Handbook of Technical Analysis
For Phil's Stock World

By Pharmboy

Table of Contents

Table of Figures

Introduction

"Study as if you were going to live forever; live as if you were going to die tomorrow."
- Maria Mitchell

"Get over the idea that only children should spend their time in study. Be a student so long as you still have something to learn, and this will mean all your life." ~Henry L. Doherty

Welcome to Phil's Stock World "Technical Trading 101" handbook! This handbook is comprised of some simple methodologies in the art of Technical Analysis (henceforth referred to as TA). This handbook is not intended for novice traders.

Technical analysis is the art of reading charts and deriving a decision to buy or sell solely on the chart. Financial statements do not need to be read, nor does the technician to need listen to a conference call. A chart speaks for itself. Technicians believe that past price patterns, trading actions, and price-volume relationships, among other indicators, form an accurate basis of where the stock *is likely* to move to in the near-term. Since price patterns on a chart are formed by investors & traders past emotional responses to price movements, the patterns can be exploited for use in the future.

Technical Analysis is not a crystal ball! Patterns can, and will fail, and will result in losses. However, if the trader focuses on highly reliable patterns (e.g., shooting star), combine several indicators (e.g., MACD), and perfect entry and exit points, a technician will be way ahead of the game.

I begin this handbook as a macro view of the market and its cycles. The market cycles similar to the seasons of the year, move in and out of favor for various reasons. Dow's Theory of the market discusses stock price movements that include, what is now called TA as well as some portion of sector rotation. By understanding fundamental analysis and using TA, a technician can use the information to make a strategic decision about trading a particular stock. When trading, the technician needs to decide what type of trade they are going to perform (e.g., scalp or momentum trade) and how to use TA. Charts and other indicators used within charts comprise the next few chapters. From there forward, candlestick patterns to aid in decisions about whether to trade a stock.

Understanding Market Cycles: The Art of Market Timing

Experts and the main stream media say that market timing is impossible. That much is true, but when TA is used, timing market movement is very profitable on a consistent basis. As a technical trader, the purpose is to find the best trades and to time the entry and exit points. After all, any trader can find the best trade in the world, but if it is not timed well, it may turn into a loss. Every stock or asset class goes through a classic market cycle. Figure 1 is a diagram of the four stages of the market cycle:

Figure 1. Four stages of the market cycle.
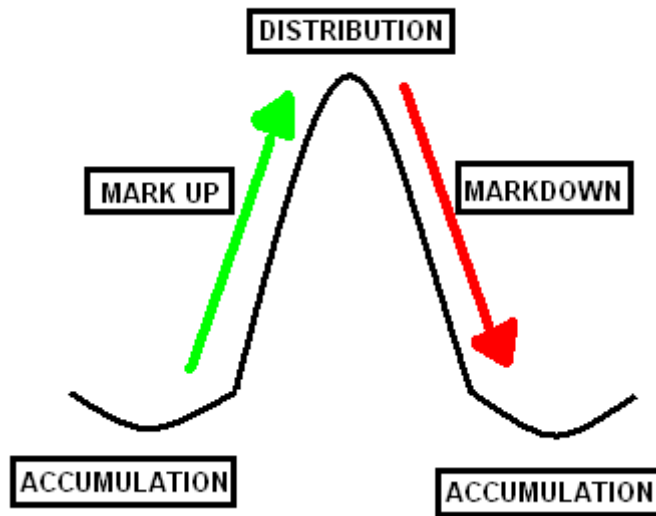
When looking at the charts of any stock or index, notice that it moves in cycles. By observing cycles, what to expect next is easier to comprehend. Figure 2 shows two stocks that have completed each of the four stages:

Figure 2a and b. Market stages of two companies.

2a. Amylin

2b. MEMC

For a long-term investor or trader, understanding market cycles can greatly benefit their portfolio.

Stages of a Market Cycle

- **Accumulation Phase** – This is the bottom (or near the bottom) of a particular stock, sector, or general market. At this stage, prices do not move upward but rather stay within a neutral trading range. At this level, the smart money begins to buy up large blocks of shares to accumulate a large position for their portfolio. They are patient enough to wait years, if needed, because it is difficult to determine how long a stock or sector will be in this stage. Regular individual retail investors do not even consider buying at this level because, in most cases, they have recently sold into the lows. At PSW, this is the stage where stocks are nominated to the Watchlist and the biggest discounts are found. Long-term oriented investors should be buying to realize the greatest long-term gains.

- **Mark Up Phase** – This phase follows the Accumulation phase. The way to determine if this phase is occurring is to see a stock or sector that has "broken out" of its neutral range. This means that it must break above the upper trend line of the neutral range. From this point on, an obvious increase in volume should be seen. Most of the institutions and individuals who are aware of this early trend will jump on board and bring along significant buying power with them. Another way to tell if the stock is in this stage is to see if **higher lows and higher highs are forming**. Toward the end of the mark up phase, full market participation will be noted as everyone from the shoe shiner to the cab driver will most likely have made an investment. This is a set up for the next phase.

- **Distribution Phase** – This is the top of the market for a particular stock, sector, or general market. Supply overwhelms demand after the smart money sells their shares to the "greater fools" who buy at the top. Because there are no other buyers left to raise the price, a stock or sector cannot advance higher, and thus, will collapse under its own weight. The sentiment is extremely bullish. This phase is marked with extreme greed and fear. The best way to identify a top is through chart patterns, most notably, the head-and-shoulder and double top formations combined with breakdowns at the 200-day moving average (MA). This phase is usually marked by the greatest volume levels for a stock until it reachs the Accumulation phase once again.

- **Mark Down Phase** – Prices are in free fall and stocks are in full liquidation mode. This group is made up of people who held beyond the Distribution phase and did not sell, or those who bought at or near the top and refuse to sell at a loss. Either way, a loss will be incurred or the size of it will be determined when an investor wishes to sell it. A trader should not buy at this stage and those that try to find a bottom will be disappointed.

- Return to **Accumulation Phase**

Phase Strategies

- **Accumulation Phase**
  - Investors: Cash » Buy
  - Traders: Cover/ Buy
- **Mark Up Phase**
  - Investors: Buy
  - Traders: Buy
- **Distribution Phase**
  - Investors: Sell » Cash
  - Traders: Sell/ Short
- **Mark Down Phase**
  - Investors: Cash
  - Traders: Short

The Agricultural Chemicals/Fertilizer sector is a good example of how it is possible to profit from their recent market cycle. As shown in Figure 3 where all the companies in the industry were rising and falling in the same time frame:

Figure 3. Market cycles of Potash (3a), Mosaic (3b) and CF Industries (3c).

3a.

3b

3c.
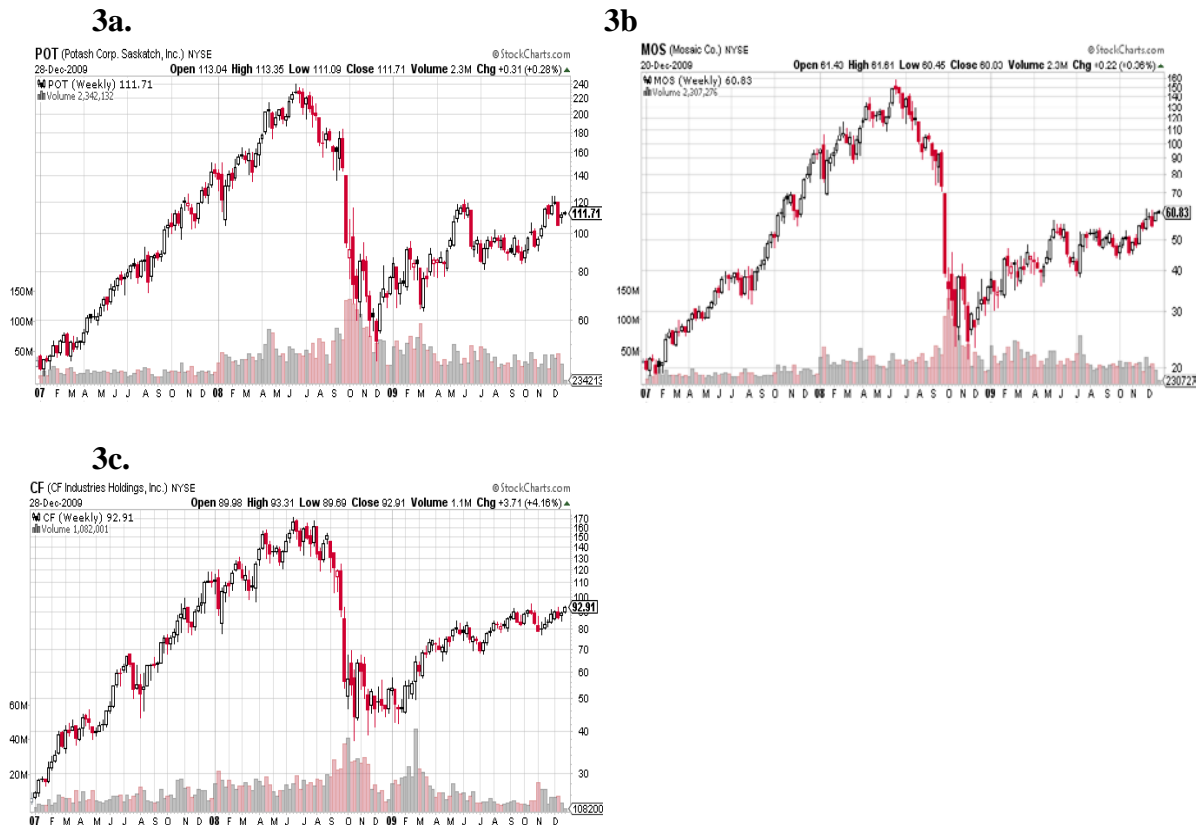
Sentiment Cycle

In addition to the actual price cycle, there is also a sentiment cycle which accompanies each stock, sector, or overall market. By definition, the market balances buyers and sellers, so that there is a balance between positive and negative sentiment. Thus it is impossible for a high proportion of market participants to have negative sentiment. However it is possible to argue that when a high proportion of *financial commentators and advisors* express a bearish (negative) sentiment, some people consider this as a strong signal that a market bottom may be near. The predictive capability of such a signal (e.g., market sentiment) is thought to be highest when investor sentiment reaches extreme values.[1] Indicators that measure investor sentiment may included:

- Investor Intelligence Sentiment Index: If the Bull-Bear spread (% of Bulls - % of Bears) is close to a historic low, it may signal a bottom. Typically, the number of bears surveyed would exceed the number of bulls. Conversely, if the% of Bulls is at an extreme high and the number of Bears is at an extreme low, historically, a market top may have occurred or close to occurring. This contrarian measure is more reliable for its coincidental timing at market lows than tops.
- American Association of Individual Investors (AAII) sentiment indicator: Many feel that the majority of the decline has already occurred once this indicator gives a reading of minus 15% or below.
- Other sentiment indicators include the Nova-Ursa ratio, the Short Interest/Total Market Float, and the Put/Call ratio.

