C H A P T E R **13**

Gann Techniques

W. D. Gann

For some reason, everything relating to Gann seems to have a mysterious flair. Many publications carry this tradition and compose their material in a difficult-to-understand manner. To fully understand and believe in this technique, one has to ignore this mystical taboo and dig into its inner works. We will try to keep our presentation as simple as possible.

W.D. Gann used a collection of techniques. Through our work we have come to the following conclusion: the reason Gann was so accurate in his predictions was not due to any one single technique—it is due to his ability to use the right tool at the right time. A master at this, he was an excellent mathematician with a quick-working mind. For example, he could tell when a market was overbought without ever using an indicator. Stochastics is a well known mathematical-based formula used to represent an overbought/oversold condition. Perhaps Gann could calculate such an indicator in his mind by looking at the prices.

The eSignal approach is to take only the easily applicable Gann techniques, improve them, add concepts to enhance them and, finally, reduce them to computer equations. Since computer equations are structured and straightforward, you will also benefit by applying them manually.

Gann Angles and Lines

We are all familiar with trend lines. The main disadvantage of a trend line is the requirement of at least two price points to connect the line. The Gann angle/line approach requires only one pivot price point and various lines can be drawn from this point. The concept behind Gann angles are described in this chapter.
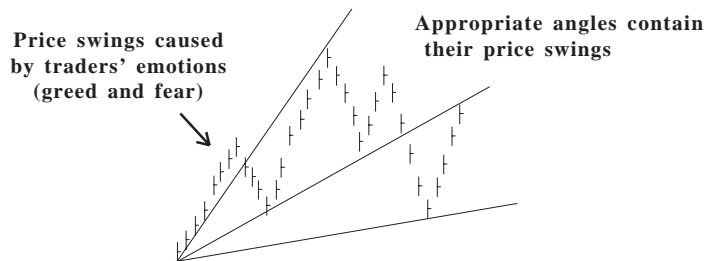

Figure 13-1: Gann Angles

When prices rally off a low, the rate at which the market rallies and fluctuates is controlled by the fear and greed combination of the mass public that is trading that particular market. The fear and greed causes swings in the markets. This human behavior goes from one extreme to another in cycles of various degrees. These varying cycles can be defined within the parameters of certain angles originating from the price lows.

The task is to find the appropriate set of angles which can define the various cycles that represent the fear/greed swing of traders involved with an individual market.

The appropriate angles were not found overnight. It took Gann several years. With the help of computers and the right concept, we have been able to calculate the angles for most commodity futures traded in the U.S. and some overseas markets. Our angles are based on the past five to ten years of data. The core angle for each market is constant and does not change over time. The sensitivity and vibration may alter slightly, but the core angle has stayed the same.

A Real-Time Example

The eSignal approach is to use constant angles for each market that define that particular market's price fluctuations, which is caused by the fear/greed emotions of traders. True Gann Angles will not change when the price scale of the chart is altered. This is illustrated below in Figures 13-2 and 13-3.

Figure 13-2: True Gann Angle Ratio

Figure 13-3: Altering price scale will not change true Gann Angles

The Fear and Greed Cycle

It is extremely difficult to predict the fear and greed behavior of traders in advance. However, we can overcome this difficulty in a roundabout fashion.

When a market makes a major low or bottom that results in a very large price swing, it is reasonable to assume that the general public has expressed their emotions to an extreme. In other words, at a major top, the greed of the traders has peaked and the subsequent market decline is due to the fear of the same traders. Having defined this, we can go one step farther and state the following: when a major top is in place, the majority of trader emotions (greed, in this case) are synchronized for that moment in time. Thus, Gann angles from such a major top originate at the infancy of the next trader emotion cycle phase; Gann angles from a major top can better define the larger emotion cycle than Gann angles from a minor top.

In simple words: Gann angles originating from a major price swing are more useful in defining future price swings than Gann angles originating from a minor price swing.

The eSignal software provides more importance to the major Gann angles.

Defining Price Swings

This leads us to the question of defining major price swings. It is easy to look at a price chart and say "this is a high" or "this is a low." Our task was to teach the computer the same.

Figure 13-4: Price Pivot Points

By measuring the percentage price swing from each high and low, eSignal software defines price pivot points as**:**

    P = Primary
    J = Major
    I = Intermediate
    M = Minor

Gann angles originating from **Primary** lows/highs have higher priority in defining the future path for the trader's emotional cycle. The next in line will be angles from **Major** highs/lows, followed by the **Intermediate** and **Minor** pivots.

