

# **Chart Reading**

**for**

# **Professional Traders**

**by**  
**Michael S. Jenkins**



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*Michael S. Jenkins*

**Biographical Sketch**  
**of**  
**Michael S. Jenkins**

Michael S. Jenkins was born in Schenectady, New York on March 12, 1949. From earliest childhood, he was fascinated with the stock market and studied every book and publication he could find regarding the subject. He studied Economics and Business Administration at Washington & Lee University and graduated with a BS in Commerce in 1971. In 1975, he received an MBA from George Mason University. He passed the Uniform CPA Examination the same year.

Mr. Jenkins held positions at various bank trust departments from 1971-75, and in 1976, he was appointed portfolio manager for three mutual funds in Washington, DC.

In 1984, Mr. Jenkins moved to New York City to become a professional trader for a number of specialist firms on the NYSE. In 1985, he founded the investment newsletter "*Stock Cycles Forecast*." Because of the widespread notoriety this letter received in precisely predicting the final stock market high in August 1987 and specifically calling for a 500 point drop in the Dow that would end by October 19th of that year, Mr. Jenkins has become a frequent commentator on television and radio and is often the subject of numerous popular financial magazine and newspaper articles.

Nearly every major high and low of significance in the past several years has been successfully forecasted in the "*Stock Cycles Forecast*" newsletter — many down to the exact day and in a few cases, the exact hour on those dates! Mr. Jenkins is considered an authority on cycles in the financial markets and often lectures on this subject, as well as providing investment seminars where his proprietary trading methods are taught. He is the author of *The Geometry of Stock Market Profits, A Guide To Professional Trading For A Living*. This new book, *Chart Reading For Professional Traders*, is an attempt to provide the investing public with a basic reference work for reading charts to forecast and trade the speculative markets, using his proprietary discoveries in the area of technical analysis.

## Acknowledgments

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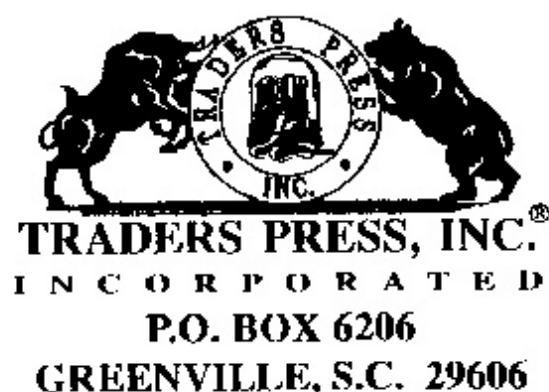
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# Introduction



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There has always been a debate about whether one should invest as a fundamentalist or as a technician. The fundamentalist, of course, does not look at charts but concentrates on analyzing hard economic figures in the belief that an improving fundamental situation will lead to higher prices. Although this sounds quite logical and perhaps 98% of all investors invest this way, it is nevertheless wrong. Only in a general sense do the fundamentals concern traders or investors who are looking for capital gains on an annual basis, and certainly day traders can easily go bankrupt from short term corrections against the fundamental bias. Unless major accumulation of an issue takes place, no matter how good the fundamentals, the price is likely to move very little, and it is this price movement that makes money for us.

Charts and technical analysis, on the other hand, are mostly concerned with price movement. When securities or commodities are fluctuating, we can trade them and make money. Any truly fundamental development of importance will first show up in the price and volume data long before outsiders will learn about the fundamental development causing it. One does not need illegal information to see illegal accumulation or major developments within a corporation or commodity supply demand factors that may be changing. Money moves the markets, and big money is always right no matter what the reason. The skilled chart reader will always see this price movement and be alerted long before others. This is the fundamental argument for chart reading, but more important is the fact that *cycles* exist and recur over and over again, showing up in the historical record of the price data and can be analyzed from such data to make future predictions.

Wall Street would like to deny the existence of cycles because no one needs a highly paid analyst or a full service broker if cycles indicate that a stock or commodity is going up or down the next year, regardless of perceived fundamentals. Only by having a price history can we truly say we know what to expect from our investment, the nature of its personality, the extremes it has traded to over the years, and where it is deviating from its past patterns, which could indicate a new significant development in the life cycle of the company.

For years I have heard the arguments about long term investing and the many people who have made fortunes in the market using a buy and hold strategy. What is not said very often, however, is the tens of millions of investors who bought and held the wrong stock and after thirty years have only broken even or worse saw their company go bankrupt. Books are not written about these unfortunate multitudes. In 1965, General Motors was the most popular stock, and "what was



good for GM was good for the country.” But, did you know that it took until January 1994 for GM to finally exceed the price it sold at in 1965!!! It took nearly 30 years for those 1965 buyers to break even!

The idea of buy and hold is a fundamental strategy. It assumes the issue you hold is going *up* every year. In these cases, you could get rich over time. But, the modern version of buy and hold has been perverted by the big brokerage firms and mutual funds to lock the customer into their particular investment program without emphasis on whether the issue is actually making money. The person who buys and holds a declining issue is not an investor but a fool. Believing the fundamental argument that improving earnings will eventually mean a rising stock price has been the death knell for many an investor. Only technical analysis and chart reading can save these sorts of individuals. The chart clearly shows us the objective trend whether up or down, and we can then develop some sort of strategy to limit losses at a reasonable level if the fundamentals do not kick in.

It has been rightfully said that chartists sell too soon out of fear of heights and miss the big move that often makes millionaires of fundamentalists. The corollary, of course, is that the chartists do not go down with the ship when they see a sinking chart pattern. I am sure the number of rich buy and hold fundamentalists is a lot smaller than the number who held on and lost everything. The obvious solution, of course, is a marriage of the two concepts. I have no problem with the person who strongly believes in his investment and wants to hold it forever, using a common sense strategy to sell it when he gets a technical sell signal, but immediately takes steps to repurchase it if it again reverses with a buy signal. This kind of long term strategy will be infinitely more rewarding in those cases where a stock goes up for years and truly does make millionaires out of its owners.

## **This Book**

The purpose of this book is to demonstrate the principles of chart reading and technical analysis as applied to general chart reading for trading purposes. Advanced techniques to find cycles, project price targets, and time periods for reversals will be examined at length. Many of my original discoveries in this field will now, for the first time, be published in an effort to help the investing public make a success of trading and allow the average person the ability to consistently make profits in the speculative markets. I will not cover all areas of technical analysis, nor will I teach the basics of stocks, options, or futures. I assume you can learn these things from a thousand other books at your local library. What I will show you, however, is a comprehensive method to make money each and every month. Making money each month, of course, means that with a reasonable amount of capital you can become independent and live the kind of life you choose not fettered with the burdens of everyday work drudgery.

These principles always work. That is why they are called *principles*. I have no time to spend lengthy chapters explaining to you the reasons behind these principles or the fundamental cause and effect behind price movements. My purpose here is to simply reveal these methods for making money. I have been a professional trader for over twenty-three years now and can

assure you that these principles are well worth learning! For those of you who must know the *reasons*, I direct you to my book *The Geometry of Stock Market Profits, A Guide To Professional Trading For A Living*.

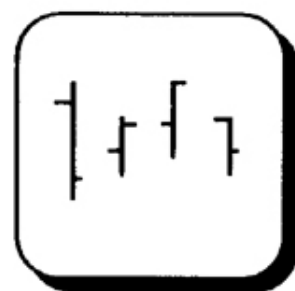
There are many esoteric truths handed down to us from ancient times, and many of these are applicable to the speculative markets. The professional trader knows that the objective is to make money, not espouse a particular philosophy or do it “the right way.” Keeping an open mind is the key.

From the earliest days, great spiritual leaders have spent lifetimes trying to conquer the subconscious mind and the body. Often rigid disciplines of starvation, flagellation, meditation, or deprivation were used to teach the body and subconscious to respond without question. If you propose to enter the largest arena in the world that exhibits fear and greed (the speculative markets), and you are brought there motivated by the emotion of greed to make money, you will surely fail. This is why there are few rich stock analysts on Wall Street. They are deluded into thinking they are intellectual and rational in their behavior, but the reality is still emotional greed. The solution, and this may be the greatest lesson in this book, is that in an emotional market you must use your brains *not* to make money, but to *control* your **emotions**. Your logical reasoning should be put to use developing strategies apart from the emotions of the trade. Chart reading with this in mind will yield infinite results. Principles can be applied in a cold, hard, non-emotional fashion, and a stop loss discipline is then rigidly applied when the strategy goes awry. Of course, this makes trading a business and not an emotional thrill, but it will be a consistently profitable business!

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# Basic Concepts

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The theory behind technical analysis is that all relevant information that concerns the appreciation or decline of stock prices is reflected in the chart of the price and volume. All information, no matter how secretive, must first surface in the buying and selling of the stock and thereby moves the price of the issue if it is of significance to the capital gains' investor. Fundamental analysis, although possibly relevant to long term trends, may or may not generate current buying enthusiasm and, in that case, has no effect on the price of the security.

The idea of stock price movements as a *process* of accumulation and distribution is the backbone of chart analysis. Major insiders accumulating large positions prior to significant upward price movements readily show their characteristic footprints in the chart patterns prior to the big moves, and these patterns have been shown to have high forecasting reliability. Similarly, distribution periods where insiders slowly sell out major positions prior to big market breakdowns also have telltale characteristics that are of extreme value to the knowledgeable chart reader. Since these trends are usually long term in nature, at least the significant price movement ones, their characteristic patterns can be broken down into subtle waves or fractal patterns for each movement, and many of even the slightest counter-trend movements can be captured by the astute chart reader. A stock or commodity that has an annual range of 20% between the yearly low extreme to the high extreme often has three or four minor movements of 10 to 15% within that larger yearly range. The active trader can therefore often achieve rates of return several times the annual range if a comprehensive trading discipline is utilized to exploit the known facts. Recent advances in technical analysis have opened the way to the possibilities of spectacular returns, and the purpose of this book is to acquaint you with many of my own proprietary discoveries in this area, along with the traditional methods that I have found to be most reliable in my professional trading career.

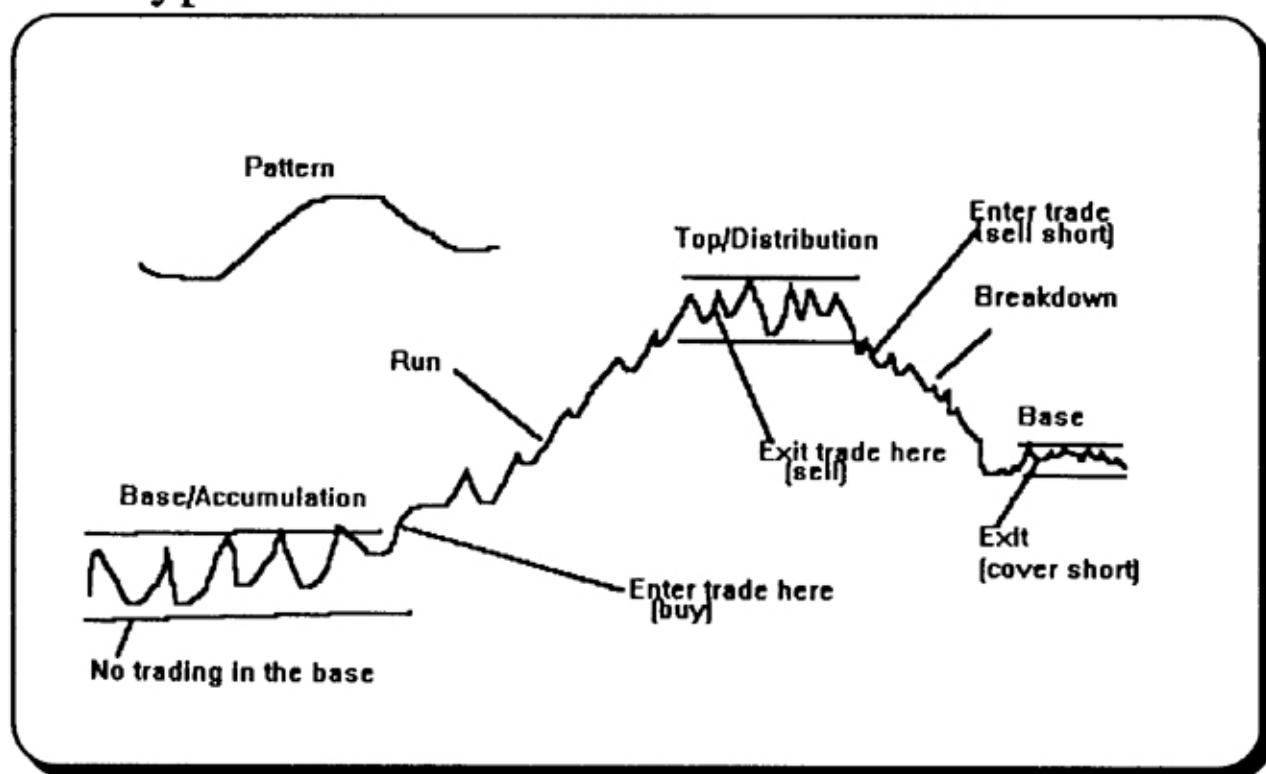
Knowledge is only the beginning. Strategy and patience are equally important. In the end, only a few will truly succeed in a spectacular fashion. However, I would say that the vast majority will immensely improve their trading with just a casual reading of this book. Eliminating easy mistakes can often double annual rates of return, and I am sure that this book will point out many principles that you will find can easily change your bad habits into profitable careers.

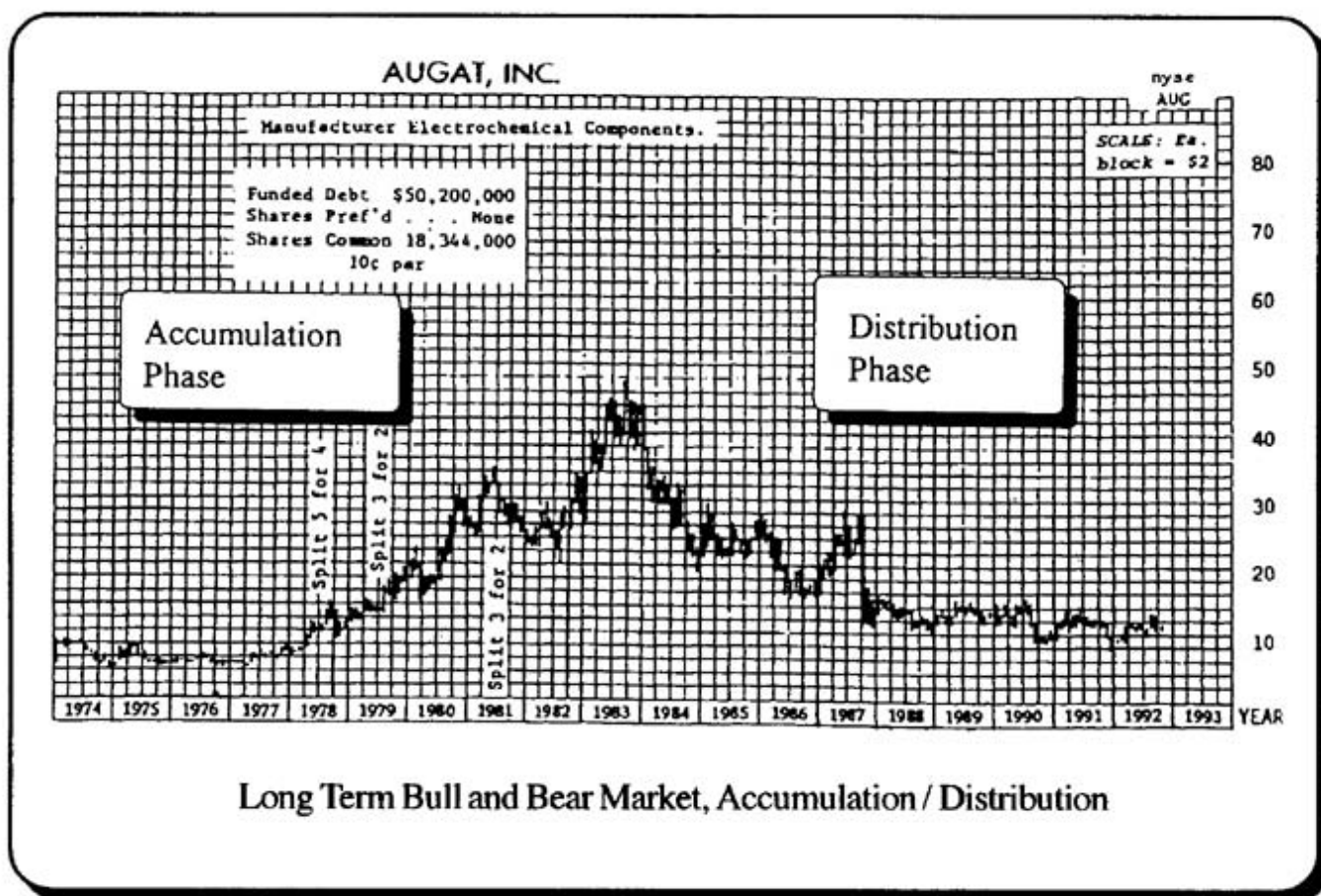
## The Basic Accumulation, Distribution Pattern

Most traders want to trade every day. In reality, you can only take what the market will give, and each day is not an equal probability for success. Professional traders can readily size up a market in the first hour and tell if the day is worth bothering with or whether the daily strategy is for small scalping trades with frequent reversals or for more leveraged major moves lasting several days. If you find yourself buying or selling every day in the first twenty minutes, you have a problem. Many good trades come mid-day or at the close when most traders have already committed. Make sure you are not so emotional that you cannot keep from the action past the first hour. Knowing that each market movement has a reliable *shape* and *time duration* can help.

The basic *accumulation, distribution pattern* looks like the statistical bell shaped curve. The **base** has an extended period of "backing and filling" in a sideways fashion, then comes the **upside breakout or run**, then comes the **topping** phase. After that, there is either **another upside breakout** or a **breakdown** back to the base. Good traders do not want to trade in the base or the top, but only the breakaway or run phase. Once the momentum dies and a consolidation range is hit, traders should move to the sidelines and wait.

### Typical Accumulation / Distribution Pattern:





The typical pattern is the same, regardless of the time period. In other words, the above pattern could be seen on an hourly, daily, or weekly chart. Obviously, differing trading strategies are employed for longer term movements, lasting days to months, rather than on an hourly chart. Leveraged traders using options and futures will work with hourly charts, and this pattern will often rise and fall over a single day's duration. The "run" phase, where one owns put or call options or futures, will ideally be limited to **8 to 13 HOURS**. Holding positions longer than that is not *trading* but *investing*. Longer term traders using daily and weekly charts will find their horizon 3-6 days to extremes of three weeks. These are stock trades and options, and futures would not be appropriate.

