

# Learn to Love Studying and Applying the Techniques of Gann Gann Masters Lessons

By Larry Jacobs

In the last issue of Trader's World magazine we included a postcard which stated that any subscriber who wanted 6 free lessons to Gann Master's International should check the postcard and return it to us. Because of the large number of postcards we received we decided to summarize those 6 lessons in to the following article. The article contains most of the important parts of those lessons. It does not include the lesson exams or many of the large charts.

W.D. Gann was perhaps the finest trader of all time. With over 40 years of research and trading, he fully understood the markets and why they move the way they do. In his lifetime Gann wrote many books and courses about the markets. What he wrote, however, is difficult to read and understand. It is the job of Gann Masters International to find for you the important trading methods and techniques Gann used, prove that they work, and put them in an easy to understand lessons.

In Gann Masters, you will be presented to each lesson in its logical order Gradually and simply, an important factor, the clarification of a mystery, vital knowledge, or a bit of material will merge into another You will not be driven into a maze of charts and numbers which you cannot understand and which will fatigue you. The lessons are organized by degrees and grades, each following in this proper order So here it is, the summary of the first 6 lessons of Gann Masters.

If when you are trading, you find yourself feeling inadequate and unable to face making decisions with enthusiasm and confidence, then this course is for you. You're probably finding yourself making pathetic trades that lose money most of the time. You can learn to become more confident and successful in trading and awaken a new trader within you with Gann Masters International.

It doesn't matter who you are or what type of person you are, you can find total self-confidence in trading! If you look around at your friends and business associates that you know trade in the markets, you will find that very few of these them are successful at it. Most of them lack the necessary confidence and conviction in trading. They are not willing to put in the work to learn how to trade the markets properly. The majority of traders have surrendered to losses most of the time. Statistics say that 90% of people lose in the commodity markets. As a result they blame their brokers, the floor, outside circumstances for their failure to trade profitably. Eventually, most people think that their trading is so much controlled by outside events that they give up trading all together.

W.D. Gann, the greatest trader of all time wrote, "Speculation or investment is the best business in the world if you make a business of it. But in order to make a success of it you must

study and be prepared and not guess, follow inside information, or depend on hope or fear. If you do, you will fail. Your success depends on knowing the right kind of rules and following them.” He said that lawyers, doctors, engineers and professional men who make a success spend anywhere from two to five years time studying and preparing to practice their profession before making any money. Yet men enter into speculation in Wall Street without any preparation. They have made no study of it whatsoever. They try to deal in something they know nothing about. Is it any wonder then that they lose?”

Speculators and investors who simply guess, follow tips, rumors, newspaper talk and so called inside information have no chance of ever making a success. Unless they follow some well defined plan based on Science and Supply and Demand, they are sure to lose.

Gann Masters International is in a unique position to give you the rules of successful Gann trading. You must be willing to study and learn the lessons in the course that will be given to you. It will take you long hours of study and practice, but you cannot get something for nothing. It will cost you time and money, but it will be worth it in the end.

If you want to be a successful trader, then you must also change your inner aspect of what kind of a trader you think you are. You must believe that you are different than most all other traders and that you are going to be as successful as W.D. Gann was in the markets. To put it another way, you are not what other people think you are, but what you think you are.

Don't concentrate on your limitations or your failures of your past trading. You have been conditioned since you started trading by people around with false concepts and values. This has limited your full potential. You have the power to change your trading. You must realize your worth as a strong person and a very successful trader. The time has come for you to stop your bad habits of trading and start putting in the time and money to become a very successful Gann trader.

Put all things aside while you are studying each lesson. The hours you spend will be a small investment compared to the return that you will receive. To get the best results from these lessons, read each lesson through several times. You may have to return to some of the prior lessons if you have forgotten any of the material. Now, read the following rules carefully:

1. You must now assume that the truths you now hold to be true may in fact be false and those truths may hold you back from your full potential as a successful Gann trader. You must open up your mind freely to all new ideas and forget all false truths you believe to be true. There is no limit to what you can do if you use your full imagination to work on becoming a successful trader. Once you believe that you are a trader as good as W. D. Gann, then you will act as though it were true. You have been unknowingly limiting your full potential through your “mistaken certainties” in your mind. If you can eliminate these “mistaken certainties” your potential for successful trading will go well beyond anything you know. You must now awake to the truth and limitations that you have imposed on yourself. You must now assume that many of the truths you now hold are in fact false and that these truths are keeping you back from fully utilizing your potential. You are primarily a product of what you have been taught up to now. If you want to change and become a successful trader, you must learn to understand everything that is taught to you and not believe it to be true until you have proven it to yourself. You will be given many Gann trading rules and techniques, but do not accept them as truth, until you have proven them to yourself.
2. You must be self-reliant. This will be a deterrent to the idea that other traders are smarter, wiser or more intelligent than you are. You will no longer look to them for support for trading

ideas which may be unprofitable. It is impossible to become a very successful trader if you are thinking other traders, analysts, etc. are smarter than you are. For example, if you have spent many hours researching all of the trends and cycles on wheat going back for over 100 years, you should be confident enough to trade it in the markets. However, if you are not self-reliant, then even the slightest comment from another trader might deter you from making a successful trade. When you become self-reliant you also will have the courage to listen to your inner feeling for hints or signs that you are on the right track. You will be taking a cue from the successful trader you are, not listening to someone outside of your inner thoughts. When you learn to follow the signs correctly and your inner prompting for hints on how to trade a particular situation, you will be a happy and successful trader. Dependency on the ideas of another trader or analyst is slavery by your own consent. It's very degrading for you to be dependent on the trading ideas of another person. One of the surest signs of dependency is that of looking up to the other trader as superior. Advice from others in the trading arena is everywhere. Most of it is free and not worth anything. You can have at any one time a dozen unpaid advisors who want to give you their opinion. Most of these advisors are, in fact, not qualified to give advice, but merely have the title that indicates that they must know what they are talking about. Most of these advisors can't trade their own accounts successfully, so how can they advise you to trade successfully? Overcoming your- dependency on other traders is difficult to do. You have been trained since childhood to depend on people. It did play an important role in your growing up and education, but it was never meant to take over your individual identity or thinking. Remember this important saying, "No one can ever let you down if you haven't been leaning on them?" No one can make you lose money in the markets, make you unhappy, angry or disappointed if you are not dependent on them for your trading ideas." Once you have developed your self reliance, you do not have to procrastinate or avoid making a decision to make a trade, because you will be confident to meet the situation with total self assurance.

3. You must accept yourself as a successful and intelligent trader. You can never be better than your own self-acceptance as a successful trader. Almost all of your problems in making trades are directly a result of how you feel about yourself as a successful trader. You can never be a better trader than how good of one you feel you are. You must have positive self-esteem about your own trading talents and abilities. Many traders seem to have a high self-esteem about their own trading talents and abilities on the surface. However, underneath, they are victims of their own low self-esteem. This low self esteem gets worse the longer they trade, until they go broke or completely give up. If you hope to be a successful trader, you must develop a high self-esteem of your own trading abilities.
4. You must love studying and applying the techniques of Gann to the markets. I haven't known any successful Gann student who did not fully love what he was doing. You will have to spend hours studying, learning and researching the mathematical techniques, and if you enjoy it. It will become financially rewarding. How much you love what you're doing, whether it be your current job or studying the techniques of W. D. Gann, will determine how successful you are.
5. Everything you need for successful trading lies within you. Your mind is your most usable asset to succeed in learning and trading the techniques of W.D. Gann. If you knew the powers in your mind, it would stagger your imagination. You must make full use of this very powerful resource to succeed in trading. You need to go way beyond what you think your mind can do. Don't let it be limited by what you think it can do. Don't look elsewhere for help, because you have in your own mind all the great power to understand and fully use Gann

techniques to trade and succeed with.

6. Successful trading requires that you devote yourself to fulfilling specific financial goals. If you do not fully commit yourself to this goal, you will be like a ship without a chart to follow and will eventually end up shipwrecked on a lost shore. Studies have shown that individuals that have a definite plan are more likely to succeed and be happy in life. At this time in beginning your studies of Gann, you need to make a plan which will utilize all of your talents and abilities. You must take the time right now to determine how much you want to study and what you want to do with this knowledge of trading.
7. If you are to achieve your maximum potential as a trader you must give yourself a physical and mental rest and relaxation period with inner communication through meditation. The meditation will establish a contact with the inner source of power within you. It will cleanse your mind and open it up to become more receptive to the techniques of Gann. When you have trouble understanding a part of Gann, it will guide you back to the right path again and help you to achieve your full potential. It will also help you to feel totally at peace with yourself.
8. Eliminate fear of failing. Fear has been around in trading the markets since they began. It has been the major cause of all market crashes. Fear is your enemy and a destructive emotion which will destroy your self-confidence in trading. If you are afraid, it is impossible to become successful at trading.

To remove any fear in yourself, you must have a positive mental attitude about yourself. Use the power within you to gain success at trading the markets and eliminate fear. Live one day at a time. Make positive statements to yourself continually during the day to help your mental attitude.

You must study the markets and know and understand them fully. You must prove all rules and techniques you have in your toolbox before you use them! When you see the rules and techniques work over and over many times, your confidence will overtake the fear you once had in trading the markets. As you cultivate a positive mental attitude about trading with the techniques of W.D. Gann, a new successful you will appear to trade the markets. You will be a trader with power and direction. Once you have fully committed yourself, you will never be the same again.

Success in your trading lies in your ability to find tops and bottoms in the markets you are trading. Using reversal patterns is one way that W.D. Gann found market tops and bottoms. Being on the lookout for reversal patterns is easy to do, if you know what you are looking for. The method of finding reversal patterns is easy to grasp and can set up in your trading almost immediately. In no time at all, you can be using this highly successful method for picking tops and bottoms.

Markets move from one point to another. Reversal patterns show tops and bottoms, the technical strength of the market and the direction it will move. This will give you the timely advantage you need to enter or exit the markets at the right time. Using reversal patterns is totally price reliant, you use no volume or open interest to give you signals. You use only the open, high, low, and close of the market that you are trading.

Spotting reversal patterns can be used on all time frames, monthly, weekly and daily charts, to show ceilings and bottoms in the markets. Usually you need only two bar combinations to suggest a potential top or bottom in the market. Using reversal patterns is especially useful in position trading. By using monthly, weekly, and daily charts you should always know the direction of the market from three perspectives. Those perspectives are the major trend, the intermediate trend and the minor trend. From this knowledge you can build a very successful trading methodology. As time goes on you will eventually learn to anticipate these reversal

patterns even before they happen. You can make a trade with the anticipation of the reversal signal happening. If the trade does happen and confirms your move, then stay with the trade. If the reversal signal does not occur, then use close stops or just exit the trade.

One way to use reversal signals is by trading the secondary reactions within a major trend. By trading the direction of the major trend, you will drastically limit your potential losses and dramatically increase your probability of success. The strategy in a major upturn is to go long using reversal signals at the bottoms of secondary reactions. Take profits at the peaks using reversal signals. By doing this you are entering your long positions at the over sold points in the market. You are exiting them when the market reaches over bought points. This is a tremendous way to trade in a major bull market. Use the reverse of this in a major downtrend.

