

THE PLANETARY SYSTEM

Ideas, Formulas and Forms for a new Culture/Civilization

The Creating Sound

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Foreword

The Mystery of the origins of Life has always driven mankind to research. Philosophies, religions, science and arts were born with the purpose of unveiling it. Nevertheless it continues to attract human minds without letting itself be discovered completely; protected not by darkness, but rather by a blazing light.

Many traditional Teachings hold that Sound engendered Creation. It is a fascinating hypothesis, which after all is not so far, at least formally, from the current scientific explanation that puts a ‘big bang’ at the beginning of the manifest world.

Yet it is quite different in its substance, because the former assumes a creating Intelligence at the origin of everything, whilst the second attributes the beginning of life to mere chance.

In any case, it appears clear that if we want to find the Origins, an investigation of the world of Sound is a good starting point.

A Group of researchers, guided by an enlightened disciple, found itself treading the paths of science and esoteric tradition at the same time, combining the indications given by the Tibetan Master in ‘A Treatise on the Seven Rays’ with the study of sound carried out by a German scientist, Hans Kayser, published in 1950 in the ‘Lehrbuch der Harmonik’, translated as ‘[The Science of Harmonics](#)’.

It is interesting to notice, and we don’t think it is coincidental, how the studies of Kayser were carried out at the same time as the presentation of the Tibetan Master’s teaching, between 1920s and 1940s. Anyway, it seems the scientist was unaware of its existence.

Approaching this topic with an open heart and using the analogical mind, it is thus possible to verify how science and esoteric tradition (the designated pillars, together with art, for the evolution of human consciousness) can support and complement each other in simplicity and beauty.

Indeed they are most properly concerned with those questions of Humanity, often unwitting yet powerful, which synthesize and usher us into spheres of thought where it is possible to find answers co-measured to the general current consciousness. In this way they help mankind to carry out its part in the general Plan.

Though in different manners and languages, these forces descend from the same Source, and to keep them separate, or even to consider them antagonistic, causes stalemate or the disharmonious development of consciousness.



1. The Purpose

Truth is always the purpose of research, which the researcher, depending on their approach, can or cannot identify with the Divine. By the way, Louis Pasteur said that ‘A bit of science leads away from God, but a lot of science leads back to Him’.

Scientists and esotericists generally agree that universe is a kind of ‘Book of Life’, i.e., a cosmic code that mankind has to interpret in order to be able to approach the Mystery, consciously collaborating with the general evolution.

Basically, it is necessary to learn to read, in order to be able to coherently inscribe our signs in this great Book, thus cooperating with cosmos.

Any starting point is valid to begin this work of interpretation, yet, as said before, it seems that the study of sound, of its nature, laws, and effects, is the preferable method for this time of human history.

We must also keep in mind that the harmonic presentation of the universe is not new in the history of Mankind. We find traces of it wherever culture and art flourish.

Could we think then, at this moment apparently so dark for Humanity, that the first seeds of a new culture and a new civilization are being to be sown?



So let us talk about Sound. Physics defines it as an oscillation, a vibration sent out into Space by a sonic source.

Everything that is recordable by the sense of hearing or by mechanical means can theoretically be called sound. In actual fact, acoustics distinguishes Sound from noise, because the former produces a regular, constant and recognizable wave (although we can also regard as Sound any noises produced in a rhythmic and continuative way), whilst the latter yields irregular and broken waves.

Each Sound is identifiable by its frequency, viz. by the number of vibrations emitted by it in unit of time. Therefore there is no Sound without **Number**.

This simple observation brings us back to Pythagoras, who stated that what cannot be numbered does not exist.

This is not the place to deal with Number. Yet let us keep in our hearts, as a simple hypothesis, the thought that Numbers are not only indicators of quantity, but real creating powers, magnetic and bearers of a project.

Furthermore, as we all know from experience, Sound expresses a **Value**, perceived by the psyche, on which it has a deep influence.

We also know that the human ear, even when not trained, is able to recognize the value of a sound, as it responds to out of tune notes with a feeling of discomfort. This shows how easy it is to trace Sound back to its corresponding Number, as well as proceed from Number to its relative sonic value.

Finally, Sound needs a **physical means** to manifest in the world of form, be it a voice or a musical instrument. This means owns the task of bringing the sonic Entity into manifestation. The more the instrument, constructed according to rules, is refined, properly handled and cared for in an appropriate manner, the more the Sound will reveal its power and become recognizable, yet never perfectly known or reproducible.

In the ternary of Number, Value and Instrument we can immediately see the analogy with Life, Quality and Appearance, or Monad, Soul and Personality. Once again then, Sound appears as a suitable guide to allow a first reading of creation.

The most astonishing characteristic of Sound, however, the one on which Kayser's studies are focused, is that, **once emitted, and as long as it lasts, it creates its own intervals (harmonics) ad infinitum, according to a precise, constant and hierarchic order** (i.e., according to the natural series of whole numbers).

This statement justifies the title given to these pages. Sound creates! And it does so because this is its nature. It creates purely because it is emitted and persisting. It creates according to a project, a law and an order that are inscribed in its nature. And by creating its offspring it saturates Space with itself, because each of its harmonics is a new sound, which endlessly repeats the same sonic process, building worlds, each of which develops starting from an interval of the original sound.

In this way the energetic trestle of Life is built!

At this point it becomes clear that the creating Entity cannot give life to something different from Itself. It cannot but generate the universe, drawing it from Its own Life. Whatever Being we want to place at the beginning of creation, we must then recognize that That is us.

It is a beautiful and powerful thought, which gives us the impression of being able to penetrate, at least a little, into the sublime theorem which states that:

‘Life is that energy that generates and multiplies itself’

We could say that Sound is constantly launched for the conquest of the Infinite, which it saturates with the luminous traces of the sonic intervals, hierarchically arranged and to which, cyclically, forms will cling.



2. The Field

Although we intend to deal here with Sound and its laws, the true object of this study is Space, as it is, after all, for any study undertaken.

Till just a few years ago, official science considered Space a vacuum and planets and stars as huge conglomerates of a solid, gaseous or other nature, kept together by mechanical laws and separated by such an interstellar vacuum.

Nowadays we are starting to understand that emptiness and Space are not the same. The scientific community effectively admits the existence of something that it does not yet understand and calls it *obscure energy*, which is present everywhere in the universe.

The Masters of wisdom propose a decisive leap here, stating that

‘Space is alive and is the universal container of Life’.

Tradition, especially from the East, describes infinite Space as a sublime Entity, the Mother, the divine Substance pregnant with Life, which is at the basis of every form. Each form is thus a ‘form of Space’ sharing all its characteristics.

