

## CHAPTER TWO -THE HEALING POWER OF MUSICAL INTERVALS

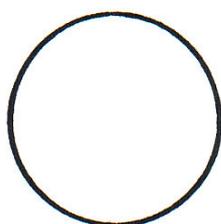
### The Effect of Different Musical Intervals - Kay Gardner

If two notes are played at the same time into an oscilloscope then different patterns will emerge. (An oscilloscope is an instrument that measures sound waves).

Two people singing in unison will create a circle pattern on the oscilloscope while two people singing two notes an octave apart will create a figure eight pattern. (Octave means eight in Latin).

Each musical interval will create a different feeling in the listener. These are feelings reported to Kay Gardner from her workshop participants: -

UNISON 1:1 (e.g. C/C) – Creates a feeling of sameness, rootedness, unity. (Used in Mantras).



1:1

OCTAVE 2:1 (e.g. C/C an octave above) – Creates a feeling of togetherness, sameness.



2:1

MINOR SECOND 16:15 (e.g. C/C sharp/D flat) – Creates a feeling of tension, unease, expectancy.

MAJOR SECOND 9:8 (e.g. C/D) - Creates a feeling of lightness, opening, mild dissonance.

MINOR THIRD 6:5 (C/E flat) - Creates a feeling of dissonance, uplifting.  
(Found in the call of a sparrow, childhood taunts)



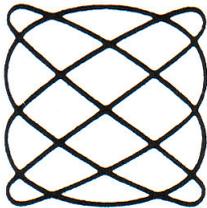
6:5

MAJOR THIRD 4:5 (e.g. C/E) - Creates a feeling of hope, sweetness. (Used in Church music)



4:5

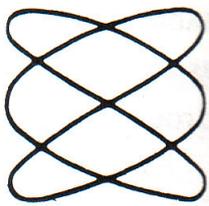
PERFECT FOURTH 4:3 (e.g. C/F) - Creates a feeling of serenity, lightness, openness.  
(Used in Pagan chants such as “The Earth is Our Mother”)



4:3

TRITONE 45:32 (e.g. C/F sharp) - Creates a feeling of suspense, the occult, outer space, strangeness. This interval was called “The Devil in Music” in the Middle Ages and was banned by the Church.  
(Used in Bernstein’s song ‘Maria’)

PERFECT FIFTH 3:2 (e.g. C/G) – Creates a feeling of completeness, comfort, creativity.



3:2

MINOR SIXTH 8:5 (e.g. C/A flat) - Creates a feeling of poignancy.  
(Used in Love Story and Chopin’s Nocturnes)

MAJOR SIXTH 5:3 (e.g. C/A) - Creates a feeling of upliftment, peace, floating.  
(Used in the song ‘My Bonny Lies Over the Ocean’)



5:3

MINOR SEVENTH 7:4 (e.g. C/B flat) - Creates a feeling of expectancy, suspense, movement.  
(Used in Bernstein's song 'There's a Place for Us')

MAJOR SEVENTH 15:8 (e.g. C/B) - Creates a feeling of discord, strangeness, eerie, ethereal.  
(Rudolph Steiner associates this interval with the Higher Self)  
(Used in the song 'Bali Hi')

Dissonant intervals can be used to stir up the emotions, bring unresolved emotion to the surface, which can be then resolved by moving to consonant interval above. ("Kay Gardner - Sounding the Inner Landscape p105-112").

### **The Effect of Different Musical Intervals - Fabien Maman**

Fabien Maman says an interval is the resonance of the musical space created by the sounding of two notes simultaneously or separately. Each interval has a different vibratory effect upon our body, mind and emotions.

#### **FUNDAMENTAL INTERVAL - NOTE C**

The fundamental 'interval' is the resonance of one note played twice. This interval is found in mantras. Most mantras are chanted on a monotone - one note. After a few minutes of repeating the same word or words on one note the mind becomes quiet. This 'interval' brings immobility, rest and old memories.

#### **SECOND INTERVAL - NOTES C-D**

The interval of the second creates a tension. It is difficult to hold this interval for a long time. This interval brings tension between two polarities, creating movement. The interval of the second is used in Modern Classical music, which uses strong dissonance. This dissonance will be even greater with a minor second interval e.g. C-D flat.

#### **THIRD INTERVAL - NOTES C-E**

The interval of the third touches the emotions. Bach used this interval to touch the higher emotions. It can produce feelings of lightness, strength and joy. Country and Western music uses the minor third e.g. C-E flat to touch the heavier emotions such as sadness or heartache.

#### **FOURTH INTERVAL - NOTES C-F**

Fabien Maman says that the fourth interval gives a strange impression that is like awakening after a dream. "The startling effect of this interval is felt powerfully in Bulgarian women's chants."

"When the fourth is augmented (e.g. C-F#), the left and right sides of the brain are stimulated. The augmented fourth is the interval heard in the sound of the Tibetan bowl. This extreme tension is maintained until resolution in the fifth interval."

