan in honour of our lady Artemis," spinning until he falls to the floor and lays exhausted until the end. After a long silence, Leila Waddell plays the violin with great passion. The magic lantern shows a number of slides. The robed adepts at Caxton Hall are ranged around the magical circle, Crowley high above them poised to strike with his ceremonial sword. The quality of the photograph is poor, a reproduction from *The Liverpool Courier* of October 28, 1910, but one of the adepts appears to be holding a gong (almost certainly Burmese). Another slide shows Leila Waddell posed with her violin, and then her most familiar image, Waddell naked, her breasts concealed by long black hair, her linked fingers and upright thumbs framing a tattoo—a roughly drawn cross within two concentric circles—branded or inked onto her bare chest. Lying flat on the table at which she sits is a metal disc with shallow boss and a central hole. Again, the image quality is poor but the disc may be a Chinese cymbal. Crowley's summation of Waddell was typically brusque. She was, he claimed, a "fifth rate fiddler" but under the influence of the rite and charged with the invocation of lunar influence, she discovered inspiration within herself and entranced those members of the audience who documented the experience.]

[**AUDIO PLAYBACK:** drumming birds and insects, including woodpeckers, whose rapid, resonant drumming echoing throughout woodland suggests the image of an upper region of communication populated only by percussionists; the red-winged grasshopper, *Arphia pseudonietana*, a bug that flies as if doomed by its own vanity, a sudden vivid flash of red, sharp clicking, an ungainly descent back to earth; the sapsucker, the manakin, the African broadbill, the Australian palm cockatoo that uses a twig to drum on logs. The magic lantern shows its second slide.]



RECITER: From the Mataco myth (cited by Claude Lévi-Strauss, *From Honey to Ashes*) of the origin of mead: "It was a bird that carved the first drum, and he beat it all night, and at dawn he was changed into a man."

MASK 1: A hole is dug into the ground, a journey to the centre of the earth in search of music, and as with all holes in the ground, the digging disturbs artefacts of the human trace. A cavity, hollow, vessel or pit deepens, unearthing memories of burying, hiding, storing, amplifying, echoing, tunnelling, sheltering, trapping, containing, planting, suffocating, sinking, secrecy, sacrifice.

MASK 2: In *Musical Instruments Through the Ages*, Klaus P. Wachsmann noted an Abyssinian (Ethiopian) instrument known as the Lion's Roar, a narrow tapered hole dug in the ground to fashion a resonating, transformative vessel for the voice. Is it possible to imagine a more economical diagram of pre-scientific cosmology than this prototypical loudspeaker? Sound is earthed or grounded within place and human society, yet it extends in all directions: outwards to intersect with the communications of non-human organisms; upwards to air, sky, the heavens; downwards into the dark underworld. With a shout—raaagh—the connection is made.

MASK 3: Documentation of terrene instruments is rare, perhaps because of their ephemeral nature, or because they had been largely superseded by

more portable and sophisticated technologies by the time ethnomusicology was sufficiently advanced as a scholarly discipline to pay attention to such devices. More important than this, they were safe from collectors and explorers. Shipping home a hole in the ground for future collection in museums such as the Horniman in London or the Pitt Rivers in Oxford was hardly a practical option. In *Musical Instruments of the South American Indians*, Karl Gustav Izikowitz described an elaborate signal drum made by the Brazilian Catuquinariú Indians. First reported in 1910 (only three years before the notorious Paris premiere of Stravinsky's *Rite of Spring*), the instrument was complex and mysterious: a large earth pit filled with resins and wood fragments and capped with rubber, and in the centre, a vertical hollow log partially filled with powdered mica, bone fragments and other materials, again capped by hard rubber.

MASK 2: Between 1961 and 1967, French ethnomusicologist Hugo Zemp found similarly strange instruments—an earth drum, an earth bow, and an earth friction drum—during his researches among the Dan of western Ivory Coast and Liberia. A photograph of the earth bow can be seen in Zemp's book, *Musique Dan*. A man squats and sings, plucking an ingenious version of what came to be known among African-American musicians as the diddley bow (though by fixing the string to a wall, the diddley bow uses a dwelling as resonator, rather than the earth itself). In this case, a sapling is bent over to form a bow. A string connects this to a sounding surface, a whole palm leaf fastened securely over a hole dug into the ground. Zemp categorised the earth friction drum, rubbed fibres threaded through the bark cover of an earth-pit resonator, as the voice of a mask or supernatural being, hidden from the sight of women and children and destroyed after ceremonial use. Named guéyibeu, Mask-that-eats-water, the otherworldly sound of this instrument could be heard on *Masques Dan*, a collection of Zemp's recordings of mask voices released by the Ocora label.

MASK 1: As we go deeper, darkness gathers. Animals of sinks, wells, pools and damp darkness croak and slither. Of the innocent frog, Seamus Heaney wrote: "The slap and plop were obscene threats. Some sat/Poised like mud grenades, their blunt heads farting." The childlike satisfaction of digging a hole (perhaps all the way to the other side of the world) may be followed by associations of burial, entrapment and the underworld. One interpreta-

tion of the 16th century English nursery rhyme, "Ding dong bell, pussy's in the well," hypothesises that the "pussy" of the rhyme described a woman accused of immorality; the sound of the bell may have referred to the "rough music" of pots and pans, the instruments of darkness played as the woman was paraded through the streets on the way to her torture by ducking stool (the precursor of waterboarding) in the village wellpond.

MASK 3: The drum is a vessel, a pit, an encircling, a craft, a receptacle for magical objects, vibrating or anticipatory air, a covering skin, a landscape of many dimensions. At the end of the 17th century, during the Christian conversions of Nordic Sami people, hundreds of shamanic drums were burned. Some people pretended that the drums were used as compasses; some hid their drums in remote caves.

[The magic lantern shows its third slide.]



RECITER: "Let us make you overgrown with flesh," sang the Tuvan shaman to his drum. "Let us make you a living creature."

MASK 2: The uncanny associations of Chthonic resonance may also apply on a smaller scale to material culture. Ueda Akinari's 18th century gothic tale, *The Kibitsu Cauldron*, tells the story of a haunting in which unpropitious omens are established from the outset by a Cauldron Purification

ritual (Mikamabara) held on the grounds of the Kibitsu Shrine, a Shinto shrine in Okayama, western Japan. For this divinatory rite, still extant, a fire of pine needles is lit under a water-filled kami, a large iron rice cauldron. "It has long been the custom," wrote Ueda, "for worshippers at the Kibitsu Shrine to make abundant offerings, present hot water to the god, and seek a divination of good or bad fortune. When the maidens complete their ritual prayers and the water comes to a boil, the cauldron will, if the prospects are good, produce a sound like the lowing of cattle. If the prospects are bad, the cauldron will make no sound." Inevitably, the cauldron is silent and so the story ends with its villain hanging by his topknot from a roof beam, all other traces of his body other than hair obliterated save for a smear of blood.

MASK 3: Bodies are instruments and instruments are bodies: the double basses with gashes in their sides; the semigrand open piano whose music hath crocodile jaws, the piano as coffin, the deep, soft, open darkness of the self. Wooden boxes, cooking pots, cups, bowls, bottles, drainpipes, tin cans, jerry cans, plastic water jugs, matchboxes. Throughout the literature of organology and ethnomusicology lies scattered evidence of these everyday vessels being transformed into musical instruments. The majority of the musical instruments that we call acoustic—piano, clarinet, guitar, violin, drum, and so on—derive their audible energy from being enclosed or semi-enclosed rooms, chambers, tunnels or vessels of marvellous shape, their equally fanciful apertures opening out onto the greater vessel of an external world. The crowded molecules of sound move about in these rooms, the equivalent of social beings, mixing and conversing, crowded or left alone, emptying out and filling up, speaking quietly or making noise. This movement is reminiscent of the architecture of the body and our sensitivity to sound moving within the body or escaping from the body. The story of Syrinx and her transformation into Pan's flute reminds us of the body's potential to become an instrument, and the absorption of music into and through the body.

RECITER: Vladimir Jankélévitch describes this as an act of trespass: "Music acts on human beings, on their nervous systems and their vital processes... By means of massive irruptions, music takes up residence in our intimate self and seemingly elects to make its home there. The man

inhabited and possessed by this intruder, the man robbed of self, is no longer himself: he has become nothing more than a vibrating string, a sounding pipe."

MASK 1: Sound is a spirit, many spirits—malevolent, monstrous, antique, mediocre, joyful, trivial, ugly, violent, seductive, seraphic, salacious, base or holy; to work with sound is to fly into the spirit world, to become a companion of spirits, take spirits into the body, transform.

[Within the room, darkness becomes complete.]

HORN O' PLENTY

GREG WALL

"Blow the great shofar,
TEKIYA, TRUA, SHVARIM
blasts, wails, broken cries,
stamp your feet
and the tombs will quake."

"And the mingling sounds will rise
to the roots of the souls,
and the wheel of destiny will turn
to rebuild all that is desolate..."

—HaRav Avraham Yitzchak HaCohen Kook

Growing up a secular suburban Jew I had a polite connection with ritual, dabbling in dreidles, matza, gefilte fish. Twice yearly we endured the forced pilgrimage to our local reform temple, where I would hear the organist and choir accompany the cantor in the seemingly endless annual show, with a large supporting cast. On Rosh HaShana we would know it was close to liberation when we would hear the cantor, or some other big lunged designate attempt to emit a few blasts on the shofar. Like the factory whistle, the sound turned our hearts and minds to something much more substantial than the religious service we were suffering through, to the tables of cakes, fruits and confections that awaited. Off with the yarmulkes, bring on the boiler makers of petit fours and Coca-Cola. In later teen years a cynical anticipation emerged. Would he or wouldn't he? A few well intentioned splats, blats or other ill sounding emissions from the shofar would instantly bring a smile to the face. Perhaps the human element was in conflict with the divine tribunal...

Years later, as a jazz saxophonist doubling as a reluctant congregant at a traditional urban synagogue struggling to stay on its feet after 100 years,

I was pressed into service to try my hand at the shofar. The Ba'al Tokeiah had passed on, and there was no one left who could get a sound out of the holy horn. This shouldn't be so hard, I thought. After all, I am a wind player! Keep the air moving, relax, visualize...

A few days before Rosh Hashanah I gave a try...TEKIYA... nothing... TEKIYA...splat...

Hmmm...

I consulted with the Rabbi, who said that I might have luck with another shofar, and showed me a drawer containing several others. I had better luck, but still was not able to consistently produce a steady tone. I then saw one wrapped up underneath some other articles, and held it up. "Don't bother," he said. Nobody can get a sound out of that one. I held it to my lips and blew. TEKIYA! A huge sound filled the room... SHVARIM... The blasts bounced off the walls, and danced along the rafters. I ran up the stairs to try out my new ax in the huge main sanctuary upstairs.

TRUA!... The shorter tones rang out in counterpoint to their still reverberating predecessors. I was psyched, and I was ready.

Rosh HaShana came and went, both days, and the notices were in... The new Ba'al Tokeiah was a hit.

"The best I ever heard!"... "Strong enough to set the walls a tumbling..." It felt great to be a Jewish musician, playing the original instrument...

But, was there more to it than that?

After a few years I found myself being more and more drawn to the synagogue and, feeling woefully inadequate due to my almost complete dirth of Jewish knowledge, I started a casual study of classic Jewish texts. It wasn't long before study became a regular part of first my weekly, then my daily schedule. I started to learn Hebrew, and began to study the meaning of the ancient verses that we chanted in the synagogue every Saturday morning. I became a father a few times over, and it was time to move on. My wife and I decided we would raise our children within a Jewish community, and provide them with the education to gain the literacy that was required to navigate within. My new rabbi, upon hearing of my predisposition to hornblowing, asked if I was a Ba'al Tokeiah, a shofar blower. Yes, I proudly responded. "Would you like to blow shofar for our community?" he asked. Sure, I replied. "Have you studied about the laws and customs of

the shofar?" he asked. No—not really...not ever. That would be the prerequisite before taking on the role in this new synagogue.

Laws? Customs? Why can't you just open up and blow...?

First things first... Jewish tradition teaches that it is a mitzvah—divine commandment—to hear the sound of the shofar on Rosh Hashanah. The shofar is mentioned in several other contexts elsewhere in the bible, but it is the Rosh Hashanah ritual that most people are familiar with. The commandment in the book of *Leviticus* (23:24) mentions a "Zichron TRUA," a remembrance of the shofar, and in the *Book of Numbers*, (29:11) it says concerning the holiday, "It shall be a day of sounding the shofar."

Why the shofar?

The sound of the shofar emanating from the heavens was heard at Mt. Sinai. It was blown to mark the end of the "Jubilee" year, after seven-year agricultural cycles, and was blown in the orchestra at the holy temple in Jerusalem. Tradition teaches us that the Akeidat Yitzchak, the binding of Isaac by his father Abraham, took place on Rosh Hashanah, and the ram's horn is symbolic of the ram Abraham sacrificed, instead of his son.

According to the tradition, the shofar must not be made from the horn of a cow (keren), as that would make a connection with the Golden Calf, a major spiritual challenge for the Jewish people, who's negative energy is still in the world.

The mystical tradition teaches that there is a parallel shofar in the heavens that is activated by the shofar on earth... Says the Zohar:

"Rabbi Abba, who was sitting before Rabbi Shimon bar Yochai, said to him: Look here, I have asked many times about the meaning of the shofar, but so far I have not had a satisfying answer.

"He [Rabbi Shimon] replied: This is the true explanation. Why does Israel require the ram's horn (shofar) on this day, but not another type of horn (keren)? For it is known where the other type of horn comes from, and we do not wish to adhere to judgment (din). However we have learned that in word and deed we should perceive and deal with secret things.

"Come and see! When the supernal shofar, in which all universal lights are included, departs and does not illumine its children, then judgment is awakened, and thrones are set up for a court. And this shofar is called 'Isaac's ram', i.e. Isaac's power, the praise of the 'fathers'. When that great shofar departs, and does not suckle its children, then Isaac is strengthened and prepares himself for judgment in the world.

"When that shofar is awakened, and when people repent of their sins, they should draw the sound of the shofar from below, and that sound ascends, and there awakens another, supernal shofar, so that mercy (rachamim) is awakened and judgment departs. We must perform a physical act with the shofar, in order to awaken the other shofar, and to produce those sounds with that shofar below that will produce all those sounds from above which are included in that supernal shofar, so that it be awakened to go out.

"And with those sounds from below Israel is given strength above, and therefore we must blow the shofar at its proper time, on this day, and with the sounds in their proper series, intending by this to arouse the other shofar above, which contains all the sounds." —Zohar, 'Emor, III, 99a–100a

That's quite a mouthful.

The Zohar mentions three conditions necessary for "arousal"—proper time, proper series of blasts, and proper condition.

The time was the easy part—during the day. The series of blasts required was another story. Due to some talmudic confusion over the order and actual performance of the notes the nine biblically mandated blasts would now be 100! Ouch!

The condition—one blowing the shofar must have the proper mindfulness, the intention, or kavana. According to the tradition, one must have in mind that he is blowing for everyone present, and that every sound is for the singular purpose of directing the congregation's spiritual energy upwards to the heavens. A lapse in concentration could cause a disconnect between the lower and upper worlds.

I told my rabbi, "Thanks, but no thanks... I'm not up for this!" He replied that my response was the one he was looking for, that an eagerness would have indicated I was indeed the wrong person for the job. I would have to see it through.

The morning of the Day of Judgment came. I went to the synagogue early, and practiced a few blasts. Nice...smooth. The youth director asked me to blow for the children's service. Thirty blasts, feeling fine. Someone asked me to go around the corner and blow shofar for someone too ill to come to the synagogue. Thirty blasts later I was back, still plenty of time until the main congregation reached the shofar service. I put on my white kittel, the ceremonial frock symbolizing purity, and stepped up to the bima. The cantor called out—TEKIYA!

I put the shofar to my lips...nothing.

I tried again...nada, gornisht...

Once more...zilch.

Silence filled the room. "Take a minute" I was told. A stand in shofar blower ascended, and I went out to the garage and cried like I never had.

"R. Eleazar also said: From the day on which the Temple was destroyed the gates of prayer have been closed, as it says, Yea, when I cry and call for help He shutteth out my prayer. (*Lamentations 3:8*) But though the gates of prayer are closed, the gates of weeping are not closed, as it says, Hear my prayer, O Lord, and give ear unto my cry; keep not silence at my tears (*Psalms 39:12-13*)..." —Babylonian Talmud-Tractate Brachot, 32B

THE PERSPECTIVAL LUTE

PETER LAMBORN WILSON

The painter Arcimboldo (1526–1593) worked for Emperor Rudolf II in Prague, where he met some of the greatest Renaissance "Magi:" Dr. John Dee and Edward Kelley, Giordano Bruno, Rabbi Loewe (creator of the Golem), Count Michael Maier and other Rosicrucians, not to mention the alchemy-mad emperor himself and all the inhabitants of Prague's famous Street of Alchemists. Rudolf loved Arcimboldo's caricature of his Imperial self as the god Vertumnus, a "composite portrait" in fruit and vegetables; and also the wonderful "Flora," a goddess made out of flowers, like a Welsh fairy, for which the ruler bestowed on the artist the title of Count Palatine.