When you spot a reversal signal it is usually best to wait until the next day before taking your trade. With experience you might want to begin making your trade based on the reversal signal the day it happens. Often a protective stop can be placed above or below the reverse signal at a predetermined percent of the price of the commodity or stock. One percent of the price is often the best stop you can have. For example, if a reverse down day occurred on corn and the top of the reversal day was \$3.61, you would take 1% of 3.61 that equals .036 and add that to 3.61 that means your stop should be at \$3.64 3/4

There are many reversal patterns that give 1 to 3 day accuracy that a trend is reversing. It is important to remember that the further the reversal signal is from the last bottom or top, the more important it is. The signal must occur at least 3 days from the last top or bottom to be a reliable signal. Reversal signals should be used in conjunction with other timing signals to be reliable. It is important to remember that certain commodities and stocks will have a tendency to change directions on the same reversal patterns. Therefore, it is important to check back to see what reversal patterns turned the market in the past.

The following is a listing and discussion of these signals for topping formations. Reverse the patterns for bottom formations.

1. One-Two-Three Reversal - This formation is the most common reversal pattern. The market makes a high on 1 and falls off into 2 and makes another challenge to the top 3 that finally fails. Points 1 or 3 are the failing peaks and the reversal days.



2. Double Tops - Double tops are very common patterns. The market makes a move to a new high and backs off. It then makes another stab and matches to top again and backs off. This pattern occurs often around major changes of time.



3. Triple Tops - Triple tops are not as common as double tops but are important when seen. The failure to penetrate a top after the third try is very bearish and will usually lead to a good reversal.



4. Inverted "V" - The Inverted "V" is a formation developed at the top on high volume. The move becomes exhausted in one last gasp usually in one day and can never regain the strength it once had. The Inverted "V" top day can occur almost without any warning.



5. Narrow Range Day - Whenever there is a narrow range day following a prolonged rally of 5 or more days, the breakoff of that small day will usually tell the direction of the next move. If the price breaks the bottom of that inside day a decline will take place.



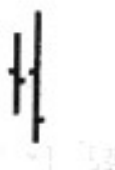
6. Inside day - An inside day is one in which the range of the day is completely inside the range of the prior day. The breakouts either up or down will usually tell the direction of the next move.



7. Coil Sometimes the three days range will form a coil each day having a smaller range. When the price breaks out of the second and third days range, the market will move in that direction



8. Outside Day - An outside day is one in which its high/low exceeds the prior days high low. If the outside day occurs after an extended price move, it suggests the end of the move and chance of direction.



9. Key Reversal Day - A key reversal day is one where the price trades above the prior days range and then closed below the previous days close. If it closes below its open, it is even more important for a change of trend.



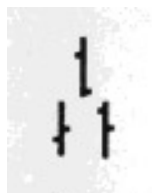
10. Hook Reversal - A hook reversal is similar to a key reversal except the close is not lower than the previous days close. The hook reversal means prices are headed lower.



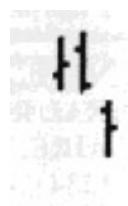
11. Exhaustion Gap - This is a gap that Occurs near the end of an up move. It signals the last gasp of the bears of the market who have thrown in the towel and given up. It gaps above the previous day's high and comes down below the previous day's high and fills the gap.



12. Island Reversal - The island reversal occurs when the price gaps up above the previous days highs. The trading ranges may stay there for one or several days then gap back below the previous day's high. This is a blow off and a probable end to the upturn.



13. Breakaway Gap - The breakaway gap down occurs from a congestion area near the top of a market and usually begins a big down move. Gaps often become support or resistance areas.



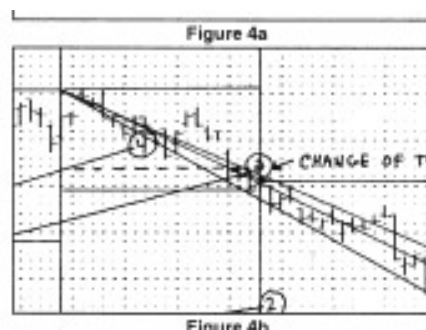
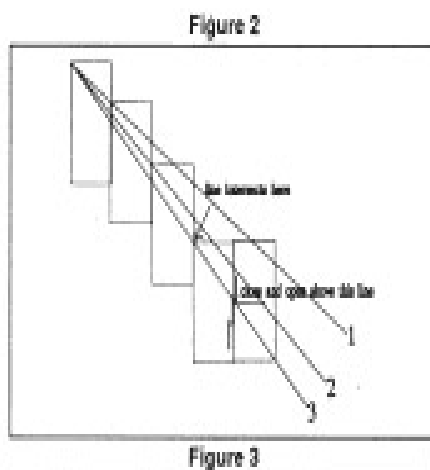
14. Round Top - The round top is a gradual reversal of trend. The trend of prices gradually reverses and goes the opposite direction. This pattern usually leads to a major move.



15. Star The star formation is more important after a prolonged move. The star is a small range gap up that follows a long range day. The next day opens sometimes with a gap and goes higher and usually closes near the low of the day. The next day many times closes near the low of the day. The next day many times gaps down away from the close and can't get above the 50% mark of the previous day.

## Follow the trend

Perhaps one important factor to making money in the markets is to remember that the market is never too high to buy as long as the trend is up and never too low to sell short as long as the trend is down, because there are usually reasons for it being high or low. W.D. Gann in his books and courses said repeatedly to buy and sell according to the definite rules he gives and not according to hope and fear. He said the public loses money in the market because they always buy bottoms in the market thinking that the prices are too cheap. When they buy they only use hope for their reasoning. When they sell short the highs in the market the only reasoning they use is that they think that the price is too high in hopes that the market has topped. The public generally follows no rules of trading and therefore has a very poor chance of making money in the markets. They try to follow the fundamental information put out by the news media to guide them, but when they get the news it's too late. Very often, they get the most bullish news at market tops and the most bearish news at market bottoms.





Perhaps the best policy to trade with is to buy the secondary reactions in main uptrends and downtrends. See Figure 1.

It is important that you know how to figure out what the main trend of a market is and when it changes. It is important that you know the big picture of the market. You will find that long term trading techniques are more reliable than the short term. The longer the term of the trend, the fewer distortions there are. By trading with the long term trend you can improve your accuracy in both the short term and intermediate term trades. If the major trend of a market is up, then to safely trade you should only trade the long side of a market and vice versa in a down trend. It's that simple. This reduces the likelihood of losses, because if you are following the main trend of the market and you enter the market and the price goes against you, it will eventually correct itself so you are in a profitable position.

Now let's look at the duration of the different trends. What is meant by the phrase long term trend? It's the uninterrupted movement in a primary long term direction toward a given price. Long term trends usually last one year to 60 years. Intermediate term trends usually last 1 to 3 years and short term trends usually last 3 months to 1 year. See Figure 2. The long term trend is the most important trend because it exerts an underlying influence on the intermediate and short term trends. Yet very few traders are aware of the influences of the long term trend, or even know if it is up or down. For example, if the long term trend of corn is up, then the intermediate and short term trends of corn will be constantly influenced by that main trend. The long term trend has a powerful influence on a market. The long term trend will always win out over the intermediate and short term trends of the markets. News will often dramatically affect the short term trend of the market, yet it has little influence over the long term trend of the market. The perceptive short



Figure 6

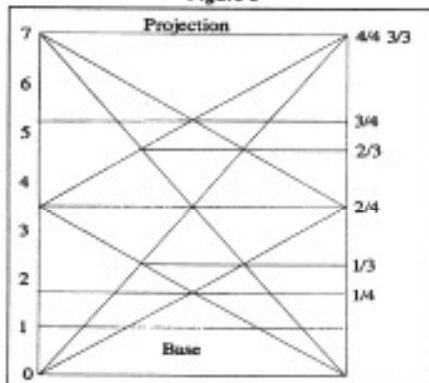


Figure 7



Figure 8

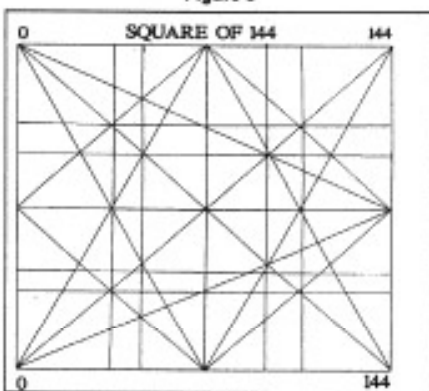


Figure 9



Figure 10

and intermediate term trader can use distorted secondary reactions to the main trend of the market to establish positions.

Knowing the main trend can help you overcome the tendency to use fear and greed in trading the markets. You won't be reacting to tips or rumors and your confidence will improve dramatically as you trade. The psychology of trading is important to your success. You should use news to reinforce what you are seeing on your charts. Your charts will usually start to change before the news does. Look toward the news and watch it carefully as it will change with your charts. You must master the ability to know the long term trend of the market, if you are going to make money in the markets. You will avoid falling into the statistic that 90% of all future traders lose. The reason that they lose is that all they are buying and selling using fear and greed alone in the short term trends of the market. These short term trends have a tremendous amount of unpredictable distortions by many news stories.

In trading the long term you will need to have patience. The opportunities don't come every day. Most of your time will be spent waiting for the right time to enter the market. You must resist the temptations to enter the markets on rumors or news that goes against the long term trend of the market. When the opportunity arises you may want to place larger positions in the market for the bigger moves. You must be prepared to sit with your positions for a long period of time. You must resist the urge to trade just because you are bored. You must be prepared to realize that most of the time the position you take will be contrary to the prevailing fundamentals and news of the markets. This will test your discipline as a true Gann trader. Your opinions and positions must be kept secret, because they will not be popular with the current attitude of the public. History shows us that the markets usually make their tops when the public is most bullish and they make their bottoms when the public is most bearish. If you voice your opinions others will try to convince you that you are wrong and you may lose confidence in your trading, even if you are right. Because your opinions and positions will probably be against the current public opinion of the markets, you must do your work in isolation. This will help you overcome the pressure of others on your trading. Gradually your self-confidence in your trading will grow until outside opinions will not affect you. You will tend to do more research on analyzing the trends. You will need to avoid watching prices as the public does which causes fear and greed. Because you watch prices less, you can do more research when the markets are open and therefore be more productive.

One confusing thing Gann said was that for a market to continue in an uptrend, it had to keep making higher highs and higher lows. For it to continue into a downtrend, it has to keep making lower lows and lower highs. If you have ever looked at a chart, you will find that the price might move up 4 days and then drop one day. Then it will start up again. The question is, did that one day down end the uptrend? How do you know when the trend has reversed according to price? Remember, we are talking about price now, not time. That is another subject to be talked about later in the course.

One technique to use in determining if a market is in an uptrend or downtrend is as follows. First take a daily chart. See Figure 4a and 4b. Divide the chart up into monthly divisions by drawing vertical lines at the first day of each month. Now draw a horizontal line at the bottom and at the high prices for each month. Now draw your trend lines off the bottom of the months in an uptrend and off the tops of the months in a downtrend. Using a daily chart with this method makes the trend of this chart much easier to see. Notice on Figure 4a higher lows and higher highs. On Figure 4b the monthly trend changed from up to down. Remember that a monthly trend is more powerful than a weekly trend and a weekly trend is more powerful than a daily trend.

See how clear the trend looks with the divisions of the days into monthly divisions. Remember, Gann said that for a market to remain in an uptrend, it has to keep making higher highs and higher lows. In Figure 5- the trend of the market changed. The market failed to make a higher high, it broke its monthly trend line and then made a lower low on the monthly chart.

Using this method, you will always know the trend of the market. It can be used on minute, hourly, day, week, month, yearly charts to figure out the trend. When Gann speaks of the trend making new higher highs or lower lows, this method will help you to see it much better 7 Times the Base

One overlooked technique that W.D. Gann used was "7 Times the Base." This technique can be used effectively for projecting where a move might go. It is very essential that a trader can forecast where prices should go. The "7 Times the Base" technique can be used on all time frames - daily, weekly, monthly etc. It effectively gives you a projection of where the price is going to go. You can make adjustments to that forecast while the market is moving. You must remember that with this technique as with all others you learn, it is much better to use a combination of tools to forecast where the price should go instead of just using one technique alone.