It is one of the more difficult aspects of trading to "stay out" of the base or top and wait for the real move to get started. Most traders hunger for the cheapest entry point and usually waste days and several stops before the real move begins, when, if they concentrated on the "easy" 70% of the move during the run phase, they would never get stopped out and would make quick safe profits in the shortest time possible. Most techniques in this book are used for identifying this most rewarding part of the pattern (run or breakout).

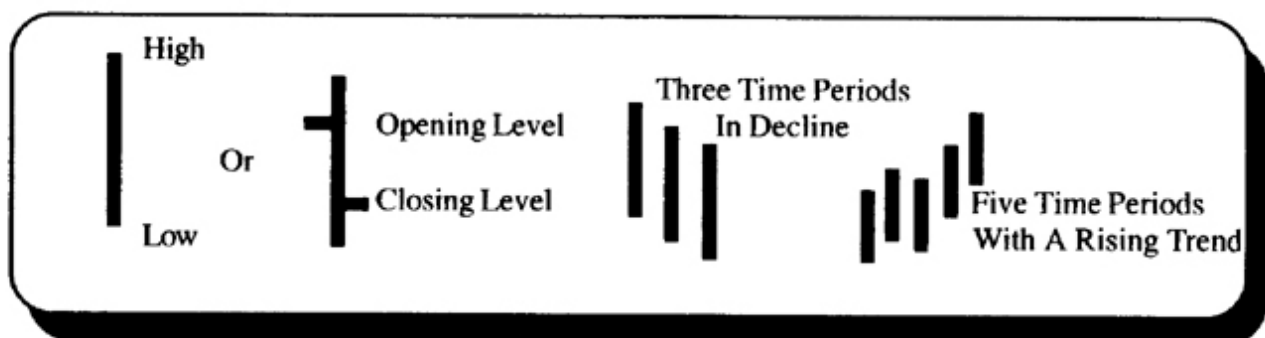


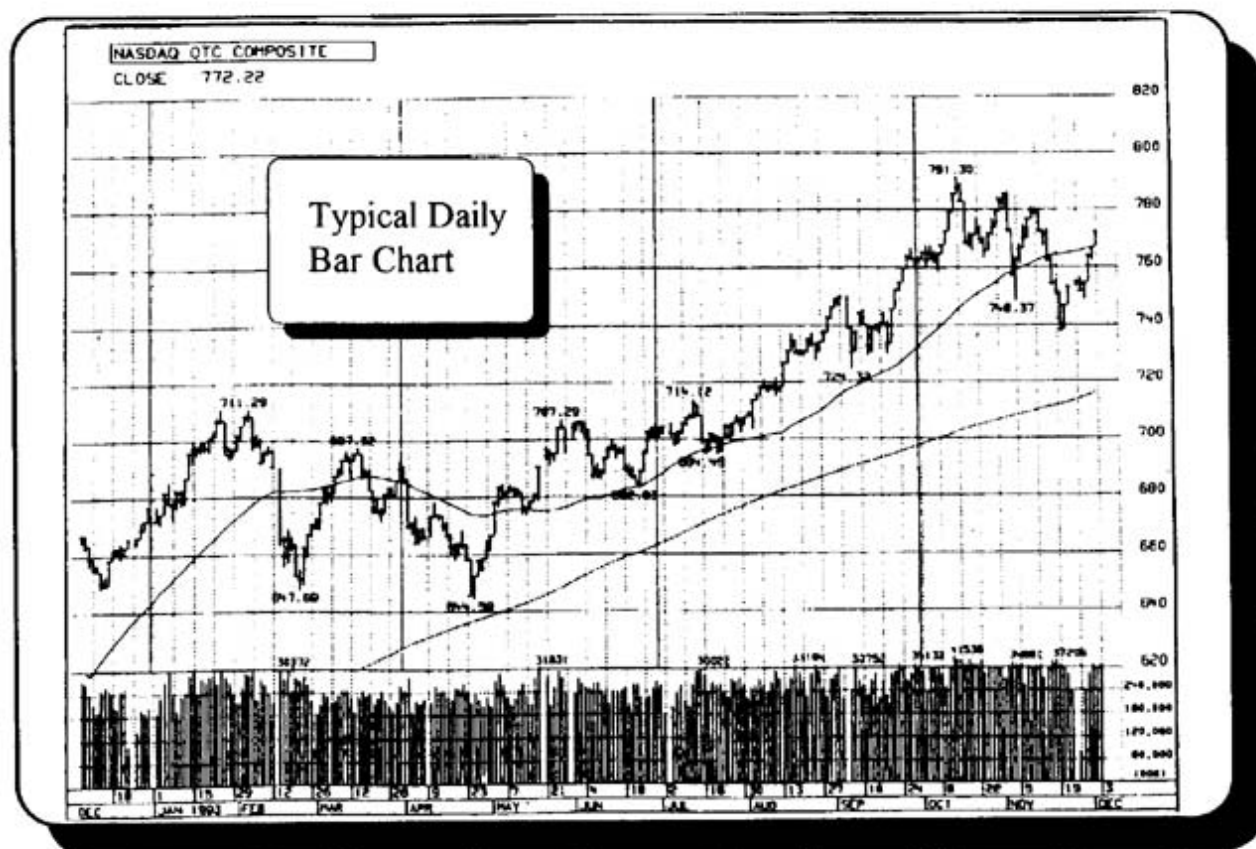
Remember that the “flat” areas of the base or top that we want to avoid trading in can be spotted by loss of *momentum*. Momentum is simply the amount of price movement per time period. Large momentum is nothing more than big price fluctuations in a short time period. When the momentum dies down, we exit our positions until activity picks up again. If you keep in mind the bars on a bar chart, the areas to avoid have a series of equal sized bars with high and low points randomly spread in a sideways fashion. Tradable moves are characterized by elongated “big” bars showing much momentum. You must train yourself to make a trade during these big bars. As traders, we can only take what the market gives, and these big bars are the payoff. Failure to trade out of fear is a mortal sin for a professional trader.

## The Bar Chart

There are many types of charts one can use in trading, but the primary basic one is the simple bar chart. Throughout this book, I will refer to these kinds of charts and use them in the examples. A good chart reader after some practice can easily visualize the other kinds in his head without having to keep up numerous chart papers. Even Japanese Candlesticks, which seem to be the current rage, give no information not found on a regular bar chart but are marketed as being easier to interpret. This is not the case if you know the *principles* behind chart reading, and the simplest bar chart will yield infinite amounts of information if you know where to look.

In its basic form, a bar chart is simply a line drawn from the high of the time period to the low represented by a straight vertical line. More information can be obtained by adding a mark on the vertical line to represent the opening and closing levels. These opening and closing levels can tell us a lot about the current day’s probabilities. For instance, a close at the extreme high or low of the day will usually carry well into the next. Similarly, several bars or days in sequence that close strong represent accumulation going on. I could probably write several chapters alone on the meanings of opening and closing ranges, but for the vast majority of traders the trend is more important than the projection, and I will leave the study of those ranges to you if you want to master intra-day trading. Many of the charts I will use in this book will omit the opening and closing marks on the vertical bars so as to cut out all but the simple trend information that is contained within the range on each bar. For most trading purposes, knowing the trend and the momentum shown by the size of the individual bar’s range is enough. The typical bar chart looks as follows:





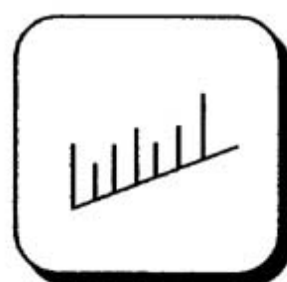
## Personalities

When you look at a chart, one of the first considerations is the type of *personality* the chart has. By this, I mean its trading characteristics. Some stocks are glamorous and big movers, while others are slow moving snails. Tops and bottoms usually form individual characteristics with some stocks “spiking” into a solitary high bar and rapidly declining, while others gradually “roll over” and go down. **You must adapt your trading strategy to these individual characteristics to be successful.** Quickly buying into a gradually rounding base is a waste of time, but a buy at a spike bottom on a signal bar reversal is a good practice. Only a first look at the most recent history will alert you to these trading characteristics. Learn to scan all the markets to find ones with personalities that fit your trading style and profit objectives rather than just taking any trade that shows up. A corollary to this is to only trade the most active markets and only when they are moving. Trading wheat, corn, bonds or stocks simply because you have a big account is a mistake. You should concentrate on the active ones to maximize your return over the shortest time period. Identifying the personality characteristics is one of the first things you should do. Only after you note the type of character and see if it will satisfy your particular objectives should you then spend time on a more detailed look at the trend, cycles, and projection targets. Examining the past is always a good first exercise, so you will have an idea ahead of time as to what is possible or likely and what is based on factual past trading patterns. Looking for a huge up or down movement that is out of character will tie up your capital needlessly.

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# Trend

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## Basic Trend Determination

The fundamental reason we look at charts is to determine the trend. We can see at a glance whether the market is rising or falling, but few casual observers realize that the real trend is actually a *pattern* of advances and declines. Once that pattern is discerned, it usually persists for quite some time. This is the basis for all investing — determining the primary trend and trading *with* that trend and not against it.

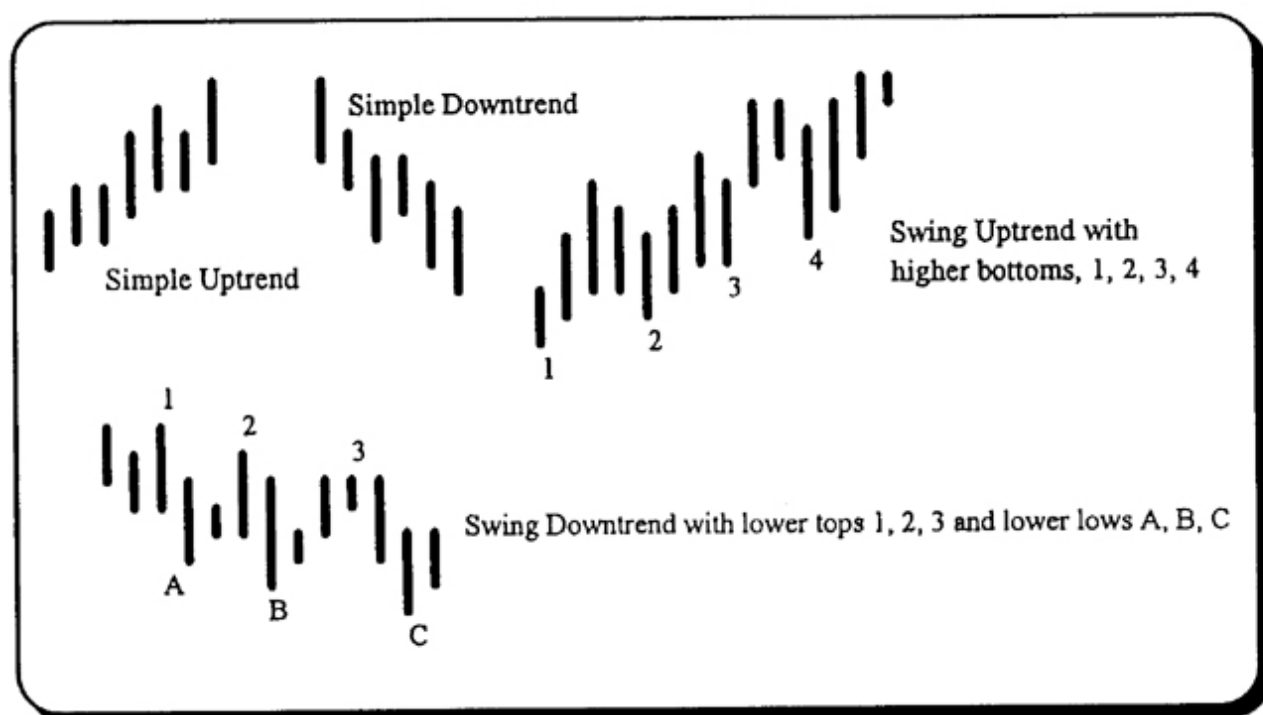
On a basic bar chart, the bars consist of a range from the low to the high for each period. These periods can be of any length, such as five minutes, fifteen minutes, hourly, daily, weekly, monthly, etc. The following are the critical telltale trend patterns for which we are looking:

**The Bull Pattern**, or rising trend, *has only one criterion and that is a series of rising swing lows*. In its simplest form, each individual bar would have a higher bottom on every bar, and, over several days, each swing correction would end at a higher swing low than the previous one. When I use the word “swing,” I am talking about a short term movement to a high and back to a low, then back to a high. Each minor high and low in such a pattern, no matter how small the scale, is referred to as a “swing.” It is extremely important to emphasize that *we are only concerned with lows or bottoms when determining a bull trend*. Highs have no relevance. The vast majority of traders buy breakouts at the high of the day, and, when the market declines the next day, they are stopped out for a loss even though that next day’s low was higher than the day before! If you learn not to trade emotionally but to have a strategy to buy into dips that end at a slightly higher price than the prior low, you can enter your trades with low risk and a very easily identifiable sell out point — that prior low if violated subsequently. Perhaps the real reason behind considering only the lows of the move as the critical level is that the big money which moves the markets cannot just jump in and chase stocks or commodities, but must patiently wait and accumulate their holdings at limit price levels. This gives the market major “support levels,” and, when the markets are really moving and the institutions still do not fill their orders, they slowly ratchet up their limits, giving us the classic “stair step” pattern of rising support level bottoms.



**The Bear Pattern** consists of *two critical elements: lower highs and lower lows!* This simply means that in a cyclical downtrend each high on every individual bar will be lower than the preceding bar, and each low will likewise be lower than the preceding low. On a 'swing' basis, each little rally will fail at a slightly lower level than the prior rally, and each new swing low will hit a new low for the entire move. The reasoning here is that the big money is selling at limit levels and lowers them as they do not finish at each level. In addition, since the market is weak, there are few buyers around, and each decline will usually have to go to a slight new low to attract bargain hunters or shorts to cover at profitable levels, creating temporary buying.

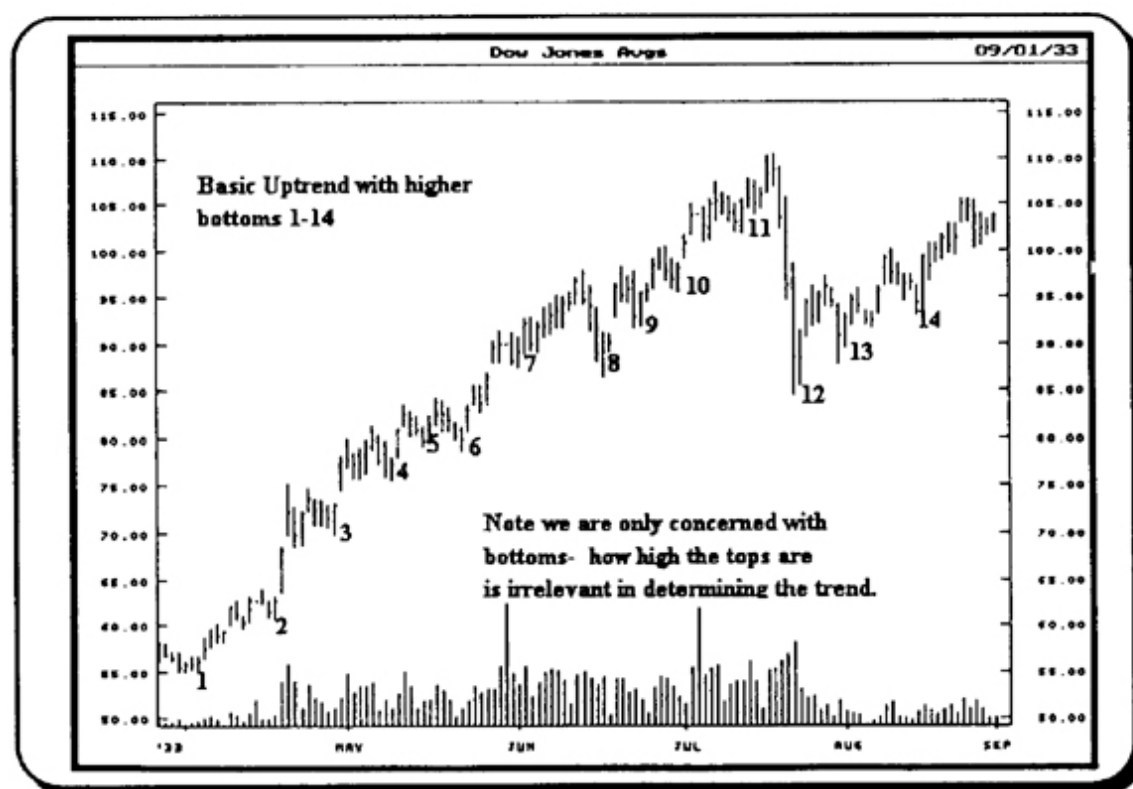
## Basic Trends

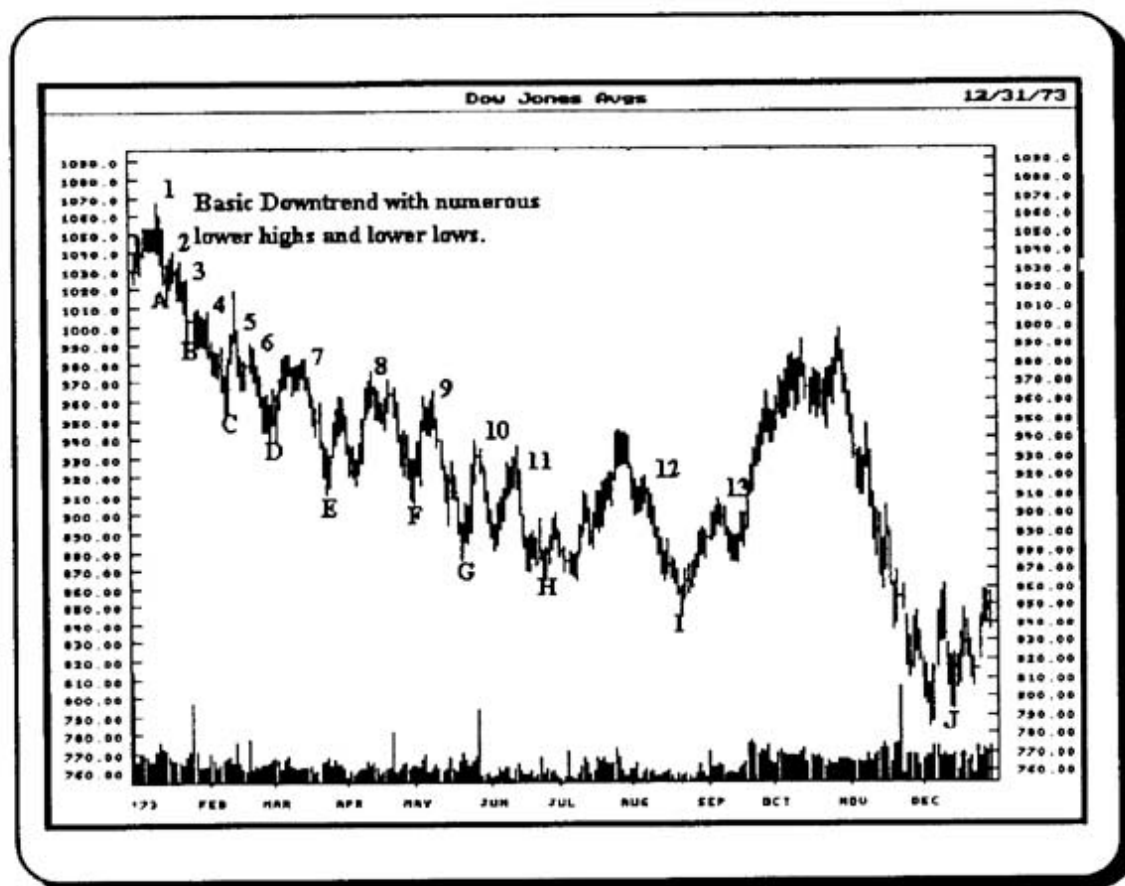


The idea that trend is a *pattern* is the most important concept in this book— indeed, in all of technical analysis. I find that, over the years, I have tried to make this point over and over, and it seems that only a fraction of a percentage of the people in the market grasps this simple but powerful concept. As a result, every time the market plunges 50 points or even 100 Dow points, people ask if it is a crash. My response is always the same: it is impossible to know until we rally, then fail, and go under the first plunge low. At that point, we have a *bearish pattern*, and we go short on every rally. Plunges *per se* are not particularly bearish. Only the lower lows and lower tops pattern. The same holds true on intra-day charts. S&P futures traders continually get shaken out of a bullish trend on a fifteen minute plunge that turns out to be a single bar decline and not a

pattern of several declining bars. You must continually look for multi-bar patterns to judge the market and not rely on a single bar extreme.

