

Channels

For

Building Wealth v2.2

A Background Paper for IBD MeetUp Tucson

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Summary

This paper spreads before you with 5 essential considerations; they are:

Part 1 - fundamentals, Part 2 - annotating techniques, Part 3 - getting started,

Part 4 - making money, and Part 5 - getting and staying in shape. Everything is slotted into the correct place. Thus, you will find the context, a means of selecting the dynamic.

This is the do it yourself approach and represents the pragmatic aspects of staying in condition.

I. Fundamentals

This Part contains three sections: A. Channels Provide Context, B. Basic Principle, and C. Basic Mechanics. Channels are only part of trading, but they go the furthest (of any other part) in providing a context for trading. Knowing how this works is important. The principle of channels is a pragmatic geometric truth that is derived from application and not from mathematics or theory. By pairing volume formations with the channel principle, we can most clearly see the P / V relationship in operation. The basic mechanics of drawing channels is not complicated. However, when to do channel annotations on price is a consideration that must be clear to the channel annotator.

A. Channels Provide Context

Throughout the range of trading, traders live with their feelings and emotions about how price is moving for them to make money. Think of the word “container”. When you do this, you can get to the consideration of a trader’s container. An extreme example is the trader’s feeling of “falling off” the edge of the earth. A channel makes a good safety

fence and an array of channels makes a very protective container that no trader can get out of. Therefore, by building and using such a container, the trader gains “protection” and, in intellectual terms, an operating context.

Protection, for traders, is an item that allows the trader’s feelings and emotions to be held in check or, at least, have reasonable workable bounds. The edge of the earth usually is no longer in view and, through growth and success, it may be found out that there is no edge, really.

The great value of having a pragmatic context, resides in being able to operate and optimize trading opportunities as they are scoped and bounded by using a channel context. Optimizing and operating are intellectual processes. These, if undisturbed by other considerations, can be very productive in trading. Thus, allowing the trader to make more money.

Recently a person admonished that only trend lines were required and that the other side of the channel was unnecessary. Apparently this person does not believe that left to right channel traverses are profitable trades. Beliefs of this ilk are stoppers. Look ahead for each of these considerations to be debunked in a rational manner.

It is true that, no matter what the specific trading or investing context is, there will be a channel associated with it. (See section II, C. Trading Chart.) Since there are many fractals, and they vary greatly by the period of the cycle of profiting, we, rationally, conclude that there is a family of channels. Whereby, each element is inside all of the longer periods of investment (other channels).

Every channel divides the price universe into two zones going back in time and going forward in time from NOW. Going from “inside” to “outside” of a channel (by price) is where a given channel fails to be a container. Here, we will learn to deal with how channels contain and how they give us the profit-making context. We want to be free of any trivial constraints for anything but making money.

We will chose the trading container and operate within it. Once we do that, we understand what is going on within the container. There is no way in which we will be considering price outside of the container that gives us our trading context.

We are protected by our container and all those other channels outside of our trading domain. Intraday trading is done inside the Intermediate Term (IT) channel trend. The IT channel duration is, necessarily, longer than the regular market hours (RMH) duration of our trading session and that is exactly how it is determined.

Comfortably, once we learn it, we find that channels overlap and, therefore, we get to observe each transition from one IT channel to the next and without ever having price go “outside” the channel in which we are operating.

There is a context, and, as intraday traders, we cannot fall off the edge of the “price” planet.

B. Basic Principle

There are many principles for active trading. Within these, the channel plays a role all the time. By understanding the principle of channels, we chose to use them because they fit into our design for making money.

Even larger, the P / V relationship is an over-reaching concept in which the channel principle resides. Luckily price volume charts, epitomize the P/ V relationship. Note that ship is a word that is container oriented in its very nature.

Price follows a path and price makes a wake that “is” its past path. We need to understand every aspect of this pathway. We always stand at NOW looking to what come next. We choose a perspective to see what is going on. Our perspective is in a context and we are very comfortable with that.

What is going on? is the question (See Part III. Getting Started).

Channels have a way of answering that question. The channel is an arbitrary choice for giving us answers. It is sufficient it turns out.