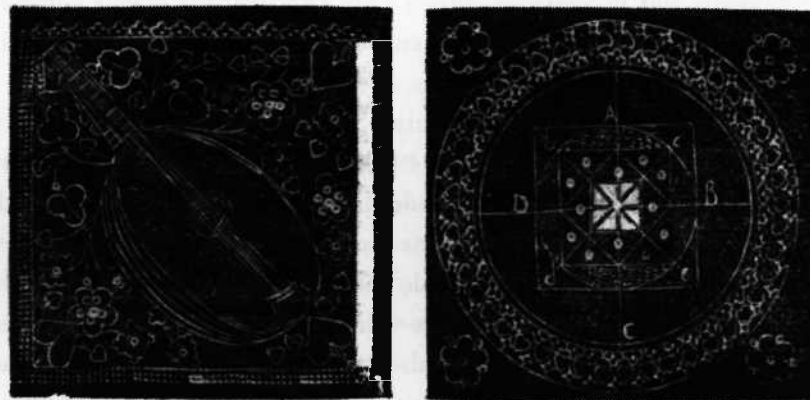
Like Leonardo da Vinci and other Renaissance painters, Arcimboldo mastered many skills and dabbled in inventions. He studied botany, architecture and metallurgy, and designed floats and tableaux for Imperial tournaments and Processions, which were like movable operas complete with plot and characters, elaborate scenes and music, and allegories based on Classical mythology and Hermetic cosmology.

The greatest of all alchemists Philippus Aureolus Bombastus von Hohenhelm, a.k.a. Paracelsus (1493–1541), whose life overlapped with Arcimboldo's, had passed on to Rudolfine Prague an obsession with the Four Elements, including the Seasons and Humours associated with them and the Nature Elementals that rule them: Earth/Gnomes, Air/Sylphs, Fire/Salamanders and Water/Undines—characters who appear in Arcimboldo's paintings. The Seven Planets also offered categories of "correspondences" or "Signatures" linking visible and invisible worlds, as did the Zodiac and the stars in general. (Even Kepler and Brahe, the Court Astronomers, no doubt contributed to the Emperor's horoscope.)

From Hermeticists such as Cornelius Agrippa and Marsilio Ficino we know that each Element or Planet can be linked magically with certain angelic rituals designed almost synaesthetically to involve all the senses

simultaneously, as well as Imagination and Intellect. Ficino's *Planetary Rituals* again resembled opera as *gesamtkunstwerk* in their mingling of colors, perfumes, wine and food, fabrics and textures, song and music. Michael Maier's fabulous book *Atalanta Fugiens* (1614) combined image, poetry and musical scores to provide an allegory of alchemy as a kind of silent opera to be staged in the reader's mind. (Adam McLean and Joscelyn Godwin published a modern translation of *Atalanta* with CD of the music, a linked series of fugues based on occult numerology.) We know that Arcimboldo himself invented a "perspectival lute" and a "color organ," both sadly now lost, perhaps precursors of J.K. Huysmans' imaginary "taste organ" (based on various liqueurs) or Liberace's "color piano," not to mention the psychedelic *son et lumière* of the 1960s.

Clearly the Occident once knew an art of mystic music very similar to those of Persia and India, although the immediate inspiration arose from the Renaissance rediscovery of Antiquity—in this case, Neoplatonic theurgy and Pythagorean numerology. Sound both organizes the cosmos and is organized by it—hence the "Music of the Spheres" as well as a kind of musico-magical therapeutics or alchemical music for aligning the Humours—"Pilles to Purge Melancholie" as the title of an old English songbook promised.



Hermetic figures "Zoemetra" and "Geometra" from a volume Giordano Bruno wrote in Prague in 1588, *Articuli centum et sexaginta adversus huius temporis mathematicos atque philosophos* (One hundred and sixty articles against the mathematicians and philosophers of the present time). These complex, deliberately puzzling diagrams represent parts of Bruno's effort to trace the hidden structures of the universe.

In an age when everybody from aristocrat to peasant could play an

instrument or at least sing along, this kind of popular esoteric knowledge was far more accessible than now. Although we moderns of course possess vastly more *data* than our ancestors, we have invested nearly all of it in machinery and mediation. We are "represented" by professionals and stars who sing and play for us—since we cannot do it for ourselves. Recorded music can of course still be magical—but always with a magic imposed upon us rather than created by us for ourselves.

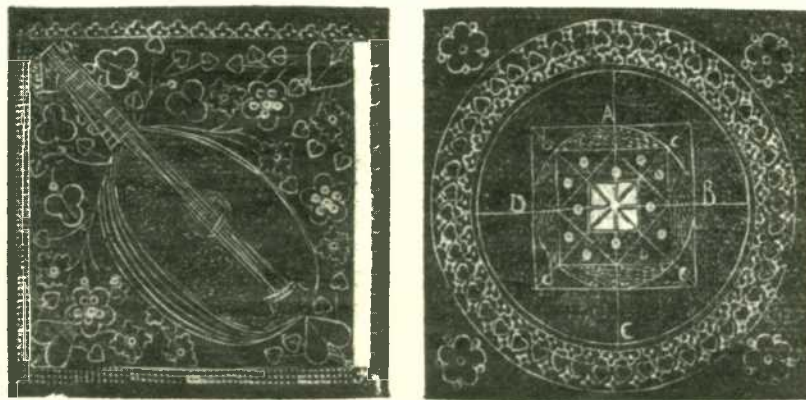
The ultimate model for an Occidental Mystical Music derives from the myth of Orpheus and the Orphic Mysteries. Shakespeare referred to it with his "charms to soothe the savage beast." Another vital myth concerns Apollo, patron of the Muses: he receives his first lute (made from a tortoise shell) from the infant Hermes—the babe's precocious first invention, prior even to the art of writing. The "Rout of Bacchus"—the wild parade of Dionysus and his maenads, satyrs, panthers, fauns, Sileni and other genii/djinn—must of course be set to music of panpipes, lyre, percussion and song. Dionysus himself "comes from India" and may be said to stand for the deepest proto-shamanic Indo-Iranian-European traditions that link the Vedic Rishis and Zarathustran Magi with Greco-Roman, Celtic and Norse pantheons. (Hermeticism, being perfectly "universal," also integrates Jewish, Islamic, African, American Indian and Chinese wisdom, besides its base in Egypto-Sumerian antiquity.)

Orphic music, rediscovered by Renaissance Hermeticists, was once again repressed and submerged—first of all by bigoted religion. Protestant iconoclasm swept away "decadent" Catholic musical mysticism as well as the neo-pagan revival, and the Counter-Reformation did the same. (Nevertheless certain esoteric secrets survived in Baroque music as well as other non-verbal arts such as the Emblem Book and the Garden.) Another coffin-nail was supplied by Enlightenment Rationalism and its scientific materialism which distrusted music for its vagueness, emotionality and appeal to *ecstasis*—traits almost stamped out in 18th century music (Mozart the Freemason being an obvious and glaring exception). The lid was finally closed by 19th century Progressism and the Machinic Revolution. All spooks were on the verge of being exorcized from music forever.

But suddenly the Romantics re-discovered traces of a lost tradition and attempted to forge again a living link with Orpheus. The music running through my head as I write this sentence is Mendelssohn's *Overture to A Midsummer Night's Dream*, composed before his sixteenth birthday,

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which evokes for me the Hermetic Shakespeare depicted by Dame Frances Yates or Lovejoy's old book on *The Great Chain of Being*. If Romanticism has a precursor as our eternal rebel avant garde it must be Hermeticism. And indeed even the "tolerant" Renaissance could burn a magician at the stake, like Giordano Bruno in Rome's "Field of Flowers" in 1600. This is Blake's *Everlasting Gospel*, always already suppressed by orthodoxy, always esoteric, occult and forbidden.

We in the West must live with the consequences of this entire series of catastrophes, the successive suppressions of *musique mystique* which have left us alienated from our Orphic heritage. Goethe, Wagner, Nietzsche and Emerson (among many others) looked to Iran and India for ways to overcome the Occidental occultation of mysticism in general, and in the specific case of music we might now follow their lead, relatively unencumbered by the "Orientalist" distortions they had to confront. By looking at Tantra and Sufism, for instance, we can find specific techniques handed down from the most archaic shamanism. Here I can speak with at least a modicum of first-hand experience, having lived in India and Iran from 1968 to 1978 and attended many seances of mystical music both Hindu and Islamic. In India it's often difficult to separate the two strands since Moslems perform sacred Hindu music and vice versa in a syncretistic pattern dating back at least to the Mughal period (when Prince Dara Shikoh declared, "Our Sufism is their vedanta, their vedanta is our Sufism.")

Tantrik teachings on sound as *mantra* have deep implications for music. Each mode—indeed each note—is "presided over" by a specific deity, just as each mantra evokes or rather constitutes the sonic body of a divine persona. In Zoroastrian and Persian Sufi tradition these deities are easily seen and embraced as Angels. The twelve Classical modes of Persian music have their Zoroastrian-named Angels as well as Zodiacal signs, months of the year and other "Signatures."

Naturally these systems imply a spiritual psychology of music in which the musician (or listener in an ecstatic state) identifies the limited self with the god or angel-self of the mode. As Arcimboldo knew, *there are no ideas but in persons*. Paganism (or its "monotheistic" analogy in angelology) knows neither abstractions nor "dead" things; the cosmos is held together by desire, and desire exists only amongst living beings. The Greek version of this ontology derives from Hesiod's cosmogony in which Chaos is formed by Eros into matter (*mater*, Gaia, Mother Earth) in the dark

womb of Old Night.

In medieval Persian Sufism of the "School of Love" this esoteric system was *performed* in an informal ceremony known as *sama'* or "Audition." In the heterodox atmosphere of Persia and North India this rite took on its classical form: a small group of Sufis, musicians and "beloveds" would meet in private to dance, perhaps drink wine or use cannabis, and induce states of mystical ecstasy. In these circles the ideal form of eroticism was a chaste pederasty limited to "gazing," perhaps kissing or dancing "breast to breast." In Tantrik ritual the beloved must be of the opposite sex to the worshipper, but Persia followed an archaic (even shamanic) preference for same-sex love, also found in both Platonism and Orphism.

If this classic form of *sama'* (or indeed the classic Tantrik "lefthand" sex ritual) still exists, I never experienced it. In modern (more exoteric) times the *sama'* takes the form of music dance sessions of dervishes unstimulated by intoxicants or erotic (dis)play. In India it has become a public *qawwali* concert performed at the tombs of saints by such maestros as the late Fateh Ali Khan; I saw him sing in Lahore in 1972 at the shrine of Mian Mir. In both these modern forms of *sama'* the hal or mystic state of exaltation is experienced by at least some participants and auditors—otherwise the session would be deemed a failure. The afflicted ones sometimes jump up and begin to spin, just like the Sufis in medieval miniatures.

The most evolved and ordered *sama'* developed in Ottoman Turkey among the Mevlevi followers of Jaleddin Rumi, with full orchestra, written scores, and intricate choreography based on the whirling spheres of heaven. Western audiences have seen folklorist versions of this, but you'd have to visit Kurdistan to witness dervishes so entranced by music they eat glass and scorpions and pass swords through their cheeks or skewers through their tongues.

It would be difficult and perhaps absurd simply to import such practises wholesale into "Western music" or modern spiritual practise in general, like some sort of Orientalist Rave Culture. Nevertheless it might remain possible to seek inspiration and even some technical secrets highly useful to any possible "Hermetic revival" of music in our era.

Music, the art to which all others aspire according to Nietzsche's highly Orphic aphorism, remains the esoteric art par excellence because it communicates essences without words or images. Of course word (song)

ideologizes music just as the caption ideologizes the image, as Walter Benjamin would say. But non-representational sound alone is still the *angelic body*, perhaps most so when unconstrained by semantic enclosure. Nevertheless mystic music always seems to want to embrace all other arts as well: poetry, dance, perfumery, theater, cuisine, etc.—in a union of the senses aimed at breakthrough into the “invisible” Mundus Imaginalis or world of the creative Imagination. As Mozart and Charles Fourier (the mad 19th century French “Utopian Socialist”) and Wagner agreed, the perfect Hermetic form ought in theory to be opera, the “complete artwork.” Fourier believed that utopian society would create operas without audiences, in which everyone would perform, just as in “primitive” societies where everyone participates in music dance ritual—where no one is “represented” and all are *present*.

Every recording is the tombstone of a live performance. Recording increases musical data but impoverishes musical wisdom on the social as well as individual level. Just as Magical Theater (from Artaud to the Living Theater) attempts to break down the proscenium between artists and audience, so too the barrier of recorded music must be breached if practical mysticism rather than dry theory is the goal. Perhaps *musique mystique* must be considered not only as live and present but even as “site-specific” and thus literally impossible to record.

There remains too the “Problem of the Audience” considered as passive consumers of music or ritual. The 20th century magician Aleister Crowley once dosed an entire audience with mescaline before a performance of his “Rite of Eleusis,” but he judged it a failure, since “asses on drugs are still asses.” We cannot simply wish into being a cultural climate in which people know how to fall into ecstatic states. We’ve all grown up in a world where technopathocratic Too-Late Capitalism has attempted to abolish not only Nature but even human society—and has largely succeeded. We find ourselves inundated with music but somehow paradoxically plunged into mourning over its absence. The same might be said of all the arts in as much as they are reduced to systems of commodities sold to an atomized populace rather than poetic artifacts produced by a free and creative people.

Recently I realized it’s been years since I’ve heard anyone singing in the street. Recorded music is so overpoweringly omnipresent in my village it seems to have killed off even this last vestige of social production.

One reason why church remains so popular in America may be its role as last refuge of amateur group music—and in some Pentecostal or Spiritual churches music still whips up *hal*-like states of ecstasy, even glossolalia and snake handling.

In anti-pessimistic moments I refuse to believe the human spirit can be wholly crushed by technology and the rule of money. I foresee some kind of Luddite uprising against “machinery hurtful to the commonalty,” and I even imagine poets/artists/musicians as the “unacknowledged legislators” of this rebellion. (By the way, Shelley supported the Luddites.) Inevitably this would involve a Hermetic Revival, and a renewal of Romanticism as the eternal avant garde. If “life without music would be a mistake” (Nietzsche) we are already experiencing the effects of this error—and only music itself can rectify it. For inspiration we might well return to our own Occidental wisdom—tradition and come to conceptualize music as alchemy. Only in this way—or so I suspect—can we hope to re-invent Arcimboldo’s perspectival Lute.

METAPHORS, MYTHOS AND METAPHONICS

Z'EV

"...if you have ears to hear, then hear" attributed to Jesu, son of Mary.
—Matthew 11:15

"If 'in the beginning was the word,' then it is our hearing of that word that makes it sacred and so allows us to hear each other into a transcendent humanness and wholeness."
—Nelle Morton¹

In his book *The Forge and the Crucible*, Mercia

Eliade, that most amazing Historian of Religion wrote:

"According to their traditions, Chinese Alchemy was developed utilizing three elements: *Principles, Myths, and Techniques*."

To my delight, I realized that this three-foldness and its ordering was mirrored in the selection of concepts that I had already chosen as the title of this writing.

To wit:

Metaphor is the *Principle* on which these musings are based.

Mythos (*Myths*) reveals a universal depth of being the world over.

And *Metaphonics* is the word I am coining/suggesting for the major Trance Induction *Technique* on the planet.

Metaphor

Dictionary definition:

"A transferring to one word the sense of another."

In the cognitive field it is a fairly common assumption that there are two quite disparate modes of apprehension: emotion and reason, which are bridged by the use of Metaphor. To my mind, this clarified the relation

between Metaphor and Trance, because when emotion and reason (i.e. the traditional body/mind dichotomy) merge, the result can be some form or another of Trance.

Metaphors are used to describe (*illuminate* could also be used here) preternatural truths as well as natural ones.

In rituals Metaphors are used to describe the nature of cosmic forces. As such, Metaphors can lead one to an innate "Realization."

Or, we could also call it an "ahh-haa" due to the reaction it elicits.

Regardless, some form of Realization is generally one of the results of the Trance experience.

Therefore: Trance is an Altered State of Consciousness, Consciousness being the salient, i.e., that which is altered. And we only know, or at least can only discuss, our Consciousness by means of Language.

While I do not agree with the philosopher J. Jaynes² on his most dramatic points regarding the origin of consciousness, on these next points I can agree:

2. *The Origin of Consciousness in the Breakdown of the Bicameral Mind.*

"It is by metaphor that language grows. (Its) grand and vigorous function is the generation of new language..."

He reaches his summation with the following:

"All of these concrete metaphors increase enormously our powers of perception of the world about us and our understanding of it, and literally creates new objects....Indeed, language is an organ of perception, not simply a means of communication."

Being consequential then, Metaphor is an organ, and perhaps *the most vital organ*, of perception.

If, through Trance, we are able to break open the Doors of Perception, might we not also be breaking open the Doors of Metaphor? And by-and-through the very means of Metaphor itself?

For we can regard all our ideas and behaviors as reflections of some Metaphor: That is, as the outcome of treating the world "as if" it is a certain way. That is, by experiencing it through a particular worldview/frame of reference.

Metaphor, in this sense, is enacted and reflected as much in our actions and feelings as in our patterns of thought and behavior.

It would not be going too far to say that Metaphor operates at every level of our consciousness and sub-consciousness in our inter-reac-

tions with the world.

Therefore, in considering worldviews, it should not be too hard to imagine the dichotomy which exists between the antipodes of a literal view, on the one hand, and a metaphoric view, on the other.

The literal worldview supposes a sort of *frozen* reality, where any particular idea or action, once reflected on or experienced, would remain absolutely stable. Resorting to Metaphor, we could call this a Photographic or a two-dimensional worldview.

The Metaphoric worldview, on the other hand, supposes a *fluid* reality. To achieve a representation of this would require something along the lines of a holographic motion picture. Holographic because you would want to be able to walk around whatever notion you were considering. Just to kind of get another angle on it. And a holographic motion picture at that.

Because things happen in Time, as well as in Space.

Since its inception, Western Science has functioned on the premise that the only way to understand a physical phenomenon, whether a frog or an atom, was to dissect it and study its separate parts. However, in a holographic Multiverse, this separateness is an illusion, because at the deepest levels of reality **everything** is infinitely interconnected.

Thus, the electrons in each carbon atom in a human being would be connected to the subatomic particles that comprise every other animal, vegetable and mineral on the Earth, and beyond that to every star that shimmers and planet that shines in the sky.

And indeed, in 1982 a research team at the University of Paris led by physicist Alain Aspect³ discovered that under certain circumstances subatomic particles (such as electrons) could instantaneously communicate with each other regardless of the distance separating them.

