

The Wyckoff Method: Trading and Investing in Stocks

Anyone who buys or sells stock, a bond, or a commodity for profit speculates if he employs intelligent foresight. If he does not, he is gambling. Richard D. Wyckoff was an American pioneer in technical stock analysis. Richard Wyckoff's first instruction to students on his stock analysis method, published in the 1930s, was quite simple and specific—forget all the decision-making factors you have ever used. All you need to know is in the table of stock prices and volumes in your daily newspaper. With this back-to-basics approach, Wyckoff promised to show his students "the real rules of the game" played so adroitly by well-heeled investors with enough capital to pack clout in the market. Although it's hard to imagine anything, especially a stock market technique, remaining viable from the 1930s to the 1980s, the Richard D. Wyckoff Method of Trading and Investing in Stocks has survived the times as a classic. Whatever it lacks in glamour and gee-whiz in this computerized age, it makes up for by giving its users a solid foundation for analyzing the fundamental relationships among the market's primary forces. In this respect, it's like the pearls and basic black dress in a woman's wardrobe. It can be embellished but not antiquated. Take a look at Wyckoff's goals—to select only stocks that will move soonest, fastest, and farthest in bear or bull markets; to limit losses and let profits run; and to make the most efficient use of investment capital. Hardly an antiquated outlook. It is also a universal theory. The premises are applicable to any open market—stocks, bonds, options, or commodities. David Weis of Memphis, Tenn., editor of the Elliott Wave Commodity Letter, has relied on the Wyckoff method in his commodities trading and analysis for 15 years. "It opened Pandora's box for me," he says. "It gave me a way of understanding what was going on," unlike the other analysis methods that came his way when he became a broker/analyst. A client making large sums of money introduced Weis to Wyckoff's method, and Weis has put the method's premises through every trial. "I promise you those principles are still applicable to today's markets," he says. His only supplement to the Wyckoff method is the Elliott Wave principle, for its added insights into the way price movements unfold. I'm not interested in anything else," he explains. "I don't need anything more." The Wyckoff method also struck a chord with a Seattle bond trader who discovered the method several years ago in mid-career. The trader, who today manages a \$20 million

portfolio, had read voraciously, but found that Wyckoff's view of the market as if a single investor controlled it described his own experiences with market behavior.

"It didn't matter to me if it was bonds or gold or stocks," he said, "Wyckoff described it in a way that made sense to me. I had already been through it, I'd seen it." So he adopted Wyckoff's volume analysis and basic attitudes toward trend tops, bottoms, and corrections.

Wyckoff, himself, was intrigued by the stock market. He learned the market from the bottom up, when experience was the only teacher. His first job in 1888 was as a 15-year-old stock runner, scurrying back and forth on Wall Street, delivering and exchanging securities and payments for a brokerage firm. By 1898, he had advanced to auditor of another brokerage firm and made his first \$1,000 profit in the stock market selling 300 shares of a company with a new product—a pneumatic horse collar. At the age of 25, he opened his own brokerage office.

He had seen "appalling losses in securities suffered annually by millions of people who do not realize what they are risking and have an amazingly small knowledge of the market." He sent daily letters on market conditions to his clients and turned his research and writing into a monthly magazine in 1907. As a broker, he saw the behind-the-scenes plays of the large operators and realized "it was possible to judge the future course of the market by its own action . . . that the action of stocks reflected the plans and purposes of those who dominated them. . . that the basic law of Supply and Demand governed all price changes; that the best indicator of the future course of the market was the relation of supply to demand."

" . . . the best indicator of the future course of the market was the relation of supply to demand."

He published the first technical analysis method of its kind in 1908 and, at the insistence of his readers, began publishing weekly forecasts in 1911, employing charts of price and volume movements for his analysis. Wyckoff pooh-poohed analysts who used their charts as a kind of Rorschach test, searching for tell-tale shapes and formations that would signal whether to buy, sell, or hold steady. "Stock market technique is not an exact science," he would tell his students. "Stock prices are made by the minds of men." In his estimation, mechanical or purely mathematical chart analyses could not compete with finely honed and practiced judgment.

Wyckoff also shunned brokers' offices, financial reports, news items, earnings reports, tips, rumors, and "the half-baked trading theories expounded in boardrooms and popular books on the stock market." To his way of thinking, an analyst should be a detective uncovering the forces behind price and volume fluctuations, a market psychologist weighing the human motivations that fuel those moves, and a general planning a financial campaign to intercept stocks when the charts show them to be at their most profitable stages.

Wyckoff's popularity as an analyst grew by leaps and bounds. Even when he tried to limit the size of his following by nearly doubling the price of his publication, the subscriptions totaled \$60,000 in six weeks. By his own account, he "made a great deal of money for myself and my clients and subscribers who numbered in excess of 200,000" before his health began to fail, and he completely turned his publications and advisory services over to his associates in 1928.

When his method was published as a correspondence course in 1931, he called it "the cream of what I have learned in 40 years of active experience in Wall Street." His method rests squarely on the law of supply and demand. When demand for a stock exceeds supply, prices rise; when supply is greater than demand, prices decline. He likens the stock market ticker tape to a movie: "Every minute of the day it is demonstrating whether supply or demand is the greater."

Wyckoff's method charts price, volume and their relationship over time to judge how the market, groups of stocks and individual issues are reacting to the supply-and-demand tug of war. The search is for turning points—the final top of a rising bull market, the final low in a declining bear market and the crests or troughs of the intermediate and minor moves that come in between.

He is guided by the fact that every change in the market consists of waves of buying and selling that last just so long as they can attract a following. When the following is exhausted for the time being, the wave ends, and a contrary wave sets in. Small daily waves build into larger 3-to-5-point waves, which eventually build into the bull and bear market swings of 10 to 20 points or more.

He acts in harmony with a wave, not against it, and only if the wave is a significant one. His philosophy on accumulating stock is to buy on the down wave and ride through the small-to-medium rising waves until you see an especially strong, breaking wave. Then sell.

Complete mastery of the Wyckoff method means working both sides of the waves—covering all shorts and going long at the bottom of a panic, depression, or intermediate bear swing, as well as selling out all long stocks and going short at the top of a boom or an intermediate bull movement. Gauging these critical turning points in the Wyckoff method is not so much a strict application of mathematics as it is an application of investor psychology. At the heart of Wyckoff's analysis is the knowledge that traders and investors are influenced by tips, news items, rumors, earnings analyses, financial reports, dividend rates, and myriad other sources of information. It isn't important to Wyckoff which of these prompts a buy or sell order—all individual actions boil down to market behavior, as if the fluctuations were the result of one person's investment operation, a 'composite' investor. Wyckoff visualized this composite investor because he knew there were usually one or more large operators working in every stock. Sometimes there are many." In his day, wealthy individuals or well-informed insiders could fill the role. Today, insurance companies investing millions of premium dollars and institutional investors managing pension funds are 'large operators' whose decisions impact the market simply by the magnitude of their investments.

Wyckoff studied his charts to uncover the motives of these large investors with enough capital to exert a force on the price of stocks and ultimately the entire market. He was not interested in their identity, only in their game plan. When large operators disclose their anticipation of price advances or declines with their purchases or sales, they signal events to come in the market or an individual stock. Wyckoff's method is built on three basic types of charts—Vertical Line (Bar), Figure (Point & Figure), and one he developed, the Wave chart. Vertical Line charts (Figure 1) record an individual stock, group, or composite average's high, low, and closing prices, plus their volume. From vertical line charts, investors following the Wyckoff method can determine the direction in which prices are moving, the most opportune time for buying, selling, or closing out, and at what prices to place their stop orders. Figure (Point & Figure) charts (Figure 2) follow price changes only from one whole point to the next, focusing on price level while ignoring time. From these, Wyckoff's investors forecast the approximate number of points a stock, a group of stocks, or the composite averages should move.

"Complete mastery of the Wyckoff method means working both sides of the wares...."

His Wave chart (Figure 3) records the aggregate price of at least five leading stocks, much like stock index bar charts today. These choices are not permanent. The group is adjusted to

include stocks that are continuously active in an industry and indicate real leadership. The wave chart gives investors a means of detecting critical points in the market's travel from one wave to another, frequently warning of coming changes days before they are apparent in the composite averages. At the very minimum, an investor experienced in the Wyckoff method can follow the stock market with a daily financial newspaper, a notebook, and an hour a day in a quiet place. "The best results I ever had in judging the market and trading," writes Wyckoff, "were when I could devote only one hour a day to study of the market, planning my campaigns and giving instructions." Obviously, investment capital isn't a prerequisite to studying the Wyckoff method. Practicing trades on paper is free, and Wyckoff is a staunch advocate of practicing now or losing money in the long run. Even initiates who feel they have graduated from paper trading are advised by Wyckoff to begin their investing with small, equal lots of the three, five, 10, or 20 best stocks indicated by the charts. Many times, as the years go by, we forget how or why we got to our current trading technique. Many times, too, an investor who wants to enter technical analysis is bewildered by the choices of methodology or is unfamiliar with the principles guiding the schools of thought. Wyckoff's method is valuable in either situation, and in the next months, we will take you through it, step by step. We'll look in-depth at his charts, apply them to modern stock market activity, walk through each of his buying and selling tests, and work on the finer points of market activity and actual transactions. Our aim, as Wyckoff said, is to show you the "real" rules of the game.

