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THE CONCURRENCE

This Week's Consideration of a Famous Opinion



¶ To be able to hear the “music of the spheres” is the dream of the aspiring mystic. While many of us may never attain this supreme delight, it is heartening to know that by achieving a harmonic relationship with the Cosmic Consciousness through attunement, we nonetheless receive limitless benefits from this divine harmony. Again, we turn to a passage attributed to Shakespeare.



*How sweet the moonlight sleeps upon this bank!
Here will we sit, and let the sounds of music
Creep in our ears: soft stillness and the night
Become the touches of sweet harmony.
Sit, Jessica. Look how the floor of heaven
Is thick inlaid with patines of bright gold:
There's not the smallest orb which thou behold'st
But in his motion like an angel sings.
Still quiring to the young-eyed cherubins;
Such harmony is in immortal souls;
But whilst this muddy vesture of decay
Doth grossly close it in, we cannot hear it.*

—SHAKESPEARE, 1564-1616

To the Members of the Esoteric Hierarchy, Greetings!

Everyone who has tried humming various notes and emphasizing those which seem to produce an invigorating sensation has become interested in this matter of music and tone effects. I think, therefore, it might be profitable to make some further explanation.

First, let us go back to the old idea of the "music of the spheres." Pythagoras had much to say about vowel sounds, tones, and musical notes, but the mystics came to understand that all sound produced by the human voice was related in some way to the sounds of the universe.

Modern science goes to great lengths to explain how and why it is that the human ear hears only certain octaves of sound. You will remember the chart of vibrations furnished you in one of the early Degrees, called the Cosmic Keyboard. On that chart it was shown that the lowest musical note the average human ear can hear is approximately 16 vibrations per second. Some persons can hear one note lower or 15 vibrations per second. The next note lower very few persons can hear. Above 16 each note is a few vibrations more rapid than the preceding one. When we reach the middle of the musical keyboard, middle C of the piano, we find 256 vibrations per second.

Tuning forks and pitch pipes are generally pitched at 256 vibrations. D, the next full note, is 288 vibrations but the half note between C and D, called C sharp or D flat, is 272 vibrations per second. In other words, the difference in the rate of vibrations between C natural and D natural is 32 vibrations per second. Half of this is 16; so by adding 16 vibrations to the note of C natural, we get a half note, C sharp at 272 vibrations; or by subtracting 16 vibrations from D natural at 288, we get a half tone lower at 272 vibrations. The higher we go in the keyboard, the more rapid are the rates of vibration and the greater is the difference between the notes. For instance, two octaves above middle C, C natural has 1024 vibrations per second while the next natural note D is 1152 vibrations per second. Here we see there is a difference of 128 vibrations between this C and D whereas there were only 32 vibrations difference between C and D in the middle of the keyboard. If we continue up the keyboard, the highest note the average individual can hear with comfort, and distinguish as a tone and not as a screech, is in the 6th octave above middle C where the rates of vibrations for the note of C are 8192 vibrations per second and for the note of F natural 11,028 vibrations per second.



An interesting fact about our musical tones, especially in the Western world (eliminating quarter tones and other unusual tones found in Chinese instruments and other Oriental instruments) is that each C natural at the beginning of each

octave, starting at the lower end of the scale and going up to the upper portion, is a double of the rate of the preceding one. Low C on the musical scale, for instance, is 16 vibrations per second. The next C an octave higher, is 32 vibrations per second. The next C above that is 64 vibrations, the next 128, and the next, which is generally called middle C on the piano keyboard, is 256 vibrations which is double 128 or quadruple 64. By going to the next C above middle C, we find that by doubling the vibrations of middle C, thereby changing 256 into 512, we have the correct pitch of the C of that octave and by doubling this number, we have 1024, the right pitch for the next C, etc. What applies to the note C applies equally to the other notes of each octave, for each is a double of the same note in the preceding octave.

All of this proves that the standard musical notes of the Western world are arranged in mathematical order. This illustrates once again the old mystical statement that "in the beginning God geometrized." This does not mean that all of the laws of the universe are mathematical and materialistic in their basis. Mathematics itself is not a materialistic thing but a divine principle, and we all have a tendency to live and to think and do things in accordance with law and order. There cannot be law and order without a schematic basis of a mathematical or geometric nature. It is interesting that the human ear finds an emotional pleasure when musical notes are mathematically correct. When we recognize a note on a piano as being out of tune, it is because that note has dropped or raised in its rate of vibration until it is not in its proper relationship with the vibrations on either side of it. If we loosen the piano string of middle C or otherwise affect the instrument so that the note produced is 245 vibrations per second or 250 per second instead of the proper 256, the note is flat. Every time we strike it in playing a piece of music, it will produce an unpleasant or jarring emotion in our consciousness.