Figure 4 shows the general range of emotions investors experience as related to market risk.

Figure 4. Range of a trader's emotions.
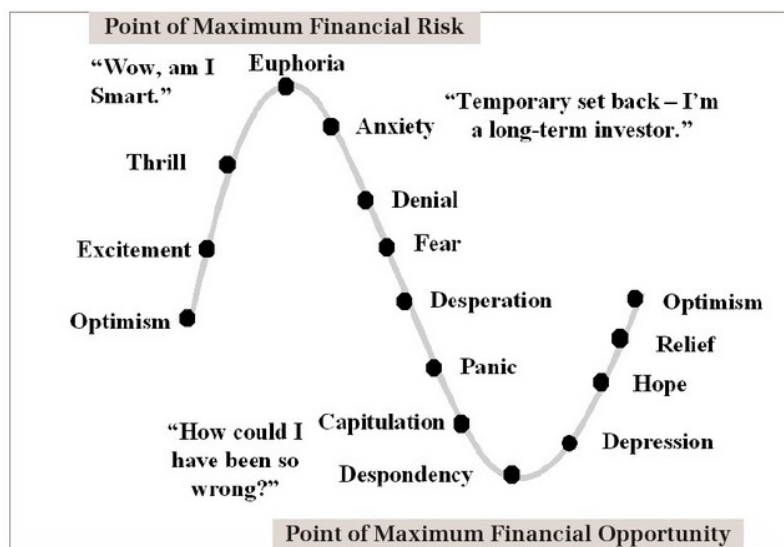
The trader is their own worst enemy because emotions give room for destructive impulse trading. By understanding each cycle and what emotions follow, traders can be better prepared. Market cycles are normal, necessary to balance the financial markets and restore equilibrium to forces of supply and demand. Understanding these market cycles and being able to recognize where we are in the cycle can help us to be better investors.

Dow's Theory of Markets

Technical analysis dates back hundreds of years. According to historical records, a great Japanese rice trader named Homma Munehisa (1724-1803) developed a form of TA known as candlestick charting.[2] A candlestick chart is a style of bar-chart used primarily to describe price movements of securities, derivatives, and currencies over time. It combines aspects of a line-chart and a bar-chart, in that each bar represents the range of price movement over a given time interval. It is most often used in TA of equity and currency price patterns.

Technical analysis is an art. With focus and diligence, TA can often be learned within a short period. A chartist using TA reads and interprets chart patterns and then attempts to predict the most likely short-term outcome based on his methods. Figure 5 shows a 6 month Diamonds (DIA) candlestick chart and many patterns and studies that traders often use to enhance their trading. Moving averages convergence divergence (MACD) and relative strength index (RSI) are two studies very commonly used by technical analysts. MACD is a trend-following momentum indicator that shows the relationship between two moving averages of prices, while RSI is a technical momentum indicator that compares the magnitude of recent gains to recent losses in trying to decide overbought and oversold conditions of an asset. Because candlestick charting is the basis of this handbook, I use these types of charts almost exclusively in my examples.

Figure 5. Candlestick chart with 50 and 200d MA. Below are the MACD and RSI.

---

[2] *Candlestick Charting Explained: Timeless Techniques for Trading Stocks and Futures*, Gregory L. Morris, McGraw-Hill, 2006,

In the U.S., TA first gained a following from Charles Dow's *Dow Theory* in the late 19th century. The six basic tenets of Dow Theory, as summarized by Hamilton, Rhea, and Schaefer, are described below:

Tenant 1. The market has three movements (Figure 6):

1. The primary trend, or major trend, may last from less than a year to several years. It is bullish or bearish.
2. A secondary trend moves in the opposite direction of the primary trend, or as a correction to the primary trend. For example, an upward primary trend will be composed of secondary downward trends. This is the movement from a consecutively lower high to a consecutively higher high. In a primary downward trend the secondary trend will be an upward move, or a rally. This is the movement from a consecutively higher low to a consecutively lower low. The secondary reaction, or intermediate reaction, may last from ten days to three months. It generally retraces 33% to 66% of the primary price change from the primary movement..
3. The last of the three trend types in Dow's theory is the minor trend, which is defined as a market movement lasting less than three weeks. The minor trend is generally the corrective moves within a secondary trend, or those moves that go against the direction of the secondary trend. The minor trends are not depicted in Figure 6.

Figure 6. Primary and secondary movements of S&P 500 Spiders Index (SPY).

Tenant 2. Major market trends are composed of three phases the accumulation, public, and distribution phases (Figure 7).

a. **Accumulation phase** (or phase I, also described as "smart money" going into a security) is a period when investors "in the know" are actively buying (selling) stock against the general opinion of the market. During this phase, the stock price does not change much because these investors are in the minority absorbing (releasing) stock that the market at large is supplying (buying).

b. Eventually, the market catches on to these astute investors and a rapid price change occurs called the **public phase** (phase II). This occurs when trend followers and other technically oriented investors participate. This phase often ends in rampant speculation.

c. At this point, the early investors/"smart money" begin the **distribution** phase as they dispense their holdings to the market (phase III).

Figure 7. Three phases of the market.

Tenant 3. Stock prices quickly incorporate new information as soon as it becomes available. Once news is released, stock prices will change to reflect this new information as traders rush into or out of the stock. Sharp stock price increases and decreases are noted in Figure 8 on earnings releases of STEC.

Figure 8. STEC earnings announcement gaps.

Tenant 4. Stock market averages should confirm each other. In Dow's time, the US was a growing industrial power with factories scattered throughout the country. Factories had to ship their goods to market, usually by rail. Dow's first stock averages were an index of industrial (manufacturing) companies and rail companies. To Dow, a bull market in industrials could not occur unless the railway sector rallied as well, usually first. If manufacturers' profits were rising, they were producing more. If they produced more, they would also ship more goods to consumers. Hence, an investor looking for signs of health in manufacturers would also consider the performance of railroad companies. The two sectors should move in the same direction. When the performances of the averages diverged, it is a warning of a change. In a more a recent example, in 2006, the banking sector (tracked by the XLF) and the homebuilding sector (XHB) were driving the market together. In July of 2006, a divergence occurred warning that something had changed (Figure 9). While the Dow Jones Industrials were setting a new high in late 2007, the housing sector (XHB) had already started diverging from XLF, and in Q2 2007, the XLF pulled away from the Dow Jones Industrials. Lehman Brothers collapsed in September 2008.

Figure 9. Divergence of XLF and XHB.

Tenant 5. Dow believed that volume confirmed price trends, but explanations vary when prices move on low volume (Figure 10). For example, an aggressive seller could be flooding the

15

market with sell orders. When price movements are accompanied by high volume, Dow believed this represented the "true" market view. If multiple participants are active in a particular security, and the price moves significantly in one direction, Dow maintained that this was the direction in which the market anticipated continued movement. To him, it was a signal that a trend was developing.

Figure 10. SPY volume declines as price increases and vice versa.

Tenant 6. Trends exist despite "market noise" (Figure 11). Markets might temporarily move in the direction opposite to the trend, but will soon resume the prior move. The trend should be given the benefit of the doubt during periods of uncertainty. To determine if a reversal is the start of a new trend or a temporary movement in the current trend is a difficult task. Technical analysis tools help investors attempting to make the distinction. Nevertheless, market participants often come to different conclusions based on the same chart patterns and analytical tools. (Hence, charting is an art, or a craft, not a science.)

Figure 11. Market Trend (2003 – 2007).

Fundamental vs. Technical Analysis

There are many different ways to assess the value of a company, and the methods used to analyze securities and make investment decisions fall into two very broad categories: fundamental analysis and technical analysis. Fundamental analysis is a method of evaluating a security that entails attempting to measure its intrinsic value by examining related economic, financial and other qualitative and quantitative factors. Fundamental analysts attempt to study everything that can affect the security's value, including macroeconomic factors (like the overall economy and industry conditions) and company-specific factors (like financial condition and management).[3] Technical analysis takes a completely different approach. It is a method of evaluating securities by analyzing statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security's intrinsic value, but instead use charts and other tools to identify patterns that can suggest future activity.[4]

Figure 12. Technical analysis noted on the graph, Fundamental analysis income statement.

PERIOD ENDING	30-Sep-09	30-Jun-09	31-Mar-09	31-Dec-08
Total Revenue	310,000	282,900	214,000	425,700
Cost of Revenue	289,500	248,000	194,300	232,700
Gross Profit	**20,500**	**34,900**	**19,700**	**193,000**
Operating Expenses				
Research Development	10,300	9,900	9,600	10,200
Selling General and Administrative	37,200	42,500	29,800	18,000
Non Recurring	39,700	5,600	6,700	-
Others	-	-	-	-
Total Operating Expenses	-	-	-	-
Operating Income or Loss	**(66,700)**	**(23,100)**	**(26,400)**	**164,800**
Income from Continuing Operations				
Total Other Income/Expenses Net	(1,600)	16,500	9,000	(59,800)
Earnings Before Interest And Taxes	(68,300)	(6,600)	(17,400)	105,000
Interest Expense	400	200	300	400
Income Before Tax	(68,700)	(6,800)	(17,700)	104,600
Income Tax Expense	(6,300)	(9,700)	(18,900)	35,400
Minority Interest	2,900	(800)	800	1,100
Net Income From Continuing Ops	(62,000)	(1,200)	2,000	70,300
Non-recurring Events				
Discontinued Operations	-	-	-	-
Extraordinary Items	-	-	-	-
Effect Of Accounting Changes	-	-	-	-
Other Items	-	-	-	-
Net Income	**(62,000)**	**(1,200)**	**2,000**	**70,300**
Preferred Stock And Other Adjustments	(2,600)	2,600	-	-
Net Income Applicable To Common Shares	**($64,600)**	**$1,400**	**$2,000**	**$70,300**

Out of the two, fundamental analysis is the more widespread discipline, by far. There is a lot of criticism concerning technical analysis, and the criticisms are derived from the Efficient Market Theory. The Efficent Market Theory states that the market's current price is accurate and correct and that past information (same as charts) is already discounted into the stock. There are variations of this theory; however, most of these people believe that if technical analysis works then market efficiency may be questionable.