Markets operate and we partner with them to make money. To make money we want to do the least to get the best. The Market behaves asymmetrically with respect to its two major variables and one minor variable that is determined by interpolating within the two major variables. All of this is a consequence of market rules. Market rules determine how markets operate when the human factor is added. Price, at all times, has two values (bid and ask) and historically, one of them is then chosen for transacting. This

means that another party entered the picture (trading opposite) and made the actual choice of which of the two, previously stated values, was used for transacting. We will be trading as price choosers. We control price for our profit making actions. More so, we control WHEN we will be doing what we do.

All of this is “inside” for us. The record is made from the chosen prices and not the two BEST other prices. The minor variable tells us all the time which of the two BEST prices is being chosen. This is, knowing on what side of the market the trading is occurring.

This allows us to describe the principle of the channel as it applies to us. We use a price and volume chart to monitor. The data is given to all who want it and it is the same for all. We use tools to enhance it and to glean from it. Our job is to act in a timely fashion to make as much money as is available.

Price, for us, follows channels. The “following” continues until something influences it to change. This is how the P / V relationship works as well. The intimate connection between the P / V relationship and channels is uncanny. The two parts of the relationship deal with continuation and change. Channels bound price movement until the price discontinues what it is doing. This “Discontinuance” is the first part of “change”.

Diets begin with two parts: discontinuing to gain weight and then being at a weight (plus or minus). The third part is losing weight.

To make money, you can do it anyway you want. For this exposition, you must have a channel religious experience simply because you must “Do Channels”. Not unlike dieter’s follow a plan.

Channels are so powerful because they “work”. Hindsight is not the subject here.

Channels are not drawn afterwards to “see what happened”.

We operate in three time zones to make money; before, during, and after. This is also known as the past, present and the future. Our job is to let time pass as price moves. We interrupt this occasionally by taking profits and remaining in the market in a new orientation.

By knowing that the price will continue to change if volume continues to increase, we are able to apply the channel to a chart. That is a major aspect of the channel principle.

Since we were able to reason that prior price movement ends when something changes in the “condition” of the market, all we do is observe the result of the condition changing by seeing that price has “discontinued” what it has been doing. We have already applied the channel to price and we observe, in the channel, that price is “discontinuing” doing what it has been doing.

We have now found a price value for beginning the application of the channel for the next trend. We do it BEFORE the official end of the existing channel. (See all sections (A, B, and C) of Part II Annotating Techniques).

This is another major part of the principle of the channel: They overlap. This keeps us “inside” the container.

Another part of the channel principle is that there are families of channels and thus channels within channels. Any channel within a channel that is the next size smaller, I call a “traverse”.

All of these parts make a whole and effective descriptive principle of the channel. There is a fit between the over-riding P / V relationship and how price moves in a bounded “inside” region. The next section deals with the money-making mechanics of the principle (not the geometry).

1. P/V relation is asymmetric: chart channels epitomize this

People live in a world of opposites but the basic principle of the market place is asymmetric. You must clearly understand, from the onset, the P / V relationship. See appendix C Part 1 of Building Minds for Building Wealth (BMBW). The P / V relationship shows how “continuation” and “change”, and orthogonal relationships, drive the market. Trade may be a pair of opposites (enter and exit) but the routine is to think in terms of time passing which involves cycles of continuation (hold a position) and change (reversing a position). For stocks, it may be that only long positions are traded. BUT, later your operations will be to go both ways (long and short). For Seamless Continuous Trading (SCT) a hold and reverse strategy is in the wings from the get go and begins to be deployed as soon as basic skills have been acquired.

2. Hindsight is not the subject here

Most people draw channels to see what happened. As a consequence they usually do not do anything in detail. Others just draw trend lines during the day and use the

breaking of the trend line for an exit after the last bounce off the unrecorded left line or the failure to traverse (FTT).

By drawing channels for trends during the day, these people can advance their monitoring greatly with little effort.

For novices, a good practice drill is to draw channels in hindsight for previous trading day's and, further, for all past periods of time on each and every fractal. Why bother?

First, it is a low risk exercise because nothing depends upon the effort. What happens is that a degree of familiarity with the market comes into consciousness for you. Less obviously, the person learns the beginning rules for drawing channels.