A note may be one, or possibly two, vibrations out of place without the average ear detecting it, but a well-trained ear will notice if it is two vibrations in error. Many a person's singing voice has a tendency to be a little sharp (vibrations a little higher than proper) or a little flat—meaning that the vibrations of the note produced are just a little below the normal or proper rate. Thus we see that our consciousness has been developed through past periods of time to be conscious of the mathematical law and relationship or ratio of one to another. This should prove that the musical keyboard or scale is not purely a man-made thing, for it is impossible to believe that just because man invented the keyboard with its mathematical rates for each note that God and Nature have changed man's consciousness to adjust itself to this arbitrary scale. Certainly, the first musicians who worked out the musical scale did not read about it in any book or have anyone explain this system to them. They discovered undoubtedly that every note or tone or group of



notes to be pleasing to the consciousness must have a mathematical relationship to another, and that each pitch or tone must have a certain separateness or space between it and another in the rate of vibration.

The old mystics say that man's first revelation about the musical keyboard came from listening to the "music of the spheres." There are certain states of psychic consciousness, when one hears or senses in some way this Cosmic music. The ancients believed that these musical notes or sounds coming from Cosmic space above were produced by the movement of the spheres or planets through space. Perhaps they had noticed that when a stone or other round object was thrown through the air it made a buzzing, humming sound much like that of a musical note. Scientific tests and experiments show that every rapidly moving object going through so-called air and ether has a frictional action. Even paper pin wheels moved rapidly in an air current produce a faint hum which persons can hear. A rapidly moving bullet or cannon ball produces a humming sound. The ancients must have decided that since the planets were spheres moving rapidly through space, they produced notes or humming tones; and that each because of its size and speed, or rate of vibration and movement, produced a different note. The tones thus produced became the foundation of the so-called "music of the spheres."

We know that every musical note not only has a mathematical relationship to all other notes according to its rate of vibration, but also has a relationship which our consciousness detects. When we hear a C and a D played together, they sound discordant because these two notes do not have a mathematical or Cosmic relationship of a harmonious nature. The same is true of E and F, or G and A, or B and C, or D and E. But if C and E are played, we have a combination of sounds that appeals to our consciousness as pleasant. These two are harmonious, or produce a harmony. C and E represent the first and third notes of the octave, so they represent "a third" in musical principles. If C and F are played, it is not so pleasing or harmonious, but if we skip one more note and play C and G together, we again have a harmonious tone. G is the fifth note from C and so we call this interval a "fifth."

C and A are also harmonious, or A and C, and these are six notes apart, but C and B, or B and C, are not harmonious. E and G are harmonious since they represent a third, and F and A are harmonious since they are a third, and D and A are sometimes pleasing as a combination. We can also play a combination of C, E, and G which brings a third and fifth together, or D, F, and A, etc. Further experiments show that when we play C in one octave, another note in one of the other octaves will be harmonious to it or pleasing with it. The more we experiment the more we discover that one note on the piano seems to need another to accompany it to make it sound rounded, full and melodious. Another note played at the same time with it, or perhaps a second and a third, appeals to the consciousness, for they constitute a harmonious chord.



Certain notes on the piano or violin, played as single notes seem to have harmonious companions that respond from other instruments or other things as though at the call of that single note. It is as though each note were like a hungry soul crying out for companionship until a harmonious note agreeing with it is played or sensed. There is a feeling of separateness that must be satisfied. All the fundamental laws of melody and harmony are based upon the playing of notes in a chord so that they produce a harmonious tone, or in playing one note immediately after another so that while the vibrations of the first are still affecting our consciousness, the vibrations of the second seem to harmonize with it. This is what makes a melody, for in any real melody each succeeding note, or combination of notes, must have some relationship to the ones previously played.

When you hum or produce musical tones with your voice, each is a single tone, for the voice cannot sing double notes or harmonious chords. But each single note produced by the voice has its harmonic note somewhere and usually the Cosmic musical notes respond to it. In other words, mystics firmly believe, through long experience and practice, that each time we hum a few melodious notes with the human voice, we attract one or several responsive notes from the Cosmic, from the music of the spheres and that through this we build up a relationship between ourselves and the Cosmic, or create a momentary attunement and harmonious contact with the Cosmic. The effect of this harmonious relationship is to make us feel inwardly and emotionally the high vibrations of the Cosmic notes. These act as a tonic upon our consciousness, which is also felt physically and mentally. This should help you understand why so much has been said in this Degree regarding musical notes and the humming of them in your various exercises.

The same is true in regard to colors. In the first place, colors are related to sounds even as to one another. They are complementary, opposites, or harmonious. Each time we see the color red it calls for companionship just as one musical note calls for the harmonious companionship of another. Red is not satisfied and happy to be alone. It wants the color green, its harmonious companion. If we look at a green light a long time and then at a blank space, we see red, the complementary, harmonious companion of green. If instead we look at red, we will see green later somewhere in our eye consciousness. Nature spots all of her green fields with tones of red in leaves, flowers, and fruit. There is no more harmonious picture and perfect blending of harmonic law than in a green apple tree with bright red apples.

Keep these principles in mind when in your sanctum, for they will help you attune with the Cosmic and will aid you later. Continue the musical exercises.



May Peace Profound abide with each of you.