Every form of Space, from the most refined to the crudest one, is alive, infinite, immortal and equipped with consciousness, be it aware of this or not.

When this concept is assimilated, it completely changes our vision of the universe and our way of living in it.

‘If we want to explore the infinity called Space, we cannot neglect the essential fact that we

are part of it, live in it and somehow occupy a center in it.

From this point of view the scholar and the field of research are not separate or distinct and the field has no limits.

Space, when explored without preconceptions about its intrinsic qualities, reveals properties correctly to intuition, even if appearances sometimes unfortunately contradict such impressions.

Thus we must distinguish, with acumen and courage, between 'appearance and 'reality'; and if many things, huge or tiny, demonstrate to be only apparent, they will have to be abandoned for the others, hidden or invisible, that, on the contrary, reveal themselves as real.

So, slowly, some ideas emerge, unusual at first, yet soon grouping and connecting together to compose systems, support each other and confirm the validity of a whole'.



3. The Interval or Ray

Let us look again now at the nature of Sound. Despite being unitary, it is actually made of the infinity of its intervals, or harmonic relations. Each Sound is thus a real sonic universe. The original Sound, present in every sonic relation, always remains inaudible, because its harmonics vibrate and blend with it.

*'In music we call **Interval** the relative difference in frequency between two sounds, and in acoustics it is expressed by the relation between their frequencies or wave lengths.*

*Thus Interval means, broadly speaking, **Relation or Rapport**. Yet it is not only the sum of two sounds, but their synthesis. It is a new sound which is impossible to reproduce without the help of two distinct notes, instrumental or vocal.*

It is a being in itself, equipped with its own psychic qualities, produced by the resounding (simultaneous or successive) of the two components. The rapport, the relation, in Harmonics is thus clearly recognized as an entity manifesting to the hearing and the psyche with its own and distinct characteristics.

The Interval is the intermediary between two sounds, and Harmonics studies it under this aspect, which is numeric, knowable and exact.

Yet the idea of the Interval derived from music can – and must – be extended to its furthest consequences, thus becoming applicable to all fields of human knowledge and perception. All that is relation can be brought back to a certain interval, even the logical oppositions, complementary principles and energetic transformations.

*Interval means **Consciousness**. In the infinite and living Space all the elementary charges of Fire (the Points) are in reciprocal relation with all the other. This infinite field of relationship is the universal consciousness, different from Point to Point and never completely absent.*

*The Interval has no thickness; it lacks dimensions yet is not aimless. Thus it is a transcendent path running between the opposites. It is properly a **Ray**.*

The Interval is the base of that world which is called subtle as it has no dimensions, and which is purely qualitative since it has no quantity. This world, being by its nature the seat of relations and consciousness, is also recognizable as intermediary between Spirit and

Substance.

If we accept these definitions and their rigorously logical foundation, many cloudy concepts in our mind may become clearer. Beyond that, we can also learn that it is possible to move in a world which is usually inaccessible, though attractive for its superiority.

By penetrating the idea of the Interval it is possible to go up from the realm of quantitative exchanges to that of qualitative relations, wherein to learn and know the laws and perceive the presences that, because of their universality, can be legitimately called divine.

Through intervals, then, we learn relations, qualities and consciousnesses. What appears isolated, separate and distinct in the physical world, in the sphere of the intervals reveals its correlations, often not expected, with other entities, which demonstrates its real belonging to a group.

The idea of a group is typical of the world of qualities and relations, as it is the authentic foundation or the center of all exchanges. In such a sphere the group replaces the individual, which is the pivot of the physical world.

The world of intervals is a dual field, as each interval, despite being a unitary and collective value, is still necessarily originated by two terms of which it is, under every aspect, the relation.

In other words, there is a constituent bipolarity in the idea of the interval, because the two creating elements can be imagined as energetic entities of opposite polarity forming together a magnetic field of force. In this field we can distinguish flow lines, just like those studied in physics, along which the material particles that make the structure or the connective tissues of the form arrange themselves.

What we mean by this is that the 'subtlety' of the interval generates an ordered field of force, different and characteristic for each of them, which in turn is at the origin of the arrangement of the material forms, be they natural, or historical events, or human behaviors.

This explains the inextricable presence of qualities in all the quantitative compositions of the physical world. It also puts such qualities at their proper level, higher and conditioning, rather than subordinate and passive, as they are generally considered.

Where does this middle world of the Intervals lead?

If it is the seat of every relation, with substance on one side of it, it must be possible – as has already been indicated – to touch the other shore, viz. spirit, that world which many human documents refer to as 'of Fire'.

Here is not the place to discuss this, even briefly. We only need a few hints to direct the mind to that goal.

Just as the birth of a relation between two entities (two sounds) reveals a superior sphere, so there is a nucleus of Fire at the most secret center of the interval, a charge of vital energy. This energy, supreme and creating, is unitary, real, everlasting, unlimited and inextinguishable. Every interval expresses or highlights certain qualities of it, yet it dwells there in its entirety. The world of Fire is unitary and transcends time and distances. Fire is only one and is at the origin of every thing and process.

During the presentation of these considerations, we went from physical to psychic laws; now let us glance at spiritual realities.

Yet the journey is actually the reverse. From a Fiery stimulus two entities originate describing it completely with their reciprocal relation (interval); from this the external form perceived by senses then precipitates into Space and Cycle. This is always the direction followed in creation, whilst the motion that leads from the form to the meaning, and thus to the Value, develops in the opposite way, through senses and intelligent understanding.

It is, after all, the two-fold and simultaneous act of 'writing' and 'reading'.

*Whoever deals with Harmonics is thus invited to recognize that the **Interval** pivots on a central unitary Fire, of which it is the first partial message, and that later manifests itself, limited with numbers and forms, in the kingdom of quantities and appearances'.*



4. The Model

The harmonics of Sound are infinite, just as Numbers are infinite. Yet they can all be traced back to the first seven. In fact, after the seventh interval nothing really new is added to the sonic structure.

Thus the septenary appears as a Model emerging from the original creative Plan. It is certainly well established in human consciousness. According to the Bible, God created the world in seven days; tradition tells us that the main receptive centers of the energies of Life are seven, whose presence distinguishes an entity that is autonomous from one that is not. Furthermore, there are seven days in a week, seven fundamental colors, seven musical notes....

If this be so, the septenary model might represent not only a means to learn to 'read' the signs of Heaven, but also a foundation to learn the art of 'writing'.

Thus the study of the law of Sound can be not only a support for daring flights of thought, but also a practical indication to make our lives and works celestial.