A good way to start is to just turn on the monitoring set up and print 60 min, 30 minute, 15 min, and 5 minute Standard & Poor's e-mini (ES) charts. Also print a 2-minute Dow Jones e-mini (YM) chart. Draw the bounds of the longest charts first; just do the "outside" of the price range by drawing whatever comes up using lines on the left and right.

The struggle to think in right and left is the first goal to meet. After that, draw multiple linear regression lines (MLR) lines of price movement by guessing. You can see that the price flow is swinging to the left and right of the MLR lines. This will impress you further with the left and right concept. For every MLR line draw the associated Trend Line (TL). Notate the points 1 and 3 on the TL create a point 2 opposite, and between points 1 and 3 in time. Draw a parallel line to the TL through point 2. Sketch in from first to last all

the traverses of the channel you have drawn, if they are to be found. After the last one, mark the FTT if it is there. Do the above for all five charts.

On the five charts, tabulate a set of data. List the number of channels, the number of traverses and the number of FTT's.

Starting with the 60 minute chart use Roman numerals to label the channels from first to last. Also label, with capital letters, the traverses of the Roman numeral channels. On the 30 minute chart see if you can find the capital letter traverses that you previously drew. Label them with the corresponding capital letters you already used. Use lower case letters to label their traverses. And, find them on the next faster chart (15minute).

Repeat for all charts using, in turn, identifying numbers, capitals in ()'s, lower case letters in ()'s and numbers in ()'s. Do the YM chart independently and last. Relate its traverses and channels to the 5 minute chart. You will notice the volume on this chart is different than the volume on all other charts.

By starting with any boundary as a container first, you gradually get to see that using parallel lines to make more and more detailed channels does work out quite well. By going from the fastest fractal charts to the slowest, you get to see the shorter duration traverses and their channels disappear into the slower longer channels. These channels are given names in Part IV, D. a. - The set up we use.

Another thing that happens is that you see some very confusing situations. By buttressing the channel drawing, and by putting volume formations on the charts, you get to see and begin to understand the relationship of volume to price and price

channels to volume formations. This understanding is where all the practices recommended in this exposition come from.

The next hindsight practice is to just focus on 5-minute ES charts and print out sets of daily charts for a few quarters. Do a session of one month (20 or so charts). By the time you have worked through a year, you will have the feeling that there is something fairly reliable about channels and how they function. You will learn more about yourself by the length of time it takes to do them. Working in hindsight will become second nature to you. In part IV, you get to the trading part of doing traverses and channels, the opposite of this work is what happens. You draw and extend a channel and then price fills it up.

C. Basic Mechanics

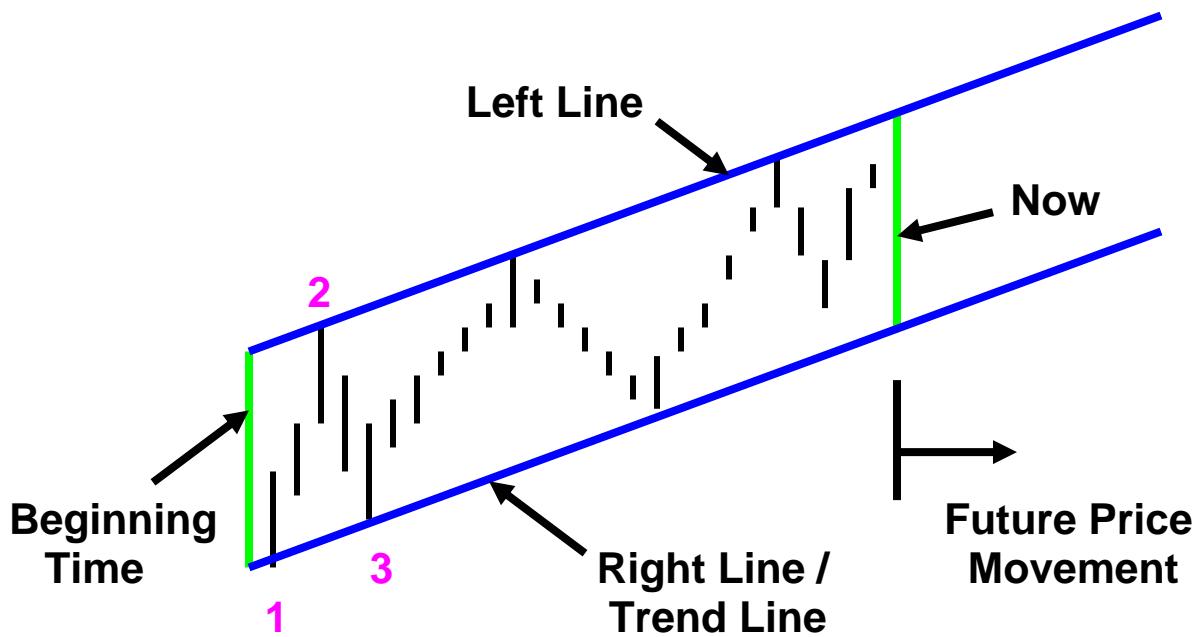
Briefly, mentally, consider all of the mechanical and mathematical bounding mechanisms the financial industry has devised over the years. Include candlesticks and point (P) and figure (F) too, as kindred because of their similar intent.

