LESSON III

INCREASE MODELS

Here and elsewhere we will not obtain the better one intuito in the things until when we really see to them to grow from the beginning

Aristotle (322 To. C.)

INTRODUCTION

The previous lessons have taught like determining the PTV, creating the ellipse and applying it ai to graphical goddesses financial markets, and which angle to attend for the axis greater dell' ellipse.
If they are from being made of the taken care of projections of price - time, is necessary one understanding of the natural models of increase. Every thing in nature grows simple mathematical relations second and the financial markets are not free from this law.
The analysts of the financial market have observed sure recurrent relationships that exist in the price - time. The most celebrated than these it is the relationship of Fibonacci of 1,618: 1. However, even if sure relationships are known to exist, without an understanding of the natural process of increase it is impossible to know when to expect these relationships to happen and when not. An arbitrary application of every technique of tempismo is one sure prescription for the disaster financial.

Market analysts constantly mistake in trying to apply to the relationships of the model of increase to one single dimension on a graphical price - time, that is, to the single levels of resistance and support in the price, or to the temporal cycles.

IF CLEAR PIU' IS EXPECTED Of The TAKEN CARE OF DEMANDED E' PROJECTIONS ONE UNDERSTANDING Of The UNIFIED NATURE Of the PRICE - TIME. THE PTV SUPPLIES THE INSTRUMENT IN ORDER TO SEE THE MULTIDIMENSIONALE NATURE OF THE MODELS OF INCREASE OF THE PRICE - TIME

This lesson will study the created models while the financial markets proceeded through the natural sequence of increase. While a greater understanding of this process of increase is developed the analyst will be rendered aware of the points in the increase process where they rerun specific relationships. In the successive lessons they will be reveals the more important relationships to you of the celebrated Fibonacci.
You hold in mind from the principle to the end of this lesson and that one that follows, than the approaches used in this course are only in the fact that is used a multidimensional approach. The PTV is used like one instrument in one price theory - unified time.

RIPASSO OF THE CULTURAL BAGGAGE

In the following explanation one presumes that the reader is familiar with the relationships of Fibonacci, the Gold Section, the Dynamics Simmetria, and the logaritmiche spirals of base. If it it is not, will be useful see again these topics before continuing.

FIBONACCI

The numerical series of Fibonacci is used from the man in order to represent sure models of increase in nature. As an example, the seed distribution on the head (cespo) of a sunflower follows the series of Fibonacci, like ago the distribution of fioretti in the pigne and the pratoline. That he is not to say that some divine spirit has developed a numerical series and has ordered to all the plants to grow in

agreement to it. The plant grows in a way that better confà to the just ambient one, filling up the space in a efficient way as well as how much possible one. The numerical series of Fibonacci is simply an attempt of the man to model and to comprise turns out you of this increase.
This numerical series proceeds as it follows:
1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89...
Fibonacci is a series of sums, of which every element it is the sum of the two previous ones. Two are the sum of one more one; eight are the sum of three more five; and therefore via. This series is prevailing especially in the models of increase that follow one conical spiral, shown in Figure 3.1.

It observes the similitudine between this figure and Figure 2.2.to, that it showed a rappresentazione bi - determine the proportions them of two circles stacks [1] used in order to construct the ellipse to you.

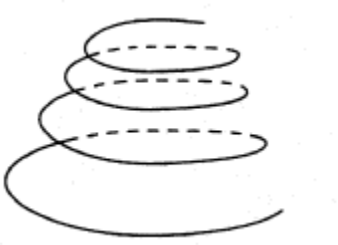

Figure 3.1
Side sight of the conical propeller.
After that the series of Fibonacci continues beyond the first little terms, every successive element is in relationship of 1,618: 1 towards that previous one. This relationship is very known "Gold Section" used from many analysts of market in order to establish the levels of support and resistance. Siccome will be shown in the successive lessons, this relationship is not the more important relationship in the analysis of the financial market. In fact, it is in bottom to the list. However, as a result of its general understanding and general applicabilità to this topic here are included.