Remember that at the heart of the theory is the idea of *accumulation* or *distribution*, and these are ongoing *processes* that do not culminate on a single day. Large trends are cyclic in nature and cannot change overnight. The single day movement would have to be so extreme as to change everyone's long term opinion in order to change from an accumulation to distribution process and vice versa. Also, remember that Bull and Bear Markets, in general, are *psychological processes* by the masses as a whole and cannot be changed overnight. If it takes institutions a three year period of day after day buying to get their stock positions during a bull market, you cannot expect them to sell everything and end a new Bear Market in only six weeks. After years of a continuing trend, every bank and institution around the world will have millions of shares of popular stocks, and scattered selling from these global sources will take years to complete. Every day into the future, someone somewhere, will wake up and be tired of waiting for yesterday's leader to go back up and will sell. This is why trends persist, and the distribution process is a *pattern* of rallies that fail and then result in new lows to attract bargain hunters. The early Bull Market acts the same. There are long periods of gradual creeping, while institutions are slowly buying, and each failure will stop at a higher level as support increases. Knowing that a solitary "big bar" is *not a trend* can make you a fortune, if you going against that bar when it is counter to the long term trend, and it does not form a pattern. The following two exhibits demonstrate the bull and bear *patterns*:





## What Can We Deduce From This Trend Information?

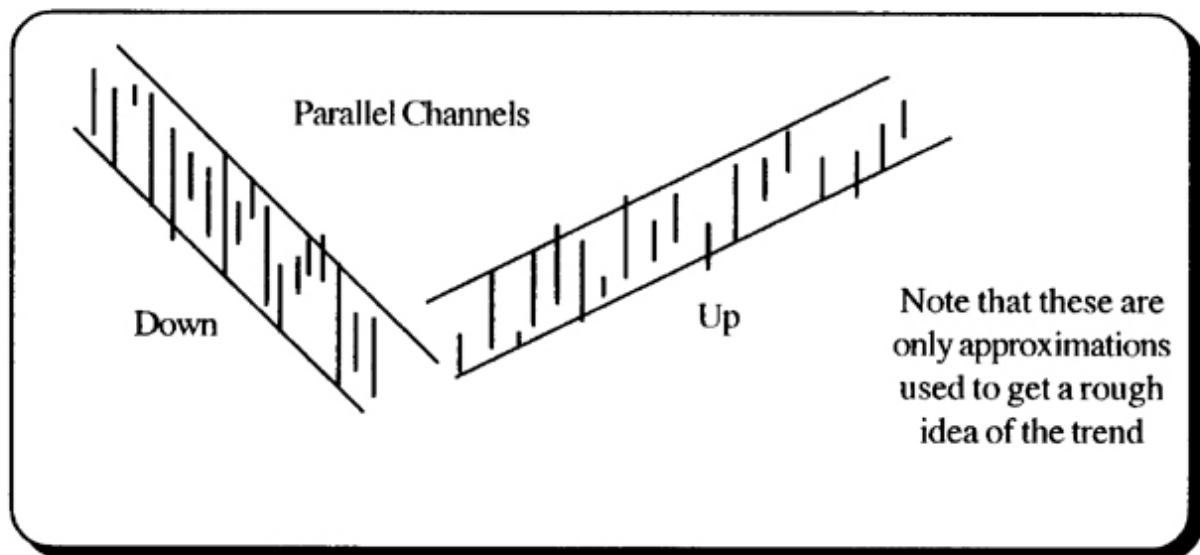
The primary use of trend information is to *develop strategies to enter and exit trades*. If we are bullish, we *wait* to buy into a dip at a level just above the most recent low. If we are bearish, we sell or go short at each rally high, which should be slightly lower than the prior one.

In general, the basic rule about higher bottoms or lower highs and lower lows is that you *will eventually break one of the prior swing levels, but you will rarely break two*. In other words, when buying into dips, a dip may go lower than the immediate past dip level but will usually not carry down to the second one back. When shorting a bear rally, know that the rally could exceed the recent past high but not likely the second one back.

This idea also gives rise to a basic sell stop strategy. We place our stop out point at the *second* swing level prior and move it up or down only as we make a new swing level. This way we can ride a trend for long periods of time without overtrading or becoming confused on the trend.

An easy way to see the primary long term trend is to draw **parallel channels**. These are simple trendlines connecting a series of low points and then drawing an upper angle parallel to the lower but through one of the upper level swing points. Parallel channels are especially good for analyzing

long term trends, such as over five to ten years. They give you good perspective in that, for both upper and lower trendlines to hold parallel over long periods, the trend would have to be extremely strong, and one would have to think twice before assuming the existing trend was about to turn. Multi-year parallel channels for differing industrial groups is one way to determine an overall market's Bull or Bear trend.



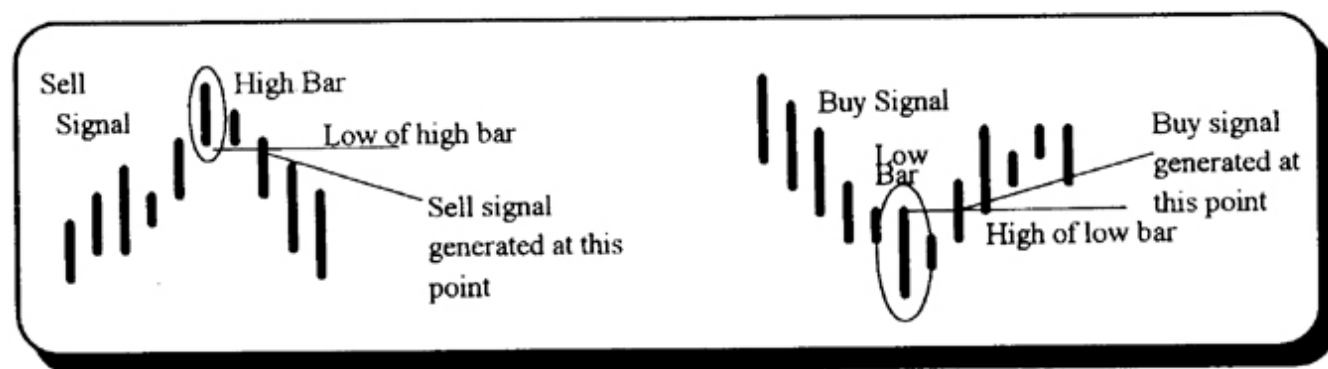
## Reversal of Trend

We know that a bullish trend has a series of higher bottoms and that the bearish trend has a series of both lower tops and lower lows. Since our basic goal is to invest with the primary trend, how do we determine just when one trend turns into another? There are a number of techniques, but the most basic is the *signal reversal bar*. This is defined as follows:

In an *uptrend*, when you have a series of higher bottoms each day or for that matter any time period and each few days you see a new high bar for the move, the reversal comes when you find the highest high bar for the move. We are not concerned with that *high* but with the *low* of that high individual bar. The bar after that must have a *lower* high to set up a possible signal. *The actual signal comes that next day or a subsequent one when the low of the high day is broken.* For example, you might have a high bar and the next day you have a lower high, but the low is higher or at the same price as the low on the high bar period. You then have to wait for the next bar to see if that bar breaks below the low of that high bar. When *that* low is finally penetrated, you get your sell signal with a logical stop point being the previous high bar high. The reasoning behind the theory is that the support level (low) of the emotionally charged high day is the critical level and when that goes the trend is exhausted.

In a *downtrend*, you have a series of lower low bars, and you are looking for the lowest low bar for the move. When you find that bar, you need to note the high of that low bar. When on a subsequent day the new bar has both a higher low and the high of the low bar is exceeded, you get the reversal buy signal with a sell stop at the low of that lowest bar.

## Reversal Bar Signal Pattern



Obviously, this type of simple reversal signal happens quite often and, if taken indiscriminately, will lead to quick and sure bankruptcy. The best signals are combined with other techniques, such as trendline breaks, cycle counts, overbought/ oversold readings, and just plain common sense. The longer the trend has been in effect when the reversal comes, the more likely it will be a valid signal indicating exhaustion.

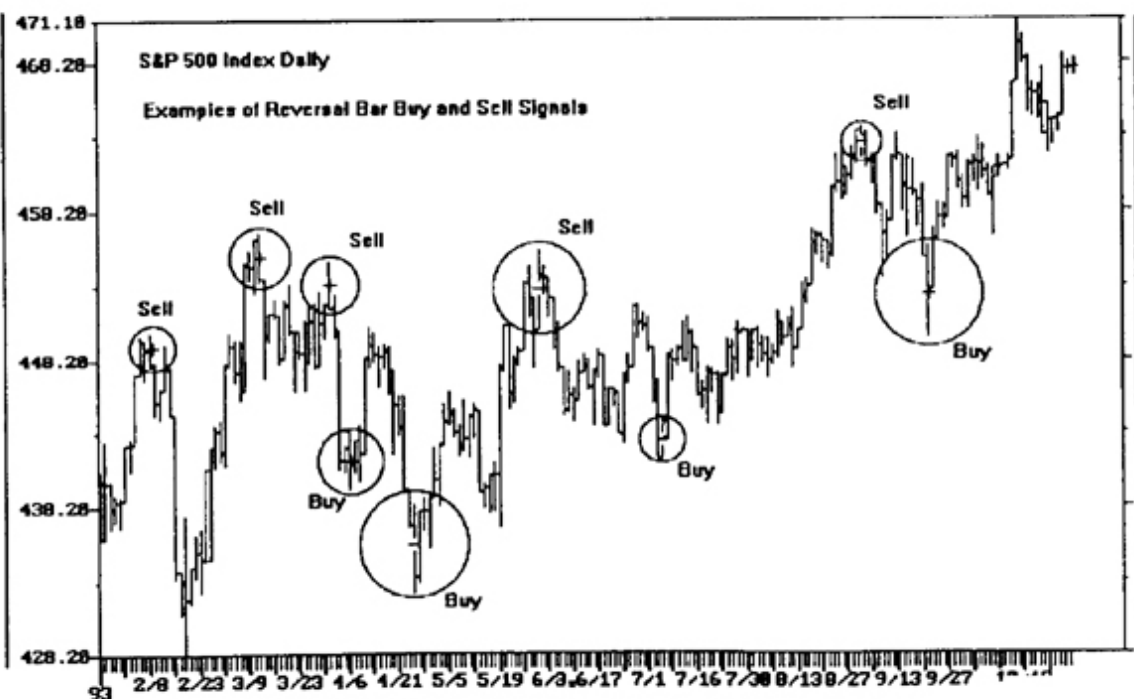
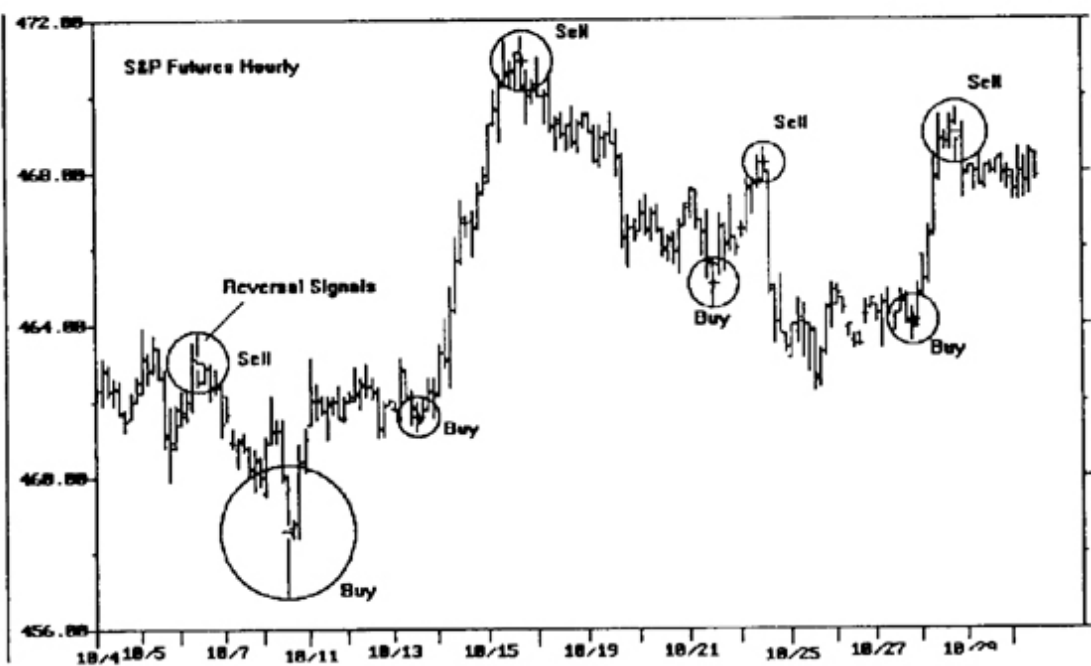
The importance of the signal cannot be overemphasized. I find the vast majority of traders are quick to pull the trigger and reverse in a nervous choppy market. Waiting for at least this basic signal will greatly discipline oneself. You will also note that, since this signal operates off the highest bar or lowest bar for the range and does not come until the opposite extreme of that bar is exceeded, it is very unlikely you will get a buy or sell signal following a large elongated bar with a big range. It will usually come later on a small range bar period.

Most traders make the fatal mistake of trading for a reversal on a big day movement, such as a 50 point up day in the stock market, whereas this signal could not possibly come until the low of that 50 point run up was broken! This is highly unlikely for a few days. Likewise, it is highly unlikely that buying into a big down day will result in an up move. Futures traders typically want to sell or short into a big up bar on a strong opening, but this kind of momentum will usually last all day. Knowing of the reversal pattern would save them a lot of money, and knowing this signal will keep you with the current trend throughout these big bar range movements and warn you when they are followed by a small range bar that could lead to a reversal.



Note that this method usually is only executed after the reversal high or low bar because we must wait for the next bar to penetrate the extreme high or low of a previous bar to get our confirmation. This is still valuable information, since trends persist for quite some time, and the new trend will give us plenty of time to exploit it. A little common sense and some tape reading skill, however, can actually allow us to trade at the exact extreme. What we do is make a professional *guess* that the current bar is the extreme, take our position counter to it, and use a very close stop *that will be confirmed by the next bar*. We would want to see an extended run with the current bar being a “tiny” range bar with little momentum before we made this *guess*. We then know that any decline in a subsequent period would generate a sell signal, so we guess, take a position, and see what happens. Keep in mind that professional trading is a process of playing percentages much as a professional gambler does. The difference of course in speculation versus gambling is that in speculation you set your own odds as to when you will trade and what you will risk. In gambling, the house sets the odds against you. In professional speculation, we can often get odds as high as 80-90% as to the trend, and using simple money management disciplines and close stop points our losses can be very insignificant.

The following are some examples of simple buy and sell reversal bars. Please note that these are **simple** signals, and additional analysis is usually performed coincident with these signal developments to see if they are worth taking. These other factors could be duration of trend in existence when signal given, prices at major support or resistance levels or angles, or near important time cycle change expectations. Please study these examples carefully.



In these examples, I have not circled every possible signal generated, so as not to confuse you at this stage. You could cut down dramatically on “false” signals by waiting 1-3 days after a signal was generated to see if it was confirmed and then buying the first dip.

The idea of reversal of trend brings up the question of *persistence of trend*, and charts lend themselves to a good rule for defining such persistence. This is the **three bar rule**. This, simply stated, means that *a new trend will go at least three bars in the new direction before reversing*. For trading purposes, we naturally would want to pay attention to reversals on hourly, daily and weekly charts because of this three bar persistence, rather than, say, a five minute chart. Also, keep in mind that these charts are all nested like Chinese boxes, so, if we get a turn on an hourly chart that is good for at least three hours, then we might have enough to turn the daily chart three days and the weekly chart for three weeks. These fractal chart turns at big cycle pivot points is what causes explosive impulse wave movements in the markets.

Besides reversal of trend in terms of *price patterns*, we also can confirm a reversal through *timing* or *cycle studies*. The biggest problem in chart interpretation involves these Chinese nested box patterns. A reversal on an hourly chart or daily chart is one thing, but how do we know the trend will last six months to a year? This is a difficult subject that is covered in the cycle’s section, but you should keep in mind when looking at a persistent chart pattern that *extended counts validate the longer term trend*. For instance, when trading options or futures with an hourly chart, most reversals come at Fibonacci <sup>1</sup> count intervals like 3, 5, 8, 13, 21, 34, 55, etc... But, minor reversals usually only last 5 or 8 hours, rarely 13. If the trend lasts 14 or more hours, the odds increase dramatically that this is a *new long term trend* that will last several days to weeks.

<sup>1</sup> Fibonacci numbers will be discussed at length in the hourly chart section.