The physicist David Bohm believes Aspect's findings implied that an "objective" reality does not exist—rather that, despite its apparent solidity, the universe is in fact holographic. Because, unlike photographs, every part of a hologram contains all the information possessed by the whole.

The work of these two scientists, and they are just a cursory sampling, strengthens the notion that only a holographic metaphor of consciousness could enable the vast amounts of frequencies being shared by all our different senses to be sorted out to produce our conventional perceptions.

3. <http://www2.cnrs.fr/en/447.htm>

Research is continually discovering that each of our senses is sensitive to a much broader range of frequencies than was previously suspected. For example:

1. Our visual systems are sensitive to sound frequencies (which is how my sound works in the dark functions).
2. Our sense of smell is in part dependent on intra-molecular vibrations, referred to as "osmic," or absorptive frequencies,
3. Even the individual cells composing our bodies are sensitive to a broad range of frequencies, which accounts for the phenomenon known as "whole body hearing."

Biologist Lyall Watson has described⁴ an encounter with an Indonesian Shaman woman who, by performing a ritual dance, caused an entire grove of trees to disappear and then reappear, off again and on again several times in succession. Obviously Western Science is incapable of explaining, let alone accepting, such events and experiences.

But they are "explainable" if what is referred to as "consensual reality" is formulated and functional at a holographic level where all minds are infinitely interconnected. In this holographic multiverse there would be no limits to the extent in which the fabric of reality could be altered.

Experiences such as Watson's are rare then, only because we have not agreed to share the metaphors that would make them commonplace.

The point that seems to be arising here is that a literal worldview would reflect the *normal* state of consciousness and a Metaphoric worldview any of the variety of *altered* states of consciousness.

In 1987 Cathy J. Wheeler wrote *The Magic of Metaphor*⁵, an absolutely killer article that rocked my world when I came across it, and I can't recommend it enough.

Jungian Psychologist James Hillman⁶, who has revised and revitalized Jung's work, connects the metaphorical-literal contrast with the notions of monotheism and polytheism.

Monotheistic religions regard their god as the ultimate, The One True God. No wonder then, that within this worldview, for any phenomenon there *must* be One, single, exclusive, and absolute Truth. Unfortunately, with the possible exception of particle physics, this is still the pervasive

4. *Gifts of Unknown Things*.

5. *The Magic of Metaphor in: Metaphor and Symbolic Activity* v.2 (4).

6. *The Thought of the Heart and the Soul of the World*.

mindset of Non-Animistic Cultures and their Sciences.

In contrast, Polytheism esteems diversity, plurality, and complexity. Polytheism not only acknowledges many god/desses but it tends to be loose, adaptable and non-dogmatic.

Polytheistic cultures generally do not regard themselves and any other religions they encounter, or might in the past have conquered, as mutually exclusive. Unless, of course, that religion is/was Monotheistic.

It should come as no surprise, therefore, that Trance Cultures throughout the world are decidedly polytheistic.

For example, go to the market and check out the candle department—dollars to doughnuts you will find Santerian candles.

Santeria is a perfect Polytheistic blend of Catholicism, with its vast list of Saints, transported/transmuted into a New World adaptation of traditional African religions with their Pantheons of Powers.

And Polytheism *does* make the perfect transition to the discussion of Mythos—because where would the Myths be without their vast pantheons of Divine characters to gossip about?

Mythos

For the Greeks, *Mythos* meant: word, saying, fable, tale, talk or speech.

This was contrasted with *logos* (The Word) and later with *historia*.

Literary criticism regarding the veracity of Myth began as early as 500 BCE, and Mythos eventually came to denote that which was unreal. It is most interesting that even that far back in history the Metaphoric function/purpose of Myth was beginning to fade.

Closer to home, in a current *Encyclopedia Britannica*, Myth is introduced as a collective term denoting a symbolic narrative in religion, as distinguished from symbolic behavior (of a sect or during a ritual) or symbolic places or objects (temples, icons, drums/instruments, etc.)

What this is implying is that, as simply a "narrative," Myth should be understood as existing somewhere separate from, or inaccessible to, ordinary human experience or behavior or place or object.

And that seems pretty sad to me.

The novelist Ian McDonald⁷ set forth a notion of Myth most beautifully:

"Marvelous how all human strife and conflict was a symbolic enactment of loftier struggles between the Powers Cosmic so that every moment of

the present was merely a fragment of the past repeating itself over and over again."

The theologian Paul Tillich and the philosopher Karl Jaspers have both put forth cogent views in which:

"Myth is that which is taken for granted when thought begins." —Tillich

And

"Myth is the limit reached in the course of scientific analysis when it is (continually, I might add) found that no further progress in definition can be made after certain fundamental principles have been reached." —Jaspers

Ian McDonald said in this regard:

"The science which doesn't include that which it can't explain is no science at all."

This dead end has been apparent in Western Science for quite some time and is responsible for the instigation of discussions about the limits of what can be scientifically explained. This dilemma is the force behind the impulse that has brought out all the books about Science and Spirituality, as well as all the conferences on that topic. The upside is that it has also sparked a renewed interest in the Mythological dimensions of human knowledge and consciousness.

Now these dimensional levels can also be considered as functions of Memory.

For, as far as I am concerned, it is only the *very least* of what Mythos is that manifests as the collections of fictions that exist in their oral or textual form. While that aspect of Myth is clearly the most usual referent, I would define that aspect as the stuff of Legend, Fable, Folktale, Epic, Saga, etc.

For the purposes of this discussion I would posit rather that Mythos be seen as levels of informations redolent with the transforming powers of Life and Death and the unfolding forces of Nature. Because, absolutely, these Mythic dimensional levels (in a metaphorical *without*) exist in-potential *within* each of us. And this is central to this paradigm.

For within us too, running deep throughout our 75 trillion cells are these same dimensional levels of Mythos. That is "in" what we call our Memory.

This reflexive notion (a *without* and a *within*) is echoed in the

classic esoteric dictum "As above, So Below" which can be heard echoing throughout this discussion.

As to how this Mythic information is/can be accessed?

The tradition of the *Bat Kol* from the Qabalha can shed some light here. Literally translated as *Daughter of the Voice*, figuratively it denotes the "small still Inner Voice."

My belief now is that the voice alluded to here is that of our own dear Heart.

In Qabalhistic Tradition it is held that all true teachings originate in/on what they refer to as the "Inner Planes," the access to which is gained in the Trance or Dream state. These Inner Planes are generally synonymous with the Akashik Record of Eastern Traditions and the Dream Times of many different cultures (Aboriginal, Malay, Amerindian et al.). On the one hand they are Hieroglyphically/Holographically rich "places" (i.e., states, levels, realities of mind, etc.) which can be *visited*.

On the other hand, they are also repositories for the sum total of possibilities of life-in-action.

Metaphorically they are quite obviously holographic "libraries" of all past, present and future her- and his- stories.

There are many Trance practices aimed at attuning one's self to the presence of this Inner Voice, whereby the neural activity of the brain is quieted, thus enabling our connection to the informations emanating/ resonating from/in/out of our heart and cells and/or the quantum seas.⁸

And, as we shall see, most if not all of these practices are aided and abetted by Sound/Music.

Metaphorically then, the Quarterly Nature of our consciousness (comprised of these cellular, cerebral, heart and quantum elements/energies) can be considered as a radio, that through intentional practice can, ultimately, receive such information/s—transmission/s both inside *and*, eventually—which is the goal—*outside* of the Trance state.

Metaphonics

Breaking this word down:

8. Due to space constraints I'm unable to go into depth regarding the molecular side of this whole process, but for those so interested see:

a) *Molecules of Emotion: The Science Between.*
b) *Mind-Body Medicine*, Candace Pert.
Everything You Need to Know to Feel Go(o)d, C. Pert and N. Marriot.

And regarding the Heart in this process, for those so interested see:

a) *The Living Energy Universe*, Dr. Gary Schwartz and Dr. Linda Russek.
b) *The Heart's Code*, Dr. Paul Pearsall.
c) *The Human Heart*, Rudolf Steiner.
d) <http://www.heartmath.org/research/research-our-heart-brain.html>
e) <http://www.heartmath.org/research/science-of-the-heart.html>

Meta- is a Greek and Latin preposition originally signifying the relations: "in the midst of," "among," "between," "after" and "according to."

Its first definition in Webster's *New Twentieth Century Dictionary* is: "*changed in position or form*," "*altered*" and "*transposed*."

Which leaves us with: *Phon*—which is from the Greek *phone*: "*sound*" or "*voice*."

Metaphonics then, is the term I am coining for what is now generally termed Sacred Musics. That is, music/sound that is most concerned with transition/transportation. Or whose intent is to *alter* consciousness or to *transpose* between states of consciousness and/or levels of reality/ies. This would be in contradistinction to secular musics that seek but to distract or entertain.

So from the Shaman's rattling drum to the Mormon Tabernacle Choir, virtually all societies have favored sound as the medium to establish the *Setting* for their most sacred activities.

While sound is hardly the only stimulus used for this, due to its pervasiveness and potential for subtle variation it has always been the ideal tool to provide the markers for the changing moments of ritual action.

Consider the fact that many such rites are conducted at night or in a dim light which also serves to enhance the sensitivity of the ear. Consider too that a ritual lead by a deaf person would be as rare as the proverbial chicken's tooth, while rituals lead by a blind person are very common indeed.

Perhaps the primary power of sound, and this is especially true in regard to Metaphonics, is in its relationship to Time. More specifically, this relationship is expressed by sound's ability to achieve various degrees of Time-Dilation; i.e., relative/subjective experiences of Duration.

As Albert Einstein was related to have said, "When you sit with a nice girl for two hours you think it's only a minute. But when you sit on a hot stove for a minute you think it's two hours. That's relativity."

And it is also Time-Dilation.

This demonstrates that during experiences of Time-Dilation one is taken out of a mechanistic/linear reality and inhabits the probability rich realities of Relativity.

In respect to the Uni- vs. Multi- *ness* of our Verse, it would seem that while physically it is Uni (that is, Newtonian), when considered psychically/spiritually it is Multi (that is, Relativistic/Holographic).

Another way of saying this is: you can only build a machine by using Newtonian Physics. However, you can only consider the cosmos or the relationships of matter using Quantum/Relativistic Physics, and perhaps only then from within the Holographic Metaphor.

So it is probably safe to say that the vast majority of peoples today think of their bodies and the objects around them and the space in which they both exist as three-dimensional.

An obviously more recent development in Western Science is the concept of a *fourth* dimension, although this concept was introduced in 1908 by H. Minkowski.

In considering the ramifications of Einstein's Special Theory of Relativity he pointed out that it was now necessary to include a fourth dimension, that of Time, to the basis of our three dimensional world. Minkowski, not Einstein, referred to this "new" WorldView as the "four-dimensional space-time continuum."

Simply put: if the three spatial dimensions are extensions in Space then the fourth dimension of any object is its *duration*, or extension, in Time. (Note that it seems the current contender in mainstream Science for this 4th position is gravity).

In an article by S.C. McLaughlin⁹, entitled *The Relation Between Physical Dimensions and Higher Consciousness*, he

states as its purpose, "...to present the elementary principles of a system of ideas in which the transcendent or spiritual element in human experience is described in terms of the dimensional structure of the physical universe."

McLaughlin has gotten *very* consequential with the ramifications of this WorldView in the consideration of states/levels of consciousness which are directly related to my concept of the Metaphon.

In his article he posits that a *purely* three-dimensional form, having no fourth dimension (i.e., duration) could not enter our experience. Conversely, a purely fourth-dimensional sensory observation is equally outside the range of human experience because it would entail a sensory awareness of the infinitely eternal sequence of events attached to the "life" of each-and-every "thing" encountered.

For McLaughlin then, human sense-impressions (i.e., consciousness) lie somewhere *between* those two dimensions. The reason I mention this is that within his paradigm, which he refers to by the term "dimensional

9. *The Relation Between Physical Dimensions and Higher Consciousness* in: *Journal of Altered States of Consciousness* v.5 (1).

level of consciousness," changes in states are basically *Time* based.

And I would bet that everyone reading this has had some experience with Time-Dilation. That, at the very least, you have "gotten lost" when listening to music, while driving, etc.

This is what I am putting forth regarding Metaphons.

That it is, by their ability to alter one's relationship to both Space and Time, which they, in fact, both can—and do—enable one's consciousness to be altered.

The current paradigm for thinking about the dimensionality of the physical world was introduced into the West by Pythagoras¹ who coined the term *philosophos* (lover of wisdom); he was the first person to refer to himself as such.

1. Pythagoras. <http://www.anirwilliams.com/images/Pythagoras-Knapp.gif>

Pythagoras gained his place in the annals of Western Science primarily for introducing the idea of the *limit* as the correlative to the then current conception of a limitless something out of which the world was made.

According to his theory, the limitless *once* limited produces the point, *twice* limited the line, *thrice* limited the plane, and *four* times limited the solid. And he was satisfied that all things then arose from the various arrangements of these geometries.

His search for the secret of the Octave led him to associate measurements of length and weight with musical tones. His success left the West with a large chunk of their "scientific method," the conversion of quality (in his case sound) into quantity (in his case lengths and ratios).

Tradition holds that Pythagoras was inspired by hearing hammers striking a stirrup against the anvil of a Smithy. Attaching the heads of the hammers to cords of equal length and substance, he went on to develop his theory of the Octave.

Many versions of this tradition relate it only in terms of the lengths of the cords or the relative size of the weights. Also, Pythagoras' intent here was to erase the Shamanic element by leaving out the context, i.e. the Smithy.

For what would a Philosopher like Pythagoras be doing in a Smithy anyway?

However, Aristotle wrote that Pythagoras had a golden thigh-bone. At the time this was recorded Aristotle could have been doing nothing less than conclusively identifying Pythagoras as having been within the Shamanic tradition. An Archetypical Smith is actively present in many of

the traditions which have been documented regarding initiation rites in the (inner) Underworld. This Smith is generally concerned with that part of the initiation process that includes the dismembering of the novice.

This is often followed by their immersion in a cauldron, or not. Either way, when they are reconstituted as a Shaman, some bone(s) have been replaced by metals.

So Pythagoras had his epiphany in the Smithy.

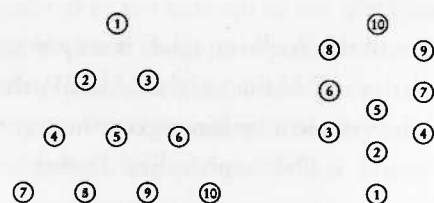
And he discovered that the basic intervals of the music scale recognized in his day (i.e., the fourth, the fifth and the octave) could be represented by the ratios (or proportions) 1:2, 3:2 and 4:3. This correspondence made it appear that *kosmos* (i.e., order and beauty) was imposed on the potentially chaotic range of sound by means of the first four integers 1, 2, 3, and 4. And he saw this as a further vindication of his four-folding of the limit.

The numbers 1 + 2 + 3 + 4 add up to 10, which provided striking confirmation, if it was not the actual ground, for the Pythagorean belief that the number ten was, as Aristotle relates; "something perfect, and containing in itself the whole nature of number."

This number they represented graphically by the figure known as the tetractys which became their sacred symbol. It also appeared in a formula by which his followers were said to swear their allegiance to his School:

"By him who handed down to us the tetractys,
source and root of everlasting nature."

The number 10 also signifies a major glyph of Qabalhistic lore known as The Tree of Life.



Tetractys Tree of Life.

For the Pythagorean Schools c.550 BCE through to the early Christian writers, numbers were held to be the principles and elements of all things

and composed the proportions of the whole world.

Allow me to take a slight detour and consider the notion of proportion:

1. Rhythms are built up out of proportions.
2. Proportion literally translates as "for one's portion."
3. One's *portion* always has a direct relation to one's *destiny*.

When sounding a proportion/rhythm, then, one is invoking a *course of events*, the intention of which varies with the particulars of the time and location of the particular ritual. These ritual properties, especially time and location, are most developed in the Indian musical system of the raga, which I will explore further.

In respect to this notion of proportion then, it is the proportionate *difference* between the relative magnitudes of the beats and the silences—between these beats—which comprise and give the power to any particular rhythm.

For example:

When X = beat and x = rest, and -(x) = a longer rest, a particular rhythm could look like this:

XxXxx-(x)-XXxxxXx-(x)-

(This "loops" as: XxXxx-(x)-XXxxxXx-(x)-XxXxx-(x)-XXxxxXx-(x)-XxXxx-(x)- which would be repeated ad infinitum in a ritual setting).

Through the intention of the drummer the particular rhythm notated here would be capable of enabling the manifestation of the energies corresponding to either the creator/creation, or the Forest, or the Lighting (i.e., the visual accompaniment to thunder).

Apropos this, ethnopsychologist John Blacking¹⁰ relates a fascinating incident:

¹⁰ *Concept of Identity and Folk Concepts of Self: A Venda Case Study in: Identity*, A. Jacobson-Widding ed.

"I remember an old, blind, Master Musician criticizing a performance on one of my tape recordings on the grounds that the drummers could not have been moving their shoulders and arms correctly."

Intense, eh? That this Master could literally *see* what he was hearing. And consider also the fact that even just the *recording* of the sound was actually conveying this information to one who knew how to access it.

You can turn your back on a sight, but you cannot turn your back

to a sound.

11. *The Birth of the Symbol in Music* in: *World of Music* v. 26 (3).

Also, this anecdote related by M. Schneider¹¹:

"...considering the great importance ancient peoples placed on hearing. I had a concrete example of this many years ago when a Duala beat a rhythm for me that coordinated sea waves, herds coming down a hill and wind blowing through underbrush."

So the Duala was varying his "intention" as he played, allowing Schneider the multiplicity of visualizations he was seeing, in his "mind's-eye", associated with the rhythmic sounds he was hearing.

