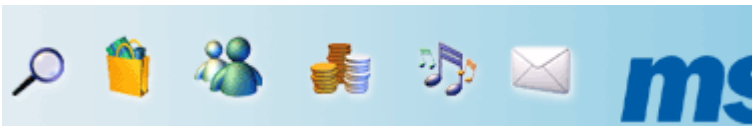

LESSON YOU

RESONANCE SIMPATETICA

And The VIBRATION LAW

I have tried to same me, as also I have demonstrated to others, that the Law of the Vibration explains every possible phase and condition of the market..... W. D. Gann

INTRODUCTION

The simpatetica resonance is the scientific term for the seen natural phenomenon when a body is subject to an external source of vibration with an equal frequency to that one della natural frequency del body, the same body begins to vibrate. As an example, when two ropes of violino they are in unisono and one is played, the other will oscillate to the frequency of the played rope. This will happen even if the second rope is not touched from the bow.

To the aim to explain this phenomenon, short explanation of the simple vibration is necessary one. Initially, it can be difficult to comprise as this material relations to the financial markets; however, EVERY THING introduced in the following explanation is directly applicable to the financial markets. If the reader chooses to jump this explanation the introduced material more late he will not acquire sense. The explanation is short and in a generalized manner variety of characteristics of this phenomenon embraces one. For that they wish greater information on this argument, they are available of the physics books that give greater details. Like previously asserted, it is not intention of the author to supply the information available near other sources. Rather, the reader is supplied of citations towards these sources.

A way simple to comprise the simpatetica resonance is to visualize a child who oscillates on the see-saw. If every time that the see-saw returns someone gives to the child an other push, he will oscillate more and more up. This because the rhythm to which the see-saw it is pushed is equivalent to the period of the see-saw. The two (period of the see-saw and the action of pushing) are sincroni. Similarly, if the see-saw is pushed in alternate way it returns and will continue to oscillate. In this case, the see-saw and the push are sincrone with a relationship of two to one, that is, two oscillations for one pushed. However, if the see-saw is pushed that returns before completely, the two will be outside phase and the see-saw will not oscillate more up.

In this example the see-saw is the body on which it is acted, the push is the external force, and the period of the oscillation is the natural frequency of the system.

With reference to the financial markets, the simpatetica resonance allows the analyst to project, not only exactly where a market will be left over or withdraw in the price, but also **WHEN** it will happen. The time always has been the element lacking in the projections of the market analysts. However, **The E' TIME IMPORTANT ELEMENT PIU'.**

SINCRONISMO

The nature stretches sincronizzare the elements that initially appear to be disarmonici. To times, to catch up this state of synchrony demands the maximum entropy until when a common denominator is obtained, after that sopravviene the stability. As an example, when the cells characterize them of the heart are removed from two living hearts that pulsano, that they are pulsando naturally to different rhythms, these two cells will continue to pulsare to the rhythm of the heart from which they have been removed. However, when these two cells are placed in contact one with the other, both their rhythms of pulsation will change until are caught up a third different pulsation from ognuna of the two rhythms

originate them. Both these cells will continue to strike to this third rhythm until are supplied of oxygen and nourishing. They are synchronized one with the other.
Examples of this law abound in nature. Numerous searches have found that when the women are put together for various hours every day, their menstrual cycles sincronizzano. Even if the menstrual cycles are, initially, accidentally distributed in all the month, after a short period of time the cycles sincronizzeranno. Such experience regards also the premenstrual syndrome.
The synchrony happens also with the physical aspect. When people alive together year after year have the tendency to begin to resemble itself. The older braces not only achieve of the similar habits, but physically they seem somiglianti than when they were when they were met. These are all examples of dispositions that they force sincronizzare.
Like with all the natural laws, the financial markets are not free from the phenomenon of the synchronization. _ in the the order to sincronizzare exact a financial market finanziario, be simple a issue to find with which other element in nature the particular market be synchronized, then determine if this other element supply predicibilità.

