

# Learning Flawless Execution of a Trading System

By Mark Douglas

The proper execution of your trades is one of the most fundamental components of becoming a successful trader and probably the most difficult to learn. Most traders find it is much easier to identify something in the market that represents an opportunity, than it is to act upon it. However, there are some very good psychological reasons why it is so difficult to act on a trading signal. To understand these reasons, you need to understand the nature of trading systems (defined as any methodology that consistently identifies an opportunity to buy or sell with a potential profit in some future moment) and how these systems interact with the markets and ourselves.

For example, most good trading systems, technical or otherwise, will consistently take money out of the markets over the long run. Most of these good systems have been available to the public for years, and yet, there is still a huge gap between what is possible and what most traders end up with. The problem with trading systems is they define market behavior in limited way when the market can behave in a most infinite combination of ways.

Systems mathematically or mechanically can reduce relationships in human behavior characteristics to percentage odd of what could happen next. They can only capture a very limited number of these behavior characteristics compared to the billions that are possible. As a result, any identified pattern may or may not be repeating itself with respect to the way the pattern or relationship progressed when it was observed in the past. Therefore, we never really know if it is valid or not until it has actually completed itself. The big psychological problem here is that people have a great deal of difficulty acting on opportunities with probable outcomes.

Most people like to think of themselves as risk takers, but what they really want is a guaranteed outcome with some momentary suspense to make it feel like the outcome was in doubt. The momentary suspense adds the thrill factor necessary to keep our lives from getting too boring. However, when it comes right down to it, no one trades to lose or puts on a trade believing it is going to be a loser, and all systems will definitely have some percentage of losing trades. So it's difficult not to be tempted into trying to guess which ones are going to be the losers and not participate.

As most of you reading this article already know, trying to outguess your trading system can be and usually is all exercise in extreme frustration. The signals you get from a trading system will have you trading in ways that are completely contrary to your logic and reasoning. Sometimes the system will defy your reasoning and be right and sometimes you will agree with the system and it will be wrong. You need to understand that technical trading systems are not designed to be outguessed. What I mean is, they aren't designed to give you isolated signals of an opportunity to be taken when it seems right. What they do is mathematically define, quantify, and categorize past relationships in collective human behavior to give you a statistically probable outcome of the future.

As a comparison to trading, it is much easier to take risks and participate in a gambling event with a purely random outcome based on statistical probabilities, simply because it is random. Meaning, if you risk your money on a gambling event that you know has a random outcome, then there's no rational way you could have predicted what actually happened. Therefore, you don't have to take responsibility for the outcome if it isn't positive. Whereas, with trading, the future is not random. Price movement, opportunity and outcomes are created by traders acting on their beliefs and expectations of the future. Every trader contributes to the outcome of the future by putting on and taking off trades in accordance with their beliefs. Since traders actually create the future by collectively acting on their beliefs about the future, the outcome of their actions is not exactly random. Otherwise why would traders try to outguess their trading systems, unless they had some concept of the future and how that future will effect the markets.

This adds an element of responsibility to trading that doesn't exist with a purely random event which is difficult to avoid. This higher degree of responsibility means more of your self-esteem is at stake, making it much more difficult to participate in. Trading gives you all kinds of ways to beat yourself up for all of the things you should have or could have considered that would have resulted in a more satisfying outcome.

Furthermore, you don't trade in an information vacuum. You form your expectations about the future with information that technical systems don't take into consideration. Consequently, this sets up a conflict between what your intellect says should be happening, and the purely mathematical means of predicting human behavior afforded by your technical system. This is precisely why technical systems are so difficult to relate to and execute. People aren't taught to think in terms of probabilities and we certainly don't grow up constructing a conceptual framework that correlates a prediction of mass human behavior in statistical odds by means of a mathematical formula.

To be able to execute your trading systems properly you will need to incorporate these two concepts into your mental framework--thinking in terms of probabilities and correlating the numbers or the mechanics of your system to the behavior. Unfortunately, the only way you can really learn these things is to actually experience it by executing your system. The problem is that rarely will the typical trader stay with his system beyond two or three losses in a row, and taking two or three losses in a row is a very common occurrence for most trading systems. This creates somewhat of a paradox or catch 22. How do you do it if you don't believe it, and you won't learn to believe it unless you do it long enough for it to become a part of your mental framework. This is where you employ mental discipline to eventually make flawless execution a habit.

When you form any habit it acts as a force on your behavior. This force exists inside of your mental environment in the form of a belief. Mental discipline comes into play when you need to establish a belief that does not yet exist, and more importantly, doesn't have the support beliefs in your mental system that already do exist. For example, if you are not a runner and decided you wanted to become one, you may have many beliefs that don't support this expression of yourself. These beliefs will act as resistance to your attempts to run by drawing your thoughts and attention to anything that will divert you from your intent to do so.

Mental discipline is a form of thought control employed to recognize the dynamics of this process focus your attention back on your goal and purposefully work through your resistance to establish this new expression of yourself. The more you do it the faster you will establish a new belief that you are a runner. This new belief will then act a force on your behavior motivating So you to run.

The same type of mental dynamics described above will also apply to learning how to

properly execute a trading system. You will likely encounter many beliefs acting as force to divert your attention away from what you need to-do when you need to do it. As a result, you will need to employ mental discipline So a counteracting force to stay properly focused until you build a mental framework that is consistent with His new expression of yourself.

To build the mental framework necessary to execute effectively, I suggest that you take some percentage of your trading capital and designate it as money set aside strictly for educational purposes. With this designated capital, buy and trade a simple trading system with well defined entry and exit points. This system does not have to be expensive. You can get one out of the many books an technical analysis available today or; choose one being offered at an investment conference. I think it is important to buy one instead of devise one of your own because it might beta little easier to stay focused on the objectives of this exercise. Any system you devise you are naturally going to want to make money with. Save it for later, after you have learned how to execute properly.

You will also need to find a system that suits your unique tolerance for taking a loss. The amount of money you risk per trade should be an amount that you are completely comfortable with. If you don't stay within this tolerance level you will be, at the very least uncomfortable, in which case to whatever degree you are, you shut down the learning process. When you are feeling pain, instead of being focused on what the market is teaching you about itself and yourself, you will be focused on information that will ease your pain. Which usually results in a painful lesson.

Once you have decided on your system you need to make a commitment to trade this system exactly as the rules call for. You will need to make a very strong commitment here and not play any games with yourself. The object of this exercise is to work through any resistance you may have to following your rules. Taking Call of the signals generated by your system is the only way you can get the first hand experience you need to establish a belief in probable outcomes, and relating the mathematics to the behavior.

After your system takes three or four losses in a row it's going to be very difficult to put on a trade generated from the next signal. But you have to do it anyway, in spite of any resistance to do otherwise. When that next trade turns out to be a winner you will have established a first hand understanding of the nature of technical systems and a belief in how you can-an make money in the long run, if of course you can execute your system properly by acting on every signal. Owe you establish this belief you will have the force of habit working for you and the struggle will cease. So while you are working at it, just do the best you can and look for ways to improve your performance.

What you need to learn by doing this exercise will come much faster if you keep in mind that it is not going to be easy (at least not for most peopled so be easy on yourself. The more accepting you are of your mistakes the less fear you will encounter when it comes time to make the next attempt. If your child was learning how to ride a bike I'm sure you wouldn't scold him for failing off and tell him not to try again. You would encourage him Land eventually he'll learn. Give yourself the same kind of understand and consideration. What you Dare doing is more of an exercise in learning trading discipline and the skill of flawless Sex execution, which I am defining as executing a trade immediately upon your perception of an opportunity :(inclusive within opportunity is the opportunity toxic a losing trade). In the lord run having this Skill is far more important than your immediate desire to Snake money. So keep your contract size light. You can always increase it later when you have learned to completely trust yourself to always do what needs to be done without hesitation. Stay with the exercise until it becomes second nature or a part of who you are. As you gain in your confidence, you will learn more

and consequently learn how to make money as a trader. As you make money you will gain in your confidence. This positive cycle will expand your ability to be successful just as easily as a negative eye will feed on itself to end in despair.

There is something else that you need to be aware of. Trading a technical system in a rote manner will make you money but it won't necessarily satisfy your need for creative expression (unless you created Me system). Since all traders believe they know something about the market, the most satisfying trade is one based on your own ideas and reasoning process. These kinds of trades are an expression of your creativity and when they work, nothing feels better. This need for creative expression is a very powerful inner force that is hard to resist, especially for the sake of your technical trading system

So what I suggest you is express these creative trades in a separate trading account. By opening up a completely separate trading account for your creative trades and also trading a different commodity, it will help you avoid the inevitable conflicts that would result between what you think and what your system says to do. When these conflicts arise they diminish your ability to execute your system and have the potential to completely immobilize you to the point where you can't do anything at all, except watch the opportunity pass you by.

By making this kind of distraction and tangible separation between your intellect and your technical trading system, you will be creating for yourself the kind of psychological conditions that will enable you to learn, through experience, the effectiveness and value of your technical system. This article is a revised version of the material contained in title "Disciplined Trader". This book is available and can be ordered in the Trader's World's World Catalog section # this Magazine. Any reproduction of this article is prohibited without express written consent of the author - Mark Douglas is president of Trading Behavior Dynamics.

# Synchronizing Your Brain for Successful Trading

By Larry Jacobs

**M**any traders have struggled to master the art of making money trading the markets. Traders have studied the techniques of the masters such as W.D. Gann and R.N. Elliott as well as many of the currently published new books on technical analysis. Some have achieved the results they wanted through deep concentration and study into the discipline and techniques of trading and have made tremendous amounts of money. Others have failed to understand or develop the discipline of trading and have become part of the statistic that 90% of the people that trade Lose money in the markets.

Few traders can utilize the full potential of their brain, for example to understand the complex trading methods of W.D. Gann, one of the most brilliant traders of all time. W.D. Gann was able to reduce the movements of the markets to mathematics and make millions of dollars trading the markets. The average person has difficulty reading and understanding his books and courses. Most people must read his material over and over again to understand his trading methods. Many traders have tried to understand Gann's concepts but finally just gave up. These are some of the people who say that the trading concepts of Gann just don't work. Others who were able to fully understand what Gann was saying have made hundreds of thousands or even millions of dollars and believe that nothing could be better than Gann techniques. Could it be that most peoples' minds are not developed enough to fully understand the concepts of Gann? More than likely, it is.