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# Forecasting



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The rise and fall of stock and commodity prices are a study in human emotion. Although, in a broad general sense, fundamental economic factors are the underlying cause for valuation, the actual day to day fluctuations that we as professional traders exploit to make our livings are really emotional extremes of the masses. I would guess that perhaps 30 to 70% of all market movement relates to this emotional component, rather than the actual raw economic fundamentals. The vast majority of people attracted to the markets are done so out of greed. This is the motivating influence. Since greed to make money and get rich motivates, it is only logical that people buy or sell at emotional extremes in the market. Buying and selling in this manner causes the vast majority of trading losses that people sustain. The purpose of chart reading and the philosophy of trading set down in this work attempt to construct a system of rational entry and exit points to eliminate the handicap of fear and greed.

In theory, the emotions of the masses are statistically quantifiable and uniform over long periods of time. The investment community changes little, day to day. Perhaps, over several years, the makeup of traders and institutions playing the market vary, but, in the short run of six months to two years, the buyers and sellers are the same group. This being the case, we can actually “measure” the emotional extremes of this group over the past few years and use as a rough guide such “benchmark” extremes to better predict when the current emotion of either fear or greed will subside and reverse.

Keep in mind that emotionalism in stock charts shows up in a number of dimensions. For instance, price “spikes” are certainly emotional, but what about volume extremes, gap movements, or extended time periods of optimism? What we have to do in order to measure the effect of emotional extremes is to find a *common denominator* on our charts to measure. We leave volume out of the discussion, for now, since that is a separate discussion with its own statistics. What we will focus on is *time and price*. The concept of price emotion is simple — a big move is more emotional than a small one. We can measure the price difference from a high or low to get that extreme. That is only half of the story, however, since *time is an emotional factor too*, such as it is for the man facing the electric chair in an hour, or football players down a few points in the championship game with the clock running out.

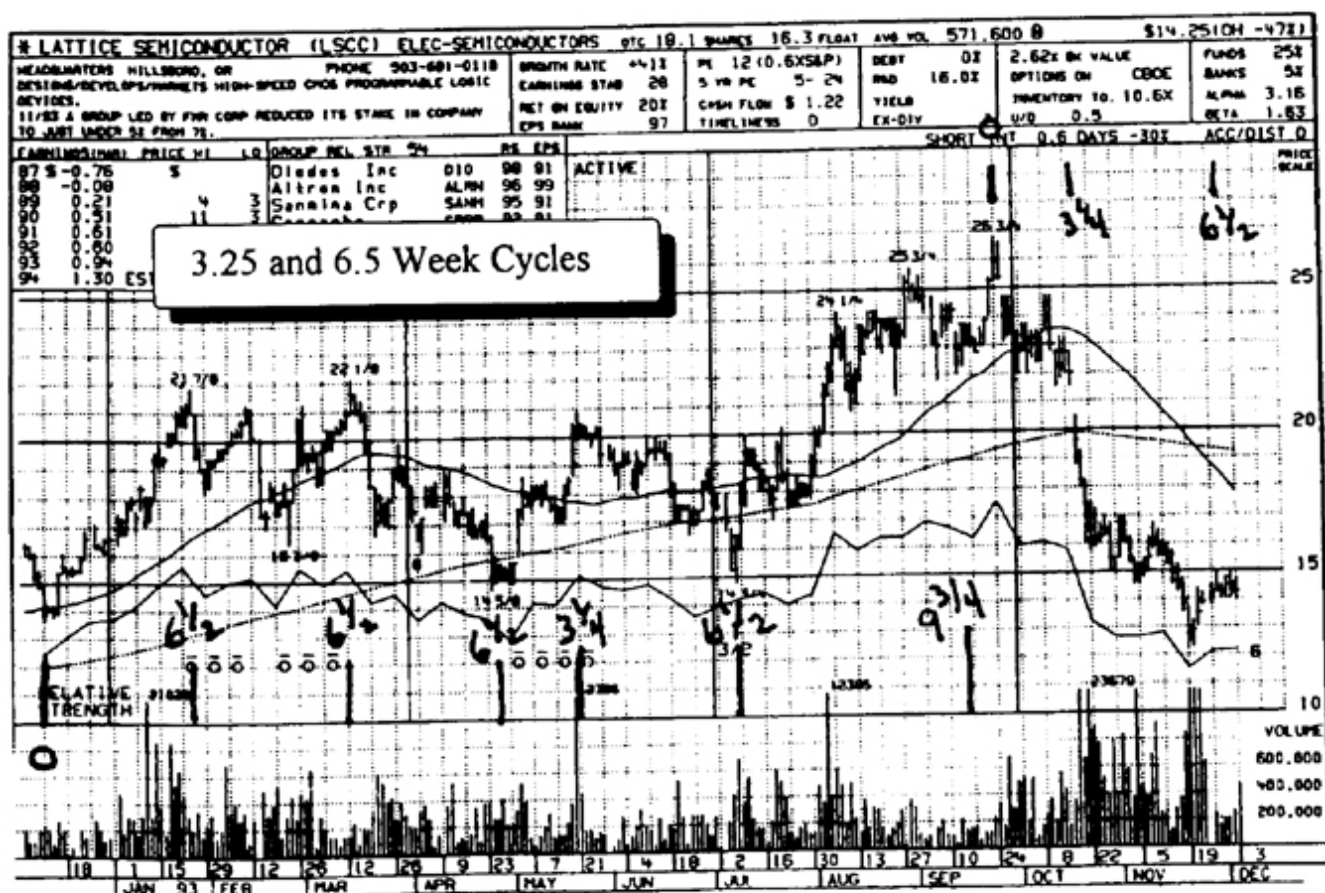
In the speculative markets, we measure time horizontally across our chart page, and we measure price vertically. This is the familiar bar chart representation that you will see throughout this book. Because emotionalism can take many forms, *we must use the universal measurement of vector directions to balance our time and price axis.* In physics, vectors are merely sums of energy spent in different directions that combine to form a new direction. Think of the ice skater sliding in one direction but with a strong wind pushing from a right angle. The new direction will be a vector diagonal, and its energy will be the sum of the two forces. On our stock and commodity charts, we can likewise use vectors to combine price and time. At first, you might have difficulty with this concept because it has as its assumption that a unit of emotional time is equal to a unit of price. Statistically, this can be readily proven, but, for now, you will have to take my word for it. Obviously, if time and price were equal all the time, the vectors on our charts would always be diagonals. The emotions manifesting, however, are seldom equal, and so we get big price movements and then long periods of time but little price movement. Suppose a stock went from 50 to 100. We would normally think that it would meet resistance at that price, since it had doubled. But, what about a stock that goes from 50 to 75, and then goes sideways for two months? Does that two month sideways equal 25 price units, so the resistance is the same in the two cases?

If we can "measure" time in this way, we can know when prices will break out of trading ranges and consolidation zones. *The solution to this problem is to use circular arc measure.* This way time and price components are equal at any point on the circular circumference, and we can forecast a coming change in direction. Should the emotionalism be so extreme as to exceed such circumference, it will usually go to an even multiple of such measurement, and so, here too, we can make a good estimate for the coming change in direction. These circular arc measurements are known as "measured moves." Circular arcs are so important that the entire next chapter is devoted to them.

Since the *extremes* of emotionalism in the market do not change over time, we merely need to review the recent past few years of history to see and measure such historic extremes and come up with our benchmarks. Our analysis then takes the existing swing movement and extends these by our historical observations, starting with the most frequent observations, in an effort to estimate the duration of the current swing. The idea of the measured move, although simple, can lead to incredibly complex forecasts. In my trading, I rely almost exclusively on these swings on my hourly charts to get a first approximation and, only then, refine my technique to counting bars or using trendlines. I continually find traders expecting swing movements totally at odds with the simple historical record of fluctuations on the chart they are using. You should always first examine the past few weeks, such as on an hourly chart or fifteen minute chart, to see the larger movements over the immediate past weeks, before you jump to the conclusion that the existing move is deviating from the typical norm.

## Natural Time Period Durations

In most markets, but particularly the stock market, the natural cycle most frequently encountered is the three and a quarter week cycle. This works for individual stocks, but the market averages, as a whole, frequently demonstrate cycles that are twice this or six and a half weeks in length. These cycles come from the natural division of the year of 52 weeks by sixteenths and eighths. Almost every movement you will find will be a combination of these basic cycles strung together. These are the facts if you look. There is no such thing as a two week cycle or a four or five week cycle. The ten week cycle is really three cycles of three and a quarter or nine and three quarters. To find where you are, just look to the prior major high or low and count to the present to look for your three and a quarter week pivot. For example:



The strategy to use is to buy into a three week decline on the first sign of a reversal or sell out on a three week advance. If the trend continues within a day or so, expect the original trend to go to six and a half weeks and then reverse. Many of my best trades are when I wait to see an explosive up move caused by a news item or brokerage firm recommendation, and, when I see the first top, I patiently wait three and a quarter weeks and *then* buy the issue. Invariably, the stock will explode upwards in another impulse leg within a day or so. Keeping track of these turning point dates, in a tickler file or calendar, is helpful.

In looking at long term bull or bear trends, know that the general rule is that major trends never go more than six weeks to ninety days *counter trend*. That is, in a bull market, a decline will never exceed 90 days before resuming the uptrend, and, in a bear trend, rallies never last more than three months. In fact, the basic definition of a bear market trend is that you have broken a swing low from a time period past three months ago. You generally are safe being a long term investor, as long as your holding does not go below any price level seen 90 days back or further, and, if you are looking to sell stocks short, you want to choose issues that have not seen a new high for at least 90 days and are under a low price level from 90 days ago. Those issues are almost certainly in long term downtrends that could last a year or more. (I am using 90 days here as a practical cutoff for the Bull or Bear Market definition, since that works 80% of the time. Be aware, however, the extreme cutoff is 4 months, and one or two exceptions this century have gone 6 months.)

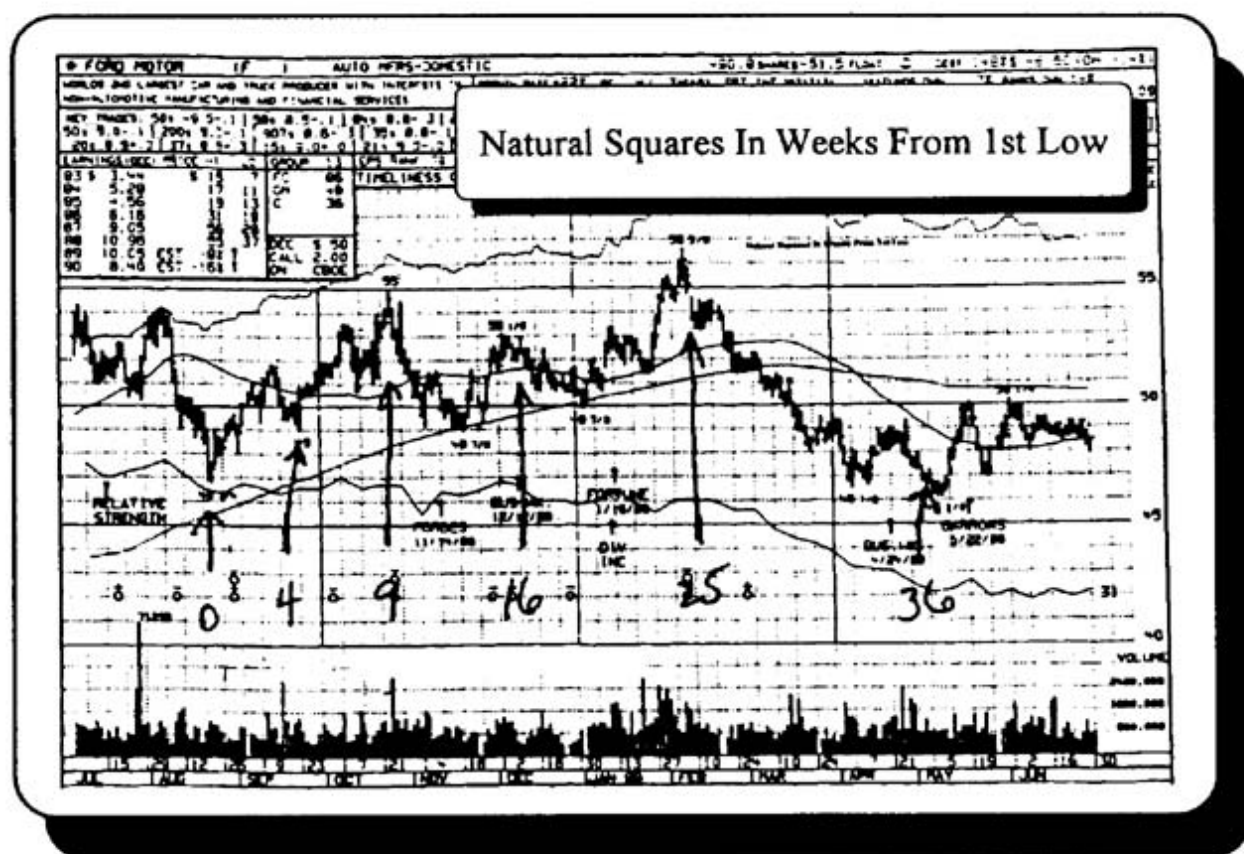
The ideal correction to buy into in a bull trend is one that has lasted about six weeks, *but prices are well above levels seen 90 days ago*. You will note that the bullish charts usually spike up and quickly pullback from the high, but no low levels are ever broken. *Only the new high recent advance is corrected* over the full three or six weeks and then the next upward spike. Many strong stocks can follow this type of pattern for years without a three month correction.

Other cycles most commonly found are the numerological "Gann" cycles. This theory is covered at length in my other book, and indeed I have spent an entire lifetime developing it. Basically, the premise is that the **price of the stock**, at the final high or final low, is **exactly the same** as the **time cycle** operating. That is, a high of \$50 means a time cycle of 50 units, such as 50 hours, 50 days, 50 weeks, etc. At each numerological time period of 50 or the fractional parts of fifty, you will find a turning point. This sounds strange to those unfamiliar with the concept, but, in over twenty years of challenging people in large audiences to find just one exception to this principle on any stock or commodity, no one has ever found an exception nor will they. Again, I refer you to my other book for the reasons behind the theory. Strategy here is to count the bars on the chart you are using until you reach the count equal to the high or low price level and then look for a reversal signal.

## Natural Squares

Another common forecasting method for determining cycles is that of numerical natural squares. This is simply the whole numbers squared as 3 squared is 9, 4 squared is 16, 5 squared is 25, 6 squared is 36, etc. You start your count from each major high and low. Time periods can be hours, days, weeks, months, or years, but weeks work particularly well as the next chart demonstrates.



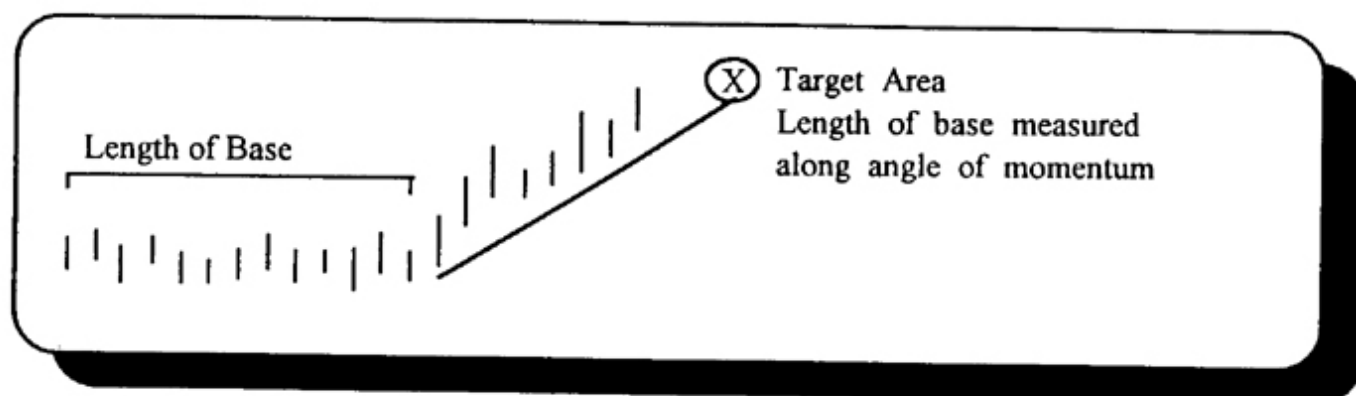


## Basic Concepts

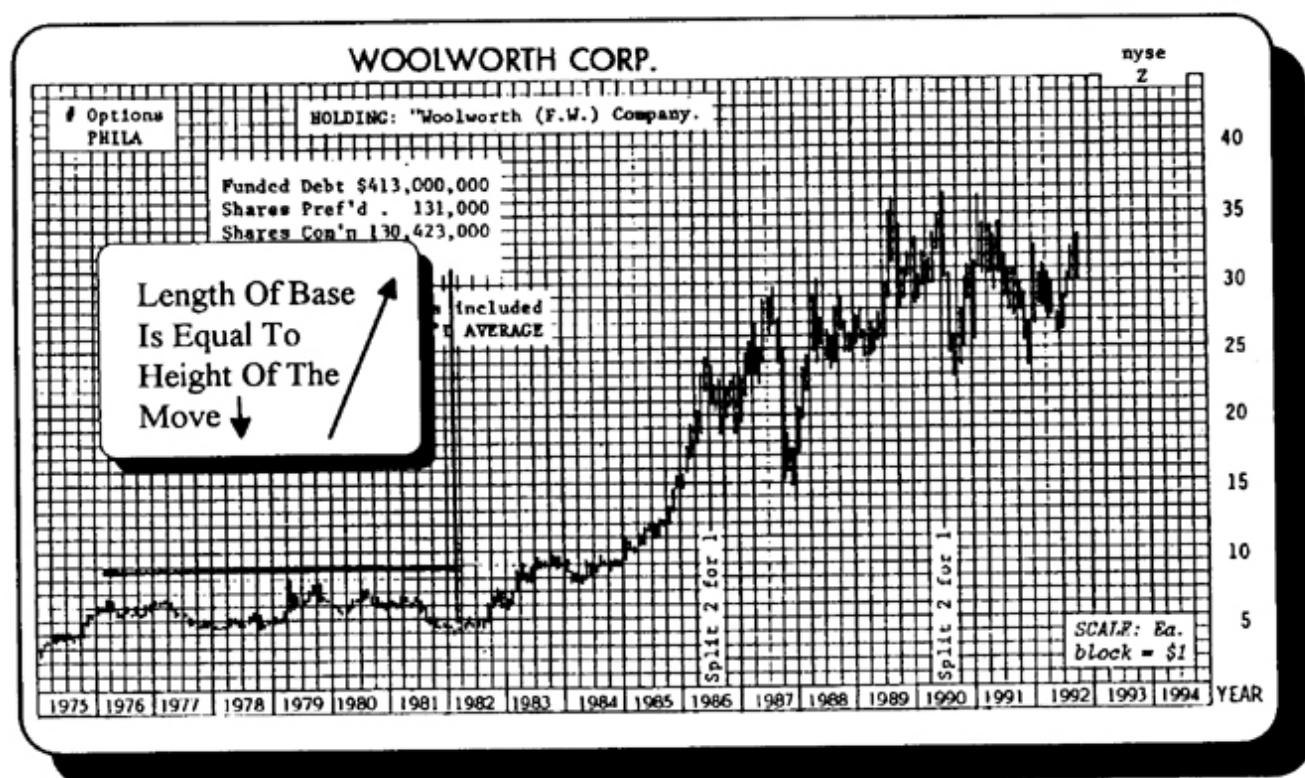
### Length of the base...equal to the height of the move

This phrase originally comes from the area of technical analysis that specializes in point and figure charts. Point and figure charts are pure price charts showing only upward and downward price movements. There is no volume nor any time periods on these charts other than incidental footnotes to mark the beginnings and endings of movements after the fact. Prices themselves are what make us money, so point and figure charts clearly point out issues that are in definable trends. I do not suggest you use point and figure charts as a trader since **Time** is most important, and return on capital requires a gain every month, whereas a point and figure chart could look good, but may not move for months on end. One of the great uses, however, of point and figure charts is to point out periods of basing or topping patterns. The constant reversals, up and down, in a narrow price range clearly show accumulation or distribution, and the longer this period, or the more frequent the reversals, the more powerful the subsequent move. Long ago, analysts discovered that if you measured the sideways area of the support or resistance zones, then the subsequent advance or decline would go almost exactly the same magnitude of a "measured move" before exhausting itself — hence, the phrase: "the length of the base is equal to the height of the move."

