Part One

The Search for the Science Behind It All

Unveiling the Secret Science

n *The Secret Doctrine*, Helen P. Blavatsky tells us that the secret laws were passed on orally from teacher to student for thousands of years, and that they were never written down. For centuries, the written divulgence of these secrets had been forbidden out of "necessity" because they could have been wrongly used by the profane and material-minded masses. She added that they would gradually be revealed to true and honest seekers of the New Age and that revelation would come when the time was right. At that time this information would be of use only to the enlightened minds of the day, for no one else would find sense in or use for it.

Certain mystic writers have been entrusted with part of the knowledge, and in the future there will be still others to reveal even more. I believe these ancient secrets are being made known now, in this New Age, or this small portion would not have been revealed to me. Why me? I'm as surprised as anyone. All I know is that I had a deep and honest desire to know and that something has been urging me in this direction all my life.

From the time I was a child I had a great interest in things of a spiritual nature. I thought ancient man must have been very fortunate to have been so close to his beginnings, and so close to nature. The stronghold of opinions had not yet begun to form. Ancient peoples did not have to go far to find forests and other natural scenes of beauty where they could feel the stillness of the environment, hear the song of birds and insects, and feel the strong aura of approaching animals. This was a time before men parroted other men's opinions; when they could learn no other way than by going within and meditating deeply; by joining their Higher Selves to the great consciousness of the Universe about them. I reasoned that in the very beginning there had to be only God, and that in order to create anything it had to come out of Himself. We are all divine substance—intelligent particles in the whole body of our creator.

I used to hear such wonderful lectures in my head that I wished someone would invent a machine that could capture every word that was spoken by that still, small voice. Eventually, I was able to write down some of these thoughts, until I had notebooks filled with them—thoughts that I later found written in other books. Where did these thoughts come from? At the time I believed that they were purely my imagination. But I did tune into something out there, or within, and it told no lies. I came to trust these inner monologues and in time learned to distinguish them from my own thoughts.

As I grew older I often thought I would like to study ancient Hebrew because it was the language from which all biblical translations originated. But I never expected this research to take me into the very heart of it. It is as though my Higher Self had been prompting me to do this since I was a child.

My research covered a vast number of books related to numerology—books that each held a key thought that struck a chord within me. Through meditation, deductive reasoning, and sudden insights, all of these key thoughts, like pieces of a jigsaw puzzle, fit together very neatly.

The secrets themselves have remained hidden by their very obviousness. The science is in the realm of physics, transcendental physics, and entwined with geometry and deep symbolism. Many of its truths are hidden in myths, math, and magic. A few key phrases led me to the unveiling of the secrets themselves, secrets that are described in Chapter 11 in "Prelude to Letters," and Chapter 22, "Prelude to Numbers."

In one source I read that all writers of the mysteries would never reveal these secrets clearly. Rather, they would surround a key idea with related material, which would draw attention away from the germ of the idea. Only the true seeker would understand it.

There were other key ideas that seemed to stand out for me in books I read. It was significant that Hebrew letters were also their numbers and that the two were completely interchangeable; that meanings were hidden in the shapes of the letters; and that these letter symbols were regarded as containers of, and manifestations of, concealed virtues. They represented arcane powers of a set and determinable nature which would reveal themselves to one who meditated on them.

It helps to know that when we meditate on any particular symbol it will reveal itself to us. You see, symbols are the universal language of the soul. This was why Pythagoras had those wishing to enter his school meditate on a given symbol and then share the meanings they derived from that meditation before they were accepted as students.

Then there was the fact that Pythagoras taught that a number is a living qualitative reality. It is not just representative of an amount, but a rate of vibration.

The Latin adage, "Omnia in numeris sita sunt" means: "Everything lies veiled in numbers." And Helen Blavatsky said, "number underlies form, and number guides sound. It lies at the root of the manifested Universe."

There was also the discovery by the turn-of-the-century piano-music composition teacher, Mrs. L. Dow Balliet, that the letter name of each note had the same vibration as its musical tone. It stood to reason that the sound of every letter in the English alphabet must therefore correspond to the vibration of its numbered place therein.