MUSICAL SCALES

Figure 6.1 extension the ropes of varied lengths in one be of vibration. The rope is used because it is the simplest example than a body that vibrates. The fundamental tone is shown in 6.1.to, and remaining tones (6.1.b until 6.1.f) they are calls you "harmonic advanced" to the fundamental tone.
The relationships between these tones (and the fundamental tone) define notes on the "Scale Greater musical Diatonica". As an example, between 6.1.to and 6.1.b the relationship is 2, that it defines eighth. The relationship between 6.1.b and 6.1.c is three to two, that it defines the fifth musical one. The remaining relationships and their you respect musical tones to you are shown on the left part of the figure. On the skillful part of the figure there is the relationship R-with regard to the fundamental tone, 6.1.to.
It observes that these musical intervals only consist of eighth, fifth, and eighth of fifth. This is the same system used from Pitagora when it developed the musical scale "Greater Diatonica". In this system, called the "succession of fifth", is defined a tone, such C, like the fundamental tone. Fifth, a relationship of three to two, is annotated under this tone. Then fifth it is annotated over the fundamental one, defining the tone g. An other fifth is taken from g, then an other fifth from this tone, and this process is [1]
repeated until is covered five eighth. These tones are all reduced in one single eighth, creating the musical scale "Greater Diatonica" with the shown relationships of frequency in Table 6.1.

Table 6.1
Relationships of frequency of Greater the Diatonia Scale
with C like fundamental tone (key of C)

[2] TONE MUSICAL	INTERVAL	RELATIONSHIP OF RELATIVE FREQUENCY TO FUNDAMENTAL TONE (C)
C	FUNDAMENTAL	1
D	ACCORDING TO	9/8
And	THIRD GREATER ONE	5/4
F	QUARTER	4/3
G	FIFTH	3/2
To	SIXTH GREATER ONE	5/3
B	SEVENTH	15/8
c	EIGHTH	2/1
g	TWELFTH	3/1

This is the musical scale GIVES, KING, ME, AGO, SOL,, GIVES. The music played on a such scale, with C like fundamental tone, is known like "playing in the key of C".

The material consultation is recommended to the reader adds concerning them the construction of Greater the Diatonica Scale. This topic will not be widened beyond because this information is available

near other sources.
For the scope of this argument remembered that a taken sequence of "fifth" over a fundamental tone, and under the fundamental one, and all reduced to a single one eighth, define the musical scale "Greater Diatonica", like created from Pitagora.

NODAL POINTS

Having achieved an understanding of base of the musical scale, the attention can be focused on Figure 6.1. lengths and therefore, the frequency of the ropes shown in this figure are subsequently uniforms from two relationships, eighth and fifth.
The points on this figure where the advanced and inferior lines riconciliano are call to you **NODES,** and they are placed on the rope where it succeeds no movement. As an example, in 6.1.b there are two nodes to the final points and a node in the exact half. Similarly, the 6.1.c has two final nodes and two medium nodes, that it divides the rope in three equal lengths that vibrate. The nodes are created like vibrations, that they are sended through the ropes, they bounce with the final points and they interact with the waves that progress in the opposite direction. To the points where they succeed the nodes the waves are added together in order to neutralize themselves.
The concept of nodes is a lot important since, like will be shown, also the financial markets possess the nodes, that is, periods of small or no movement where the cycles that move in different directions little create the direzionati markets.Lesson IX, **The CYCLES I COMPOSED To YOU**, it expands the concept of nodes.
For being in unisono two ropes they do not have to be of equal length. Also the ropes with lengths in the relationship of simple entire numbers are in unisono. As an example, the ropes in Figure 6.1.to and 6.1.b they are in unisono with an entire relationship of two. Ropes 6.1.b and 6.1.c three and two are in unisono with a relationship of two entire numbers, and therefore via for the remaining lengths shown in the figure. Therefore, a rope is in unisono with its harmonicas.
If rope 6.1.to (the fundamental tone) it is put in vibration, also rope 6.1.b it will begin to vibrate. Also the 6.1.c will vibrate like the 6.1.d, the 6.1.and and therefore via. These ropes are in unisono and will vibrate simpateticamente. The musicians are very aware of this phenomenon, than cause the sound "to tintinnio" set up high hearing when instrument is pizzicata the rope of one. Without these "advanced harmonicas" the single fundamental tone must have a sound a lot sordo, submitted.
It is a lot important to observe that THE CHORD LENGTHS DO NOT HAVE TO BE IN EXACT UNISONO IN ORDER TO VIBRATE, SIMPATETICAMENTE. If there is a smaller difference from the exact entire relationship the bodies still risuoneranno, simpateticamente. However, the more far they are the bodies from the exact one unisono, less will succeed the simpatetica vibration. The importance of that will become obvious when the amount of simpatetica resonance to attend in a financial market is determined given a sure one to pile of variation from the fundamental ideal. This will be studied in Lesson VIII.
Rather than to play the shown fundamental tone in Figure 6.1.to, if the rope in 6.1.b is indurrà blow the simpatetica vibration in its advanced harmonicas that is, 6.1.c, 6.1.d, 6.1.and, etc.. However, the vibration that simpateticamente is induced in 6.1.to it will have minor largeness of that one in the advanced harmonicas. In other words, when a body has entered in vibration the advanced harmonicas (the ropes with shorter lengths) vibrates simpateticamente, with much more energy of the "inferior harmonicas" (the ropes with greater length of those entrances in motion).

