

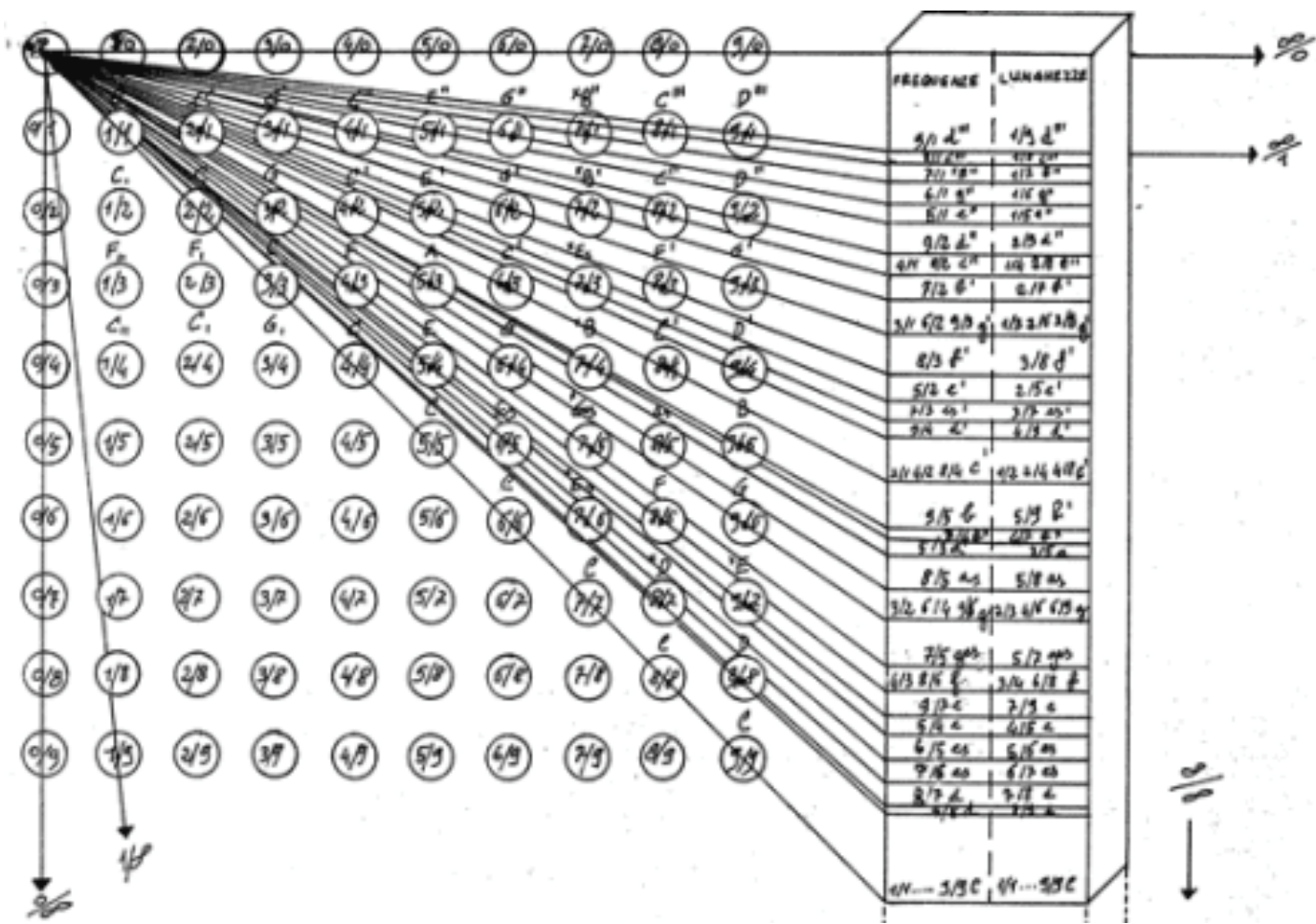
The System of Tonal Coordinates and the Equitonals

TPS Editor |

(In the day of the heliocentric entrance of **Jupiter** into the Sign of **Virgo**, which It rules from the point of view of our Spirit, let us celebrate Its *spatial Teaching* of Harmonics, presenting how Light and Sound, the divine Creators, “square the circle” of Space, producing Vibration and Form).