There are many papers, in fact, that say TA is often more reliable and profitable using a few finely derived rules. Ramazan Gençay wrote a paper entitled, "The predictability of security returns with simple technical trading rules." Here is the abstract:

---

[3] http://www.investopedia.com/terms/f/fundamentalanalysis.asp
[4] http://www.investopedia.com/terms/t/technicalanalysis.asp

Technical traders base their analysis on the premise that the patterns in market prices are assumed to recur in the future, and thus, these patterns can be used for predictive purposes. This paper uses the daily Dow Jones Industrial Average Index from 1897 to 1988 to examine the linear and nonlinear predictability of stock market returns with simple technical trading rules. The nonlinear specification of returns are modeled by single layer feed forward networks. The results indicate strong evidence of nonlinear predictability in the stock market returns by using the past buys and sell signals of the moving average rules.

Does all of this mean that one is better than the other? No! Not only is it important to master TA, but you must also be aware of a company's financial strength. Because the stock market can move in an irrational manner, charts will not accurately represent the company's value. In addition, TA can be used because financial statements and management "misstate the truth" in some cases. Knowing how to perform both fundamental and technical due diligence is essential for both investors and traders.

Are there times where one technique is more effective than the other? Yes! It all depends on 1) the time horizon, 2) the trader's personality and type. Figure 13 is a chart that plots the effectiveness or ineffectiveness of both types of analyses as the time horizon shifts from short-term to long-term. In my opinion, TA is most effective in the short-term and less effective in the long-term, and fundamental analysis is most effective in the long-term and less effective in the short-term. The ability to perform both analyses gives investors and traders flexibility throughout each timeframe.

Short-term is defined as micro-trading (minutes), day trading (hours), and swing trading (days). Intermediate-term is defined as any holding period between several months up to a year and long-term is defined as 1+ years.

Figure 13. TA and FA effectiveness in long and short term trading.
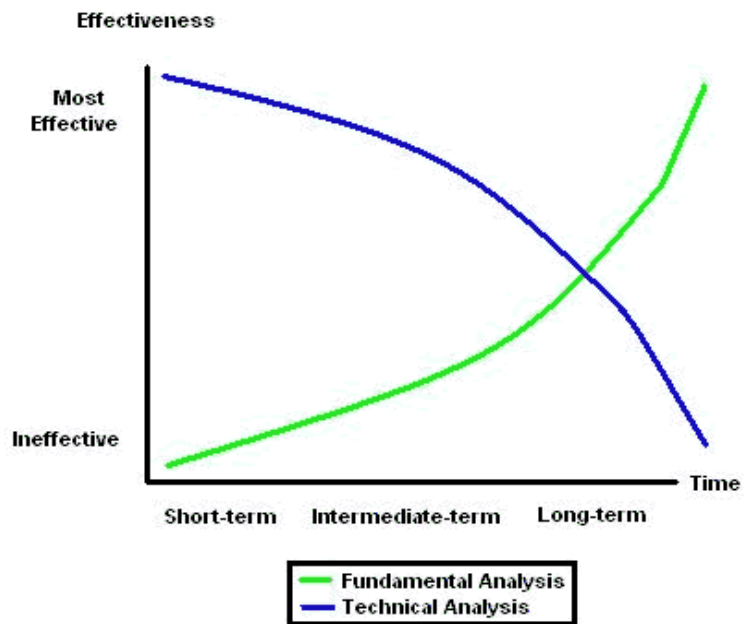
Types of Technical Trading: Scalping, Day, Momentum, Swing, & Position Trading

There are five main types of trading that technical traders can utilize: scalping, day, momentum, swing, and position trading.

Scalping

Scalping (or micro-trading) is all about taking very small profits, repeatedly (welcome HAL9000). Scalpers believe that stocks go in a certain direction, even for a little bit. They also believe that when trading, unfavorable events can be avoided. Even though scalping may not be suitable for the ordinary public trader, it's important to know that scalpers provide liquidity throughout the day. Typically, trades last between seconds to minutes, so given the volume; it is not surprising that scalpers amass the most transaction fees. Scalping is an expert skill because it is easier to take a larger loss that will wipe out the entire day's gains, so it is not recommended for beginners. The biggest benefit is if it is done correctly, the small profits will add up.

Day Trading

Day trading is all about buying and selling stocks on the same day and you are not holding positions overnight. Comparing day trading to scalping, this particular style calls for holding stocks for minutes to hours vs. seconds to minutes. Because of the short duration of trades, there is little room for error. Day traders even have their own set of tax rules by the IRS. The biggest benefit is that the trader liquidates their position at the end of the day.

Both scalping and day trading require strong discipline, the time and ability to learn how to rapidly trade, a tested and profitable strategy, and enough capital to withstand sudden and enormous draw downs (losses).

The next two types of trading take advantage of short-term trends and they are momentum and swing trading (see Optrader for his website on swing trading). Both are not as rapid as Scalping and Day trading, but that doesn't make these strategies any less profitable – just ask Optrader!

Momentum Trading

In momentum trading, the trader identifies a stock that's breaking out and jumps on to capture as much of the momentum on the way up as possible. The trader gets in at the very beginning of a trend and allows other buyers, who identify the trend, to provide the fuel to lift the stock higher. Enersis S.A. (ENI) in

[Figure](#) 14 is an example of momentum trading.

Figure 14. Momentum trading of ENI.

The typical time frame for momentum trading is from several hours to several days. Although momentum trading does carry overnight risk and day trading or scalping do not, there's a possibility that there is enough force for the stock to gap up higher.

Swing Trading

Swing Trading is the art of capturing the short-term trend. This style and position trading are the only two types of trading where a person with a full-time job can still consistently trade well part-time. Since the holding period is several days, intraday moves will not affect the swing trader as much as it would for a day trader. Typical holding periods for a swing trade is between 3-7 days. Swing trading is best used when the market or stock is in a neutral trading range, meaning the market isn't going anywhere but up and down without much price progress. In VZ, swing trading is effective if a trader wants to take advantage of the ups and downs of this range. Notice that long-term position trading (covered next) or momentum trading will not work in this type of environment but that doesn't mean you cannot make a profit. Use swing trading when the market or a particular stock is going nowhere.

Figure 15 shows how a swing trader could follow the short term trends of Verizon (VZ).

Figure 15. Swing trading Verizon.

Position Trading

Position Traders hold stocks for weeks or months (see

Figure 14 of ENI above). This style of trading is synonymous with "trend following". The only reason to become a position trader is if you anticipate the current trend to continue for a much longer term than a momentum or swing trade. Another example of a position trade is in natural gas and oil. Petrohawk (HK) in Figure 16 has become a favorite in chat and many traders are long the stock (accumulation phase). For now, the traders are taking advantage of the stock's wild swings, but as a position trader, they can buy on the way up and sell or cover their stock with in-the-money options when the trend changed (e.g., HK had a bearish engulfing in July which would have signaled to sell or cover). The position trader is not limited to only buying, the trader can also short (or short sell the stock). In each instance, the holding periods are for several weeks to months. Position trading gives traders a lot of freedom for those who cannot trade frequently. Profit potential is not diminished and position traders can make considerable gains. In HK's case, over 100% going long and over 100% going short!

Figure 16. Position trader buying and selling in Petrohawk.

Now that the different strategies have been presented, the trader must decide how long the trader wants to hold a position. Here are some questions to ask:

- Am I short-term or long-term oriented?
- How much time do I have during the day to trade? Do I work full-time?
- Am I patient and able to wait, or do I need to see results quickly?

Finally, the current market environment will greatly influence what type of trading is appropriate. Mastering one style is very important, but also the trader needs to be proficient in others. If in doubt, stay in cash. Standing aside is considered a defensive position and there's nothing wrong with waiting for an opportunity.

Stock Charting Basics: How to Read & Understand Stock Charts

Technical analysis does not exist without charts. Charts are the most basic foundation to the art. Without a clear understanding of charts, it will be hard to master TA. Stock charts can predict future movement with a high degree of accuracy.

Petrohawk (HK), Merck (MRK), STEC Inc (STEC), and Sunpower's (SPWRA) (Figure 17) charts will be used throughout this handbook (along with a few others). These are some of PSW's favorite trading stocks, and many have made a nice chunk of change trading them …all by understanding what the chart was telling us and knowing the company's fundamentals.

Figure 17. SPWRA bar chart.

There are **6 key components** of any chart that every trader should focus on, as shown in the example above (Figure 17):

1. **Identification** – The company name, ticker symbol, date, stock exchange, day's price range, volume of shares traded, and percentage change are listed in a bar chart listed here. Figure 17 depicts SPWRA's 1 year chart from December 12, 2008.

2. **Time Frame** – In this case, a 1 year chart is used. Time frames are especially important.

3. **Volume** – Volume tells the participation level for a particular day for a stock and is the number of shares traded during that day. Volume is used to confirm price action and spikes in volume both up and down days, mean that many traders are involved in trading the stock. Notice the massive volume spikes in May and August? A lot of shares exchanged hands that day and the significance of this and other volume signals will be touched on later.

4. **Trend lines** – These are lines that are drawn through three or more points. The points do not have to perfectly match up, but if the trader can draw a line close enough to the trend, it's considered valid. Figure 17 depicts a 4-month trend line from $22 to $28.

5. **Moving Averages** – Moving averages (MA's) smooth out average closing price over a specified period of time. In Figure 17 the 50 and 200-day MA are listed. There are also exponential moving averages (EMA's) and others. I use 5, 20, 50 and 200 day MA are used throughout the handbook.

6. **Individual Days** – A collection of individual days make up a chart. Many times, it is important to pay attention to each specific day. The oval depicted in Figure 17 shows a one day reversal and was the precursor to a major reversal. In March, there is a major one day reversal that forecasts another change in the prevailing trend. Do not ignore one day moves. Each day matters and can lead the way to directional changes in the stock.

The three most popular are bar charts, candlestick, and line charts. Bar charts are the most widely used and line charts the least. Candlesticks are gaining explosive popularity due to their predictive nature.

Line Charts

Line charts compile the closing prices of a stock and ignores the open, high, or low points of each trading day. Line charts are more suited for the longer-term trader (

Figure 18).