This natural phenomenon is the scientific base for the radio. A station transmitter sound a tape or a CD in the emitter, that it emits marks them in the shape of the vibrations. These vibrations induce to vibrate to the circuita part them of the radio, simpateticamente, recreating mark them that it was transmitted.
From the transmissions radio to the creation of the musical scale, the examples of the simpatetica resonance can be find to you in nature everywhere. This is not limited to the phenomena that happen on the Earth, but can also be seen in the movements in the solar system. As an example, **The RELATIVE PERIODS Of PLANETS EXIST In The HARMONIC RELATIONSHIPS, IMPLYING THAT**

RESONANCE SIMPATETICA it was to the job on stellar detritus during the process of formation of the solar system.
The modern models of the planetary formation have a residual one of stellar detritus originally distributed in equal way in a bidimensional plan that extends from the Equator of the sun. The Concorde to the theory, this material muoveva in areas where the minimal clean force acted to you over (nodal point). This migration of the stellar material has created effectively of the areas with great detritus amounts and areas with little or no detritus. The areas where the detritus were accumulateed are those where the planets were formed. The areas where no detritus was not present were those with a great clean force that acted to you over, eventually muovendo the detritus outside of the area. The areas from where the detritus muovevano represent the distance between planets after that the formation process was complete.
The periods of planets exist in harmonic relationships. This means that the nodal points, that they characterized the areas in stellar detritus where the material was collected and where the planets were formed, were divided in harmonic relationships.
This process is easy simulabile in the laboratory placing of the limature of iron on one flat slab and subjecting the slab to vibration. The limature of iron move towards areas where the slab vibrates less, that is, the nodal points. If the vibration rhythm is changed the limature of metal they move towards an other area on the slab where the new nodes exist.
The harmonic relationships between the periods of greater planets are shown in Figure 6.2. This figure is the same one of Figure 6.1 except the periods of the planets that have been inserted in the appropriate positions in order to show the harmonic relations.
Like observed previously in this lesson, the fundamental tone produces the advanced harmonicas. Figure 6.1.f extension a advanced harmonica that is the 1/12 length of the fundamental tone, dividend effectively the fundamental tone in segments of 30 degrees, (360°/12 = 30°). Eighth of this division it creates adds them harmonic advanced along the aces of 15°. Therefore, a tone that is produces to the advanced harmonicas that are the 1/24 fundamental tone, the harmonicas that coincide with the aces of 15° of the fundamental tone. These aces of 15° are criti to us in the motion of planetary correlation with the DJIA.

Table 6.2 list the sidereal and sinodici eliocentrici periods[4] of planets.

Table 6.2
Sinodici and sidereal eliocentrici periods of planets

PLANET	SIDEREAL PERIOD	SINODICO PERIOD
Urano	**84 years**	**N/A**
Saturno	**29,5 years**	**N/A**
Giove	**12 years**	**N/A**
Mars	**22 months (687 days)**	**N/A**
Venere	**7 months (225 days)**	**N/A**
Mercury	**88 days**	**N/A**
Saturno - Urano	**N/A**	**45 years**
Giove - Saturno	**N/A**	**20 years**
Giove - Urano	**N/A**	**14 years**