This reminds me of a conversation I had with a Senegalese musician I worked quite a bit with when I was living in Amsterdam. He told me that the Master of Masters of Senegalese drummers had awoken one night during a rain storm from a dream in which he had *learned* the "rhythms of the rain."

Listen to the talking drummers who play with Senegalese singers Yousu N' Dour or Baba Maal, and you can hear this liquidity for yourself.

The Pythagorean School used music in both its healing and metaphonic capacities. In their teachings, their belief was that seven "planetary" spheres each corresponded to a different note of a cosmic musical scale. I put "planetary" in quotes because the seven included our Moon and the Sun along with the five inner planets Mercury, Venus, Mars, Jupiter and Saturn.

The particular pitch depends on four basic parameters: planetary rotation and orbital period (time), and orbital circumference and diameter (space), just as the pitch of a lyre string depends on its material, length, thickness and the tension under which it is put.

However, this "Music of the Spheres" was never a fixed system. There were as many such schemes, with differing values given to each "planet," as Philosophical Schools that dealt with it.

Attributed to Socrates in Plato's *Republic* is the statement that, for the Pythagoreans, Music and Astronomy were sister sciences. Therefore, then, these ratios found through Sound were also applied to Astronomy. The orbits of the planets and the vault of the stars were taken to correspond to these ratios. Consequentially then, these orbits should be emanating tones which would combine into a virtual symphony.

If Humanity was not in tune with these harmonies, then that must

be because their Souls were out of tune and not vibrating in unison with the emanations of the kosmos. So this is what their notion of a "Music of the Spheres" was about. And, maybe not surprisingly, it refers to a "silent" "inner" Music.

Pythagoras taught that this information was revealed to the Greeks through Orpheus, and for centuries revealed to initiates of his Mysteries. Just before these Mysteries began to degenerate, Pythagoras instituted their teachings into his School.

For over some 1,000 years this notion of sonic tones being an inherent property of astronomical entities and events has been considered a naïve fantasy of obviously "primitive" peoples.

However, in the fall of 2003 the Chandra X-ray Observatory (in an elliptical orbit ranging from 6,200 to 86,800 miles above the Earth's radiation belts) produced images that allowed NASA scientists to confirm the presence of sound waves in the Perseus Galaxy, some 250

II. Perseus galaxy. http://chandra.harvard.edu/photo/2003/perseus/perseus_xray.jpg

million light years from the Milky Way¹². The sound's pressure zones, which have remained roughly constant for approximately 2.5 billion years, pulse at a frequency of [approximately] 1 cycle per 300 million million seconds. This translates as a tone fifty-seven octaves below middle C. The [approximate] pitch of the tone would be B^b, or ten notes above middle C.

In the April 2006 issue of *The Astrophysical Journal*, a team led by Professor Adam Burrows reported that immediately preceding the explosion of a supernova, which then becomes a black hole, the supernova "sings." Until this time scientists had assumed that the explosion was due to the star's outer shell bouncing back off the core. But Burrows' team has developed computer models that simulate the events from the collapse of the core of a dying star through to the supernova explosion. Their simulations showed that about 500 milliseconds after the core collapses, the inner core begins to vibrate wildly. And after 600–800 milliseconds, this oscillation becomes so vigorous that it generates sound. In their simulations, it was the pressure of the sound that actually caused the star to explode. The researchers said that the typical sound frequencies in the inner core range from about 200 to 400 Hz.¹²

The most prominent of the Milky Way's satellite galaxies are a pair called the Magellanic

12. And if you're counting, or listening, appx. 200Hz is F below Middle C and 400 Hz lies above Middle C, between G at appx. 392 Hz and A at appx. 440 Hz.

III. Magellanic clouds. <http://www.csiro.au/news/mediare/mr1998/images/lmc.gif>

Clouds^{III}. During their rotation cycle around the galaxy, they create a warp in its galactic disk which has puzzled astronomers since its discovery in 1957. The warp, seen most clearly in the thin disk of hydrogen gas permeating the galaxy, extends across the entire 200,000-light year diameter of our Milky Way^{IV}.

In January 2006 UC Berkeley astronomers Leo Blitz, Carl Heiles and Evan Levine published an image^V which mathematically describes the warp as a combination of three different types of vibration: a flapping of the disk's edge up and down, a sinusoidal vibration like that seen on a drum-head, and a saddle-shaped oscillation.

These three "notes" are about 3 million octaves below (maybe no surprise) middle C.

Blitz, director of UC Berkeley's Radio Astronomy Laboratory, has said that his personal belief is that the three "notes" are "the Father, Son and Holy Ghost."

And it's also worth noting that now that Astrophysics is listening, and not just looking, they are continuing to uncover other examples of this Music of the Spheres.

So much for the macro-cosm; let's look at the microcosm for a bit:

In his *Life of Pythagoras*, Iamblichus repeats the statement of Plato that the study of Sonic Science "awakens that organ in the brain which the ancients described as the 'eye of wisdom.'" This eye of wisdom is now known to physiology as the pineal gland. And it is worth noting that this association with the eye is not purely metaphorical. In addition to being considered part of the endocrine (hormonal) system, it is also often included as part of the visual sensory system.

An ancient Taoist Alchemical text, translated by Charles Luk¹³, places the position of the original cavity of the spirit in the center of the brain, behind the spot between the eyes.

And the Immortal Taoist Lao Tzu was referring to the pineal when he spoke of "the gateway to heaven and earth." In relation to this he urged people to "concentrate on the center in order to realize the oneness of all things." ^{V, VI}

In adults the pineal gland is the site of cal-

IV. Galactic warp. http://berkeley.edu/news/media/releases/2006/01/09_warp.shtml

V. Pineal 1. <http://www.valdezlink.com/pages/media/pineal.gif>

13. Taoist Yoga: Alchemy and Immortality.

VI. Pineal 2. <http://www.wwnorton.com/college/history/ralph/resource/24descar.htm>

cified deposits of what is often called "brain sand." This is actually hydroxyapatite ($\text{Ca}_5(\text{PO}_4)_3\text{OH}$), or what makes up 70% of the mineral composition of the cancellous and cortical bone structure.

Very interestingly, hydroxyapatite is piezoelectric, which means that it responds to both electromagnetism and mechanical vibration. That is, if pressure is applied to it, it can produce an electrical charge—and if it receives an electromagnetic signal it can produce a mechanical vibration. This means that the pineal is sensitive to both the pressure waves exerted by the beating heart and to different levels of electromagnetic light, received via the optic nerve.

And if that wasn't enough, being a gland, its first "language" of course is in the molecular fluidic/chemical mode of ligand releasing.

The main job of the pineal gland is to transduce these mechanical and electromagnetic impulses into hormonal information, and vice versa, influencing daily, seasonal and annual rhythms such as sleep, temperature, reproduction and aging. Thus, the eye of wisdom.

And it's only the size of a pea.

This well sets the stage for a bit more regarding the pineal gland:

"Harmonic Signature" researcher Nick Anthony Fiorenza¹⁴ shares my opinion that, in his words, "The Earth is a spherical receiver of cosmic energy (evolutionary intelligence) which directs our biological process and spiritual evolutionary unfoldment. The Earth re-radiates the cosmic information it receives from its core outward in complex long-wave signals."

Fiorenza feels that we receive these "planetary musics" via the Schumann Resonance Field^{VII, VIII} through an antenna system composed of our spinal column and cranium. While this notion of the spine as an antenna could certainly be one part of the picture, it is worth reiterating that as our entire body is inundated with these signals, the heart also receives and redirects them throughout our body as well.

The field was first observed by Nikola Tesla, but it was not until 1952 that W.O. Schumann¹⁵ first calculated them at 7.83 Hz.

And that is way way low. In fact most humans don't really hear below 20 Hz. Sounds

14. And if this interests you, you can find Fiorenza's in-depth treatment of *Harmonic Signatures and Schumann Resonance*, etc. at: www.lunarplanner.com/Harmonics/planetary-harmonics.html

VII. Schumann. http://commons.wikimedia.org/wiki/File:Schumann_resonance_01.png

VIII. Schumann. http://geomag.usgs.gov/iagaxiii/posters/mn_jagazoo8.pdf

15. For information on W.O. Schumann and Schumann Resonance see: http://www.hese-project.org/hese-uk/en/papers/schlegel_schumann.pdf

down around that range, and below, are usually felt only in a physical sense, if their volumes are high enough.

In 1978 Dr. Robert Beck's¹⁶ work on Extremely Low Frequency signals, Earth resonances and their effect on brain wave frequencies was presented at a U.S. Psychotronic conference, and when published served to "popularize" this information. Beck reported that

7.83 Hz is also a brainwave frequency often detected when psychics are in their intuiting mode.

Shades of Plutarch!!! (Who wrote c. 120 CE: "The Earth...sends up to human beings ... Trance.")

When our brainwave and body rhythms are measured electromagnetically, they are found to occur prominently within this ELF spectrum.

When the brain is given a stimulus, through the ears, eyes or other senses, it emits an electrical charge in response, called a Cortical Evoked Response^{IX}. These electrical responses travel throughout the brain to become what you hear, see, smell, touch, taste.

IX. Cortical response. <https://www.transparentcorp.com/products/np/images/evoked.jpg>

When the brain is presented with a rhythmic stimulus, such as a drum beat, the rhythm is reproduced in the brain in the form of these electrical impulses. If the rhythm remains consistent enough, the brain responds by synchronizing its own electric cycles (known as our "brainwaves") to the same rhythm. This is commonly called the Frequency Following Response [or FFR]^X, first pointed out in the 1940s by the English neurophysiologist W.G. Walter.

16. R. BECK. <http://www.scribd.com/doc/9943389/Beck-R1980ELF-Magnetic-Fields-and-EEG-Entrainment-A-Psychotronic-Warfare-Possibility-20-p>

<http://www.scribd.com/doc/9943404/Beck-R1985Subliminal-Warfare-ELF-Extremely-Low-Frequency-Magnetic-Fields-9-p>

X. Entrainment. http://www.mind-machines.de/images/np2_brainwave_entrainment.gif

In the West the aforementioned Vedic triune aspects of Creation are symbolically personified by their Triple Goddess in her three aspects of Crone, Mother and Virgin. She is also personified in Myth as Hecate, Demeter and Persephone, as the planets Saturn, Moon and Venus, and as the numbers 3, 9 and 7.

So let's start delving into this Metaphonic process.

The Brahmanas are considered to be among the oldest prose writings in any Indo-European language. Composed c. 600 BCE, they contain explanations of, and commentaries on, the mantras, and describe the importance of prayers, sacrifices, and their correct observance.

Perhaps the oldest Brahmana, the *Aitareya Brahmana*, states explicitly that the seat of the *Brahman* (the primordial sound) is located in the ear.

This *Brahman* is the first *sacrifice*, and is interpreted as the first Creating act, occurring in the element *Akasha* (Air). This act, though inaudible, reveals itself after the birth of the element Air. Thus *Brahman*, the transcendent inaudible rhythm, appears through the Air and it becomes audible in order to create the primordial world.

The first sound-sacrifice to *unfold* (the technical term used in the Brahmanic texts) was a chant of praise which brought an acoustical level/reality to birth in the midst of the previously pervading "darkness." It was through rhythms, enfolded like the ripples in a pond, which unfolded the developing complexity of this, at first, monotonally acoustical level/reality.

Metaphorically speaking, the different rhythms in these Brahmanic acoustical levels/realities can be thought of as different pitches.

And these emanations are coincident with the number of notes comprising the Vedic musical scales. (Such as the seven notes: "Do Re Mi Fa So La Ti" of the Western scale).

When interacting, these pitches enfolded harmonies which achieved the (again metaphoric) capacity of a choir, which, (again metaphorically) called forth a dawn, for some of these sound-rhythms had turned into Light.

In the Vedic tradition all of the second Brahmanic phase, which is superimposed on the first, is the work of the god Indra, the supreme ruler of the gods. There are more hymns (approximately 250) in the Rig Veda dedicated to him than to any other god or goddess. Indra was the leader of the Devas, the god of war, a thunderbolt wielding god of thunder and storms, the greatest of all warriors, the strongest of all beings. (Remember these particular associations because they will return when we come to consider Shiva and Dionysus).

When this Lightening-Sounding *Dawn* "broke," superimposed on the two preceding, and never-ending, level/realities, and as these rhythms (or frequencies) enfolded and unfolded, they somehow/somewhy chose to be perceived as concrete, compact matter. From this choice resulted the liberation of the never-ending process of our physical universe.

Thus, as explained by the Vedic tradition, this resulted in three distinct aspects which can be seen to correspond to Sleep, Dream and

Wakefulness. Note that in some traditions these three aspects are sometimes also further subdivided into five, seven or nine minor emanations.

More often than not these aspects/emanations are now represented in their Myths by a Tree of the World¹⁷, sacrificial stake, column, stairway or some other segmented something generally planted in "the midst of the waters." These branches/segments unfold in/as the sounds of the particular cultures" harmonic series. That is, in their representations, the amount of branches/segments would equal the amount of notes in their musical scale.

Additionally, these aspects are often related as occupying the center of the Multiverse and usually act as a mediator between God/desses or Inner Words and Humanity.

During the archetypal times when Heaven and Earth, or the primordial world and our world, were still either united or differentiated, there was no need for a mediator. This is where Metaphonics relates to this complex, because when these two (or more) regions differentiated, their reintegration seems to have been effected primarily through Sound. That is, through sacrificial, supplicational, etc. chants, lamentations, and prayer.

In the Vedic tradition their notion of an "Unfolding" of Creation is symbolized by the dance of Shiva. For Shiva is a dancer, in fact, as Nataraja-Shiva he is the Lord of the Dance^{XI}.

He executes the Cosmic Dances—the rhythms of his pounding feet throughout the Multiverse, which perpetuate the eternal Enfolding and Unfolding. As such, his Dances resonate both in and out of existence.

The dance of Shiva also represents the five aspects of his name Pancha-anana (5 Faced)^{XII}: *Shrishti* (creation, evolution), *Sthiti* (preservation, support), *Samhara* (destruction, transformation), *Tirobhava* (illusion, madness), and *Anugraha*—(liberation, grace). Shiva's Being-in-Manifestation is meditated on as a River of 5 streams from 5 sources, because 5 is the sacred number of Shiva, although the total number of names or epithets attributed to him is 1,008. His body is said to be constituted of 5 mantras, composed of 5 syllables, which evoke his essence in the practitioner.

Under the epithet Yogesvara, Shiva is the Teacher who, in silence,

17. For a fairly definitive article and link source for culture-by-culture World Tree info see: <http://ascension2000.com/ConvergenceIII/c315.htm>

XI. Shiva Nataraja. <http://www.lilaarts.com/en/images/BA085a.jpg>

XII. Shiva Panacha. <http://www.kheper.net/topics/Tantra/bg44.jpg>

expounds to the Sages the Laws of Music, Yoga, Gnosis, and all the other Arts and Sciences. Also note that this "silent-expounding" refers to transmissions by/through the Inner Voice/Planes.

The God who "transformed" in the scriptures over time into Shiva was Rudra, the Wild God, also known as The Howler. As the Red God, Rudra was intimately associated with Blood and Fire and the Powers of Life and Death. This identity with Rudra also connects Shiva with the darkness of Night and the Underworld, symbolized by Black Shiva. Through this attribution of the Wild God, we can see the correspondence of Shiva to

Dionysus¹⁸, the Wild God of the West who was also called *Bacchus*—"the mad one," *Lusios*—"the liberator" and *Bromius*—"the roaring one."^{XIII}

Shiva traveled to Greece where he became known as Dionysis^{XIV, XV}, and also made it to Africa where his attributes were given the name Ogun^{XVI, XVII}, the Orisa of Metals and Metal Working (the Smith), Minerals, Tools, War, Dogs, and Wild Beasts. Ogun is also the Orisa of Sacrifice, being the owner of steel and the blade that is used in making sacrifice to all other Orishas.

In searching for images of Rudra I was coming up empty. Then, lo and behold, I came back to a book¹⁹ that was given to me by the *Way of Action* Sufi group in Holland over twenty years ago when I used to drum accompaniments to their healing massage rituals. The book was the definitive study on the Rudra-Veena^{XVIII}, an instrument that has been mentioned in Indian literature for over 1,800 years. In fact, the entire system of the raga was developed by and through the Veena. (Note that the sitar is a much, much later instrument and quite "pop" in comparison). Some traditions hold that the Veena was "invented" by Shiva in tribute to his consort Parvati^{XIX} and that the sound of the Veena recreates her rhythmic breathing.

While the lingum is the primal and primary image of Shiva, the Sri

18. *Shiva and Dionysus*, Alain Daniélou (K.F. Hurry trans.)

XIII. Dionysus. <http://www.articleserver.info/MYTH28/Gods/Dionysus/original/dionysus%20or-f%20leopard.jpg>

XIV. Shiva lingum in Nepal. http://lh3.ggpht.com/_1-oYBWgNgFM/RyLyqVZr0kI/AAAAAAAAAGNE/wg3wgKq5cU/IMG_2315.JPG

XV. Dionysus at Delos. http://www.vroma.org/images/mcmanus_images/dionysus_phallus.jpg

XVI. Ogun. <http://i91.photobucket.com/albums/k311/dulakaba/ogun.jpg>

XVII. Ogun. <http://members.tripod.com/~Yemoja/Logum.jpg>

19. *THE WAY MUSIC/How to conjure with sounds*, subtitled: *Rudra Veena: the Theory and Technique of Tantric Music*, Thomas Marcotty.

XVIII. Rudra Veena. http://www.indianetzone.com/photos_gallery/18/rudraveena_13405.jpg

XIX. Shiva Parvati. <http://indiajournal2004.com/images/pics/5-Tiru-042.jpg>

Yantra^{XX} is also His, and from the permutations of its structure are derived the actual proportional series that govern the Vedic musical, i.e., the notes of all the ragas and raginis. Rudra-Shiva then, is the totality of manifestation whose 8-Fold domain consists of the Vedic Five Elements of Earth, Water, Fire, Air and Space together with the two measurers of Time: the Sun and the Moon.