My subconscious was working on all this information, and I didn't really know that I understood exactly what it was all about until someone asked me why our letters are numbered as they are, and how we can know that their meanings are true. As I explained this, I heard myself giving the answer I had been looking for, and it became clear to me for the first time—but my subconscious had already known.

Then another puzzle was solved in a most unusual way. I read in several sources that Aleph (A) was called "oxhead" and its meaning was "physical generation." For months I pondered that. I could see no connection between an oxhead and reproduction. Then one day I noticed a man wearing a T-shirt with an unusual picture on it. At first glance it looked like the picture of a uterus. Curiosity made me take a closer look: It was an oxhead! The horns are the fallopian tubes. So that was it. The ancients knew anatomy. They knew what the uterus looked like and that it is in the shape of an oxhead. How very well matched it was after all! How ingenious! And how beautifully concealed the secret was in its obviousness. On January 22, 1989, I attended a lecture at the Philosophical Research Society by Manly P. Hall's wife, Marie Bauer Hall. I was amused to hear her say, "God made man to make secrets and he made woman to break all secrets wide open."

The Power of a Name

name creates an instant impression. Some of us love our names, while others are uncomfortable with theirs and change them. I noticed that the sounds of various names give us different feelings, as though they are energies.

Our youngest daughter let us know her own name soon after she was born. I cuddled her to me and softly spoke her name: "Kathryn." I recalled how our first two babies, Jennifer and David, had looked up at me and smiled at the sound of their names, but now I got no response. So I repeated, "Kathryn," and still no reaction. We had also been considering the name Julianne. So I said, "Julianne?" and she looked right at me and smiled.

I told my husband about it. He laughed and said it must be my imagination. The nurse overheard, and the next time he came in she said, "I want you to know it's true. I tried it when she was in the nursery and she did not respond to Kathryn. But when I said 'Julianne,' she turned her head to me and smiled. Your wife is right about that." So of course he had to try it, and when he got the same reaction there was no doubt about it—her name was Julianne.

It was interesting to us that she had made the final decision, for until then we had not been able to decide between the two names. Over 15 years later, through the study of numerology, I concluded that our names are not accidental, and that we choose the vibration that will help us fulfill our mission. Even if the birth registrar writes "Baby Girl" on the birth certificate, this is the incoming vibration that holds the clue to the child's talents and destiny.

When I first began working in the movie studios in the early 1960s, I met one of the main drivers on the Warner Bros. lot. He introduced himself, then immediately went into an explanation of his name.

"Now that's not my real name," he said. "I won't tell anyone my real name because it was made famous by a notorious outlaw years ago, and I

don't want anybody to even think we are related. So I changed mine legally to the one I use now." No amount of coaxing would pry his natal name from his lips, and he never mentioned it again.

When I was in college, the Dean of Music used an initial for his first name, and his full middle and last names. There again, he would not reveal his real name. Now I notice that quite a few people prefer to use only their initials, or a nickname.

Some names are so common, and there are so many of them listed in phone books, that people have banded together and formed clubs for people with the same name. There are the "Mikes of America," "The Fred Society," the "Jim Smith Society," and a club of Susans called "Sic-M" who are all involved in communications and the media.

Experts say that when it comes to names, familiarity can breed contempt. For centuries people in crowded countries used formal names with titles before them because the titles generated respect. The act of saying Mister, Misses, or Miss helped people get along with one another.

We associate names with the persons we have come to know, and this makes them very personal. Often we also associate names with things, as in the Salk Vaccine, Disneyland, Steinway Pianos, and Bell Telephone. All these names seem to fit their inventions. Can you imagine a concert pianist playing Disney instead of Steinway? And instead of Disneyland, does it sound as much fun to go to Salkland?

In the advertising world, names are money. Corporations pay a great deal to find the right name for a product.

Even the name of a city can be important and affect an entire community. In January 1987, a portion of Los Angeles called Canoga Park was renamed West Hills. That name change made the value of the homes in the area appreciate \$10,000 to \$20,000—all because of a new name.

"A good name is better than a precious ointment" (Ecclesiastes 7:1).

The Power of the Word

ere are the temples of his words," I heard, and I saw weird looking structures. Some were made of slime, while others were like crystalline palaces.