With the sinodico cycle Saturno - Urano of 45 years like fundamental tone, the sinodico cycle Giove - Saturno of 20 years defines eighth, and the sinodico cycle Giove - Urano of 14 years it defines the fifth musical one (from the Giove cycle - Saturno). The first reaction in seeing this could be that the cycle Giove - Saturno it is not, EXACTLY, two times the Saturno cycle - Urano. However, it remembers what it was asserted previously, that two bodies do not have to be in exact unisono to the aim of risuonare, simpateticamente. If a rope of length 45 cm is put close to one of 20 cm, and the rope of 45 cm is made to vibrate, the rope of 20 cm will vibrate, simpateticamente. In adding, we see from Table 6.1 that the

relationship of frequency between "C" and "D" is 8/9. This produces the period of 40 years. That is, 45 years x 8/9 years = 40 years, that it produces one eighth of 20 years.
Like just a test in than these two cycles more risuonano simpateticamente, Lesson VIII will show that the aces of 15° and 30° of both these cycles supply areas where sincronizzano one with the other. This probably has had to the elliptic orbits of planets, that they provoke varying of the time amounts to pass when the planets move through their aces of 15°. Even if the cycles of Saturno - Urano and Giove - Urano are not multiple entire exact, when the segments of 15° are observe to you stretch sincronizzare. Saturno - muoverà Urano 15° while Giove - Saturno moves 30°. That will be tried when the planetary cycles and their harmonicas are correlate to you with the securities market.

FACTS KEY TO REMEMBER FROM FIGURE 6.2 THEY ARE THAT LIKE SATURNO - URANO MOVES 15°, GIOVE - SATURNO MOVES 30°, GIOVE - URANO MOVES 45°, And COMPLETE MARS A CYCLE. THESE CYCLES And THEIR HARMONICAS CORRELATE With the CYCLES In the SECURITIES MARKET.

Figure 6.3 extension the same harmonic relations shown in Figures 6.1 and 6.2. The difference in Figure 6.3 are that the periods of smaller planets are shown. The Giove cycle - Urano is included in the 6.3.to in order showing the logon between the greater and smaller cycles. Mars is introduced like the fundamental tone in 6.3.b. While Giove - Urano moves 45°, complete Mars a cycle of 360°. Therefore, while Giove - Urano moves through its aces of 15°, Mars is moved 120°.
The harmonicas of the Mars cycle are divided in sessions of 1/3 and 1/4. Venere corresponds with the section of 1/3, that it defines the twelfth musical one. While Mars moves 120°, complete Venere a cycle of 360°.
The division of ¼ of the Mars cycle corisponde with the Mercury cycle. While Mars moves 90°, complete Mercury two cycles of 360°. An other way to watch to that is that complete Mercury a cycle of 360° while Mars moves 45°. This means that the Mercury cycle is synchronized with the eighth musical ones of the Mars cycle. Eighth they divide the fundamental tone in sections of 180°, 90°, 45° etc..
It observes that the relative periods you of planets are numbers in the numerical sequence of Fibonacci. A Mars cycle finishes when three cycles of Venere finish and eight Mercury cycles. One, three and eight are numbers in the numerical series of Fibonacci, like explained in Lesson III, **The INCREASE MODELS.**
Similarly, a Saturno cycle - Urano it ends when two Giove cycles end - Saturno and three cycles Giove - Urano. One, two and three are successive figures in the numerical series of Fibonacci.
If the relations between the harmonicas of planets have not been clear yields from the aforesaid description, Lesson VIII, **The PLANETARY CYCLES**, it will answer sure to some of the remained questions.
Interval musical relationship of frequency towards
Correspondent relationship of fundamental
Frequency