The process reaches completion with the addition of the Sacrificer or Initiate (the Brahman). And in the shape of the numeral 8, very coincidentally, you also have the image of Shiva's hourglass drum, the

damaru.^{XXIa-e} When the vertical numeral 8 flips to its horizontal mode as the symbol of Infinity, it is also mirroring an object known as the Labrys^{XXII}.

This forges
the link between
Shiva and that most
ancient manifestation of the divine, namely, the
Goddess.

Labrys cultures represent the roots of the Indo-European people as its image is found as far back as Paleolithic cave paintings (10,000–40,000 years ago). Minoan in origin, the

word "Labrys" is from the same root as the later Latin labus: "lips."

As a glyph for the female labia at the entrance of the womb and the butterfly, it is a symbol of both birth and rebirth. The two heads also symbolized the waxing and waning Moons. It appears on matriarchal murals and mosaics, pottery, seals, and amulets throughout the Aegean region and into Africa as well.

The matriarchal Cretans made the Labrys in all sizes, from delicate jewelry to nine foot tall specimens which stood at the ends of altars. Its image was also used to mark the entrance to their Goddess sanctuaries and Labyrinths, and it is worth remembering in this context that our Inner Ear is composed of not just one, but two Labyrinthine structures.

Before we dip into some more Goddess lore, let's have one last nod to Pythagoras, or more specifically to his teacher Thales. Bertrand Russell wrote that, "Philosophy begins with Thales." Thales is also regarded as the first scientist, in the Western sense of that word.

XX. Sri Yantra. <http://alumni.cse.ucsc.edu/~mikel/sriyantra/> Note: If you look at the Sri Yantra, squint your eyes and you can see a labrys/BDamaru inside the green circle.

XXI. Here are a few more. damaru/ Figure 8's floating about in the cosmos.

XXIa X-ray photo of DNA. <http://scienceblogs.com/bioephemera/dna.jpg>

XXIb. Hourglass nebula. http://hubblesite.org/gallery/album/nebula_collection/pr1996007a/

XXIc. Crab nebula. http://hubblesite.org/gallery/album/nebula_collection/pr1999032c/

XXId. The red rectangle. http://hubblesite.org/gallery/album/nebula_collection/pr2004011a/

XXIe. Demise of a star. http://hubblesite.org/gallery/album/nebula_collection/pr2007009a/

XXII. Minoan labrys. <http://www.hartzler.org/cc307/minoan/images/b4.jpg>

So, I would like to point out that Thales taught that water was the basic element of all Life. Not surprisingly, we now know that approximately 60% of the human body, including 70% of our brain, 83% of our blood and 90% of our lungs, is water. Water also covers approximately 60% of the Earth and is also the only substance that naturally appears in all three states; liquid, solid (ice), and gas (steam).²⁰

Thales was a Greek-speaking Sage from what is now the Aegean coast of Turkey, which was then known as Anatolia. So perhaps it is no coincidence then that Anatolia was home to the most exceptional and ancient Metaphonic Goddess, Kybelle, the Great Mother of Çatylhöyük, whose names then were also Kubaba and Zemelo.^{XXIIIa-b}

Kybelle was known in the Greek world as early as 700 BCE, and references to her appear in the Homeric Hymns. She is considered the inventor of the Drum, as Pan is of the Pipes and Hermes the Lyre. According to traditions the earliest entity-attendants of the Grecian Kybelle were the Korybantes or Galloi, (sometimes identified with the Dactyls), who worshiped her with drumming and dancing, and the wild ecstasy of their cult has been compared to the Maenads, the female followers of Dionysus.^{XXIV}

The primary iconic-object of Kybelle was the meteorite^{XXV}, so no coincidence then that the sacred object in the Kaaba at Mecca^{XXVI} is also a meteorite called Al-hajar Al-aswad (the Holy Black Stone)^{XXVII}. This particular image of the mysteries of Kybelle^{XXVIII} echoes this fragment from an evocation from the Elusian mysteries:

"I have eaten from a drum,
I have drunk from a cymbal,
I am an initiate of Attis."

Around 200 BCE the Rites of Kybelle was brought to Rome and given a temple on the Palatine, which was an exceptional honor for a foreign Goddess. The worship of Kybelle was also one of the most obstinate antagonists of Christianity, disappearing only as late as approximately 400 CE.

20. *Water from Heaven*, Robert Kandel subtitled: *The Story of Water from the Big Bang to the Rise of Civilization and Beyond*.

XXIIIa. Kybelle c. 6500 BCE. <http://mythology.ourgardenpath.com/wp-content/uploads/2008/04/goddess1.jpg>

XXIIIb. Greek Cybele with drum. http://www.somaluna.com/images/products/STA009/portrait_sc.jpg

XXIV. Maenads and satyrs. <http://www.mlahanas.de/Greeks/Dance/Maenads2.jpg>

XXV. Goddess meteorite. <http://imca.repetti.net/images/BlackStone.jpg>

XXVI. Mecca. <http://www.arabia.it/english/islam/mecca2.jpg>

XXVII. Kaaba meteorite. <http://www.al-islam.org/gallery/photos/hajraswd.gif>

XXVIII. Elusian mysteries. <http://www.aztriad.com/angelhrm.html>

Kybelle's Rites were celebrated to the Metaphonic accompaniment of cymbals, drums, castanets and tambourines^{XXIX}. And the celebrants chanted and danced themselves into a Trance state.^{21, XXX}

The circle/circling dance is perhaps the Trance Dance par-excellence. One of the earliest representations of it, from the British Library, is a Cyprian limestone figure of "Phoenician" dancers from approximately 1000 BCE.^{XXXI}

The Circle Dance would also be the astral choreography alluded to in this fragment from a prayer of the Mevlevi order (the whirling dervishes) established on the teachings of the mystic poet Mevlana Jalaladdeen Rumi in the late 13th century:

"by revolving as rapidly as lightning we become intoxicated...let us imitate those luminous bodies...let us revolve like the sun and the moon... let us turn like the planets...let us turn like the stars in the heavens...let us turn like the circle which has neither a beginning nor an end...."XXXII

The circle alluded to here is perhaps also synonymous with the "circle of completion" atop the sacred *ong* symbol of Bali, where the indigenous word for "trance" translates as, "to become."

Regarding the importance of the sound quality of the cymbal in Kybelle worship, the work of Marija Gimbutas²² is particularly germane. Her findings from Ancient European sites lead her to state that, "the epiphany of the Goddess is inseparable from the noise of howling and clashing." Of the initiates of the Goddess, Gimbutas wrote, "they clash the cymbals of the Great Mother."

And here are three more examples of this complex from Greek texts:

"Wearing her turreted headdress, the great goddess Kybelle will clash her hoarse cymbals to accompany the Idean dance." —Propertius 3.17

"Brass-sounding, honored, Kronos' blessed queen, drum-beating, fury-loving, of a splendid mien." —Orphic Hymn 14 to Rhea

"I prithee, clear-voiced Mousa, daughter of mighty Zeus, sing of the Meter

XXIX. Maenads. <http://www.fondazionelevi.org/ma/index/number2/restani/don4a.jpg>

XXX. Maenads dance. http://www.gutenberg.org/files/17289/17289-h/images/o12_1.jpg

21. Maenads trance. <http://www.hermeticfellowship.org/Dionysion/Maenads.html>

XXXI. Phoenician dancers. http://www.gutenberg.org/files/17289/17289-h/images/005_1.jpg

XXXII. Sufi dancer. http://4.bp.blogspot.com/_pMqNaWEUTt8/Sc-9nKYCxBI/AAAAAAAAAB9A/UYVbyNebtG4/s400/Dervish+dance.jpg

22. *The Goddesses and Gods of Old Europe*, M. Gimbutas.

(Mother) of all gods and men. She is well-pleased with the sound of rattles and of timbrels, with the voice of flutes and the outcry of wolves and bright-eyed lions, with echoing hills and wooded coombes. And so hail to you in my song and to all goddesses as well!" —Homeric Hymn XIV to the Mother of the Gods

Note that this list of sounds mirrors the "Six Families of Noise" that Futurist musician Luis Russolo listed in his *Art of Noises* (1913), which Edgar Varese cited as an influence on his monumental work *Ionisation* (1933). These families also basically describe the pallet employed by the seminal Grindcore band Carcass (c. 1988–1996).

Before we leave the Goddess let's head South and have a look at Hathor, Egypt's Metaphonic Goddess, who was the primary deity associated with music, the drum and dance. Hathor was held to be the incarnation of dance, whose hieroglyph was either a cow bearing the solar disk between its horns, or a woman crowned with the solar disk and horns.^{XXXIII}

Inspiration was also ruled by Hathor, and her followers would come to her temples to have their dreams explained or to beseech her for her aid in procreation, in much the same way that the Greeks invoked Hekate.

The Biblical story of the forging and worshipping of the Golden Calf at Mount Sinai is based on aspects of her Cult as practiced in the southern Sinai by Western Asiatic miners who were there working for the Egyptians.

In the Old Kingdom era a hymn in her honor reads:

"We play the drum for your spirit, We dance for your majesty,
We uplift you to the skies."

Another text from the Dendara crypts^{XXXIV} implies orgiastic/Trance rituals/worship when Hathor is described as: "leader of the choral dance, the bestower of the intoxication that knows no end." I don't know about you, but I'm down for that.

To get back on track then: In its transformative power, Metaphonics resembles all that's best in the act of Worship. That is, when the energies of Sound and an expectancy of Transition are focused toward a common meaning and goal, then the potentials of Metaphonics and the Sacred (i.e. those all-possible holographic levels of reality) can achieve a synergy. This

XXXIII. Hathor. <http://www.kenseamedia.com/november/images/hathor.jpg>

XXXIV. Hathor temple. <http://www.brynmawr.edu/Acads/Cities/wld/00085/00085e.jpg>

synergy enables a synthesis that creates an intensification of experience that is greater than either Sound or "simple" expectancy might achieve on its own.

That is, Metaphonics can enhance, intensify and transform almost any experience into one which resonates with significance and dimensionality. It is at this point, and in this synthesis, that Metaphonics touches on the Mythic. And there are, for example, not only Myths of Music but also Musics of Myth.

For in most cultures/religions throughout history, Myths have been embodied not only in/as written literature but also in/as musical performance. That is, "religious texts" were sung long before they were ever, if ever, committed to writing.

For example, the "drum lineage" songs of the pre-Buddhist Tibetan Bon Path evoke for the practitioner a link with the beginning of Time and center of the world. In many cultures/religions music is held to be not humanly, but rather, divinely patterned and is considered less an expressive "art" than a technology to produce practical results. For, in its performance, Music provides one of the most effective bridges between Myth and Ritual, that is: between belief and action.

In the *nada-Brahman* or God-as-Sound of Hinduism, Music is considered to originate as a primordial divine power, exemplified as previously discussed, in the Drumming/Cosmic Dance of Shiva. This same dynamic can also be recognized as well in the widespread stories of god/desses who *sing* their creations and creatures into existence.

And the Goddess is here included due to the many South Amerindian and Melanesian legends of the male's theft of sacred flutes from the women who originally possessed them.

In Tibetan Buddhist tradition "Music" is a combination of the *actually present music* produced by the sound-making voices and instruments and the *internally produced music* perceived and imagined by each and every listener. Differing results/experiences are considered to be due to each individual's evolution, which translates as expertise in their practice and in the power of their imagination.

Mark Booth²³ suggests that Music, and

23. *The Experience of Songs*, M. Booth.

Song in particular, evokes primordial memories of the rhythms and vibrations experienced in the mother's womb, effects produced, in fact, by the mother's heart. For Booth though, Song offers "the experience of unity with what seems to lie apart

from ourselves." And he proposes that this experience is the result of the unity that occurs when Song affects the marriage of Music and Language. This same unity also occurs with the Drum and Drumming, but in this case the tonal quality of the Drum represents Music and the rhythm pattern, Language.

Further, Metaphonic rhythms also form a link between Words, Music and Dance. Even if it's as a Song, the lyrics generally Rhyme. That is, the words conform to a Rhythmic scheme. Rhythms provide the cues of accent and patterning with which one coordinates the movements of their body in—and as—Dance.

Traditions worldwide associate particular rhythms and cycles with specific ritual activities and/or to specific god/desses (i.e., states of consciousness/levels of reality).

These rhythms range in style and, through a variety of tempos from the very steady, almost monotonous beating used by both Amerindians and Shamanic Cultures worldwide, to the very fast, syncopated rhythms (featuring sounds that fall between and overlap the beats) associated with African and Afro-Ameri-Carib possession rites, to the asymmetrical and *extremely* slow rhythms used in the Far East, with Tibetan Buddhist ritual dances and especially their Oracular Ritual being prime examples of these types of rhythms, with beat groupings extending into the hundreds to musically embody cosmological and other lineage related religious concepts.

In Arabian classical musics there are numerous examples of long cycles still in use. The longest example known is called the "conquering rhythm" (Darb faTh), invented during the Ottoman period, measuring 176/4. To give a little demo of what this means, it just took me one minute to count to 176 at a reasonable tempo. In the pop song universe one verse of a song is typically eight measures long, so then one pop verse at 176/4 would take eight minutes.

Another reason why Percussive patterns are an excellent vehicle for an *Other* aspect to manifest in the reality of our concrete world is because they are devoid of any concrete form or image that might be a distracting obstacle to the manifestation of any such *Other* aspects.

Various traditions, in referring to the genesis of the World, relate that the externalization of the creative impulse/rhythm occurs through "the Word of God."

Schneider delineates this process quite succinctly, and I'll draw here

on an analogy he drew which is excellent, albeit from a Christological point of view. In this analogy, the first step of this process would be the unfolding of an inaudible rhythm. When this rhythm appears in a different reality (i.e., ours) it becomes sound by pronouncing itself. Thus his example, whereby the Christ-energy existed as a rhythm in the thought of the Father, but became the audible word (i.e., the Logos) when pronounced (i.e., brought into manifestation) by him.

Returning for a last time to Vedic Meta-physics, in their system sound is divided into four specific qualities:

Spho a: The creative principle of the Multiverse and the World of Pure Being.

The eternal element of pure unmanifested sound that is beyond perception.

N da: The unstruck and unstruckable sound. In the same way that you can't see colors in the dark, though they're there to be seen, without proper training you can't hear Nada, though it's there to be heard.

An hata: "Unstruck," refers to sound potentially existing but not expressed. And remember this is the name for the Heart Chakra. It is the sound of thought on the verge of manifestation. Not to be confused with pure unmanifested sound.

Ahata: "Struck," refers to sound produced by the physical action of one thing upon another. It includes the whole range of physical sound, whether audible to human ears or not (such as the sounds of insects etc.)

Ahata is also divisible into four categories or stages:

Spanda: the pulsing or quivering that just precedes manifestation

Paryanti: the point from which the movement of sound commences

Pashyanti: the reverberation before impact (i.e., hearing) is made

Vaikhari: the sound that is actually heard.

The common denominator between the Metaphonic Drum Drumming and its Voice Chanting has been most cogently dealt with by

anthropologist Donald Tuzin.²⁴ His bottom line is that, in both cases, it is not so much what *can* be heard as what *can not*.

His "not heard" results from the sub-auditory sound pressures which can be propagated by both drums and the human voice. This is especially true when the voice is augmented and distorted by the use of a resonant chamber developed to this end by various cultures. These range from the basilica of a church to the special barrel or tube-like resonating chambers for singing into, which occur in many cultures. The didgeridoo is a good example of this sort of device, although the correct Yolngu (Aboriginal) term is Yidaki.

Tuzin went on to develop a hypothesis that this *not-heard* relies on infra-sound (sounds vibrating below the threshold of hearing).

Other than the more commonly studied physical effects of infra-sound, it's known that the psychic/psychological effects of low levels of infra-sound include feelings of the super- and preter-natural, déjà vu and jamais vu. But, most especially, what Tuzin refers to as *awe*, he translates as feelings which are by-and-large indicative of what he terms "religious experience."

The bull-roarer has been in continuous use since as far back as the Stone Age. It is found within the archaic civilizations of all five continents, and is probably the most widespread among all sacred instruments.

Tuzin considers his most bold suggestion in the article to be that, "the special, pre-articulate feelings which validate religious belief by referring it to subjective experience are not primarily (if at all) creations of cultural conditioning, but natural emanations or proclivities of the brain itself."

Again I will point out that not only the brain, but our heart and every cell in our body also contributes to these "natural emanations."

Auditory neurophysiologist, Dr. Alfred Tomatis²⁵ has pointed out that the effect within the cochlea of the low frequency percussive sound of drums (especially the single-headed "Shaman's drum") causes an exaggerated fluxion of the endolymphatic liquids in the cochlea (the inner ear) that can induce a loss of awareness of the body. This condition is fairly crucial for many forms of Trance.

Neurophysiological research obviously considers the specifically neural basis of emotions to be triggered in the set of sub cortical structures

24. *Miraculous Voices in: Current Anthropology* v. 25 (5) D. Tuzin.

25. *The Conscious Ear*, A. A. Tomatis.

which comprise the Limbic System, a complex of forms and functions in the Temporal Lobe of the brain.

Beyond this, though, Dr. Pert's research showed that the core limbic brain structures contained 85–95% of the various neuropeptide receptors that she had studied up to that point.

The Limbic System is also involved with the perception and recognition of all sensory stimuli, involuntary bodily functions and those aspects of memory involved with facts and events (in a small section of the temporal lobe called the hippocampus).

Electrical stimulation of certain parts of the temporal regions has resulted in the calling forth of not only vivid memory images (both auditory and visual) but the emotions associated with these memories as well.

In other words, in states of what I'd refer to as "intensified hearing" other than the "normal" auditory input received from the upper brainstem (the thalamus), the temporal region also receives additional impulses from the heart and blood pumping with Dr. Pert's "molecules of emotion."