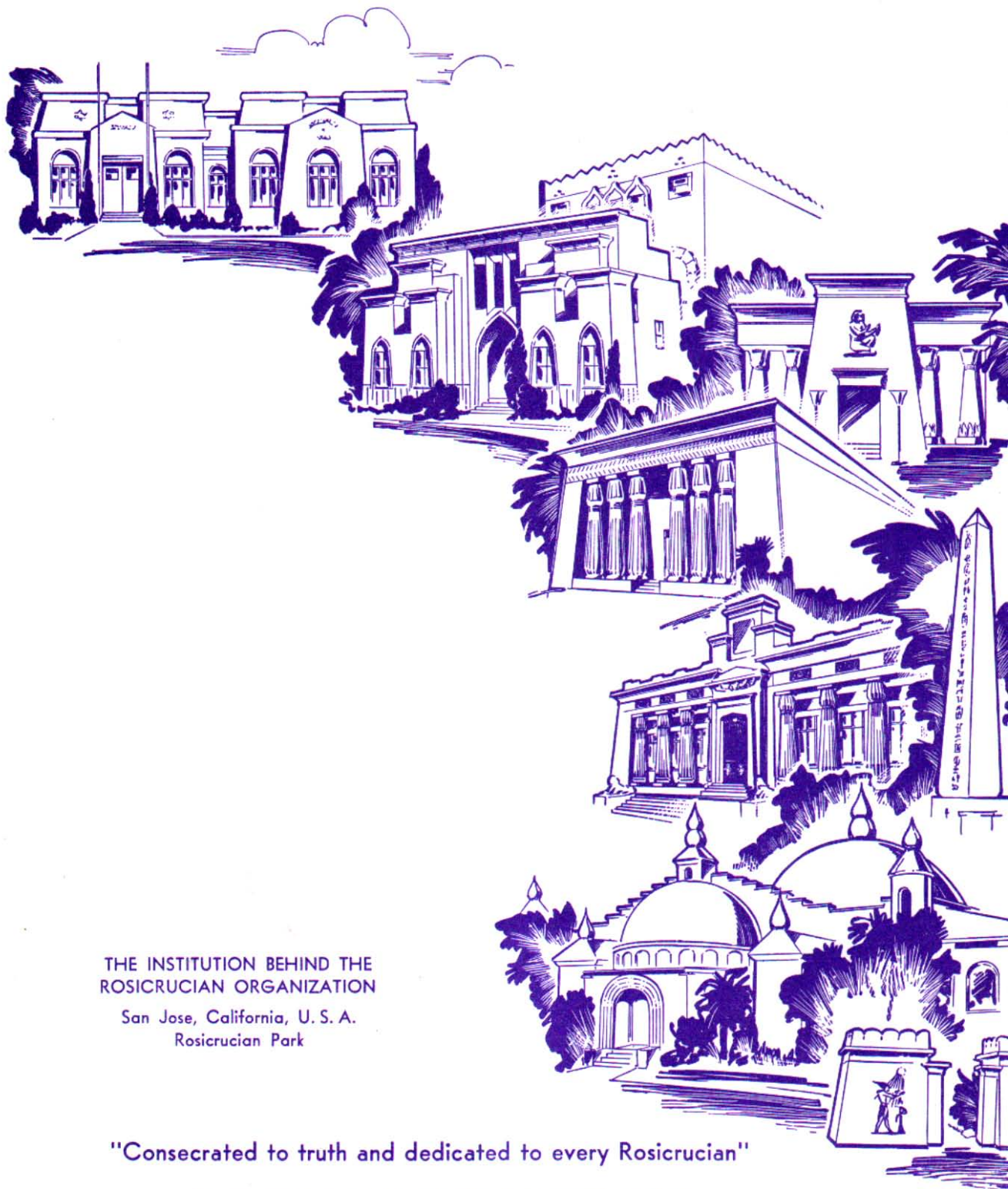
Fraternally, YOUR CLASS MASTER

Summary of This Monograph

Below is a summary of the important principles of this monograph. It contains the essential statements which you should not forget. After you have carefully read the complete monograph, try to recall as many as you can of the important points you read. Then read this summary and see if you have forgotten any. Also refer to this summary during the ensuing week to refresh your memory.



- ¶ Mystics came to understand that all sound produced by the human voice was related to the sounds of the universe, which were called the "music of the spheres."
- ¶ The lowest musical note the average human ear can hear is approximately 16 vibrations per second. The highest note the average ear can hear and distinguish as a tone is in the 6th octave above middle C.
- ¶ Middle C, or the middle of the musical keyboard, is 256 vibrations per second. Tuning forks and pitch pipes are generally pitched accordingly.
- ¶ The higher we go in the musical keyboard, the more rapid are the rates of vibration and the greater is the difference between the notes. The number of vibrations of each is double that of the same note in the preceding octave.
- ¶ The musical keyboard demonstrates the old mystical statement that "in the beginning God geometrized." Every note or group of notes must have a mathematical relationship to another to be pleasing to the consciousness.
- ¶ Just as single notes require the companionship or harmonizing of another note, or combination of notes, so do colors require their complementary colors.



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ROSIKRUCIAN ORGANIZATION

San Jose, California, U. S. A.
Rosicrucian Park

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