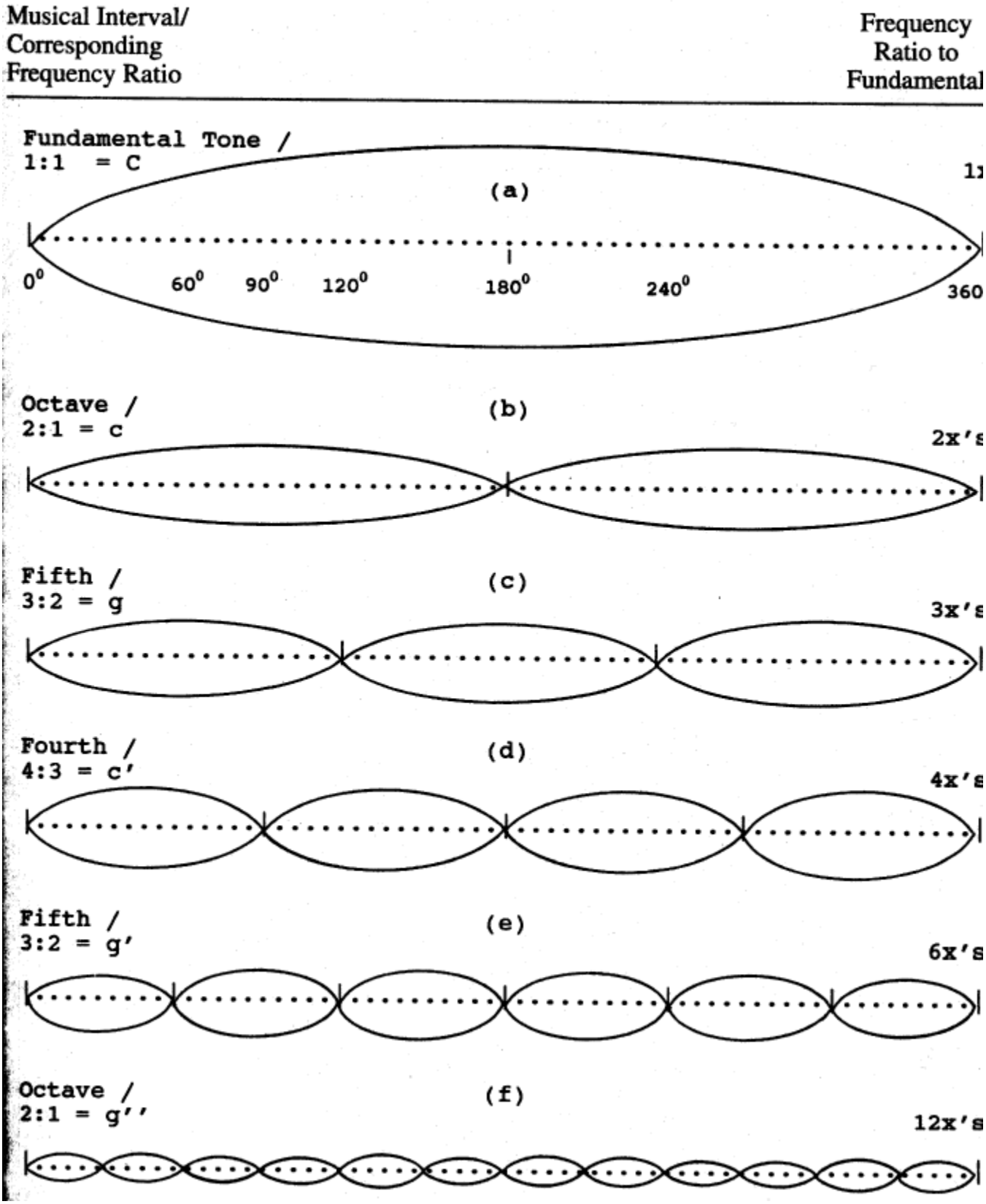

Figure 6.1
The musical intervals and the correspondents frequency relationships.
Interval musical planetary Cycle Relationship of frequency
Correspondent relationship towards the fundamental one

of frequency

Musical Interval/ Corresponding Frequency Ratio	Planetary Cycle	Frequency Ratio to Fundamenta