After all, the human being, the macrocosm of its microcosm, is entrusted with the task of 'bringing Heaven to earth and earth to Heaven', thus producing Beauty.

We can say that Beauty and Harmony are synonyms. As a consequence, we can say that they are not just debatable and subjective, but immediately recognizable, measurable and exact being based on precise harmonic relations.

The understanding of Harmonics and its application to life allows our consciousness to go from the sphere of quantity to that of quality, that is to the world of relations, where '*we measure by communicating and we communicate by measuring*'.



5. The offspring of Sound: the seven Intervals

The world of intervals is clear and simple, with three of them dominating and supreme. The other four, of lesser power, assist these. All the others gradually get lost in the blur as far as the faculty of human perception is concerned, yet without losing their individuality.

The first three have always been recognized by all peoples throughout history. They are exact, incontrovertible, primordial and universal. They completely express the Trinity of Being, the three Persons of the unitary divinity.

In terms of the contemporary musicology, they are the Unison, the Octave and the Fifth.

The lesser four are the Fourth, the Third (major and minor), the Sixth (major and minor) and the Tone (major and minor).

The analogy with the Teaching of the Tibetan Master is immediate; he says that Life informs of Itself the universe through seven creating Powers, the seven Rays. Three of them, the greater ones, are called Rays of Aspect, while the lesser four are identified as Rays of Attribute. Below are their characteristics:

5.1 The Unison

The Unison is the first interval of Sound which, as soon as emitted, repeats itself and vibrates with itself. Strictly speaking, this cannot be defined as a proper interval, because it doesn't have any duality; yet it is the true generator of all the other intervals.

In actual fact, at the beginning nothing is outside It and, in order to develop the creation and the world of relations, It can only face Itself.

Through this powerful gesture of affirmation It completely commits to creation, allowing itself to be infinitely limited by forms.

If we give the numerical value of 1 to the original sound, its first interval, the Unison, is thus the **1/1**.

There is a substantial difference between 1 and 1/1, even if their numerical value is quantitatively identical. The former represents the Whole perfect in itself, the world of Being, whilst the latter generates the Becoming.

The Unison is thus the prime cause; the manifest origin.



'It is the first impulse, yet it restrains and stops everything that opposes it. It is the basis of every motion and what stops the motion. It is the sign of correct orientation and of the path running between opposites. It is the ray of piercing light. It is a sword that divides, cuts and restores simplicity to life. It is a stimulus, a call and a warning. Its qualities are assertion, command and power. It is the Father; the Right; the Heaven. It is the Center.

*It is **Will**, thus aiming at a purpose with implacable decision. Its Purpose is the progressive and total order, the hierarchy of the better, beautiful and good.*

*It is the **first Ray**. Its form is the Point. The supposed color is ruby red.*

As it is simple, it is inflexible, unadorned and bare. Yet its light shines even more, as nothing hides it'.



5.2 The Octave

The second interval of the Sound is the Octave. In music it is so called because it falls on the eighth note that we find starting from the tonic.

If the initial sound is a *do*, after eight notes we find a *do* again, but of different pitch. Identifying the first Sound with the number 1, the interval of octave is **1/2** or **2/1**, depending respectively on the length of the string (or pipe) of the instrument that emits it, or the vibratory

frequency.

Frequencies and lengths are the reciprocal of each other.

Indeed, in order to go from a Sound to its octave it is sufficient to double the frequency or to halve the length of the string with which the sound is produced.

The Number Two is thus the power that rules the interval of the Octave indicating its order of appearance and its frequency.

This physical law is astonishing, for both its simplicity and meaning. It is the experimental validation of the indissoluble union between what is measurable and tangible (number, frequency) and what is psychical, intangible; between the world of science and that of psyche; between the field of the builder and that of the artist.



'Also in this interval the Sound repeats itself, but at the critical level where, going up or down, is going to penetrate into a different sphere. The two sounds that compose it are like the two Pillars of Hercules put as a symbol of a universal boundary, not impassable and clearly evident. On this side there is a certain world, on the other another world dominated by the same laws yet different as superior or inferior.'

In Hans Kayser's Harmonics the various octaves follow one another without relevant variations in their content; the octave included between a 'do' and the following one is exactly and completely identical to any other.

Here, on the contrary, we presume that the passage from one to another octave marks a deep difference in substance, if not in essence. Octaves so intended, then, are not a series of overlapping identical circles, but consecutive coils of an increasing and decreasing spiral; this is an unmistakable symbol of a different degree of freedom, of greater or lesser light, although this degree is relative and consequently valid only inside the spiral or the system itself.

Thus the octave is, in this sense, an interval-limit; it is a symbol suitable to define a field, a sphere, a world, a system. The idea of 'all the octaves' excellently expresses the concept of universal Space, the cosmic container of any flame, level, substance and of all forms.

The Octave as recipient and framework of all the countless intervals is thus the first appearance of bipolarity, of a transcendent dualism. It puts two terms to define its own system, two poles that condition and determine it.

The Octave is the two and it is the goal. It is the receptive and the Mother. It is the infinite and transcendent Space. It is the womb where forms grow, which it nourishes and protects. It is perfect passivity, and for this reason it includes and contains. It intervenes only to enhance or diminish, yet not judging or innovating.

*The Octave is the foundation of creation and embraces it in every part, and justifies all of them. It is the 'field' of evolution and order. It is the light spread on everything and everywhere. It holds in itself infinite complexities yet secretly simplifies them. **It is Love and Wisdom.***

Its qualities are obedience and understanding. Its energy is all-pervading and nourishing. It is response, and wraps, circles and includes. It is a Magnet that coordinates, arranges, places and supports.

*Its symbolic force is the circle or the sphere. It is the **second Ray**.*

We can hypothesize that its color is azure, from pale to dark blue of the deep night.

As it is the mother of all forms, it has no form indeed, just like the Father, the Unison; circle and point are not true forms; they really coincide and each is also the other'.



5.3 The Fifth

We come now to the third interval of Sound. In music it is called Fifth because, dividing the string or the pipe of the instrument by three, we find the fifth note of any scale after the tonic. Since the first Sound is called 'do' its third interval is '**do-sol**'.

This interval inserts a new Sound in the ordered world of the Octave. It follows the power of the number Three and it can be represented as $\frac{1}{3}$ if we consider it from the point of view of lengths, or $\frac{3}{1}$ if we refer to frequencies.

It is interesting to note that if we proceed by intervals of a Fifth, we discover all the other notes. This means that once the Three is reached, the fundamental stage of creation is accomplished.