Glossary

Short Sale of an investment instrument not yet owned in the hope of making a covering purchase later at a lower price, thereby making a profit.

Long—Obtaining ownership of an investment instrument such as a security, futures contract, or option (as a call).

Cover—to offset or neutralize a prior transaction, such as buying an equivalent number of shares and delivering against a short position.

Accumulate a line—Adding to a previous market position.

Issue-- A class of ownership such as common stock, bond, option, or contract.

Trade-- The act or process of buying and/or selling.

Price-- The amount of money for which an issue is bought or sold.

Volume-- The number of issues traded over a specific time period, such as a day.

Stop or Stop Loss Order-- Instructions to buy or sell an issue when its market price meets or exceeds a specified price.

Bear-- One who expects a decline in market prices (short).

Bull-- One who expects a rise in market prices (long).

“...all the fluctuations in the market and in all the various stocks should be studied as if they were the result of one man’s operations. Let us call him the Composite Man, who, in theory, sits behind the scenes and manipulates the stocks to your disadvantage if you do not understand the game as he plays it; and to your great profit if you do understand it.”

Richard Demille Wyckoff (1873–1934) was an early 20th-century pioneer in the technical approach to studying the stock market. He is considered one of the five “titans” of technical analysis, along with Dow, Gann, Elliott, and Merrill. At age 15, he took a job as a stock runner for a New York brokerage. Afterwards, while still in his 20s, he became the head of his own firm. He also founded and, for nearly two decades, wrote and edited *The Magazine of Wall Street*, which, at one point, had more than 200,000 subscribers. Wyckoff was an avid student of the markets, as well as an active tape reader and trader. He observed the market activities and campaigns of the legendary stock operators of his time, including JP Morgan and Jesse Livermore. From his observations and interviews with those big-time traders, Wyckoff codified the best practices of Livermore and others into laws, principles, and techniques of trading methodology, money management, and mental discipline. From his position, Mr. Wyckoff observed numerous retail investors being repeatedly fleeced. Consequently, he dedicated himself to instructing the public about “the real rules of the game” as played by the large interests, or “smart money.” In the 1930s, he founded a school which would later become the Stock Market Institute. The school's central offering was a course that integrated the concepts that Wyckoff had learned about how to identify large operators' accumulation and distribution of stock with how to take positions in harmony with these big players. His time-tested insights are as valid today as they were when first articulated.

This article provides an overview of Wyckoff's theoretical and practical approaches to the markets, including guidelines for identifying trade candidates and entering long and short positions, analysis of accumulation and distribution trading ranges, and an explanation of how to use Point and Figure charts to identify price targets. Although this article focuses exclusively on stocks, Wyckoff's methods can be applied to any freely traded market in which large institutional traders operate, including commodities, bonds, and currencies.

A Five-Step Approach to the Market

The Wyckoff Method involves a five-step approach to stock selection and trade entry, which can be summarized as follows:

Determine the present position and probable future trend of the market. Is the market consolidating or trending? Does your analysis of market structure, supply, and demand indicate the direction that is likely in the near future? This assessment should help you decide whether to be in the market at all and, if so, whether to take long or short positions. Use both bar charts and Point and Figure charts of the major market indices for Step 1.

Select stocks in harmony with the trend. In an uptrend, select stocks that are stronger than the market. For instance, look for stocks that demonstrate greater percentage increases than the market during rallies and smaller decreases during reactions. In a downtrend, do the reverse – choose stocks that are weaker than the market. If you are not sure about a specific issue, drop it and move on to the next one. Use bar charts of individual stocks to compare with those of the most relevant market index for Step 2.

Select stocks with a “cause” that equals or exceeds your minimum objective. A critical component of Wyckoff's trade selection and management was his unique method of identifying price targets using Point and Figure (P&F) projections for both long and short trades. In Wyckoff's fundamental law of “Cause and Effect,” the horizontal POINT AND FIGURE count within a trading range represents the cause, while the subsequent price movement represents the effect. Therefore, if you are planning to take long positions, choose stocks that are under accumulation or re-accumulation and have built a sufficient cause to satisfy your objective. Step 3 relies on the use of Point and Figure charts of individual stocks.

Determine the stocks' readiness to move. Apply the nine tests for buying or for selling (described below). For instance, in a trading range after a prolonged rally, does the evidence

from the nine selling tests suggest that significant supply is entering the market and that a short position may be warranted? Or in an apparent accumulation trading range, do the nine buying tests indicate that supply has been successfully absorbed, as evidenced further by a low-volume spring and an even lower-volume test of that spring? Use bar charts and Point and Figure charts of individual stocks for Step 4.

Time your commitment with a turn in the stock market index. Three-quarters or more of individual issues move in harmony with the general market, so you improve the odds of a successful trade by having the power of the overall market behind it. Specific Wyckoff principles help you anticipate potential market turns, including a change of character of price action (such as the largest down-bar on the highest volume after a long uptrend), as well as manifestations of Wyckoff's three laws (see below). Put your stop-loss in place and then trail it, as appropriate, until you close out the position. Use bar and Point and Figure charts for Step 5.

Wyckoff's "Composite Man"

Wyckoff proposed a heuristic device to help understand price movements in individual stocks and the market as a whole, which he dubbed the "Composite Man."

"...all the fluctuations in the market and in all the various stocks should be studied as if they were the result of one man's operations. Let us call him the Composite Man, who, in theory, sits behind the scenes and manipulates the stocks to your disadvantage if you do not understand the game as he plays it; and to your great profit if you do understand it."

Wyckoff advised retail traders to try to play the market game as the Composite Man played it. In fact, he even claimed that it doesn't matter if market moves "are real or artificial; that is, the result of actual buying and selling by the public and bona fide investors or artificial buying and selling by larger operators." (The Richard D. Wyckoff Method of Trading and Investing in Stocks, section 9M, p. 2) Based on his years of observations of the market activities of large operators, Wyckoff taught that: The Composite Man carefully plans, executes, and concludes his campaigns. The Composite Man attracts the public to buy a stock in which he has already accumulated a sizeable line of shares by making many transactions involving a large number of shares, in effect advertising his stock by creating the appearance of a "broad market."

One must study individual stock charts with the purpose of judging the behavior of the stock and the motives of those large operators who dominate it. With study and practice, one can acquire the ability to interpret the motives behind the action that a chart portrays. Wyckoff and his associates believed that if one could understand the market behavior of the Composite Man, one could identify many trading and investment opportunities early enough to profit from them.

According to Wyckoff, the market can be understood and anticipated through detailed analysis of supply and demand, which can be ascertained from studying price action, volume, and time. As a broker, he was in a position to observe the activities of highly successful individuals and groups who dominated specific issues; consequently, he was able to decipher, via the use of what he called vertical (bar) and figure (Point and Figure) charts, the future intentions of those large interests. An idealized schematic of how he conceptualized the large interests' preparation for and execution of bull and bear markets is depicted in the figure below. The time to enter long orders is towards the end of the preparation for a price markup or bull market (accumulation of large lines of stock), while the time to initiate short positions is at the end of the preparation for a price markdown.

Three Wyckoff Laws

Wyckoff's chart-based methodology rests on three fundamental "laws" that affect many aspects of analysis. These include determining the market's and individual stocks' current and potential future directional bias, selecting the best stocks to trade long or short, identifying the readiness of a stock to leave a trading range, and projecting price targets in a trend from a stock's behavior in a trading range. These laws inform the analysis of every chart and the selection of every stock to trade.

1 - The law of supply and demand

...determines the price direction. This principle is central to Wyckoff's method of trading and investing. When demand is greater than supply, prices rise, and when supply is greater than demand, prices fall. The trader/analyst can study the balance between supply and demand by comparing price and volume bars, as well as rallies and reactions, over time. This law is deceptively simple; learning to accurately evaluate supply and demand on bar charts and to understand the implications of supply and demand patterns takes considerable practice.

2 - The law of cause and effect

...helps the trader and investor set price objectives by gauging the potential extent of a trend emerging from a trading range. Wyckoff's "cause" can be measured by the horizontal point count in a Point-and-Figure chart, while the "effect" is the distance price moves corresponding to the point count. This law's operation can be seen as the force of accumulation or distribution within a trading range, as well as how this force works itself out in a subsequent trend or movement up or down. Point-and-Figure chart counts are used to measure a cause and project the extent of its potential effect. (See "Point-and-Figure Count Guide" below for an illustration of this law.)

3 - The law of effort versus result

...provides an early warning of a possible change in trend in the near future. Divergences between volume and price often signal a change in the direction of a price trend. For example, when there are several high-volume (large effort) but narrow-range price bars after a substantial rally, with the price failing to make a new high (little or no result), this suggests that big interests are unloading shares in anticipation of a change in trend.

