

distance

Ramsay = wave amplitude, swing of a pendulum, space.

Keely

Fichte writes: "The **will** is the living **principle** of the **world of spirit** as **motion** is of the **world of sense**." Newton said that this subtle **ether interpenetrates** all **matter** and is concealed in their **substance**, through the strength and activity of which, bodies attract each other and adhere together when brought in contact, annihilating **distance**, as if objects might touch each other. Through this "**life spirit**" **light** also flows, is refracted and reflected and bodies are warmed. Pythagoras viewed this as a **divine luminous principle** or **substance** which permeates all things and at the same time contains all things. They called it the **astral light**. The Germans call it the "**Welgeist**". [Snell Manuscript - The Book, page 2]

Russell

THE **SEVEN TONES** OF THE **UNIVERSAL CONSTANT** ARE EACH REMOVED, ONE FROM THE OTHER, THE **SQUARE** OF THE **DISTANCE** TO THE NEXT **HIGHEST POTENTIAL**. THE **ENERGY** OF EACH OF THE **FOUR UNITS** IS EXACTLY EQUAL. [Dimension Chart 5]

DIMENSION CHART No. 5. DISTANCE DIMENSION OF TONAL RELATIONS. ALL **MASS** HAS A MEASURABLE **TONAL** RELATION TO ALL OTHER **MASS**. ALL **POTENTIAL OF ENERGY** IS **ACTIVE**. ORDERLY **DISPLACEMENT** OF **INACTIVE INERTIA**, THE **RATIOS** OF WHICH ARE MEASURABLE IN ALL **DIMENSIONS** [Dimension Chart 5]

Schauberger

The same applies to all natural means of producing **light** and **power** (viz. the natural increase in the **Sun's heat**, when the **distance** from the **Sun** increases in **summer** and the **developmental path** of its **energies elongates**, or according to the findings of **Pickard's** research, it gets all the **colder** and **darker**, the closer this supposedly fiery **orb** is approached.) [The Energy Evolution - Harnessing Free Energy from Nature, Bio-Technology: Active and Reactive Temperatures]

Ramsay

"In the **laws of quantities and motions** there are **three primary ratios** from which the **musical system of vibrations** is developed.

Pendulums, from the slowness and continuance of their motions, are well adapted to give an ocular demonstration of the **relative motions** of each of these **three primary ratios** when compared and combined with the **unity** and with each other. The numbers 2 and 4 express the **first condition in the first ratio**; as, in falling bodies, when the **times** are 2 the **distances** are 4. In the case of two pendulums, when the length of the one is one fourth part of the other the **motions** are 1:2; and when **two** is counted for the upper one, the oscillations of these two pendulums will meet at one. The numbers 3 and 9 express the **first condition of the second ratio**; as, in falling bodies, when the **times** are 3 the **distances** are 9. In the case of two pendulums, when the length of the one is the ninth part of the other, the motions are 1:3; and when three is counted for the upper one, the oscillations of these two pendulums will meet at one. The numbers 5 and 25 express the **first condition in the third ratio**; as, in falling bodies, when the times are 5 the **distances** are 25. In the case of two pendulums, when the length of the one is twenty-fifth part of the other, the motions are 1:5; and when five is counted for the upper one, the oscillations of these two pendulums will meet at one.

In the **system of motions in pendulums**, the **three primary ratios** indicated in the foregoing paragraph, namely, 2:4, 3:9, and 5:25, are compared and combined with three different units. In their comparison, 1 is the **unit of**

quantities, that is lengths, and 1 is the **unit of motions**. The numbers 1/4, 1/9, and 1/25, when taken together with 1 as **unity**, express the **first comparison and combination of quantities**; and the numbers 2, 3, and 5, taken together with 1 as **unity**, express the **first comparison and combination of motions**." [Scientific Basis and Build of Music, page 15]

The **law of gravitation** is the law of **Music** as well as of **Astronomy**. The **cycles of the distances**, that is the **intervals**, in Music correspond to the **cycles of the periods** in Astronomy. In Astronomy the **distances** and **quantities of matter** are primary, and determine the **periods**; in Music the **periods** and **quantities** are primary, and determine the **distances** or **intervals**. In Astronomy the **distances** are commensurable; in Music the **periods** are commensurable. In Astronomy the **periods** are incommensurable; in Music the **distances** or **intervals** are incommensurable. In Astronomy, because the simplicity is not in the **periods**, the **conjunctions** are very few at one time; in Music, because the simplicity is in the **periods**, the **conjunctions** are very many at one time. And herein lies in the one case the **harmony** and **permanence** of the **solar system**, and in the other case the **harmony** and **beauty** of the **musical system**. The **periods** and **distances** in Astronomy and Music are inversely related. [Scientific Basis and Build of Music, page 30]

Tonic
Subdominant - F, A, C E G, B, D - dominant
Center

- and it is balanced between the two forces. If the **effects** of **notes** or **chords** depended solely on their **ratios**, then the **effect** of the **subdominant**, **tonic**, and **dominant** would have been alike, for these **chords** have exactly the same **ratios**. The **centrifugal force** of the **notes** of the **dominant chord** would take it away from the **tonic chord**; but **Nature**, in her skill to build and mix, has in the **octave scale** placed the **middle of the dominant** B under the **root of the tonic** C, and the **top of the dominant** D under the **middle of the tonic** E; so that these two rising **notes** are inevitably resolved into the **tonic chord**. The **gravitating tendencies** of the **notes** of the **subdominant** would take it also away from the **tonic**; but in the **octave scale** **Nature** has placed the **middle of the subdominant** A above the **top of the tonic** G, and the **root of the subdominant** F above the **middle of the tonic** E; so that these two falling **notes** also are inevitably resolved into the **tonic chord**. In this way two **notes** resolve to the **center of the tonic**, D upwards and F downwards; one to the **top**, A to G, and one to the **root**, B to C. **Nature** has thus placed the **notes** which have **upward tendencies** under the **notes** having **downward tendencies**; she has also related them by **proximity**, the **distance** from the one to the other being always either a **semitone** or the **small tone** of the **ratio 9:10**. [Scientific Basis and Build of Music, page 95]

"There are two distinct **laws** which rule in **astronomy** - viz., **masses** and **distances**; and there are two distinct **laws** which rule in **music** - **affinities** and **proximities**. The **notes** produced by simple **ratios** as 1:2, 2:3, 3:4, etc., are attracted to each other by the **law of affinity**; **notes** which are beside each other in the **octave scale** and have moderately complex **ratios** as 9:10 and 15:16, are attracted to each other by their **proximities**. **F and C**, and **C and G**, and **G and D** are related to each other by **affinity**. C is related to the **fifth** below and the **fifth** above; G is related to the **fifth** above and the **fifth** below. **F and C**, **C and G**, and **G and D** are never nearer to each other than a **fifth** or a **fourth**, and in either case they [Scientific Basis and Build of Music, page 95]

It will be observed that this plate represents **intervals** by its **areas**, that is, the **distances** between the **notes**; and the **notes** themselves appear as **points**. But it must be remembered that these **distances** or **intervals** represent the **vibrations** of these **notes** in the **ratios** they bear to each other. So it is the **vibration-ratios** which constitute the **intervals** here pictorially represented as **areas**. The **area**, as **space**, is **nothing**; the **note** itself is everything. [Scientific Basis and Build of Music, page 107]

See Also

Amplitude
Eighteen Attributes or Dimensions
first condition of the second ratio

first condition in the third ratio

Motion

Number

Period

Proximity

Ratio

Relativity

Time

wavelength