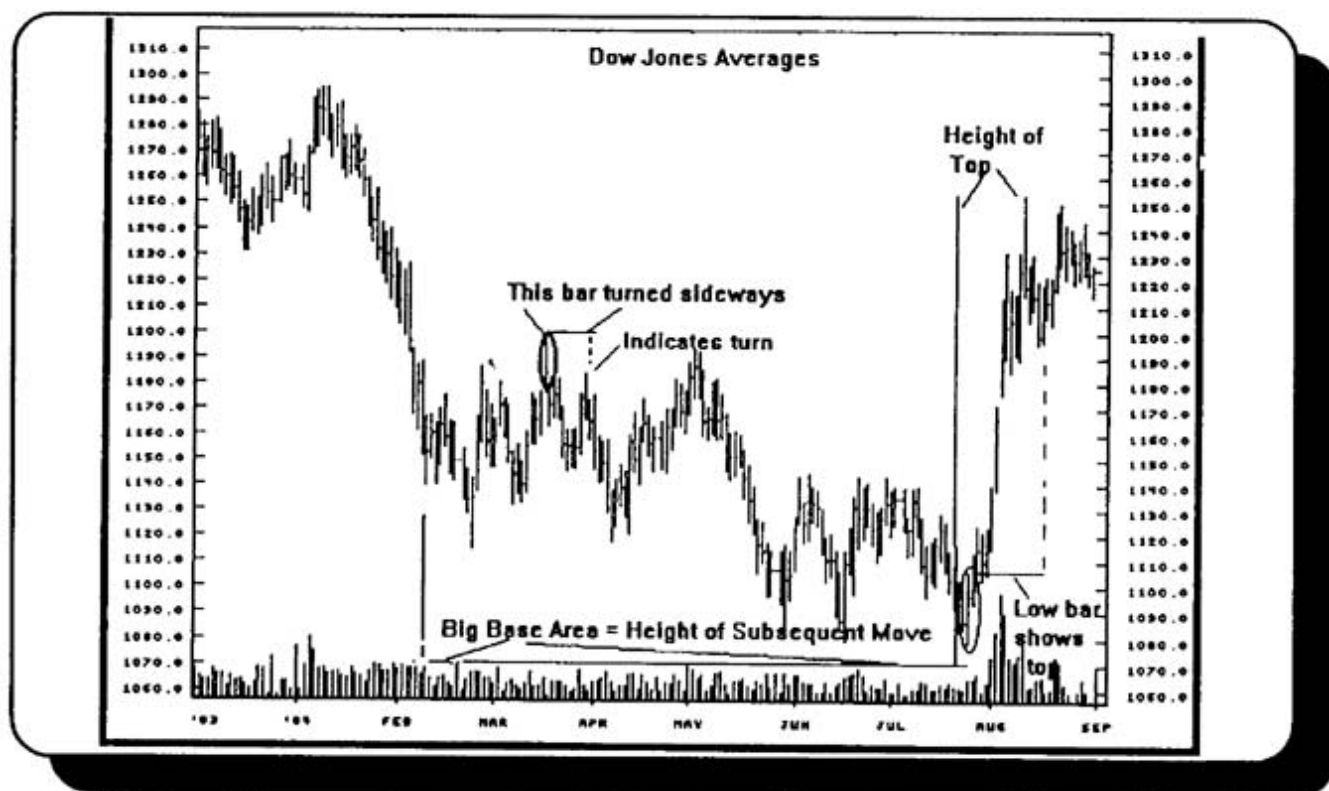
For many years, when I ran a number of mutual funds, I would rely on this rule to pick dozens of issues that would more than double over the coming year. I simply found charts that had been confined to a narrow range, such as 12 to 16, for the past three, but preferably five, years and waited until a big volume breakout occurred that took the stock at least \$3 above the prior high, such as \$19 in the prior example. In these cases, I could reasonably forecast a **TRIPLE** from the base price range. In the case of the point and figure chart, the measured base is an exact figure, whereas in the normal bar chart it is more of an estimate, but one that is certainly worth making. The reason this works falls in a subject outside the scope of this book, and one covered extensively in my book *The Geometry of Stock Market Profits, A Guide To Professional Trading For A Living*. Suffice it to say, it is related to "Gann squares" and time cycles. In general, you "measure" the horizontal distance of the basing or topping area, and, when the breakout or breakdown occurs, you reapply that measurement *along an angle* of momentum to get the probable area of exhaustion.



This is a rough method, but it is used to quickly scan a number of charts to pick out ones with potential for big moves and avoid less profitable minor movements. The theory, of course, is that stagnant economic fundamentals have suddenly changed for the better to break out of the trading range, and few people bother to take note because of the past numerous years of disappointment. The rule works equally well with hourly charts when trading options and futures, so that a congestion or consolidation area of two days can lead to a significant three day move, whereas a two hour top or bottom will probably lead to only a two hour advance or decline.



A lesser known corollary to this is **“the height of the move is equal to the length of the top.”** In other words, a “big” momentum bar on a chart cannot be reversed from quickly. Momentum takes time to lose its energy. Often, after a big up move, the momentum generated requires a broad topping phase before a down trend can get started. One of the real secrets I will now tell you is that the range of the final low or final top individual bar, when placed on its side horizontally, will often tell you when the movement is over! The individual bars on a chart can tell you a lot about the emotionalism present in the market, during that time period. Obviously, “big” bars are emotional, but the single bar at the final high or low is the most important. That bar is similar to the DNA molecule in living creatures. Our signal reversal buy/sell bar uses the opposite extreme low or high of that bar, instead of the extreme, because, when that level goes, complete emotional exhaustion is reached. Note that these signal bars give completely different support or resistance levels than most traders use — they use the extreme high or low tick. If you look at the charts, you will find that only works half the time at best. Looking at the range of these bars, particularly monthly extreme bars, will be quite rewarding! Turn them sideways for time counts and apply numerology to those sideways counts. You could be greatly surprised as to just how much information is in those solitary bars.



The concept that the length of the base is equal to the height of the move incorporates the notion that a vector distance (base) can be applied in a new direction to forecast where the market is going. This works because of the existence of time cycles. Common cyclic time periods repeat over and over, and each cycle runs approximately the same duration. Since markets are emotional, and human nature does not change, an examination of market history gives us our benchmarks. Great cycles recur infrequently but usually consist of multiple legs of common length cycles. Usually, there will be a consolidation or resting period at these multiple leg extensions, and we measure another equal leg up or down at these visible resistance areas. One rule to keep in mind when looking at charts is that straight line moves without these consolidation "wiggles" will die out as soon as the measured move is reached, whereas a big move with a number of little corrections or consolidation periods will have enough strength to go multiple lengths.

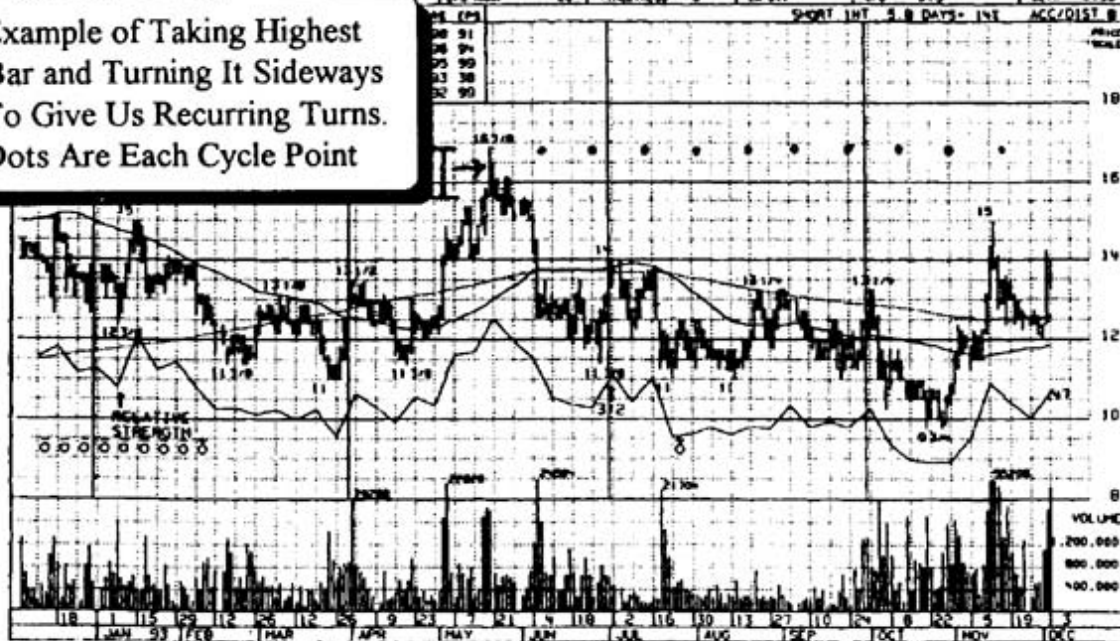
Since this idea of cyclic emotionality encompasses both time and space (that is how we chart prices), the actual measurement of these cycles is in vector distances. Simply put, a measured move of any given magnitude can manifest as a circle of resistance around an origin point. The circumference of that circle represents the potential reversal point of a move that has reached a previously observed measured move. This is one of the most profound principles of investing I have ever discovered, and its implications have almost no limit as to trading uses. Once we find our average measured move that seems to be the working cycle, we merely sketch our circle around each successive high or low to approximate potential turns.



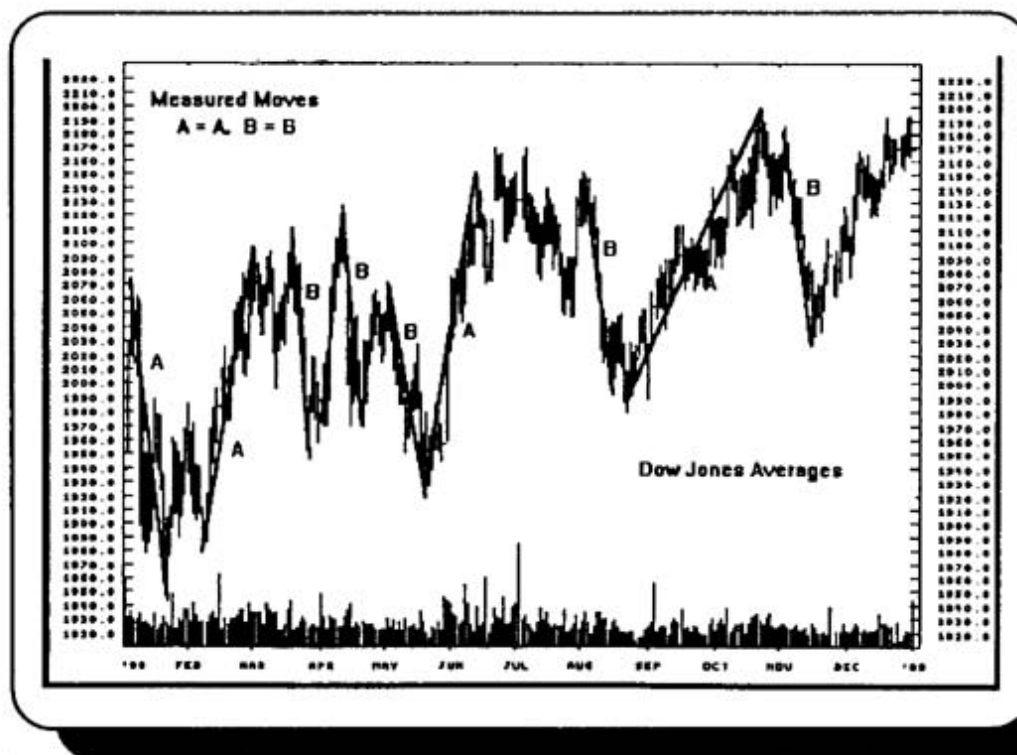
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BURGER RESTAURANTS UNDER CHECKERS HAVE 14 IN 18 STATES.		RET IN CM: 191	CASH FLOW: \$ 0.28	FIELD	INVENTORY TO:	ALPHA: 4.05
11/93 EXPECTS TO HAVE 688 RESTAURANTS BY END OF 1994: 18 RE-		EPS: 96	TIMELINESS: C	EX-DIV	W/O: 0.9	BETA: 0.98

Example of Taking Highest Bar and Turning It Sideways To Give Us Recurring Turns. Dots Are Each Cycle Point

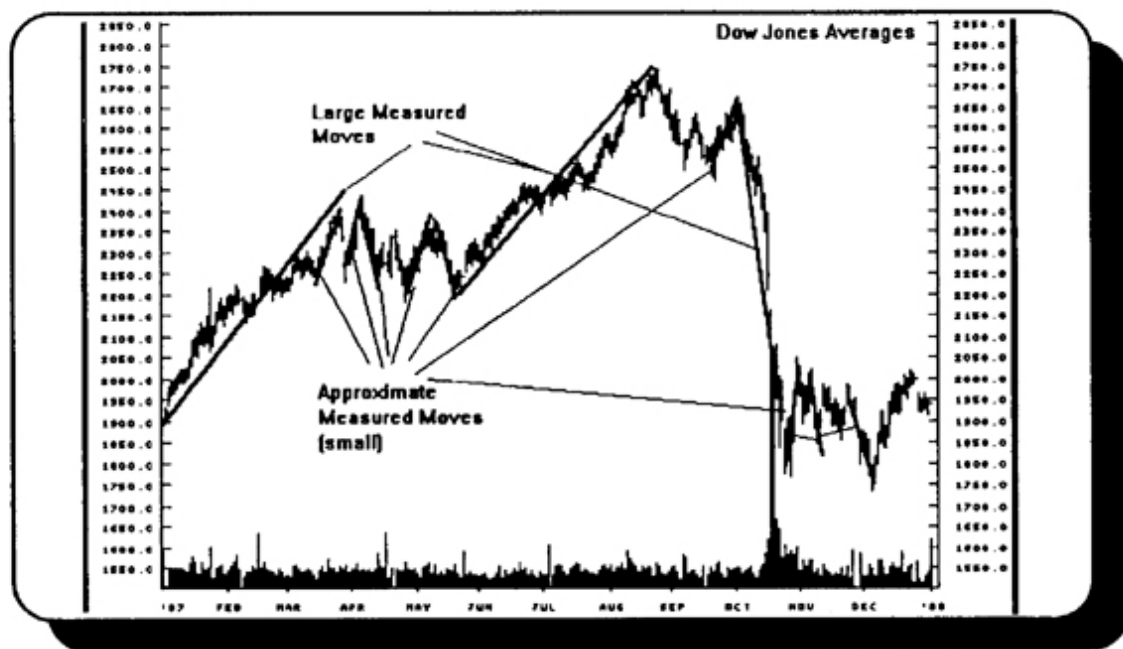


This circular measure accomplishes a number of things for us. First, it measures potential price targets at the circumference points. But, more importantly in many cases, it shows the extreme



limit of *time* duration, where the current trend will end. Often a price advance will quickly go up to the circumference and top, and then go sideways into a consolidation pattern. At this point, we look to the extreme right axis or at 3 o'clock figuratively on the circumference to see the time limit of the move. When the price reaches that extreme with the passage of time, the market will change direction.

## Measured Moves



Remember that although these measured moves can be very precise, we are only trading for the safe 70 to 80% of the move and need only make an approximation. On an hourly chart, trading options and futures will be much more exact, but here too, other indicators will be used as we approach the area of termination. Specifically, we watch closely for a signal reversal buy or sell bar near the measured extremes, and we also watch our time counts closely. Strategy here is to find large measured moves that are at work and will give us lots of trading room when we initiate a position. A good analyst will also note that at the ends of large daily and weekly measurements, most other markets like bonds, gold, and the currencies will also indicate a turn simultaneously with the stock market.

The measured move idea is simple and perhaps crude, but the real principle behind it is extraordinarily powerful and that is what we will now examine at length as we turn to the study of circular arcs.