In general, all Gann angles could provide support and resistance for price swings. However, the higher hierarchy angles, such as angles from primary or major pivots, typically provide more sustained and stronger support/resistance.
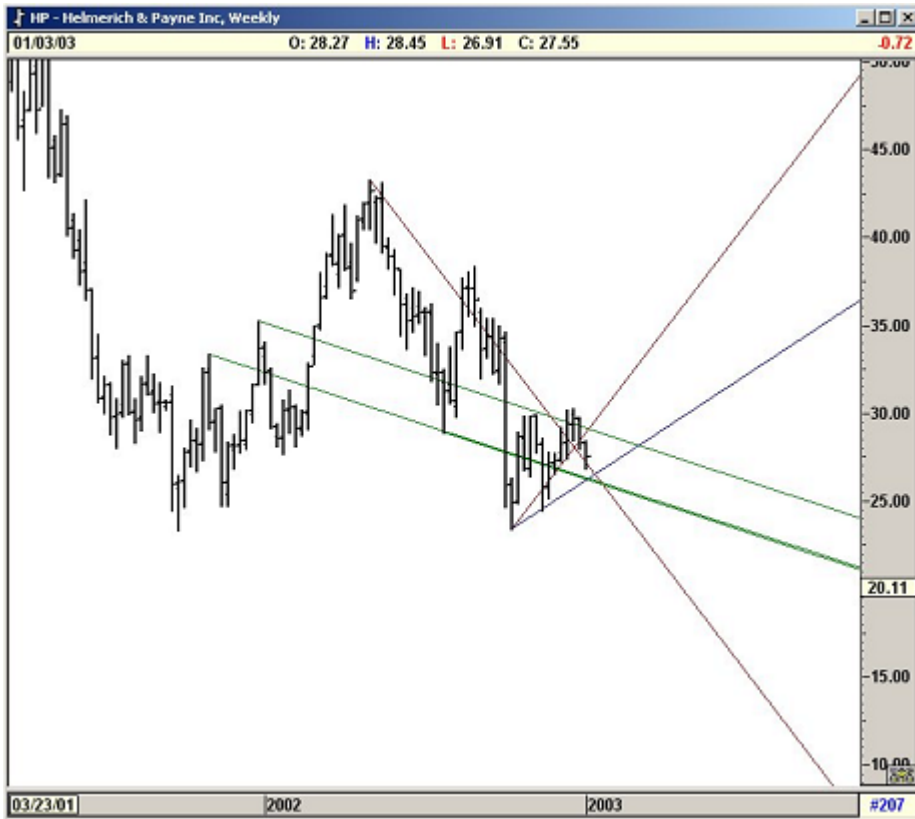

Figure 13-5: Gann Angles

Using Gann Angles with Elliot Waves

For Waves 3 and 5

When the market is moving up in a 5-Wave impulse, draw Gann angles going up from the previous Primary Pivot High. The angles should provide resistance for the tops of Wave 3 and Wave 5.
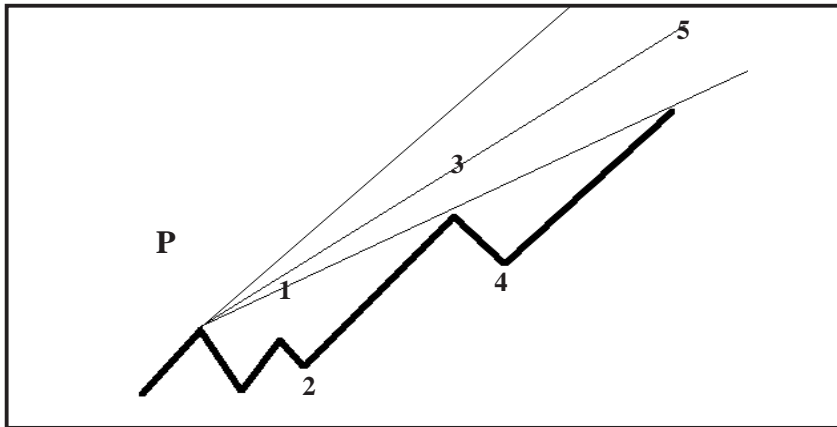