People with training and knowledge from all sorts of fields come up with stuff to do all sorts of things. We are taking the path of least resistance and effort here. What we have, in using channels, is something that we put in place ASAP and extend as a boundary. Price continues in that venue and further allows us to refine the context as price is staying inside it. As we monitor, things change. Before it happens, we are able to see when a new channel is beginning to come up. Because new channels overlap old ones, usually, we are able to take profits and enter the new trend smoothly. There is a pleasant caveat, if things improve for making money (channels become more volatile) we can handle that automatically.

Our job is to annotate the P / V chart with price channels and volume formations. This section is the segue into annotation. Here you get the understanding of why we do what we do, and how, as a consequence, we are able to make use of the annotations.

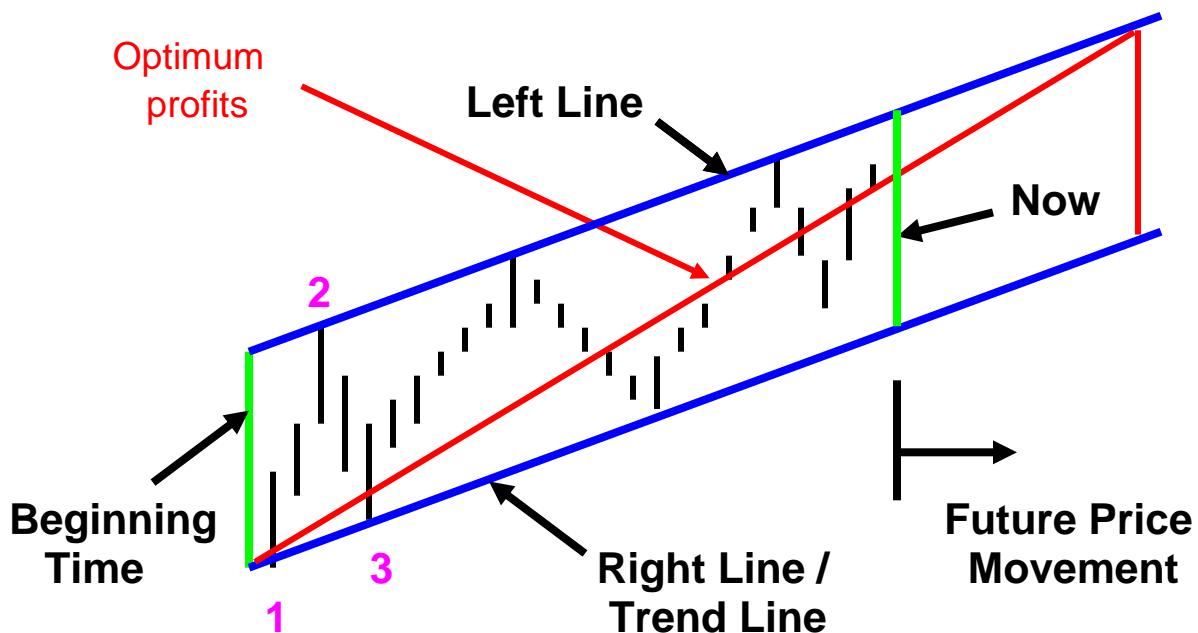
Markets are characteristically huge compared to individual participants. It is difficult for anyone to manipulate markets (See upcoming topic: depth of market (DOM)). Thus, we have a stable beginning; we can trade and not affect the market. A one-way street, so to speak.