This combined input is then interpreted as an experience comparable to what are known as affect-laden memory images, (i.e., memories invested with a high emotional charge).

Paul Maclean²⁶, was the conceptualizer and popularizer of the metaphor of the "triune brain," which theorized that there are three layers

to the human brain, representing different stages of humanities evolution:

1. The brainstem or reptilian brain, which is responsible for autonomic functions: breathing, excretion, body temperature, etc.
2. The limbic system, which encircles the top of the brainstem and is the seat of emotions, and
3. The cerebral cortex, located in the forebrain, which is the seat of "reason."

He has also described the Limbic System as being "filled with ancestral lore and ancestral memories."

In the 1940s he began to study the "limbic storms" suffered by patients with temporal lobe epilepsy. After that study he concluded, "All on its own, without the reality check of the neocortex, the Limbic system seemed to produce sensations of deja-vu or jamais-vu, sudden memories,

26. Paul Maclean. <http://www.kheper.net/topics/intelligence/MacLean.htm>

waking dreams, messages from god, even religious conversions." And didn't we just come across almost this same litany of states being produced by infra sound in Tuzin's work?

One other point about the Limbic system concerns its relationship to the experience of Synesthesia; or (most simply put) when one sense evokes another. The most common form of synesthesia is referred to as *audition coloree*, or colored hearing, immortalized by the poet Rimbaud in his poem about the hues of colors entitled *Les Voyelles*.

When neurologist Richard Cytowic²⁷ studied the brains of synesthetes during *audition coloree* experiences, he found that the blood flow decreased in the neocortex and increased in the Limbic system. Also, note that it is the heart that would be facilitating this increased blood flow, which would also be awash with the memory potential of specific neuropeptides.

Regarding the ramifications of this process Cytowic wrote,

"The brain's higher information processing turns off in colored hearing. An older, more fundamental way of viewing the world...takes over."

Considering that we are talking about Sound here, perhaps it's "an older, more fundamental way of *Hearing* (and thus remembering) the world" that Metaphonics triggers. When I came across the image of the Limbic System^{XXXV}, I was immediately struck by the similarity of its shape [the fornix] to that of the hooded cobra above the right shoulder of Yogesvara-Shiva.^{XXXVI}

XXXV. Limbic system. <http://www.nlm.nih.gov/medlineplus/ency/images/ency/fullsize/19244.jpg>

In the Confucian classic *Li Chi* or the *Book of Rites* (c. 200 BCE) it is related that

XXXVI. Shiva for limbic. http://www.chinmaya.com.au/files/shiv4_o.jpg

"Music is intimately connected with the essential relations of being."

Therefore, the mindset necessary for the production of Metaphonics is wholly dependent on the relationship between the composer/performer and their sense of Being. This manifests by the direct association of a Metaphonic performance with an exercise of the Spirit/Soul.

To be capable of serving Metaphonically, the values assigned to breath, sound, rhythm and ritual (i.e., techniques of performance) must be felt as concrete expressions of a living Spiritual intent.

When performed properly then, Metaphonic compositions are reciprocal. That is, they could just as well be said to be composing their composers/performers as well as their recipients.

This "compositional" process would be analogous to the one in which the alchemical Worker/s were *transmuted* through their Work (using the Spiritual idiom of metallurgy). While there may be others,

Emblem 59^{XXXVII} from The Hermetic Garden is the only image I have seen that presents the actual Work in a Tantric context.

XXXVII. Emblem 59 in Hermetic Garden.
<http://www.alchemywebsite.com/emblems/emblem59.html>

In this sense too, Metaphonics is always a Working, always a Transformation, always a Reinvigorating of the various modalities of consciousness and awareness and attention. Metaphonics is thus imbued with the capacity of transmuting the wisdom and knowledge of Time and Place, and delivering these aspects not just "to light" but "to sound" as well.

Metaphonics are always clarifying informations that were previously obscured by *normal* consciousness.

They are always imparting to both the composer/performer and the recipient/s a new sense of the Whole.

This sense of wholeness, of totality, of a physical feeling of *soundness*, is never vague. Rather, like an inundation with infra-sound or a limbic storm, it resonates the senses with a remembrance of deep truthfulness and connection.

Metaphonics articulates both Hieroglyphic and Symbolic forms, referents, images, tones, and visions.

These are brought together not to cancel each other out, but to form the ground for new ways of hearing and feeling and being.

In fact, Metaphonic performance can possess meaning and power only insofar as it connects both those involved with its creation and those who are receiving it, with, let's call them, "events" transpiring beyond the limited scope of its mundane performance. As mentioned before, Metaphonic performance will always include the experience of an Archetypal Time.

In this respect, the Metaphonic performance resounds throughout the Multiverse and draws its power from the Time that transcends the mundane present.

This results in the Transitions that allow a "spherical" (not just

horizontal or just vertical) expansion of Human significance into new relationships with all the various Aspects and Emanations of the Holographic Creation.

Sites

Visual Listening. <http://lewfh.blogspot.com/search?q=visual+listening>

Disk of the World. <http://www.diskoftheworld.com/diskindex7.htm>

Shiva. <http://www.kheper.net/topics/Tantra/Shiva.html>

Most heartfelt thanks to my cousin, Felice Catena (a goddess of the editing arts), for her help with putting this piece to bed.

ABOUT THE CONTRIBUTORS

WILLIAM BREEZE (b. Paris, 1955) is a violist, guitarist, bassist, electronic musician, music theorist and improvisational composer. Since 1992 he has worked as a studio violist and recorded and toured as a member of the bands *Psychic TV* (1994–1996), *Coil* (1997–2004) and *Current 93* (2005–present). As a boy he won a scholarship to the Engel School of Music in Orlando to study viola, harmony and solfège under Anne Bartlett and Joseph Kreines, later studying with Alphonse Carlo at Rollins College and training as an orchestral and chamber violist. He attended a series of colleges and universities before abandoning notated music for improvisation in the mid-1970s while a private student of North Indian musician Peter Row of New England Conservatory. He moved to New York in 1978 where he played with the percussionist Angus MacLise (Theater of Eternal Music, Velvet Underground) and the guitarist Mark Slivka. He was a bibliographer and archival assistant for the painter Larry Rivers in 1979 and 1980. In the early 1980s he was an executive at New York's oldest firm of advertising typographers, Cromwell, spinning off Cromwell Graphics Systems Corp. to market a successful universal disk and data translator of his design (cf. *Seybold Reports*). In 1984 he provided startup financing for the arts label Mystic Fire Video and was its executive vice president until 1992. His design for the Bill Moyers series *Joseph Campbell and the Power of Myth* (Mystic Fire) won a Benjamin Franklin Award for graphic design. As an independent scholar of American experimental film he has been a guest lecturer at Princeton University and international film festivals. In 1985 he became the international head of Ordo Templi Orientis (O.T.O.), taking the religious name Hymenaeus

William Breeze

Beta. He manages the Aleister Crowley literary estate, and has edited, designed and published scholarly editions of many Crowley works.

Gavin Bryars

GAVIN BRYARS (b. Yorkshire, England, 1943), was first of all a jazz bassist and pioneer of free improvisation with Derek Bailey and Tony Oxley. He subsequently worked in the USA in the late 1960s with John Cage and in Britain as part of the experimental music community. His early iconic works *The Sinking of the Titanic* (1969) and *Jesus' Blood Never Failed Me Yet* (1971), both enjoyed major recording success in various versions. He has written extensively for the stage, including three full-length operas and dance works for, among others, Merce Cunningham, Edouard Lock, Carolyn Carlson, David Dawson and William Forsythe. He taught for a number of years in art colleges and has collab-

orated with many visual artists such as Bruce McLean, David Ward, Tim Head, James Hugonin, Bill Woodrow and Will Alsop (Valencia Architecture Biennale). In 2006 he was a guest speaker at the 10th Alvar Aalto Architecture Symposium in Finland. He has made installations/performances for the Liverpool Tate Gallery, the Tate St. Ives, the Chateau d'Oiron, among others and worked closely with the late Juan Muñoz, notably on *A Man in a Room*, *Gambling*. He has a long list of instrumental, orchestral and vocal works to his credit, for artists such as the Hilliard Ensemble, Red Byrd, Trio Mediaeval, Latvian Radio Choir, Estonian National Male Choir, Opera North and the BBC Scottish Symphony Orchestra. He has an honorary doctorate from the University of Plymouth, was awarded a Fellowship of Bath Spa University and is a Regent of the Collège de 'Pataphysique. Gavin lives in Leicestershire and British Columbia and, as well as composing, performs internationally with his own ensemble. He has made many critically acclaimed recordings, most recently on his own label GB Records. www.gavinbryars.com

STEVE COLEMAN began playing music at age fourteen in Chicago. After being influenced by various recordings of Charlie Parker, Sonny Rollins, John Coltrane, and others, Steve then began listening to the spontaneous improvisations of Chicago premier saxophonists Von Freeman and Bunky Green. After moving to NYC in 1978, Steve joined the Thad Jones-Mel Lewis Big Band and subsequently played with the Sam Rivers Big Band, Cecil Taylor's Big Band, Doug Hammond, the Dave Holland Quintet, and Abbey Lincoln. Of those he came into contact with, it was mainly tenor saxophonist Von Freeman who primarily influenced Coleman as an improviser, saxophonist Sam Rivers who influenced Steve compositionally, and drummer Doug Hammond who was especially important in Steve's conceptual thinking. In 1980 Steve and trumpeter Graham Haynes started the group that eventually became Steve Coleman and Five Elements. Over the next five years this group would develop its sound in clubs in Harlem and Brooklyn. Their ideas were based on how to create music from one's experiences. Eventually these ideas were referred to as M-Base. However, unlike what most critics wrote, this concept was philosophical; Coleman did not call the music itself M-Base. In 1993 Coleman embarked on the first of many research trips, going to Ghana to study the relationship of language to music. This trip had a profound effect on Coleman's music and philosophy. However, the impact of the ideas that he was introduced to in Ghana would not be fully expressed in his work until late in 1994 after meeting the Kemeti philosopher Thomas Goodwin, whose influence on Steve's work was profound. Much of the activity from January 1996 on has been preserved in the form of a documentary produced by Eve-Marie Breglia entitled *Elements of One* (available at www.elementsofone.com). The film is based on Steve's music and the theme of cultural transference.

Steve Coleman

ALVIN CURRAN has realized a long and fruitful career as a composer/performer/installation artist, writer and teacher in the American experimental music tradition. Born in Providence in 1938 he studied with Ron Nelson, Elliott Carter and Mel Powell, co-founded the group *Musica Elettronica Viva* in 1966

Alvin Curran

in Rome where he currently resides. His music whether chamber works, radio-art, large-scale environmental theater or solo performance, embraces all sounds, all spaces and all people. For more information please see www.alvincurran.com

FRANK DENYER (b. London, 1943). His earliest musical training was as a boy-cho-
 rister at Canterbury Cathedral. Later he studied at the Guildhall School of Music,
 London. Subsequently, he formed the experimental ensemble *Mouth of Hermes*
 and through this group his own compositions started to be heard in public. They
 toured widely in Britain, Europe and Scandinavia during in the years 1966–1974
 also giving premières of work by Feldman, Scelsi, Wolff, Takahashi and many oth-
 ers. In 1974 he gave up performing for a time to pursue studies in ethnomusicolo-
 gy, first with fieldwork in North India and then as a PhD student at Wesleyan
 University, Conn. USA. Having found that life outside the western world's new
 music ghettos to be more conducive to freedom of thought in composition, he
 became a Research Fellow in African Music at the University of Nairobi. During
 this period he worked intensively with the music of the plains Pokot. Later there
 would be fieldwork research in other parts of the world as well. Resuming his
 concert career in Europe in 1981, he has been the featured composer at several
 international festivals, and CDs of his work have been released by Continuum,
 Etcetera, Tzadik, Mode and Orchid Records. The latest is *Silenced Voices* (2008)
 for Mode. In 1990 when he helped form the Amsterdam based experimental music
 group *The Barton Workshop*, which he co-directs with James Fulkerson. With this
 group he has recorded much solo and chamber music. He has also recorded the

complete piano sonatas of Galina Ustvolskaya. He is presently
 Professor of Composition at Dartington College.

Frank Denyer

Jeremy Fogel

JEREMY FOGEL (b. Antwerp, 1981) moved to Israel at the age of
 fifteen and left for England three years later. He studied philosophy
 at Cambridge, was awarded a BA in June 2002, after which he lived in Rome for
 six months, working in a youth hostel, guiding tourists, and trying to absorb beau-
 ty and grace. He later taught English in Catalonia, before spending some time in
 China and moving to Paris, where he spent a year working as a night watchman at
 a hotel and spending plenty free time working on poetry, studying the oud and
 reading. After more time spent in China, Fogel came back to Israel in 2004, and
 started studying for a master's degree, focusing particularly on the philosophy of
 religion and mysticism and graduated in 2007 with a thesis on *The Birth of Secular
 Religiosity from the Spirit of Modern Philosophy*. In his time in Tel Aviv, Fogel
 worked, amongst others, as an ancient and rare books trader, secretary at a yoga
 and dance center and assistant to a Professor of African History. He also freelanced
 in Hebrew to English translation, particularly papers about Hassidic philosophy
 and Kabbalah. Fogel, throughout, tried hard to focus on soulful endeavors, work-
 ing, amongst other projects, on as yet unpublished trashy pulp fiction which vehi-
 cles genuine philosophical and spiritual insights, Hebrew poems and psycho-mag-
 ical experiments. In 2005, Fogel started working with marimba illuminati Ravid
 Zigdon on a project which was eventually released by Tzadik—*Eretz Hakodesh*

(*Holy Land*), a deeply sexual and spiritual musical and poetic exploration of the
 Holy Land and a personal testimony of the quest for holiness in Israel and mod-
 ern life. Fogel is currently working on a mystical novel and a radically alternative
 Judeo-Christian rock album.

FRED FRITH is a songwriter, composer, improviser, and multi-instrumentalist best
 known for the reinvention of the electric guitar that began with *Guitar Solos* in
 1974. He learned his craft as both improviser and composer playing in rock bands,
 notably Henry Cow, and creating music in the recording studio. Much of his com-
 positional output has been commissioned by choreographers and filmmakers, but
 his work has also been performed by Ensemble Modern, Hieronymus Firebrain,
 Arditti Quartet, Ground Zero, Robert Wyatt, Bang on a Can All Stars, Concerto
 Köln, and Rova Sax Quartet, among many others. He continues to perform inter-
 nationally, most recently with Evelyn Glennie, Chris Cutler, John Zorn, Eye to
 Ear—a septet performing selections from his film music—and his latest band, Cosa
 Brava. Fred's writing has appeared in *New Musical Express*, *Let It
 Rock*, *EAR Magazine*, *Trouser Press*, *Poetics Journal*, *Jazzthetik*,
JazzMag, *Arcana*, and many other publications.

Fred Frith

Sharon Gannon

Peter Garland

SHARON GANNON is the co-creator with David Life of the Jivamukti
 Yoga Method, a path to enlightenment through compassion for all
 beings. A student of Shri Brahmananda Sarasvati, Swami Nir-
 malananda, and Sri K. Pattabhi Jois, she is a pioneer in teaching yoga as spiritual
 activism and is credited for making yoga cool and hip—relating ancient teachings
 of yoga to the modern world. Sharon is a musician and is a featured vocalist on
 many CDs. She has produced numerous yoga-related DVDs and is the author of
 several books, including *Jivamukti Yoga*, *The Art of Yoga*, *Cats and Dogs are Peo-
 ple Too!*, and *Yoga and Vegetarianism*. Her writing has appeared in numerous pub-
 lications, including *Toward 2012*, *Semiotexte* and *Yoga Journal*. She is a contributor
 to *Reality Sandwich* and writes a monthly essay called the *Focus of the Month*,
 which can be read at www.jivamuktivyoga.com

PETER GARLAND was born in 1952 in Portland, Maine. 1970–1973: Part of the
 original class at Cal Arts. Studies with Harold Budd, James Tenney, Wolfgang
 Stoerchle, Clayton Eshleman. Exposure to and study of Javanese gamelan and
 shadow puppetry and other world musics (esp. India). Travels throughout California
 and the West Coast. 1975–1976: First residence in Mexico, in Oaxaca, and travels
 in southern Mexico and Guatemala. Friendships in the 1970s with composers Lou
 Harrison, Dane Rudhyar, Conlon Nancarrow, Paul Bowles, Harry Partch and
 John Cage—which have a profound impact. 1978–1980: Second residence in
 Mexico, in Michoacán, with the family of Purépecha maskmaker Juan Horta, and
 further travels, including both Tikal and Copán. 1980–1991: Residence in New
 Mexico, and immersion in Native American and Hispanic musical traditions.
 1991–1995: The Gone Walkabout years, residence and travel in Mexico, Australia,
 New Zealand, Bali, Java, Vanuatu, Germany, the Netherlands, Czech Republic,

Morocco, Turkey and Japan. 1995–1997: Return to New Mexico and deepening exposure to Hispanic traditions, especially through friendship with santero Luis Lujan. 1997–2005: Third residence in Mexico, in Puebla, Veracruz and Oaxaca. Immersion in Mexican traditional musics, especially jarocho music (1998–2001). Close friendship with the Band of Totontepec, Mixes (Oaxaca, 2002–2005). 2002: Four months of travel and research in the Philippines, including the islands of Luzon, Marinduque, Negros and Bohol. Return visit to Japan, including second visit to the Buddhist mountain sanctuary of Koya-san. 2005: Return to the USA, current residence in Maine. His scores are available through Frog Peak Music, Box 1052, Lebanon, NH 03766, USA. www.frogpeak.org

MILFORD GRAVES (b. Jamaica, New York) started playing drums at three years old. Studies in African and Afro-Caribbean music/drumming began at eight years old. Milford started studying jazz in his early teens. In 1965, he studied North Indian Music/tabla drumming with the renowned Doctor Wasantha Singh, an Indian/Buddhist musician-guru. He attended City College of New York, New York Community College, Eastern School for Physicians Aides (NY), and the Occidental Institute of Chinese Studies (Canada). He is listed in *Who's Who in America*, *Groves Encyclopedia of Music*, *Encyclopedia of Jazz*, as well as many interviews, articles, and featured stories in various international publications (newspapers, magazines, journals, and books). During the past forty-two years Milford has performed in many music events, and given countless lecture-demonstration/workshops on medicine (herbology, acupuncture, nutrition, etc.) and body-movement/martial arts on an international level, including the 1983 International Conference on World Medicine at the Waldorf Hotel in New York. From 1971–1973, he developed and conducted a clinical laboratory for a private animal hospital in New York. On July 1, 1993, a special forty-five-minute documentary video, titled *Legend Drummer Milford Graves*, was televised throughout Japan on NHK-Television at a time called the Golden Hour. He is presently director of the International Center for Medicinal and Scientific Studies, co-director of the Institute of Percussive Studies, co-director of the George Washington Carver Botanical Garden in Jamaica, NY, and has been Professor of Music/Holistic Medicine at Bennington College in Vermont since 1973.