Figure 18. SPWRA line chart.
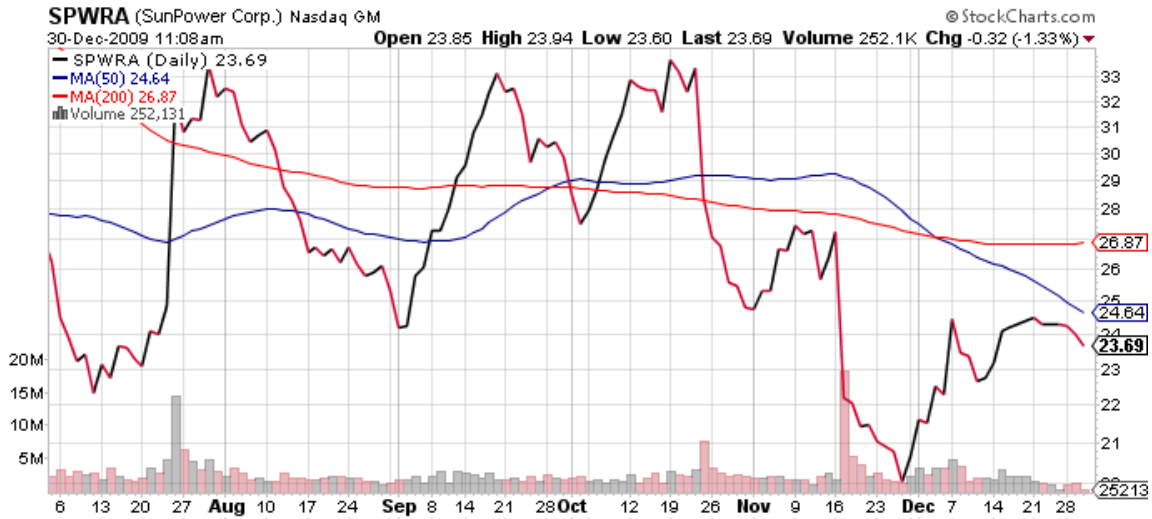
Bar Charts

Bar charts are popular charts used by some traders. The bars formed by using the open, high, low, and close prices of that particular day ([Figure 19](#)). Sometimes they are called OHLC bar charts (Open, High, Low, Close). A second type of bar chart is called HLC. These charts do not factor in opening prices. If a trader uses a bar chart, they should use OHLC charts to see a more complete and accurate picture of the action.

Figure 19. Bar chart.
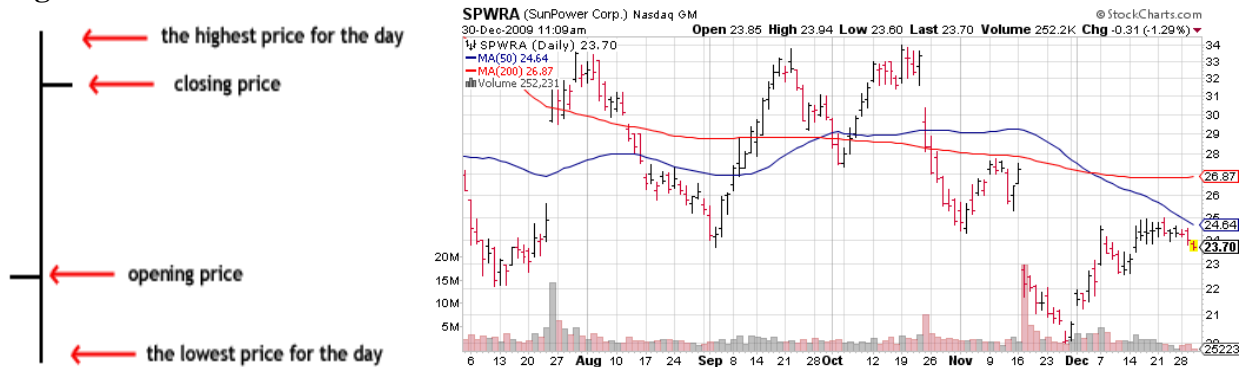
Candlestick Charts

Candlesticks are usually composed of the body (black or white), and an upper and a lower shadow (wick). The wick illustrates the highest and lowest traded prices of a security during the time interval represented. The body illustrates the opening and closing trades. If the security closed higher than it opened, the body is white or unfilled, with the opening price at the bottom of the body and the closing price at the top. If the security closed lower than it opened, the body is black, with the opening price at the top and the closing price at the bottom. A candlestick need not have either a body or a wick (Figure 20).

To better highlight price movements, modern candlestick charts (especially those displayed digitally) often replace the black or white of the candlestick body with colors such as red (for a lower closing) and blue or green (for a higher closing). Candlestick charts will be used almost exclusively throughout the rest of this handbook.

Figure 20. Candlestick chart.

Trading Time Frames

There are many different time frames to choose from. There are charts in 1-minute, 5-minute, 10-minute increments, or 1-day, 3-day, 5-day increments all the way up to several months and years. The trader must use the chart with the time frame that meet their trading needs. For instance, a day trader should not use monthly charts, and a position trader should not use 1-minute increment charts. In fact, following the wrong time frame for a specific strategy increases the risk of losing on trades. By using the appropriate time frame a trader can increase their chances for success. Examples of time frames (bar increment / window increment) for each strategy are as follows:

Scalping (micro-trading) – 1-minute/60-minutes only
Day Trading – 1-min/60-mins, 1-minute/120-minutes, 5-minutes/1-day
Swing & Momentum trading – 1-minute/180-minutes, 5-minutes/1-day, 10-minutes/3-days, monthly
Position trading – 5-minutes/1-day, 10-minutes/3-day, monthly

Error! Not a valid bookmark self-reference. shows examples of these time frames in chart form of Cerner (CERN):

Figure 21. Cerner time frame chart.

Time frames will help tie an entry, but finding an actual entry signal is the challenge. For now, use the right time frame chart with the right strategy.

Stock volume is extremely important because **volume confirms price action**. Volume tells the trader the excitement or participation level for a stock. Here are simple rules for volume:

1. *Volume Confirms Price Action* – When volume increases, price increases higher or lower. If volume decreases, price decreases.

2. *Price/Volume Divergence* – If price does not increase when volume increases, then there is a divergence. Typically, there is a sharp movement in the stock the following day.

3. *Breakout Expansion* – When a stock breaks out from consolidation, above average volume should accompany the move. Breakouts on low volume usually do not last and the price reverts to its previous level.

4. *Consolidation Contraction* – When a stock consolidates after a breakout, volume should contract, or decline. This shows healthy consolidation and that buyers are still holding the stock and there are not that many sellers. These consolidation areas typically precede more breakouts on massive volume trading.

Let's take a look STEC again (Figure 22), but this time, by analyzing its volume:

Figure 22. STEC volume analysis chart.

Traders can use volume signals to analyze a stock. This chart shows breakouts on large volume, consolidations on low volume, price-volume divergences, and price-volume confirmations. The power of TA is that one simple chart can give extremely valuable, tradable information. After analyzing hundreds of charts, a trader should be able to determine whether or not a stock is a good trade within a matter of seconds. The key is to keep looking at charts and to practice. The Appendix has a good practice website.

Using Moving Averages for Long and Short Trades

The use of moving averages (MA) are a mandatory requirement for technical trading. They are a favorite indicator of chartists. Chartists do not consider a trade without looking at the relevant MAs. A MA is the average value of a stock's price over a certain length of time. There are several uses for MAs:

- To determine momentum
- To show "invisible" support and resistance
- To give traders a head start in placing high-probability trades
- To signal warning of a breakdown
- To support the consensus of other technical indicators

All MAs are lagging indicators, meaning that they will react to price, and not foreshadow it. Moving averages work in trending stocks and do not work well when a stock is in a neutral trading range. Merck (MRK) is an example of a stock that has been trending up since May (Figure 23) and the 50 and 200d MA crossed over in July. Notice how the 50d MA acts as support for the uptrend:

Figure 23. 50 and 200d MA of Merck.

There are many types of MAs (simple, exponential, variable, linearly-weighted), but only will the two most widely used will be discussed: the simple (SMA) and exponential (EMA) moving averages.

The SMA is calculated by taking the average price of a stock over a certain period of time giving equal weight to each day.

32

$$SMA = \frac{p_M + p_{M-1} + \cdots + p_{M-9}}{10}$$

The EMA is calculated as either percent-based or period-based. The exact mathematical formula will not be covered, but the EMA cuts down the lag time by distributing more weight to recent prices and less weight to older prices. The shorter the EMA (in days), the more weight is designated to the most recent price. Therefore, the EMA is almost always closer to the current price than the SMA.

Which one is more useful? The determining factor is small, but there are large differences once a stock becomes more volatile. The EMA should be used for day/swing trading. The short time frames are factored into the EMA. The SMA is a better indicator if the holding period is several weeks because theEMA is too sensitive to small changes and will give false signals, which makes it less effective for longer periods. **If a moving average does not provide accurate support or resistance guidance, then there is no point in using it.** Not all stocks follow the same moving averages. Here is a sample guideline for which MA's to use:

Long (buy) or Short (sell) trades:

- 10 or 15-day SMA (short-term)
- 20-day SMA (short-term)
- 50-day SMA (intermediate-term)
- 200-daySMA (long-term)

The key point is to make sure the moving averages actually guide a stock. Take a look at Verizon (VZ) in Figure 24 and see how the 20 and 50-day SMA guides the stock almost perfectly. The bottom line: if a stock is about to meet a MA that the stock has used in the past, then there is a very high chance that the stock will react to the MA.

Figure 24. Moving averages for Verizon.

Besides using MAs as support or resistance, MA crossovers can be employed. Many times, when an MA "crosses over" another, that movement generates a buy or sell signal (as with

MRK). The most accurate signals come from shorter time frames because remember, MA's are lagging indicators.

NOTE: When a shorter period MA crosses above a longer period MA, that is considered bullish. When a shorter period MA crosses below a longer period MA, that is considered bearish.

Crash prevention: Here is a recent example of how the 200-day SMA provided early warning to investors/traders that the stock market (The Dow) was about to enter into a downtrend (Figure 25):

**Figure 25. Four year DJIA bar chart.**

Basic Technical Patterns: The Foundation of Common Pattern Identification

History tends to repeat itself, and trend lines, triangles, and other patterns do work in TA. Charts show the collective opinions of all market participants for that day, month, or whatever timeframe that is used. Charts are direct evidence of the trader's beliefs and feelings, and each movement reflects a bit of human emotion (or at least it did before speed trading – HAL9000). So, it should be no surprise that patterns repeat themselves over and over.

In Figure 26 below, typical up trends and down trends are shown. These zigzag patterns are seen all the time, but why do they form? Let's say someone bought a stock at a certain point. If that stock went up, but pulled back to the original purchase price, they will often think that it's an opportunity to buy more at their original price, thus adding to their position. This is also the same for shorts when they are able to short a stock at the same price they shorted previously. Then why do peaks form? People sell (or cover) to take profits. Obviously, any increase in selling will pull the stock back. Those who bought at a lower level may start buying again. This repeats and repeats until 1) there is no more stock left for people to buy, or 2) there is too much supply and not enough buyers. On a larger scale, this is how bull and bear markets begin and end.