Now let's get into this lesson and learn how to forecast prices based on the "7 Times the Base" method. The first wave up from the base is usually the base measurement. That is from 0 point to wave 1 top. See Figure 5.

To use this technique simply find the bottom of a major move. When the trend starts back up, find the first top that it makes. After its makes that top it will usually back off a percentage of the move. The base measurement is from the bottom to the first top. Take this range and multiply it up from the base 7 times and mark that point on the chart. See figure 6 and figure 10. You can also divide it into the Gann divisions of 1/4.

1/3, 1/4, 2/3 and 4/4. See Figure 7. When you divide the ranges you can usually see how the prices break above and below the points. Again see figure 10. It is also possible to divide the square even further for more accuracy. That could be into 8ths and 6ths or even 16ths and 12ths. But for the example in Figure 10 we only divided it into 7 parts.

Remember that in this example, we are only projecting price and not time. Time projection will be learned in a later course. It would be possible to use the square in Figure 9 for a time forecasting tool and a road map tool for time forecasting. Briefly, if you know approximately where the time will end in this move based on other techniques you will learn later, a variable square could be created to end on that time frame. The square then could be overlaid on top of prices and the trend watched and followed closely through the overlay.

When, you use "7 Times the Base" method for forecasting and the price comes out to some important multiple of the natural square, you can substitute one of those fixed squares for the variable square. If, that does happen to be the case and a natural square does fit, that is another confirmation that the market will project to that price.

In a later section of this course you will learn that overlays for your charts should be made up according to the fixed natural numbers in Figure 8.

The fixed numbers are the number of squares vertically and horizontally of a major square. For example, Gann's Square of 144 was 144 squares up and over. The square was divided into halves and thirds. See Figure 9.

Now let's go through this particular example. See the chart in Figure 10. The base developed in the middle of June 1992, which is by the way an important part of the year. Important turns occur at the first part and mid-parts of the year. The market rallied in June and then came

back through the base and then started up. Many times after a base is formed the market will break out through the bottom and come back up quickly indicating the market is ready to go. Sometimes this action takes out all of the stops. Watch this action very carefully. It is an indication of a major turn.

The base measurement is taken from the low of the base to the top of the base. Take this distance and multiply it up 7 times to get the projected top. You can also mark the seven base divisions on the chart as we did in figure 7.

# Counting — The Universal Measurement

By Joe Rondinone

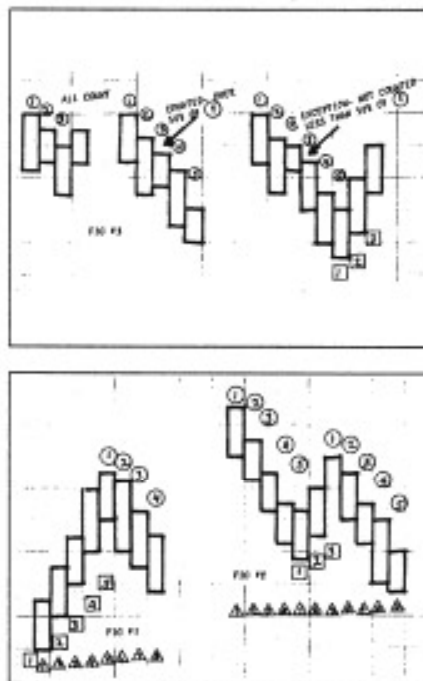
There are only very few activities in the human endeavor that have been as well studied as the buying and selling of commodities. Markets have attracted some of the worlds greatest accountants, analysts, researchers, mystics, hunch players and every Tom, Dick and Harry.

One year in the 1960s, Doc Whiting and I were long beans, we knew what the estimated crop was, we kept track of all crushings and exports. We were convinced there just had to be a shortage, yet the beans were going down. We kept buying more, there was going to be a shortage. Before long the government report was altered, they just found 30 million bushels (in a closet). Need I say more?

Because we are unable to follow all the figures, analyze all the numbers, true or not, we must rely on technical indicators and patterns which I have classified and assembled in numerical formations. They are simple to learn, easy to follow and have validity.

There has always been a problem with counting! Everyone counts, some by their toes, others by fingers, Chinese have their own calculators. If you buy two \$10.00 items at a store, they need a calculator to add the two up. This is true.

But the 1st number everyone agrees on is #1. If you have land, you start to measure from the start of the boundary line. If you count money, you count each dollar, you do not count from



one to two as one dollar, right? Yet when we count the trading days, we count from high day to the second day as one day down. The Monday movement is #1 for the week, we do not count from Monday to Tuesday as one day. Monday is a #1 day, and Tuesday should be a #2 day... don't give up reading, we have not made out point yet...

In the 1970s I spent considerable time tracking down the son-in-law of Mr. Elliott. I understood Mr. Elliott had a 100 page manuscript. I wanted to see it, buy it, or get a copy of it. WHY? Because I spent many years studying Elliott Wave Theory and I was never sure of what I was counting. Could this manuscript contain the answer? Was this the missing link? I don't think anyone ever got the manuscript. That was the end of my wave study....

Here is the point! The double day count! If a move in any commodity declines for 5 days, make a law on the 5th day. This is the #S day, the next day the price rallies above the high of the 5th day. You will call this a one day up because it has crossed the high of the 5th day, right? Wrong. The low day is the #S day, it is also the #1 day for the rally. Thus we have a double day count. It is S day down and a #1 day for the up move. see fig. 1. If you are looking for a Fibonacci day count for rallies and declines, wrong counting can result in overstating or understating a position, which can be hazardous to your financial health. The 3, S. and 8 day counting will conform to Fibonacci form when this approach (the Symmetrics count) is used. The double day count is used on top and bottom days of all moves.

In fig. 2, we have the days numbered. In Symmetrics we use the circle 1 for the down days and the square 2 for the up days. Notice in fig. 2 how the double day count is displayed; it is counted for the up move and the down move. Now we also have a day count in symmetries. This is illustrated by the triangle with the number inside the triangle. This is great for reference to any certain day's move, also for a count from any important high or low for a Fibonacci interval count.

I want to point out one exception that has taken years to nail down. In Symmetrics counting, if you have an inside day in a three day move, all days are counted... If the move extends over three days, the inside day is not counted, unless it is over 0% of the previous day's move. This exception will make the Fibonacci count balance see fig. 3.

Joe Rondinone studied with ED. Gann in 1954. He developed the Presto S/4 Angle Trading method and the Angle Symmetries Trading Method. He can be reached at 214-867-5332 after 6 p.m., or write to him at P. O. Box 260-675, Piano, TX 75026.

# The Beginning of Bob Buran's Successful Trading Career

Charlatans, pipe dreams and cowboys, how not to start trading commodities\*

In the summer of 1979 my wife and I decided to leave our Wisconsin roots and go west. Like millions before us we packed everything we owned into a U-Haul and headed towards California with dreams of making a fortune in the sun. We arrived in the Golden State with a '68 Chevy Van, about \$1000 in cash and an old dog.

After our meager funds were nearly exhausted, we finally found jobs and settled down in a two bedroom flat 65 miles east of Los Angeles. Aside from having a roof over our heads, little else seemed right. It seemed like we were always working, always tired and despite our best efforts we seemed to be just barely able to make ends meet. The hardest thing in the world is to work hard at something that gives you neither intellectual stimulation nor personal satisfaction. We knew we were going to get old fast living and working that way and we desperately wanted to find a way out. In 1983 we developed the ten year plan.

The ten year plan was basically an escape plan to get us free from the alwaysbusy-going-nowhere lifestyle that was eroding our quality of life. We figured we would be free by June 1993. The plan was simple. We would save every penny we could. We would drive old cars, wear old clothes and eat hamburger soup. I estimated we might be able to save \$150,000 over a ten year period and with interest that could leave us with about \$250,000 at the end of ten years. Then we could quit our jobs and buy a little cabin in the mountains someplace. We would have to live very frugally, but at least we would be free, no longer prisoners of modern urban life. It was a dream worth nurturing. The first problem was developing the discipline to save; at the time the only savings accounts we had were called Mastercard and Visa. The second problem was, once the money was saved, how should it be invested? I had absolutely no background in business, economics or investment. I could barely balance a checkbook and I hated math. Nevertheless I bought a compound interest table and soon realized that the key to making the ten year plan work was getting a good return on the money we saved. First I looked into money markets and mutual funds, but they seemed so slow and so boring. What I needed was something that would take a small amount of money and make it a big amount of money fast. One day in 1984 while watching the Financial News Network I finally saw exactly what I was looking for. They had a guy on that was selling a course on trading commodities. It only cost \$295. The guy said that this course would teach you how to make a fortune out of an initial three to six thousand dollar investment trading things like soybeans, silver, corn and sugar — especially sugar. Along with the course came a free hot line and what really sold me was that the guy had a broker working with him that specialized in setting up these three to six thousand dollar accounts. I immediately called the 800 number and ordered the course and didn't become the slightest bit suspicious when the guy double billed my Mastercard.

The book I got with the course was great. The story that really grabbed me was about a woman who opened a two thousand dollar account and bought one sugar contract at about five cents per pound. She left instructions with her broker to reinvest any profits in the same market and then she took off for Alaska. When she came back a year later her account was worth 7 million dollars. Sugar had shot to 52 cents per pound. Now this was the kind of

financial plan I was looking for!

At the time I was reading this book sugar was at about 5.70 and falling and I knew it couldn't go below 5.00. I needed money fast to open an account so I took my wife out to a nice restaurant, plied her with a little wine and proposed we borrow six thousand to open an account right away. My wife has always supported me in every hair-brained scheme I have come up with and this was no exception. The lenders weren't so easily convinced, however. Before I got the six grand they took out a second mortgage on our twobedroom bungalow, title to our two old cars and a chattel mortgage on all our clothing, personal belongings and furniture.

I was nearly manic with excitement in November 1984 when I filled out all the paperwork and sent it to my broker along with the check for six thousand. I started calling them two and three times a day to see if my account had been opened. Sugar had dropped to 5.40 and was making a five year low... it was going to be so easy. Finally, they told me my account was ready and I immediately bought five contracts of March '85 sugar at 5.30. I couldn't believe how lucky I had been: 5.30 in a market that couldn't go lower than 5.00! I secretly began making plans for our fortune. In a few months, maybe a year, I would take my beautiful wife back to the same restaurant as before. We would order the same meal, the same wine and then I would say, "Honey I have something to show you." Then I would present her with the check for millions. We would quit our jobs, buy our ski chalet in the mountains and call it the "Sugar Shack."

On Tuesday morning, December 12th, 1984, March '85 sugar opened below 5.00 per pound and plunged to a life-of-contract low. I went on margin and my positions were liquidated. I had lost over half the six thousand dollars of borrowed money on my first trade. I was still shaking and could hardly speak when I called my broker on Friday and asked him to send me a check for what was left over of our money. I was too numb to notice the contempt in his voice when he told me it might take them until Monday or Tuesday of the following week to get the check out. I hung up the phone, staggered into the men's room and retched. There is no pain that goes as deep as the pain of shattered dreams.