"Words?" I asked.

"Yes, words. Words are living entities. They are given birth through man's mouth and they continue to live in the fourth dimension, becoming his home at the crossover."

The sight of those structures never left me, even though it was in a dream, a vivid dream. That brief soul journey gave me valuable insight into the power of words and made clearer the meaning of such scriptural references as:

"For I say unto you that for every foolish word which men speak, they will have to answer for it on the day of judgment. For by your words you shall be found guilty" (Matthew 12:34).

Then in my research I found the following statement in Eliphas Levi's *The Book of Splendours* (43):

For in the world to come, all good words spoken in the world at hand will take on living forms, and you are creatures of goodness, you who manifest through the Word that which is true.

The spoken word is powerful because it brings forth a thought, and a thought is the start of every manifestation: "... for the mouth speaks from the fullness of the heart" (Matthew 12:34). This means that whatever appeals to you is where your consciousness lies, and that level of consciousness is revealed by the words you speak.

The Secret Science of Numerology

According to the Kabbalah, the name of God is found in the vowel sounds because they are the vibrations that form life. If you read this paragraph aloud without the vowel sounds, you will see why they are called "the animating spirit of the word."

The sound of the spoken word can be measured by its rate of vibration, and that vibration can create pictures visible to us on a device called an eidophone. This is a drum-like instrument with a rubbery material across the top. A mouthpiece extends from it that can be spoken into. Then a crystalline mixture is spread on the top, and as different words are spoken into the mouthpiece, the crystals form various shapes.

The vibrational effect of the word "butterfly" causes the crystals to take on a beautiful butterfly formation; "snowflake," the pattern of a snow-flake. Such lovely words form lovely pictures. But harsh words do not form beautiful designs at all. Instead, they form haphazard, even grotesque forms as ugly to the eye as to the ear. The invisible takes form before our eyes, based on our words. How important, then, are the words we speak?

"The words of a wise man's mouth are gracious; but the lips of a fool will ruin him" (Ecclesiastes 10:12).

The Power of Thought

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This was the subject of discussion in one of my science classes in college at San Diego State in 1957. We had been talking about thought forms and were wondering whether there was any scientific basis for them.

Our professor told us he was aware of a college that had an experimental group who gathered to concentrate their efforts on developing a thought form. First their teacher had them relax to bring their brain waves into the alpha state. He then proceeded to describe a dragon, and as he did so, all the students were to picture every detail as he described it. Once their concentration was unified, a mist began to form in the shape of a dragon, and held its shape until the students lost their power of concentration.

They concluded that thoughts are energy in a certain state of motion, and that collective thinking can be very powerful. Our discussion then shifted to the sensing of certain types of thought forms established in places where people of the same mind gather: shopping malls, bars, places of worship, etc. Obviously there is a different mood connected with each place. We sense the thought forms that have been built up by the mental atmosphere of the location.

Psychics, or sensitive people who may not realize they are psychic, pick up on these thought forms very clearly. Once understood, we see there is nothing supernatural about these things.

Our words leave a thought behind that continues to live. These words produce thought forms that become a part of our own personal energy field that creates a distinct vibration of its own. This vibration is like the kind sent out by a tuning fork and works on the same principle—when sound vibrations are projected on an object of the same natural frequency, the object will begin to vibrate with it. Objects of a different frequency remain untouched.

Dr. Baraduc of Bordeaux invented a machine that actually records the vibrations of thoughts. It registers a high speed, strong vibratory effect when an intelligent person approaches the instrument, and a feeble, slow rate when someone of low mentality comes near (*The Finding of the Third Eye*, 32). This shows how thoughts are energy in a certain state of motion. The more force, the higher the vibration. The slower the rate, the less force it contains and it becomes negative in action.

Our whole body goes into action when we think. Our muscles and larynx move, even if it seems undetectable. Scientists have discovered that chest movements are directly related to thoughts and even succeeded in recording them graphically. Each type of thought has a set wavelength!

In 1945, Sir Alexander Cannon, a professor and doctor, learned to compare types of thoughts at a glance by their mathematical interpretation from graphs. The graphs even showed the effects of different types of music on individuals (*The Power Within*, Chapter 8).