It's been said that the mind is one of the most under utilized resources in the world. The human brain consists of billions of cells and it has the potential to challenge the biggest computer in the world. The wonderful bio-computer between the ears has inconceivable potential. Very few people have tapped even part of its potential. The psychologist William James said the we human beings bungle through the days of our lives "as if only half awake." Abraham Maslow concurred, estimating the average person is operating well below his true capabilities, utilizing only 1015% of his mental potential. As unflattering as these remarks are, they are probably true.

All of us have experienced periods in our trading when for some reason our performance soared far beyond its normal parameters. For some reason everything came together and it gave us an opportunity to achieve fantastic profits. At such periods of peak performance, our mind and body is functioning at their full potential. Our entire entity is united and synchronized for success. When we are in this state we are empowered by deep forces within us and we are able to fully analyze the markets and make very profitable trading decisions. It's at those passing moments that we get a glimpse of our possible potential.

Athletes try to achieve what is call the Zone: a magical feeling, an aura,when you can't do anything wrong. All athletes have felt it. They talk about it, but they are not sure how to get it,

how to keep it, or what it really is. Basically what it is a heightened state of consciousness, an altered states if you will. It's form varies among different people, but it's the same thing. Mind and body are functioning at their full potential. Traders, especially day-traders have the same zone, days when they do no wrong in day-trading. The reason they do so well on those days, is that their mind is in a heightened state of consciousness. They are sharp, ready and alert to take the right action on any change that might occur in the market. They are probably in the hyper-alert state of "Super-Beta" awareness. Just imagine if you could put your brain in the same state of mind or "Super-Beta" frequency of the best trading day you ever had in your life? What could that do to your profits?

To achieve this potential on a regular basis may not be as difficult as you may think. New and important understandings into the area of neuro-psychology are being made daily. New techniques and technologies are emerging which hold the promise of dramatically improving the functioning of your mind for better learning and functioning during different activities. A new technology has developed to voluntarily control the different states of the brain. An amazing megabrain device utilizing light and sound synchronizers is available to improve your brain performance. The device is made by InnerQuest and sells for \$299. This remarkable portable device contains 21 present computerized programs to promote deep relaxation, meditation, mental alertness and concentration, high energy, enhanced creativity, accelerated learning and self-development, as well as improved sleep. Giving the usefulness and the popularity of this device, it's not surprising that a large number of traders will use the InnerQuest to condition, tune up, and build mental muscles to improve their trading profits.

### The InnerQuest has the following 21 programs:

"A" 15 minute relaxation conditioning. Begins in Beta at 18 Hz. and slows to low Alpha, 7 Hz., over 5 minutes. Good to use as a "carefree break" in place of a coffee break. Use this daily to train for quick and easy relaxation. All FOCUS mode; returns to Beta to leave you refreshed and alert.

"A-1" 22 minute deep relaxation/ learning. Helps you progress into Theta conditioning at 5.0 Hz. Ramps from 18 Hz. to 5.0 Hz. over 7 minutes, multimodal through relaxation phase, then FOCUS through learning phase (13 minutes), returns to Beta over two minutes. Highly compatible with InnerQuest personal improvement cassettes.

"A-2" 30 minute relaxation exercise. Moves you between Alpha and Theta levels alternately while shifting emphasis from auditory to visual. Use to develop facility in shifting levels easily.

"A-3" 30 minute "Beta Wave". A high energy program to motivate, "psych-up" for sports activity, public speaking, etc. Multi-modal in waves ranging from 18 Hz. to 36 Hz. Try this one with your favorite "active" music! Light intensity is constant - set your comfort zone and hang on!

"A-4" 25 Minute "Alpha-Beta" wave. Alternates within 12 Hz. to 20 Hz. range. Good for light relaxation, music enjoyment; pleasant visuals. Light intensity varies 25 % in waves.

"A-5" 30 minute deep "AlphaTheta" wave. Slowly alternates within the range of 12 Hz. to 5.0 Hz. Good meditation trainer. Also use for personal programming. Light intensity dims in the Theta phases. All in FOCUS mode.

"A-6" Relax into sleep. 45 minutes. Our famous sleep trainer. Gently ramps to ever lower plateaus as intensity fades to zero, ending with "lights out" at 1.0 Hz. Good night.

"B" 40 Minute "Earth Harmony" program. A gentle relaxation from 18 Hz. then constant at 1.83 Hz., the Schumann Resonance frequency of the Earth's magnetic fields while alternating

between FOCUS and EXPAND mode. Recommend prone position with head to North.

“B-1” 36 Minute deep relaxation and Theta learning. 7 minute relaxation period followed by gentle Theta wave for high retention of programming and mental imagery.

“B-2” 36 Minute High Creativity. All in EXPAND mode. Promotes intense hemispheric “crosstalk” useful in problem solving and creative thinking. Range: 33 Hz. to 7.0 Hz. Excellent to use while you are developing your trading strategy.

“B-3” 46 Minute Deep Relaxation/ High creativity. First relax into Theta then stimulate creative thinking in the EXPAND mode. Great for inspiration and inventiveness. Light intensity gradually dims to 60% at deepest levels.

“B-4” 25 Minute General Tune-Up. Multi-modal; a tour of patterns and frequencies combined with Alpha level relaxation. Good music enjoyment program.

“B-5” 45 Minute General Use. Deeper and longer period of relaxation following multi-modal ramp-down. Good also for cassette-guided learning.

“B-6” 45 Minute Accelerated Learning. Combine with your language course, etc. First ten minutes for deep relaxation, then 30 minutes for high retention followed by a five minute return to refreshed alert.

“AB” 60 Minute Ultra-Deep Relaxation. 10 minutes of inductive relaxation, 40 minutes in Delta wave, and 10 minute return with strong stimulation for full mental clarity. Excellent to use before intense study into for example, Gann material.

“AB-1” 15 Minute “Cat Nap”. Rapid relaxation to Delta sleep level, 10 minute nap and return.

“AB-2” 40 Minute “Delta Alert”. After 7 minute deep relaxation, light stimuli will go to Delta levels (1.0 to 4.0 Hz.) while audio will stimulate to maintain mental awareness. Experiment in this program with lucid, wakeful dreaming.

“AB-3” 30 Minute “K-COMPLEX CREATIVITY”. Experiment in the hyper-alert state of “Super-Beta” as you spend 3 minutes each on plateaus of 31, 33, 35, 37, 39, 38, 36, 34, 32, & 30 Hz. in FOCUS up and EXPAND down modes. Use the “PAUSE” button to linger where you like.

“AB-4” 75 Minute “Delta Escape”. This is a favorite while on long trips: air, land or sea. A great escape anytime. Deep relaxation and sleep, then a gentle return to high Alpha. Try combining it with meditative music at low volume.

“AB-5” 36 Minute Memory/Recall. Use this program when trying to recall forgotten events, find something you’ve hidden “where no one will find it”, or experimenting with regression. 7 minutes of relaxation followed by all FRONT-BACK mode in Alpha-Theta range.

“AB-6” 35 Minutes. Call this one “Kaleidoscope” or “Carnival Ride”. Some special effects for an exciting and fun experience. Fasten your seat belt!

There is also a line of self improvement Acoustic Brain Research/ InnerQuest subliminal cassette tapes compatible with the InnerQuest. The tapes can be used with or without the InnerQuest, however, InnerQuest has been found to improve the effectiveness of any subliminal tape by 400%. The tapes have been created with the most advanced and sophisticated auditory technologies available. This technology has been developed to allow the subliminal tape to speak directly into the unconscious mind in its own language. For example, the tape might want to convey the idea that it is safe for you to grow and change. “When you plant a seed deep into the earth . . . its roots grow underground. . Drawing to itself. . everything it needs...to grow...when you plant a seed. ..deep. . into the earth. . you just forget about it...it grows automatically . . . underground.” The associations are virtually endless. Everything known about plants and gardens is used by the unconscious mind to understand (and accept) growth and

change. There is no resistance to the idea since the reference is to seeds, not to you. However, the unconscious mind also understands that this message is a statement about you. Therefore it accepts the statement and the opportunity for personal change has increased. Metaphors may be audible or subliminal. On tapes where subliminals are used, the exact script is included. The following is a list of subliminal tapes that are of great help to the average trader.

“A” The 24 Minute Nap. This tape seems like it’s equivalent to 3 hours of sleep. The tape is ideal when you are feeling “tired and run down.” Simply find 24 minutes when you can relax and put on the tape. After your “nap” you will be much more refreshed and ready to return to your tasks. It’s great for you when studying trading books late at night. The tape can also be used to refresh yourself before landing or before any important occasion where you are required to function without fatigue.

“B” The 22 minute Vacation. This tape is a “mini 30 day vacation” and will greatly relax you. After the tape has ended just set quietly for a few minutes enjoying your sense of relaxation and refreshment.

“C” The “High Genius” Creativity Tape series has been designed for those interested in expanded awareness, mental development and everyday creative potential. Based on Higher Cognitive Principles found in scientific and artistic genius, these tapes have special implications for education, the arts and creative problem solving. Through this synthesis the tapes can assist you in: tapping subtle perceptual experiences that would have previously remained below your level of awareness; integrating language and perception; exploring personal and archetypal patterns of potentiality; facilitating insight to your creative work; and finding new answers and possibilities to specific questions or goals. There is a tape to assist you in: transforming your sleep and dreams to higher creative states; interpreting your dreams or dream images; or in deciphering creative images or symbols from your “waking dream” protocols of this tape series. This is an excellent set of tapes to listen to when you are into intensely studying the concepts of W.D. Gann.

A new set of two tapes has been developed for Trader’s World subscribers. This special set of tapes is called “Gann Mind Tapes”. It is a combination audible/subliminal set of two tapes which contain most of the important rules and principles of trading the market. When these tapes are listened to over and over again, the information they contain will go into the trader’s mind. Information such as Gann’s successful rules and principles of trading. If a traders is about to make a irrational mistake, hopefully, his mind might say, “stop, this is not one of the rules of successful trading.” Another thing his mind might say is, “You can’t trade based on this signal alone, you have never proved that it works enough to be reliable.” Or his mind might say, “OK you have put your trade in, where’s your stop and what is your profit objective?” The “Gann Mind Tapes” will allow your trading mind to fully grow and expand in the right direction with solid proven rules, helping you to avoid the pitfalls of most traders who trade on fear and greed. The set of tapes is available in the Trader’s World Catalog section.