I had to try to forget. That same night we packed up our cross country skis and headed up into the Sierras for a weekend of skiing. I could barely sleep that night and wondered how I was ever going to tell the woman who placed such unconditional trust in my judgement. Just before dawn I slipped out of our motel and drove up to the trail head. The mountain air was crackling cold and I slipped on my skinny skis as the sun rose over the White Mountains. Before heading out I put on my headset and slipped a Juice Newton tape into my Walkman. I started kicking and sliding down the trail and Juice started singing:

Traveling With The Rodeo It's The Only Life He'll Ever Know Started In New Mexico  
Must Have seen A Thousand Years Ago Used To be The Best They Say  
Riding Young Wild Horses For His Pay But Now Hews Much Too Old  
It seems He Only Rides Wild Horses In His Dreams They Told Him:

Ride 'em Cowboy Don't Let Them Throw You Down You Can Make No Money If You Hit  
The Ground Ride 'em Cowboy Don't Let Them Throw You Down You're The Toughest Cowboy  
In Town.\* Copyright 1981 Capitol Records, Inc.

The words made me laugh and after a mile or so I started singing along with Juice. The freezing mountain air invigorated my lungs, my legs felt stronger and my body lighter as I glided through the lodge pole pine. Suddenly I realized everything here was just as beautiful as ever.



The snow was just as crisp and white, the sky just as blue, and the trees just as tall. And in that wonderful moment high up on that trail in the early morning all by myself I made a decision I'll never regret. I would call my broker on Monday. I would tell him to hold the check.

Over six years later my wife and I had taken over a half million dollars out of the markets. We quit our jobs in 1988, five years ahead of schedule, and moved not to the mountains, but to the sea shore where our home office overlooks the Pacific

Ocean. Of that half million about \$70,000 was made in the sugar market. We do not call our house the "Sugar Shack." We are projecting one million dollars by the end of 1993. So what happened? Well, that is really what my current activities are all about. I am presently allowing anyone to examine my six hour video trading seminar, risk free. You see, making half a million dollars over a six year period is hardly big time but that is just the point. My wife (she started trading her own account in June 1990) and I are just little guys who have been pulling money out of the markets consistently, month after month, for nearly six years. We have been averaging about 13% return on total margin per month, or about 150% per year for this entire period. We have traded through two recessions, one stock market crash, one drought and a war. The money just keeps coming in.

Until fairly recently I figured we were just a couple of run-of-the-mill investors that were doing pretty well in the markets. But when I started talking to other traders on the phone and at seminars I began to get the feeling that practically nobody makes money in these markets and if they do make money they certainly don't make it in such a consistent and predictable manner. When I would tell people that we consistently made \$70,000 to \$80,000 or more on a

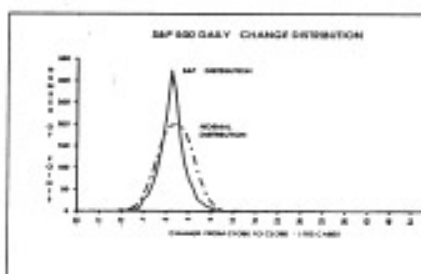


Figure 1 Paretian Distribution of S&P Changes

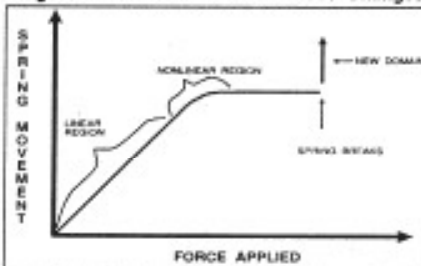


Figure 2 Linear and Nonlinear Motion

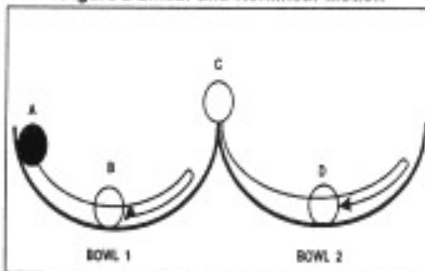


Figure 3 Model of Chaotic Behavior

Figure 3 Model of Chaotic Behavior

\$50,000 to \$70,000 portfolio they would look at me like I was either a genius or a liar. Let me assure you right now that I am neither.

I am interested in providing the small investor with some insights into effective investing in the futures markets. Not some optimized mush, not some computer generated garbage, but insights based on a six year, real time, half million dollar track record. That is why I have gone public with my track record and my methods and systems. I cannot guarantee you success, but I do think you will find some of my ideas simple, unusual and interesting. I'm tired of hearing that 95% of small investors lose money in the futures markets. I put this seminar together for all those little guys. We can be winners and we can make money investing in the futures markets. O

Bob Buran is a successful trader and the producer of an in-depth video trading seminar of how he made over a half million dollars in the futures markets in the past six years starting with just \$6000. He also developed the trading software program "The Grand Combo. " He can be reached at 30613 "J" Place, Ocean Park, WA 98640, Telephone (206) 665-5008, Fax (206) 665-6195.

# Capitalizing on Chaos

Dr. Hans Hannula, PhD, RSA,  
CTA

Over the years, there have been many efforts to explain the motions of price over time. W. D. Gann described moves along Gann lines, within Gann Squares, and by his Law of Vibration. R. N. Elliott described market action as waves. Welles more recently has claimed that the markets follow a perfect order called Delta. In the 1960s, statistical models called the Efficient Market Hypotheses came into being. But all of these are obsolete. As clearly shown by Edgar E. Peters [6], the markets follow the laws of the new science of Chaos. My own research has shown that chaos is inherent in the markets and can be traced to the solar system.

Since the publication of the popular book Chaos, the Making of a New Science [3], many have tried to apply the theories to the markets [1]. But profitable application of theory requires a practical feel for the phenomenon you are studying. So let's start with basics.

The Efficient Market Theory was based on the assumption that stock and commodity prices followed Gaussian statistics. This type of statistics has what is called a "normal distribution." It is usually the only form of statistics taught in most schools and the only form built into calculators, computer spreadsheets, etc.

In 1963, an IBM scientist named Benoit Mandelbrot published a paper showing that commodity prices did not obey Gaussian statistics, because they violated an assumption upon which these statistics depend. That assumption is that prices move continuously and never have gaps. Mandelbrot claimed this was a bad assumption. Traders would agree, having seen price gaps frequently. Mandelbrot went on to

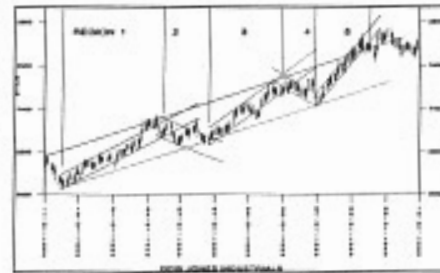


Figure 4 Linear Behavior on a Chart

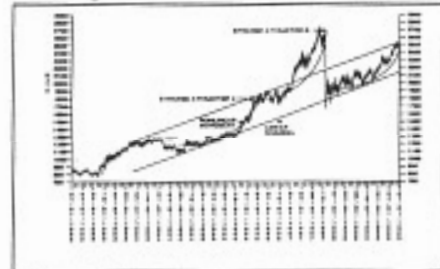


Figure 5 Linear and Nonlinear Motion in Dow

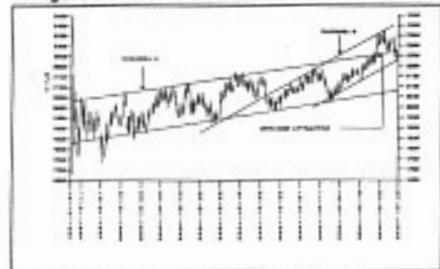


Figure 6 Chaos in the Nikkei

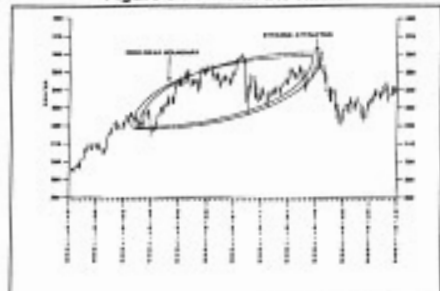


Figure 7 SP500 and Nonlinear Region

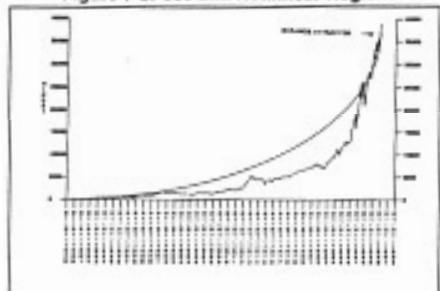


Figure 8 Chaos in the Nikkei

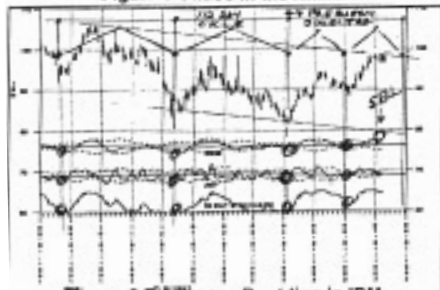


Figure 9 Frequency Doubling in IBM

show that prices followed a form of statistics called

Figure 1 shows the statistical distribution of daily S&P 500 futures price changes. These follow a distribution. This is characterized by having a much higher number of points at the peak, which is also skewed below the mean. Further, the tails of the distribution expand much further than they would for a normal distribution. What this means for traders is that prices can trade in a narrow range a lot of the time and also make sudden, wide swings. Anyone who has traded the S&P has experienced this. So, the Efficient Market Theory must give way to something closer to reality, which is Chaos Theory.

Chaos theory is a theory developed by scientists and mathematicians to describe the behavior of nonlinear systems. It has been found to describe all sorts of real physical systems from waterwheels to heart attacks. So what's a nonlinear system? Well, a nonlinear system is one that is not linear. What linear means is that the input output relationship of the system is a straight line. If you go out and press down on your car bumper with ten pounds of force the bumper might move one inch, and move two inches with twenty pounds of push. The distance moved is proportional to the force applied.

But as you push harder, the system becomes nonlinear. Near the end of the spring, it might take thirty pounds of force to move an additional inch. And when you reach the stops, no motion results as you add force. The output (distance moved) is no longer proportional to the input (force applied). That is nonlinear behavior. Figure 2 illustrates your car bumper's behavior.

If you continue to increase force, assuming of course that you are a very strong trader, you will suddenly get a lot of motion for no increase in force as the spring breaks. In fact, the equations relating force and distance in a compressed spring no longer apply. Your car suspension system has just entered a new "domain of behavior," one where the equations of motion for ballistic bodies apply.

If, before you broke your car spring, you just removed your hand abruptly, the bumper would raise up, settle down, raise up, etc. until it settled down to a point of rest. Linear systems have only one state of rest. Nonlinear systems can have one or more states of rest. If they have more than one, they are chaotic systems.

Consider the two bowls and the ball in Figure 3. If I release the ball at point A in bowl 1, it will roll back and forth, losing height each time until it reaches a state of rest at point B in the bottom of bowl 1. The bottom of the bowl is a point of rest, called an "attractor." But if I push the ball hard enough as I release it. It could conceivably balance itself at point C where the razor sharp rims of bowl one and two meet.

What happens here? This is a balance point between the force that would move it back into bowl one or draw it into bowl two. At this point the slightest force, such as a butterfly flying nearby, causing a slight wind to hit the ball, could tip the balance of the outcome. This balance point is the point that marks the boundary between two domains or regions, the two bowls. Within each bowl, the system is linear, and can be described by a linear equation. But the equation only applies within each domain, that is, each bowl. Each region has a point of rest, which is called a "strange attractor" in chaos jargon. The balance point can also be called a "strange attractor," which is obviously less stable than the bottom of bowl attractors.