Analyses of Trading Ranges

One objective of the Wyckoff method is to improve market timing when establishing a position in anticipation of a coming move where a favorable reward/risk ratio exists. Trading ranges (TRs) are places where the previous trend (up or down) has been halted and there is relative equilibrium between supply and demand. Institutions and other large professional interests prepare for their next bull (or bear) campaign as they accumulate (or distribute) shares within the Trading Range. In both accumulation and VD distribution Trading Ranges, the Composite Man is actively buying and selling - the difference being that, in accumulation, the shares purchased outnumber those sold, while, in distribution, the opposite is true. The extent of accumulation or distribution determines the cause that unfolds in the subsequent move out of the Trading Range.

Wyckoff Schematics

A successful Wyckoff analyst must be able to anticipate and correctly judge the direction and magnitude of the move out of a Trading Range. Fortunately, Wyckoff offers time-tested guidelines for identifying and delineating the phases and events within a Trading Range,

which, in turn, provide the basis for estimating price targets in the subsequent trend. These concepts are illustrated in the following four schematics: two depicting common variants of accumulation Trading Ranges, followed by two examples of distribution Trading Ranges.

Accumulation Wyckoff Events

Preliminary Support—preliminary support, where substantial buying begins to provide pronounced support after a prolonged down-move. Volume increases and price spread widens, signaling that the down-move may be approaching its end.

Selling Climax—selling climax, the point at which widening spread and selling pressure usually climaxes, and heavy or panicky selling by the public is being absorbed by larger professional interests at or near a bottom. Often, price will close well off the low in a Selling Climax, reflecting the buying by these large interests.

Automatic Rally—automatic rally, which occurs because intense selling pressure has greatly diminished. A wave of buying easily pushes prices up; this is further fueled by short covering. The high of this rally will help define the upper boundary of an accumulation Trading Range.

Secondary Test—secondary test, in which the price revisits the area of the Selling Climax to test the supply/demand balance at these levels. If a bottom is to be confirmed, volume and price spread should be significantly diminished as the market approaches support in the area of the Selling Climax. It is common to have multiple STs after a Selling Climax.

Test— Large operators always test the market for supply throughout a Trading Range (e.g., STs and springs) and at key points during a price advance. If considerable supply emerges on a test, the market is often not ready to be marked up. A spring is often followed by one or more tests; a successful test (indicating that further price increases will follow) typically makes a higher low on lesser volume.

Sign Of Strength is a sign of strength, a price advance on increasing spread, and relatively higher volume. Often, a Sign Of Strength takes place after a spring, validating the analyst's interpretation of that prior action.

LPS—last point of support, the low point of a reaction or pullback after a Sign Of Strength. Backing up to a Last Point of Support means a pullback to support that was formerly

resistance, on diminished spread and volume. On some charts, there may be more than one Last Point of Support, despite the ostensibly singular precision of this term.

BU—"back-up". This term is short-hand for a colorful metaphor coined by Robert Evans, one of the leading teachers of the Wyckoff method from the 1930s to the 1960s. Evans analogized the Sign of Strength to a "jump across the creek" of price resistance, and the "backup to the creek" represented both short-term profit-taking and a test for additional supply around the area of resistance. A back-up is a common structural element preceding a more substantial price mark-up, and can take on a variety of forms, including a simple pullback or a new Trading Range at a higher level.

Note:

Springs or shakeouts usually occur late within a Trading Range and allow the stock's dominant players to make a definitive test of available supply before a markup campaign unfolds. A "spring" takes price below the low of the Trading Range and then reverses to close within the Trading Range; this action allows large interests to mislead the public about the future trend direction and to acquire additional shares at bargain prices. A terminal shakeout at the end of an accumulation Trading Range is like a spring on steroids. Shakeouts may also occur once a price advance has started, with rapid downward movement intended to induce retail traders and investors in long positions to sell their shares to large operators. However, springs and terminal shakeouts are not required elements: Accumulation Schematic 1 depicts a spring, while Accumulation Schematic 2 shows a Trading Range without a spring.

Phase A: Phase A marks the stopping of the prior downtrend. Up to this point, supply has been dominant. The approaching diminution of supply is evidenced in preliminary support (Preliminary Support) and a selling climax (Selling Climax). These events are often very obvious on bar charts, where widening spread and heavy volume depict the transfer of huge numbers of shares from the public to large professional interests. Once these intense selling pressures have been relieved, an automatic rally (Automatic Rally), consisting of both institutional demand for shares as well as short-covering, typically ensues. A successful secondary test (Secondary Test) in the area of the Selling Climax will show less selling than previously and a narrowing of spread and decreased volume, generally stopping at or above the same price level as the Selling Climax. If the Secondary Test goes lower than that of the Selling Climax, one can anticipate either new lows or prolonged consolidation. The lows of the Selling Climax

and the Secondary Test and the high of the Automatic Rally set the boundaries of the Trading Range. Horizontal lines may be drawn to help focus attention on market behavior, as seen in the two Accumulation Schematics above.

Sometimes the downtrend may end less dramatically, without climactic price and volume action. In general, however, it is preferable to see the Preliminary Support, Selling Climax, Automatic Rally, and Secondary Test, as these provide not only a more distinct charting landscape but a clear indication that large operators have definitively initiated accumulation. In a re-accumulation Trading Range (which occurs during a longer-term uptrend), the points representing Preliminary Support, Selling Climax, and Secondary Test are not evident in Phase A. Rather, in such cases, Phase A resembles that more typically seen in distribution (see below). Phases B-E generally have a shorter duration and smaller amplitude than, but are ultimately similar to, those in the primary accumulation base.

Phase B: In Wyckoffian analysis, Phase B serves the function of “building a cause” for a new uptrend (see Wyckoff Law #2 – “Cause and Effect”). In Phase B, institutions and large professional interests are accumulating relatively low-priced inventory in anticipation of the next markup. The process of institutional accumulation may take a long time (sometimes a year or more) and involves purchasing shares at lower prices and checking advances in price with short sales. There are usually multiple STs during Phase B, as well as upthrust-type actions at the upper end of the Trading Range. Overall, the large interests are net buyers of shares as the Trading Range evolves, with the goal of acquiring as much of the remaining floating supply as possible. Institutional buying and selling imparts the characteristic up-and-down price action of the trading range. Early on in Phase B, the price swings tend to be wide and accompanied by high volume. As the professionals absorb the supply, however, the volume of downswings within the trading range tends to diminish. When it appears that the supply is likely to have been exhausted, the stock is ready for Phase C.

Phase C: It is in Phase C that the stock price goes through a decisive test of the remaining supply, allowing the “smart money” operators to ascertain whether the stock is ready to be marked up. As noted above, a spring is a price move below the support level of the Trading Range (established in Phases A and B) that quickly reverses and moves back into the Trading Range. It is an example of a bear trap because the drop below support appears to signal resumption of the downtrend. In reality, though, this marks the beginning of a new uptrend,

trapping the late sellers (bears). In Wyckoff's method, a successful test of supply represented by a spring (or a shakeout) provides a high-probability trading opportunity. A low-volume spring (or a low-volume test of a shakeout) indicates that the stock is likely to be ready to move up, so this is a good time to initiate at least a partial long position. The appearance of a Sign Of Strength shortly after a spring or shakeout validates the analysis. As noted in Accumulation Schematic #2, however, the testing of supply can occur higher up in the Trading Range without a spring or shakeout; when this occurs, identifying Phase C can be challenging.

Phase D: If we are correct in our analysis, what should follow is the consistent dominance of demand over supply. This is evidenced by a pattern of advances (Signals of Strengths) on widening price spreads and increasing volume, as well as reactions (Last Point of Supports) on smaller spreads and diminished volumes. During Phase D, the price will move at least to the top of the Trading Range. The last point of support in this phase is generally excellent for initiating or adding to long, profitable positions.

Phase E: In Phase E, the stock leaves the Trading Range, demand is in full control, and the markup is obvious to everyone. Setbacks, such as shakeouts and more typical reactions, are usually short-lived. New, higher-level Trading Ranges comprising both profit-taking and acquisition of additional shares ("re-accumulation") by large operators can occur at any point in Phase E. These Trading Ranges are sometimes called "stepping stones" on the way to even higher price targets.

PSY—preliminary supply, where large interests begin to unload shares in quantity after a pronounced up-move. Volume expands and price spread widens, signaling that a change in trend may be approaching.

BC—buying climax, during which there are often marked increases in volume and price spread. The force of buying reaches a climax, with heavy or urgent buying by the public being filled by professional interests at prices near the top. A Buying Climax often coincides with a great earnings report or other good news, since the large operators require huge demand from the public to sell their shares without depressing the stock price.

AR—automatic reaction. With intense buying substantially diminished after the Buying Climax and heavy supply continuing, an Automatic Rally takes place. The low of this selloff helps define the lower boundary of the distribution Trading Range.