GOLD SECTION

One of the interesting things a lot care the Gold Section is that it does not import which two numbers are used in order to begin the series. If the sum process is continued times enough the relationship of the terms succeeded to you it will converge on relationship 1,618:1. As an example, if arbitrarily we have chosen two numbers, like 520 and 12, as the first two numbers of the succession of summary and we have proceeded like described over, the terms succeeded to you will converge on 1,618:1. This series will be left over as it follows:
520, 12, 532, 544, 1076, 1620, 2696, 4316..
Last the two terms of this series had already approached 1,618:1. It puts into effect them relationship to this point of the progression is 4316/2696 = 1,6009:1.
This numerical series is the base for the "Gold Spiral", shown in Figure 3.2, that has every successive beam equal carrier to a number of Fibonacci.

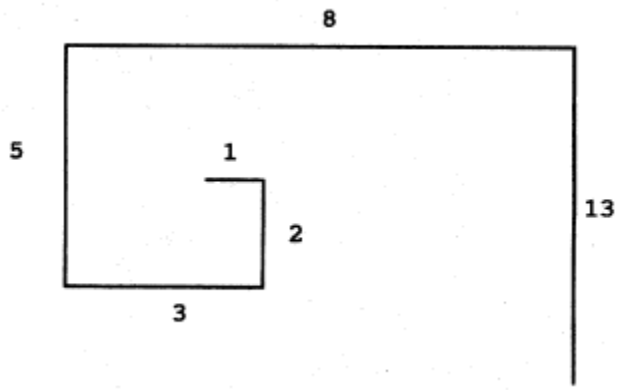

Figure 3.2
Gold spiral

ON A GRAPHICAL PRICE - BIDIMENSIONAL TIME GOLD SPIRAL PUO' DIRECTLY NOT TO BE SEEN BEYOND The FIRST LITTLE TERMS. Like described previously, the action price - time gives the appearance of serpeggiare and turning within and outside of the observation page. For to determine the location of the Gold Spiral, we must before see the successes to you terms in the series of Fibonacci, then to apply the principles of the Dynamics Simmetria in order to characterize where he will lead the next turn in the spiral.

DYNAMICS SIMMETRIA

The dynamics simmetria is the name given to the design found in the plants and living and increasing animals. This is in contrast with the static simmetria, that it is present in the inanimati objects. The principles of the dynamics simmetria are used from the artists in order to create one better appearance than "life" in their job. They are not only the contemporary artists to use these principles, but they have been used from the artists for hundred of years. Many antichi jobs of art, especially Greek, show one deliberated incorporation of the Dynamics Simmetria. Dynamics Simmetria uses geometry in order to obtain the present proposizioni in the living organisms. This produces one variety of geometric designs, including those with the Gold Section.

A graphical rappresentazione of as the dynamics simmetria is used in order to obtain the Gold Section from a square is shown in Figure 3.3.

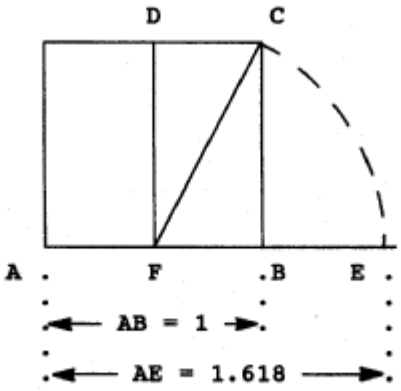

Figure 3.3
The Gold Section is derived from the diagonal of square half.

In this example of dynamics simmetria, square AC is divided in two equal rectangles, TO and DB. The diagonal of one of these triangles, PC, is used like beam carrier imperniato to the F point, and designed towards the bottom to intersect a segment extended from the minimum of the square, AE. Therefore, FC = FE and the relationship between this extended segment, AE, and the side of the square, AB, is 1,618:1.