The InnerQuest and the subliminal tapes sound incredible, something straight out of a science fiction novel. But if there’s one thing that we have realized in this rapidly changing world, it’s that yesterday’s fictions have become today’s realities. The InnerQuest and the Acoustic Brain Research/InnerQuest cassette tapes talked about in this article are available in the Trader’s World catalog section in this magazine.



# Synergy: The Secret of Cycles

By Eric Hadik

Thirty months have transpired since the composition of "Achieving the Ultimate High" in February 1989, and yet everything that was applicable and pertinent then in the stock indices, is again exerting pressure on the markets. The cycles and Elliott Wave counts are again converging, although with greater impact, projecting a major downturn over the next two to three years. One significant oversight was made while composing that article and its two sequels, which the recognition of has added another dimension to current analysis. It is a principle which is present in all aspects of life and is recognized in varying forms. Solomon, considered to be one of the wisest men in all of history, applied this principle to humanity when he stated, "Two are better than one because they have a good return for their labor. For if either of them falls, the one will lift up his companion. But woe to the one who falls when there is not another to lift him up. Furthermore, if two lie down together they keep warm, but how can one be warm alone? And if one can overpower him who is alone, two can resist him. A cord of three strands is not quickly torn apart." (Ecclesiastes 4:9-12) Previously, in Proverbs 11: 14, he states, "For lack of guidance a nation falls, but many advisors make victory sure." The same principle applies in market analysis and can be utilized in many ways. It is the principle of synergy. One application, (which in retrospect shed some light on the apparent miscalculation for a major high in September 1989) is the use of correlating markets as confirmation when considering a technical or cyclical signal. An example of this can be seen in Figures 1 & 2, weekly charts of the Dow Jones Transportation Index (which led the 1988-1989 advance and subsequent Friday the 13th decline in October 1989) and the Dow Jones 65 Composite, the truest Dow Index which incorporates the Transports, Utilities and Industrials. Each of these charts confirm that a major high, perhaps the Ultimate High, was attained on September 1, 1989, even though it was not evident on the chart of the 30 Industrials. (See Gann and Elliott Wave June/July and Nov/Dec 1989 issues for further explanation or write this author for copies.) These charts also confirm the major low projected for mid-October 1990 in The Golden Cycle, which was evident in all the indexes. Using this conjecture as a foundation, some significant conclusions can be drawn. The primary assumption is that the two year anniversary of this high will present an opportunity for another important reversal to occur. The two year cycle has been very consistent in the stock market and should once again prove to be valid due to the coincidence of major, intermediate and minor cycles aligning on one day—SEPTEMBER 3, 1991. Any student of stock market history should recognize this day as the exact date of the 1929 high. Utilizing the Golden Cycle (Trader's World Apr./May/June 1991 ) as a guide it is safe to project that a major reversal should occur 62 years from this date—SEPTEMBER 3, 1991. This date also represents the 60 week cycle from the July 1990 highs and the three month anniversary of the June 3, 1991 intermediate highs as well as the start of the ninth-forty and a half day (Lost Cycle) cycle from the October 11, 1990 lows, marking an imminent change in trend. (It also coincides with several multiples of a yet to be discussed cycle, 140 days from the highs in the DJU and DJT and 14 months from the 1990 highs.) September 1991 also marks another major convergence of cycles and completion of Waves in the Gold and Silver markets, in addition to an intermediate peak in Treasury Bond cycles at month's end. Considering that these two commodities (Gold and Silver) have existed through all known history, it is safe to conclude that all the previously discussed cycles, derived

from Biblical mathematics, should occur even more frequently in this arena. If this is an accurate conclusion, then next month could prove to be the most significant in the precious metals since January 1980, based on a combination of Biblical and Gann related cycles.

September 1991 is:

- 140 months from the January 1980 peak
- (140 =  $2 \times 70$  &  $3 \frac{1}{2} \times 40$  -all Biblical #'s)
- 45 months from the December 1987 peak
- 2 year anniversary of the September 1989 low & 15 months from the June 1990 peak
- (August 31, 1991 = 20 years since abandoning the gold standard)

And a low on September 13 or 16 would be the culmination of numerous "7" related cycles:

- 84 weeks from a high
- 56 weeks from a high
- 35 weeks from a high
- 14 weeks from a high
- 140 days from a low
- 98 days from a high
- 84 days from a low
- 28 days from Monday's coup highs.

A low around this date would usher in a major reversal through the autumnal equinox indicating the beginning of Fall for stocks and a new season for Gold and Silver. Combining Cyclic, GaM and Elliott Wave analysis produces a higher level of synergy which increases the percentage of probability even greater. Figure 3 illustrates the pending peak of a diagonal fifth wave (the weakest topping formation in Elliott) at the time of this major cyclic convergence. This potent combination of analysis increases the odds of a 2-3 year correction in the indexes.

NOTE: If September 3 marks the peak in the market, then another synergistic time frame should be viewed with caution. This alignment occurs in mid-November, two days either side of November 20, 1991, and could represent the completion of the first waves in metals and stock indexes. This time frame is equally important in Bonds and currencies.

The application of synergy appears simple enough but certain pitfalls should be considered first. Certain conclusions should never be automatic when analyzing the markets. Economists perpetually correlate one market to another and this is where the danger enters in. Do not assume that just because one or two or more markets are projecting one scenario that all the usual consequences will occur. Each market (or complex of markets) has its own driving forces and fundamentals and the immediate correlation of one to another should be avoided at all costs. The important and often changing question is "Which market or fundamental is leading?" Consider the following: If the U.S. Dollar is dropping consistently and leading market focus, then Bonds will follow suit as their appeal begins to diminish...HOWEVER...if bonds are dropping and leading the way, it is likely that interest rates are rising and the Dollar along with them. If Bonds rally on lower interest rates then the appeal of Gold and Silver increases as holding costs are reduced and alternative investments (paper) lose favor...HOWEVER...if Gold and Silver are rallying on other factors, such as rising inflation or economic activity, then Bonds are likely to drop. This yin and yang of financial markets is ever present and any two markets may correlate inversely or conversely depending on which is leading, so use correlations (a form

of synergy) with great caution. One other note of caution should be addressed with respect to this concept: Do not deceive yourself by utilizing two or three similar indices (i.e. RSI and Stochastics) and assume that their coincidence will increase your predictive probability. It is similar to assuming that since March, June and September Bonds rendered a similar buy or sell signal that it is three times as likely to work. So use prudence and discernment when applying the principle of synergy.

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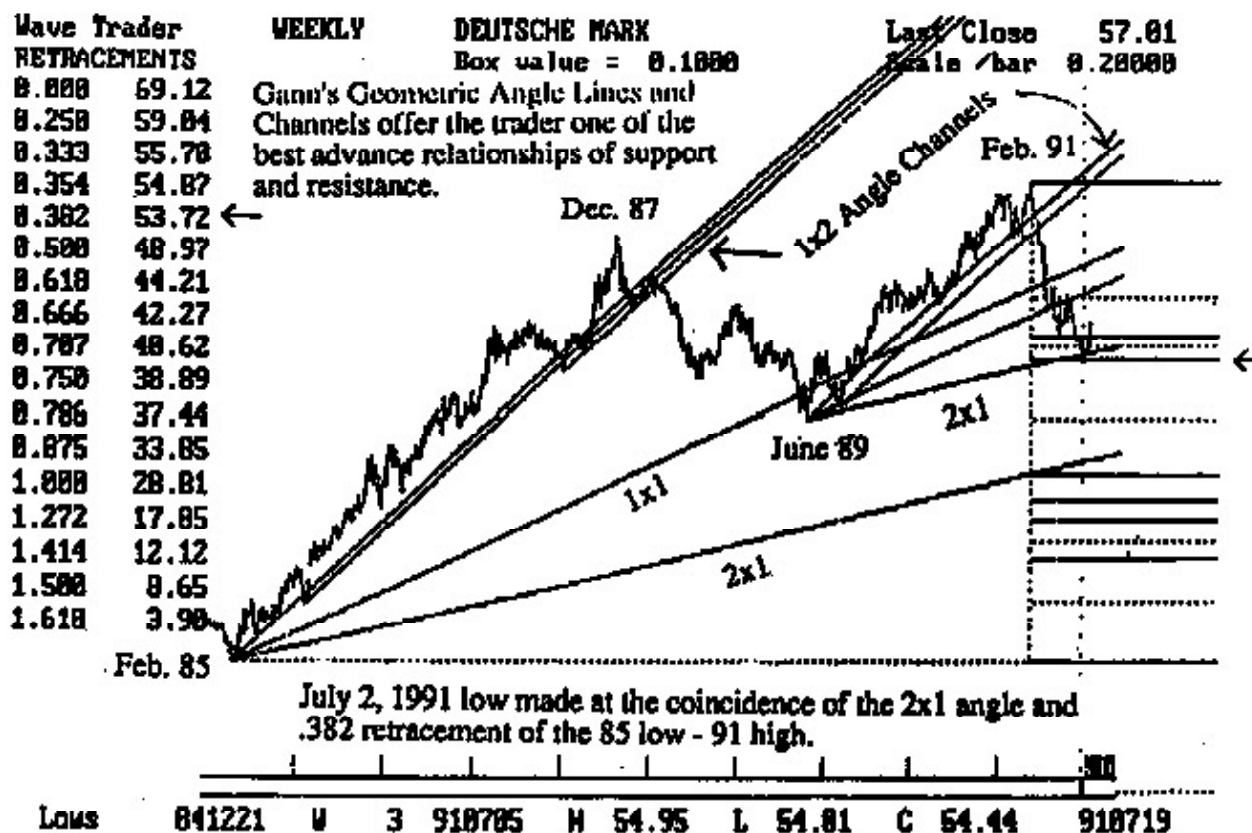
# Gann's Geometric Angles

By Robert Miner

**W**. D. Gann discovered many unique relationships of time, price and market geometrically in market activity. Unfortunately, many educators and traders misuse many of Gann's important concepts or are not able to put them into practical market analysis and trading decision making. In almost ten years of studying and applying Gann's concepts and trading techniques to virtually every actively traded market, including almost two years of preparing my trading course related to Gann, I have expanded on Gann's techniques and discovered how to properly apply Gann's concepts to more thoroughly understand the position of the market and make practical trading decisions on a day by day basis.