62 – Space resounds with these laws and only that of the Magnet leads to evolution. The ear which is capable of understanding perceives these harmonies.

The tonal Coordinates are represented in the table below and are discussed in later chapters.



The study of Harmonics now proceeds to examination of the diagram (K) to extract from it all the precious gems hidden there. Before going ahead in this “universe”, it is warmly recommended to consider the diagram, or the symbols, as the expression of

energy and thus in movement, and not as a static form.

The diagonal or generator divides the diagram into two sectors, one greater and one less than 1.

All the horizontal harmonic series (K of frequencies) are divergent, as they tend to ∞ : the vertical ones are convergent as they tend to 0. This expansion and contraction of the horizontal and vertical harmonic series gives the idea of a heart which beats. Each sound (man) can thus tend towards 0 or ∞ , according to whether he travels the materialistic or the spiritual path. It should be noted, moreover, that this convergence or divergence has a different “speed”, whose movement varies in relation to the series. In fact, all the horizontal series (if represented for instance as a, b, c, d etc.) are of arithmetical proportions:

$$a - b = c - d$$

the vertical ones are of harmonic proportions:

$$a : c = (a - b) : (b - c)$$

the ones which are perpendicular to the generator are of geometrical proportions:

$$a : b = c : d$$

This system of coordinates is a group scheme of primary structure, based on the series of the whole numbers and their reciprocal numbers.

It should be noted that the examination of K. has concerned so far only the “number” aspect, but the psychic content which appears when the “tonal values” are introduced is still more remarkable.

All the series of intervals, horizontal and vertical, start from the octave and the other intervals subsequently appear in order:

OCTAVE	$1/2$
FIFTH	$2/3$
FOURTH	$3/4$
MAJOR THIRD	$4/5$

MAJOR THIRD	5/6
MINOR THIRD	6/7
MAJOR TONE	7/8
MAJOR TONE	8/9
MINOR TONE	9/10
.....	10/11
.....	

It is important to impress on the mind, as “listeners”, this series of always decreasing intervals and it is also appropriate to compare them with the corresponding ones on the pianoforte.