Such graphs show another amazing thing: The thoughts of one person actually influence another person by the mere mental atmosphere produced by these thoughts—and it is detectable by the respiration!

We can control our thoughts by taking deep, slow breaths. Some meditation techniques require deep breathing. This is good, for it keeps the mental state in balance and at the same time it is beneficial for the body.

It has been noted that mantras are effective aids in meditation. They are either spoken aloud, whispered, or thought upon, but the most powerful of the three are those repeated in thoughts. This is not surprising, for only in silence can we hear the inner voice.

By nurturing thoughts of contentment, disease can be cured. Likewise, inharmonious and worrisome thoughts filled with negativity can create disease. This is because our immune system is set up to release adrenaline when we are in danger. Stressful thoughts as well as other stress-filled stimuli, such as graphically violent movies, trigger the flow of adrenaline into the bloodstream. At the same time the heart beats faster and acid is released into the stomach.

Our body cannot tell the difference between actual bodily danger and the act of just "thinking" about a stressful situation. Even when it is only the mind that is occupied with these negations, the body prepares itself anyway.

If excessive production of hormones continues, it eventually debilitates the body, making it ripe for all kinds of physical problems. So gaining control of our thoughts and emotions is important for good health. People appear to be physically made of the same type of matter, but in reality, they are made of different chemical elements that correspond directly to their own level of consciousness. Have you ever wondered why you feel a kinship with some people at first meeting? Or why certain ones you haven't even met can repel you upon first sight?

It is their consciousness that sets up their personal vibratory rate. When we are of the same mind as someone else we say we are "in tune" with them, and we really are. We are like the object that vibrates with the tuning fork, and those of a completely different vibratory consciousness from our own may not seem as attractive to us.

Man's own growth vibration is recorded in his auric field. The more advanced a person is in his knowledge, the shorter the wavelength and the higher the frequency. That vibratory level is made manifest in the voice, so the tone of voice indicates the level of spiritual development (*The Key to the Universe*, 228).

This vibratory level is evident in our reading level as well. When we read with comprehension, we not only see the printed word, we see the form of it in our mind's eye and at the same time we are silently vocalizing the word and hearing it. Since each person comprehends at his own level of understanding, no two people can read the same passage and get the same meaning from it.

Thought always precedes action. The extent of our knowledge and all of our life's experiences arise from our thoughts. We draw our opinions, beliefs, actions, and reactions from this personal storehouse. The strongest influences are visual stimuli because they have an impact on our optic nerve, which stores them in our pictorial memory garden. Everything we see and hear is impressed on our brain cells, which are living tissue. Our thought forms appear in our sleep, in our daily life, and they color our reactions.

I once painted a thought form into a piece of furniture! While my husband and I were antiquing our dining room set we were watching *The Planet of the Apes* on television. To this day I see apes when I look at that furniture. Even pictures that artists paint include the astral and mental aspects of their conception as they paint. That remains as an influence on each viewer (*The Hidden Side of Things*, 400).

In a way we are all like computers—we cannot give out anything that has not been put in. Thus, our thought material has a profound effect on our life experiences.

Let pleasant thoughts mold your face.

The Fourth Dimension

t was the day before Mother's Day in 1981 and my family had a large, beautifully wrapped present for me by the fireplace. Every time I walked by it I wondered what it could be. Then, all of a sudden, I saw it completely unwrapped and I knew what it was. I was stunned and quickly took a second look. This time it was completely gift-wrapped again.

I told my family I saw right through the gift-wrap and knew what it was. My husband laughed and said I couldn't know because it was something new on the market and he didn't think I even knew about it. The next day before I unwrapped it I said, "What I saw was a foot massager." My husband's jaw dropped. It was indeed a foot massager.

This experience, I knew, was called "clairvoyance," meaning, "clear seeing" into some fourth dimension. It happened to me, yet I could not do it at will. I wondered what caused it, and why it happens only occasionally, for I had other similar experiences.

As I reflected on this experience, it brought to mind times when I was equally perplexed by clairaudient (clear-hearing) experiences. When I was a child I heard both audible voices and music in my room at night that seemed to be coming from nowhere, well after my parents were asleep.