Gann was a holistic market analyst and trader. In other words, he examined the market from every perspective before making a trading decision. It is important that the trader be aware of all dimensions of market activity, TIME, PRICE, SPACE, PATTERN and GEOMETRICITY, in order to thoroughly understand the position of the market and how the market is most likely to unfold in the future. A trader's analysis methodology must not only be able to consistently and accurately describe the position of the market, but must prepare the trader in advance for specific time and price zones where change is likely to occur with a high degree of probability.

It is beyond the scope of this article to thoroughly explain all dimensions of market activity for any single market. We will primarily look at just one of Gann's unique concepts of market analysis, GEOMETRIC ANGLES, and describe how they can be crucial in understanding the current



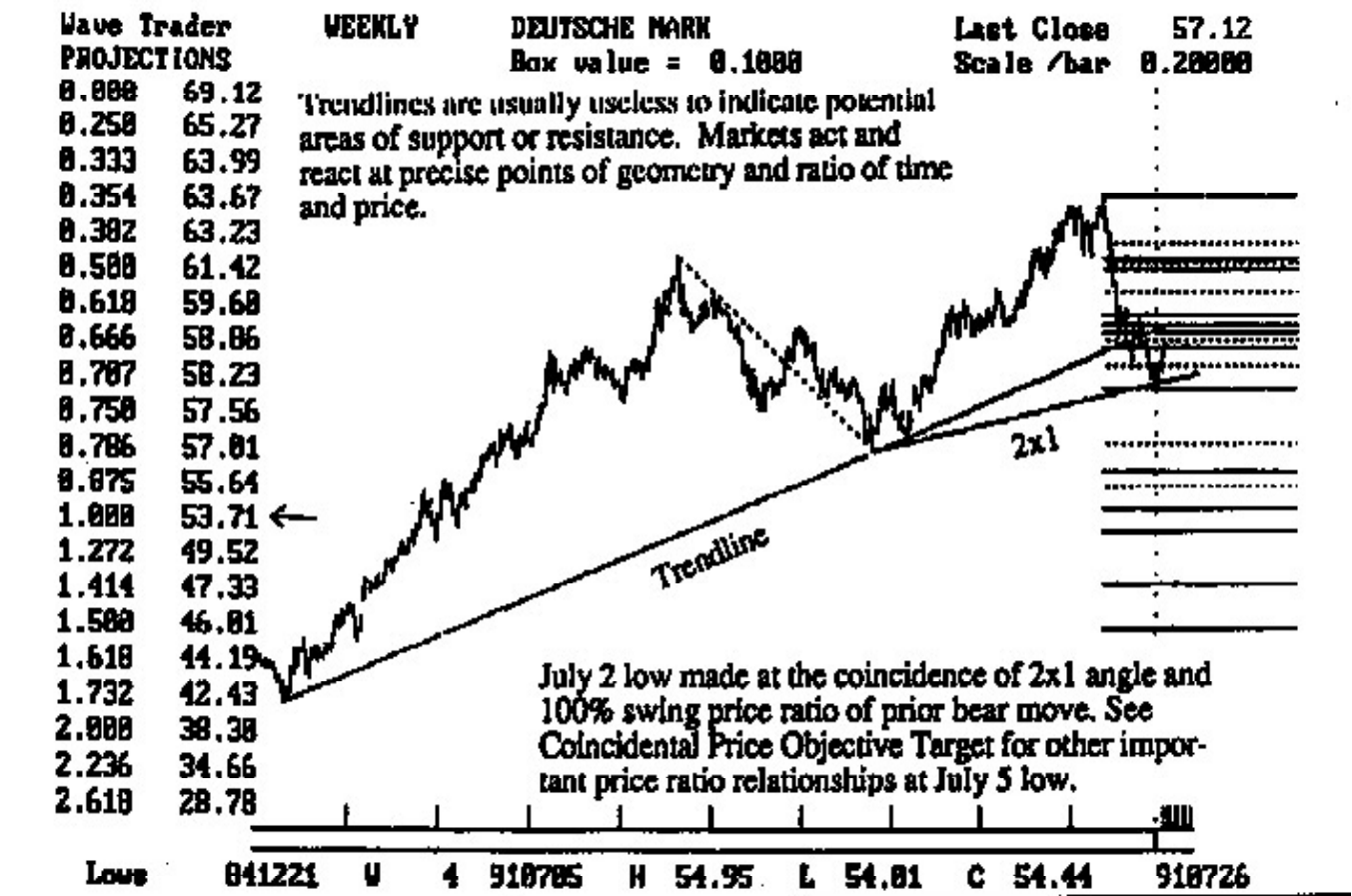
position of the market and future points of important support or resistance.

One of Gann's unique discoveries was that geometric angles were often the points of support or resistance for market activity. The static geometric angles are derived from the divisions of a square. The 1 x 1 or 45 degree angle is represented by the diagonal of a square and relates to one unit of time to one unit of price. A 2 x 1 angle is two units of time to one unit of price, a 1 x 2 angle is one unit of time to two units of price, etc.

When properly used, the geometric angles will give a good indication in advance of the price areas of support or resistance for a market and help to determine the position of the market and the continuation or termination of a market trend. Price will often make a change of trend precisely at a geometric angle. More often, we will find a trend reversal will occur a bit above or below an angle. When this occurs, we then construct an angle channel by drawing a parallel angle from the high or low made near the original angle from the price extreme.

The beauty of geometric angles is they are constructed from just one point of time and price or a single high or low. Trend lines must be constructed from at least two points, or, after a considerable amount of price activity has unfolded. The trader will find that the geometric angles will usually be much more accurate areas of support or resistance than trend lines. Few traders are aware of these important angles and how to put them to proper use.

Figure one (weekly Deutsche Mark) clearly demonstrates how geometric angles and angle channels have been very useful in our analysis of the position of the mark in the past and how they will come into play in the future. From the Feb. 1985 low, price made a sharp rally. At the first sign of reversal, an angle may be drawn, as an angle needs only one point of reference to be constructed. The best time / price ratio for the geometric angles for the mark on the weekly chart is at .1/wk for the 1 x 1 angle (.05/ wk for the 2 x 1, .2/ wk for the 1 x 2, etc.). The market tested the 1 x 2 angle at the first consolidation from the low. In Sept. 1985, price declined below the angle

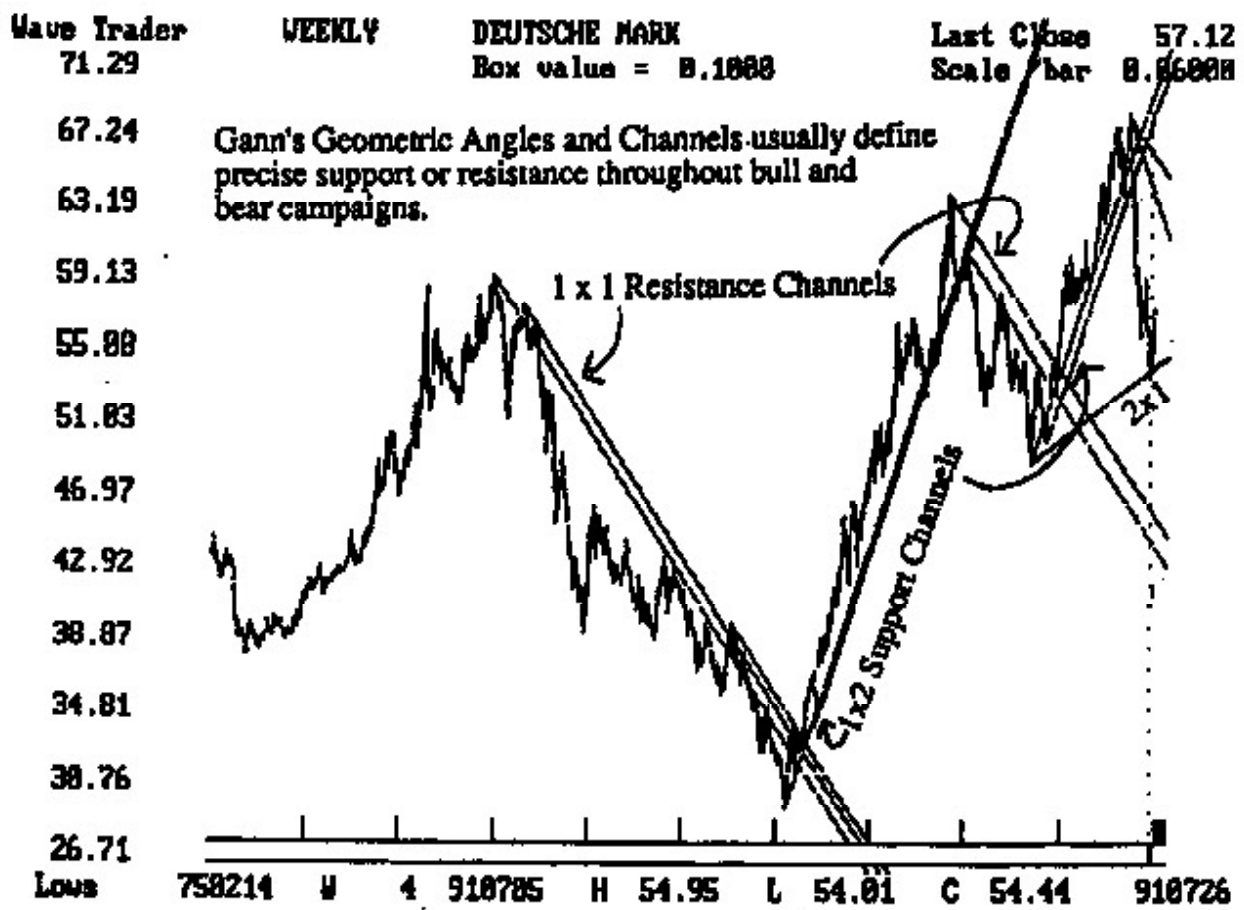


slightly before springing back above the 1 x 2 angle to continue the bull trend.

The 1 x 2 angle did not act as precise support, but an area to be alert to support if dynamic price ratio relationships coincided with the angle at the time the market approached the angle. Once the trend continued above the 1 x 2 angle from the extreme low, we construct a 1 x 2 angle from the low of the reaction that exceeded the original 1 x 2 angle from the extreme low. We now have an angle channel of two parallel angles, one from the extreme low and one from the secondary or first reaction low just below the original angle. This 1 x 2 angle channel now helps to define an area of support for the bull trend. The longer the market remains above the angle channel and the more often it is tested, the greater the degree of decline will occur once the channel is decisively broken. .