So a chaotic system may exhibit very predictable behavior within a domain, but at the boundary of two domains, its behavior cannot mathematically be predicted. As soon as a new domain is entered and new equations apply the next phase of motion can be predicted, just as we can predict that the ball, if tipped into bowl two, will eventually come to rest at point D if no other inputs are injected.

You can easily observe chaos in your stock and commodity charts, if you know what to

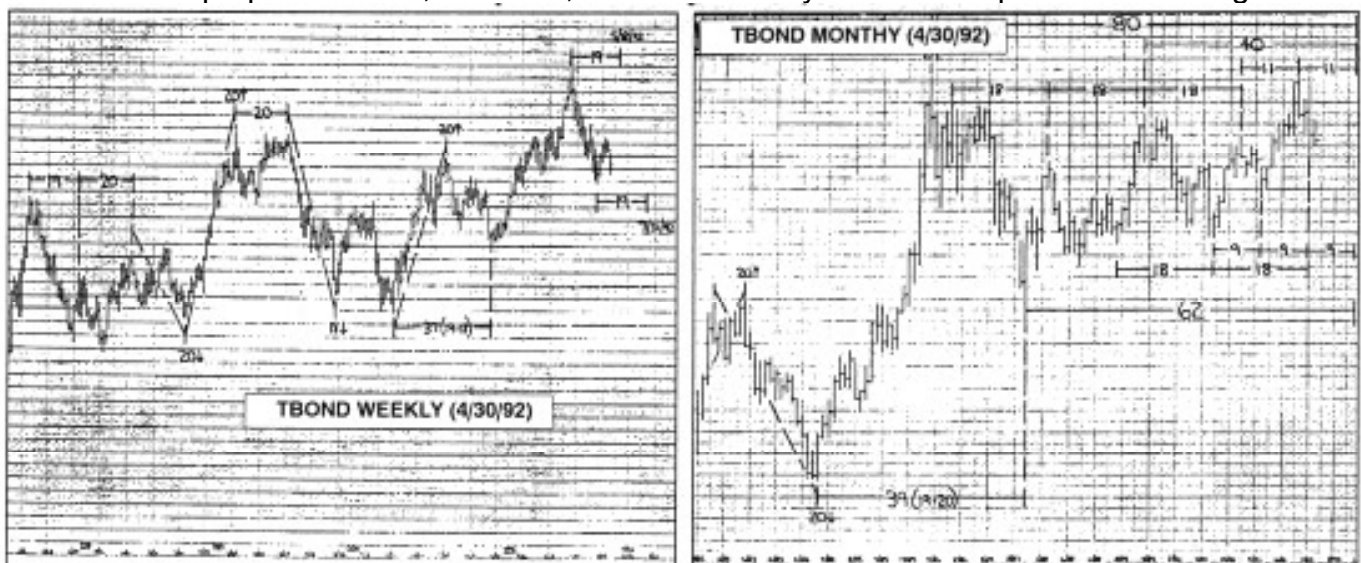
look for. Stocks and commodities tend to move, over and over, in nice up channels and down channels. Within each channel, they move fairly regularly from channel boundary to channel boundary. They stay within the lips of the bowls. If one thinks of time as the input and price as the output, these straight channels represent linear behavior. Very frequently, the rallies and declines form straight linear channels which zig-zag between the boundaries of a larger channel. An example is shown in Figure 4.

Nonlinear behavior can also be observed in markets. Often, a price will rise or fall at an increasing rate, forming a curve rather than a straight line. This is nonlinear behavior. An example is shown in Figure 5. Note that most stocks and commodities exhibit both types of behavior.

In different time regions, either linear or nonlinear behavior can be seen. One can also observe such phenomenon as nonlinear behavior within a linear channel, as illustrated in Figure 5. Where these behaviors meet is a strange attractor, so an important thing to ask is, "What happens at a strange attractor?" Two conflicting sets of equations cannot describe the same behavior. The result is a region of instability. Prices seem to do one of two things here. They tend to oscillate up and down in a triangle, usually of 5 waves, before resuming their course. Or they may move sharply into a totally new region. When they do this, they often form gaps. The primary message of gaps, then, is that a new set of equations applies and past chart interpretations, channel boundaries, etc., do not necessarily hold.

Figure 5 shows typical market behavior at strange attractors. At strange attractor A, the market reached a state of balance, oscillating around the 1800 level for many months until the balance was tipped in favor of an upward move, which proved to be swift and sizable. At strange attractor B, however, the market broke sharply, and crashed back into the linear channel region which it had occupied before the 1987 rally. Just like the car spring, a breaking point was reached. Notice that where the market reentered the linear region it gapped, indicating that new equations applied.

Sometimes, the market will accelerate dramatically at a strange attractor. An excellent example of this occurred after the Crash of '87. As 1988 progressed, the Dow moved very predictably within the channel lines marked A in Figure 6. In early 1989, as the market approached the top of the channel, I had computed the location of a strange attractor, shown in Figure 6. I anticipated that the market would once again turn downward. But the market made a sharp upward move, reversed, and dramatically broke the top of channel A right at the



strange attractor. Knowing the significance of this, I immediately computed the new channel equations, and drew the new channel B boundaries. That channel held until October of 1989, when the 1989 Mini Crash occurred.

The Mini-Crash indicated that another set of equations was in effect. At that time, I was able to compute a new nonlinear set of boundary conditions, this time on the S&P, which showed the region where the current set of equations would cease to work. This region is shown in Figure 7. In fact, I computed two nearly overlapping regions, with a high point in late December or early January. This point was very clearly the strange attractor the market was moving towards. The market reached the strange attractor marked in Figure 7 and broke sharply in the January sell off.

Another example of chaos in action is the Nikkei average. In mid 1989 I devised a method to compute the natural growth boundary curve for the Nikkei. This curve rose ever more rapidly but abruptly failed to exist in December, 1989. This curve, which was distributed to my subscribers in November 1989, showed the Nikkei topping at a projected 37233 on December 27, 1989. The long term curve is shown in Figure 8. The strange attractor is where the curve ends. Chaos theory indicated that a very sharp break could develop. That was nearly two years ago. The Nikkei is now some 54% lower.

Most traders also believe that cycles exist in markets, but often profess difficulty using them. Frequently, this is because the trader is thinking of cycles with an outdated model. Earlier models of cycles held that they were nice, regular, single frequency sine waves. They are not. Under the Chaos Model, cycles tend to have more than one frequency, just as chaotic systems have more than one attractor. On a chart, three frequencies are often visible. These are usually a base frequency, twice that frequency, and half that frequency.

Traders should be especially alert for "frequency doubling", which is a property of chaotic systems that frequently warns of the onset of violent, nonlinear action. Figure 9, from the July issue of The Market AstroPhysics Newsletter, shows a chart of IBM. A 112 day nominal cycle has been extracted with the aid of a 26 day Zero Delay Filter [S]. For eight months, this cycle had a frequency of 112 days. Then it doubled (the duration halved) to 56 days. This warned of a possible sharp turn in IBM. With the ZD26 cycle above the sell line, and the 50 day stochastic near 100 percent, a sell signal was generated in early July.

What happened next is history. IBM sold off sharply to 88. In accordance with Chaos Theory, it gapped down. This turned out to be a very nice option trade, thanks to an understanding of Chaos Theory, and the Zero Delay filter, which was designed to track chaotic cycles, following their jumps infrequency.

Hans Hannula is a trader, scientist, engineer and programmer with over 20 years market experience. He has recently announced a monthly course called "Capitalizing on Chaos." He can be reached at MicroMedia, (303) 452-5566.

# A Cycle of Time

By Eric S. Hadik

**A**re we experiencing a recession or a recovery? A recession or a recovery? Recover? Recede?...the pendulum swings endlessly to and fro. The danger of engaging in this debate is that when one of these alternatives finally becomes clear, it is nearly history. It has likely been intact for 6-12 months and is therefore poised for a change which then invokes the debate over exactly how long it has been in effect. Whether reality proves to be a recovery or a recession (or neither), the important questions are: Where are interest rates and subsequently, bills and bonds headed? And even more critical —How can these moves be capitalized on?

Predictive analysis is necessary to reach any solid conclusions in this matter and cycles, combined with Elliott Wave, are a tremendous aid in this respect. In addition to providing foresight in the markets, they also identify landmarks for confirmation (or invalidation) within an anticipated scenario. Although these techniques are severely limited in their trading application, they are able to convey a basic outlook of how the markets should unfold and, more importantly, where this scenario has derailed. This allows for a trading strategy to be integrated with these expectations and, subsequently, for fundamentals to confirm what the charts have already concluded.

The question regarding the economic fundamentals is often moot since literally dozens of unforeseen events could enter the arena, catapulting markets well beyond their anticipated extremes. For example—assuming that a recovery is underway and therefore rates should go no lower (and bonds no higher)—WHAT IF: The treasury again reduces the size of the long bond issuance, thereby limiting supply? WHAT IF: Japan and/or Germany are forced to lower interest rates, consequently increasing the appeal of dollar-denominated instruments?...or if the dollar experiences a sizeable rally without these foreign interest rate cuts? WHAT IF: Argentina decides to enter the marketplace directly to purchase U.S. Bonds for their debt restructuring?

The list of potential, realistic scenarios is vast and equalled by the more irrational/less expected occurrences. After all, who would have expected an Iraqi invasion of Kuwait or a coup d'etat in the Soviet Union and the subsequent moves in bonds, stocks and oil?

When utilizing projective analysis, primary emphasis should be placed on timing and secondary consideration given to price. Timing is the most important aspect of trading or any other facet of our lives. What is applicable and appropriate at one point in time could be exactly opposite at another. To quote Solomon: "To every thing there is a season, and a time to every purpose under the heaven.." (Ecclesiastes 3:1) (It may shock some to realize that "The Birds" did not originate that phrase in Turn.)

With this premise in mind, the focus will be concentrated on cycles (thus completing this trilogy) and their impact on the Bond market. (Two convergences of cycles will become apparent after walking through the ensuing analysis...In approximately three months an intermediate cycle low occurs between July 21-27, 1992 and should be followed by a five month rally into a MAJOR cyclic high in early December, 1992.)

The weekly and monthly bond charts deserve the most attention since they are the most consistent, and therefore predictable. The cycles applied are unique in many respects although common in others. The 40-42 (Lost) and 60-62 (Golden) cycles are both existent, though with less frequency. (Note: See “Lost Cycle” and “Golden Cycle” articles—both available from this author—for further explanation.) This eliminates their use as a primary indicator but still allows for application as a confirming indicator.

Fibonacci cycles and ratios are more prevalent, making them a helpful tool also. In the case of the bonds, however, they too are a secondary tool in this author’s work. All of these cycles enhance, and rarely contradict, the most consistent cycle in the bonds: The cycle of 19.

Careful observation reveals that the monthly charts have a very clear and concise 18-20 month cycle throughout the life of the contract. The weeklies possess a similar 18-20 week cycle which is even more significant when certain specific multiples are followed (i.e. 76 and 93-95).

As the anticipated low in late-July nears, the daily (calendar)thwarts are, and should continue to, adhere to the same rhythm...March 2 high—April 9 high=38 days//April 23-28 (the current low) is 19 days from the April 9 high and 38 days from the March 16 low/April 9 high + 38 days coincides with a peak in the 19 week cycle and should provide a significant peak on May 18, June 19 arrives 38 days from the April 28 low, 57 days from the April 9 high and precedes the late July time frame by approximately 38 days, so will probably represent an intervening low...These are just a few near-term dates to monitor for potential highs and lows if July 21-27 is to be a symmetrical turning point (from a cyclic perspective) as many major reversal areas are.