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# Circular Arcs

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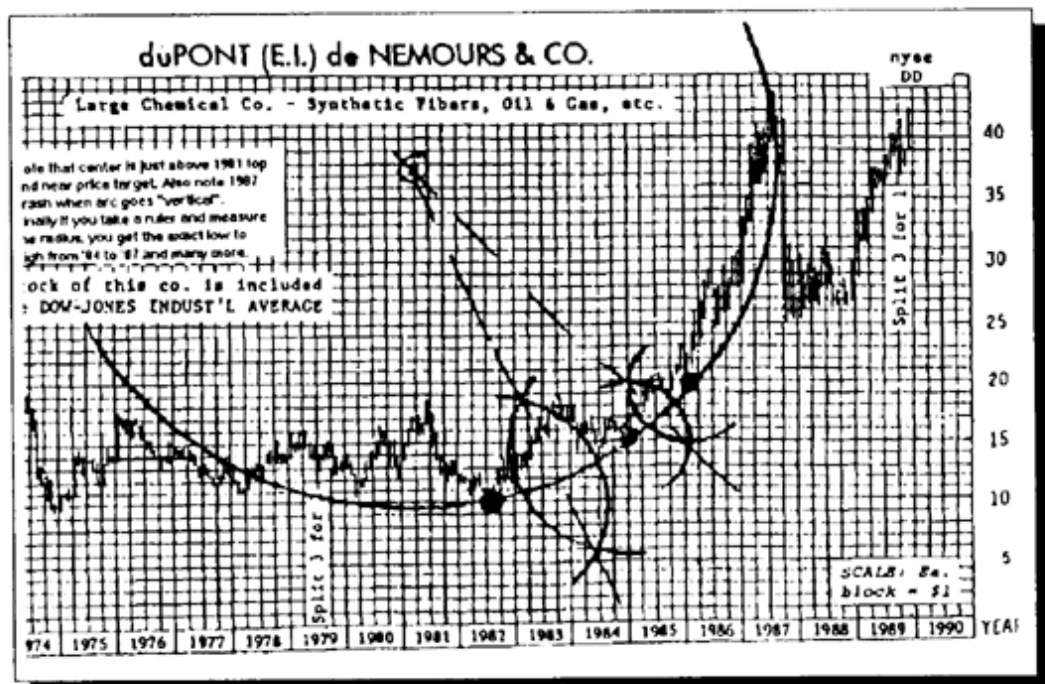
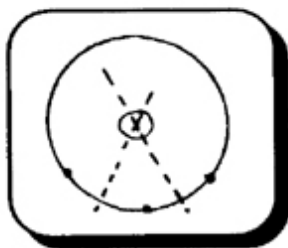
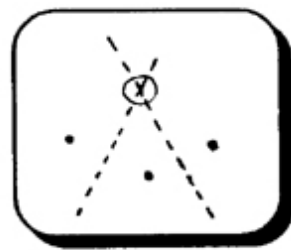
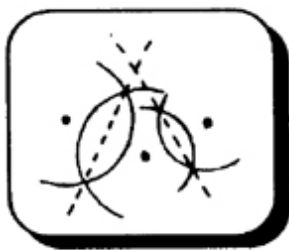
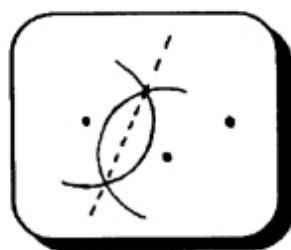
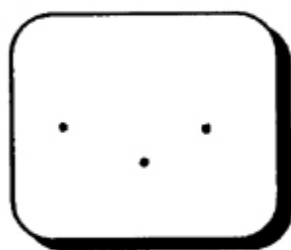
## Finding The Natural Cycle Length

Since cycles give rise to measured moves or an emotional time period that can be measured in a vector distance, we can deduce from this that *unknown cycles* operating within our charts will reveal mathematical structures that will give us a clue to the cycle's length. The simplest form this takes is a visible *circular arc*. When we see an arc forming in our data, it implies that a long term cycle is operating and that arc is but a part of it. If we use geometry to recreate the actual arc, we will discover its actual length and size.

The word cycles implies a return through a 360 degree rotation back to the origin. We view this as a circle on our charts, but in reality circles are only a close approximation of conic sections or slices through a cone. These are what are really known as ellipses and are closer to the real nature of cycles. You can visualize conic sections by imagining an ice cream cone. The cone, if cut directly across its height, will yield a round circle, but if cut at a slant, will yield an ellipse whose "flatness" will vary depending on how steep or slanted our cross cut is. Although the ellipse is the key to our trading, it is a subject a little too advanced for this book, and I will leave that investigation to your curiosity. Circles are easier to deal with and will suit our purposes just fine in most cases. Additionally, although cycles expand and contract to yield ellipses on many charts, if we use a slightly larger chart such as going from a daily to a weekly, we find that these small expansions and contractions in our cycles drop out, and a large circle becomes a very close fit to the data to mark our major beginnings and endings of the cycles.

The standard textbook method for constructing an arc that lies on the circumference of a circle is as follows: first, you must "eyeball" three points that look to you like they fall on a circle. You must have three, and, if they are not really on a circle, your axis lines will be parallel and not intersect. The first step is to pick the three "dots" on our chart. Then, you take a drawing compass, put the point at dot #1, and draw an arc not quite the length to dot #2. Swing this arc about a half circle and then move the compass point to dot #2 *without changing*

*its separation.* Now, swing an arc back toward dot #1, also about a half circle so that the two arc swings from each point intersect at two opposite ends. Where these two arcs intersect, you draw an axis line through the intersecting points. Note that this is also a method to exactly find any midpoint between two points, which we will use later to discover support and resistance at the midpoint of swings. This axis line will point to the center of the circle. Next, you repeat the same process between dots #2 and #3 to find their midpoints and axis line. Where the two axis lines from points #1 and #2 and #2 and #3 intersect will be the exact center of a circle whose circumference goes through the three points. You, then, merely move your compass point to that center, adjust the separation to any one of the dots, and swing an arc or a complete circle around all three dots. The radius, diameter, and upper and horizontal boundaries of this circle give us our important cycle turning points on that chart, **if** we have actually found a real circle. Sometimes what looks like a circle on short term charts is only a curve, so in picking your three dots to work with, you actually want to see five, ten, or more dots that appear to be connected. When the three important ones are mathematically connected, they will join up all the others, and we have more reliability with our pattern. The real solution of course is to use very long term charts over several years because the visible shapes forming on those charts are much more reliable and long lasting.

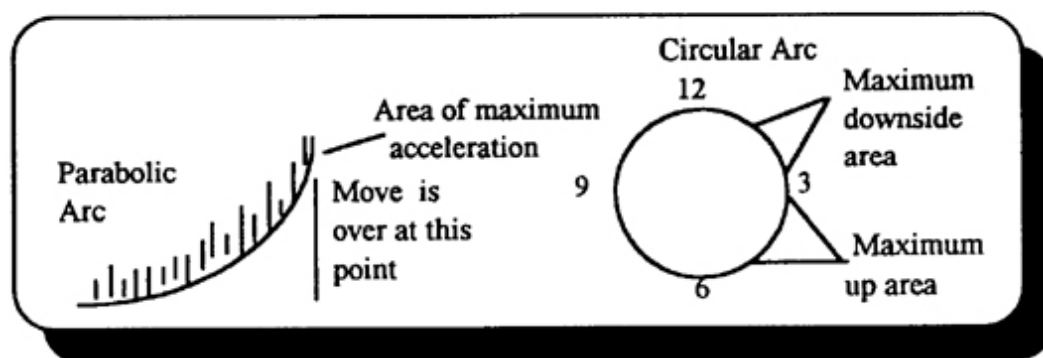


## Implications of Circular Arcs and Circles

Circular arcs tell us a lot about trend, support and resistance, and even where to expect big momentum moves. Remember, we want to pick chart patterns to trade that have big potential and are moving, not stuck in a base or top. The first important observation to note about arcs is the physical property of acceleration. These arcs describe human *emotional* behavior, and as we go up the arc this behavior is *intensified*. Imagine a graph of a car going at a constant speed of 50 mph. This graph would be a diagonal upward sloping straight line. Now, imagine a spaceship launch that is accelerating at a rate of change of 50 miles per second per second. This graph is a parabolic increasing line where the slope gets steeper and steeper until it "goes vertical" or accelerates at an infinite rate or at maximum physical capacity. The emotions of the masses, when chasing a stock or commodity, act like these parabolic curves. Our circular arcs also describe this maximum emotion when the side of the circle is hit, and the arc "goes vertical." At that point, the maximum amount of buying emotion is present, and whoever *will* buy *has* bought. The move is then over and must decline. Similarly, a decline will accelerate to a point where maximum fear is present, and that pattern will exhibit a circular arc turning down until it drops vertically. At that point, the maximum fear is past, and a basing pattern ensues.

When trading, we want to be *long as we go into the maximum up phase* and time our exit near the arcs' maximum vertical movement. Likewise, shorts are held until the arc climaxes on the downside. It cannot be emphasized enough how important a knowledge of these arcs can be. When fear or greed is at its extreme, it takes a very cool head to do the right thing in a fast moving market. By analyzing these arcs as the move unfolds, we get the confidence to act when we know the turn is coming and only need the slightest technical reversal, such as a signal reversal bar on a 5 or 15 minute chart to validate our hypothesis. These "vertical" moves naturally occur on the edges of a circle, such as moving from 5 o'clock to 3 o'clock in an up move, or 1 o'clock to 3 o'clock for the down move. But, what about 12 and 6 o'clock? These are our major support and resistance points. As a market advances from a point near the bottom of the circle, it will first meet massive resistance at the center point or "gravity center." Getting above that which usually takes several tries, it will go to the top of the circle and usually end the move at that point. Big moves that get past the top of the arc will usually go 1 and 1/2 to 3 full circle diameters in that direction.

Having first drawn an accurate circle, we can now forecast with extreme accuracy all possible future points of support or resistance.



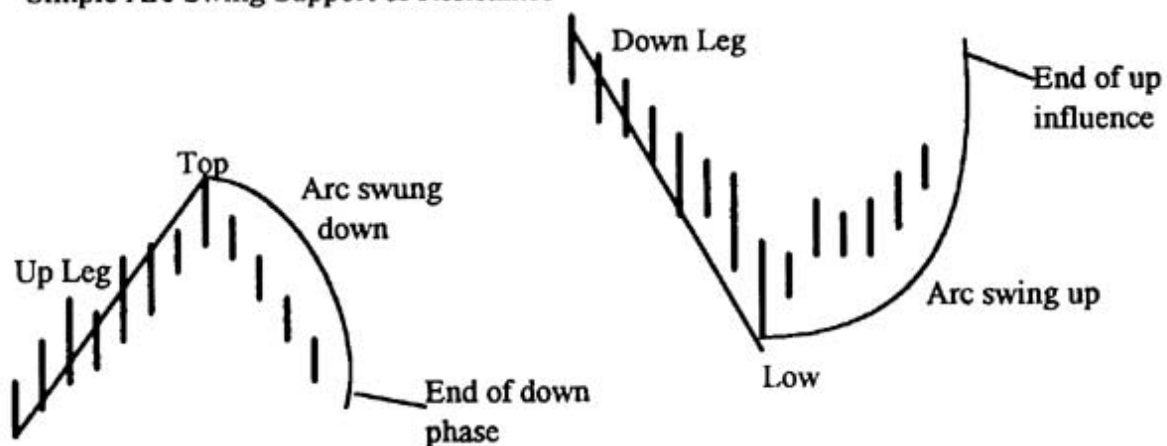
Common sense is needed when using arcs. If you find a major long term arc and are predicting a low for a stock as it declines from 8 o'clock to 6 o'clock for the low, know that a big basing period may be necessary before any upside is possible. You can certainly cover shorts at the low, but trading long is not possible until we get towards 5 or 4 o'clock on the circle. On a long term daily chart, this may represent six weeks to three months before a decent rally is possible. Keep this in mind.

## **Tips On Drawing Circular Arcs**

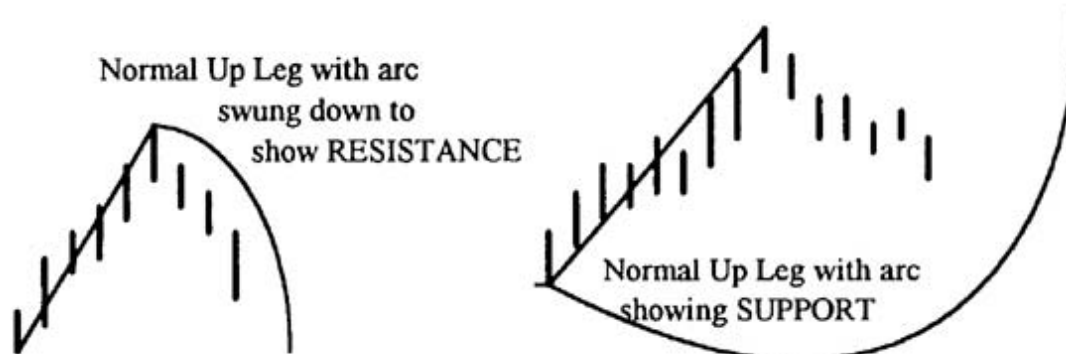
Although most arcs are drawn by inspection, that is looking at the chart and either trend fitting a circle or by just seeing an obvious circular symmetry, most arcs that I use in trading are not regular circles but circular "influences" of a radius vector swung up from a recent low to the high, and then the arc is swung down to the vertical. No matter how bullish you are, it usually pays to wait for the price consolidation period to move sideways enough to get past that downward arc before it is a safe long. That arc usually times the low, but oftentimes a secondary "crash" starts at the very end of the arc and the price damage can be severe. Likewise, an upward influence is generated by swinging an arc up, using the prior top as the center point, and swinging up from the recent low. This defines at least a time period where a rally could occur.



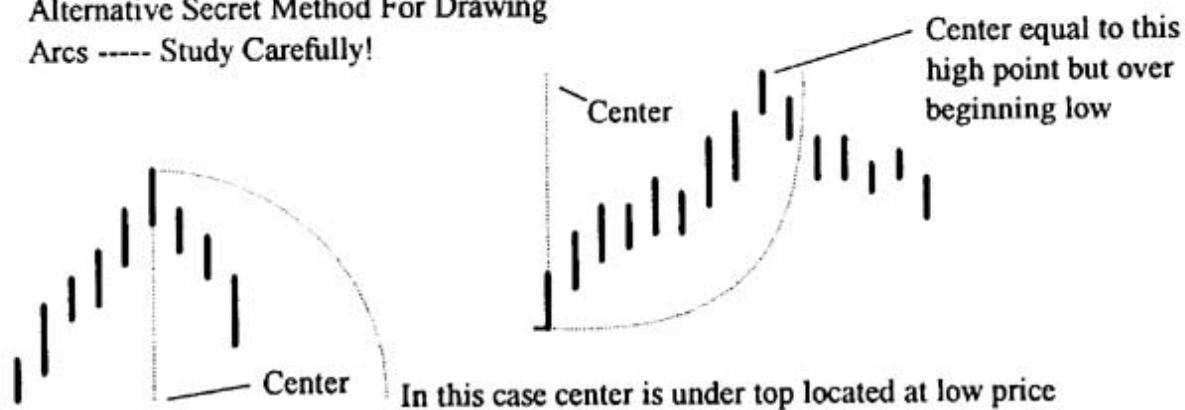
### Simple Arc Swing Support & Resistance



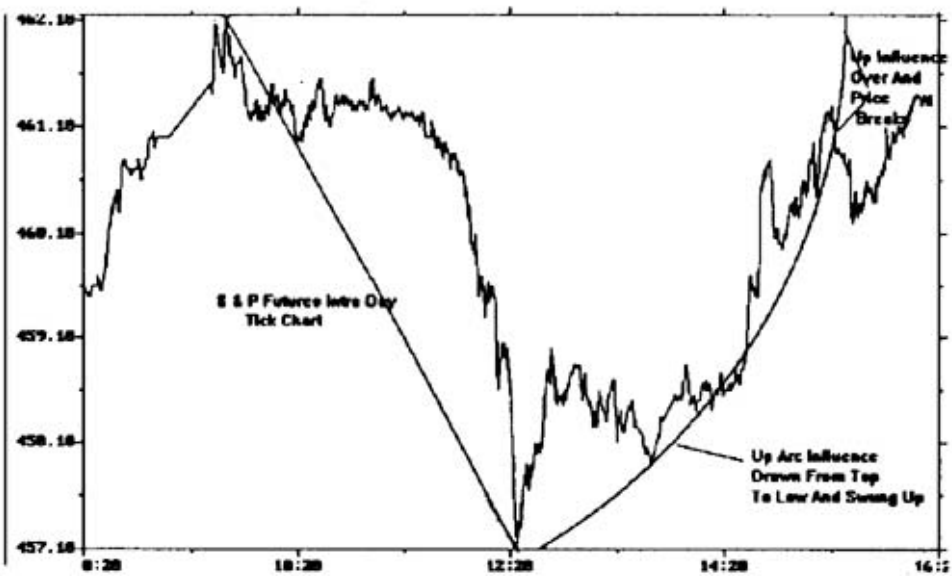
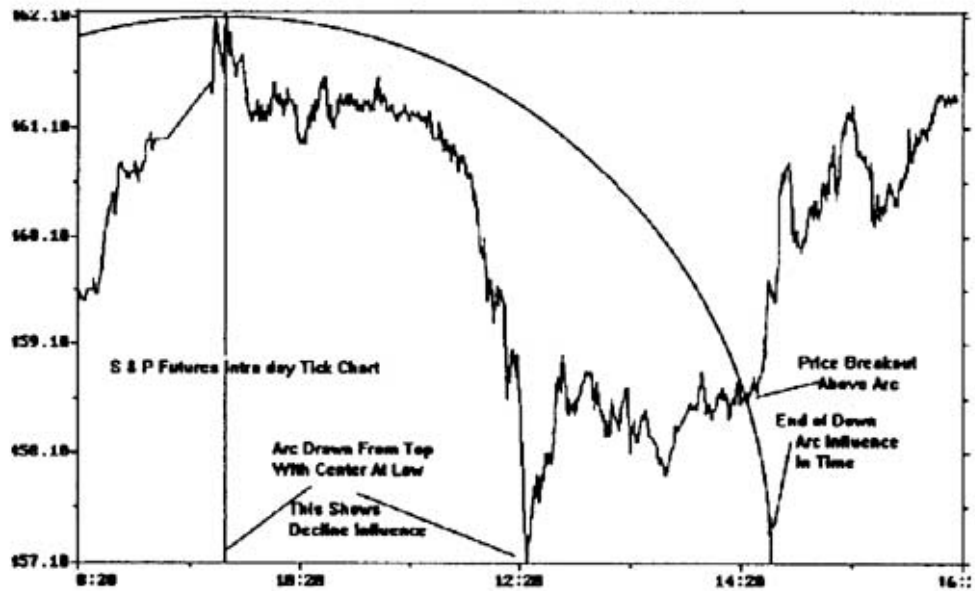
### Two Types Of Arc Swings--- One Support, One Resistance



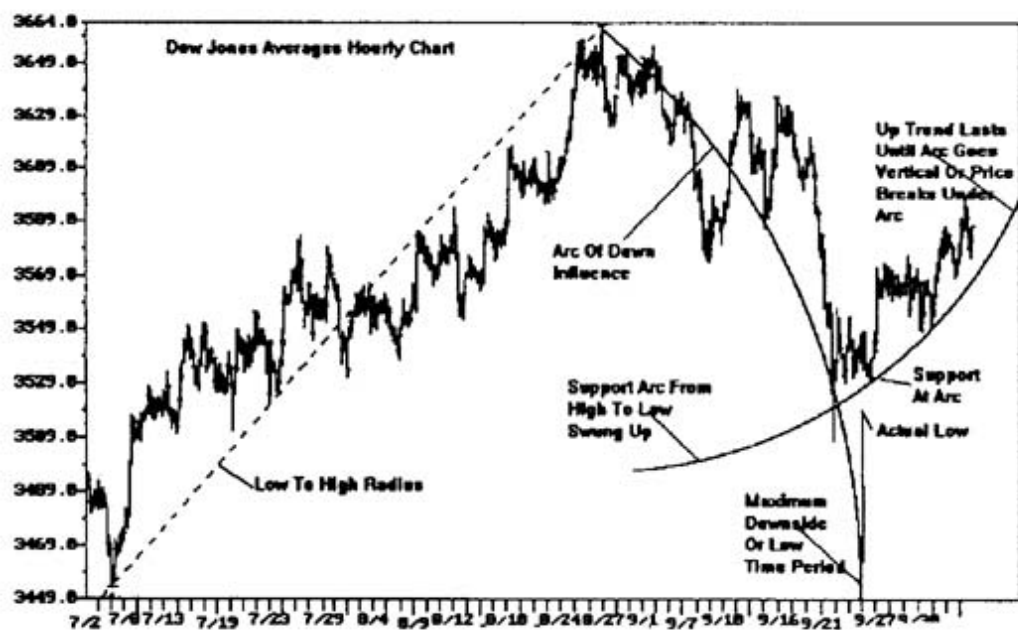
### Alternative Secret Method For Drawing Arcs ----- Study Carefully!