Secondary Test—secondary test, in which the price revisits the area of the Buying Climax to test the demand/supply balance at these price levels. For a top to be confirmed, supply must outweigh demand; volume and spread should thus decrease as price approaches the resistance area of the Buying Climax. A Secondary Test may take the form of an upthrust (UT), in which price moves above the resistance represented by the Buying Climax and possibly other STs before quickly reversing to close below resistance. After UT, price often tests the lower boundary of the Trading Range.

SOW is a sign of weakness, observable as a down move to (or slightly past) the lower boundary of the Trading Range, usually occurring on increased spread and volume. The Automatic Rally and the initial SOW(s) indicate a change of character in the stock's price action: supply is now dominant.

LPSY—last point of supply. After testing support on SOW, a feeble rally on a narrow spread shows that the market is having considerable difficulty advancing. This inability to rally may be due to weak demand, substantial supply, or both. LPSYs represent exhaustion of demand and the last waves of large operators' distribution before markdown begins in earnest.

UTAD—upthrust after distribution. A UTAD is the distributional counterpart to the spring and terminal shakeout in the accumulation Trading Range. It occurs in the latter stages of the Trading Range and provides a definitive test of new demand after a breakout above Trading Range resistance. Analogous to springs and shakeouts, a UTAD is not a required structural element: the Trading Range in Distribution Schematic #1 contains a UTAD, while the Trading Range in Distribution Schematic #2 does not.

Phase A: Phase A in a distribution Trading Range marks the stopping of the prior uptrend. Up to this point, demand has been dominant, and the first significant evidence of supply entering the market is provided by preliminary supply (PSY) and the buying climax (BC). These events are usually followed by an automatic reaction (Automatic Rally) and a secondary test (Secondary Test) of the Buying Climax, often upon diminished volume. However, the uptrend may also terminate without climactic action, instead demonstrating exhaustion of demand with decreasing spread and volume; less upward progress is made on each rally before significant supply emerges.

In a redistribution Trading Range within a larger downtrend, Phase A may look more like the start of an accumulation Trading Range (e.g., with climactic price and volume action to the downside). However, Phases B through E of a re-distribution Trading Range can be analyzed in a similar manner to the distribution Trading Range at the market top.

Phase B: The function of Phase B is to build a cause in preparation for a new downtrend. During this time, institutions and large professional interests are disposing of their long inventory and initiating short positions in anticipation of the next markdown. The points about Phase B in distribution are similar to those made for Phase B in accumulation, except that the large interests are net sellers of shares as the Trading Range evolves, with the goal of exhausting as much of the remaining demand as possible. This process leaves clues that the supply/demand balance has tilted toward supply instead of demand. For instance, SOWs are usually accompanied by significantly increased spread and volume to the downside.

Phase C: In distribution, Phase C may reveal itself via an upthrust (UT) or UTAD. As noted above, a UT is the opposite of a spring. It is a price move above Trading Range resistance that quickly reverses and closes in the Trading Range. This is a test of the remaining demand. It is also a bull trap—it appears to signal the resumption of the uptrend but in reality is intended to “wrong-foot” uninformed break-out traders. A UT or UTAD allows large interests to mislead the public about the future trend direction and, subsequently, sell additional shares at elevated prices to such breakout traders and investors before the markdown begins. In addition, UTAD may induce smaller traders in short positions to cover and surrender their shares to the larger interests who have engineered this move.

Aggressive traders may wish to initiate short positions after a UT or UTAD. The risk/reward ratio is often quite favorable. However, the “smart money” repeatedly stops out traders who initiate such short positions with one UT after another, so it is often safer to wait until Phase D and an LPSY.

Often demand is so weak in a distribution Trading Range that price does not reach the level of the Buying Climax or initial Secondary Test. In this case, Phase C's test of demand may be represented by a UT of a lower high within the Trading Range.

Phase D: Phase D arrives after the tests in Phase C, which show us the last gasps of demand. During Phase D, price travels to or through the Trading Range support. The evidence that

supply is clearly dominant increases either with a clear break of support or with a decline below the mid-point of the Trading Range after a UT or UTAD. There are often multiple weak rallies within Phase D; these LPSYs represent excellent opportunities to initiate or add to profitable short positions. Anyone still in a long position during Phase D is asking for trouble.

Phase E: Phase E depicts the unfolding of the downtrend; the stock leaves the Trading Range, and supply is in control. Once Trading Range support is broken on a major SOW, this breakdown is often tested with a rally that fails at or near support. This also represents a high-probability opportunity to sell short. Subsequent rallies during the markdown are usually feeble. Traders who have taken short positions can trail their stops as the price declines. After a significant down-move, climactic action may signal the beginning of a re-distribution Trading Range or of accumulation.

Supply and Demand Analysis

Analysis of supply and demand on bar charts, through examination of volume and price movements, represents one of the central pillars of the Wyckoff method. For example, a price bar that is widely spread, closes at a high well above those of the previous several bars, and is accompanied by higher-than-average volume suggests the presence of demand. Similarly, a high-volume price bar with a wide spread, closing at a low well below the lows of prior bars, suggests the presence of supply. These simple examples belie the extent of the subtleties and nuances of such analysis. For instance, labeling and understanding the implications of Wyckoff events and phases in trading ranges, as well as ascertaining when the price is ready to be marked up or down, is based largely on the correct assessment of supply and demand. Wyckoff's first and third laws described above (Supply and Demand and Effort versus Result) embody this core approach. Conventional wisdom of much technical analysis (and basic economic theory) accepts one of the obvious insights of the law of Supply and Demand: when demand to buy shares exceeds sell orders at any time, price will advance to a level where demand decreases and/or supply increases to create a new (transient) equilibrium. The converse is also true: when sell orders (supply) exceed buy orders (demand) at any time, equilibrium will be restored (temporarily) by a price decline to a level where supply and demand are in balance. Wyckoff's third law (Effort versus Result) involves identifying price-volume convergences and divergences to anticipate potential turning points in price trends. For example, when volume (Effort) and price (Result) both increase substantially, they are in

harmony, suggesting that demand will likely continue to propel prices higher. In some instances, however, volume may increase, possibly even substantially, but the price does not follow, producing only a marginal change at the close. If we observe this price-volume behavior in a reaction to support in an accumulation trading range, this indicates absorption of supply by large interests, and is considered bullish. Similarly, a huge volume on a rally with minimal price advance in a distribution trading range demonstrates a stock's inability to rally because of the presence of significant supply, also from big institutions. Several reactions in the AAPL chart below illustrate the Law of Effort versus Result.

In this chart of AAPL, we can observe the principle of Effort versus Result in three price reactions. In the first, we see prices falling at a number of widespread bars and volume increasing. This suggests a harmony between volume (Effort) and the decline in price (Result). In the second reaction, price decreases by a similar amount as in Reaction #1, but on smaller spreads and lower volume, indicative of reduced supply, which in turn suggests the potential for at least a short-term rally. In Reaction #3, the swing size decreases, yet volume increases. In other words, the Effort increases while the Result decreases, showing the presence of large buyers absorbing supply in anticipation of a continuation of the rally.

Comparative Strength Analysis

Wyckoff's stock selection process always included an analysis of comparative strength. To identify candidates for long positions, he looked for stocks or industries that were outperforming the market, both during trends and within trading ranges, whereas with short positions, he looked for underperformers. All of his charting, including bar and Point and Figure charts, was done by hand. Therefore, he conducted his comparative strength analysis between a stock and the market, or between a stock and others in its industry, by placing one chart under another, as in the example below. Wyckoff compared successive waves or swings in each chart, examining the strength or weakness of each in relation to prior waves on the same chart and to the corresponding points on the comparison chart. A variation of this approach is to identify significant highs and lows and note them on both charts. One can then evaluate the strength of the stock by looking at its price relative to the previous high(s) or low(s), doing the same thing on the comparison chart. In these charts of AAPL and the NASDAQ composite index (\$COMPX), AAPL is making a lower high at point #3 (relative to point #1), whereas the \$COMPX is making a higher high at that point. This shows that AAPL is

underperforming the market at point #3. The picture changes in February: AAPL is starting to outperform the market by making a higher high at point #5 and a higher low at #6 relative to the market, which is making a lower high at point #5 and a lower low at point #6. In his stock selection, Wyckoff would enter long positions in stocks that showed similar strength relative to the market, assuming that these candidates met other criteria as well, as discussed in the Nine Buying/Selling Tests, below. Modern Wyckoff practitioners can utilize the Relative Strength Ratio between a stock and a market proxy to compare points of strength and weakness. In fact, the use of the Relative Strength Ratio can more easily eliminate potential inaccuracies due to the existence of different price scales between a stock and its relevant market index.