It is this cycle—The Cycle of 19—which has been the most intriguing over the last several years in the treasury bond futures.

At first glance the number 19 holds no particular significance or application. That, however, is ONLY at first glance; closer scrutiny reveals that it is a very unique number from many, various perspectives.

First, by combining the works of W.D. Gann and Hamilton Bolton, it is evident that 19 squared= a circle, and thus a year. (Sound like a paradox?) In other words,  $19 \times 19 = 361$  ( $360 =$  a circle/ $365 =$  a year). Inversely, the square root of a circle’s or a year’s degrees rounds off to 19.

So, 19, 19 day cycles= one year. Also, 19, 19 week cycles= 7 years (a very significant Biblical and natural cycle). Additionally, 19 months= 81 weeks (see “Lost Cycle” for further explanation of this significance).

Here is where it becomes most intriguing... There are 7 months in the year with 31 days and 5 months without. That means that .618 (rounded to nearest whole) of the months of the year have 31 days. (Simple enough?) Well,  $.618 \text{ of } 31 = 19$ . Therefore, month proportioned by the Golden Section= 12 days and 19 days. A year proportioned likewise= 5 months and 7 months. (This may sound like irrelevant babble at the moment, but pay close attention to these numbers—7,5,31,19 + 12—as they all come together.)

By combining three principles, expounded on in previous articles, the congruence of these numbers becomes apparent. These principles are: Summation Series//Biblical Cycles//Golden Ratio (trinities often work out so well!).

By utilizing two of the most frequently mentioned numbers in the Bible (7 and 12) to begin a summation series (one where each subsequent number is the sum of the two proceeding in the series) we arrive at: (5), 7, 12, 19, 31, 50, 81, 131, 212, 343... (In previous writings, it has been demonstrated how certain summation series govern individual markets. This



series is the controlling force behind the bond market and is very unique in relation to time, as we measure it.)

Following are some additional characteristics of this series...

#1—If we assume that each number in the series applies to days (i.e. 7 days, 12 days, 19 days, etc.), then the coinciding weeks (rounded off) begin the series again (50 days= 7 weeks, 81 days= 12 weeks, 131 days= 19 weeks...). Another way of stating this is that by dividing each number in the series by the base of the series (7), it self-perpetuates

#2—Every fourth number in the initial series is a multiple of 7 exponentially (rounded off in the second case)... $7 = 7 \times 1$ ,  $50 = 7 \times 7$ ,  $343 = 7 \times 7 \times 7$ . So, 7 not only begins the series, but plays a critical role throughout it.

#3—As is the case with all summation series, the further it is carried, the closer to a perfect Golden Ratio each subsequent pair becomes.

Regarding time as we measure it, (days, weeks, months, years) this is the most significant series for both its components and its properties and claims the two most prevalent Biblical numbers as its foundation (Unfortunately, for them, many people still have trouble rendering credibility to the Bible.)

The accompanying charts illustrate the repetition of these cycles and assist in pointing to the potential for a final high forthcoming in the bonds. Elliott Wave also factors in reaching this conclusion, based on numerous fifth waves unfolding, and still to come.

December is the optimum month for a peak, based on several different cycles, ratios and wave analyses coinciding with the 18-20 month cycle. (The 18-20 month cycle is also beginning to divide into 9 and 11 month cycles—  $1/2$  and  $.618$  of 18-20 an event characteristic of an impending reversal. These subcycles are also converging in December 1992.)

December is also the coincidence of "Lost and "Golden Cycles" (80 months from the April 1986 high//62 months from the October 1987 lows//40 months from the August 1989 highs), making it a very critical time frame. It also falls

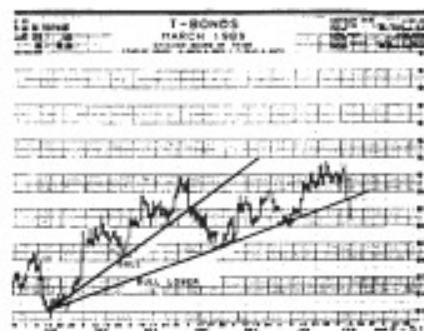


Figure 1

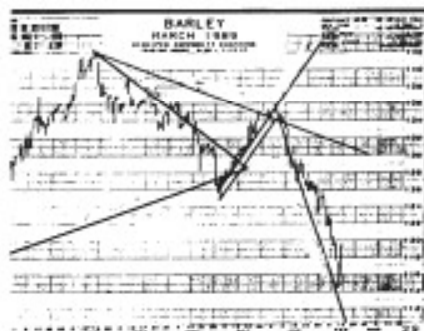


Figure 2

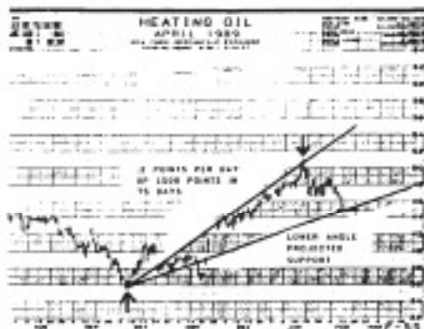


Figure 3

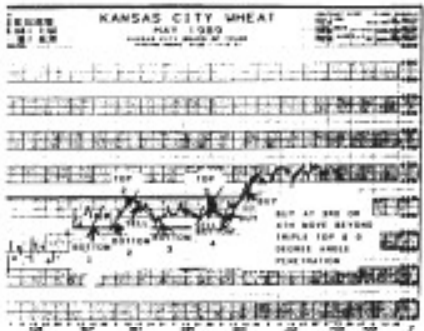


Figure 4

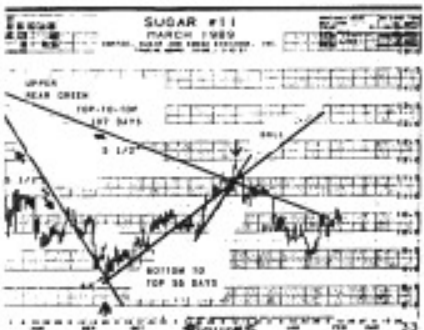


Figure 5

in the midst of the 7th 18-20 month cycle since the September 1981 major lows (7 is the Biblical number for completion).

The weekly charts align similarly during the last two weeks of November and the first two weeks of December (If July 21-27, 1992 is indeed a low, then one final 19-20 week rally—similar to the first wave rally—would culminate in this time frame also.) This convergence of long and intermediate cycles, in conjunction with other analyses, leads to the conclusion that a major cyclic peak is due around December 8-9, 1992 (+ or - 1 week).

Utilizing Elliott Wave, two major objectives appear at 106-18—107-10 and again at 110-10—110-23. If either of these levels is being approached during the late November/early-December time frame, it would present a near-perfect alignment of time//price//Gann//Elliott Wave//Biblical Cycles//and Fibonacci, warranting close scrutiny.

As this time frame, smaller cycles and lesser-degree waves should also begin materializing, pinpointing a Major top. (Needless to say, there are specific support levels which, if penetrated, would invalidate this scenario and portend a sharp decline into December, instead. This, however, is a remote possibility at present.)

# Gann's Angles & Squaring Methods

By David Green

**L**n his trading course published in the early 1950s, W.D. Gann said geometric angles were the basis to his forecasting method." Gann used many diverse, complex, and exotic techniques but angles and squaring seem to have been his primary methods. Therefore, this article concentrates mostly on the angles and squaring

First, the markets will usually go up or down, on average, at a percentage inclination or declination paralleling one of the geometric angles. Second, the market will frequently find support or meet resistance when the price hits an angle going in the opposite direction.

A market that is declining will frequently receive support and possibly rally as descending price hits an angle drawn up from an important swing low due to the angle squaring and gravitational fulfillment taking place. If in fact, it is a bull market, the price will, likely ascend to the next steepest angle above the advancing support angle as a result of gravitational attraction.

In a bear market, the price may only receive minor support from the below up sloping bull angle and not rally to the next greatest steeper bullish angle. Instead, it is more likely, due to gravitational attractions, to move to the least steep declining angle drawn down from a prior important swing high or crash through the underlying bull angle support without a rally taking place.

A market that is advancing will frequently receive resistance and possibly decline as the advancing price hits an angle drawn down from an important swing high due to the angle squaring and gravitational fulfillment taking place. If in fact, it is a bear market, the price will likely descend to the next steepest angle below the declining support angle as a result of gravitational attraction.

In a bull market, the price may only receive minor resistance from the down sloping bear angle and not decline to the next greatest steeper bear angle. Instead, it is more likely, due to gravitational attractions, to move to the least steep advancing angle drawn up from a prior important swing low or smash through the underlying bear angle without a decline occurring. Gann talks at length about "swing highs and swing lows" and he refers to the geometric angles as "moving trend lines." That is exactly what they are. The angles are the only way possible to draw a valid trend line with only one reference point (swing high/low) available or in use.

Correctly drawn angles on a square chart and drawn from important swing highs/lows will frequently be a strong area of support or resistance when the price intercepts angles. A swing high can be defined as a high or high point with lower highs in front and behind the high point. Conversely, a swing low is a low or low point with higher lows in front of or behind the low point.

If the price closes at 2% to 3% (of the current price) above or below an angle for two or more consecutive days, this indicates a strong possibility that the current angle gravitational attraction is weak compared to price momentum and the next nearest angle's gravity attraction. This is a warning of a price direction reversal.

Quite open, when angles radiating from separate swing highs or lows meet, this marks

a market turning point or change of trend. Sometimes, if not the exact day, within a few days of the crossing point. Also, price gets drawn to cross points, and angle crossing points sometimes will mark a cycle high/low.

We will now analyze S charts. We will look at the charts like we were actually analyzing the markets from a real-time perspective for hands-on learning. It is important that you properly align the dates on the bottom of each chart to identify the day or time periods involved. The charts are courtesy of Commodity Perspective and seem to be about the best widely used charts for Gann charting purposes. Charts used are in square proportion to allow Gann analysis. However, some of the chart scales could be improved upon. This is why it is best if you do the charts by hand or use a computer program designed specifically for square Gann charting.

In figure 1 the TBond chart displays both a bull 45 degree angle and a bull lower angle, both coming up from the major low in August. Note how the market received strong support and then moved up, after touching the 45 Angle in September and again in October. Note how the market received strong support, and then moved up, after touching the other angles in November, December and January.

Another valuable tool is the observation that once the market hits a support angle for the third or fourth time (the fourth time in particular), it will frequently penetrate the support angle and transform from a bull market to a bear market or vice versa. The sudden angle penetration that just occurred in February was the fourth attempt to penetrate the angle and indicates the start of a bear market. Also, the 45 angle was hit 3 times prior to the significant November decline.

In figure 2 the Barley chart displays how the market followed the 45 angle down from the major September high. Failed attempts were made to penetrate the angle on several separate occasions after October. Finally, the bear decline received support from the bull lower angle drawn up from the major low that happened in July. That angle finally caused the market to advance at a bull angle inclination coming from the midpoint of the day's ranker on the large key reversal up day that occurred on November 30th.

By December 13th the up move was confirmed by the magnitude of the move above the Bear 45 Angle, and closing near the day's high. The bear upper angle, drawn down from the major high in September, caused major resistance to the steady advance that occurred from late November through early January. Starting on December 23rd through January 5th, the market quite obviously was encountering stiff resistance caused by the bear angle. Finally, by January 9th it was apparent the resistance was strong enough to cause a transformation back to a bear market.