A CYCLE OF FIVE YEARS DEFINES THE SMALL PIU' MODEL OF COMPLETE INCREASE

Before that the relations described over are connected to the financial markets, some measures of price - time is necessary. The diagram weekly magazine will be used, extended over a period of various years, for being sure that an entire model of increase is included in the field of vision. If the temporal picture is only used a every day diagram he would be too much short in order to complete an increase model and would be only seen a piece of the model.

Diagram III.To extension a diagram weekly magazine reported in Lesson II, with the members price and time of the beams enclosed carriers. The data used for the calculation of these beams are contained in Table 3.1.

Table 3.1

Calculations of the PTV for Diagram III.To in order showing the suit
Model of increase of five years

BEAM CARRIER PREZZO-TEMPO	DATE OF THE MINIMUM	MINIMUM OF CLOSING	DATE OF THE MAXIMUM	MAXIMUM OF CLOSING	CHANGE OF TIME IN DAYS	CHANGE OF PRICE IN POINTS	VALUE OF CARRIER (PTV)
AC	08/03/1982	795,47	07/08/1984	1204,62	613	409	737
CE	07/08/1984	1204,62	27/03/1986	1821,72	413	617	742
EG	27/03/1986	1821,72	02/10/1987	2641	384	819	904
IK	02/03/1988	2071,29	11/08/1989	2684	366	612	713
AE	08/03/1982	795,47	27/03/1986	1821,72	1026	1026	1451
AG	08/03/1982	795,47	02/10/1987	2641	1410	1846	2323

Various facts must be observe care to you the values in Table 3.1 and the correspondents cycles shown on Diagram III.To.

1. If the value is the time or the price, base "approximately 205 is all entire multiples of a value". This is demonstrated in Figure 3.4, where the entire multiples are only shown. That is, 2 on Figure 3.4 205 = 410 represent 2 x, 3 are equivalent to 3 x 205 = 615, 5 are equal to 5 x 205 = 1025. The points To, C and and are the same ones like shown on Diagram III.To. On Diagram III.To ellipse AC it has a temporal member of 613 days, that it is three times 205, and a member price of 409, that it is two times 205. Therefore, the rectangle that have 613 days like a side and 409 points as a side is one rectangle 3 x 2.
2. The two beams carriers, AC and CE, that they define the greater aces of the correspondents ellipses, are of equal length.