Milford Graves

Larkin Grimm

LARKIN GRIMM (b. September 18, 1981) is an American singer-songwriter and musician born in Memphis, Tennessee. She was born into a spiritual commune/cult called The Holy Order of MANS. Her father is a fiddler of German, Afro-Caribbean, and Sinti descent, and her mother is a hippie folk-singer of English, French, and Cree descent. After her parents left the cult, they relocated to Dahlonega, Georgia, where she grew up. She won a scholarship to study at Yale where she painted and sculpted. At twenty years old she dropped out of Yale, and moved to Alaska, where she hiked and began to experiment with singing. She later was convinced by a friend to return to Yale, where she began to record *Harpoon*, which was inspired by a love affair at that time. She then moved to Providence, Rhode Island, where she has since produced another album called *The Last Tree*. Larkin's

third album *Parplar* was released October 2008. Larkin Grimm is a radical environmentalist and opposes the War in Iraq. She has proclaimed that she is not affiliated with any political party, but considers herself an anarchist.

TIM HODGKINSON is a composer/improviser. He studied social anthropology before switching to music: lap steel guitar with Konk Pack, ethnography in Siberia, bass clarinet and numerous recordings with Iancu Dumitrescu's Hyperion Ensemble, compositions played at many European festivals including Huddersfield Contemporary Music, *Infinity* self-remixing CD with K-Space, solo clarinet performances, *Sketch of Now* CD on Mode. Past epics include keys and reeds in Henry Cow, electric alto with God, lap steel and vocals in *The Work*, Tadeusz Kantor-inspired suite *Stop Mortal* with Dagmar Krause, Pierre Schaeffer interview for *Rer Quarterly*, and many improvising encounters all over, including with Siberian musicians. Writings on shamanism, new technology, spectralism, musique concrète...seminars, workshops, masterclasses, lectures, art schools, conservatories. "When I compose I write for sounds and then for instruments. I try to make something that is adequately eventful for our crazy time. I think I am writing for our time and the listeners who must authentically inhabit it. Real music happens when ideas are outrun by events." For more information please see www.timhodgkinson.co.uk

Tim Hodgkinson

Jerry Hunt

Eyvind Kang

JERRY HUNT (b. Waco, Texas, 1943) attended North Texas State University (aka University of North Texas). He worked as a pianist through 1969 performing in concerts of contemporary music. Since 1978, the focus of his artistic activity had been the production of a series of interrelated electronic, mechanic and social sound-sight interactive transactional system performances of his work alone, or with and for other performers and performance groups, and interactive participant array installations. His last series of works included musical and performance collaborations with performance artist Karen Finley, visual and conceptual artist Maria Blondeel, performer and composer James Fulkerson (Barton Workshop), visual and sound artist Paul Panhuysen and composer and software designer Joel Ryan. He lived in a self-built house in east Texas until his death in 1993.

EYVIND KANG (b. Corvallis, Oregon, 1971). Eyvind Kang spent his youth moving around the Canadian prairies and Iceland before settling down in Seattle in 1991. There he met the violinist Michael White (who performed with the Fourth Way, Sun Ra Arkestra and Pharoah Sanders), who focused his attention on the achievements of the great jazz musicians, particularly John Coltrane. In 1998 he studied with violinist Dr. N. Rajam in India, which greatly influenced him. Since the mid-'90s he has performed extensively with Bill Frisell, as a violinist in his Quartet, and currently as a violist in his 858 Quartet and in a trio with drummer Rudy Royston. He also performs with Laurie Anderson, and has written arrangements for Blonde Redhead, Sunn O))), and many others. He has released many albums of original music, including *7 Nades* (1996, Tzadik), *The Yelm Sessions* (2007, Tzadik), and *Athlantis* (2007

Ipecac), featuring Mike Patton and Jessika Kenney, a choral piece with text by Giordano Bruno and Marbodius of Rennes. Since 2001, he has collaborated with Jessika Kenney, as a soloist in her pieces *Atria* and *Her Sword*, and in a duet CD *Aestuarium* (2005, Endless).

JESSIKA KENNEY (b. Spokane, Washington, 1976). Kenney's initial performances as a vocalist were within the Spokane punk scene of the early '90s. Deeply inspired by the writings of Kathy Acker, she concentrated her studies on vocal sounds and poetry. In 1994 she moved to Seattle to study with jazz singer Jay Clayton at Cornish. In 1997 Kenney began to train in the traditional vocal arts during travels to Indonesia. Since 2004 Jessika has studied Classical Persian music, its radifs and poetry, with renowned ney player and vocalist Dr. Hossein Omoumi. She is currently a member of his performing ensemble, and sings on the album *Voices of Spring* (2008, Haft Dastgah). She also works with composer Jarrad Powell and Gamelan Pacifica. Together with Eyvind

Jessika Kenney

William J. Kiesel

Yusef Lateef

Kang, she recorded an album of voice and viola duets based around sacred text, *Aestuarium* (2005, Endless). Her compositions for voice, small ensembles, and gamelan orchestra include *Atria* and *Her Sword*.

WILLIAM J. KIESEL is the publisher of Ouroboros Press as well as an independent scholar and member of the European Society for the Study of Western Esotericism. His practical experience and historical knowledge of occult literature and culture spans two decades and draws from such diverse areas as Hermeticism, Neoplatonism, Qabalah, Thelema, Alchemy, Rosicrucianism, Theosophy, Near Eastern Esotericism and Ceremonial Magic. Esoteric symbol systems in religion, mythology and folklore in historical and contemporary contexts are among his objects of continual study. He lectures in the United States and Europe.

YUSEF LATEEF is a Grammy award-winning composer, performer, recording artist, author, visual artist, educator and philosopher who has been a major force on the international musical scene for more than six decades. In recognition of his many contributions to the world of music, he has been named an American Jazz Master for the year 2010 by the National Endowment for the Arts. Still very much active as a touring and recording artist, Yusef Lateef is universally acknowledged as one of the great living masters and innovators in the African American tradition of autopsiopsychic music—that which comes from one's spiritual, physical and emotional self. He is a virtuoso on a broad spectrum of reed instruments—tenor saxophone, flute, oboe, bamboo flute, shanai, shofar, argol, sarewa, and taiwan koto—and is considered a pioneer in what is known today as World Music. As a composer he has compiled a catalogue of works not only for the quartets and quintets he has led, but for symphony and chamber orchestras, stage bands, small ensembles, vocalists, choruses and solo pianists. He is an emeritus Five Colleges professor at the University of Massachusetts in Amherst, MA, from which he was awarded a Ph.D. in Education in 1975. In 2007 he was named University of Massachusetts' "Artist of the Year." Yusef Lateef has published two novellas, *A Night in*

the Garden of Love and *Another Avenue*; two collections of short stories, *Spheres* and *Rain Shapes*; and his autobiography, *The Gentle Giant*, written in collaboration with Herb Boyd. In recent years he has also exhibited his paintings at various art galleries.

Grammy award winning composer-trumpeter-teacher FRANK LONDON is a member of The Klezmatics, and leads his Klezmer Brass Allstars, whose CD *Carnival Conspiracy* was Rolling Stone's #1 Non-English recording of 2006. Critic Stephen Fruitman writes, "Frank London is new Jewish musics' heart, soul and yiddishe kop" and Seth Rogovoy calls *A Night in the Old Marketplace* "the best Jewish musical since *Fiddler*." His opera about the Soviet Yiddish theater, *Green Violin*, was performed in Amsterdam, St. Petersburg and at New York's Jewish Museum. He is Artistic Director of KlezFest London (no relation) and on the faculty at SUNY Purchase. Musicologist Joel Ruben called him "the person most responsible for pushing the klezmer revival in the world beat and fusion with rock and jazz." In addition to klezmer and Yiddish theater, London has explored Jewish jazz with Hasidic New Wave, cantorial music on *Hazonos* and *Invocations*, and mystical music on *Nigunim* and *The Zmiros Project* and most recently on his Tzadik release, *tsuker-zis*.

Frank London

Dary John Mizelle

Meredith Monk

DARY JOHN MIZELLE (b. Stillwater Oklahoma, June 14, 1940) studied trombone theory and composition in California (B.A. Sacramento State University, M.A. UC Davis, PhD UC San Diego). Mentors include: Larry Austin, Richard Swift, Jerome Rosen, Karlheinz Stockhausen, David Tudor, Roger Reynolds, Robert Erickson, Pauline Oliveros, and Kenneth Gaburo. A member of the New Music Ensemble at UC Davis (the first free group improvisation ensemble) and a founding member of *SOURCE Music of the Avant Garde* magazine, he has specialized in the sonic and structural aspects of contemporary compositional practice. He works with electronic/computer/concrete materials, chamber, solo instrumental, large ensemble, choral, orchestra, opera and experimental combinations. He performs on the piano, trombone, trumpet, shakuhachi, voice, performance art, jazz and intermedia idioms, and conducts. A prolific composer with over 450 works for all media, he is currently engaged in the SPANDA project, thirteen days of experimental music for all media with a coherent macrostructure. His works have been performed locally, nationally and internationally since the sixties. He has taught composition, orchestration, computer music, music theory, music history, and world music at University of South Florida, Oberlin College Conservatory, Sonavera Studio of Sonic Arts and Purchase College SUNY where he served as Chair of the composition program. He makes his home in Mount Vernon, New York.

MEREDITH MONK is a composer, singer, and creator of new opera and music theater works. A pioneer in what is now called "extended vocal technique," Monk has been hailed as "a magician of the voice," and "one of America's coolest composers." During a career that spans more than forty years, she has been acclaimed

by audiences and critics as a major creative force in the performing arts. She has received numerous awards including a MacArthur "Genius" Fellowship, two Guggenheim Fellowships, and in 2006 was named a USA Fellow and inducted into the American Academy of Arts and Sciences. In the mid-'60s Monk began her innovative exploration of the voice as a multi-faceted instrument and subsequently composed and performed many solo pieces for unaccompanied voice and voice/keyboard. In 1978 she formed Meredith Monk & Vocal Ensemble to further expand her musical textures and forms. She has made over a dozen recordings, mostly on the ECM New Series label, including the 2008 Grammy nominated *impermanence*. Her music has been performed by numerous soloists and groups including Bang on a Can All Stars, Björk, Double Edge and Musica Sacra. She has been commissioned by Michael Tilson Thomas/New World Symphony, and Kronos Quartet among others. Her music can also be heard in such films as *La Nouvelle Vague* by Jean-Luc Godard and *The Big Lebowski* by Joel and Ethan Coen. In October 1999 Monk performed a *Vocal Offering* for His Holiness, the Dalai Lama as part of the World Festival of Sacred Music in Los Angeles. In 2000, the Lincoln Center Festival celebrated Monk's music with a three-concert retrospective and in 2004, a four and a half hour marathon was presented at Carnegie's Zankel Hall. Another marathon, *Meredith Monk Music @ The Whitney*, was presented in 2009, followed by the site-specific *Ascension Variations* at the Guggenheim Museum.

Tisziji Muñoz

TISZIJÍ MUÑOZ is a unique creative genius with dozens of musical releases and written publications that continue to inspire, heal, shock and liberate the few. Tisziji's musical spirit emerged early on. By age three he was drumming ecstatically, and despite chronic nerve damage to his left wrist sustained shortly thereafter, he was brought into the Mongo Santa Maria circle of musicians as a drum prodigy in his teens. He taught himself how to play the ukulele and later joined a Doo-Wop singing group, The Arrogants, recording four songs in Hollywood, including *Canadian Sunset*. Following his service in the US Army 440th General's Band, in which he was featured as a percussionist, Tisziji focused on generating his own musical ideas while taking a leading role in the development of Toronto's underground music scene. He was a guitarist in the *Hair* and *Godspell* musicals, and met and inspired the now world-famous keyboard player, Paul Shaffer, who became Tisziji's primary accompanist from 1970 to 1972. Upon his return to the U.S., Tisziji met the great jazz saxophonist, Pharoah Sanders, and later toured with him for six years. After raising his children in New York City, Tisziji moved upstate and established Anami Music Productions to handle the ever-expanding demands of his music, and The Illumination Society to accommodate his writing and spiritual teaching functions. Knowing that most individuals would not have any direct contact with him, Tisziji has documented and published his views on a vast array of subjects, encouraging individuals to awaken and realize the Master within themselves; thus freeing himself from the burden of any formal or ritualistic teaching function. Through his works encom-

passing music, spirituality and time-mastery, his teaching activities, and his spiritual approach to life, Tisziji continues to defy and transcend all schools of thought while validating the Spiritual Heart-Source of his catastrophic music, which he calls Heart-Fire Sound.

Besides his alchemical work with trash, MARK NAUSEEF has performed and/or recorded for more than forty years with many leading musicians of various genres from around the world. Areas of study and master artists he has studied with include, among others, Javanese Gamelan with K.R.T. Wasitodiningrat, Balinese Gamelan with I. Nyoman Wenten, North Indian Pakhawaj drumming with Pandit Taranath Rao, North Indian music theory with Pandit Amiya Dasgupta, Ghanaian drumming and dance with Kobla and Alfred Ladzekpo, Dzidzorgbe Lawluvi and C.K. Ganyo, and 20th century Western percussion techniques and hand drumming with John Bergamo. Mark also studied frame drum techniques of the Middle East, India and the Caucasus with Glen Velez. Nauseef has also worked as a producer. In addition to his own recordings, he has produced many records of various types of music including modern experimental as well as traditional forms. Traditional music productions include numerous recordings of Balinese and Javanese music such as the acclaimed and award winning CMP recordings, *The Music of K.R.T. Wasitodiningrat*, recorded in Java, also *Gamelan Batel Wayang Ramayana* and *Gender Wayang Pamarwan*, which were recorded in Bali. Current music activities include recording and performance as a member of The Kudsi Erguner Ensemble, led by the Turkish classical Sufi ney master and composer Kudsi Erguner. This ensemble, made up of mostly Turkish classical musicians, plays reworked compositions of the Ottoman Empire as well as modern and classical repertoire. Nauseef is currently a faculty member at the Hochschule für Musik und Theater (Conservatory of Music) in Hamburg, Germany.

Mark Nauseef

PAULINE OLIVEROS (1932) is a composer, performer, author and philosopher and has influenced American music extensively through her works with improvisation, electronic music, teaching, myth, ritual and meditation. She pioneered the concept of Deep Listening, an aesthetic based upon principles of improvisation, electronic music, ritual, teaching and meditation designed to inspire both trained and untrained performers to practice the art of listening and responding to environmental conditions in solo and ensemble situations. During the mid-'60s she served as the first director of the Tape Music Center at Mills College, aka Center for Contemporary Music followed by fourteen years as Professor of Music and three years as Director of the Center for Music Experiment at the University of California at San Diego. Since 2001 she has served as Distinguished Research Professor of Music in the Arts department at Rensselaer Polytechnic Institute (RPI) where she is engaged in research on a National Science Foundation CreativeIT project. She also serves as Darius Milhaud Composer in Residence at Mills College doing telepresence teaching and she is President of Deep Listening Institute, Ltd. where she leads projects in Adaptive Use, Deep Listening and Publications. For more information please see www.paulineoliveros.us and www.deeplisting.org

Pauline Oliveros

GENESIS BREYER P-ORRIDGE first achieved recognition with the 1969 founding of COUM Transmissions, a confrontational performance collective heavily influenced by Dada, which was later transformed into the band Throbbing Gristle. (P-Orridge would, in 1981, found the ground-breaking band, Psychic TV.) In the early 1970s, P-Orridge met William S. Burroughs, who introduced h/er to Brion Gysin, marking the beginning of a seminal and influential collaborative relationship. The supremely Dadaist practice of the "cut-up" technique of the early 20th century Surrealists s/he learned from them would influence P-Orridge throughout h/er career and remains an integral element of h/er work. P-Orridge was an early participator in Fluxus and Mail Art, applying the theories of John Cage exchanging works with Ray Johnson among others. P-Orridge later began an occultist practice influenced by the theories of the artist Austin Osman Spare. The "sigils" they performed explored the relationship between the conscious and unconscious self through magical techniques such as automatic writing, drawing and actions. In the 1990s, P-Orridge began a collaboration with the performance artist Lady Jaye Breyer—deconstructing the fiction of self. Influenced again by "cut-up" techniques they applied the strategy of "cutting-up" to their own bodies, in an effort to merge their two identities, through plastic surgery, hormone therapy, cross-dressing and altered behavior, into a single, "pandrogynous" character, "BREYER P-ORRIDGE." (Although Lady Jaye passed away in 2007, the project continues with Genesis embodying the entirety of BREYER P-ORRIDGE.)

Genesis Breyer
P-Orridge

Terry Riley

Californian TERRY RILEY, whose career has spanned five decades, is one of the most influential composers and performers in contemporary music. His work *In C* changed the course of music after 1964.