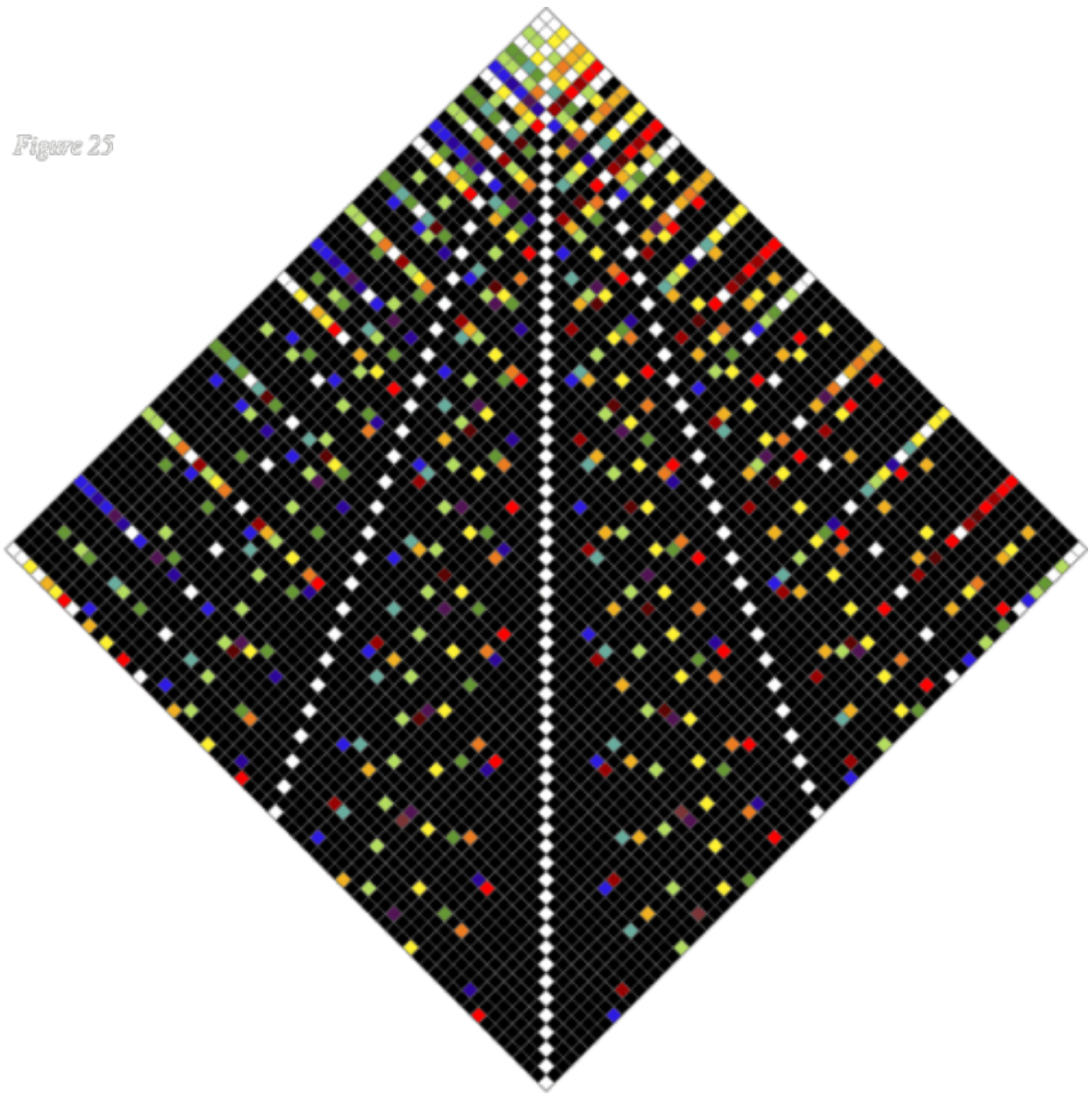


Figure 25

THE EQUITONAL LINES

Introduction of the “null” series:

$0/0$ $1/0$ $2/0$ $\infty/0$

$0/1$ $1/1C$

$0/2$

...

...

...

$0/\infty$

which naturally do not correspond to verifiable or expressable sounds.

We have already observed that in the “K” some sounds are repeated and especially the “C”, then the “g” and then the “f”, and so on, according to their “hierarchical” position. But in this repetition we must distinguish two different types. The first derives from raising or lowering the octave:

$$1/1 C ; 2/1 C' ; 4/1 C'' \dots$$

and these, which keep their value but vary in height, we call “Sounds of equal character”. The second, on the other hand, concerns those sounds which are repeated unchanged both in height and in character:

$$2/1 C' ; 4/2 C' ; 8/4 C' \dots$$

We call them “Sounds of equal value” and we will now deal with them.

If we connect all these identical sounds contained in the “K”, we note that not only do they belong to the same straight line, but also that all these straight lines meet in the point $0/0$, and not $1/1$, of the diagram. These straight lines are called “equitonal”.

Through any point we can trace a straight line which connects it to the $0/0$ (point of reference of the band of all the equitonals): the line will pass also through all the other points of equal value.

It is of no little importance to demonstrate that in a mathematical sense the equitonals

“must” meet in O/O. But it is amazing to observe this phenomenon, and whoever takes this action and discovers it for himself on the coordinated plane cannot but feel surprised: it is a question, as we shall see, not only of one of the many phenomena of Harmonics, but of a Theory of extraordinarily vast significance, both in an esoteric and a symbolic sense.

This check carried out on the monochord is the supreme proof of the psycho-physical and inner rightness of the arrangement assumed by the points of the “K”. With it, one penetrates directly from a mathematical-physical field into a psychic arrangement which is equivalent to it: a transmutation of what is material and logical into what is psychic and spiritual, which surpasses every other harmonic operation in its persuasive force and introduces something which, with respect to today’s scientific methods, is absolutely new.

*** (Excerpts from “Harmonics”, 1980, E. Savoini’s unpublished text – the quotes are from Agni Yoga collection – the pictures are inserted by TPS editorial staff. Refer also to [The Creating Sound](#)).**