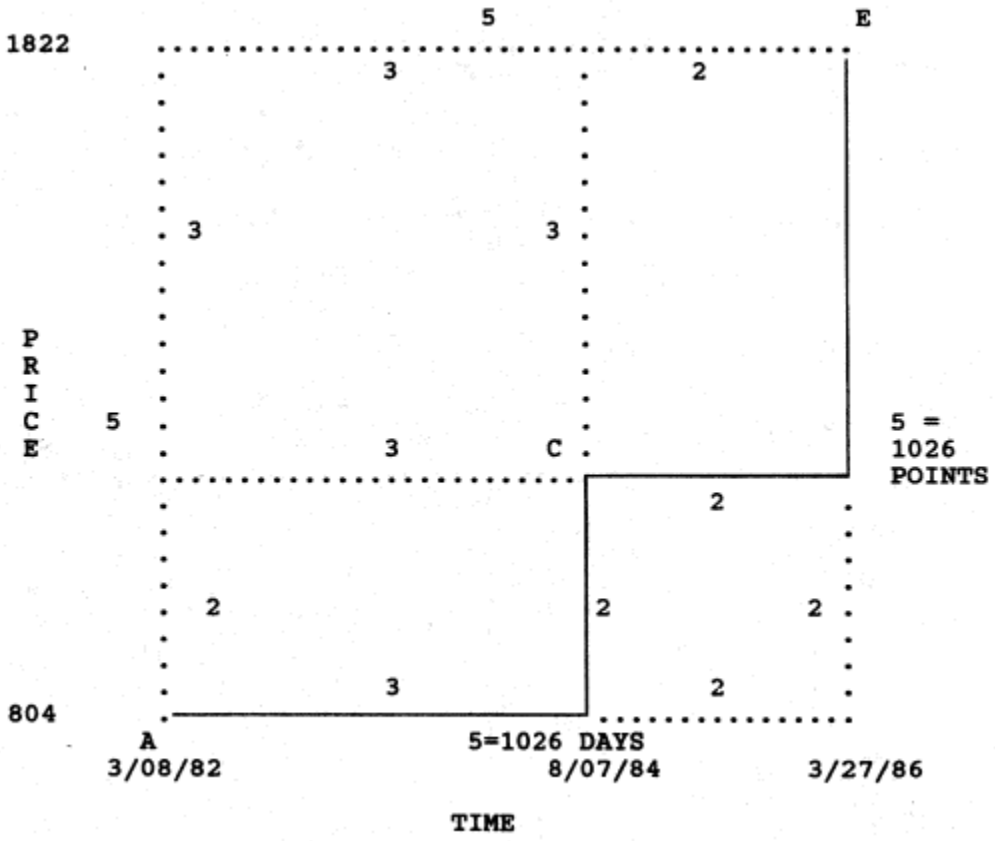

Figure 3.4
Squared from Diagram III.To (DJIA 8/03/1982 - 27/03/1986).

3. Ellipse CE is the inverse one of ellipse AC. That is, the member time of CE is 413 days, that price of ellipse AC is equivalent to the member. And the member price of ellipse CE is 617, that time of ellipse AC is equivalent to the member. Therefore, ellipse CE has the members price - time of one rectangle 2 x 3. Ellipse AC contains the long action the advanced perimeter and long ellipse CE the inferior perimeter. If these two ellipses are overlapped an ellipse with both perimeters is seen delineates to you.
4. Two cycles, AC and CE, are defined within a square, AE, with equal sides to 1026, that it is equivalent to 205 times 5.
5. Since Figure 3.4 are a square, follow some that the diagonal, AE, must form an angle of 45 degrees [2] with the axis of the time. This figure currently contains three squared with sides two, three and five. These numbers are terms succeeded to you in the numerical series of Fibonacci. It confronts this figure with Figure 3.2, the "Gold Spiral".

In order to practice the visualization of as the spirals they are unfolded in three dimensions, it tries to see the twisting that 3 of ellipse CE would be demanded in order to place rectangle 3 x 2 of ellipse AC over rectangle 2 x.

On Diagram III.To the action it began to the point To and muoveva along the advanced perimeter of ellipse AC until the strong cyclical effects they down induced it to being pulled [3] in the minimum of June - August 1982. When this cycle touched the moved bottom the action to the rise and oscillated between the advanced perimeter of the ellipse, supplying resistance, and the diagonal of square AE, than procurò support. They can it are seen various points where the action touched both these lines. In January 1984, the support line, AE, and the perimeter of resistance of the ellipse joined. To this point it

began an express decline, making to come down the action to the inferior perimeter of the ellipse, that it supplied the support until the ellipse was complete to point C.

After that ellipse AC finished, its opposite one contained the action while muoveva towards the high until the point was caught up and. The point and not only represented the point where the ellipse was complete, but also the completion of square AE. To this point the market was salted of 1026 points in 1026 days of ag, having defined the square with i sides 1026 x 1026.
Square AE has many remarkable characteristics:

1. The diagonal of the square supplied a line of support until was broken off in January 1984.
2. Two great ellipses, AC and CE, are contained within this square.
3. The end of ellipse AC and the origin of ellipse CE happened to point C. **THIS POINT NOT E' DIRECTLY On the DIAGONAL Of the SQUARE.** More just, the position of point C defined the [4] Gold Spiral within the square.