On the week of Aug. 14, 1987, price exceeded the 1 x 2 angle channel slightly, only to spring back once again and close above the channel the following week. Following this non-confirmation of decline, we now construct another parallel 1 x 2 angle from the low just below the original channel. This three point angle channel is now a very important zone of support. Once decisively broken, the market is likely to make a counter trend decline relative to the entire bull move from the Feb. 1985 low.

The market continued to rally, making a top on Dec. 31, 1987 and declined sharply to within the angle channel. For several weeks, the entire market activity is contained within the channel, unable to rally above the channel. The failure to spring back above the channel alerted the trader that any close below the three point 1 x 2 channel would be a strong signal to confirm the termination of the entire bull move from Feb. 1985 and a decline greater than any since that low would likely unfold. A correction to the entire bull campaign of Feb. 1985 to Dec. 1987 would be indicated once the angle channel was exceeded.



Within a few weeks, the market declined below the three point 1 x 2 channel, confirming the continuation of the decline and a greater bear move than any other since the Feb. 1985 low. The next support angle is the 1 x 1 angle from the Feb. 1985 low. Should the market continue to decline, the trader should be very alert to the price ratio and pattern relationships if the market reaches the 1 x 1 support angle. In June 1989, the market exceeded the 1 x 1 angle, then rallied above it. We can now construct another angle channel by drawing the 1 x 1 angle from the June 1989 low. The market declined below the top of the channel, making a swing low the week of Sept. 15, 1989, precisely at the lower angle line of the channel or the 1 x 1 angle from the June low.

The primary 1 x 1 angle from the Feb. 1985 low alerted the trader to the area of important support. The geometric angle should never be considered as a precise area of support, but an important area to be alert to the other price ratio, time and pattern relationships should price reach the angle.

Price springs back above the angle channel, continuing a new bull market. The 1 x 1 angle channel of the Feb. 85 and June 89 lows is now a very important zone of long term support. It is constructed of two lows of primary degree. Once exceeded, we will have a strong indication that the market is undergoing a bear move relative to the entire advance from Feb. 1985 and, more than likely, greater than the Dec. 1987 to June 1989 bear market. A confirmed decline below the 1 x 1 angle channel would indicate that the market would more than likely continue to decline below the June 1989 low.

From the June 1989 low, the market activity once again defined an important angle channel constructed from the June 1989 low and the Sept. 1990 secondary, Note how precisely this 1 x 2 angle Note how precisely this 1 x 2 angle channel resulted in support during the entire bull move from the June 1989 low. Once the 1 x 2 active angle channel was exceeded, the trader could expect at least a correction of the entire bull move from June 1989. Should the primary 1 x 1 support channel fail as definitive support, a bear move counter to the entire advance from Feb. 1985 would likely be under way.

Following the Feb. 1991 top, price declined sharply. The trader would be very alert should price decline to or within the primary degree 1 x 1 channel. If this channel is exceeded, a primary degree decline is under way that should be equal to or greater than the Dec. 1987 to June 1989 bear market. The market found short term support precisely at the bottom of the 1 x 1 channel, but has decisively broken that channel, indicating that a bear market of primary degree is under way. From an angle perspective, the market should eventually continue to decline below the June 1989 low, eventually making an important bottom near the 2 x 1 angle from the Feb. 1985 low. Should the market decline to the primary 2 x 1 support angle in the future, this will not necessarily indicate the termination of the bear market, but an area where at least intermediate degree support will be found.

As you can see, Gann's geometric angles, when properly used, have helped the astute trader to be alert to important areas of price support and determine the degree of counter trend move once exceeded and the intermediate and longer term position of the market. There are a few simple rules for properly applying Gann's geometric angles for market analysis and trading.

## GEOMETRIC ANGLE RULES

1. The geometric angles may be constructed from any single point in time and price.
2. Support or resistance is often found precisely at an angle. Should an angle be exceeded and price recover back above the angle, construct a parallel angle from the extreme price beyond

the angle. This angle channel will be an important zone of support or resistance. 3. A confirmed decline (advance) beyond an angle channel will indicate a counter trend move of greater degree than any since the beginning of the angle channel. 4. Construct another parallel angle on any false break of the angle channel followed by a quick recover. 5. The more times the channel is tested, the more important it becomes as support or resistance. 6. On a confirmed break of an angle channel, the next angle is likely to be a zone of support or resistance should price continue that far. 7. Gann's geometric angles must never be used out of context of the other dimensions of market activity - time, price ratio, space and pattern.

As mentioned above, angles must never be used out of context of the other time, price and space technical relationships. Let's look at the immediate position of the market. The July 2, 1991 low was made at the 2 x 1 angle from the June 1989 low. Was this single geometric angle enough to alert us to a high probability that price would find support at this angle? No. Price will usually only find important support at an angle if there are other important price ratio relationships near the angle at the time price approaches the angle. The cluster of price relationships at the 2 x 1 angle in July were overwhelming. In fact, this was only the second price zone from the Feb. 11 high where there was such a large cluster of price relationships that support of at least intermediate degree might be found. Let's quickly take a look at them.

The astute trader would be prepared months in advance for important support near the 53.92 - 53.71 price zone. This was an important area of price relationships from several perspectives of intermediate and primary degree, as well as the area of the 2 x 1 support angle in early July.

#### 53.92 - 53.71 (Important Price Support Zone)

53.92: 75% retracement of the 6/15/89 low - 2/11/91 high.

53.75: 50% price cycle relationship of the 1/3/80 high - 2/26/85 low from the 2/11/91 high.

53.72: 38.2% retracement of the 2/26/85 low - 2/11/91 high (See Figure One)

53.71: 100% price cycle relationship of the 12/31/87 high - 6/15/89 low from the 2/11/91 high.

2 x 1 Gann angle (weekly chart) from the 6/15/89 low (See Figure One).

On July 2, price made an intra day low at 54.01, just a few ticks above this price / angle - support zone. The market has initially rallied sharply from this price zone. How important will the rally from the July 2 low be? Given the strong coincidence of price relationships and angle at the July 2 low, the market should advance in a counter trend swing equal to or greater than any since the Feb. 11 top. However, it is very unlikely the market will advance above the 1 x 1 parallel angle channel. Support angles become resistance once exceeded, just as swing lows become price resistance once exceeded.

There are two very important Coincidental Price Objective Zones of primary degree below the market at this time. They are 48.97-48.32 and 44.2143.22. These two price zones are a result of important clusters of price retracement and swing price ratio objectives and percentage change objectives. The 48.97-48.32 zone is also a Price Termination Zone M that should be the minimum price zone that should be reached prior to any major bottom being made in the mark. It will be a good exercise for the reader to examine the various price ratio and percentage change ratio relationships of the primary degree swings from 1975 to discover all the price relationships into these two important price zones.

If the market declines to one of these important support zones at a time when the primary 2 x 1 support angle from the Feb. 1985 low falls in that zone, be prepared for an important low to be made. The coincidence of angle support and Coincidental Price Objective TM is an



important indication of change. Figure Two illustrates the usual ineffectiveness of traditional trend lines. Price barely hesitated at the support trendline of the 1985 and 1989 lows. Price declined sharply below the trendline making at least an intermediate term low just a few ticks above the Coincidental Price Objective Zone of 53.91 -53.71. The 2 x 1 Gann geometric angle fell precisely within this zone at the time the market approached. Figure two also illustrates the alternative swing price relationship. The important ratio relationships of the range of the prior primary decline (Dec. 31, 1987 - June 15, 1989) are projected from the Feb. 11, 1991 high. The 100% price cycle relationship of this primary decline fell at 53.71, just below the low of July 2. Review the box above for important price ratio relationships into the important support zone.

Figure Three illustrates the precision which the angles acted as resistance during the prior two primary bear markets since 1975. Note that each bear market found resistance at the 1 x 1 angle channels and each advance found support at the 1 x 2 angle channels. The market's bull markets advanced at an average twice the rate of the bear market's decline.

Just as a trader must have a precise methodology to determine well in advance narrow zones of price where support or resistance is likely to be found, the trader must have a methodology that will project very narrow periods of future time that have a high probability of trend change. How important that trend change may be will relate to the degree of past time cycles that are projected into the future. The major changes in trend will occur when time relationships from primary and intermediate term degree coincide in the same narrow time period.

The Feb. 1991 top in the Mark fell precisely within an important coincidence of direct and indirect Time Cycle Ratios TM from the four primary degree swings from the 1975 low through the 1989 low. Traders were prepared over one year in advance for a potential intermediate or major trend change in Feb. 1991. Because the Coincidental Time Objectives TM of Feb. 1991 were of primary degree, the new bear trend should also be of primary degree in time and price.

As of this point in time, the Mark has declined to the minimum price objective of primary degree, but has a considerable amount of time before a primary degree change in trend is likely to unfold. The earliest a primary low is likely to unfold is Feb. - March of 1992. The bear trend is more likely to continue through Aug. of 1992 or later.

Gann instructed that every current time cycle is unfolding in precise ratio relationships to one or more past time cycles. Gann's concept of time goes far beyond the traditional fixed length time cycles. Projected Turning Point Periods are determined well in advance from prior time cycle relationships in a similar methodology as the Coincidental Price Objectives TM. It would take far too much time to describe these relationships for the purpose of this article. Bryce Gilmore and I will thoroughly instruct in our time factor methods derived from Gann's unique concept of time at the Singapore workshop in Oct.

Projected Turning Point Periods TM are those future time zones, usually just 2-4 trading days, when trend change has the greatest possibility of unfolding. They can be determined months, even years, in advance. They are accurate to 80-90% probability. The Projected Turning Point Periods themselves do not indicate a high or low period, but simply a high potential period of trend change. Time must never be considered out of context of price, pattern, space and geometric angles. It is important to keep in mind that important change will only unfold when the market is trading at or very near the coincidental price projections and geometric angles within a day or two of the Projected Turning Point Periods. At the coincidence of time, price, space and angle, change is inevitable.

If no significant change occurs within two or three trading days of the Projected Turning Point

Period, the market is likely to continue its trend at least into the next period.