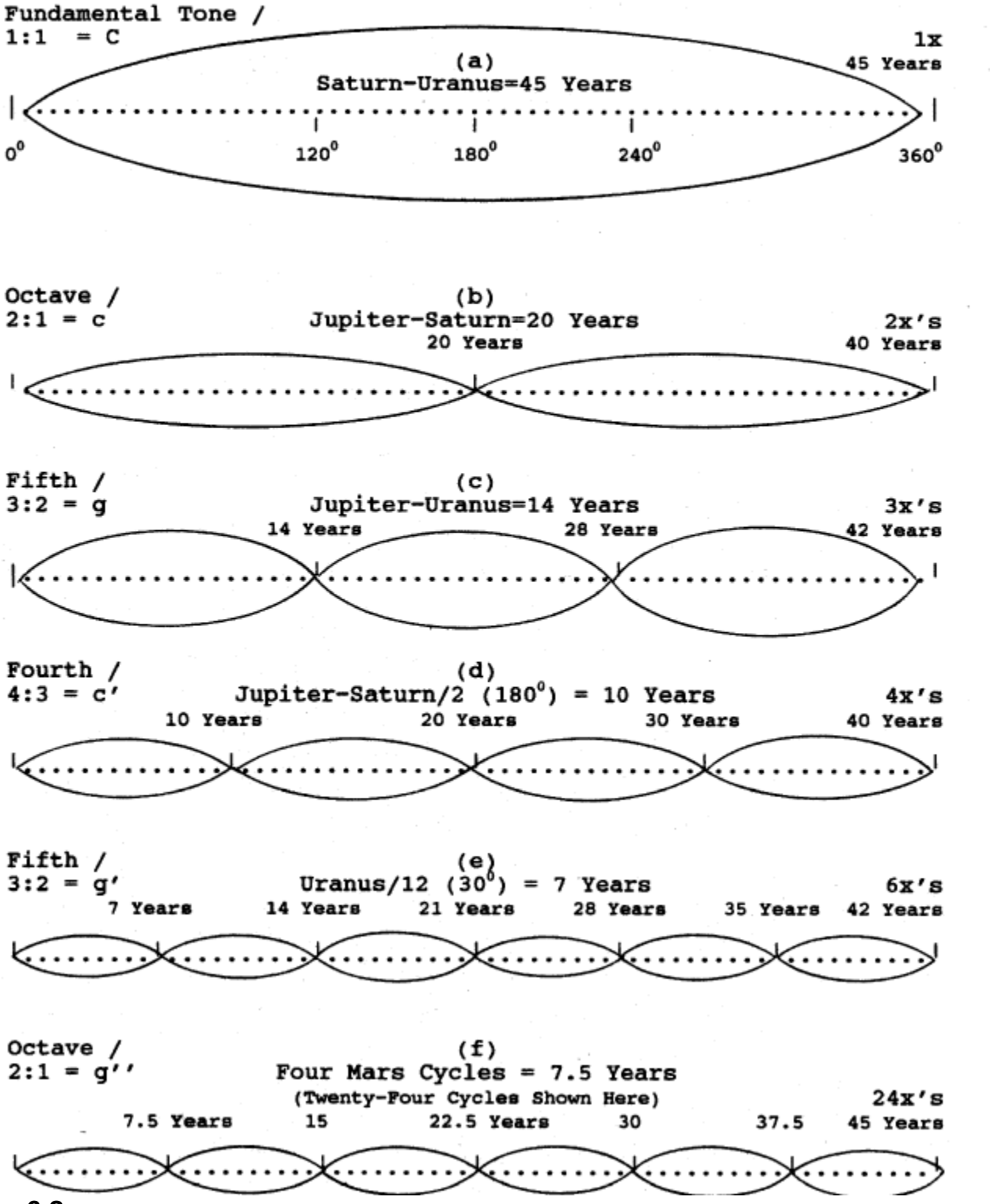

Figure 6.2

The musical intervals and the correspondents planetary greater cycles with the cycle Saturno - Urano

like fundamental tone.
Interval musical planetary Cycle Relationship of frequency
Correspondent relationship towards the fundamental one
of frequency