Figure 26. Typical up and down trends.
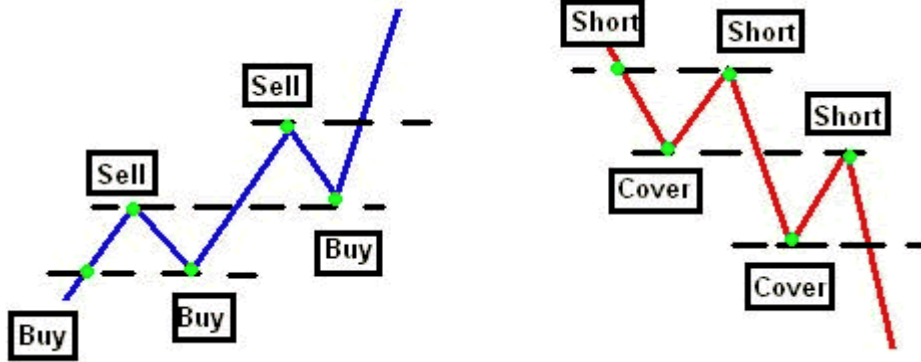
The following basic chart patterns will be covered in this chapter:

- Trends & Trend lines
- Support & Resistance
- Neutral Ranges
- Triangles (Symmetrical, Ascending, Descending)
- Flags, Pennants and Wedges
- Double Tops & Bottoms
- Head & Shoulders
- Cup with Handle
- Entry & Exit Points

- Low Risk Trading
- Selling Short
- Candlesticks
- Summary

Trends & Trend lines

1. An uptrend is drawn from the extreme low of the bar that starts the up trend (Figure 27), up and to the highest minor low point preceding the highest price on the same trend. The key here is that the line drawn must not pass through prices in between the two low points (Figure 27 and Figure 28). The line extends upward past the highest high point.

Figure 27. Trend line drawn correctly.

Figure 28. Trend line drawn incorrectly.

Downtrends lines are drawn exactly opposite of the uptrend lines, where the line is drawn for the highest high to the high prior to the low price of the trend. The line does not pass through price points prior to the lowest low of the trend, but can pass through price point past the lowest low (Figure 29).

Figure 29. Downtrend line of Caterpillar.

How does a trader identify a chance to a trend? When drawing the trend line, the 1) trend line is broken, 2) The trend no longer makes a higher high in an uptrend or lower low in a downtrend. For example, in an uptrend the market sells off but when prices rise again they do not make a higher high, or 3) Prices go below the previous sell-off in an uptrend or go above a previous rally in a downtrend below gives an example.

---

[5] http://education.wallstreetsurvivor.com/images_articles/Trend_reversals_Figure3.jpg

Figure 30. Trend lines and identifing breakdowns.

The trend line on Dryships Inc. was broken 2 (

[6] http://education.wallstreetsurvivor.com/images_articles/Trend_reversals_Figure5.jpg

Figure 30). When prices rebounded they could not make a new high. 3. The price drops below the previous sell-off low. Was the uptrend really broken after these three things happened? Let look at the next part, as the trend change confirmed.

Figure 31. Trend lines and breakdowns continued.

After the previous selloff low (Figure 31; #3) was broken, prices quickly retreated from the $102 price range to the $70 price range.

Support & Resistance

Support is a level where price demand is so strong. The stock will stop its decline, at least temporarily, because there are enough buyers to support the price. Resistance is just the opposite. There are enough sellers at that point that the stock will continue to sell to keep its price from going higher. Figure 32 is an example of the Diamonds (DIA) support and resistance lines:

Figure 32. Support and resistance lines.

---

[7] http://education.wallstreetsurvivor.com/images_articles/Trend_reversals_Figure6.jpg

Jun 26, 2009 : DIA 84.27
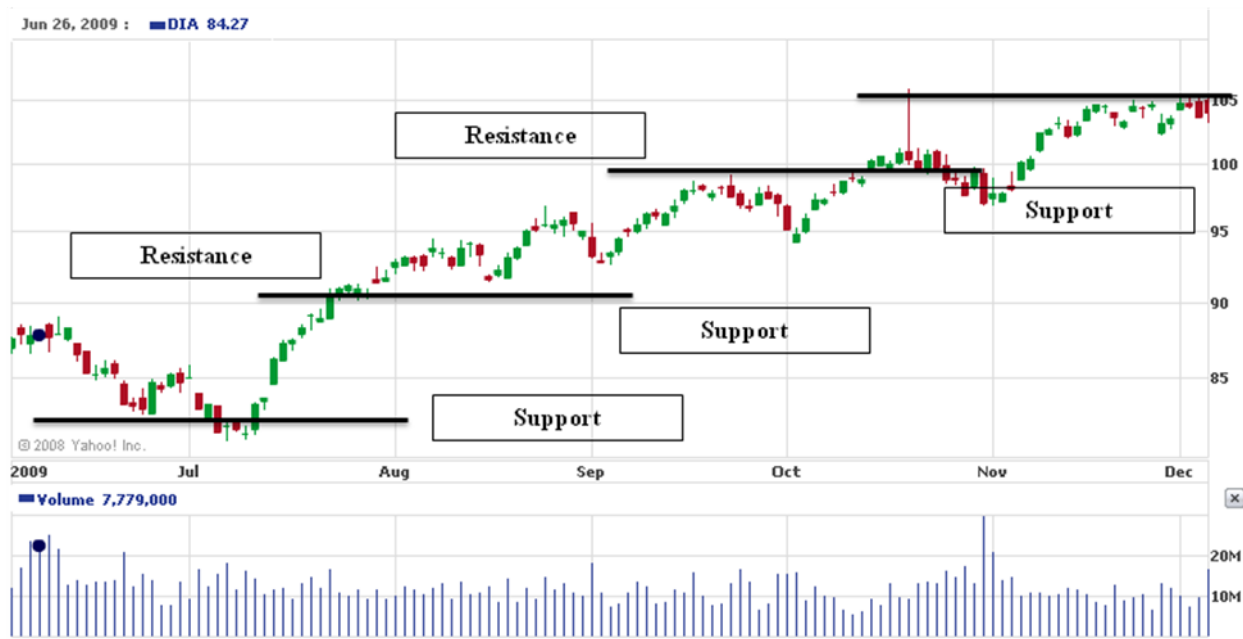
At the start of the chart, there is a clear line of support at $82.5 where the stock bounces off of that line. Then there is a gap up, and then the support moves up. That becomes the support-resistance line. Certain gaps are so powerful that traders who buy at support (or short at resistance) and will join the prevailing direction of a stock's move so that it does not go against them from originally shorting the stock. In Figure 32, the same support line turns into resistance. Notice how the stock cannot break through the $105 level after the resistance line has been breached – That is due to the sellers keeping the stock price down. Many support levels turn into resistance and vice versa.

Neutral Ranges

What happens when a stock is equally bound by support and resistance? That is called a neutral range or a trading range as shown in

Figure 33. Neutral trading ranges.

A trading range signals that supply and demand are in balance. A range is a consolidation pattern, meaning that a stock is waiting to either continue its current trend or reverse it. The winner is determined through a breakout to the upside or a breakdown. In MRK, the can see that the stock broke down below $30 on several occasions, which was the lower range support level.

Triangles: Symmetrical, Ascending, Descending

In addition to trading ranges, there are symmetrical, ascending, and descending triangles. All triangles are consolidation patterns.

Symmetrical triangles are formed when price points form lower highs and higher lows. The easiest way to determine if a stock is in a triangle is to draw mini trend lines and to see if it looks like a symmetrical triangle. The important thing to note here is that daily prices may fluctuate without much movement until a breakout or breakdown occurs. For Choice Hotels (CHH), there is a clear breakout to the upside. Symmetrical triangles, in many cases, have an equal chance for a continuation or a reversal (this one reversed back to the low) (Figure 34).

Figure 34. Symmetrical triangle.

Ascending triangles are different because there is a horizontal resistance line where the highs are constant but the stock is also forming higher lows. Typically this means that the buyers are gaining control (accumulation) as each price point makes a higher low. Ascending triangles are usually continuation patterns and breakout to the upside (Figure 35).

Figure 35. Ascending triangle.

Descending triangles are just the opposite. There is a support line, but the highs are getting lower and lower. This pattern indicates that the sellers are in control. These are bearish continuation formations that typically breakdown. Petrohawk (HK) has broken down considerably below the descending triangle (Figure 36).

**Figure 36. Descending Triangle.**

43

Flags, Pennants and Wedges

Flags are a technical charting pattern that looks like a flag with a mast on either side. Flags result from price fluctuations, within a narrow range, and mark a consolidation before the previous move resumes. Pennant formations are usually treated like flag formations because they are very similar in appearance, tend to show up at the same place in an existing trend, and have the same volume and measuring criteria. Flags and pennants are among the most reliable of continuation patterns and only rarely produce a trend reversal. The only difference between the two patterns is that a flag resembles a parallelogram (or rectangle) marked by two parallel trend lines that tend to slope against the prevailing trend. The pennant, however, is identified by two converging trend lines and more horizontal which resembles a small symmetrical triangle. The important thing to remember is that they are both characterized by diminishing trade volume and though different, the measuring implications are the same for both patterns as demonstrated in the above illustration. A wedge is a technical chart pattern composed of two converging lines connecting a series of peaks and troughs. All formations are shown in Figure 37.

Figure 37. Flags, pennents and wedges.
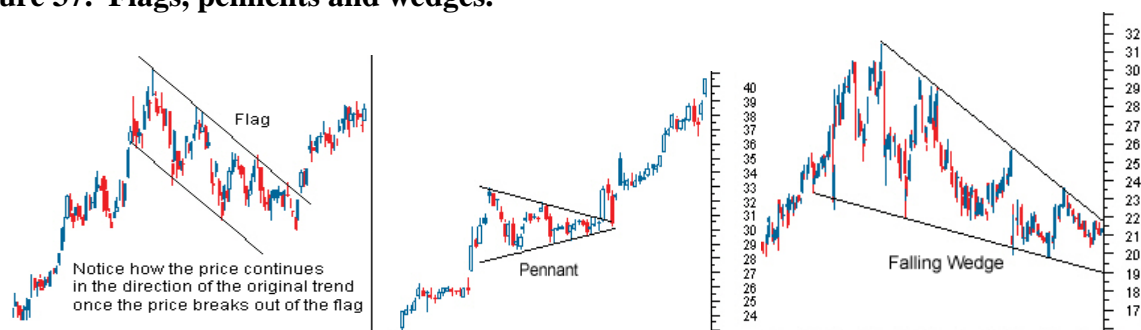
Double Tops & Bottoms

Now, let's look at double tops and double bottoms. A double top is a reversal pattern that forms after an uptrend. The tops are usually similar and there is strong resistance present above GTE's double top in

Figure 38. Double top in GTE.