Once, when I was in my 20's, I heard a beautiful piano concerto coming from my living room in the middle of the night. I lay there enjoying it quite awhile before I woke up enough to realize it was coming out of nowhere and I felt frightened at the thought. "Oh, no," I said, "I'm scared. Please stop!" And at that I heard the conductor rap his baton on his stand, the music stopped, I heard all the music books shut, and there was silence.

I felt I was truly fortunate to hear such glorious music from another dimension. From then on I looked forward to such encounters. I could never experience them at will, but I did learn that I could communicate with the musicians by thought, and if I asked them to repeat any section, they would. I had been a music major in college, a singer and composer, so I began to memorize sections of music to write down, and I succeeded.

Probably the most outstanding example of such experiences was the time I heard the loveliest duet in a dream. A princess was having her hair brushed by a handmaiden and they were situated on a rock at the edge of a small lake in a great forest. A handsome prince approached, singing in his glorious baritone, "You are my music." The princess joined him in song and I was entranced by the scene as well as the music. I wanted to capture that music and asked them to repeat it. They did. I wrote it down, entered it in a composer's contest, and won first place in ballads.

It wasn't long afterward that I met the real prince of my dreams, and he had that same glorious baritone voice I had heard singing that song. Soon after we were married, the winning songs were to be performed in concert, and we sang "You Are My Music" together. The thrill cannot be described.

I knew there had to be an explanation for these experiences. It was only through my research to find the secret behind the accuracy of numerology that I learned the mystery behind these phenomena. Sometimes, for a moment, we are transported into the fourth dimension.

The physical plane about us is three-dimensional space of height, breadth, and thickness. We see the surface of all things but cannot perceive the hidden side, which is the interior from our exterior point of view. So this fourth dimension is the unseen of what we see, and it is also an aspect of mind and a dimension we experience in dreams.

Most of us at one time or another have experienced seeing something "out of the corner of the eye" and then realized that nothing is there. For a brief moment we may very well have seen something in the fourth dimension.

Where is it? The fourth dimension is in the astral plane that interpenetrates our physical plane, but which is usually invisible to us on our three-dimensional level. This is where thought forms exist. This "unseen side of things" is seen only with the mind's eye.

We tune into the fourth dimension when the sense organs of our astral or etheric body are awakened. The physical body is an exact copy of the etheric counterpart, which encircles us and extends several feet from the physical. It is the etheric body that determines the shape of the physical one by its lines of force. All through life it rebuilds and restores the physical. Any physical problems show up first in the etheric body. When they do, the etheric draws in closer to the physical. We sense this weakened energy field around those who are afflicted.

The reverse is also true: health can be accepted by the mind, and its healing effect restores the etheric first and then the physical. This is why affirmations, suggestion, and prayer are powerful aids in combating illnesses. The more faith and hope that can be instilled in the patient, the quicker the recovery. The stronger the life force, the further the etheric extends from the physical. The reason it is not seen on this dimension is because the molecules that compose it are much farther apart than those

of the physical, which renders it invisible, though it is very real. "There is a natural body and there is a spiritual body" (1 Corinthians 15:44).

Anesthetics drive out the etheric body so the person is unaware of pain. The etheric body remains whole even if the physical has had an amputation. Amputees have attested that they are aware of their etheric counterpart when a limb is removed—they feel it as though it were still there (*The Rosicrucian Cosmo-Conception*, 60-66). Kirlian photography shows the etheric presence of such limbs, and parts of leaves that have been torn away.

It is not unusual to sense another person's etheric body. If you move your hand close to, but not touching, another person's hand, or even your own, you will feel a slight sensation as etheric touches etheric. This etheric body has its own set of sense organs, called chakras, which are the vehicles that attune us to the fourth dimension.

Chakra is a Sanskrit word for wheel, and the chakras appear to the seer as colored wheel-shaped objects. They are seven circular vortices, or force centers, which are connection points for the flow of energy from the Universe to our etheric counterpart, and then to us, supplying energy to our physical body.