*'This third interval has in itself both the characteristics of the first two, despite being different. Of the Unison it repeats the creative activity, of the Octave the generating and comprehensive fertility. It is intelligent activity and **Active Intelligence**.*

The Fifth is the innovator par excellence. Where it appears and acts, it never leaves things as they were; its passage is always marked by its actions.

From the original and fundamental vibration, as it has already been said, the Octave is born first. It defines the field yet without introducing new things in it; everything is still primordial. But the Fifth is the first fruit, the first 'form' (in a transcendent sense) and the first child. It is astonishing to see this undreamed-of bud, bearer of great processes, presenting itself as a different reality in a prepared field (the Octave), which now reveals itself as its true field of action and creation. The Octave is the prearranged scene; the Fifth is the master, the maker and the actor of the drama.

The rational mind cannot understand this surprising appearance, but must accept it as an unquestionable reality and learn to understand its processes, function and purpose.

The Fifth is the Three, and all that is three-fold is perfect in its completeness.

It is the builder of all the other intervals, which it gives quality and form to; not Life, which they draw only from the Unison (the Father) and the Octave (the Mother).

The Three/Fifth is what revolutionizes with order, undoing and recomposing, unceasingly proposing new topics without ever repeating itself. It is what glorifies the Father and exalts the Mother. It is the Demiurge and the great Architect of the Universe.

The Fifth is therefore the builder of creation, which it populates with countless values, different yet siblings of each other. It is the lord of infinite peace that continuously unsettles any stasis or stagnation. It is perennial youth; the great inquisitor; it continuously seeks and finds, finds and seeks. Being always busy discovering new horizons and knowing other truths,

it is the impulse itself of formal evolution and spiritual progress. It produces what is complex, yet the re-conquered and understood simplicity is its purpose. It is the question, the great Inquirer and the (transcendent) Weaver.

Whilst the Octave is a closed interval (as it encloses yet without limiting), the Fifth is the open interval par excellence, since it discloses all the mysteries and overcomes all the gates. Thus it is the great agent of liberation, achieved through active and tireless, combative and daring commitment.

*Its symbol is the diameter that joins center and periphery. It is the **Third Ray**. We can suppose that its color is yellow which irradiates, tending to white and dazzling’.*



5.4 The Fourth

The unexpected appearance of the Fifth in the field of the Octave coincides with another innovation: the Interval of Fourth, which is the accomplishment of the Fifth.

The Fourth interval **1/4** or **4/1** arises together with the Fifth to smooth out the energetic unbalance caused by it. It indeed leads back to the Octave.

If the interval of Fifth sounds like *do – sol*, the interval of Fourth is *sol – do*’. But if we start from *do*, as we did with the other intervals, we will find that it is connected to the fourth note: *fa*.



‘This Interval is the first of the lesser ones, and it is the central element of the whole of the fundamentals seven.

*It has, therefore, the great and two-fold function of coordinating the inferior and balancing the whole, by harmonizing it. It is the great mirroring level, where the lights of the superior triangle (reality) reflect, upside down, in the inferior: illusory, dual, precarious and instable. This task, if well understood, gives a clear idea of its huge importance and reveals its unusual and elusive characteristic; precisely because of its position of pivot of the whole system, this interval is often hidden, neglected and unperceived. It is the true Magister Musicae, the **Fourth Ray** and has the task of **harmonizing through conflict**.*

It is the magic mirror, yet is not inactive; it works without taking prominence; it fights and corrects, yet escaping; it is elusive. It knows reality and models lower things on it; when its work is done it disappears in the glory of the superior three.

While the Fifth interrogates and investigates, the fourth responds and concludes, resolves, levels and composes in an ordered system.

It is the level of intuition, the proper world of ideas, still unitary but on the verge of precipitating into duality and multiplicity.

All that works for the positive and dynamic balance has something to do with this interval which, as a great orchestra conductor, can go unnoticed despite being the true center of musical execution.

The interval of Fourth works as a crucible for compensation and has the effect of exciting in the inferior a status of resonance with the superior.

The result is, broadly speaking, that its quality is a producer of beauty; it mirrors in itself, as

the first of the lesser intervals, something of the creative power of the first interval, the Unison. It is about a reflected or second creativity, and it is thus typical of the artist in general, viz. of the man who carries out the hard work of reducing the chaos into such a fairly regular status in order to reflect quite well the celestial arrangement.

Harmony, beauty and art are the results of its interval. Looking carefully, it is a proper capacity for transmutation. The fourth Ray does nothing but continuously try to realize the model, the original and extremely pure Idea, and for this purpose it uses any operative technique. It acts in nature as a whole, but especially through man.

Indeed, the human being (the fourth kingdom of nature) embodies the interval of a Fourth because of its position in the creation (animal + god); its main work being to actively assist with loving intelligence the execution of the divine challenge.

The divine models (Ideas) are cognizable to the human kingdom which gradually learns to arrange things in order to express them completely. 'It reads' the virtues and purposes of things above and 'writes' them in the manifest world with all sorts of signs.

The Fourth is thus an interval of activity and dynamic balance; it is a gorge where necessarily all the energies transit from above to sprinkle the lower regions, and as well those that from the bottom go up, evaporating, and back to the unitary Source. It ensures that at the end everything is arranged according to number and co-measurement; the synthesis is composed from the whole of the parts; the primordial Sound translates itself into a concert.

These great functions are achieved not thanks to isolated activities, but in collaboration with all the other intervals, viz. with the other qualities of the primary Energy. The Fourth interval, even if central, gets lost in the others, and this shows the reason of its being so elusive. It is the lord of Ideas; translates the One into the many, and extracts the original unit from the multiple.

We can suppose that its color is indigo; this light, which is one of the seven of the iris, is hardly perceivable in the glory of the rainbow. In fact, painters usually do not consider it and do not know if it is a result of blue and red or of a combination of red and purple. This issue matches quite well the nature of this interval.

Finally, we notice that in its numeric expression, which is connected to the four, an operation of the octave is implicit ($2 \times 2 = 4$), which reveals the deep relation between the Fourth and the Great Mother, Love, Space, comprehension and the universal magnetic bipolarity'.



5.5 The Third (major and minor)

The fifth interval in music is called the Third because, by dividing the string into five we find the third note after the tonic.

At this point, however, we encounter a fork. Indeed, counting three notes and assuming that the tonic is a *do*, we find two different sounds: the **third major** (*do-mi*) and the **third minor** (*do-mib*).

For the first time we notice that this interval is not acoustically 'exact'. It appears not as a precise vibration, but as a whole. Although we indicate it as **1/5** or **5/1**, because it is ruled by the power of the Five, the interval of Third corresponds to a 'sphere of action', which on the string occupies a space of several millimeters on the right and left of the two tonal values that define the positions of the major and minor Third.