Figure 13-6: Primary Pivot High, Waves 3 and 5

When the market is moving down in a 5-Wave impulse, draw Gann angles going down from the previous Primary Pivot Low. The angles should provide resistance for the bottom of Wave 3 and Wave 5.
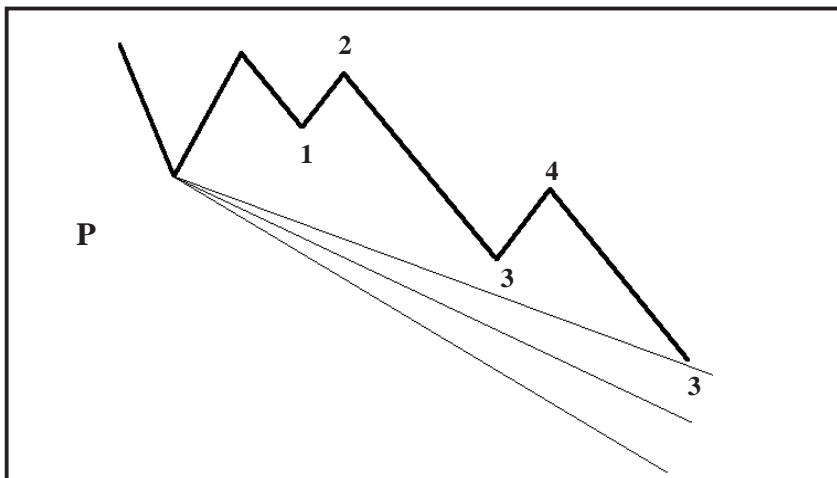

Figure 13-7: Primary Pivot Low, Waves 3 and 5

Using Gann Angles with Elliot Waves

For Wave 4

When the market is moving up in a Five-Wave impulse, draw Gann angles going up from the previous Primary Pivot Low. The angles should provide **support** for the **bottom** of Wave Four.
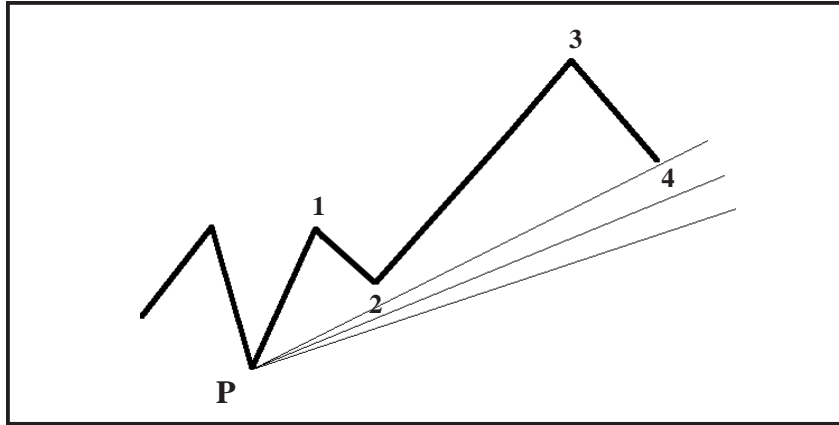

Figure 13-8: Primary Pivot Low, Wave 4

When the market is moving down in a Five Wave impulse, draw Gann angles going down from the previous Primary Pivot High. The angles should provide **resistance** for the **top** of Wave 4.
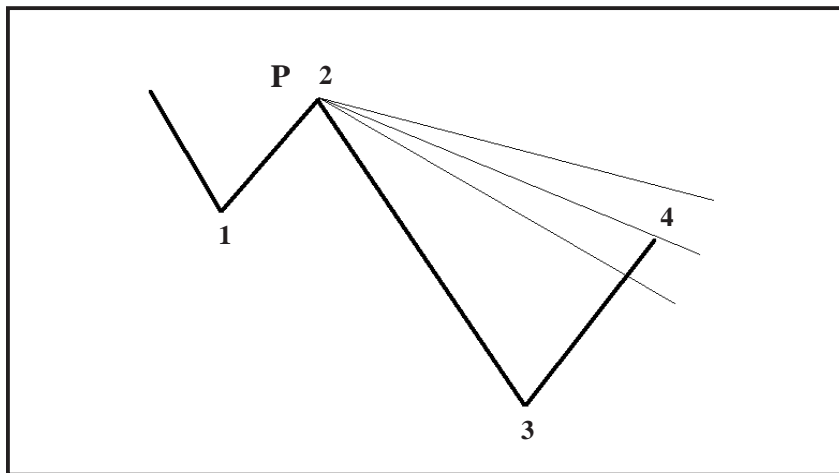

Figure 13-9: Primary Pivot High, Wave 4

Optimized Gann Angles

In the past versions, we provided a pre-built scale for Gann Angles for selected U.S. commodities. This created two major drawbacks:

1) The built in scales could not be altered to allow for day-to-day volatility of the markets.

2) Gann angle scales were only available for selected markets.

We have now added our Optimized routines, which allow the user to find the optimal angle for any market loaded on the screen including stocks, spreads, cross rates and foreign issues. The routines also include volatility adjustments.

The optimized scale is printed on Figure 13-10, below.

Figure 13-10: The correct angles for any given market are obtained by clicking the Optimize button when applying the angles to the chart.