There are three groups of chakras: the lower (physiological), middle (personal), and higher (spiritual) (*The Chakras, a Monograph*, 17). The physiological energize the desires of the flesh. Development of spiritual qualities activates the higher chakras. As a person grows spiritually, these chakras go into motion. They are like colored lotuses, with movement so slight as to be undetectable. But when activated, each petal opens as they vibrate. Through their unfolding comes the gift of seeing into the fourth dimension (clairvoyance), hearing in the fourth dimension (clairaudience), and a higher awareness.

Sometimes children are born with their chakras open and they can see and hear equally well in both worlds. They talk to and play with playmates who are unseen by us, but are very real to them.

When we understand the laws of vibration, we cannot help but realize the power we have in our thoughts. The ideas we entertain and create take form in the fourth-dimensional plane and will become realities here if we give them enough power. We give them that power when we think of them with such emotional intensity that it becomes ingrained in our soul. In a given amount of time, that "seed" will germinate into a force that will either spur us to action to accomplish, or, if a negative thought, will take hold in the etheric body, and then manifest itself in the physical body (Knowledge of the Higher Worlds and its Attainment, 62).

Another aspect of the fourth dimension is that of predictions. All through history people have wanted to know what the future has in store. Priests built high towers so that they could study the changing sky. They plotted the courses of the visible planets, drew up the zodiac, and related all the world's happenings to the stars. Astrology became a popular

science, especially with regard to the forecasting of events. Today there are many seers who foresee that which takes place in the fourth dimension before it is manifested here. They must be careful not to make judgments and predict a negative event as a fact, for ultimately it is man who makes a choice that can change a course of events. Seers who do not make this distinction and foretell a negative event are as guilty of that event coming to pass as though it were planned and executed by them.

On the other hand, if the belief in their word is great, they could prevent a foreseen disaster by warning others to be cautious. They have an understanding of how present trends can lead to future results. Man has a power of choice and can change probable outcomes by taking the right action. The seers' power isn't so much just the fact that they can foresee future events, as it is a power to set an idea into the atmosphere that people will accept.

We find there is not that much difference between prediction and actuality when it is accepted in people's minds. That is proved over and over again in movies where the power of an idea is magnified to a living reality. Until Rod Serling wrote and filmed *The Hi-Jacking*, there had never been one. But less than one week after it ran on television, there was the first one in history. He said he often regretted deeply having filmed this idea, for he created a terrible monster and he realized it when it was too late.

Our thoughts—what we think about, read about, look at—are all fourth-dimensional, and all is initiated on that plane before it manifests on our third-dimensional physical plane.

This will be perfectly clear to the spiritual-minded, for the higher can understand the lower, but the lower cannot understand the higher.

According to Confucius, "Heaven sends down it's good and evil symbols, and wise men act accordingly."

This is potent stuff. We are working with the power of creation. We are able to draw from Eternal Mind, where all ideas exist, by tuning in with our higher mind to the fourth dimension, and beyond.

You have the power to love the world.

As Above, So Below

he science behind numerology has given modern science great insight into the workings of nature. Numbers never fail. Numbers are law. There is nothing made that does not have size, shape, and dimension. The principle of the law is "As in the macrocosm (the Universe), so in the microcosm (man and nature)." By studying an atom or cell we can find the key to the functioning of a man, a planet, a galaxy. In other words, laws that are true to us on Earth are inevitably true in the Universe. The Hermetic aphorism is phrased simply: "As Above, So Below."

As an example of this truth, or law, there is a most striking demonstration that is found in the science of spectroscopy: the study and analysis of the phenomena observed with the spectroscope.

The spectroscope is an optical instrument that looks somewhat like a telescope. There is a prism in the middle. Light rays that enter are transformed into parallel rays, discrete colored lines that can be measured by their wavelengths and compared to known chemicals and elements.

Every element has its own pattern that never varies. According to the Hermetic law "As Above, So Below," the pattern will be the same on other planets: the above. The astronomers merely compare the picture presented with known elements on Earth: the below, and those that match up to a particular element will prove that element to be on that planet. Spectroscopic analysis shows that all elements known on Earth are found in the sun. So we see how it is true that as it is above, so it is below.