1991 Potential Projected Turning Point Periods Intermediate or Primary Degree for the Deutsche Mark Coincidence of Primary (from 2/11/91 high) and intermediate (from 7/2/91 low) Degree Time Cycle Ratios. July 2-9, Aug. 2-7, Sept. 5-9, Sept. 21-25, Oct. 25-28, Nov. 10-14, Nov. 24-26, Dec. 9-14.

As of this point in time (July 26), the Mark has made at least a short term low just two trading days prior to the July 49 period. Because that low was made just short of the 53.92 coincidental price projection and intermediate 2 x 1 support angle, most likely the market will advance in similar or greater degree of time and price of the advance from the April 29 low. A failure to advance in similar or greater degree will indicate a very weak market. The failure to change trend at a time, price and angle coincidence is an indication of extreme weakness.

At this point in time, the Projected Turning Point Periods underlined are the strongest dates in the next few months. Given the current position of price and pattern of the Mark, an ideal set-up would be to see an intermediate term high made in the Aug. 2-7 period. If a high is not made near the Aug. 2-7 period, the market will likely continue to advance or consolidate at least into the Sept. 5-9 period. Once an intermediate term high following the July 2 low is confirmed, these Projected Turning Point Periods may shift as a result of the ratio relationship of the new intermediate term swing.

The analysis of the past and current position of the Mark from the weekly chart is relative to primary cycle degree. The geometric angles and all the other concepts described are equally applicable to any degree of change, whether from a monthly or daily chart perspective or, even hourly charts. The geometry, time and price ratio and pattern analysis knows no time restrictions. All degrees of change unfold in the same relationships and processes.

The incorporation of Gann's concepts of time, price, pattern, geometric angles and space and trading techniques with the harmonic ratio analysis of time and price is a comprehensive and powerful tool to prepare traders well in advance for important changes in trend and to understand the current position of the market. No analysis methodology will project the future with certainty. All successful traders realize this. Gann's concepts of market geometry and time and price ratio analysis, when properly understood and implemented, will prepare the trader in advance for change and give the trader the edge that is necessary for success. Proper trading strategies and money management must always be implemented with any analysis procedure.

Robert Miner of Gann / Elliott Educators, has trained market analysts and traders in eight countries the concepts and practical trading techniques of W. D. Gann through his original W. D. GANN TRADING TECHNIQUES HOME STUDY COURSE and his market letter, THE PRECIOUS METALS TIMING REPORT. Miner's Gann trading course expands upon the concepts and techniques of E. D. Gann by integrating them with the most important elements of R. N. Elliott and harmonic ratio analysis. Gann / Elliott Educators is also the exclusive distributors of Bryce Gilmore's WAVE TRADER TIME AND PRICE ANALYSIS PROGRAM. GANN / ELLIOTT EDUCATORS, 6336 N. Oracle Suite 326-151, Tucson, Az. 85704, (602) 797-3668.

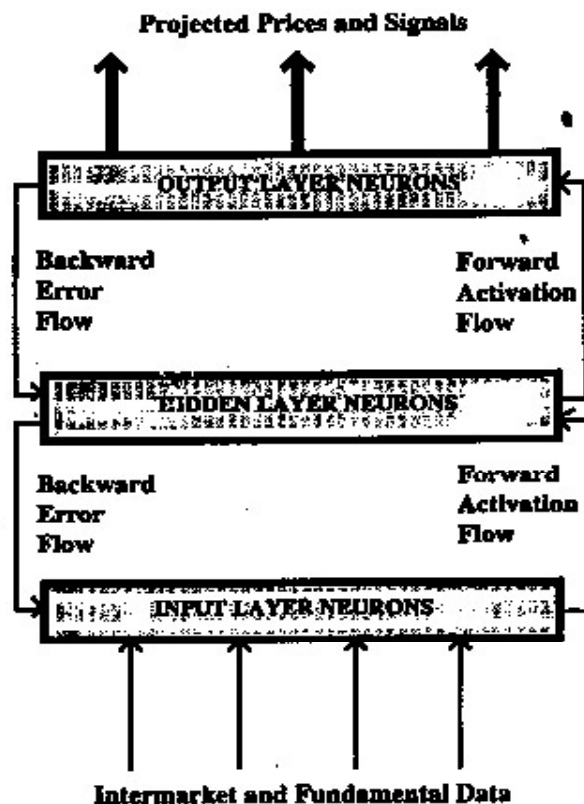
# How to Design an Artificial Neural Trading System

By Lou Mendelsohn

Unlike technical trading systems popular in the 1980s, artificial neural trading systems use an iterative “training” process to forecast prices and trading signals without rule-based “optimization” of system parameters or technical indicators. Instead, neural systems “learn” the hidden relationships within selected technical and fundamental data that are predictive of a specific market’s future price level.

This article examines the steps to follow in applying neural computing technology to the financial markets. First, you need to specify the output that you want to forecast. You should identify the appropriate input data that the system needs in order to generate an accurate forecast. Then the type, size, and structure of your neural system must be defined. Finally, the system has to be trained and then tested before it can be used as a predictive tool in real-time trading.

Most financial neural systems or “neural networks” generate real numbers in the form of forecasted prices, or classifications such as buy/sell signals or trend directions as their projected outputs.



Input data should be selected based on its relevance to the output that you want to forecast. Unlike conventional technical trading systems, neural systems work best when both technical and fundamental input data are used. The more input data, the better the system can discriminate the hidden underlying patterns that affect its productiveness.

Before you train the system, the data should be preprocessed or “massaged”, since neural systems work better with relative numbers, rather than absolute numbers. For instance, it is preferable to use changes in price levels rather than actual daily prices as your inputs and output.

Neural systems consist of one or more interconnected layers of neurons. In a typical system there are three types of layers: an input layer, a hidden layer, and an output layer.

One choice of system architecture successfully applied to financial forecasting is known as a feed-forward network with back-propagation supervised learning. This design has two or more layers. Neurons within a layer are not interconnected, while neurons in one layer receive inputs from each neuron in the previous layer and send outputs only to each neuron in the following layer. This is accomplished by assigning connection weights or strengths to the connections.

The input layer receives input data. The number of neurons in this layer is determined by how many different data categories are used, with each category taking up one input neuron. For instance, in a Tbond price forecasting system, if your input data includes each day's closing price spread between TBonds and the DMark, Japanese Yen, Tbills, Eurodollar, Swiss Franc and Dollar Index, as well as the Fed Funds Rate and Dow Jones Utility Average (a total of eight categories of data), initially the input layer would be comprised of eight neurons. If you preprocess the data by taking a one-day momentum on the closing price of each of these markets, or smooth the time series with moving averages, you will increase the number of input neurons accordingly.

Depending on the number of input markets and the extensiveness of the preprocessing, it is not uncommon for a neural system to have several hundred input neurons. With supervised learning, each day's input data provided to the system during training would also include the next day's Tbond prices. Before training you should randomly shuffle the paired input data, so that the data is not presented to the system chronologically.

The hidden layer neurons do not interact directly with the outside world. This is where the network creates its internal symbol set to record the input data into a form that captures the hidden relationships within the data, allowing the system to generalize.

Selecting the appropriate number of neurons in the hidden layer and the number of hidden layers to use, is often found through experimentation. Too few neurons prevent the system from training. If too many neurons are selected, the system memorizes the hidden patterns without being able to generalize. Then, if it is subsequently presented with different patterns, it will be unable to forecast accurately because it has not discerned the hidden relationships.

The format of the output that you want to forecast determines the number of output neurons needed. Each output category uses one neuron. If you want to predict the next day's high, low, midpoint, and a buy, sell, or stand aside signal for Tbonds, the system would need six output layer neurons.

During training, the system's forecasted output of the next day's Tbond prices and signal is compared with their known values. Forecasting errors are used to modify each neuron's connection strength or weight, so that during subsequent training iterations, the system's forecast will be closer to the actual value.

The “learning law” for a given network governs how to modify these connection weights

to minimize output errors during later training iterations. While there are many learning laws that can be applied to neural systems, one of the most popular ones is the Generalized Delta Rule or Back-propagation method.

During each iteration of training, the paired data presented to the network generates a forward flow of activation from the input to the output layer.

Then, if the outputs forecasted by the system are incorrect, a flow of information is generated backward from the output layer to the input layer, adjusting the connection weights. Then, on the next training iteration, when the system is presented with the same paired input data, it will be more accurate in its forecast. The time necessary to perform training can be considerable depending on your computer's speed, the number of days of data (known as "fact-days"), and the number of neurons in each layer.

When the system reaches a stable state, it is ready for further testing. You can perform "walk-forward" testing by creating a testing file comprised of fact-days which were not used during training. Depending on the test results, you may need to redesign the system, including its architecture, learning law, input data, or methods and extent of preprocessing. You may even need to change the forecasted output that you want to predict. Unlike training, during testing the connection strengths are not adjusted to compensate for errors.

If your system can not train on certain paired data, it may contain contradictory or ambiguous information. You should reexamine each of your data inputs or eliminate redundant input data massaging methods before retraining.

Once your network has trained successfully, it is easy for it to forecast the expected output in real-time. All you have to do is provide it with the necessary input data, just as you did during training. However, as with testing, no adjustments are made to the connection strengths. You should consider retraining your system periodically, experimenting with different data and massaging techniques.

Neural trading systems represent a major milestone in the development of analytic tools for time series forecasting in the financial markets. With the ability to develop flexible, adaptive trading systems, which do not rely on predefined trading rules to model the markets, this "sixth generation" technology promises to bridge the gap between technical and fundamental analysis. It brings them together into a combined trading strategy that fully recognizes the impact of intermarket analysis" in the global markets of the 1990s.

Lou Mendelsohn, president Mendelsohn Enterprises, Inc., Zephyrhills, Florida, designs and tests neural trading systems for the financial industry.

# Combust

By Larry Pesavento and Steve Shapiro, Ph.D.

One of the most powerful indicators of changes of trend in stock and commodity prices is combust, or the conjunction of the Sun and various planets. Conjunction occurs when the angle (aspect) between the sun and one of the planets is 0 degrees relative to the earth. Or, to put another way, combust takes place when the earth, the planet and the sun are aligned in a straight line.

One of the most consistently reliable combust combinations is Sun - Mercury, which occurs approximately six times a year. When this particular combust pattern appears, particularly in combination with other planetary events, it appears to exert a powerful influence on price activity.