Nine Buying/Selling Tests

Whereas the three Wyckoff laws provide a big-picture foundation for the Wyckoff method, the nine buying and selling tests are a set of narrower, specific principles to help guide trade entry. These tests help delineate when a trading range is drawing to a close and a new uptrend (markup) or downtrend (markdown) is about to begin. In other words, the nine tests define the line of least resistance in the market. Below is a listing of the nine buying tests and nine selling tests, including the references to which kind of chart should be used. Wyckoff Buying Tests for Accumulation - Downside price objective accomplished – POINT AND FIGURE chart Preliminary support, selling climax, secondary test - Bar and POINT AND FIGURE charts Activity bullish (volume increases on rallies and diminishes during reactions) – Bar chart Downward stride broken (that is, supply line or downtrend line penetrated) - Bar or POINT AND FIGURE chart Higher lows - Bar or POINT AND FIGURE chart Higher highs - Bar or POINT AND FIGURE chart Stock stronger than the market (that is, stock more responsive on rallies and more resistant to reactions than the market index) - Bar chart Base forming (horizontal price line) – Bar or POINT AND FIGURE chart Estimated upside profit potential is at least three times the loss if the initial stop-loss were hit – POINT AND FIGURE and bar charts. Wyckoff Selling Tests for Distribution - Upside objective accomplished - POINT AND FIGURE chart Activity bearish (volume decreases on rallies and increases on reactions) - Bar and POINT AND FIGURE charts Preliminary supply, buying climax - Bar and POINT AND FIGURE charts Stock weaker than the market (that is, more responsive than the market on reactions and sluggish on rallies) - Bar chart Upward stride broken (that is, support line or uptrend line penetrated) - Bar or POINT

AND FIGURE chart Lower highs - Bar or POINT AND FIGURE chart Lower lows - Bar or POINT AND FIGURE chart Crown forming (lateral movement) - POINT AND FIGURE chart Estimated downside profit potential is at least three times the risk for if the initial stop-order were hit - POINT AND FIGURE and bar charts.

The downtrend in this example of AAPL concludes with Preliminary Support (Preliminary Support), a Selling Climax (Selling Climax), an Automatic Rally (Automatic Rally), and a Secondary Test (Secondary Test), which combine to satisfy Test #2. Volume contracts throughout the trading range, and prices start to make higher highs and higher lows – this shows a decrease and absorption of supply and ease of upward movement, despite decreasing demand. Once supply has been exhausted, price can rise on lower demand than one might otherwise expect. Such activity is bullish and satisfies Test #3. The downward stride and downtrend channel have been broken, and price consolidates in the trading range – Test #4 is satisfied. In February-April 2009, AAPL made higher highs and higher lows, all of which were stronger than the market. This satisfies Tests #5, 6, and 7. The stock has spent six months consolidating and has built a cause sufficient for a substantial future advance. The base is formed, satisfying Test #8. Note that tests #1 and #9 could only be met through the use of POINT AND FIGURE charts. Guidelines for horizontal counting in a trading range are discussed in the following section of this article. Wyckoff Point and Figure (POINT AND FIGURE) Count Guide Wyckoff developed a uniquely effective method to identify price targets for both long and short trades using Point and Figure (P&F) charts. This method embodies Wyckoff's fundamental law of Cause and Effect, where the horizontal POINT AND FIGURE count within a trading range represents the Cause and the subsequent price movement out of the trading range represents the Effect. The Wyckoff Count Guide shows the trader how to calculate the cause built during a trading range so as to be able to project future price targets. The process consists of the following: Use a bar chart and a POINT AND FIGURE chart encompassing the same trading range(s) and timeframe. Choose an appropriate box size for the POINT AND FIGURE chart: e.g., for low-priced stocks, the box size could be 0.5 to 1 point, whereas for high-priced (> \$200) stocks, a box size of 5 points would be more appropriate. The box size for the Dow Jones Industrial Average could be 100 points. After identifying a sign of strength (Sign Of Strength) towards the right side of the Trading Range on the bar chart, locate the last point at which support was met on a reaction—the last point of support (LPS). Locate this point on

your POINT AND FIGURE chart also, and count from right to left at the price level of the Last Point of Support, taking your most conservative count first and moving further to the left as the move progresses. These increments in counts should be based on phases corresponding to specific Wyckoff events within the Trading Range. In moving to the left, turn to your bar chart and divide the area of accumulation into phases, adding one complete phase at a time. Note that POINT AND FIGURE phases are NOT the same as Phases A–E used in the analysis of trading ranges described in previous sections on Accumulation and Distribution. Never add only part of a POINT AND FIGURE phase to your count. Volume and price action will usually show where the phase began and ended. For instance, the first phase can consist of the POINT AND FIGURE count from the Last Point of Support back to the spring, while the second phase covers the count from the spring to a clearly defined Secondary Test. In the case of a longer-term count involving multiple POINT AND FIGURE phases, the Last Point of Support often appears at the original level of preliminary support or the Selling Climax. When the Last Point of Support occurs at either of these levels, this tends to validate the count. A spring may also serve as the Last Point of Support from the perspective of the POINT AND FIGURE count. Usually, a spring is followed by a Sign Of Strength, and the law of the reaction following that Sign Of Strength is also a valid LPS. As the trend progresses, you will often see price consolidation, or a new trading range, forming at a higher (or, in a downtrend, lower) level. Very often, this will produce a “stepping stone confirming count” of the original POINT AND FIGURE count. Thus, as the new Trading Range forms, you can often get a timing indication by watching the action of the stock as the potential count begins to confirm the original count. In other words, as the price target projected from the stepping-stone Trading Range approaches that of the original Trading Range, the upward or downward trend may be ready to resume. Because the price swings within these stepping-stone consolidations are typically narrower than those in primary accumulation or distribution Trading Ranges, it is preferable to use a smaller box size to measure POINT AND FIGURE counts within the former. For example, long-term counts on three-point and five-point charts are frequently confirmed by subsequent minor counts using a one-point chart in re-accumulation Trading Ranges.

For longer-term price targets, you should add the POINT AND FIGURE count to the exact low of the trading range in which the count is being measured, as well as to the halfway point between the low and the price level of the count line. You will thus be using the most

conservative count(s) as a guide so as to estimate more realistic minimum price targets. Price targets derived from Wyckoff POINT AND FIGURE counts represent points where you should “stop, look, and listen.” These targets should never be looked upon as exact points of where a trend will change; instead, they should be used as projected points where a turn could occur. Additionally, you can use the bar chart to observe the price action and volume as these points are approached. In the case of three-point or five-point charts, the same count line should be used for one-point charts. Wyckoff's chart-based methodology rests on three fundamental “laws” that affect many aspects of analysis. These include determining the market's and individual stocks' current and potential future directional bias, selecting the best stocks to trade long or short, identifying the readiness of a stock to leave a trading range, and projecting price targets in a trend from a stock's behavior in a trading range. These laws inform the analysis of every chart and the selection of every stock to trade. Conclusion: The pioneering work of Richard D. Wyckoff in the early twentieth century was centered around the realization that stock price trends were driven primarily by institutional and other large operators who manipulate stock prices in their favor. Many professional traders today use Wyckoff's method, but his overall approach is still not widely followed among retail traders, even though his educational efforts were intended to teach the public the “real rules of the game.” Nonetheless, his stock selection and investment methodology have stood the test of time, largely due to their thorough, systematized, and logical structure for identifying high-probability and highly profitable trades. The discipline involved in this approach allows the investor to make informed trading decisions unclouded by emotion. Using Wyckoff's method, one can invest in stocks by capitalizing on the intentions of the large “smart money” interests, rather than being caught on the wrong side of the market. Attaining proficiency in Wyckoff analysis requires considerable practice, but it is well worth the effort.

Visual templates for market timing decisions

Introduction This article will explain and discuss applications of the Three Schematics used in the Wyckoff Method of Technical Analysis. It will build upon and extend the “Wyckoff Laws and Tests” article that appeared in the STA's journal in November 2004 (Issue No 51). That article examined the first part of the Wyckoff Equation – the analytical, digital half which consists of “check lists” for the “three laws” and “nine tests”. The Wyckoff Schematics will complete the Wyckoff picture by introducing students of technical analysis to the visual half

of the Wyckoff equation. For each of the three Schematics – one for accumulation and two for distribution – there will be an idealised representation of the Schematic. On top of each Schematic there will appear alphabetical and numerical annotations that refer to Wyckoff's interpretations of key phases and junctures found during the evolution of accumulation or distribution. Many of these annotations reflect the work of Mr. Robert G. Evans. It was Mr. Evans who carried on the teaching of the Wyckoff Method after the death of Mr. Wyckoff in 1934. Mr. Evans was a creative teacher who was a master at explaining Wyckoff via analogies. The Schematic principles will then be applied to charts of Nokia. (These were real-time charts used by the authors during conferences in Stockholm, Sweden in October 2004 and in Malmo, Sweden during June 2005. Finally, this article will explain how the use of Wyckoff Schematics may be extended. The authors have long observed that an accumulation schematic had been missing. This missing schematic would be the accumulation counterpart of the distribution schematic of declining types within a trading range. A new schematic for accumulation has, therefore, been developed to fill the gap in Wyckoff schematics.