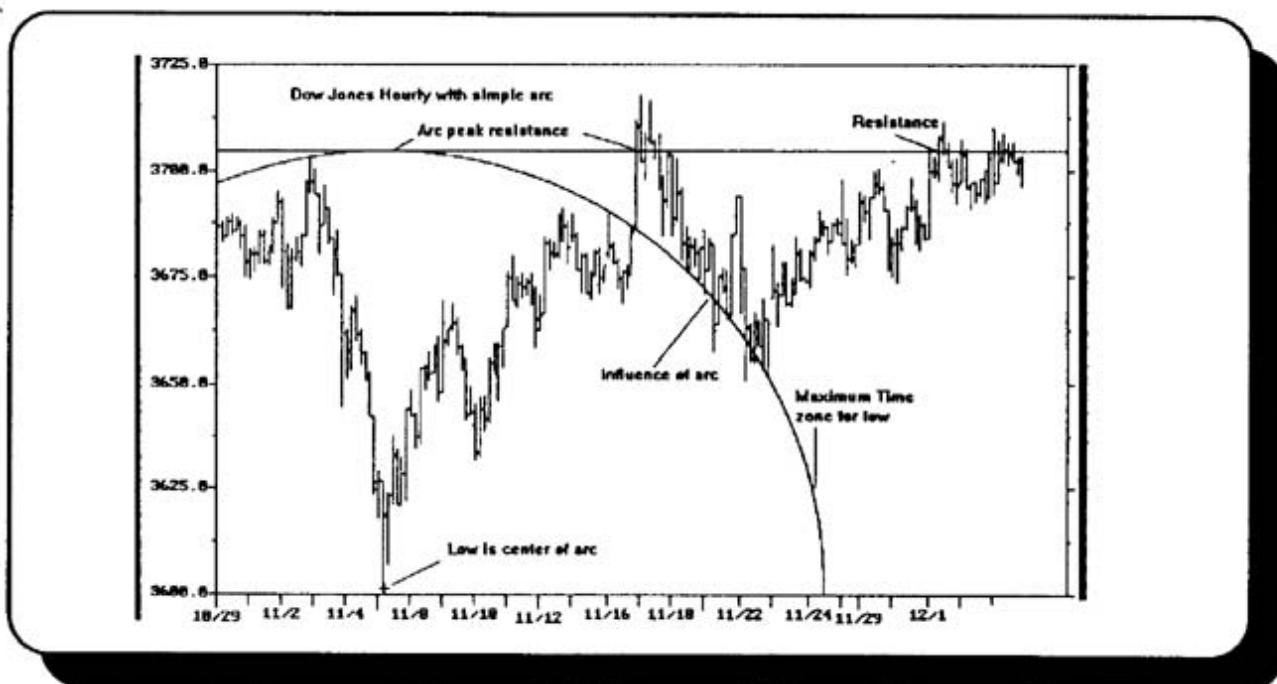
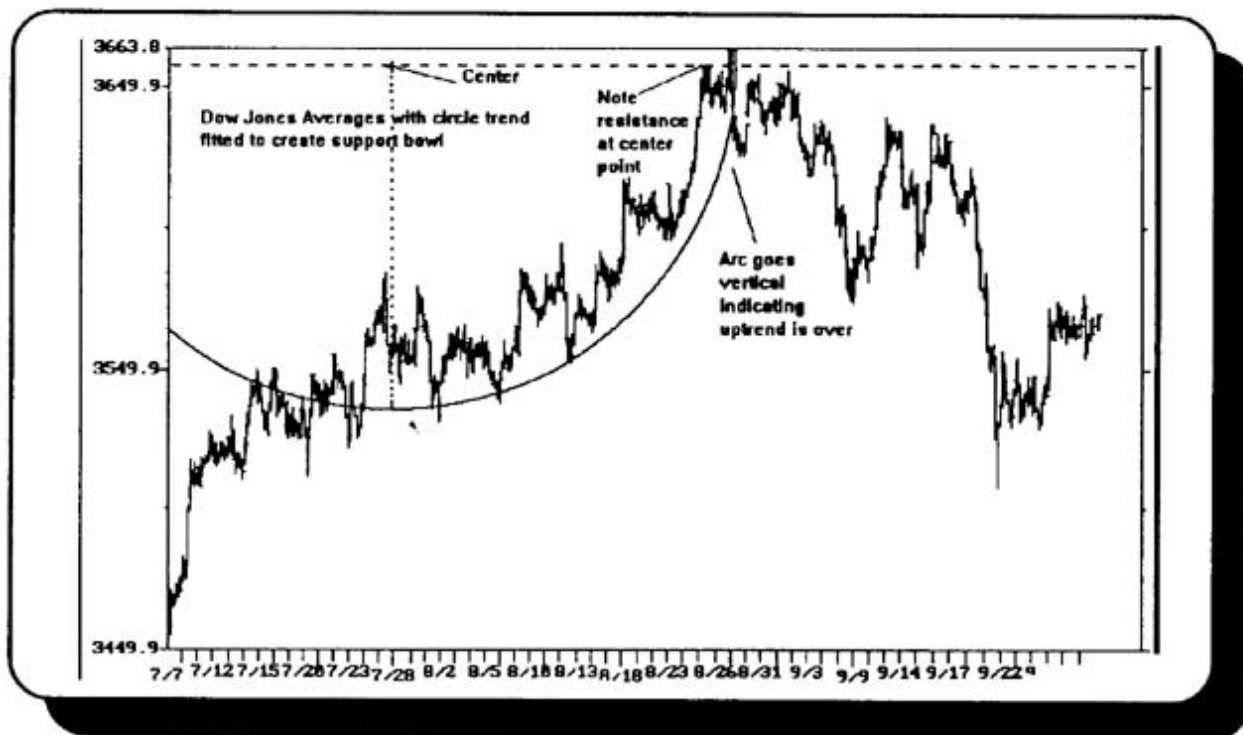


## Examples of Arcs On Intra-day Charts

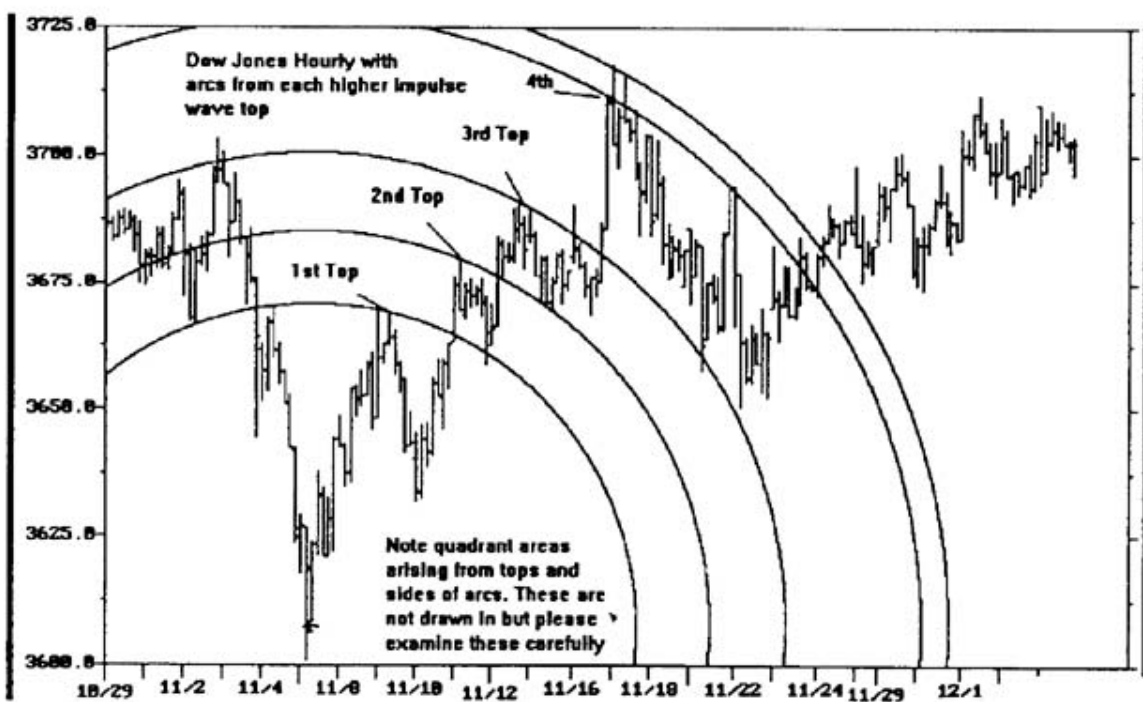
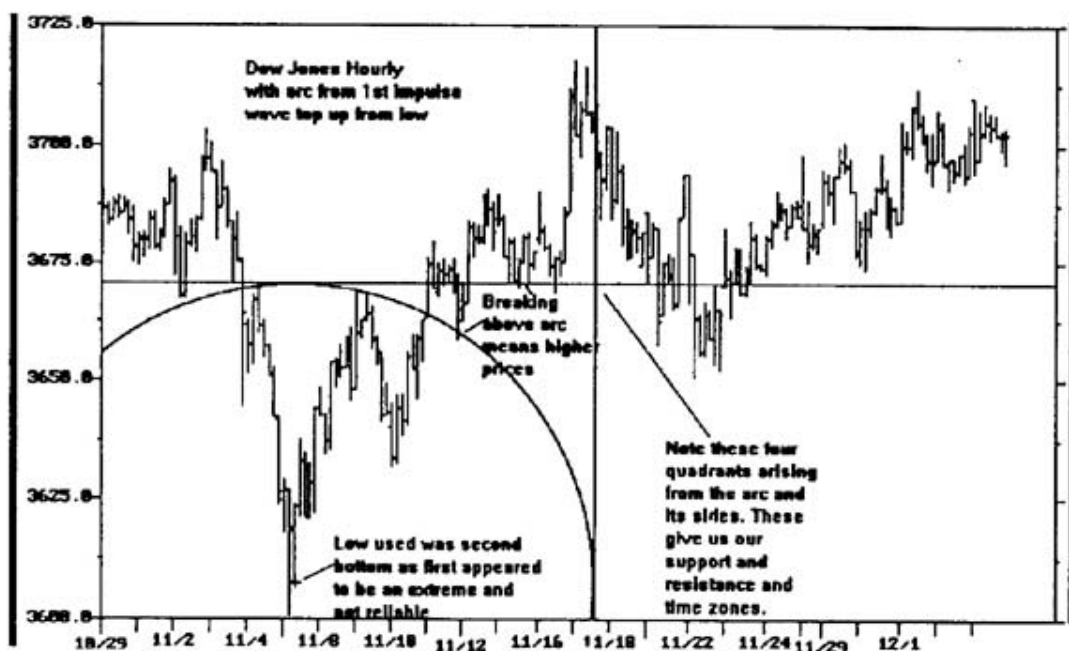


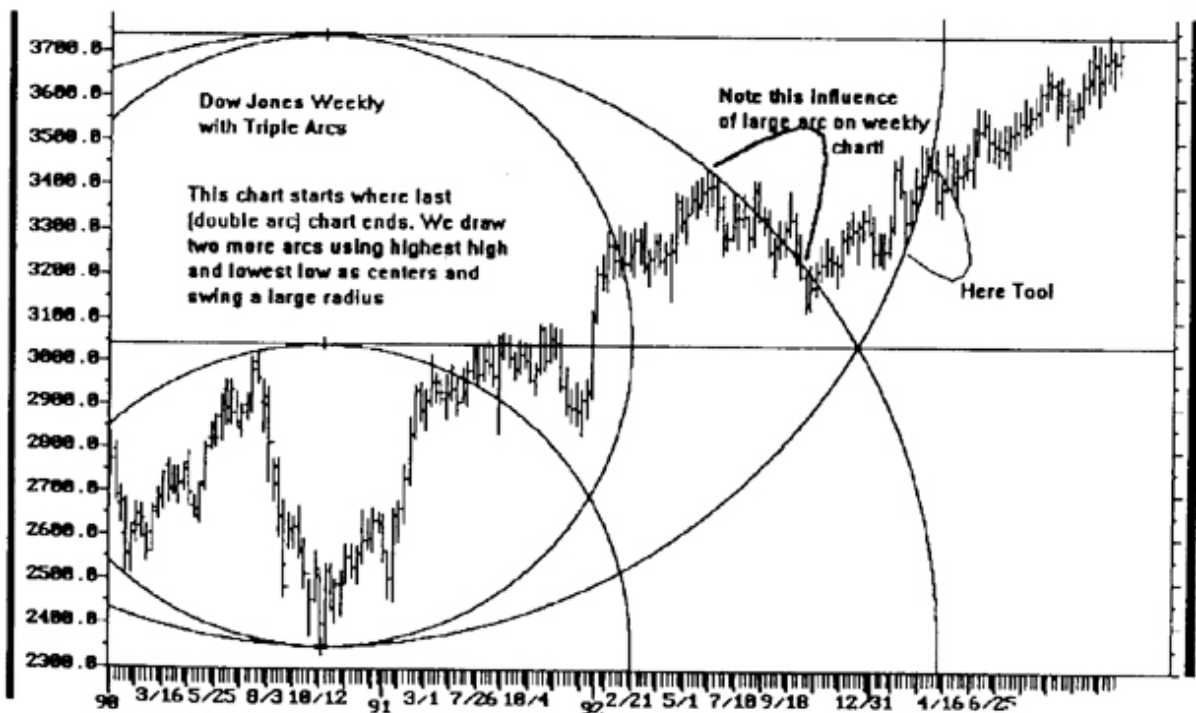
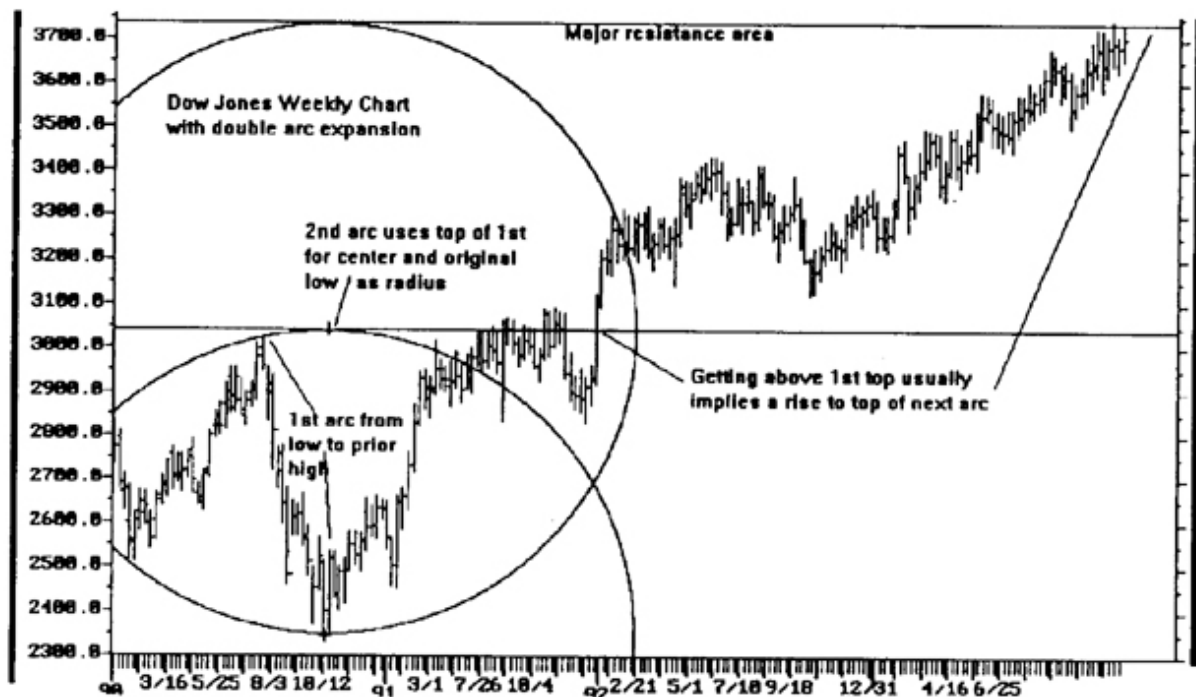






Note that the arc drawn on the above chart misses the actual timing for the subsequent low. But, if you use the secret alternative method shown on the prior exhibit whereby the center is located just left of the low and directly under the first top, the arc drawn that way catches the low perfectly. This is not shown on the chart, but you may want to draw it to prove it to yourself.





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# Support & Resistance

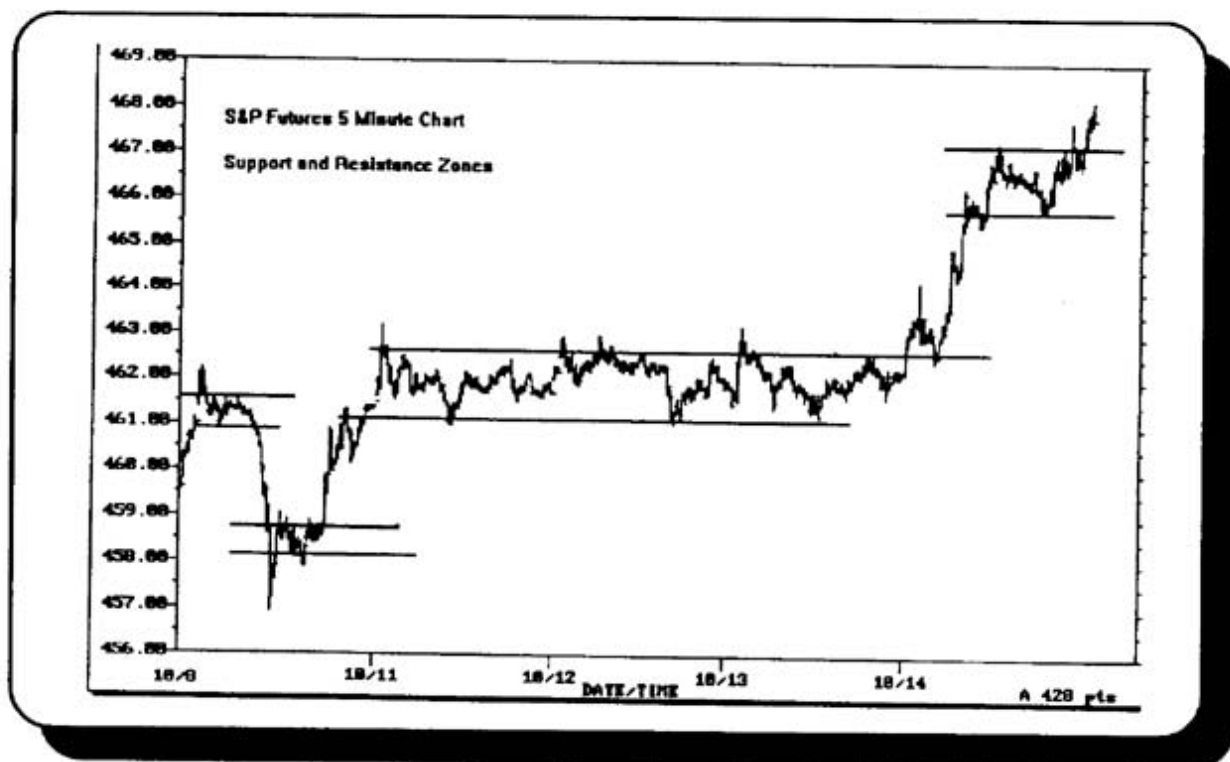
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Support and resistance levels can be determined from three basic methods: 1) Actual historical price clusterings, 2) numerologically, based on common harmonics of 360, and 3) calculated or projected methods. This last includes well-known Fibonacci retracements and projections but for my purposes I usually use derivatives of arcs and roots of the swings themselves. We will start first with the basics of typical support and resistance visually seen in the chart patterns from past history.