For example, in 1991 Sun - Mercury combust occurred 6 times: March 2, April 14, June 17, August 21, October 3, and December 8. Looking at the chart for July Wheat reveals that on February 28th Wheat reversed its trend and rose in price from 274 to 297 on March 6th. On April 14th Wheat hit a short term high of 300 and reversed to 279 1/2 on April 29. And on June 17, after two days of relatively little price movement, Wheat's price activity accelerated, dropping an additional 35 cents in six trading days.

All of these moves were significantly greater than Wheat usually experiences during comparable time periods. While it is scientifically impossible to say combust caused these movements, it is certainly appropriate to observe that many times when combust occurred these accelerations in price also occurred, usually accompanied by changes in trend.

The days given were for the exact days of combust. This means when the planet was along the axis of earth's orbit. Other important times involving combust are when the planet (in this case mercury) enters and leaves the orb (plus and minus 13 degrees away from the ecliptic, or plane of the orbit).

The reader is invited to determine for himself the accuracy of the effect of combust by checking historical price activity of the other commodities with dates (entering the orb, exact, and leaving the orb should be used).

For the reader's convenience the dates of exact Sun Mercury combust for 1992 are offered. Feb 12; Mar 26; May 31; Aug 2; Sep 15; and Nov 23; Entering and leaving dates may be obtained from a standard ephemeris.

The successful application of this technique in the past does not guarantee its continued or future success. The material presented in this article does not make any inferences to buy or sell recommendations.

Larry Pesavento and Steve Shapiro, Ph.D. are authors of the book *Harmonic Vibrations: A Metamorphosis from Traditions Cycle Theory to Astro-Harmonics* and can be reached at AstroCycles, POB 1106, Pismo Beach, CA 93449 (805) 773-37417

# Gann's New York Permanent Chart

By James Flanagan

Since 1982, there has not been one W.D. 1982, there has not been major high or low in the Stock Market that has not been predictable based upon W.D. Gann's Master Time Factor. Based upon our understanding of these cycles, we are approaching an historic crossroads in the Stock Market. The consensus of these Master Time Factor Cycles points to a final "blow-off" into all-time highs between May and October 1992, followed by a monumental bear market in 1993. I believe a correct interpretation of W.D. Gann's New York Stock Exchange Permanent Chart, provides the evidence of why these events will unfold according to a well defined historic pattern. I also believe that these cycles have already determined in advance when the next panicky Stock Market decline will take place.

In Table 1, we have reproduced the first half of this square which Gann describes in his course as, "a square of 20, or 20 up and 20 over (10 over in this table), making a total of 400 (200), which can be used to measure days, weeks, months or years, and to determine when tops and bottoms will be made against strong angles, as indicated on this Permanent Chart." The true value of this chart is the dimension it gives us with regard to Gann's Master Time Factor or Yearly Time cycles.

In Gann's own words, "The Great Time Cycles are most important because they record the periods of extreme high or low prices. By studying the yearly high and low chart and going back over a long period of time, you will see the years in which bull markets culminate and the years in which bear markets begin and end. Each decade or 10-year cycle, which is 1/10 of 100 years, marks an important campaign. The digits from 1 to 9 are important. All you have to learn is to count the digits on your fingers in order to ascertain what kind of a year the market is in. "

The most compelling example I have seen demonstrating the value of this cycle, was the 1987 anniversary of the "crashes" in 1837 (-34%), 1857 (-57%), 1877 (-46%), 1907 (-48%), 1917 (-34%) and 1937 (-50%). Historically, this "7th" year is the most dangerous for holding long stock positions. In close second is the historic tendency for major declines in the "3rd" year. As

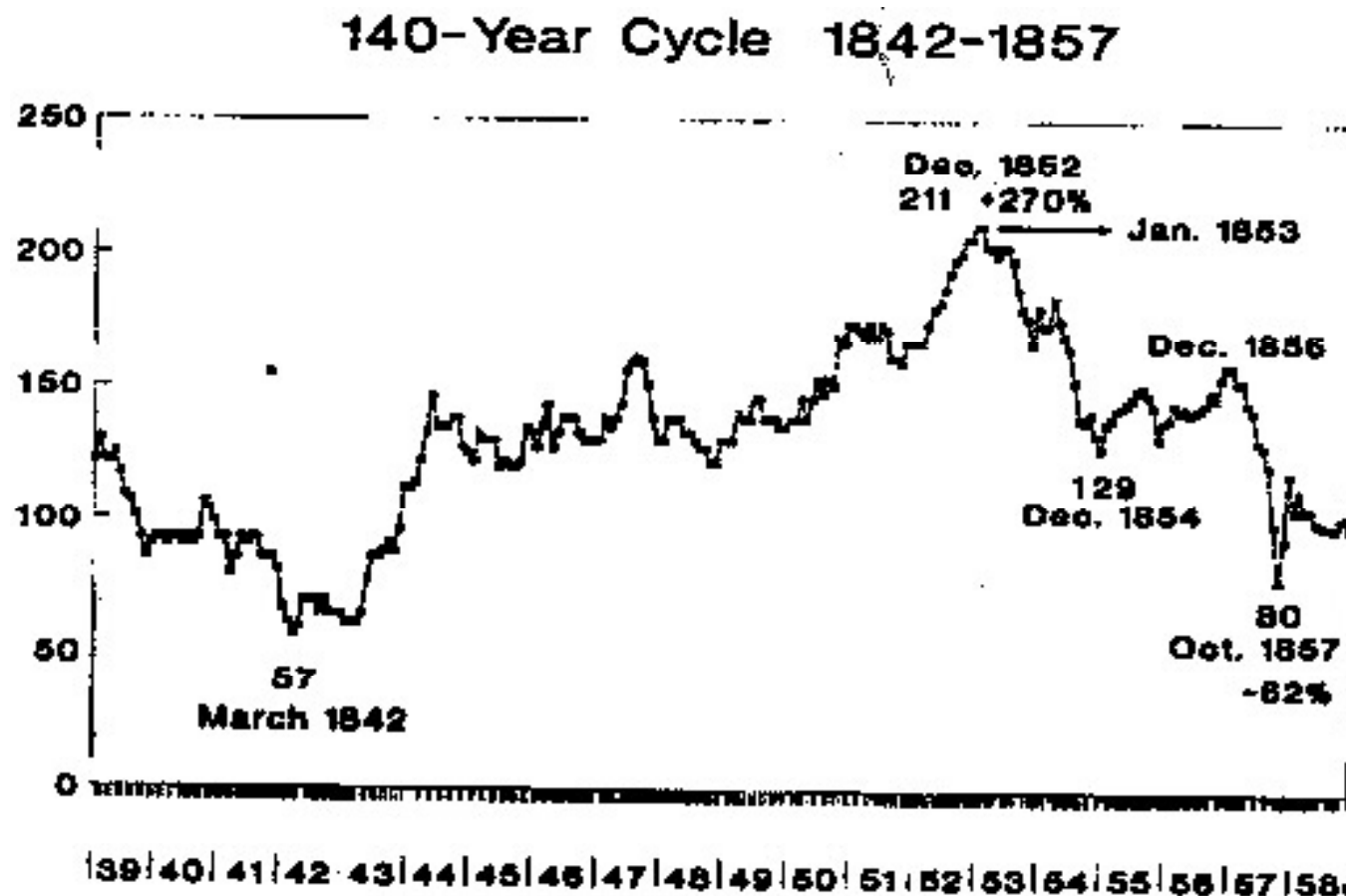
CYCLE	BULL MOVE	% MOVE
140	Oct. 1851-Dec. 1852	+33%
120	Oct. 1871-May 1872	+40%
100	Aug. 1891-Oct. 1892	+25%
80	Oct. 1901-Sept. 1902	+12%
60	Sept. 1911-Sept. 1912	+29%
20	Nov. 1971-Jan. 1973	+39%

we approach 1993 we need to be aware of this.

To construct a forecast in the Stock Market for 1991-1993, we look at all previous 10-year or decennial movements to determine the time periods demonstrating similar movements to our own. Having scrutinized the price patterns in the years 1791-1793, 1801-1803, 1811-1813 etc., we have determined that 1991-1993 is very similar to the consensus of movement in the 200, 140, 120, 100, 90, 80 and 20-year cycles. The conclusion based upon these cycles is that major bull market starting in 1982 will culminate in 1992, followed by a wicked bear market in 1993 (Figures 1-7). Additionally, there is a strong likelihood that the bear market will unfold over a period of four years, with two major assaults down. The first will be in 1993. The second will be to final depressionary lows in 1997.

Returning to the Permanent Chart, we have shaded the years when major lows were made and left clear the years when major highs were made during these critical "1st" through "3rd" years. During these three years alone, 17 of the 30 most important market highs and lows in the history of the Stock Exchange have been recorded. At the top of the square, six of the seven turning point years were major highs. In the middle of the square, seven of the ten turning points in the "1st" and "2nd" years turned out to be bottoms. This shows us that the decades alternate between highs and lows, suggesting that when the "2nd" year registers a final low as it did in 1982, the likelihood is that the "2nd" year in the following decade will register a final top. Thus 1992 stands out as a year for a major top.

Of additional importance is that the year 1992 falls not only at the top of the square, but also at the half-way point moving to the right of the square. This signals the completion of a bull market of higher degree or greater magnitude than any which have preceded it. This is confirmed by the current 293% appreciation in our market from low to high which has now





exceeded all seven previous bull market cycle highs in the "2nd" year including the 270% advance in 1852 and the 287% in 1872. Based upon the timing of the "2nd" year highs, we have yet to complete this bull market.