To get to the true nature of elements, we find that they are composed of basic molecules of energy. The ancients say this energy is made of God Himself: being the Creator of all there is, He had to create from the energy of His own ideas and the material of His own Being.

Even though we cannot see these molecules of energy with the naked eye, they nevertheless exist. And each invisible force has its own set of vibrations, starting with low frequency domestic electricity that has 50 to 60 vibrations per second. As the vibratory rate increases, there are sound, radio, television, and radar waves, microwaves, infrared rays, X-rays, and gamma rays, all invisible around us but powerful when harnessed.

There are only two kinds of matter: negative (electrons) and positive (protons), which are whirling bits of energy. The distance between them and their constant rate of vibration determine what form the matter takes: *solids* are close together and the rate is slow; *liquids* are further apart and move faster; and *gases* are the furthest apart and move the quickest.

Wavelengths affect form, color, sound, heat, light, and substance. All vibrate, and vibration has three factors: size, rate of oscillation, and its relation to fixed time.

Sound is produced by the vibrations of a body and is audible if the frequency lies between 20 and 20,000 vibrations per second. Loudness depends on the extent to which the sounding body vibrates. Above this range the vibration is called ultrasonic, and below, subsonic.

Light is a form of radiant energy transmitted in electromagnetic waves, which stimulate the organs of sight.

Heat consists of the kinetic energy of the vibrational motion of molecules. The more friction, the more heat. Friction and speed are the forces that form what appear to be different substances, yet there is only one substance. Everything breathes, even inanimate objects like metal. Solid matter, in its last analysis, is merely energy in a certain state of motion.

Color is simply a different rate of vibration in another octave. The color of an object depends upon the wavelength it reflects. Beyond the violet vibration the oscillation is so minute and rapid that it can interpenetrate solids, so we cannot see any further colors (*The Finding of the Third Eye*, 28-31). The principles that govern music apply to the vibratory rate of colors, and the same ratio exists between colors of the spectrum as between notes of the musical scale.

It was Sir Isaac Newton, the English philosopher and mathematician (1642-1727), who first described the mathematical synchronicity of color with music. It was he who discovered the dispersion of white light into the prism of seven colors and assigned each of them to its corresponding musical tone:

Even disease has a distinct vibration. An American physician, Dr. Abrams, invented an instrument to measure all of the reactions to the human body and was able to assign a numerical value to each disease. He believed the remedy could also be figured out through numbers (*The Finding of the Third Eye*, 114).

Years later, in 1985, a woman named Karin Lee Abraham published a small book entitled, *Healing Through Numerology*, in which she furthers

the idea that "disease" corresponds to certain vibrational rates. She shows how to construct an illness chart, and by using numerology, find the best medication. She stresses that a person's mental attitude is a major factor in overcoming any illness, that we are *mind* before we are body, and suggests that we can not only control the cure, but may certainly have created the illness in the first place (*Healing Through Numerology*, Introduction).

All of these studies bring me to the conclusion that the source of all color, sound, and vibration is in the spiritual plane, not the physical. "As Above, So Below." These are the tools for the making of the Universe.

According to Professor Jagadish Chandra Bose of Calcutta, who wrote the book, *Response in the Living and Non-Living*, there is some degree of life in the smallest grain of sand.

...not only the chemical compounds are the same, but the same infinitesimal invisible lives compose the atoms of the bodies of the mountain and the daisy, of man and the ant, of the elephant and of the tree which shelters it from the sun. Each particle, whether you call it organic or inorganic, is life.

His findings won him the highest scientific honors, for he proved that so-called inorganic matter responds to stimuli. He measured the reaction of different forms of life to different stimuli. When compared, he found that reactions were exactly alike (*The Secret Doctrine*, Vol. 1, 281).

"The laws of reality cannot deviate from the ideal laws of mathematics" (Gottfried Wilhelm Leibniz, as quoted in Morris Klein's *Mathematics and the Search for Knowledge*, 213).

The Influence of Music

an you picture anyone fighting to the gentle tune of "Love is a Many-Splendored Thing," or any other ballad of love?