**Patterns:** The typical support area is an area that was a prior low or high for a considerable time, and now prices have declined back to that area. The area of that prior congestion will give us a hint as to how strong that support might be. Keep in mind that in trading, we are only concerned with *identifying* these areas, *but we do not trade within them!* In trading, we are looking for maximum return over time, so entering a support or resistance area is an opportunity to sell out a long or cover a short and patiently wait until momentum picks up again and takes prices out of that zone. These historical support and resistance zones are obvious to all who have a chart, and for that reason we cannot always be certain they are meaningful on the first test. In reality, these zones are located where they are because they are mathematically related to the price structure of the stock or commodity. If you have read my *Geometry* book, you know that these areas are related to past highs and lows and various "squares" of the price structure. For our present purposes, however, we merely note them since our trading strategy dictates we get out of the market when we arrive at one.

The primary rule in dealing with support and resistance is that old highs become future lows and vice versa after a breakdown. Getting above or below a resistance zone does not change the mathematical underpinnings of that zone. That particular price structure is intimately connected with that particular security for all time, and indeed all highs and lows in the entire historical record for the issue have *perpetual significance*. This is another reason for examining long term charts before trading a security for the first time. You can also use a common multiple such as 1.25 or 1.5 or 2, etc., times these resistance zone average prices to project future zones of significant resistance.



## Numerological Support and Resistance

Natural cycles repeat over and over, and like any physical law, these fluctuations can be described in mathematical terms related to the 360 degrees of a circle. Most actively traded stocks and commodities will eventually gravitate to the common denominators of numbers related to 360. The most commonly observed numbers are the divisional parts of quarters and thirds of 360, or 360 divided by 2 and 360 divided by 3. This sequence starts as  $360/2$  or 180, which is then divided by 2 to get 90, then divided by 2 = 45, divided by 2 = 22.5,  $/2 = 11.25$ , etc. The thirds are  $360/3$  or 120, and this starting point is then divided by 2 or  $120/2 = 60$ ,  $/2 = 30$ ,  $/2 = 15$ ,  $/2 = 7.5$ , etc. The numbers resulting from such divisions are natural harmonic numbers that can be used in trading. These are considered both from a price perspective *and* a *time* perspective. That is to say, 45 is both a number and a time period, such as 45 bars, or hours, days, weeks, etc. The following table summarizes these 360 harmonic natural divisions. You can subdivide these levels even farther, but I have stopped at the major numbers to give you the idea.

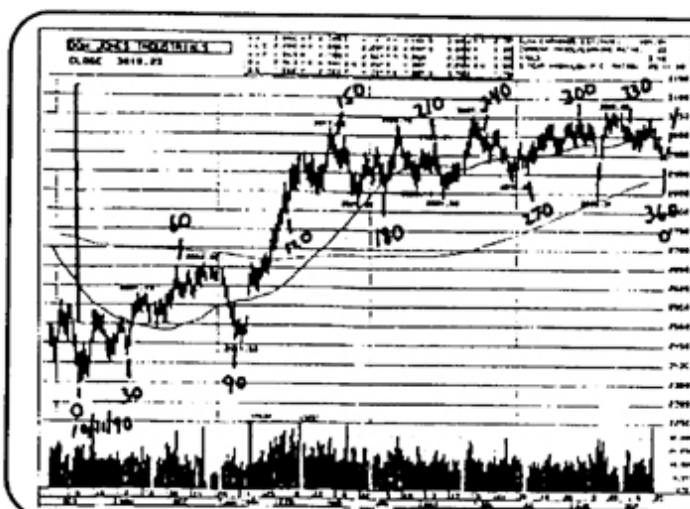
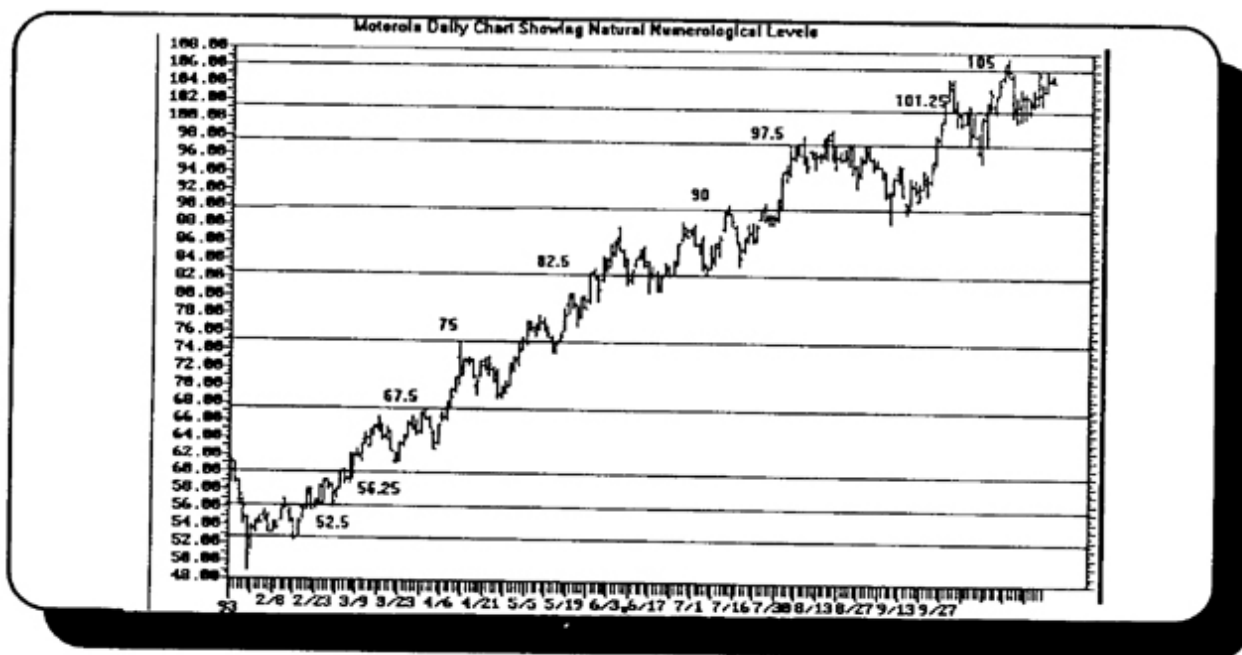


**Table of Numerological Breakpoints**

<b>360/2</b>	<b>both (doubly strong)</b>	<b>360/3</b>
5.63		7.5
11.25		15
	22.5	30
33.75		37.5
	45	52.5
56.25		60
	67.5	75
78.75		82.5
	90	97.5
101.25		105
	112.5	120
123.75		127
	135	142.5
146.25		150
	157.5	165
168.75		172.5
	180.....	
	360	

Most people are aware that these numbers form natural resistance and support, and most traders will easily recall stocks and commodities that reversed at prices of 45, 90, 30, 60, or 120. Not so obviously, however, is the natural *incremental* effect of these numbers. For instance, if a stock hits a major low at 17, we add these increments of 7.5, 11.25, etc., to the price to get this particular stock's natural support and resistance. From a low of 17, we would get 24.5 (17 + 7.5), and 28.25 (17 + 11.25). All other numbers would be added accordingly. Remember too, that the time periods of 17 plus these increments would be

important. On a typical bar chart of any time periodicity, we would count these time numbers as individual bars to look for turns when these periods came out. If you need a logical explanation for this (which is dangerous when you're trading), you can visualize cycles as sine waves that alternate through 360 degrees and start at a number. The 90 degree rotations then merely add an increment to the starting point until the full circle of 360 is reached. By the way, the broad market averages will usually be multiples of 360 or 180, and many of the individual bull and bear waves will equal these total points. For instance, some familiar Dow Jones numbers would be: 3240 ( $9 \times 360$ ), 3600, 3780 ( $10 \times 360 + 180$ ), 3960 ( $11 \times 360$ ), 2520 ( $7 \times 360$ ), 1800 ( $5 \times 360$ ), 720 ( $2 \times 360$ ), 900 ( $720 + 180$ ), and 1080 ( $3 \times 360$ ). An entire book could be written alone on the importance of these number combinations, but I will have to leave that to your investigation and point you to my other books in that regard.

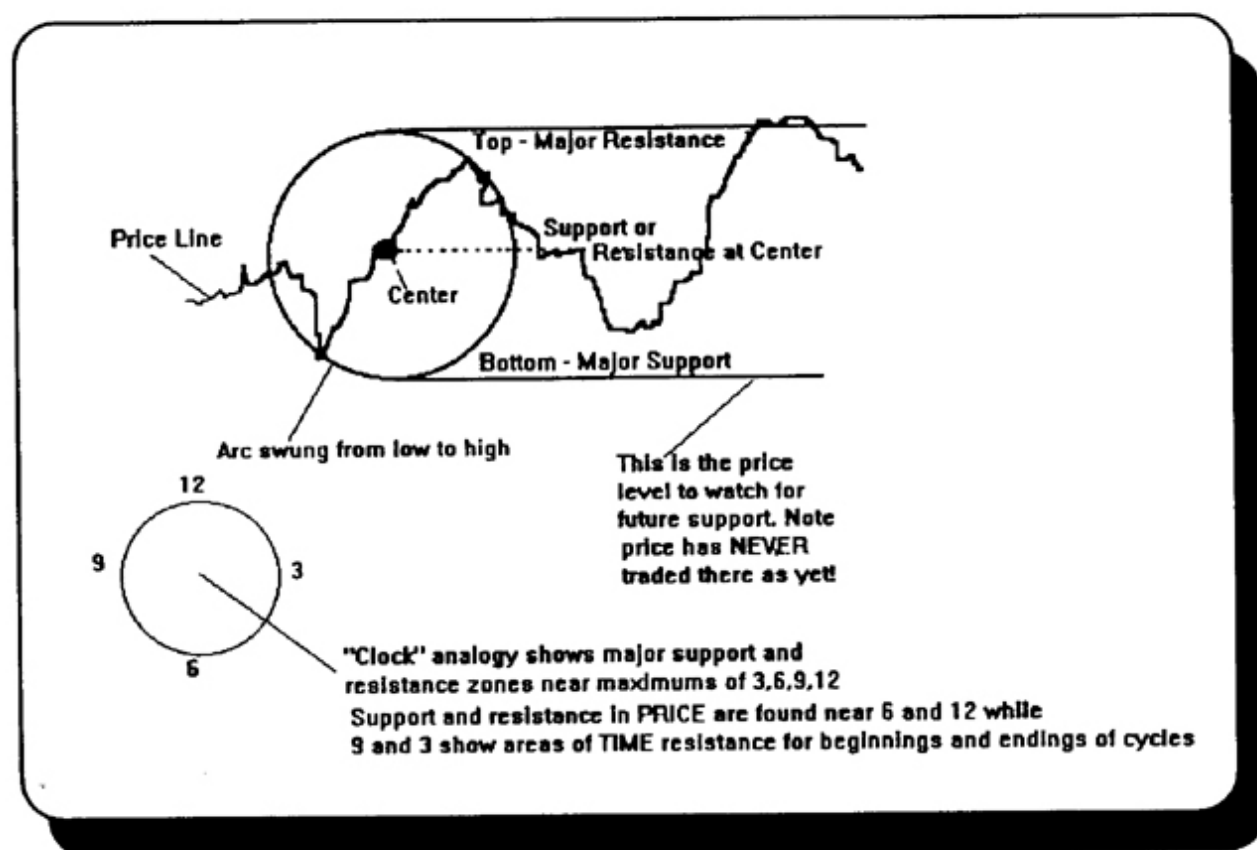


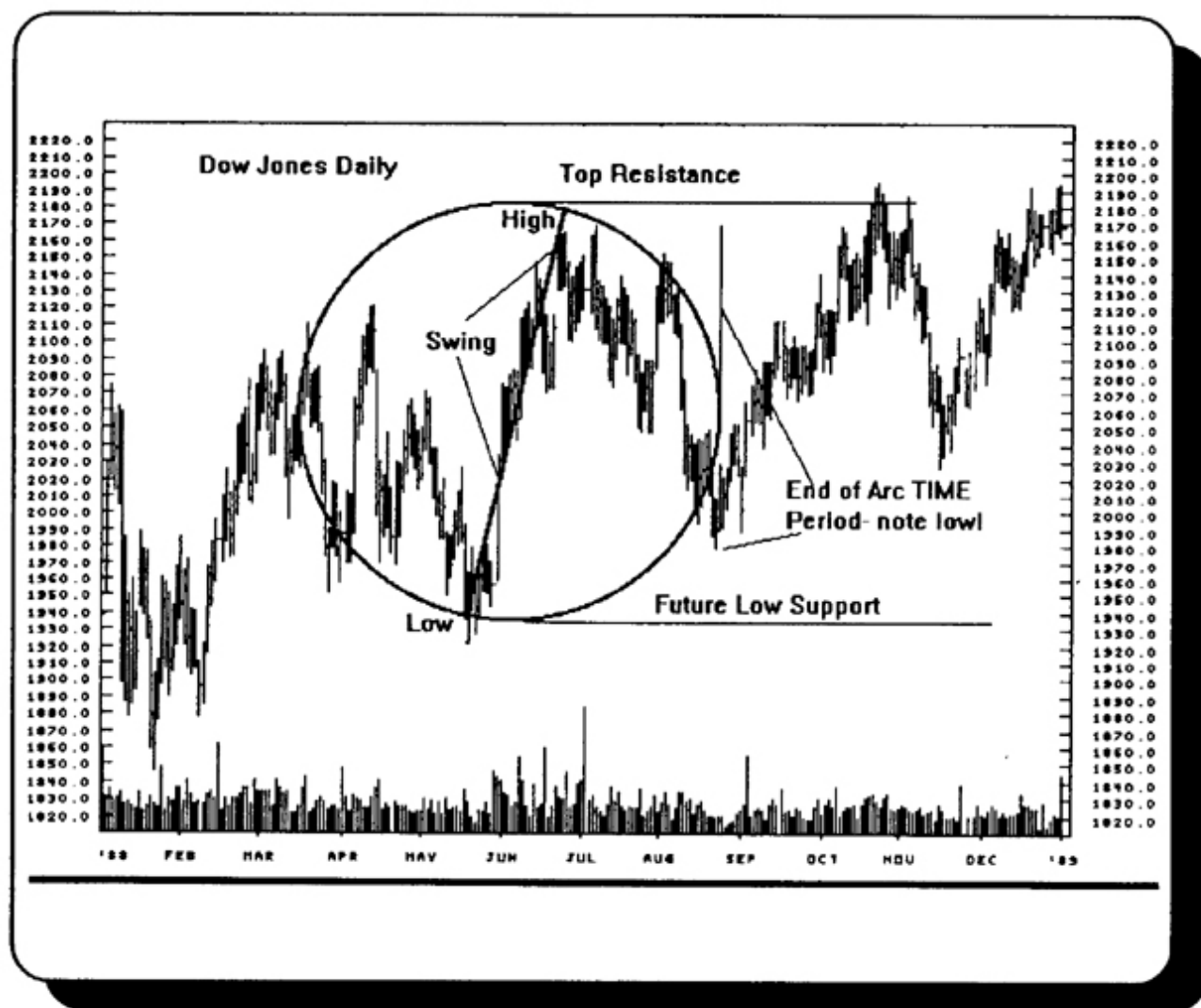
This is a chart of time resistance based on 360 day counts. The 30 day listings are calendar days and as you can see, time the market very nicely.

## Natural Arc Support and Resistance

One of the major discoveries I have made in my technical analysis methods is the use of Arcs to determine vector common denominator time and price projection points. What this simply means is that (since time and space are circular) if we measure in a circle from any high or low to get our estimated "measured moves," we will find areas of natural support and resistance. The ends of these arcs are the major resistance points as is the gravity center of the force or the center of the circle. We first swing major arcs around major swings of lows to highs and various highs to lows. The distance away from the current price level these arcs extend to is the area of future support or resistance. If we draw several different arcs from a number of time period swings, we may find that several of these independent swings end at approximately the same price points. This will be one of the major harmonic number fractions of the cycle operating on that individual stock or commodity.

This method is the **only** reliable one to show guaranteed true support and resistance levels long before prices ever reach those levels. Normal technical projection techniques are mere approximations based on likely projections, but this method alone is the key to real analysis. The value of this idea, I can assure you, is worth thousands of times the price of this book, so I urge you to consider it carefully and learn the principle.





## Natural Squares and Square Roots

One of the best kept secrets of technical analysis is that all highs and lows and all beginnings and endings of Bull and Bear Markets are numbers that are natural squares, or more precisely, the square root increment of prior highs and lows. It is the squares of numbers that account for all natural expansion and contraction in the speculative markets. This concept is by far the single most important one you will ever encounter and time spent understanding the principle will make you rich. Since my *Geometry* book deals at length with the underlying principle behind why this works, I will not go into that here but give a brief overview.

The natural theory of cycles states that the price level itself tells you what the mathematics of the underlying cycle is. That is to say, a stock that hits a high at \$50 and then declines tells you that 50 is the master mathematical harmonic: fifty minutes, fifty hours, fifty days, fifty weeks, etc. will have important time cycle influences on that particular stock. This theory goes on to demonstrate that a "square" drawn from that top of 50 in any time period unit such as hours, days, weeks, months,