Other strong indications of the down move were the fact that the bear upper angle crossed over the bull upper angles drawn from the November 30 mid-point on December 29 and again on January 3rd, drawn from the Nov. 30th intra-day low. January 3rd was in fact the exact high of the move! As mentioned earlier, angle crossing points are frequently change of trend days. Keep in mind, even during the advance, it was only a bear market rally, as the major trend was down unless the bear angle was crossed strongly or for several consecutive days. Thus, the drop below the angle, with confirmation by the big down day on January 10th, confirmed the bear market continuation move. You could have gone short here and made big profits with the huge down move that occurred in January and February.

The next chart of the Heating Oil market in figure 3 shows how the market's time and price squared out against a bull 45 angle. From a low of 3565 on October 6 the market followed the bull 45 angle up to January. The inclination (slope) of the market vs. the angle was very precise starting in late November.

If you were following this market at the time, you would have observed that on January 18 the market closed at 5065. That closing price was up exactly 1500 points from the October low! ( $3565 + 1500 = 5065$ ). January 18 was 75 days from the October low. Therefore, since we are working with a chart scaled with a grid value of .2 per day, we multiply 75 times .20 which equals 15 full cents or 1500 points. Thus, you could have easily predicted a top about January 18th near the 5065 level.

It turned out that the prediction would have been exact, both in terms of price and time, as the market's high closing price occurred on January 18th and the price was predicted exactly at 5065. I am sure you will agree that the accuracy of the predictions was amazing! Your actual sell indications would have come on January 19th due to the reversal down day and close under the angle. You would have either taken profits or gone short about that time, expecting a decline. However, if going short, expect support and possibly going long again, about mid-February, at the bull lower angle support area, from the October low.

The May KC Wheat chart in figure 4 shows the Gann concept of buying and selling against both double and triple tops, expecting resistance at the double/triple top Zero Degree or near zero angle, and expecting support at the double/triple bottom Zero Degree or near zero angle.

The chart also reflects a longer term buy signal once a fourth attempt at the triple top is penetrated. Remember, at the third or fourth attempt to penetrate horizontal resistance, a penetration and strong continuation move, after the penetration, is a fairly common occurrence. Also, the chart uses short term angle penetrations to confirm five of the miscellaneous buy/sell signals.

The reason for picking this particular flat looking chart was that it shows these techniques can also work in a sideways market or congested time period. Large moves or good trends are not mandatory to work with these techniques.

The March Sugar chart in figure 5 presents some interesting but complex and sophisticated little known aspects to the angles, plus a never before revealed surprise technique involving measurements of the angle lengths.

From the major high of 1439 recorded on July 14th the market moved down to its major low at 869 on September 26th. As you may recall, since Sugar moves in 1 point increments, the square of 1 is important. Since the chart has a grid value of 5 we will multiply the squares by a factor of 5.

The multi-even square of 1 is 10, square of 10 is 100, and 5 times the chart grid value equals 500. Thus we can look for time running out about 500 points below the major high. As previously outlined, since the July high was a volatile period, we draw the bear angle from mid-point of the range, radiating from near the 14 cent level. That is also a preferred price to draw from, as it is a whole even number. We observe that the reverse square of 500 is 50. Therefore, 50 days from the high is a possible turning point, especially true due to the price itself being close to a 500 point drop from its high. ( $1439 - 500 = 939$ ).

September 22 high was 948 and 931 low. Median price for this 50th day was in fact 939! This day EXACTLY squared out the range from the high based on the multitudes and derivatives of the square of 1 combined with the graph scaling! As a further confirmation of a trend change prediction we can look at the bear angle. On September 26, the price squared out but the price completed a 2 day pattern High Low Close (definition, as previously outlined) and closed weak near its low.

That indicated the bear angle was still strong enough to influence the price down in spite of time running out. Also, the price should square again by hitting the angle after time was

squared. These items indicated the market could still move a liable lower. On the day of the major low the price closed down and right at the bear angle. That confirmed a squaring of the angle taking place after the time ran out. Now that the angle had again been squared we can look for buy indications. Finally, in early October the price moved sideways to up, sufficiently far from the bear angle to confirm a break away.

That is especially noticeable if viewed by a perpendicular measurement from the angle slope. We can draw a new bull 45 angle from the September low and note the market followed the general trend of the 45 Angle up from September to December. On December 12th we should start looking for a top because of a new subject you are now going to learn about, which is Bull and Bear Angles crossing from different directions.

The bear upper angle from the July high crosses over the bull angle on the exact day of the highest closing price. Also, the next day, December 12th, the price itself ran out of time and closed weak after completing both a high-low-close pattern and a reversal down day during this 2 day cross-over period. Also, the short term bull upper angle drawn up from the minor swing low of November also crosses over both major angle on the same date.

Lastly, I would like to tell you about a unique and unusual technique I have developed for measuring the angles to predict trend changes. As far as I can tell Gann or others were not or are not familiar with this technique, so it is unique!

Measure the Sugar bear lower angle from the July high day mid-point angle starting point, to the September low. Then measure the bear upper angle from the same high and project the same distance the angle. Where the measurement intersects the bull 45 angle from the major low marks the turning point! The EXACT turning point as far as time is concerned and fairly close to the actual price turning point! I have also observed this technique to work when applied to certain angles in miscellaneous markets.

Thus we have many different conformations that a change of trend is imminent. In fact, we have so many powerful indications of a change of trend occurring about December 12th. that going short here would be about as close to a guaranteed successful trade as is possible! Finally, on December 15th a break-away day occurred involving a significant percent drop under the bull 45 angle and now confirming the market was following the bear upper Green angle from July high. That indicates the end of the bull move and start of a new bear move.

# Is Day-Trading Right for You?

By Terry R. Davis

Everyone wants to daytrade. Why? IS it because of no overnight positions, ~no margin calls, smaller (or no) margins, smaller commissions, action that is immediate and lower risks? It would seem that daytrading answers all the negatives about trading. Good news... it does. Before you rush out and quit your job let's look at some of the benefits and drawbacks that go with starting any new business.

First, what are you willing to bring to this new business venture? Your Bust commitment should be an absolute devotion to begins successful. Do you have that? Almost no one does! If you already had this, you wouldn't be working for someone else. Well, would you? There is nothing more gut-wrenching on a day-to-day basis than the roller coaster ride your emotions go through every day. Now for the flip side of the coin. you have the commitment to be successful, the commodity markets can (but may not) make you richer than your wildest dreams. Better than that you can make more money than your wife can spend! Man o' man, that is a lot of money. I cannot stress strongly enough that being inwardly compelled to be a success (in anything) is worth more than any trading system (except the ones that I sell (ha!)). The Psychological Aspects Of Trading Should Not & Cannot Be Slighted. In fact, they are probably more important than your trading system. An excellent book on this subject is *The Disciplined Trader* by Mark Douglas (available from the Trader's World Catalog in this magazine). The next most obvious thing you must bring to your new business is capital! What amount do you need? Not much! All you need is \$8,000-\$10,000. If you are starting with less than this you are only deluding yourself. Trading on a shoestring and having to make the monthly mortgage payment is an invitation to divorce or suicide (Do not pass go, do not collect \$200)...or both.

Next we have to decide what markets to trade. The ideal market would be one that has good daily movement both up and down with the opportunity to make \$300 \$1000 dollars a day. There are several that fit these criteria.

My picks are: 1) soybeans 2) S&P 3) Swiss Franc, Japanese Yen, D-mark or British pound. If I had to pick two (and I have) they would be the Swiss Franc and the S&P. If I had to pick one it would be the S&P. T-bonds, in my opinion, do not offer enough consistent intra-day movement to be a viable option to the ones previously mentioned. Two markets (one is better) are all that I am able to follow with any kind of trading regimen.

Risk per trade is the next factor we need to look at. My day trading is done almost exclusively from 4 minute bar charts. I also trade the S&P from the 15 minute chart. My risk per contract (excluding commissions) for soybeans and the Swiss Franc is \$75, for the 4 minute S&P my risk is \$125, and for the 15 minute S&P my risk is \$200. My entries are virtually always "or better" orders. I do this so I am able to define my risk. My gains on the S&P are nearly always above \$500 per contract. This means that I can be wrong 3 out of 4 times and still have a net Rain on the trades. I do not know what I can do to stress the importance of risk versus reward in daytrading. You must use stops to both enter and (most of the time) exit the market! I cannot use "at the market" orders and define my risk at the same time. My very livelihood depends on this risk reward ratio! I have days I can do no wrong and unfortunately, days that I can do no right! If you pick daytrading as a vocation, be prepared for a lot of both.

Overhead is one of the necessary evils in any business. Let's look at commissions first. All you want from a broker is good fills and cheap commissions. If you listen to your broker for trading advice, all your broker will do is make you brokers. Good brokers, in my opinion, take orders and get me good fills — period! I do not think you can daytrade without computer real-time quotes and graphics. There are many good real-time setups to choose from. It is beyond the scope of this article to “name names,” but I would be happy to discuss them with you on the phone. Currently I have real-time quotes from the Mercantile Exchange (S&P - currencies) and 15 minute delay from the Board of Trade and New York. I do not pay for more than I use. My current monthly cost is \$259. My current setup has all the bells and whistles. I use very few of the technicals that I have available on my current trading setup and if I could pay for less I would. I hope you see that I have pared my monthly expenses down to less than one profitable S&P trade.

Last, but not least, you need a trading discipline to follow. I am particularly fond of my own, Price Equilibrium. It lets me set the close stops found in this article. Whether it be my system or another system, you do need something that makes you take similar signals day after day. Any system is better than no system! My system is “user active” and you must be in front of the screen as market action unfolds. There are other daytrading systems that buy/sell price levels attained during the day. As a matter of fact there are many systems out there. Make sure and find one that fits your temperament! Finding the trading system that will make you successful cannot be covered in this short article but I have sown the seeds of what it takes to be successful in the marketplace. Do you have what it takes? O

Mr. Davis welcomes questions. He has written three popular trading courses: MARKET STRUCTURE, BUBBLE THEORY: and his newest: PRICE EQUILIBRIUM. He is a small business owner and trader. He can be reached at 21 7-347-5101.



# Data thru your Cable TV. Inexpensive Tick-By-Tick Data Thru Your Cable TV!

By Larry Jacobs

**T**here is a lot of excitement regarding the release of the new Signal 3.0 and the new 9600 baud Signal Plus receiver for your cable TV. It's possible that this might be the most significant event that has happened to computerized technical analysis in the last 10 years.

The new Signal software and subscription service thru your cable TV provides real-time and delayed trading information from all major exchanges on stocks, options, commodities, futures options, mutual funds, money market funds, and market indices. In conjunction with the software, a receiver/processor translates signals received via cable TV channel (either CNBC or C-SPAN) to trading data on your IBM compatible computer screen. You receive trading information instantly, as soon as it reaches your receiver.