This phenomenon has great importance; so far the intervals (the Unison, the Octave, the Fifth, and therefore also the Fourth which is its complementary) expressed a relevant exactness, not to say absolute precision. And even conceptually, we cannot conceive an approximate Octave or a Unison less than perfect. Yet on the contrary, the Third admits and perhaps it imposes a different situation: imprecision, which is here the accepted norm. In the kingdom of the three lesser intervals (these considerations also refer to the Sixth and the Tone), precision and mathematical exactness are not respected any longer, but a status of ambiguity creeps in. This explains many things, but most of all it reveals a different requirement, the need and function of **tolerance**. Harmonics is an exact science, to the point that it identifies where exactness is necessary and compromise is dutiful.

The three greater intervals (and the Fourth with them) don't allow ambiguity; everything is clear-cut, sharp and unmistakable in the kingdom of their primary principles. Here tolerance and compromise are vices, useless and intolerable mistakes. But in the field of the three lesser intervals ambiguity not only is accepted, but it is indeed an unavoidable requirement. This does not mean giving up the search for perfection in the relation, but using enlightened compromise as an element of balance and adaptation.



'The implicit scission in the interval of Third has uncountable repercussions and by itself is enough to explain the causes of infinite phenomena in the manifest world and that of psyche. In effect, it concerns a proper dualism, expressed and not latent as highlighted in the octave itself, in the fifth and in the fourth. Here two different modes of manifestation of Being appear; the intrinsic poles of the octave here overstep, so to speak, into the sphere of the explicit. From now on, in the sonorous development, everything will be double and many times double, with the outcome of inevitable double relations and complexities. Yet here at the level of the third, the situation although complicated is still clear, and it is possible to read in it the causes of the subsequent general duplicity, as well as the way to transcend it.

Fork, ramification, scission, distinction, dualism are all terms we use to try and describe the appearance of this element. The Third works dialectically; it opposes, analyzes, discriminates, sieves, discerns, divides and dialogues. We can see in it, deformed, the cause itself of all intervals, not in their essence (which is unitary and synthetic) but in their appearance, which is of two sounds or generally involves a basic dualism. Even better we can say that the Third is the mother of form, since it introduces the necessary dualism for its appearance and permanence.

All that has a form can be therefore led back to this peculiar double interval; even a thought, since specific and consequently formal, has its own appearance and falls under its empire or its law.

Thought has indeed a two-fold nature; it can be abstract or concrete, viz. universal and unitary, or dualistic. The latter aspect is the result of intellect, reason and common sense and is by far the most common mental activity for modern humans. Its characteristic is in fact to distinguish between true and false, right and wrong and all sorts of oppositions; it analyzes, judges, weighs, refutes, supports; it continuously poses problems without ever solving any. It is incapable of synthesis; it is partisan or agnostic; it is the forge of doubt, hesitation, perplexity. It is the father of concrete science, the glory of modern humankind, yet also partly the cause of its moral misery.

The distinction that is produced at this level, then reverberated in all the other subsequent manifestations, has another great effect: the separation of creation in two distinct and

complementary spheres which can be called, in musical terms, the major world (male, positive, active, creative) and the minor one (female, negative, receptive, nutritive). Here indeed a bi-sexuality originates, not existing beforehand, with its reciprocal game of attraction and repulsion.

This reality and its effects affect all the kingdoms of nature (the mineral as well; in the atom we can find the game of opposites between nucleus and electron) and thus all that is manifested and sensible.

It suffices to think that everything is ascribable to an action of the Third and that, despite being inevitable in the sonorous development and thus in creation, it is only the tangible expression of the inner unity, which remains unmanifest, yet present and real.

The Third, with its vibration, veils Reality, covering it with form. Thus Ideas, once concretely thought, acquire a mental aspect which is perceivable by many, yet their light dims. They descend from the world of absolute values into the sphere of meaning which, being dualistic, is relative.

On closer inspection, the Third, which is the manifesting, formal, dualistic interval par excellence precisely for its nature, is destined to remain unknown or obscure. Indeed, this fifth principle never manifests itself; its appearances take place in the concrete world, being positive or negative and greater or lesser, but the Third, their source, is unknown. This is neither the minor nor the major Third, but the cause of both. We shall talk about one or the other aspect, yet keeping in mind that it is not really only one or the other, but the synthesis of both.

*The interval of Third is the fifth principle, the **fifth Ray**. It is the **Master of concrete Science**, of reasoning and logic.*

*It is the Master of all the manifest intervals; It is the **Immanent**. The Unison indeed is and remains unexpressed and, one with the Octave and the Fifth, is the **Transcendent**.*

It is supposed that the color of the third is orange, as a fusion of the two primary colors red and yellow. We could not propose a color for the third major and minor as distinct entities. Orange could therefore be also the light of the Third in itself, that unknown interval that is expressed in two different ways'.



5.6 The Sixth (major and minor)

In the same way as the complement of the Fifth is the Fourth, the major and minor Third have respectively, as their complement, the minor and major Sixth.

Therefore we notice that the even intervals met so far always tend to lead back to the completeness and perfection of the Octave, whilst the odd ones are carriers of new impulses which somehow, while creating opportunities, unsettle the field, rippling and shaking the spatial waters.

In general we can say that, in the succession of higher harmonics, the intervals corresponding to an even number repeat a sound already previously heard an Octave below. For example the sixth harmonic is a *sol''*, which is the higher octave of the third harmonic *sol'*.

It is appropriate to observe that, while the Fourth is one of the higher harmonics and has its place over the Fifth, the same cannot be said about the Sixths.

The sixth interval, or sixth harmonic, appears at the value of **1/6** or **6/1** (*sol''*) which makes, together with the previous 1/5 (*mi''*), a minor third interval and not the major sixth. Even if

we considered the fifth interval as two-fold, that is not counting its place in the sonorous development as follows,

	1/1		1/2		1/3		1/4		1/5		1/6	
DO		DO		DO'		SOL'		DO''		MI''		SOL''
	unison		octave		fifth		fourth		major third		minor third	
										THIRDS		
	1		2		3		4			5		

the sixth value would be the ekmelic one of $1/7$ *Sib''*, which with the previous one also makes a minor third.

As we can see, the Sixths immediately appear as an intromission, yet we cannot deny their presence, since they are what remains of the octave when a minor or major third is subtracted, and at the listening their psychic value is autonomous from that of the thirds.

The matter is delicate and seems to confirm the truth of that statement according to which 'the sixth principle does not exist', and has an illusory appearance.