A double bottom is a reversal pattern that forms after a down trend. It is the complete opposite of a double top and instead of strong resistance, there is strong support. In Figure 39, MEMC (WFR) has formed a double (triple) bottom. Just like the double top, a double bottom is easy to identify.

Figure 39. Double bottom in MEMC.

Head & Shoulders

One of the most popular reversal patterns is the head and shoulders pattern – the one that started the crash of 2008.

A head and shoulders pattern, such as the one for the S&P 500 in Figure 40, is formed with three successive peaks. The left and right shoulders are lower than the head, which is the highest peak. The two shoulders are similar. The pattern is complete when the support level (neckline) for the peaks is broken. The head and shoulders is one of the most reliable long-term reversal signals that exist today.

Figure 40. Head and shoulders pattern.

Cup with a Handle

Below is a chart of Arch Coal (ACI) and shows a perfect example of a cup with handle. A cup with handle pattern was developed by William O'Neil in 1988. He is the founder of Investor's Business Daily. The pattern consists of a cup, which is shaped like a bowl or a rounded bottom, and a handle, which is a small continuation pattern or a flag. The cup with handle pattern together is a highly reliable continuation pattern that signals a breakout may occur imminently to the upside. On ACI's chart, one notes a continued move to the upside following the pattern (

Figure 41).

Figure 41. Cup with handle pattern.

Entry & Exit Points

Technical analysis warns traders and investors when a trend changes against their favor. A trader can use chart patterns and price-volume divergence to join the ranks of the "smart money" that can accumulate long before other traders catch on. Traders accumulated STEC at the bottom of Figure 42, and several entry points were clearly defined for other chartists to get on board (as noted by the green arrows). A trader can identify reversals (red arrows), and know when to exit a position.

Figure 42. Chart showing the entry and exit points for STEC.

Low-Risk Trading

For example, Figure 43 shows consolidations and breakouts of the DIAs, and identifies the difference between standard flags, triangles, wedges, pennants, and other formations and their respective reliability levels. By using these chart formations, a trader knows when to place a trade. In general, a winner is apparent within 1-3 days of a major breakout.

Figure 43. Chart of the DIAs and its breakouts and consolidation pattern.
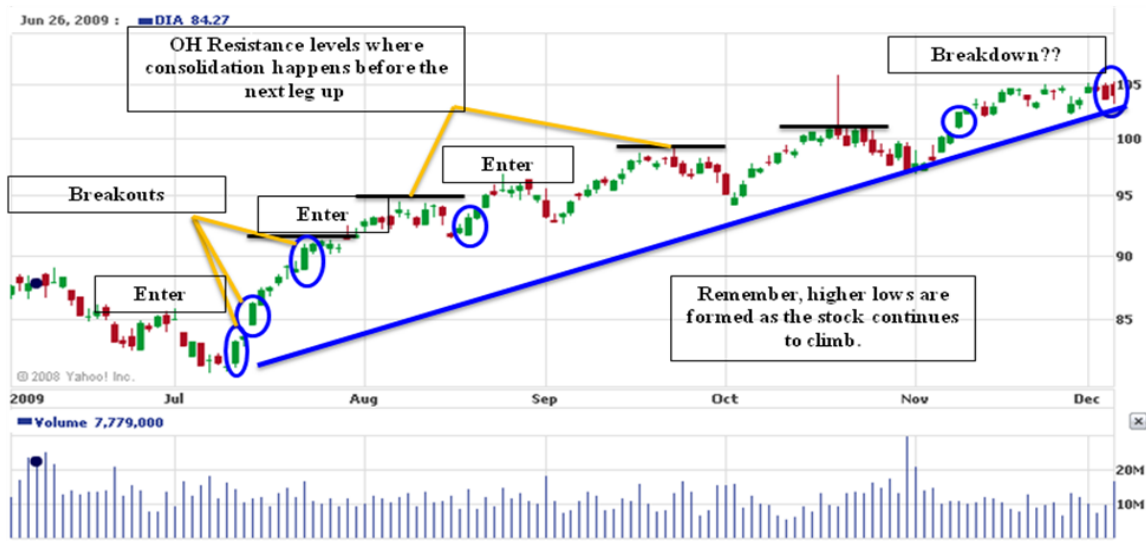
Selling Short

Technical analysis is used not only for buying stocks, but nine out of 10 investors/traders do not know how to sell stocks short, or are afraid to do so. Figure 44 shows the Chevron (CVX) chart and examples of where to sell short using moving averages and bearish engulfing signals:

Figure 44. CVX short selling.

Candlestick Charts

Candlestick charting can assist a trader in identifying warning signs in advance and give enough time to react. The basics are: continuation, and reversal patterns complete with pattern recognition, and some reliability levels. Figure 45 shows a Merck (MRK) candlestick chart.

Figure 45. Candlestick chart of MRK showing different signs.

Summary: Combine Indicators to Support Trading Decisions

There are dozens of indicators that are available to make trading decisions, including MACD, RSI, Stochastics, Money Flow, and many others. This handbook touches on the main indicators.

Figure 46 highlights indicators that can be used to confirm trade decisions for Verizon (VZ):

Figure 46. Indicators for trade decisions.

As with all patterns, remember that a pattern's likely move is based on what has occurred most frequently. There are pattern failures in which case the trader should cut their losses quickly.

Candlestick Charting I: Basic Patterns

Candlestick charting is one of the best ways to understand what a trader should do. Candlesticks outperform many other types of charts because the trader can 1) visually depict stock data easily, 2) establish strong price relationships and 3) catch possible reversals quickly. The basic candlestick is shown in Figure 47.

Figure 47. Chandle sticks.
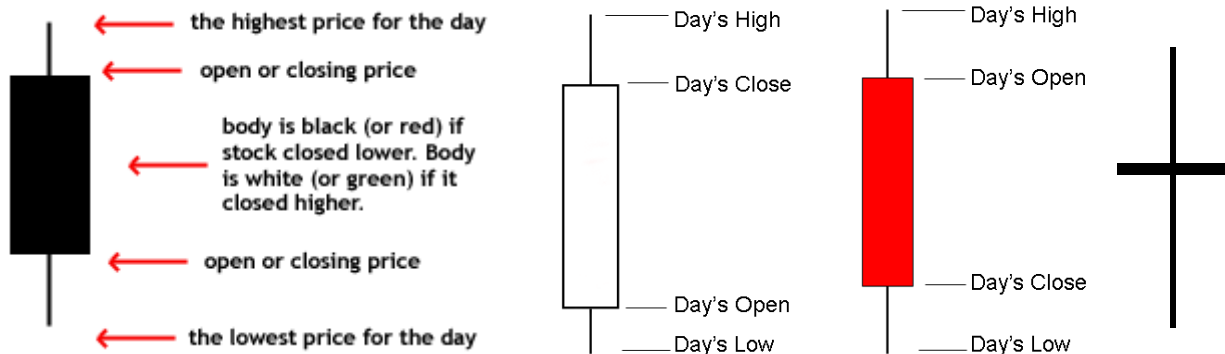
A green or white candle signifies a positive (up) day and a red or black candle signifies a negative (down) day. The forth pattern to the far right is called a doji, which signals indecision, and one of the many basic patterns.

There are 11 categories of basic and major candlestick patterns and are the most common patterns seen in charts (shown in Figure 48). Descriptions will be given for each, along with a real-life example. An indication of the "reliability" levels for each pattern: extremely high, high, medium, low, extremely low will be noted. Below are the categories:

Figure 48. Candlestick patterns.
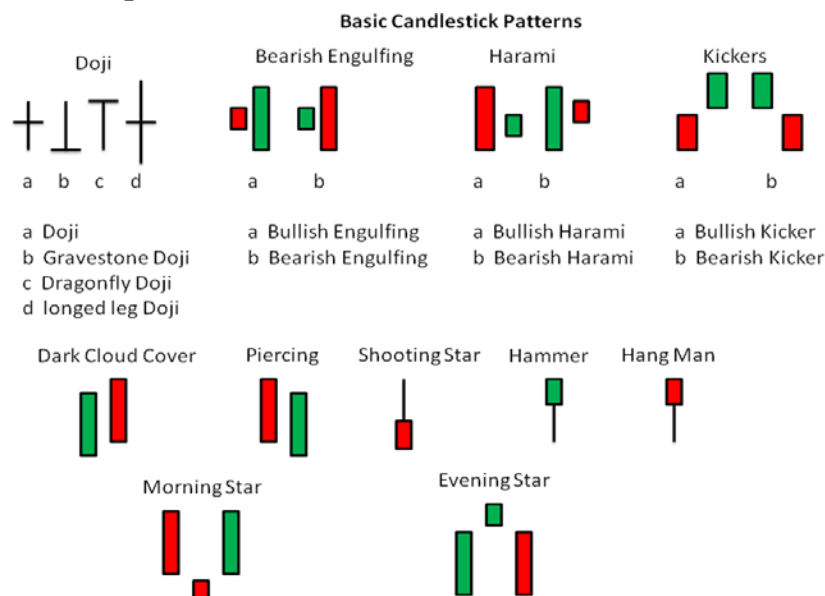
Doji

Doji are a pattern for days where the open and close are identical or nearly identical. The candle will look like a cross and is a primary signal for indecision and a potential reversal. It is important to note that doji in the middle of a trend usually continues the trend, while doji located at the bottom of a trend obviously mark reversals. Whenever a doji is noted, note its location within a chart.

There are three types of doji: gravestone, dragonfly, and long-legged (Figure 49). A gravestone doji simply means that a stock opened at the low of the day, reached a high, but fell back down to close at/near its open at the low of the day. The dragonfly doji is the opposite where a stock opened at the high of the day, reached a low, but bounced back up to close at/near its high of the day. A long-legged doji signals extreme indecision and volatility. Every doji has the potential to signal a sharp and sudden move.

Figure 49. Doji patterns on STEC chart.

Engulfing

Engulfing patterns, both bullish and bearish (

Figure 50), are reversal patterns that may signal the end of a trend. Bullish engulfing patterns have the potential to end a downtrend and bearish engulfing patterns have the potential to end an uptrend. Both patterns are highly reliable in signaling reversals.

Bullish engulfing patterns are formed when a green candle gaps down (opens lower) and closes much higher than the open of the previous day's red candle. If you look at the pattern, you can see how the green candle completely "engulfs" the red candle. This shows that there was intense buying pressure sometime during the day to negate the selling pressure at the open. Bearish engulfing patterns are just the opposite and they are formed when a red candle gaps up (opens higher) and closes much lower than the open of the previous day's green candle. This shows an immediate sentiment change during the day and cancelled out the previous day's gains.