1. ACCUMULATION and DISTRIBUTION An objective of the Wyckoff Method of technical analysis is to improve market timing when establishing a speculative position in anticipation of a coming move where a favourable reward/risk ratio exists to justify taking that position. Trading Ranges (TRs) are places where the previous move has been halted and there is relative equilibrium between supply and demand. It is here within the TR that campaigns of accumulation or distribution develop in preparation for the coming move. It is this force of accumulation or distribution that can be said to build a cause which unfolds in the subsequent move. The building up of the necessary force takes time and because during this period the price action is well defined, trading ranges present particularly good trading opportunities with potentially very favourable reward/risk parameters. To be successful, however, we must be able to correctly anticipate the direction and magnitude of the coming move out of the trading range. Fortunately, Wyckoff offers us some guidelines and models by which we can examine a trading range.

ACCUMULATION Schematic 1 is a basic Wyckoff model for accumulation. While this basic model does not offer a schematic for all the possible variations in the anatomy of the TR, it does provide a representation of the important Wyckoff principles, often evident in an area of accumulation, and the identifiable phases used to guide our analysis through the TR toward

our taking of a speculative position. SCHEMATIC 1 Accumulation Schematic Phases A through E: Phases through which the Trading Range passes as conceptualised by the Wyckoff method and explained in the text. Lines A and B... define support of the Trading Range. Lines C and D... define resistance of the Trading Range. (PS) preliminary Support is where substantial buying begins to provided pronounced support after a prolonged downmove Volume and spread widen and provide a signal that the downmove may be approaching its end. (SC) Selling Climax... the point at which widening spread and selling pressure usually climaxes and heavy or panicky selling by the public is being absorbed by larger professional interests at prices near a bottom. (AR) Automatic Rally... selling pressure has been pretty much exhausted. A wave of buying can now easily push up prices which is further fuelled by short covering. The high of this rally will help define the top of the trading range. (STs) Secondary Test(s)... revisit the area of the Selling Climax to test the supply demand balance at these price levels. If a bottom is to be confirmed, significant supply should not resurface, and volume and price spread should be significantly diminished as the market approaches support in the area of the SC. The "CREEK" is an analogy to a wavy line of resistance drawn loosely across rally peaks within the trading range. There are of course minor lines of resistance and more significant ones that will have to be crossed before the market's journey can continue onward and upward. Springs or Shakeouts usually occur late within the trading range and allow the market and its dominant players to make a definitive test of available supply before a markup campaign will unfold. If the amount of supply that surfaces on a break of support is very light (low volume), it will be an indication that the way is clear for a sustained advance. Heavy supply here will usually mean a renewed decline. Moderate volume here may mean more testing of support and to proceed with caution. The spring or shakeout also serves the purpose of providing dominant interests with additional supply from weak holders at low prices. Jump Across the Creek (JAC) is a continuation of the creek analogy of jumping resistance and is a good sign if done on good spread and volume – a sign of strength (SOS). Sign of Strength (SOS)... an advance on good (increasing) spread and volume. Back Up (BU) to a Last Point of Support (LPS) – a pull back to support (that was resistance) on diminished spread and volume after a SOS. This is good place to initiate long positions or to add to profitable ones. Note: A series of SOS's and LPS's is good evidence that a bottom is in place and Price Markup has begun.

Phase A In Phase A, supply has been dominant and it appears that finally the exhaustion of supply is becoming evident. This is illustrated in Preliminary Support (PS) and the Selling Climax (SC) where widening spread often climaxes and where heavy volume or panicky selling by the public is being absorbed by larger professional interests. Once selling pressure is exhausted, an Automatic Rally (AR) ensues the selling climax. A Secondary Test on the downside usually involves less selling than on the SC and with a narrowing of spread and decreased volume. The lows of the Selling Climax (SC) and the Secondary Test, and the high of the Automatic Rally (AR) initially set the boundaries of the trading range. Horizontal lines may be drawn here to help to focus attention on market behaviour in and around these areas. It is also possible that Phase A can end without dramatic changes in spread and volume. However, it is usually better if it does, in that more dramatic selling will generally clear out all the sellers and pave the way for a more pronounced and sustained markup. Where a TR represents a Reaccumulation (a trading range within a continuing upmove), we will not have evidence of PS, a SC, and ST as illustrated in phase A of ??? Schematic 1 Phase A will instead look more like Phase A of the basic Wyckoff distribution schematic (described later in the article under Schematic 2 or 3) but, nonetheless, Phase A still represents the area of the stopping of the previous move. The analysis of Phase B through E would generally proceed in the same way as within an initial base area of accumulation. Phase B In Phase B, Supply and Demand on a major basis are in equilibrium and there is no decisive trend. The clues to the future course of the market are usually more mixed and elusive, however here are some useful generalisations. In the early stages of Phase B, the price swings tend to be rather wide, and volume is usually greater and more erratic. As the TR unfolds, supply becomes weaker and demand stronger as professionals are absorbing supply. The closer you get to the end or to leaving the TR, volume tends to diminish. Support and resistance lines, (shown as horizontal lines A, B, C, and D on the Accumulation Schematic 1) usually contain the price action in Phase B and will help define the testing process that is to come in Phase C. The penetrations or lack of penetrations of the TR enable us to judge the quantity and quality of supply and demand. Phase C In Phase C, the stock goes through a testing process. The stock may begin to come out of the TR on the upside with higher tops and bottoms or it may go through a downside spring or shakeout, breaking previous supports. This latter test is preferred, given that it does a better job of cleaning out remaining supply from weak holders and creates a false impression as to the direction of the ultimate move. Schematic 1 shows us an example of this latter

alternative. A spring is a price move below the support level of a trading range that quickly reverses and moves back into the range. A spring is an example of a “bear trap” because the drop below support appears to signal resumption of the downtrend. In reality, though, the drop marks the end of the downtrend, thus “trapping” the late sellers, or bears. The extent of supply, or the strength of the sellers, can be judged by the depth of the price move to new lows and the relative level of volume on that penetration. Until this testing process, we cannot be sure the TR is accumulation and must wait to take a position until there is sufficient evidence that mark-up is about to begin. If we have waited and followed the unfolding TR closely, we have arrived at the point where we can be quite confident of the probable upward move. With supply apparently exhausted and our danger point pinpointed, our likelihood of success is good and our reward/ risk ratio favourable. The shakeout at point 8 on our Schematic 1 represents our first prescribed place to initiate a long position. The secondary test at point 10 is better, since a low volume pullback and a specific low risk stop or danger point at point 8 gives us greater evidence and more confidence to act. A sign of strength (SOS) here will bring us into Phase D. Phase D If we are correct in our analysis and our timing, what should follow here is a consistent dominance of demand over supply as evidenced by a pattern of advances (SOSs) on widening spreads and increasing volume, and reactions (LPSs) on smaller spreads and diminished volumes. If this pattern does not occur, then we are advised not to add to our position and look to close our original position until we have more conclusive evidence that markup is beginning. If the market or stock progresses as stated above, then we have additional opportunities to add to our position. Our aim here is to initiate a position or add to our position as the stock or commodity is about to leave the trading range. At this point, the force of accumulation has built a good potential and could be projected by using the Wyckoff point and figure method. We have waited until this point to initiate or add to our positions in an effort to increase our likelihood of success and maximise the use of our trading capital. In Schematic 1, this opportunity comes at point 12 on the “pullback to support” after “jumping resistance” (in Wyckoff terms this is known as “Backing Up to the Edge of the Creek” after “Jumping Across the Creek”). Another similar opportunity comes at point 14, a more important point of support and resistance. (See Side Bar). In Phase D, the mark-up phase blossoms as professionals begin to move into the stock. It is here that our best opportunities to add to our position exist, before the stock leaves the TR. Phase E In Phase E, the stock leaves the TR and demand is in control. Setbacks are unpronounced and short lived. Having taken

our positions, our job here is to monitor the stock's progress as it works out its force of accumulation. At each of points 8, 10, 12, and 14 we may take positions and use point and figure counts from these points to calculate price projections and help us to determine our reward/risk prior to establishing our speculative position. These projections will also be useful later in helping us target areas for closing or adjusting our position. Remember that Schematic 1 shows us just one idealised model or anatomy of a trading range encompassing the accumulation process. There are many variations of this accumulation anatomy and we addressed some of these considerations earlier. The presence of a Wyckoff principle like a selling climax (SC) doesn't confirm that accumulation is occurring in the TR, but it does strengthen the case for it. However, it may be accumulation, redistribution or nothing. The use of Wyckoff principles and phases identifies and defines some of the key considerations for evaluating most trading ranges and helps us determine whether it is supply or demand that is becoming dominant and when the stock appears ready to leave the trading range. THE "JUMP" ACROSS THE CREEK ANALOGY The term "jump" was first used by Robert G. Evans, who piloted the Wyckoff Associates educational enterprise for numerous years after the death of Richard D. Wyckoff. One of his more captivating analogies was the "jump across the creek" (JAC) story he used to explain how a market would break out of a trading range. In the story, the market is symbolised by a Boy Scout, and the trading range by a meandering creek, with its "upper resistance line" defined by the rally peaks within the range. After probing the edge of the creek and discovering that the flow of supply was starting to dry up, the Boy Scout would retreat in order to get a running start to "jump across the creek." The power of the movement by the Boy Scout would be measured by price spread and volume. Defining the Jump A jump is a relatively wider price-spread move made on comparatively higher volume that penetrates outer resistance or support. A backup is a test that immediately follows the jump – a relatively narrow price-spread reaction or rally on comparatively lighter volume that tests and confirms the legitimacy of the preceding jump action. The Wyckoff method instructs you to buy after a backup following an upward jump (a sign of strength) or to sell short after a backup following a downward jump (a sign of weakness). Also according to Wyckoff, you should not buy breakouts because that would leave you vulnerable to swift moves in the opposite direction if the breakout turned out to be false. Hence, at first glance, the Wyckoff method appears to be telling you to buy into weakness and sell into strength. DISTRIBUTION Schematics 2 and 3 represent two variations of the Wyckoff model for distribution. While