When a living cell has caught up the maturity is reproduced separating itself in two parts, after all creating two cells with two times the volume of the cell originates them.
In geometry, in order to create a square with two times the area of the square originates them the [5] diagonal of the first square is used like squared side of the new one. The diagonal of the square shown in Diagram III.B extends from the point To to the point and and has one length of 1451, like calculated in Table 3.1. With this line used like base, is constructed the new square, AEMN. This squared it is used in order to find the successive point on the curve of the Gold Spiral, using the principles of the Dynamics Simmetria, like shown in Figure 3.3. To the point and the spiral it was been left over in the series of Fibonacci until number five: 1, 1, 2, 3, 5. These numbers and theirs square correspondents are shown on Diagram III.B. The next number in the series is 8.
Within the new square, AENM, is designed the diagonal of squared means, PN. This line, PN, have one [6] length of 1622, that the value is eight times base of 205, and establishes the length of the next PTV on the Gold Spiral. This PTV originates to the P point and graphically is extended ahead in the time having designed the arc, NG. Along this arc the limits of the successive turn on the Gold Spiral are defined. As it can be seen on Diagram III.B, this arc touches the maximum of the market hardly before the landslide of 2 October 1987.
In order to verify that the theoretical values calculate to you over meet put into effect it them action of market, EG must be shown to be in the relationship of Fibonacci of 1,62 with the side of the square, AE. Table 3.1 respective calculated the values for EG and AE to be 904 and 1451. Therefore,

AE = 1451 = 1605
EG 904

In other words, EG and AE are in the relationship of Fibonacci of 1,6:1. It observes also that the EG value, that was determined from the relationship of the five root, is equal to the PTV from 1966 to 1982.
In order to confront as the theoretical ideals values uguagliavano the data it puts into effect them, the side of square AE is divided for 1,618 in order to obtain the theoretical length of EG. That is,
Since AE = 1451, the theoretical value of EG is given gives;
Value EG theorist = AE = 1451 = 896,8
1,618 1,618
The present value them of EG was 904, producing an error of,
904 - 896,8 = 0.80% error
896,8
An ulterior test that the techniques of dynamics simmetria defined over identify the Gold Section within the model of increase of five years on Diagram III.B is obtained verifying relationship PHI between PTV AG and AE.

AG = 2323 = 1,6

AE 1451

TOPICS ARE LEFT OVER TO YOU

The reason that the dynamics simmetria is a precious instrument in determining the final carried out one on the spiral of the completed cycle of increase of five years is that the final PTV, EG, currently turned out outside the observation page. The distortions determine the proportions provoked them from the bidimensional diagrams create the appearance that the action is coming towards the observer while it sees the diagram.

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[1]

The ellipse contains the action price - time, that it exists in more than two dimensions. The two used circles in order to construct the ellipse are two coverings succeeded to you in a conical propeller. As the action of price - time oscillates through the ellipse, than what currently slice "outside from the conical propeller is looked at is one". That can be visualized watching a little ball that rolls down from a rolled up spiral, and sees only the little ball when it rolls in front of you.

[2]

This is the angle of 45° of W. D. Gann. It is the diagonal of the square. When the square has completed the formation, like to the point and, the angle of 45° is caught up and is met one important resistance.
Which angle the action price - time follows, depends before on the stage puts into effect them of the increase process. For example, if the action price - time is following the inferior perimeter of the ellipse angle 1 x 2 will dominate to the beginning in the cycle, then the 45, then 2 x 1. The angle it progressively becomes steeper as it increases the process of increase to a greater rhythm, while it is contained within the ellipse.

[3]

The cycle that induced this action price - time to being weakened until lessened of 1982 will be explained more ahead in this course.

[4]

The Gold Section divides a square with the length of the equal side to five in two parts with relationship 3:2. These are the two terms to the beginning in the numerical series of Fibonacci, on which the Gold Section it is based.

[5]

This because the diagonal of the square with the side along one is √ 2. And the area of the square with the length of the equal side to √ 2 are √ 2 to the square, that it is equivalent to 2. This will be explained more ahead in Lesson IV.

[6]

The square means diagonal is defined like √ 5 times the short side of means - squared. In the example shown on Diagram III.B, PE is the short side of means - squared. Therefore, the diagonal, PN, R-with regard to this means - squared it is given give: PN = √ 5 x PE; or PN = 2,236 x 725,5 = 1622.