Figure 50. Bullish and bearish engulfing patterns.

Harami

Harami means "pregnant" in Japanese and the term is derived by observing a small candle "within" a larger candle. The long candle is the "mom" and the small candle is the "baby". The second or smaller candle's open and close must both be located within the open-close range of the first or long candle. This pattern is also known as an "inside day". A harami can signal a slowdown in the current trend and a possible reversal. However, the reliability of the pattern is low and it is recommended that the trader waits for the next day to "confirm" a reversal. Figure 51 shows both bullish and bearish haramis.

Figure 51. Bullish and bearish haramis.

Kicker

Kickers are perhaps the most important and powerful reversal signals in candlestick charting. They represent the most dramatic and sudden shift in sentiment. Kicker candles are most

57

commonly compared to breakaway gaps. The longer the candle, the more powerful the price reversal is. These signals have the ability to completely end a trend and start a new one, all in a single day. This is why they are so powerful and of course, their reliability is extremely high.

A bullish kicker (Figure 52) is formed when the first candle is red and the second candle is green but the open and close of the green candle exceeds the open-close range of the previous day's red candle. This is because the gap up is forceful to the upside. The bearish kicker is just the opposite where a red candle gaps down so hard, that the open-close range are well below the open-close range of the previous day's green candle.

Figure 52. Bullish kicker.

Dark Cloud Cover

The dark cloud cover is a bearish reversal signal (Figure 53) consisting of a green and red candle. The red candle must gap up (open higher) above the green candle and then the bar turns into a red candle and must close at least 50% below the mid-point of the green candle. The dark cloud cover's reliability is medium.

Figure 53. Dark cloud cover.

Piercing

The piercing pattern is the opposite of the dark cloud cover and it is a bullish reversal pattern ([Figure 54](#)). This pattern also consists of a green and red candle but the green candle must gap down (open lower) below the red candle. This green candle must close at least 50% above the mid-point of the red candle. The piercing pattern's reliability is medium.

Figure 54. Piercing pattern.

Shooting Star

The shooting star is a bearish reversal pattern ([Figure 55](#)). It consists of a green candle and during the day it was a long candle, but for some reason, there was a sell-off that "shaved down" the long candle by at least 2/3 (this is flexible and can be less). This means that the candle opened up, reached a high, but closed near its open. The candle is still above the previous day's candle. The shooting star is an ***extremely reliable*** pattern to determine high-probability tops.

Figure 55. Shooting star pattern.

Hammer & Hanging Man

Both patterns are reversal patterns (Figure 56). The Hammer occurs at the bottom of a downtrend and a hanging man occurs at the top of an uptrend. What happens is that these candles open, sell off during the day but somehow manage to rally back close to their open. The shadow has to be at least 2/3rds larger than the body of the candle. The term "hanging man" is exactly what it is…a man hanging. Both patterns have *high reliability*.

Figure 56. Hammer and hanging man in STEC chart.

Morning Star

The morning star is a bullish reversal pattern at the end of a downtrend. This is a three candle formation with the first candle being red, the second neutral, and the third, green. The second candle can be anything, but in most cases, it is a doji. What happens here is that the downtrend is exhausted and there is a lack of sellers pressuring the stock down. The second day, being an indecisive day, becomes "middle ground". If the bulls win the next day, the green candle completes the morning star pattern. The third candle must close at least 50% above the mid-point of the red candle.

The morning star (

Figure 57), and its counterpart, the evening star, are two of the ***most highly reliable reversal patterns in candlestick charting***. The failure rates are extremely low and the morning star and evening star are two of the most sought-after patterns by technicians.

Figure 57. Morning star pattern on Goldman Sachs.

Evening Star

The evening star (Figure 58) is the complete opposite of the morning star and it is a bearish reversal pattern. At the end of an uptrend, the stock exhausts itself and may form a doji top, signaling a stalemate between the bulls and bears. This is an indication that the majority of traders have bought the stock if there is no price progress made. The third candle, a red one, indicates panic-driven selling as a result of a lack of buyers. The downtrend usually continues for quite some time. Opposite of the morning star, the third red candle must close at least 50% below the mid-point of the green candle.

Figure 58. Evening Star in Merck chart.

In summary, the basic and common candlestick patterns that happen have been covered. Next, several more advanced candlestick patterns will completed to aid in the understanding of the major continuation, reversal, secondary and tertiary signals.

Playing the Gap: Identifying and Trading Gaps

Gaps are very profitable technical indicators. A gap is an area on a chart where no trades take place and these are caused by fundamental or technical events that usually occur after the market closes and before the market opens, also known as 'non-regular trading hours' (NRTH's). There are four basic gap types: area, continuation, breakaway and exhaustion.

Gaps are significant for many reasons:

1. Gaps tell traders that something occurred during NRTH's. Typical events include: earnings announcements, FDA approvals, analyst upgrades/downgrades, company press releases and other significant events that may cause investors and traders to place orders to buy or sell during NRTH's, causing an order imbalance.

2. The type of gap will help you determine the probability of the stock's direction in the short and intermediate term.

3. Gaps are profitable. Traders can take advantage of the imbalance of orders by either "catching the momentum" or "fading the gap". When riding a gap, the traders are betting that the stock will continue in the direction it gapped. When a trader fades a gap, they are betting that the gap will "fill" and move opposite of the gap's opening direction.

Types of Gaps:

Area Gaps

Area gaps are usually small and unimportant. They are also referred to as "common gaps" because they occur so frequently. Characteristics of area gaps are that they are fill very quickly. When the word "fill" is used, traders are referring to the gap's closure. The gaps usually occur in trading ranges and they form on very low volume. Because of the low buying volume of the stock, the gap cannot sustain itself, thus filling relatively quickly.

The easiest way to determine if a gap will fill is to watch the first 30 minutes of the day. If the candlesticks appear to be fading in the opposite direction, it's very difficult to stop it. This is because many others see the same fade and will jump on board. Remember, a gap does not have to fill on the same day of the gap. These types of gaps are unpredictable and are hard to trade.

an example of an area gap:

Figure 59. Area gap.

Continuation Gaps

Continuation gaps are extremely important because they "continue" a trend. They are also known as "runaway" or "measuring" gaps and they do not fill quickly. These gaps mark a very large interest level in buying or selling a stock. These gaps can continue an existing uptrend or downtrend and they must be accompanied by above average volume. The reason why they are called measuring gaps is because many technicians believe that these gaps mark the halfway point of a trend. The gaps are usually self-fulfilling prophesies as a rush of buyers or sellers get into or out of a stock anticipating additional moves in their present direction. Figure 60 are examples of continuation gaps:

Figure 60. Continuation gap.

Breakaway Gaps

Equally important, breakaway gaps do exactly that. They break away from the current trend and start a new one (also known as Kickers). They can end an entire uptrend or down trend in a single day. The characteristic of a breakaway gap is that the candle/bar must breakout from a congestion area and the volume must be extremely high. Because these gaps start a new trend, many of these gaps do not fill for months. Figure 61 shows an example of a breakaway gap.

Figure 61. Breakaway gaps.

Exhaustion Gaps

Just as a breakaway gap can start a new trend and a continuation gap can continue it, an exhaustion gap effectively kills the trend and marks the end of it, usually in a single day. What should happen is that a stock is in a continuous and extended uptrend (or downtrend) and the stock makes one final massive gap up (or down) and profit-taking (or a sell-off) ensues all day long. Exhaustion gaps are the most volatile of all gaps and reversals take place instantly. Whenever you see an exhaustion gap, it's either time to sell (if you're long) or cover (if you're short).

Figure 62 shows an example of an exhaustion gap.

Figure 62. Exhaustion gap.

Strategy

Area Gaps – Day trade or short swing trade. Experienced traders should trade these gaps.
Continuation Gaps – Buy during uptrend, short during downtrend (multi-week position trade).
Breakaway Gaps – Trade in the direction of the gap (multi-week/multi-month position trade).
Exhaustion Gaps – Sell long positions immediately, cover short positions immediately.

When to Buy (Short) and Sell (Cover)

Some traders say buy the gap. Others say wait a few days and allow it to consolidate. The higher potential risk would be the first statement and the lower risk would be the second. Most traders should wait a few days to see if the stock consolidates normally, instead of chasing a stock. This nearly ensures that your entry is timed correctly.

Where are some areas where gaps occur frequently? 1) Trend lines, notably at support and resistance, 2) moving averages, and 3) breakouts (or breakdowns) from patterns. Each area of technical analysis complements each other and so it's necessary to use everything learned together when making a trade.

When exiting a position, it depends if the particular target is met so that the exit is voluntary or if a gap has broken down, forcing an exit. A general rule is if a gap starts to fill, then it's time to get out.

How to Find Trading Gaps

Instead of looking at thousands of charts a day, the best way to find gaps is to use stock screeners. Here is the link: http://stockcharts.com/def/servlet/SC.scan. Toward the bottom of the "Technical Indicators" section, the following can be found: Gaps up/down, runaway (continuation) gaps, and breakaway gaps, etc. Make it a daily habit to inspect this stock screener for profitable gaps.

Conclusion

Don't fight the general market trend. If the market is heading lower but you see a continuation gap up in a certain stock, it's advisable to not buy it in most cases. As with all technical patterns, there are failures and the easiest failures come from ignoring the general market direction. Since 3 out of 4 stocks follow the market, any gaps can fade toward the direction of the market, so don't go against the trend.

High-Reliability Reversal Signals

Figure 63 shows four of the most highly-reliable reversal signals that every long should look at charts: evening star, shooting star, bearish engulfing and bearish gap up.

Figure 63. Signals for reversals.
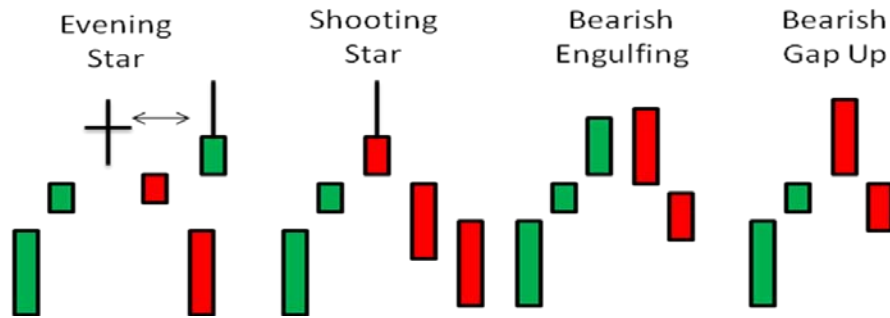
Evening Stars are one of the most reliable reversal patterns available as the failure rate is low. Evening stars suggest that the rally is slowing because the open-close range decreases. The doji at the top signals an end to the rally and a struggle ensues between bulls and bears as to the direction of the stock. This doji day is a critical candlestick because the **next day** will most likely continue in the direction. There is a very high chance that the stock price will drop the next day. Should that occur, the evening star pattern is confirmed, as a long white candle, the doji in the middle (or a large tail above a green , followed by a down red candle. Figure 64 shows two evening star examples:

Figure 64. Evening star patterns.