#### **FIFTH INTERVAL - NOTES C-G**

Fabien Maman says that, "The fifth interval expands in all directions and provokes the widest movement of energy in space. It can be heard in Brazilian music where there is often the interval of the fifth between guitar and voice."

"Because of its stimulating nature, the cycle of fifths can be used both to concentrate and align chakra energies. The following order can be used to relax the body and bring about the maximum expansion of consciousness: - F C G D A E B." (Each note being five notes above the last)

According to Fabien two people whose fundamental vibrations create an interval of the fifth will have a stimulating relationship. A couple whose fundamental vibrations create the interval of the fourth or the second will have a relationship filled with dissonance and conflict.

#### SIXTH INTERVAL - NOTES C-A

The sixth interval is the sweetest interval. Fabien Maman says that listening to the sixth interval is "like receiving the quintessence of the fragrance of an opening flower." This interval is generally used in children's lullabies. The sixth interval seems to carry no weight, no tension, no stimulation and no emotional heaviness. The sixth interval creates a feeling of total opening, of offering yourself to the universe, contrary to the third interval, which is contained.

#### SEVENTH INTERVAL - NOTES C-B

Fabien says that the seventh interval creates extreme tension, but it is not a paralysing tension like the second interval. It is a healthy tension that provokes a growth in consciousness. Beethoven was the first Western composer to use this interval. Hector Berlioz, in his biography of Beethoven, said that the first time Beethoven's music was played in the Paris Opera House, the consciousness of the audience 'exploded'.

Ravel also used the interval of the seventh. Jazz composers such as John Coltrane began to use this interval in the 1960's, a time of great social change.

"The seventh musical interval represents the ultimate dissonance before resolution into the stillness of the octave. It has a powerful purpose in physical, musical and spiritual evolution."

In his experiments Fabien found that it was generally the seventh interval that destroyed the cancer cells. As the notes of the scale was played to the cancer cells in test tubes they began to break up when the notes A# and B were played. The effect was particularly strong when metal instruments were used. He says that this reveals the power of the seventh interval to affect change at the cellular level. "

"The cancer cells could not bear the dissonance of the seventh interval. Throughout the experiment the cancer cells appeared rigid, inflexible, and seemed to fight each note of the musical scale until they finally exploded around the addition of the seventh interval. Healthy cells, because they could breathe in the resonance of the sound, remained intact and some even seemed to be revitalised by the addition of the seventh interval." (Fabien Maman - the Role of Music in the Twenty first Century 1997, p24-31)

***"The seventh interval will be resolved into the stillness and peace of a new octave, which will provide a mirror for civilisation to come. The seventh interval pushes us towards expansion to a higher octave of inner peace, not a conceptual 'return' to a nostalgic memory. Even the most enlightened master cannot escape completely the vibration of the musical interval in which he or she lives. We all belong to the sound current of our moment in time." - Fabien Maman***

## Archetypal Qualities of Musical Intervals - Mary Elizabeth Wakefield & Michel Angelo

**Unison** - "Two identical pitches sounding together, a 1:1 relationship. This is the sound most indicative of the primal cosmic union, and represents perfect serenity and peace."

**Octave** - "The first overtone of any given series, an interval generated by two sounds, one of which is twice the frequency of the other; a 2:1 relationship. This interval is restful, meditative, calming and grounding, and represents the harmonious union of yin and yang. It is perhaps best exemplified by the sound of men's and women's voices singing together in unison, since (due to the nature of their vocal cords and the conventions of musical notation) their "unison" melodies are, in effect, sung an octave apart."

**Perfect 5th** - "The second overtone of a series, generated by sounds in a 3:2 relationship. The 5th is opening and stimulates power and movement. It can bring forth new life, creative ideas and rebirth. The 5th is also the functional fulcrum within an octave, in that it can facilitate movement either to the upper tonic note, or a return to the fundamental. It was used most notably by the medieval mystic Hildegard of Bingen in her musical compositions to express openness, joy and healing."

**Perfect 4th** - "This is the 3rd overtone, a 3:4 relationship. This interval touches the heart, but at the same time, awakens feelings of being controlled, making people uneasy. In the medieval period, the perfect 4th was used in certain types of plainchant to reinforce the status quo, in which the Church had dominion over the hearts and souls of the populace."

**Third** - "This interval, the 4th to 6th overtone, can be either minor (5:6) or major (4:5), depending upon the number of half-steps, or semi-tones, that comprise it. Each has a different quality. This simple, unadulterated interval can possess great sweetness, and suggests possibilities, compatibility, stillness and repose. In keeping with the traditional symbolism of the number 3, the major 3rd was considered a harmony of divine perfection."

**Second** - "Like the 3rd, the 2nd (the 7th overtone and higher) can be major (two semi-tones) or minor (one semi-tone); it creates friction, agitation and dissonance, and contains the potential for movement beyond pre-existing limits and strictures. It promotes growth, and can be likened to the grain of sand in the oyster – an initial source of irritation that in time gives rise to the beauty of a pearl."