these models only represent two variations of the many possible variations in the patterns of a distribution TR, they do provide us with the important Wyckoff principles often evident in the area of distribution and the phases of a trading range that can lead us toward taking a speculative position. Much of the analysis of the principles and phases of a TR preceding distribution are the inverse of a TR of accumulation, in that the roles of supply and demand are reversed. Here, the force of “jumping the creek” (resistance) is replaced by the force of “falling through the ice” (support). It is useful to remember that distribution is generally accomplished in a shorter time period than accumulation. SCHEMATIC 2 Distribution Schematics Schematics 2 and 3 show us two model variations of distribution Trading Range. Phases A through E...phases through which the Trading Range (TR) passes as conceptualised by the Wyckoff method and explained in the text. (PSY) Preliminary Supply...is where substantial selling begins to provide pronounced resistance after an upmove. Volume and spread widen and provide a signal that the upmove may be approaching its end. (BC) Buying Climax... is the point at which widening spread and the force of buying climaxes, and heavy or urgent buying by the public is being filled by larger professional interests at prices near a top. (AR) Automatic Reaction... with buying pretty much exhausted and heavy supply continuing an AR follows the BC. The low of this selloff will help define the bottom of the Trading Range (TR). (ST) Secondary Test(s)... revisit the area of the Buying Climax to test the demand/supply balance at these price levels. If a top is to be confirmed, supply will outweigh demand and volume and spread should be diminished as the market approaches the resistance area of the BC. (SOW) Sign of Weakness... at point 10 will usually occur on increased spread and volume as compared to the rally to point 9. Supply is showing dominance. Our first “fall on the ice” holds and we get up try to forge ahead. The ice... is an analogy to a wavy line of support drawn loosely under reaction lows of the Trading Range. A break through the ice will likely be followed by attempts to get back above it. A failure to get back above firm support may mean a “drowning” for the market. (LPSY) Last Point of Supply... (Schematic 2/Point 11): after we test the ice(support) on a SOW, a feeble rally attempt on narrow spread shows us the difficulty the market is having in making a further rise. Volume may be light or heavy, showing weak demand or substantial supply. It is at these LPSY's that the last waves of distribution are being unloaded before markdown is to begin. Schematic 2/Point 13: after a break through the ice, a rally attempt is thwarted at the ice's surface (now resistance). The rally meets a last wave of supply before markdown ensues. LPSY's are good places to initiate a short position or to add

to already profitable ones. (UTAD) UPthrust After Distribution... (See Schematic 3/Point 11). Similar to the Spring and Terminal Shakeout in the trading range of Accumulation, a UTAD may occur in a TR or distribution. It is more definitive test of new demand after a breakout above the resistance line of the TR and usually occurs in the latter stages of the TR. If this breakout occurs on light volume with no follow through or on heavy volume with a breakdown back into the centre of the trading range, then this is more evidence that the TR was Distribution not Accumulation. This UTAD usually results in weak holders of short positions giving them up to more dominant interests, and also in more distribution to new, less informed buyers before a significant decline ensues.

Phase A In Phase A, demand has been dominant and the first significant evidence of demand becoming exhausted comes at point 1 at Preliminary Supply (PSY) and at point 2 at the Buying Climax (BC). (See Schematic 2 and 3.) It often occurs on wide spread and climatic volume. This is usually followed by an Automatic Reaction (AR) and then a Secondary Test (ST) of the BC, usually on diminished volume. This is essentially the inverse of Phase A in accumulation. As with accumulation, Phase A in distribution may also end without climactic action and the only evidence of exhaustion of demand is diminishing spread and volume. Where Redistribution is concerned (a TR within a larger continuing downmove), we will see the stopping of a downmove with or without climactic action in Phase A. However, in the remainder of the TR the guiding principles and analysis within Phases B through E will be the same as within a TR of a Distribution market top.

Phase B The points to be made here about Phase B are the same as those made for Phase B within Accumulation, except clues may begin to surface here of the supply/demand balance moving toward supply instead of demand.

Phase C One of the ways Phase C reveals itself after the standoff in Phase B is by the "sign of weakness" (SOW) shown at point 10 on Schematic 2. This SOW is usually accompanied by significantly increased spread and volume to the downside that seems to break the standoff in Phase B. The SOW may or may not "fall through the ice," but the subsequent rally back to point 11, a "last point of supply" (LPSY) is usually unconvincing and is likely to be accompanied by less spread and/or volume. Point 11 on both distribution Schematics 2 and 3 give us our last opportunity to cover any remaining longs and our first inviting opportunity to take a short position. An even better place would be on the rally testing point 11, because it may give us more evidence (diminished spread and volume) and/or a more tightly defined danger point.

An upthrust is the opposite of a spring. It is a price move above the resistance level of a trading range that quickly reverses itself and moves back into the trading range. An upthrust is a "bull

trap” – it appears to signal a start of an uptrend but in reality marks the end of the up move. The magnitude of the upthrust can be determined by the extent of the price move to new highs and the relative level of volume on that movement. Looking now at Schematic 3, Phase C may also reveal itself by a pronounced move upward, breaking through the highs of the TR. This is shown at point 11 as an “Upthrust After Distribution” (UTAD). Like the terminal shakeout discussed earlier in the accumulation schematic, this gives a false impression of the direction of the market and allows further distribution at high prices to new buyers. It also results in weak holders of short positions surrendering their positions to stronger players just before the downmove begins. Should the move to new high ground be on increasing volume and “relative narrowing spread” and then return to the average level of closes of the TR, this would indicate lack of solid demand and confirm that the breakout to the upside did not indicate a TR of accumulation, but rather a formation of distribution. A third variation not shown here in schematic form would be an upthrust above the highs of the trading range with a quick fall back into the middle of the TR, but where the TR did not fully represent distribution. In this case, the TR would likely be too wide to fully represent distribution and there would be a lack of concentrated selling except in the latter portions of the TR. Phase D Phase D arrives and reveals itself after the tests in phase C show us the last gasps or the last hurrah of demand. In Phase D, the evidence of supply becoming dominant increases either with a break through the “ice” or with a further SOW into the TR after an upthrust. In phase D, we are also given more evidence of the probable direction of the market and the opportunity to take our first or additional short positions. Our best opportunities are at points 13, 15, and 17 as represented on our Schematics 2 and 3. These rallies represent “Last points of Supply” (LPSY) before a markdown cycle begins. Our “averaging in” of the set of positions taken within Phases C and D as described above represent a calculated approach to protect capital and maximise profit. It is important that additional short positions be added or pyramided only if our initial positions are in profit. Phase E In Phase E, the stock or commodity leaves the TR and supply is in control. Rallies are usually feeble. Having taken our positions, we must monitor the stock’s progress as it works out its force of distribution. Successful understanding and analysis of a trading range enables traders to identify special trading opportunities with potentially very favourable reward/risk parameters. When analysing a TR, we are first seeking to uncover what the law of supply and demand is revealing to us. However, when individual movements, rallies or reactions are not revealing with respect to supply and

demand, it is important to remember the law of “effort versus result”. By comparing rallies and reactions within the trading range to each other in terms of spread, volume, velocity and price, additional clues may be given as to the stock’s strength, position and probable course. It will also be useful to employ the law of “cause and effect”. Within the dynamics of a TR, the force of accumulation or distribution gives us the cause and the potential opportunity for substantial trading profits. It will also give us the ability, with the use of point and figure charts, to project the extent of the eventual move out of the TR and help us to determine if those trading opportunities favourably meet or exceed our reward/risk parameters. “The Ice Story.” We imagine the market in the person of a Boy Scout walking over a frozen river in the midst of winter. If support, the ice, is strong the river covered with ice has no difficulty in supporting the weight of the Boy Scout. That support is seen as a wiggly line connecting the lows, the supports, in a trading range. A failure by the Boy Scout to reach the upper resistance level of the Trading Range would be a warning of potential weakness. Weakness of the ice would be signalled by the Boy Scout breaking support or falling through the ice. The Boy Scout has two chances to get back above the ice (i.e., creating a bullish “Spring” situation). On the first upward rally the Boy Scout may fail to regain a footing above the ice. If so, then he will sink lower into the river in order to gather strength to try and rally once and crack the ice. If on this second attempt, the Boy Scout again fails to penetrate above the ice, he would be most likely to sink downward and drown (i.e., a Bear Market/ Markdown phase would occur).