Patterns will fail, so strict risk management and controls must be in place to handle these types of failures which is why TAers initiate small positions or wait for confirmation.

Shooting Stars is a favorite pattern to TAers. It was named by the Japanese rice futures traders as they noted it look like a star falling down to Earth. It's an ominous signal that a stock price will drop. The failure rate is extremely low, but is higher than an Evening Star pattern. A shooting star day displays a gap up in the trading day, but for some reason is unable to hold its intra-day highs, and falls back near its close. From the open to its high, the shooting star is formed when at least 2/3rd's of the day's gains are gone. Figure 65 shows an example of a shooting star.

Figure 65. Shooting star.

Bearish Engulfing patterns are just as reliable as shooting stars, but not much so than Evening Stars. Still, bearish engulfing is a warning to traders that sentiment has almost entirely changed from the previous day. What happens here is that the first day opens and closes well over its open but on the next day, the stock gaps up and drops like a rock throughout the day and the open-close range penetrates so deep that it completely engulfs the previous day. This action basically cancels out yesterday entirely and shows that something happened that made investors/traders to dump the stock right after they bought it. Take a look at Verizon (VZ) below (Figure 66):

Figure 66. Bearish engulfing.

Another signature bearish bet is the Bearish Belt Hold. These are stops that gapped up considerably but sold off throughout the day, closing well below its open. The gap is usually not filled on the same day. This pattern represents the ultimate change in extreme sentiment because investors/traders were excited, and the stock continues to be bought, even after-hours and pre-market the next day. The stock, though, falls back, and even can move lower than before the jump. Figure 67 displays examples of the Bearish Belt Hold:

Figure 67. Bearish belt hold and examples.

SPWRA (SunPower Corp.) Nasdaq GM

DNDN (Dendreon Corp.) Nasdaq GM

Patterns fail, so cut losses QUICKLY if this does occur (

Figure 68).

Figure 68. Failure of Bearish belt hold pattern.

Breakouts & Breakdowns

The first area to look at is the general market, and whether it is trending up or down. Other key factors such as volume and any one-day reversals are also important. But when a breakout or breakdown occurs in the chart, it is important to understand the reasons for it. The STEC chart in Figure 69: Notice the one-day breakdown that occurred on September 17. Competition entered the market for STEC, and signals to a trader that they can short. If a technician didn't add positions on that day, they could have added them in the next two days. By the second and final rally day after the breakdown, the technician would have noticed that the rally was weak. After the first breakdown, there was another chance to short. Additional shorting opportunities occurred on the few days, only to result in another breakdown. Flags, high-and-tight flags, sloped flags, pennants, symmetrical, ascending/ and descending triangles and other forms of consolidation can be used to strengthen a hypothesis before a breakout or breakdown occurs.

Figure 69. STEC chart showing a breakdown pattern.

Breakouts

The MRK chart in (

Figure 70) displays a measured-move type of breakout. Note that each consolidation is a ranged flag that acts as a step to a move higher strike price. If MRK cannot make a new high and breaks down, a trader could then short it. Notice how MRK nicely bounces around the 50-day MA several times, so a trader can use the moving averages as resistance lines.

Figure 70. Breakouts.

Bank of America (BAC) shows a different type of chart ([Figure 71](#)). Notice the sharp spikes that are called high-and-tight flags (that form after large spikes) and down sloping flags (As long as the flag's low doesn't close below the opening price of breakout, the trend should hold).

Figure 71. High and tight flags.

Breakdowns

Breakdown patterns exhibit the same patterns as they do with breakouts. Usually, the flags spend about the same time consolidating; however, many times they do breakdown quicker since the market falls about 40-70%+ faster than it rises.

Note the range flags that form in consolidation pattern of STEC Inc (STEC) in [Figure 72](#). These patterns are informative because once a breakdown occurs, a 5-10%+ cushion is formed. In

other words, if a stock breaks down, but an island reversal forms and the stock price gaps up, the trader should be close to breakeven.

Figure 72. Breakdowns.

In July 2008, Arch Coal (ACI) formed a one-day breakdown and then started the first flag (Figure 73). This automatically should give reason to put ACI on a watch list. The ensuing rally is weak and thus waits a few days before making a decision – as traders may step in to cover their shorts. After the first breakout, this stock presented no more concerns for me. Once a big break occurs, very, very, very few stocks make it back up in a short amount of time. Therefore, lookout for the breakdowns and watch them closely. In addition, ACI is also managed to form an island reversal (IR). An IR is when a stock gaps in one direction, consolidates, and gaps in the opposite direction, forming an "island". This reversal pattern is one of the most reliable patterns known to chartists.

Figure 73. Breakdown with island.

Take notice of the general market trend, the stock of interest, and then look for consolidation patterns as well as support areas (for breakdowns). The technician does not want to get caught in the beginning of a possible rally.

Petrohawk (HK) formed a double top and broke the 50-day MA (Figure 74). Notice that the market gives ample opportunity to short. Just because a stock broke down doesn't mean it's too late. Notice the long flag on HK and how it bounced at the 200-day MA and then bounced right to the neckline.

Figure 74. Double top pattern.

Figure 75 is a chart of LG Display Co. (LPL). Bear markets fall much faster as a series of small flags (most are only 2-4 days long).

Figure 75. Wedge and flags.

[8] http://2.bp.blogspot.com/_NOVV_qpBVl4/SNEEAnzIgrI/AAAAAAAAAfw/E9Qm_9RxjiQ/s1600-h/MDR.png

Bucyrus International (BUCY) formed a slanted triple top (this is not a head-and-shoulders because the height of the head doesn't exceed the shoulders) ([Figure 76](#)). A few things to observe on the chart is: 1) the inability for the second top to make a new high, 2) the large one-day breakdown following the top, 3) the weak rally afterwards, and finally, 4) the strong gap down signaling the end for BUCY. BUCY has been churning at the 50-day MA for 5 months, and that's usually a long time.

Figure 76. Triple top.

CNET formed a head-and-shoulder pattern over a 6 month period ([Figure 77](#)).

Figure 77. Head and shoulders.
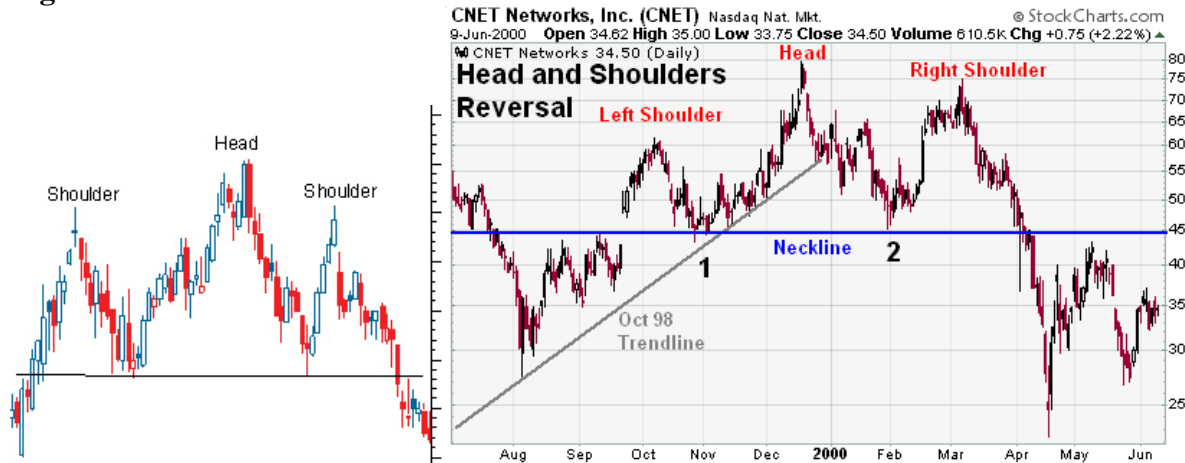
Gran Tierra Energy (GTE) formed double-top-head-and-shoulders ([Figure 78](#)). GTE could be added to a watch list on the first break of the 50-day MA and short within 2-days inside the flag, but do not short on the break has a 50/50 chance of moving in the opposite direction. Do not chase stock prices moving up, and do not short any gap downs in excess of 25% as the infamous dead cat bounce[9] may form or a huge short-covering rally may form the next day, gapping the stock up. Theses bounces are known to take out shorts many times over who chased a stock down or followed a gap down.

---

[9] A temporary recovery from a prolonged decline or bear market, after which the market continues to fall.

Figure 78. Double top head and shoulders.

How to Trade Power Spikes

Trading power spikes are a TAers's favorite pattern. A stock exhibiting a power spike is one that displays an immediate and forceful change in sentiment from the previous day. Whatever the reason, traders instantly changed their minds on the direction of the stock (Figure 79).

Figure 79. Power spikes and VeraSun.

There are basically two ways to trade spikes:

1) If a stock that spiked the previous day looks like it will gap up in today's session, then the buying momentum is highly likely to be maintained throughout the day or allow you enough margin to set a stop in case of an intra-day sell off.

2) If a stock that spiked the previous day looks like it will gap down in today's session, then the selling momentum is highly likely to be maintained throughout the day or allow you enough margin to set a stop in case of an intra-day rally.

Guidelines:

a. A short can be held until there is an up day where the open and close cancels out the previous day's open and close. This is a candle of equal or greater length than the previous day.

b. Add a stop as anything can happen.

c. For stocks exhibiting #1 where the stock continues to go up, up, and away, then there will be a day where it will form a bearish gap up, doji, or bearish engulfing pattern, all three of which are prominent reversal patterns.

d. Spikes are unstable and many will fail. Stocks that rise too quickly in a very short period of time will reverse quickly and end up close to where they started.

e. Spikes will meet resistance and make a successful or failed test just like regular patterns.

These trades typically yield an average of 15-30% and the average holding period is 3-5 days.

References & Games

Game for those that want to practice is at http://chartgame.com/

For technical trading gaps: http://stockcharts.com/def/servlet/SC.scan