'With the Sixth we have the impression of penetrating into a world that is fantastic rather than real, yet convincing and present. It is like a spell that tests the capacity of reasoning, of which it distorts the laws.

This sixth level, indeed, has the typical effect of inversion. The reversed correspondence between the Third minor and the Sixth major reveals it, and this is a characteristic which has in itself the germs of disorientation.

It is about another duplicity, although different from that, met for the first time, of the fifth principle which was called fork, and that already illusorily separates what is and remains indeed unitary. Here the same duplicity is, so to speak, exacerbated by the reversal of the couple of opposites, so that it is easy to lose the path and to remain stuck.

This is the domain of illusion; rather than by Ideas it is populated by idealisms, which drag us far away from the sunny fields of truth, disorienting and keeping us as prisoners. Here zealotry can arise; this is the land of partisans, sects, sweet deceptions, desires and disillusion.

There is only one way to get out of this swamp that entices and wastes, that is to keep to the middle way, where there are no reversals at all and the field of opposite forces is in balance. Only on this narrow path we can avoid the deception of the Sixths, the true sirens, Scylla and Charybdis.

Yet the sixth principle has its own function in reality. Its nature itself is preliminary to higher conquests. The desire and the feeling (perhaps clearly expressed by both Sixths) are authentic vibrations, once the field is brightened up and the fog cleared.

They are the natural complements of intellect, the right humidity that tempers the drought of reason. They are miraculous energies that stretch towards the Ideas of the fourth level, complementary and authentic, viz. real and ordered. These 'cravings' are the reawakening of the Will on the path of return.

In the action itself of divine creation a glaring desire is implicit; what is undeniable and perhaps explains the real nature of the sixth principle. But we need to clear it up from contradictions, anxieties, upsets and false lights that immature minds see, disoriented by reversal and dualism. In other words, they are false perspectives that form like mirages, only because and only when the real nature of the sixth principle is unknown.

We can repeat here what we said about the Thirds; the true interval of the Sixth is unknown. This adds value to the previous statements; the seat of illusion is not illusory.

*The Sixth is the search for Ideas, it is the **Sixth Ray**, pure **Idealism**, **Devotion** and **Value**. It is the Fighter, the Knight in shining armor. It is the Battle itself and the Banner. It is Communion.*

Its color is presumably green, a result of yellow (Fifth) and its complementary blue (Octave).



5.7 The Seventh (the Tone)

When the miracle happens and the Fifth is born, two more intervals are born as well, we might say simultaneously (yet time and distance do not really exist in Space); they are the Fourth, already mentioned, and the Tone.

The Tone is obtained by bringing back in the same octave (with an operation of octave) an ascending Fifth (*do–sol*) and a descending one (*do–fa*). The interval between the two sounds obtained (*fa* and *sol*) is indeed the Tone.

This is the ‘brick’ of creation, the canon of co-measurement of the senary, the guarantor of harmony among intervals.

We must distinguish between the seventh interval as a harmonic sound, **1/7 or 7/1** and the tone.

The tone, in fact, does not depend on the 7 as a numerical expression, but as the seventh of its siblings (unison, octave, fifth, etc.). This consideration opens new perspectives on the way to intend qualities and functions of number seven.

The seven is the quantified part of the first ‘ekmelic’ value, viz. extraneous to the system.

If we vibrate a string divided into 1/7, 2/7, 3/7, etc. of the total, we hear it in sharp dissonance with all the tonal values of the senary partitions (viz. those expressed among the numbers 1 and 6 included, their multiples and submultiples).

Thus the seventh interval blends in itself the two-fold aspect of being a custodian of the harmonic order and an element extraneous to the system which itself has helped to build.



‘The seventh is rightly considered as a stranger; not an enemy, but a citizen of another order, member of another system which, despite following identical rules, remains by itself and does not blend in with others.

Thus it is the symbol and memory of the fact that, when an ordered world and perfect in itself is given and confirmed, there are always other worlds, just as legitimate and regular, which must be kept into consideration and with which it will be necessary to agree in a superior and more inclusive harmony.

The presence of the seven is a stern warning; there is no limit to the process of harmonization, there is no respite to research. Perfection is not the standstill of hibernation. All this is implicit in the symbolism of number seven. The seven stands, and keeps restlessness and eagerness for perfection alive. Consequently many religions and schools of thought consider it as evil and good at the same time; it is like an inspector that checks not on the achieved peace, but on the

capacity to overcome it in view of new openings.

It is necessary to distinguish between this bewildering yet inevitable presence and the qualities and functions of the Tone.

The seventh interval is a 'measure' of the system gravitating around the senary which is ruled and populated by it. The Tone is in fact the degree that divides the scale and all the musical scales. Therefore it is a regulator, a master of ceremonies, a master of rites; this is its being the seventh. It belongs to the system and it is not a stranger to it at all.

It appears, then, that we must distinguish between the seven as an 'ekmelic' value and the seventh of the intervals, which is a canon of co-measurement of the senary. If anything, we can say that the Tone is the guarantor of the harmony between major and minor intervals, which is quite different from being a stranger. It is the necessary tester and in this role it has, below, functions similar to those of the Unison, the supreme creator. And since its action is carried out among the intervals, it must be two-fold, viz. it must have also the characteristics of the minors. In fact, the Tone can be distinguished into major and minor and here we have again the essence and need for dualism, since we could not commensurate what is dual by remaining unitary and thus purely subjective.

The Seventh Master is, in other words, a Magician, who purposely manifests its dualism and controls it, without being its prisoner.

It also carries out another extremely important function, though, which connects it to what we said above about the seven; since it is the extreme tip, so to speak, of the senary, the Tone is both a Door and a Guardian, watching over the regularity of order, excluding strangers and unworthy; it is prompt to accept who is entitled, as being fair and perfect, and to inexorably reject who has not what it takes. Finally, this inflexible regulator of rhythms is like a voice which calls and invites who qualifies to participate to the whole; it is the Herald of the Order, or its Messenger.

Its tasks are precise and clear, as all ceremonies and rites should be; its actions have indeed the purpose of excluding irregularities. It is a builder of states of dynamic equilibrium and so must continuously balance minor and major, positive and negative, light and dark, full and empty. Thus it ends up being the Officiant of the eternal marriage between spirit and substance.

If the fifth principle (mind, the Third) is the origin of dualism and thus the creator of form, and the sixth, elusive, is responsible for the inversion, the seventh is what fixes, concretizes, arranges and divides. From its hands a fabric originates, a net that is as intricate as regular and skillfully made. The great Work started by the supreme Master, by Unison, is thus accomplished in its final form. The canvas is finished, the drawing appears.