**Tritone** - "The most dissonant of intervals (3:2:4:5), the tritone was referred to by medieval music theorists as the "diabolus in musica" ("devil in music"), because the functionality of its dissonance sought resolution outside the parameters of an existing tonal center, thus presenting the potential for musical and harmonic anarchy."

"It is energizing, lifting (in that it can resolve upward to a perfect 5th), and encourages creative thought, with an anticipation of something unexpected. It is also referred to as an augmented 4th or diminished 5th."

### Indian Scale - Cloe Goodchild

According to Chloe Goodchild singing the notes of the Indian scale represents a musical journey. She says that each musical interval has a different effect on us: -

Octave	Sa	The New Octave. Merging with the One
7 <sup>th</sup>	Ni	The Mystical. Close to Union
6 <sup>th</sup>	Dha	Going Beyond the Self. This interval has an Other Worldly Quality
5 <sup>th</sup>	Pa	Connecting with the Positive
4 <sup>th</sup>	Ma	Longing for Beauty
3 <sup>rd</sup>	Ga	Letting Light come through the Door. Receiving the light
2 <sup>nd</sup>	Re	Opening the Door to the Light.
1 <sup>st</sup>	Sa	The Unchanging. The Root of Everything.

(Cloe Goodchild - Indian Scale Tape)

### Dissonance - John Beaulieu, N.D., Ph.D.

"Learning to identify, understand and honour dissonance leads to new levels of living and wellness. Dissonance means without sonic alignment or to "beat against". Our first reactions to dissonances, whether in music or life, are to label them undesirable and something to be avoided. When Igor Stravinsky premiered 'The Rite of Spring' many listeners rioted. They cited the horrible dissonances in the music as the cause.

A group of doctors tried to sue Stravinsky for damaging people's ears. Today many find the dissonances in 'The Rite of Spring' to be harmonies."

"During the Middle Ages the Catholic Church determined what musical tones and intervals were spiritual. New musical sounds were usually introduced through heresy and thought to be the work of the devil. As hard as it is to believe, many people were executed and tortured for playing the "wrong note".

"Go to the piano key board and play C and G than play the octave of C and C. If you lived in the Dark Ages you may be on your way to being a music star. Now play C and C followed by C and F#. Uh-oh! You made a fatal mistake. You are now on your way to being burned at the stake or worse. C and F# was considered to be the interval of the devil."

"Our life experiences of dissonance vary greatly. A commonly used word for dissonance is stress. Dr. Hans Selye defines stress as adaptation to change. Those that resist change will perceive stress as distress. Those that accept change may experience the same stress as euphoria. In other words what is distress for one person may be euphoria for another. This may explain from a scientific perspective why the dissonances of a music composition like Stravinsky's 'Rite of Spring' may be terrible for one person and beautiful for another."

"The Nobel Prize winning physicist, Dr. Ilya Prigogine discovered the importance of dissonance while investigating chemical systems. He termed his discoveries "order from chaos". Prigogine proved that for a system to change and go into a higher state of functioning it must first pass through a state of disruption or chaos. The sonic term for chaos is dissonance."

"Prigogine points out the crucial role dissonance plays in living systems evolving into higher levels of order or resonance. He discovered that all living systems dissipate more and more energy over time caused by fluctuations or dissonances inherent within the system."

“As time passes these dissonances increase in intensity causing the system to move further and further from equilibrium. Soon everything begins to wobble. The wobbling increases until all pre-existing order within the system shatters causing the system to leap into chaos.”

"Prigogine terms the precise moment a system goes from order to chaos a bifurcation point. As a system approaches bifurcation it only takes a very small and seemingly inconsequential event to create chaos. From chaos the system reorganises itself into a new system functioning at a higher level resonance."

### **Jacob's Ladder**

“The ancient story of Jacob's Ladder illustrates the mythological relationship between dissonance and order. Jacob's Ladder is an archetypal ladder between heaven and earth. We begin as spiritual beings at the top of the ladder and descend until we become earthly beings at the bottom of the ladder. Our spiritual journey begins when we choose to climb back up the ladder. Each rung upwards represents increasing states of energy and consciousness.”

“The transitions from one rung to another on Jacob's ladder are different than a regular ladder. The rungs are in discontinuous steps. This means distance between each rung becomes greater and greater the further we go up the ladder.”

“Climbing Jacob's Ladder requires a special climbing skill that is sometimes referred to as quantum leaping. We are at one level of vibration or rung on the ladder then suddenly we are at another.”

“The myth of Jacob's Ladder is very real in our everyday life. The process of moving into higher states of being begins with dissonance. During dissonance our life becomes challenged. The more we deny our challenge the greater our dissonance becomes. There are no solutions on our current rung of the ladder. We must seek change and seek resolutions from a higher perspective.”

Dissonance - John Beaulieu, N.D., Ph.D. –

From web site - <http://www.biosonicenterprises.com>