I noticed many years ago that something wonderful happened when

our choir sang in school. In those days music was a required subject, so we had quite a variety of students singing with us. Some were the macho guys who could be pretty rough. But when they sang, their countenances changed and the feeling around them became more genteel. I noticed something else. The students who tended to be difficult to get along with or the ones who were mad at each other would, after singing together, become renewed. The anger was gone.

In choir there was no intolerance or prejudice. We sang in harmony and we were as one harmonious chord, as people as well as musically. Music brought us together in a brotherly spirit. The right music, more than anything else, has the power to heal wounds, uplift us from this physical plane to the spiritual one. The human nervous system is so attuned to sound that our response is immediate.

Each person has a keynote. Max Heindel tells us in the *Rosicrucian Cosmo-Conception* that the medulla oblongata acts like a tuning fork when the right sympathetic tone is played. At that point it will vibrate along with the tone.

The medulla oblongata is the hindmost and lowest part of the brain, narrowing down into the spinal cord. It has a direct influence on breathing, for it controls the heartbeat. This explains why music has such influence on us. Some music can soothe and heal, while music that is antagonistic to our own vibratory nature makes us tense, uneasy, and even angry or ill (*The Sacred Word and Its Creative Overtones*, 143).

In music therapy, a person can be healed by soothing sounds of his own keynote, for the medulla oblongata will then vibrate in sympathy with the keynote and immediately get the heartbeat to normal and, like a relay station, the entire body will respond and adjust itself.

There are healthy and unhealthy sounds, and we take them in the same as food. Our minds learn to adjust to different sounds but our bodies can not. Musical passages have an effect on our muscles. To quote from *Sound Health* by Steven Halpern and Louis Savaryl (69, 70):

One of the problems with much of rock and pop music is its standard rhythm called the "stopped anapestic rhythm"—a short-short-long-pause pattern. This rhythm tends to confuse the body and weaken the muscles. Among hundreds of persons tested by behavioral kinesiologist FDR. John Diamond, ninety percent registered an almost instantaneous loss of two-thirds of their muscle strength when they heard this beat. Interestingly, this often happens even when the listener likes the music. The end result is that the body's system is confused, the heart response is irregular, and the body gets weakened.

In the book, *The Secret Life of Plants* by Tompkins and Bird, an experiment is described in which plants, under controlled conditions, were tested in their reactions to different types of music. Beautiful music, both popular and classical, was beneficial to the plants. They grew toward the sound and tried to reach the speaker it came from. Where there was no sound at all, the plants grew straight up. But where there was abrasive music, the plants tried to move away from the sound and then died. Loud, dissonant music that makes repeated frictional air waves, is carried to the stems of the plants and kills them (*The Sacred Word and Its Creative Overtones*, 134). Gentle songs like "Love is a Many-Splendored Thing" are healthy for plants and promote kind feelings among people.

Every rate of vibration forms a different geometric figure. Ernst Florens Friedrish Chladni (1756-1828), a German physicist who analyzed sound waves mathematically, proved that sound can shape matter into forms. Because of this he became known as the "Father of Acoustics."

He formed sound pictures by placing sand over a thin metal plate. He changed the pitch by varying the position of his finger on the plate as though it was a violin's fingerboard. By doing so, the sand took on different geometric shapes according to pitch vibration that made the sound patterns visible. No two were alike unless their rate of vibration was the same. This was the forerunner to the eidophone (*The Sacred Word and Its Creative Overtones*, 74, 9).

Pictures have been taken of music with a device called a tonoscope where the vibrations make forms in a layer of fluid and are then photographed. Even a polygraph machine (lie detector) shows graphically the effect that music has.

But centuries before these machines existed, Pythagoras knew that form came about through vibration; that the world came into being out of chaos by sound and the intervals produced by that sound. Music was an important part of his school's curriculum. This is one secret I had been searching for regarding the accuracy of numbers: everything that exists has vibration. The vibrational field of sound, music, color, matter, our words, thoughts, and names, all show form. All are vibrations. All vibrations are measurable. To measure vibration, we need numbers. Numbers are the basis of it all. Numbers are the keys to all mysteries. According to Helen P. Blavatsky (*E.S.T.*, 7):

"...number underlies form, and number guides sound. Number lies at the root of the manifested universe..."