What the transcendent weaver (the Fifth) thought and wanted finds its manifested accomplishment through the seventh Master.

But this is not a conclusive action; it is the start of a new journey, since the Life imprisoned in this canvas must finally free itself and go back to its original source. From the Tone the first impulses of this ascent depart, and thus the work of the first interval, of which the seventh is the reflection, repeats and restarts again.

*The Tone is thus the **seventh Ray** (which is the closest to the first), the Master of Ceremonies, the Messenger, the Guardian, the Magician, the **Master of rites**, the **Canon**.*

Its color is presumably violet, which closes the rainbow and connects it to the ultraviolet, that

is the zones not yet enlightened nor explored of divine consciousness.'



6. The Community of Sound

The Sound creates in Space a real Community, ruled by a unique law, orderly and supported by a powerful hierarchical arrangement.

The countless sonorous intervals that originate from the Sound are divided into seven great families, each of which is connected to all the others by harmonic bonds. Each part is functional to the whole and is the whole.

Nobody can feel alone in the universe; everyone occupies their own place, established by the level of consciousness. Each consciousness is part of a major one and feeds the minor ones.

In the infinite Space there is no distance and each point can easily communicate with all the others. To address thought to the Sun, to the Luminaries, means to relate with them and take their vibration on.

In this regard, the study of Sound presents a very interesting phenomenon, also considered valid in other fields of science: **Resonance**.

When the strings of a musical instrument are tuned on the same sound, it occurs that while touching one, the others vibrate as well. Yet we can see that it does not take much for losing the resonance.

This brings us back to the need to keep our inner strings well stretched. Every one of us, every form of Space, is a resonator that reproduces cosmic music. Everyone has their own basic note, Sound and Name, recognizable and recognized in every region of the Infinite.



'All is transmitted in Space. There is no knowledge, consciousness or sound which cannot be extracted from the invisible and manifested in a form. What is of Sirius, Jupiter and Venus can be expressed in terrestrial modes. This is the universal Science. The Cosmos knows, and every particle of it reflects all its wisdom.

When such topics are faced, we can feel anguished and overwhelmed by their grandiosity, so that what we devoutly grasp and describe seems like less than a grain of sand.

The infinite cyclical modulations of the countless sources of energy, their power, the activity that they bring into the most concealed spaces, the swift, spontaneous and perfect obedience of their similes and the wonderful and simultaneous intertwining of all vibrations are conceptual figures of such a force to appear unbearable to the heart. Yet the resonant Space contained in the heart is the very place of reception and transmission of all signals. It must be purified and kept in such a state of selective tension in order to react to the farthest messages and recognize their origin.

These are processes of education and discipline easy to understand, through which one day the terrestrial humankind will ascend to the glorious consciousness of Cosmos, distilling knowledge by resonance.

The Cosmic unit appears arranged by degrees, distinguished by the quality of consciousness and able, each of them, to respond to some tones of cosmic vibration and reverberate them within its own hierarchy. From this we can see that the process of resonance is two-fold in its effects. A receiving center accepts a signal coming from outside and sends it back into Space,

amplified by the induced spontaneous concordance; yet it also absorbs part of the energy and distributes it, inside its sphere, to all the constituting individualities for which it is by right responsible, and whose nature is such to correspond to that signal.

Thus, in particular, the terrestrial humankind receives from Space the waves that, by its quality of consciousness, it can 'understand' or, in other words, respond to. And humanity not only re-launches them, but absorbs and spreads them among all the units that constitute it; wherever they raise understanding, the process is repeated in the individual, who seizes the signal, repeats it in the human whole and absorbs it in his/her own parts.

This means correspondence between the individual and the whole, between the parts and the individual, in an ordered and hierarchic way.

A signal of solar provenance, received by humankind, unsettles some men and some organs inside them, physical or not. A signal received by the vegetable kingdom unsettles some of its families and in these some of their parts, and so on. It is an unceasing exchange of energy and intelligence that links every point of Space, depending on consciousness.

The more an organism is complex, the clearer and more numerous are the manifested correspondences that connect by resonance the external space with the space enclosed in it. A vital, noble and complex whole like a human being must thus respond to a huge range of cosmic vibrations, assimilating part of them for the benefit of the inner environment.

According to consciousness, the resonance varies by quality from that of a savage to that of a genius. Furthermore, it varies depending on peoples, places, worlds and Systems.

Thus the primary energy passes on into Space by orders and correspondences, by means of the principle of resonance. The entities that populate the Cosmos are all connected to a unique non-manifested Source, by degrees or orders, in a perfect hierarchic arrangement.

A signal of beauty that vibrates in the heart of a man transforming him from inside arrives filtered by a series of hierarchic correspondences, cooperating from the top to the bottom like radio links. It is a progression that must be respected, both for the descent of the signal and for its opposite motion, ascending or, if we like, invoking.

These concepts lead us to recognize that energy is transmitted through two simultaneous modes; by waves or by quanta. Also the study of Harmonics and of its fundamentals goes through this dualism, which will be resolved in a synthesis.

Each point is in contact with every other in the Infinite, which means continuity. At the same time, Space is coordinated hierarchically, which requires degrees, viz. jumps, or discontinuities.

To accept just one or the other of these two aspects not only limits the field of knowledge, but damages the truth of what we are going to know, by deforming its representation. We can only 'go between the two', viz. synthesize them in a superior understanding that as such cannot be expressed in words'.



7. The Diagram of Sound

The Sound, associated by some traditions with Fire, tends like this to ascend. The series of its physically recordable intervals builds what is called the series of higher harmonics as we have already said. We will repeat the initial values, remembering that each sound corresponds to one and only one of the infinite whole numbers, which qualifies it with its power and at the same

time determines its order of appearance:

DO DO' SOL' DO'' MI'' SOL'' SI b.'' DO'''...

One might wonder, though: 'are there also the lower harmonics?' In other words, could not the Sound simultaneously generate the same intervals in a decreasing order?

Acoustics does not record such a phenomenon, yet this possibility presents itself as logical and it is thus legitimate to keep it in consideration.

The world of lower harmonics would therefore develop as a reflection of the first, precisely symmetrical to that of the higher harmonics, yet lacking of real existence.

This theory allows us to understand that even what is illusory in the universe is no less arranged and that from it we can go back to the reality it reflects.

Starting from this assumption, Kayser set up a system of tonal coordinates that he used to carry out his studies in numerous fields.

The diagram has been called Lambdoma, because its shape recalls the Greek letter Lambda Λ . For our convenience we trace it by placing the higher harmonics horizontally and the lower ones vertically.