One of the advantages of the new Signal Plus receiver for your cable TV is the ease of installation. When you get the receiver box, you just take it out of the box, hook your cable TV cable to it, plug the power cord into your AC socket, and connect the serial cable from the unit into the serial Port of your computer. You turn your computer on and set up the software, either the Signal 3.0 software that comes with the unit, or use one of the many third party packages that are available. (In this issue of Trader's World, we are reviewing two software programs that work with Signal, the new MetaStock RT by Equis International and LiveWire by CableSoft.) The software should be set to 9600 baud and to your cable channel that broadcasts either CNBC or C-SPAN. You'll also have to put in your special code number in your program that Signal gives you, which authorizes you to receive service. That's all it takes to get the unit up and running. If you have any trouble, just call the Signal 800 technical line and they will be glad to help you with any installation problem. Signal has perhaps the best reputation in the business for quality of service. If anything goes wrong, call them and they will fix it right away. If equipment breaks down, they will overnight a replacement to you. Signal has both real-time and delayed service. I personally believe that the Signal delayed service fits most of Trader's World subscribers for the following reasons:

1. The service start up and on-going costs are very inexpensive. It's not really any more expensive than a telephone data retrieval service. A one time \$325 usage fee charge for the Signal Plus cable receiver and a \$60 per month charge for a basic package plan is very reasonable (see Figure 5). If you are an individual trader, investor or even a broker this is an excellent service. An individual trader that sits at home or in his office and trades has the best of all worlds. He can watch CNBC for late breaking news and watch his delayed

tick-by-tick technical analysis program for timing and trends in the market. A broker using his firm's real-time quote machine and the Signal delayed service with a computer charting software package can have all the essentials he needs for effective technical trading for a minimal cost. In most cases the firm will pay all of the costs of the delayed service for the broker. The broker just has to buy his computer and the charting software.

2. The Signal delayed service has highquality tick-by-tick data, not the snap shot data the other delayed services put out. You must understand that snap shot intraday data is not totally accurate! If you use a real-time technical analysis software program with snap shot tick-by-tick data, the charts and indicators will be inaccurate, because the highs and lows of the intraday data can be wrong. The S&P intraday cash price peaks and bottoms on your charts during the day may be off by as much as 10 points each! The indicators and oscillators you use can be wrong because of this. The Signal delayed data, however, is the same high quality data that is used with their real-time service. We have checked out the intraday highs and lows on tick-by-tick charts made with Signal delayed data and they are 100% accurate. With a good software package like LiveWire, you can save daily data into a database and eliminate the expensive daily calling up of data service via modem.
3. The Signal delayed service uses the minimum delay possible. The delay of quotes is in exact accordance with exchange regulations. There is no additional delay beyond the required minimum. For example, the CME and CBT are on a 10 minute delay, which is not bad. Ten minutes should not make that much difference in your trading success. If you are a good technical trader and you use timing cycles, you should be able to work around the delay without any problem. The delayed service also gives you 90 real-time indices which includes the S&P cash. The new release of LiveWive 5.0 charting program which works with Signal uses a spread study in which you can add the real-time S&P cash to the Premium index and get the near term S&P 500 future charts. Since the S&P cash and the Premium indexes are live, the calculated S&P futures is live. That means if you trade only the S&P 500 futures or OEX options, you would be able to save over \$200 per month in data fee cost over that of real-real!
4. With the Signal delayed service and a charting package like LiveWire 5.0, you can have a complete on-line portfolio manage The package will give you a valuation of your entire portfolio any time of the day. You can set alarms for both stops and price objectives. You can figure out your taxes anytime. It's really great to know where you stand all the time, so you can make objective decisions.
5. Your timing using intraday tick by tick data should increase dramatically. To properly trade you should first look at monthly charts for the big picture, then look at weekly charts, then daily charts for closer timing. Now, if you have the new Signal delayed service and access to your computer chart program during the day, you can check out 60 minute charts, 30 minute charts, 15 minute charts and even the 1 minute charts so you can fine tune your exact point of entry or exit in the market. If you don't have access to your computer during the day, you can still have the tick-by-tick data being stored in your computer for your evaluation every evening.  
If you feel that you have to have real time data to be successful, this is still the service to have. Signal has one of the highest quality services around. See the real-time data costs in the comparison of real-time data services..

Figure 1 illustrates how the system works. Data Broadcasting Corporation has central computers that receive trading information from the major stock, options, and future exchanges. The data is then transmitted by satellite to cable stations throughout the United States and Canada. The data signal is a carrier on a non-visible portion of a regular video broadcast. The receiver is connected to a standard cable television outlet, it decodes the data, and your computer displays it on the screen.

Data on over 50,000 securities is broadcast by major exchanges and services. The Signal receiver contains a computer. When you load the Signal software for the first time, the program is stored in the receiver's memory. Along with the Signal program, a sample collection file is loaded into the receiver. The receiver monitors trading data for all securities in the current collection and stores the current prices. The collection and current prices remain loaded in the receiver's memory until you unplug the receiver or load a different collection.

As long as you have the Signal software running in your computer, Signal displays data on the securities in the current collection on your screen and continues to update trading information for the securities as it is broadcast. If you exit the program or turn off your computer, the receiver continues to monitor the symbols already stored in the receiver as long as the receiver is plugged in.

If you choose to use the Signal 3.0 software, you can build lists of up to 950 securities, call collections (the actual number of securities you can track depends on how much memory you have in your computer and in your Signal receiver). With this software, Signal saves collections in files, which you load one at a time under the name you specify. You can include a variety of groups or portfolios in one collection and organize them on separate pages. If you want to monitor more than approximately 950 securities, you must create additional collection fields. When you load or create a new collection file, Signal ceases monitoring the previous collection.

You can view data stored in the receiver on a Detail, Alert, Summary, News, or Leaders page, in the Ticker window, the Symbol Detail window, the Instant Quotes window, or the Plus Window on the front of the Signal Plus receiver. A Detail page displays most incoming data on securities. A collection can contain up to 99 Detail pages. You can list up to 18 securities on each page.

An Alert page displays data and also allows you to set alert values for trading data. When you set an alert value, Signal alerts you when that value is reached. You set alerts by entering limit values for volume traded and high or low trading prices. You can set Limit alerts on as many as you would like, but Signal can monitor only 250 symbols offline. Your computer signals an alert by means of visible displays and optional audible alarms.

Signal can compress Detail and Alert pages into Summary pages, which list as many as 72 symbols, their last trading prices, and the direction of the last change in price (up or down).

A News page displays information about the News alerts broadcast over the course of a day. Whenever the network broadcasts a Dow Jones News alert for a symbol, Signal displays the symbol, the time of the most recent alert, and the total number of alerts for the symbol. Unlike the other pages, the News page includes symbols that may not be in the current collection, even symbols that are listed on exchanges you may not subscribe to.

The ticker window displays the price and net change of the securities in your collection whenever they are traded. The information scrolls continuously through the window, which overlays the area of the page just above the status line at the bottom of the screen.

The symbol detail window displays all the information available about any security you select for your collection. The window overlays the top four lines of the page on the screen.

The Instant Quotes window displays information on a specific issue instantly, provided the symbol is stored in your receiver. The window overlays, the top four lines of the page that is on the screen.

The Leaders pages display trading data on the top 10 volume leaders and the top 10 price percentage gainers and losers for the NYSE, AMEX and OTC stocks, and stock options.

The Plus Window - the liquid crystal display (LCD) on the front panel of your Signal Plus receiver-can be set to display alerts, quotes on a specific symbol, ticker information, or the Dow Jones industrial average. The Plus Window is always active whether or not you are using Signal or your computer. As a result, you can monitor trading data both online and of offline..

If your use 1-2-3 or Symphony, you can exchange data between Signal and a worksheet. Using a defined worksheet format that reflects the Signal Detail page, you can transfer collections of security symbols from the worksheet directly to Signal. The transfer is done by means of a memory-resident program call The Link that allows 1-2-3 and Symphony to talk directly to the receiver. The Link program is the bridge between the real-time trading data received by the receiver and a 1-2-3/Symphony worksheet. With the new collection loaded from the worksheet, you can send incoming trading data back to the original worksheet. You can then use any of the worksheet graphing, database, or analytical capabilities with the data.

Whether you need real-time or delayed tick-by-tick data Signal is one of the finest and reasonable services around. To get started, call us or fax us and indicated that you want to get set up on the Signal real-time or delayed time. We will send you the necessary papers to get set up. Remember, there is a 30 day free trial period, if you don't like the service.

If you live in one of the 40 cities that carries FM broadcasts for DBC Signal and want real-time data or end-of-the day data, you can get the Signal Plus FM receiver or the Signal enhanced receiver. The cities served are the following: Atlanta, Austin, Baltimore, Boston, Buffalo, Calgary, Chicago, Dallas/Ft. Worth, Denver, Detroit, Hartford, Honolulu, Houston, Indianapolis, Jacksonville, Kansas City, Las Vegas, Los Angeles, Maui, Miami, Minneapolis, Montreal, New Orleans, New York City, Orlando, Philadelphia, Phoenix, Providence, Sacramento, San Antonio, San Diego, San Francisco, San Juan, Seattle, St Louis, Tampa, Toronto, Vancouver, Washington DC. For Signal's delayed data, you must use the Signal Plus cable receiver.

# Volatility/Range Index

By R. Maynard Holt

**T**he Volatility/Range Index™ (VRI) is a powerful technical trading concept based upon the difference of the range over the last “n” days. It is basically a short term reversal identification technique based on momentum.

The VRI is actually two indicators. The VRIB is used for buy signals. The VRIS is used for sell signals. When the difference between the range becomes “stretched”, the short term momentum of the present move is about to “expire”. Identification of these price reversal areas can produce many profitable trading opportunities for the alert analyst or trader.

The moment of stretch is reached when each indicator approaches, touches or penetrates the zero line. For example, a buy signal occurs when VRJB is above the zero line and then moves down and touches or penetrates the lower zero line. A sell signal occurs when VRIS is below the zero line and rallies to touch or penetrate the upper zero line. Note that both the VRIB and VRIS may anticipate a coming reversal by several days. A

dashed vertical line is placed on the VRI indicators in the examples for easy correlation of the signal and market action.

After a VRIB or VRIS signal, you may use your favorite entry technique or, for example, a

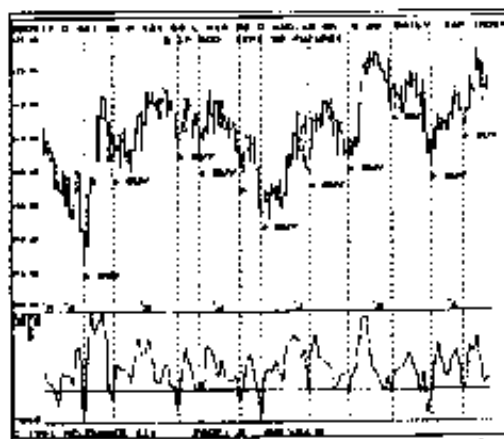


Figure 1 - VRIB Buy Signals

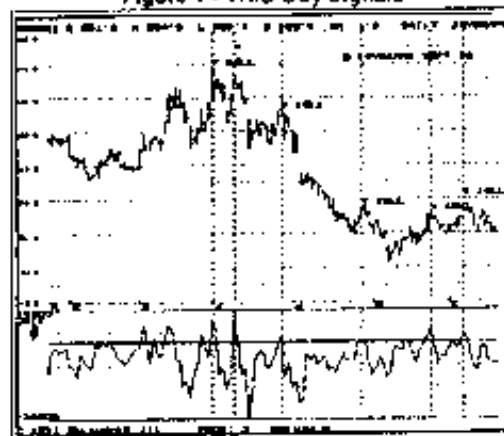


Figure 2 - VRIS Sell Signals

two or three day minor trend line to buy or sell as the case may be. Always place stop orders above the prior high or low pivot, for example, to protect your capital.

One of the best strategies is to use the VRI only in those markets which are moving and trending. Then, use VRIB to buy dips in an up trend and VRIS to sell rallies in a down trend.

1. Determine the probable trend and trade the VRI buy or sell signals only in the direction of the dominate trend. The best period will vary with each market. The best range will generally be from 2 to 5 days.

2. Use the VRI signals in combination with other indicators or time/price techniques.

R Maynard Halt is a private trader, author of Trading Methods and Strategies a trading technique textbook lecturer, designer of RELEVANCE III,