2. Wyckoff Schematics Applied to Charts of Nokia Weekly Charts of Nokia display the overall cyclic progress of Nokia from Markup to Distribution to Decline to Accumulation and finally to the commencement of a Markup phase. Schematic # 4 provides a visual conceptual scheme depicting these four phases of market action. The Weekly Charts of Nokia suffice as an application of this Conception of Primary Market Phases. The Weekly charts also furnish a bigger picture backdrop for the detailed applications of the Schematics 2, 3 and then 1 for Distribution and then Accumulation. The “jump across the creek” and “ice” analogies will be used to help explain the important junctures of distribution and accumulation illustrated on the Daily Charts of Nokia (See Side Bar #2 and Figures 2 and 4). Nokia’s bull market advance was stopped during the year 2000 around the 500 level by the entry into the market of a dominant force of supply. This force of supply first appeared around March 2000, where it created a sharp sell off down to the vicinity of 350 on the Nokia chart. The demand that came to market to staunch this sell-off marked the point at which the “Ice Story” commenced. (See

Schematic #2). We can see that support occurring at points (1), (2), (3), and (4). The rallies from these support levels were becoming increasingly feeble as witnessed by the progressive diminution in volume coupled with the halting of the price advances at a resistance level near 540. Then from point (4) there was a rally that failed to reach the horizontal resistance line. Here the volume shrank appreciably. Moreover, the price level stopped in July near the same 500 level as did the earlier preliminary supply (PSY) in March-April. Hence, this juncture is annotated as a last point of supply for the possible completion of a line of important distribution. The failure to reach the upper resistance level was a warning of potential weakness. Indeed, a sign of weakness ensued on the next sell off. It is here that we witness support breaking around the 425 level in August 2000. Note the extremely wide price spread and the enormous increase in volume as the Nokia plunged through the meandering support line drawn across the previous lows. The significance of the price breaks below the support levels of this trading range in Nokia will be confirmed by the subsequent tests. In the ice analogy the Boy Scout has two chances to get back above the ice (i.e., creating a bullish "Spring" situation). As can be seen on Nokia chart #2, there were two such rallies. The first attempt stopped at LPSY (2) while the second attempt was halted at about the same level as PSY and LPSY (1). It can also be seen that the ice, which had provided support, has now reversed roles and is acting as resistance against attempt to move higher. These latter LPSY's (2) and (3) also expand the possible extent of the distribution (supply) pattern, thus generating the potential for a greater decent in price. Nokia ultimately declined to under 100 in year 2004. Nokia's decline was stopped by the Selling Climax (SC), Automatic Rally (AR) and Secondary Test (ST) during July and August 2004. This sequence of stopping actions helped to form a small base of accumulation that in turn helped to propel Nokia upward to the resistance level around 110. Thereafter there was a prolonged period of backing and filling on the chart. Bearish forces remained in control as seen by the line of floating supply around the 110 levels. However, another, lesser branch of the creek was formulated by the dominance of supply over demand during the intermediate down channel that occurred during late 2004 when Nokia's stock price declined from about 115 down to under 100 in early 2005. The "Boy Scout" was cognizant of these developments as he would have been following along the edge of the creek around the 110 level so as to judge best the relative powers of supply and demand. Earlier he would have been following the minor creek as it flowed downward under the weight of supply from 115 to below 100. Then near the end of the year 2004 and early

2005, the Boy Scout would have sensed that the floating supply was drying up. He would have noticed the narrowing price range, the diminishing volume and the absence of material price progress on the downside. It was at this point that he said to himself, "Now if I back way up to make a good run for it, I bet I can jump across the creek". In the process of backing up, he causes price to drop below minor support around 105. Also in this process the remaining bears (floating supply) are flushed out of the market as evidenced by the downward gap in price that exhaust the supply. A Wyckoff "spring" thus occurs. Note the wide price spread of about 10 points as Nokia climbs from around 98 to 108. More significantly, note the very significant expansion in volume that accompanied that 10 point upward move in price. That large volume day is where the "jump" occurred. Thus we also know that that is where the edge of the meandering (minor) creek occurred. In other words, this successful JAC was also a sign of strength (SOS). A long position could have been initiated during the pull back test following JAC at around 104 with a protective stop loss order entered below the support level, around 95. In practice, such a long is not typically entered by a student of the Wyckoff Method, because it is evident that the major branch of the creek still lies ahead. After jumping the lower and lesser branch of the creek, the Boy Scout continues upward to the vicinity around 115 where earlier he had found the flow of supply too fast and too deep to jump across. Here again in early 2005 around the 115 price level, the creek creates a squiggly-wiggly line of resistance, along the peak prices of the recovery rally, or slightly above the 110 price level of Nokia. However, this time things are different. The Boy Scout observes that the volume is shrinking and the price level is narrowing. The Boy Scout is witness to a drying up of the floating supply creating the edge of the major creek/ major resistance level just above 110. As in the instance of his earlier preparation to jump across the (Minor) creek, the Boy Scout again creates a "Spring" as he backs up to the 100 level. A relative increase in upward price spread coupled with a notable expansion in the level of volume mark where the Boy Scout jumped the major creek. But by the time the propulsion of the jump had dissipated the Boy Scout would have been temporarily tired out by his exertion in jumping across the creek. Hence we would logically anticipate that he would rest and consolidate his strength. He does so by backing up to the edge of the creek (BUEC). At this point we observe further confirmation that supply has been exhausted and demand is in control. The pullback comes on a relatively smaller price spread and shrinkage of volume, thus showing that supply cannot regain control. Consequently, it is now safe for the trader or the investor to enter a long position in the vicinity

of 110- 115 and to place a sell stop order just below the 100 level. 3. NEW SCHEMATIC: ACCUMULATION Gradient of Ascending Bottoms The chart below depicts a new or added schematic for accumulation that we wish to name "The Accumulation Gradient of Rising Bottoms." This new Schematic is an attempt to fill an obvious gap in the conceptual body of the Wyckoff Method. In brief, there are currently two Schematics for distribution, but only one Schematic for accumulation. The new Schematic for Accumulation is a counterpart to the Schematic for Distribution that features descending price peaks. Richard D. Wyckoff and his Associates time and again pointed out the power of ascending bottoms in a base of accumulation or re-accumulation. They also underscored on numerous occasions the efficiency of a pattern distribution composed of descending price peaks (current Schematic #2). The logic for ascending bottoms amid descending peaks is rooted in the concept of the Composite operator. Within a trading range the composite man is seen to accumulate a line of stock from the public who become especially frightened during the downthrusts. The composite man is willing to play the short side of the market as well during the trading range of accumulation so long as he can abstract a public following of sellers. But as the trading range proceeds, the new schematic reveals that fewer and fewer sellers remain to propel stocks downward in price. As a consequence, the downwaves become shorter and shorter in length (the bottoms rise) and the Composite Man as a result accumulates an increasing line of stock. Ultimately there is little left of sellers to coax to the downside and so the composite man reverses his attention and spurs prices upward and out of the trading range. A markup campaign now gets underway led by the composite man. Elsewhere Pruden has conducted studies of Market behaviour with the aid of the Cusp Catastrophe Theory from Mathematics/ behavioural finance. That theory shows accumulation dissipative gradients and accumulation gradients that occur within a trading range just prior to buying stampede or a selling panic. Our label of "Accumulation Gradient" for the new Schematic was in large part inspired by the Cusp Catastrophe model of market behaviour. Moreover, the literature of Catastrophe Theory describes how the "managers" of an unstable situation will keep things in a close proximity until all the marginal, regional support has been exhausted. This phenomenon is known as the Delay Rule and the Maxwell Rule followed by the Maxwell Principle. Thus the observations of Wyckoff, the logic behind the Composite Man and the Models from Catastrophe Theory combine to buttress our addition of a new Schematic for accumulation to complete the Conceptual body of the Wyckoff Method in regard to Schematics, a powerful visual tool for

Wyckoff Analysis. BIBLIOGRAPHY Jack K. Hutson, Editor, Charting the Stock Market: The Wyckoff Method Technical Analysis Inc., Seattle, WA. 1986 Jim Forte, "Anatomy of a Trading Range." MTA Journal, Issue 43, Summer – Fall 1994, pp. 47 – 58. Henry (Hank) Pruden and Bernard Belletante, "Wyckoff Laws and Tests." STA Journal, November 2004, London, U.K. Schematics, Courtesy of Wyckoff/Stock Market Institute, Phoenix, A.Z. Benoit B. Mandelbrot and Richard L. Hudson, The (Mis) Behaviour of Markets: A Fractal View of Risk, Ruin and Reward, Basic Books, United States, 2004 Henry O. Pruden, "Chart Reading in the R-Mode", MTA Journal, Issue 36, Summer 1990, pp. 33 – 38. Edward R. Tufte, The Visual Display of Quantitative Information, Graphics Press, 1983, Cheshire, Conn.