If we build it starting from the lengths of the chord we have:

1/1 1/2 1/3
 2/1
 3/1

The complete diagram originates from the twine of the horizontal with the vertical lines, viz. of the higher with the lower harmonics, because the law remains constant, independently from which note or number we start with. Higher harmonics go up in tone, whilst the lower ones go down, but intervals remain constant:

1/1	1/2	1/3	1/4	1/5	1/6	1/7
2/1	2/2	2/3	2/4	2/5	2/6	2/7
3/1	3/2	3/3	3/4	3/5	3/6	3/7
4/1	4/2	4/3	4/4	4/5	4/6	4/7
5/1	5/2	5/3	5/4	5/5	5/6	5/7
6/1	6/2	6/3	6/4	6/5	6/6	6/7
7/1	7/2	7/3	7/4	7/5	7/6	7/7

Here we represented a diagram with a septenary index, but it is obvious that one with a lower or higher index can be used depending on the need of the study.

When we analyze this diagram we need always to keep in mind that each numerical relation corresponds to a Sound and therefore we are facing an extraordinary sonorous table, the peculiar characteristics of which are worthy of observing. We mention some of them below.

First of all we observe that the diagram is divided in two sectors by a diagonal line, or central axis, built by a series of relations of Unison which go, in this instance, from 1/1 to 7/7. In the top part we find higher harmonics, the real world, whilst in the bottom there is the mirrored world, that of lower harmonics.

This duplicity of relations, where one contracts and the other expands, gives the idea of a pulsating heart. It lets us understand that we are not facing an inert table, but a living diagram, where each interval is a consciousness that vibrates in Space and tends to go back to the Source that generated it.

Such considerations show us the central axis as the Middle Way that goes through the couple of opposites and leads to the One.

Every consciousness, at whatever point of the diagram is, in order to start the return journey must therefore find the Way that, once recognized, cannot be lost again. This is the Way of the Being, of the One, and is hidden in every sonorous entity, each of them is the Way.

Indeed, each consciousness, each of us, is the result of a relation between two sonorous entities, at whose center secretly flows that Way which is actually not a path leading from a point to another, but such as to let us be here now.

Furthermore, we notice that some numerical and thus sonorous values are repeated in the Lambdoma. This occurs in two different ways. The first originates from reductions or elevations of octave:

1/1 (unison); $\frac{1}{2}$ (first octave); $\frac{1}{4}$ (second octave)...

These sounds, which preserve the same value but vary in octave, are called 'sounds of equal character'.

The second way refers to those sounds which are repeated unchanged both in octave and character: 1/2, 2/4, 4/8, for example, are all numerical and sonorous relations of the same nature.

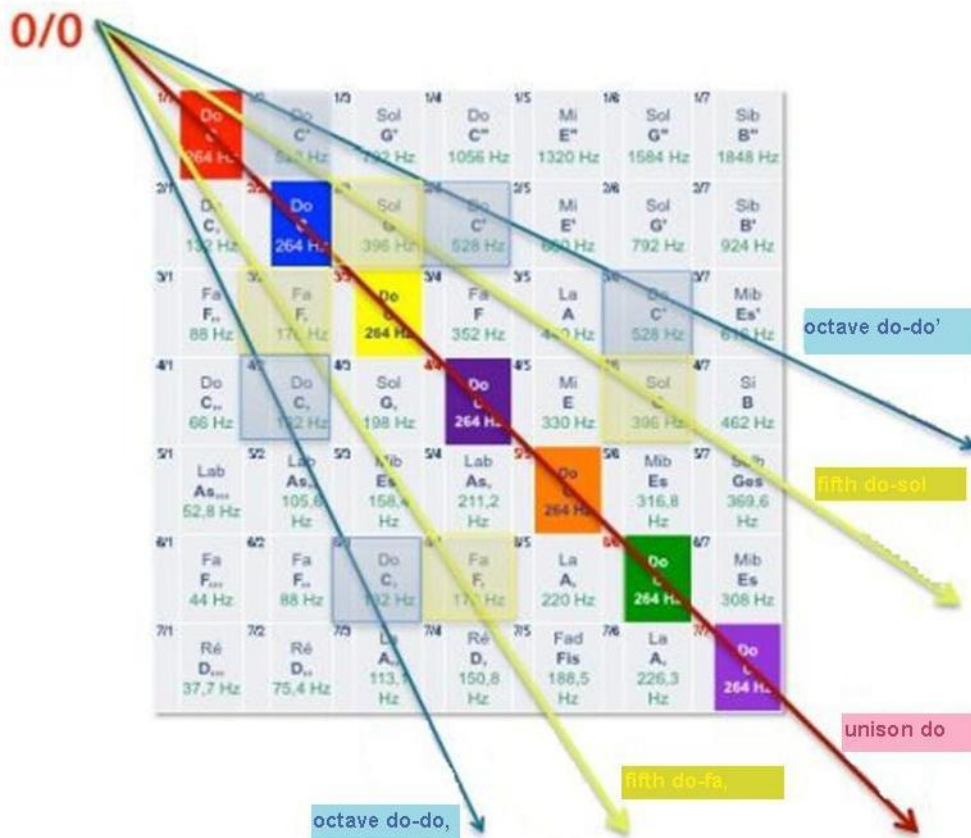
If we connect the identical sounds contained in the diagram we notice that they belong to a same straight line and that all these lines, called 'equitonals', join at a point outside the diagram, which Kayser calls 0/0.

It is astonishing to observe this phenomenon; we cannot but feel surprised at it.

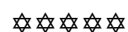
Indeed, if we have associated the first Sound to the Creator, to the immanent Life in any creature, we must think that the study of the Lambdoma also reveals to us the existence of the transcendent Origin, to which every entity is equally directly connected.

Many other considerations can be made by observing the admirable arrangement of this sonorous diagram with the eyes of the heart, and by penetrating ever better the world of Sound through an open mind.

Lambdoma developed in the index 7 with diagonal and equitonals. As an example, for each sound is indicated the frequency but it is necessary to keep into consideration that in harmonics Do (C in the anglo-saxon notation) is a sound of any frequency which, according to the specified relations, begins the diagram.



These few pages have the purpose of showing, in a simple manner, that it is possible, by asking the right questions to Space, to try to spell out the Book of Life and find the path that allows us to orient ourselves in that wonderful energetic and ordered tissue which is beneath the forms. Thus the Sound diagram can be our 'table to draw', the instrument which can make us the Builders of the future.



Note: The parts in italic are extracts of unpublished documents.