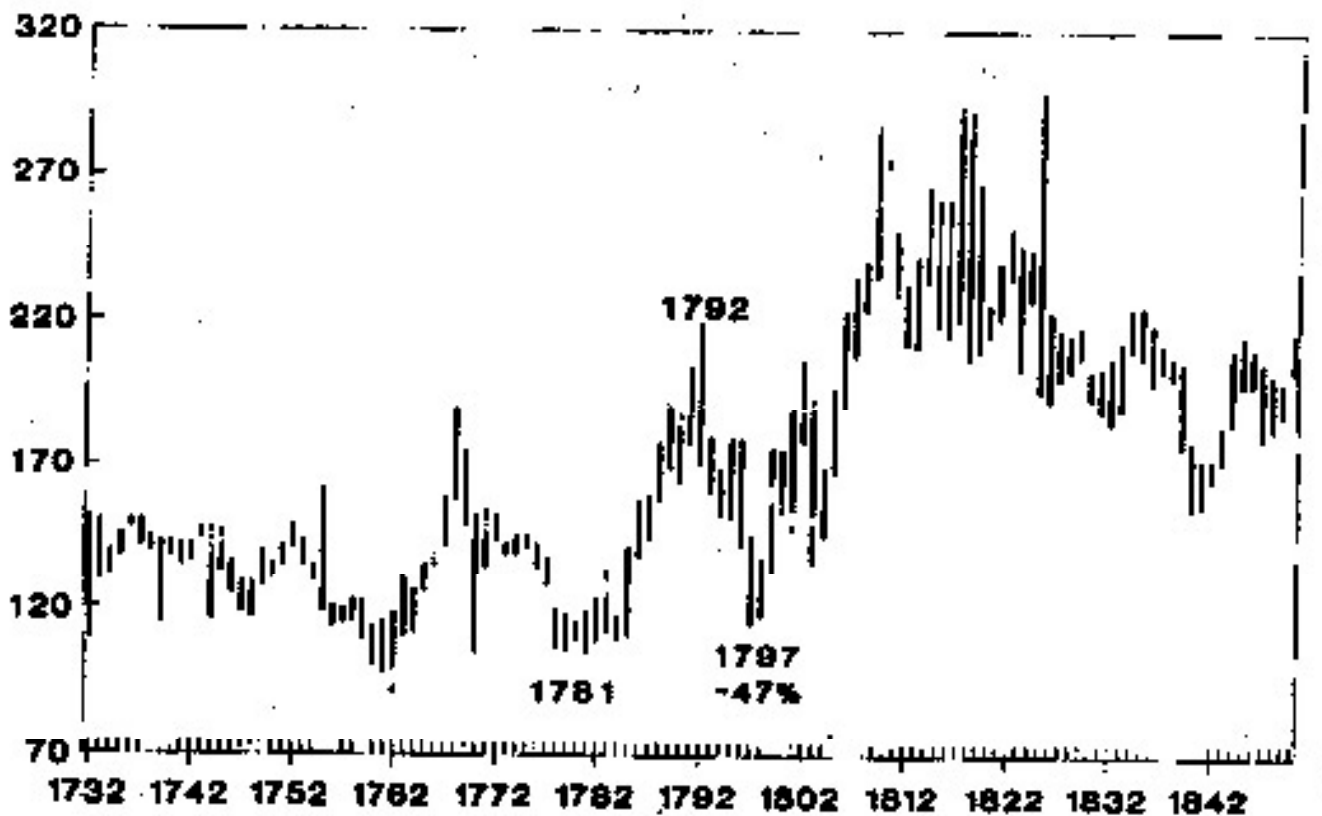
In Table 2, we have listed the final bull market legs that preceded the absolute highs in the "2nd" years. These cycles were unanimously bullish after November of the "1st" years (November 1991), with percentage gains during these final moves up ranging between +12% in 1902 to 40% in 1872 (29% average). If we experience a similar advance from current price levels, a move to 3500-3700 on the Dow Jones would imitate these average final moves up as early as May 1992 and no later than January 1993.

Looking down the road, while there was some diversity in how and when the tops were made, there is no confusion on when the onset of the major bear market occurred. The consensus is for a significant breakdown in Stock prices starting in January of 1993. We have placed an arrow on each chart designating January of the "3rd" year. Returning to the Permanent Chart in Table 1, we have highlighted these "3rd" years and the percentage declines that took place from high to low. Even in markets that did not establish final bull market tops, the market experienced severe reactionary tendencies (1833, 1933 and 1953). This "3rd" year bear syndrome is also evident in the panics and crises in 18th century England in 1763, 1773, 1783 and 1793.

## THE 100, 90, and 60-YEAR CYCLES

Gann students have undoubtedly recognized that some of these cycles are of greater importance than others according to W.D. Gann. The dominance of the 100, 90 and 60-year

### 200-Year Cycle 1781-1797



cycles is of particular interest.

Based upon the 100-year centennial cycle of panic and depression, we would expect our current market to duplicate the depressions of 1793-1797 and 1893-1896. The decade of the 1790s recorded the French Revolution and runaway inflation that destroyed their country. During the same period, England experienced its worst depression since 1721. One-hundred years later in the United States, the completion of the worst depression up until that time in 1896, coincided with the trough of the Kondratieff Wave 54-year cycle. Also, of interest based upon this 100-year multiple is the 200 year anniversary of the New York Stock Exchange on May 17, 1792, and the 500-year anniversary of Columbus's discovery of America on October 12, 1492.

Based on the 90-year cycle, September 1720 marked the top of the biggest market mania history had ever recorded during the South Sea Bubble in England (270 years). Ninety-one years after, the prospects for a U.S. war with England ushered in the Stock Market top in 1811, ultimately resulting in the panic of 1814 and the closing of the First Bank of the United States in 1812 (180 years). This market did not see final bear market lows until 1814. Ninety years after that, the McKinley boom drove prices higher from 1896-1902 (90 year). The convergence of these cycles is the engine fueling this huge bull market. The antithesis will be the wipeout in 1993.

The harmonic 60-year or "Great Cycle" as Gann referred to it, is also due to play a significant role in the overall decline. These major declines were recorded in 1693 (300 year), 1753 (240 year), 1811-1814 (180 year), 1873 (120 year) and 1929-1933 (60 year).

## CONCLUSION

Over the near term, there is a high probability that the Stock Market will experience a final "blow-off" move into a final high in 1992.

Over the long-term, we sum up our views in one word completion. Since time is more important than price, the strongest statement we can make is that regardless of where price is on January 1, 1993 you need to be short the Stock Market. This should start the next major transfer of wealth into 1997. As W.D. Gann was fond of saying, if we do our homework we don't have to guess what the markets will do we will know.

We have utilized the Cowles All Stock Index and S&P 500 because of their superiority to the Dow Jones Industrials both in terms of how the averages are constructed and greater representation of stocks.

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# The Power of Eclipses and Their Effects on the Market

By David Wierzba

**E**clipses have been considered an omen of things to come from the earliest days of mankind. Many traders still consider eclipses to be significant for the stock market while others ignore them completely. A great deal of confusion is generated on this subject, especially after the apparent failure of the widely advertised July 11, 1991 solar eclipse to have an effect on the market.

What do eclipses really mean for the stock market? First let's start with the basics. Eclipses are a common occurrence of about four to seven each year. There are two kinds of eclipses: solar and lunar. The solar eclipse is a new moon where the moon's orbit blocks the light from the sun. A lunar eclipse is a full moon where the moon passes through the earth's shadow.

Solar eclipses can be broken down into three different types. Total solar eclipses have complete sun coverage. Annular eclipses are total except for a ring of light surrounding the disk of the sun. Finally, with partial eclipses the moon only covers part of the sun.

Lunar eclipses also have three different types. In a total lunar eclipse the moon falls completely in the shadow of the earth and disappears from view. In a penumbral lunar eclipse the moon falls into the area of partial shadow called the penumbra. A partial eclipse occurs when only a portion of the moon is covered by the earth's shadow.

Our study covers 141 solar eclipses and 143 lunar eclipses from 1929 to the present. Daily charts of the Dow Industrials were studied looking for an eclipse effect. For the purpose of this article we define "eclipse effect" as either:

- a) A definite trend change (not just a small one day trend change) within 2 days of the eclipse.
- b) A very significant trend change (monthly or longer) within 3 days of the eclipse.
- c) A very volatile outside day within one day of the eclipse.

Of the 141 solar eclipses studied there were: 49 total, 47 annular and 45 partial. An eclipse effect was noted for 37 out of 49 total eclipses or 75%.

Dec. 21, 1991	partial lunar	Small low before a holiday rally
Jan. 4, 1992	annular solar	In 0 degree conjunction with Uranus. A significant trend change possible.
June 15, 1992	partial lunar	82% chance of a trend change
June 30, 1992	total solar	Possible trend change
Dec. 9, 1992	total lunar	76% chance of a trend change
Dec. 24, 1992	partial solar	Weak partial eclipse should have little effect on quiet holiday markets.

The 37 eclipse effects were almost equally divided between highs and lows for total eclipses. (17 highs and 20 lows). For annular eclipses, 32 out of 47 were significant or 68% of the time. For partial solar eclipses only 23 out of 45 eclipses or 51% coincided with an eclipse effect.

As expected partial solar eclipses were the weakest, exactly as one would expect. Some interesting solar eclipses: 3/7/32 high for the year; 5/30/46 - high for the year; 5/20/47 low of the year; 10/23/57 - low of the year.

Of the 143 lunar eclipses studied there were 51 total, 53 penumbral and 39 partial. An eclipse effect was noted for 115 or 80%. For total lunar eclipses, 39 out of 51 were significant or 76%. For partial eclipses, 32 out of 39 were significant or 82%. For penral it was 44 out of 53 or 83%.

These results were surprising in two different ways. First, total lunar eclipses were not as strong as penumbral or partial. However the few percentage points difference between them is probably not statically significant. It was also surprising that lunar eclipses had a more consistent effect. Many people consider solar eclipses to be more important but only 92 of the 141 solar eclipses or 65% were significant.

Notable lunar eclipses: a) 7/26/34 low for the year. b) 11/7/38 - 2 trading days from the high of the year. c) 2/9/44 - 2 trading days from the low of the year. d) 9/15/51 - high of the year.

Eclipses have been associated with "crash" behavior in the markets but from our research that is not the case unless the eclipse is negatively aspected by an outer planet. On Sunday, March 29, 1987 the solar eclipse formed a near exact 90 degree square angle with the planet Neptune. On Monday, March 30 the market was down 57 points. Another example of crash behavior was associated with the June 15, 1973 lunar eclipse. The moon was at a bearish 180 degree opposition to the planet Saturn. The Dow was down 14.37 points or a steep 1.6% drop from the 900 level. The next eclipse to watch for crash behavior is the solar eclipse of May 21, 1993. This eclipse forms a bearish 90 degree angle to the planet Saturn. Watch out for this one!

For reference purposes next year's eclipses and their anticipated effects are displayed in table 1. The material presented in this article is for research purposes only and does not make any buy or sell recommendations. The past application of this technique does not guarantee its continued success in the future.

David VVenba publishes Willow Financial Timing, a forecasting and educational research newsletter. For a sample copy please send \$2 to Willow Financial Timing, P.O. Box 26637, Santa Ana, CA 92799.