It introduced a new approach to tonality and new structural principles that projected kaleidoscopic, psychedelic atmospheres, representing a striking departure from the then established musical direction of the mid-20th century. An imaginative improviser, his recordings such as *A Rainbow in Curved Air* and *Poppy Nogood and the Phantom Band*, with their driving kinetic rhythms, sent waves across the contemporary music world as well as into the territories of rock and jazz. His jazz inflected piano improvisations incorporate elements of western classical music as well various latin and world music flavors. Of particular note is his twenty-six year association with his music Guru, legendary Indian vocalist, Pandit Pran Nath. Riley appeared as accompanist in hundreds of concerts with the great Master and continues today to give concerts of Indian Classical Music as an adjunct to his own work in contemporary music. Terry has written for orchestra, choir, string quartet, saxophone quartet, guitar, piano and various chamber music combinations and his work has been performed on virtually every continent. Terry has collaborated with some of the great names of our era, including Chet Baker, La Monte Young, George Brooks, Zakir Hussein, Krishna Bhatt, Kronos Quartet, Michael McClure, Stefano Scodanibbio, John Cale and more recently his son, Gyan Riley. His most recent work, *SolTierraLuna* for two guitars, violin and Orchestra had its premiere in

March 2008. Terry played his first pipe organ concert to a sold out audience at Disney Hall in May of 2008, introducing *The Universal Bridge*, a work especially commissioned for that evening. He christened the gigantic Disney Hall pipe organ "Hurricane Mama."

Adam Rudolph

Born in 1955, handdrummer, percussionist, composer, multi-instrumentalist and improviser ADAM RUDOLPH grew up in the Hyde Park area of the Southside of Chicago. From an early age he was exposed to the live music performances of the great artists who lived nearby. As a teenager, Rudolph started playing hand drums in local streets and parks and soon apprenticed with elders of African American improvised music. He performed regularly in Chicago with Fred Anderson and in Detroit with the Contemporary Jazz Quintet. In 1973 Rudolph played on his first record date with Maulawi Nururidin and with the CJQ at the Ann Arbor Blues and Jazz festival. In 1977 he lived and studied in Ghana, where he experienced trance ceremonies. In his travels throughout West Africa he saw how music can come from a cosmological grounding beyond music itself and can also be about something beyond music itself. In 1978 he lived in Don Cherry's house in the Swedish countryside. Cherry inspired him to start composing and showed him about Ornette Coleman's concept and the connection of music to nature. Rudolph is known as one of the early innovators of what is now called "World Music". In 1978 he and Gambian Kora player Jali Foday Musa Suso co-founded The Mandingo Griot Society, one of the first bands to combine African and American music. In 1988, he recorded the first fusion of American and Gnawa music with Sintir player and singer Hassan Hakmoun. Rudolph intensely studied North Indian tabla for over fifteen years with Pandit Taranath Rao. He learned hundreds of drum compositions and about how music is a form of Yoga—the unity of mind, body and spirit. In 1988 Rudolph began his association with Yusef Lateef, with whom he has recorded over fifteen albums including several of their large ensemble collaborations. Lateef introduced Rudolph to the inspirational practice of Autophysiopsychic Music—"that which comes from one's spiritual, physical and emotional self". Rudolph still performs worldwide with Dr. Lateef in ensembles ranging from their acclaimed duo concerts to appearances as guest soloist with the Koln, Atlanta and Detroit symphony orchestras. Over the past twenty-five years Rudolph has developed a unique syncretic approach to hand drumming in creative collaborations with outstanding artists of cross-cultural and improvised music, including Jon Hassel, L. Shankar, Joseph Bowie, and Wadada Leo Smith among others. He has released over a dozen recordings on his own Meta Records label documenting his compositions for various size ensembles as well as his collaborations with artists such as Sam Rivers, Omar Sosa, and Pharaoh Sanders. Currently Rudolph composes for his groups Adam Rudolph's Moving Pictures quartet and octet, Hu: Vibrational trio, and Go: Organic Orchestra, a fifteen to fifty-piece ensemble for which he has developed an original music notation and conducting system. He has taught and conducted hundreds of musicians in the Go: Organic Orchestra concept in both North America and Europe. Rudolph recently premiered his opera *The Dreamer*, based on the text of Friedrich Nietzsche's *The Birth of*

Tragedy. He also performs as half of the Wildflowers Duo with Butoh dance innovator Oguri. Rudolph has recently had his rhythm repository and methodology book, *Pure Rhythm* published by Advance Music, Germany. He has performed at festivals and concerts throughout North and South America, Europe, Africa, and Japan, appeared on numerous albums and released over twenty recordings as a leader. He has received grants and compositional commissions from the Rockefeller Foundation, Chamber Music America, Meet the Composer, Mary Flagler Cary Trust, the NEA, Arts International, Durfee Foundation and American Composers Forum.

DAVID CHAIM SMITH 1964: born in Queens, NYC. 1980–1982: Philosophy and art history at Queens College. 1982–1986: BFA in drawing at Rhode Island School of Design. 1988–1989: MFA in drawing at Columbia University. 1990: Beginning of intensive study of alchemy and Western Esoteric Qabalah. 1990–1997: Ritual work and study with several western occult orders. 1997: Visual art suspended in favor of practical mysticism. 1997–1998: Residence at Crazy Cloud Hermitage. 1998–2006: Immersion in Chassidic mysticism and traditional Hebrew Kabbalah with several teachers. 2007: Innovation of a set of graphic keys based on the 13th century mystical text *Maayin HaChochmah*. With these symbolic constructs image making is resumed after a ten year hiatus from visual art.

David Chaim Smith

Trey Spruance

TREY SPRUANCE is a California based composer, multi-instrumentalist and producer, leader of Secret Chiefs 3, member of defunct Mr. Bungle. Nietzschean reactionary angst from exposure to redneck town of youth led to overzealous immersion in music and philosophy (and an aversion to western Christendom). Once in San Francisco in the beginning of the 1990s, appropriate psychic and social adjustments began. Education and participation in some of the more inscrutable elements of the SF underground at that time, with its mysterious and often humble but completely insane personages, inspired much creativity and soul searching. Truth-seeking (albeit disjointed and anarchistic) arrived in seed-form by 1993, and led to nearly two decades of deeply intensive studies in Hermetic and Islamic Philosophies. Eventually these studies began to crystallize into something substantial and musically applicable. On embracing of non-ET tonality (not "microtonality" but modal concepts owing much to Hellenic musical Philosophy), and also non-subdivided rhythm, an unmistakable musical overlap with Philosophy resulted in a "synergy" that has maintained a steady direction and output. The music is often mistaken as avant garde, but is really just situated consistently in a tension between ancient and modern ideas, eastern and western concepts, etc. Moved to the mountains in 2000. For over a decade compositional goals have reflected a rigorous "home-schooled" kind of quasi-quadrivium (*Book M*, *Book of Horizons*, etc.) that walks the line of aforementioned tensions. Now entering third year of being an Eastern Orthodox Christian wannabe layperson, who at this point is just trying to not become the next Rasputin, Simon Magus or Judas.

DAVID TOOP is a musician/composer, author and curator. He studied fine art and graphic design, then in 1971–1972 took part in the first improvisation workshops led by jazz drummer John Stevens. Having played improvised music since the beginning of the 1970s with musicians such as Paul Burwell, Steve Beresford, Max Eastley, Hugh Davies, Terry Day, Peter Cusack, Sally Potter and Lol Coxhill, he also recorded shamanistic ceremonies in Amazonas and appeared on Top Of The Pops with the Flying Lizards. Musicians he has worked with include Brian Eno, John Zorn, Prince Far I, Jon Hassell, Derek Bailey, Talvin Singh, Evan Parker, Scanner, Ivor Cutler, Akio Suzuki, Haco, Rhodri Davies, Jin Hi Kim and Alasdair Roberts, and collaborated with artists such as theatre director/actor Steven Berkoff, Japanese Butoh dancer Mitsutaka Ishii, sound poet Bob Cobbing and visual artist John Latham. His first album, *New and Rediscovered Musical Instruments*, was released on Brian Eno's Obscure label in 1975; since 1995 he has released eight solo albums, including *Screen Ceremonies*, *Black Chamber* and *Sound Body*. Four books have been published, currently translated into seven languages: *Rap Attack*, *Ocean of Sound*, *Exotica* (a winner of the 21st annual American Books Awards for 2000), and *Haunted Weather*. As a critic and essayist he has written for many publications, including *The Wire*, *The Face*, *The Times* and *Leonardo Music Journal*. In 2000, he curated *Sonic Boom*, the UK's largest ever exhibition of sound art, at the Hayward Gallery, London, and in 2005 curated *Playing John Cage* for Arnolfini Bristol. His sound works have been exhibited in Beijing's Zhongshan Park, Tokyo ICC and the National Gallery, London. His most recent book *Sinister Resonance: The Mediumship of the Listener*—will be published in summer 2010. He is currently composing a chamber opera, *Star-shaped Biscuit*, for Aldeburgh Music.

David Toop

Greg Wall

Peter Lamborn
Wilson

Rabbi GREG WALL is a saxophonist and composer who is equally fluent in both jazz and world music. He has performed and recorded with his own ensembles Later Prophets, Greg Wall Trio, Hasidic New Wave, The Wall/London Band and Greg Wall's Unity Orchestra as well as with Neshama Carlebach, the Hi-Tops and many others. Greg has made many session appearances for record dates and film scores and performs his own music regularly at top venues and major festivals throughout North America and Europe. Since 1999 he has collaborated with the Carolyn Dorfman Dance company, resulting in many commissioned dance scores. Most recent projects include the Unity Orchestra, a pan cultural ensemble featuring eight musicians from five continents, and *Ha'Orot*, a musical setting of the mystical poetry of legendary Rabbi Rav Kook. Greg is the Rabbi of the 6th Street shul in New York's East Village.

PETER LAMBORN WILSON (b. 1945) is an American political writer, essayist, and poet, known for first proposing the concept of the Temporary Autonomous Zone (TAZ), based on a historical review of pirate utopias. See *Green Hermeticism: Alchemy and Ecology* essays by Peter Lamborn Wilson, Christopher Bamford, Zia Inayat-Khan (Lindisfarne Bookes, 2008).

Z'EV text/sound artist, composer, sound sculptor, poet and mystic. He is perhaps best known for his performances of acoustic phenomena produced through catacoustic (reflected sound-based) percussion. In 1978 he met Haitian Hougun Rico Joves and was initiated into Vou-Dun drumming. Employed as a researcher for the Society for the Preservation of Occult Consciousness he received initiations into the Western Ceremonial Tradition. In 1979 he began his studies with Rabbi J. Winston, founder of the Jewish Meditation Society. His work is influenced by the Middle Eastern mystical system best known as Kabbalah (although not of the Jewish variety), as well as cultures and esoteric systems world-wide. After studying at CalArts with Concrete poet Emmett Williams he concentrated on visual and sound poetries, and was included in the *Second Generation* show at the Museum of Conceptual Art in San Francisco in 1975. In 1976, inspired by the Punk Movement, he re-entered the musical sphere and was one of the progenitors of the so-called "industrial" movement in the late '70s. Between the years 1978-1984 he, along with Neil Megson, was fairly responsible for delivering the "tribal" impulse and esthetic into the Western cultural milieu. In 1992 his first book, *Rhythmajik—Practical uses of Number, Rhythm and Sound* was published by Temple Press UK. With some few exceptions he was retired from artistic endeavors between 1994 and 2003. In 2001 Tzadik released his work: *The Sapphire Nature*; five translations of the primal Qabalhistic text known as the *Sefer Yetzirah*. While performing primarily as a soloist, since 2003 he has been concentrating on cooperative and collaborative composition and performance. He currently spends as much time as possible in Peckham, England in the company of Conceptual Artist Barbara Stevni, the mother of what is now called Socially Engaged Art.

z'ev

John Zorn Drawing on his experience in a variety of genres, including jazz, rock, hardcore punk, classical, klezmer, film, cartoon, popular, and improvised music, JOHN ZORN has created an influential body of work that defies academic categories. A native of New York City, he has been a central figure in the downtown scene since 1975, incorporating a wide range of musicians in various compositional formats. He learned alchemical synthesis from Harry Smith, structural ontology with Richard Foreman, how to make art out of garbage with Jack Smith, cathartic expression at Sluggs, and hermetic intuition from Joseph Cornell. Early inspirations include American innovators Ives, Varèse, Cage, Carter, and Partch, the European tradition of Berg, Stravinsky, Ligeti, and Kagel, soundtrack composers Herrmann, Morricone, and Stalling, as well as avant garde theater, film, art, and literature.



Answering a need for critical attention towards experimental and avant-garde music, *Arcana* is a ground-breaking work—as far-ranging and dynamic as the current generation of musicians. Through manifestoes, scores, interviews, notes and critical papers, performer/composers address composing, playing, improvising, teaching, and thinking in and through music. Rather than an attempt to distill or define musicians' work, *Arcana* illuminates with personal vision and experience. *Arcana* is a remarkable book—challenging and original—essential for composers, musicians, theorists and fans alike.

Arcana is a vibrant testimony to the continuing vitality of new music. These exciting young composers are as idiosyncratic and eloquent with words as they are with music.

—MEREDITH MONK

Arcana, edited by John Zorn, is filled with writings by musicians from all over the musical map. Interested in the sampling, deconstruction and reconstruction of pop hooks? The historical sociobiology of the downtown music scene? An American's reaction to the study of Gagaku? Extended contrabass techniques? A savvy take on ear plugs, amplifier distortion and pain? This is the book you've been looking for.

—STEVE REICH

contributors

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GERRY HEMINGWAY	BOB OSTERTAG	Z'EV
SCOTT JOHNSON	JOHN OSWALD	JOHN ZORN



Arcana II is the second in a groundbreaking series of volumes presented by John Zorn answering a continuing need for critical attention toward avant-garde and experimental music. Thirty distinguished composer/performers illuminate and speculate upon method and practice in the process of making, experiencing, and thinking about music. Imaginatively elucidating through essays, scores, manifestoes, and interviews both real and imaginary, *Arcana II* gives voice to a new generation of brave musical explorers living outside the mainstream academy who passionately and selflessly devote themselves to a search for the miraculous.

Colorful, urgent, idiosyncratic. Arcana II is a manifesto for freedom and experimentation. It's also an exciting collection of stories by musicians about how and why they make music. Now that the music business has fractured, categories have loosened up too. Mainstream? Pop? Experimental? They mean completely different things these days. Arcana II lays the groundwork for revolutionizing what music can mean and be.

—LAURIE ANDERSON

The original and free spirited ideas in the essays contained in John Zorn's collection Arcana II are always stunning, passionate, and truly thought-provoking. This book is the must-read pleasure for anyone with an interest in music—what it is—has been—could be. Bristling with ideas. Illuminating and redefining.

—LOU REED

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The writings in the continuing *Arcana* series provide direct connections to the inner sanctums of some of the most extraordinary musical thinkers of our time. Technical, philosophical and mystical in nature, these essays reach out to the listener to illuminate the creative processes and hidden stratagem of a music (and a community) largely misjudged and unappreciated by mainstream culture. *Arcana* provides welcome tools for digging into the underground and can lead the creative mind toward an exciting world of possibilities for artists, musicians, musical theorists and curious listeners alike.

—from the preface

The Arcana series will come to be viewed as the most vital source of relevant information on creative music in the transitional opening of the third millennium. In a time period where mundane reading sources permeate the publishing world, this body of writings provide welcome intellectual nourishment for serious engagement and learning about creative thinking. John Zorn continues to lead by example in both his music and activist work, demonstrating the kind of dedication and leadership that inspires real positive growth and world change.

—ANTHONY BRAXTON

This diverse group of contributors, living and writing in a deeply aware 21st century provides insights into the way musicians view their work and each other. One senses that there is an unlimited way "to do it" and that musicians, who can delight with their magic spells, can speak with welcome clarity about how they attempt to get to that mysterious place. These writers point to their sources, their concerns, and at times their love and admiration for one another with original thought. What you get with Arcana III is a sense that there are no boundaries—the closing piece raised me right up out of my chair with a resounding "YES."

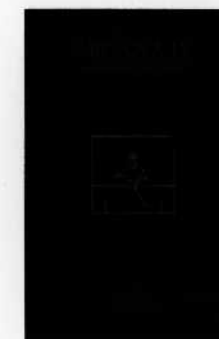
—TERRY RILEY

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Now in its fourth installment, with a fifth in preparation, John Zorn's acclaimed *Arcana* series provides insight into the work and methodologies of some of the most creative musical minds of our time. Rather than an attempt to distill or define a musician's work, *Arcana IV* illuminates directly via personal vision and experience through the undiluted words and thoughts of the practitioners themselves. Elucidating through manifestoes, scores, interviews, notes and critical papers, composer/performers address composing, improvising, teaching, living, touring and thinking in and through music. Essential for composers, musicians, students and fans alike, this remarkably challenging and original series has now become THE major source on new music theory and practice in the 21st century.

As musicians, we are at our best when fully engaged in the intensely personal processes of uncovering and revealing the things that we have each found to be true along the way. The pursuit of our own individual goals in sound and conception can offer insights that transcend as we search to reconcile the impossible with the possible, the imagined gesture with the actual fact of music itself. With this fourth volume in the Arcana series, John Zorn has again assembled broad testimony to the cause in an infinity of dialects, wildly diverse but unified with an intent on delivering a range of personal reports that ruminate not only the state of the art in music today, but offer an illuminating view into the deepest crevices of our culture on the move in this most interesting of times.

—PAT METHENY

We live in a time of musical illiteracy, but a volume like this, in its multiplicity, enthusiasm, and polemicism offers to anyone wanting to go beyond the tatters of contemporary musical criticism a fascinating look into the minds of a broad segment of living music-makers. Not every view is represented, but enough are, to show how much richer the reality is than the picture presented by the panders.

—CHARLES WUORINEN

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