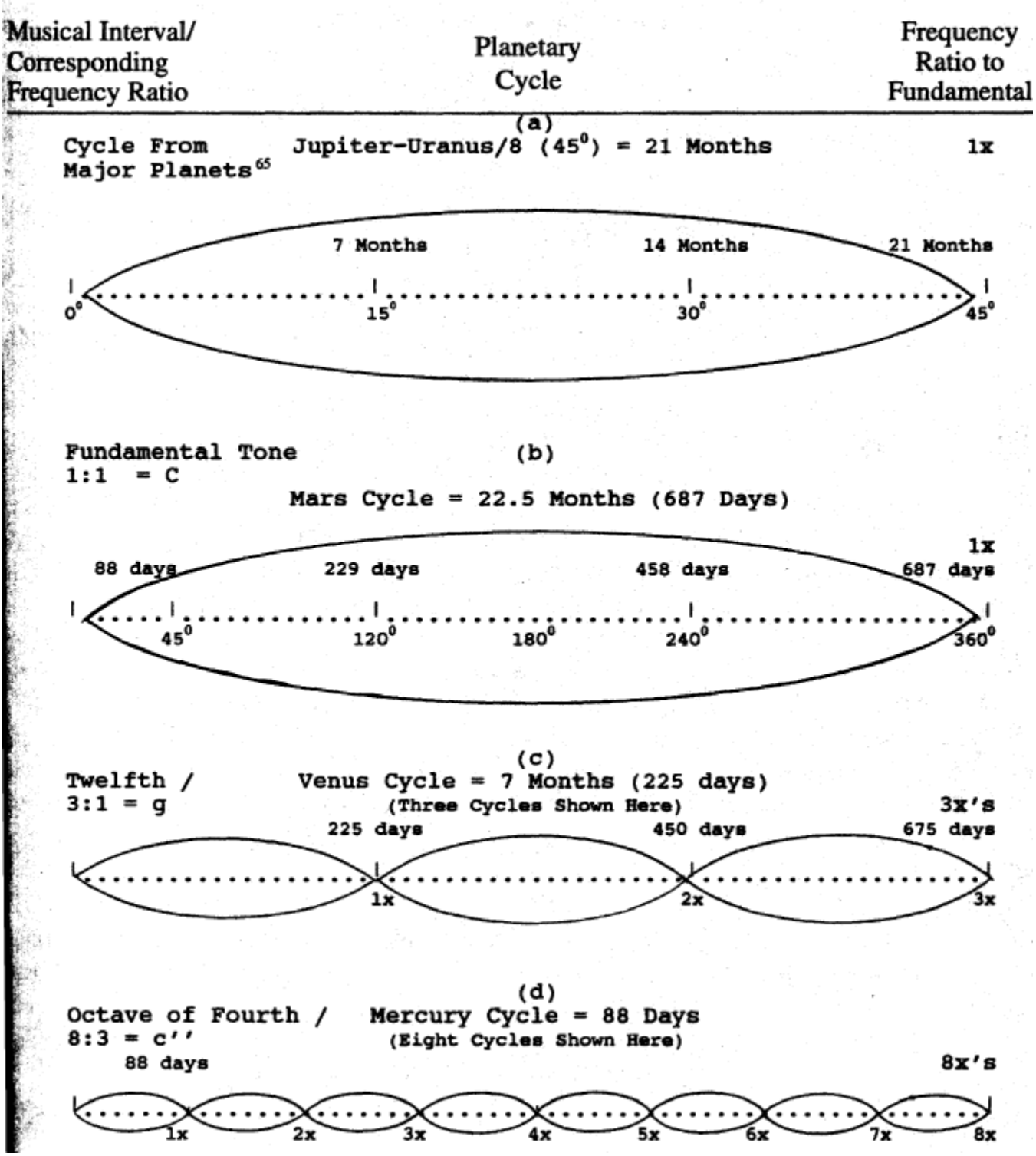

Figure 6.3
The musical intervals and the correspondents smaller planetary cycles with the Mars cycle like [5]
fundamental tone.

[1]

To reduce the tones to a single one eighth simply means to remove the unit value and to take the fraction remaining. As an example, 3/2 x 3/2 = 9/4. From unit 9/4 the unit is removed, (4/4 in this case). The result is 5/4, that it is the relationship of frequency of the tone "and", (sees Table 6.1), within the single one eighth of the musical scale.

[2]

The capital character traditionally is used in order to indicate fundamental tone (C). The letters with the very small character represent before eighth from fundamental tone (C). Every eighth successive one is represented from interrogated letters of very small character (there, c ", etc..). This is the notation used in Figures 6.1, 6.2 and 6.3.

[3]

In The 1909 W. D. Gann asserted that its "Law of Vibration" was "the fundamental law on which they are bases the radiotelegraph, the radiotelephones and the phonographs to you. Without the existence of the Law of Vibration the above-mentioned inventions would have been impossible ".

4 I sidereal periods are measured in relation to fixed stars. A sidereal eliocentrico period is the time that takes in making one complete revolution around the sun and to return to the same position, like approval from the sun. sinodico eliocentrico period is the interval of time between two successive conjunctions, like sights from the sun.

[5]

The cycle greater Giove - Urano, shown in Figure 6.2, are included in this figure in order to evidence the logon between the greater and smaller cycles. Saturno cycle - Urano is synchronized also with the Mars cycle.