By setting up a channel, geometrically, and extending it we immediately have a price zone for using trading rules. It is also possible to create and apply additional smaller rules to optimize money making. In the context of the previous section, where the principle is stated, we see the “inside of a channel” is a trapezoid formed by two vertical times and two sloping lines of price, left and right. You may prefer another description immediately. This is a strategic description however.



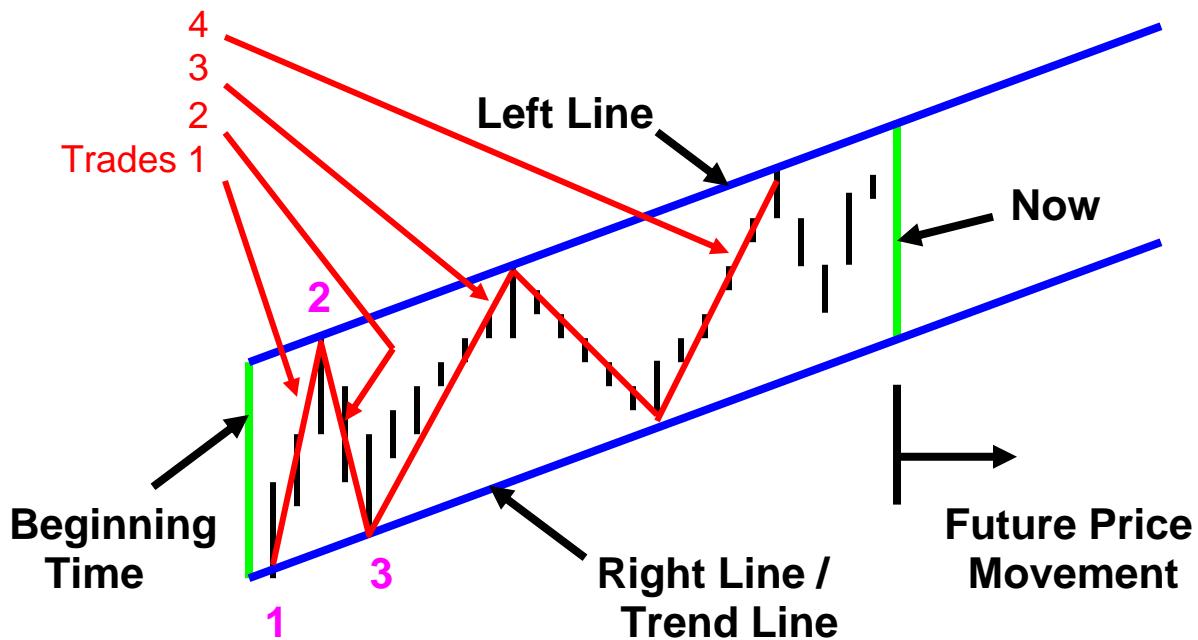
The trapezoid moves across the chart from its beginning at the right going to the left.

This is true of any spot on the chart you monitor. It goes off the chart on the left side well after its use has terminated. The trapezoid grows as the right vertical time line changes from one line to another. The left and right price lines are cloned to extend them if necessary. Each price line of the channel has a function. The most money is made on the trapezoid by trading from one corner to it's opposite.



You go from the right channel price line and the oldest time vertical line intersection to the left channel price line where it meets the most recent time vertical line. Obviously, this diagonal is the longer of the two diagonals. Rocket science this is not.

Market myths creep into all trading pictures. For channel trading one of the finest myths is to trade from one first corner to the available future adjacent corner. Not too swift, this is not the optimum (maximum) line. All points between the optimum diagonal and this line occur by declining, and from one to the other. Ordinarily, we use this price movement for making money by reversing as the diagonal is reached and holding to the smaller value. For any trading program on any fractal, the basic money making pattern is the trapezoid and its optimum diagonal as a first trade and then reversing to go to the right trend line as a second trade. On all markets, you may desire to trade, it is usually possible to begin to detect two levels of trapezoids when you shorten the fractal period. For ES, we use the 5 minute and see trend channels and their traverses.



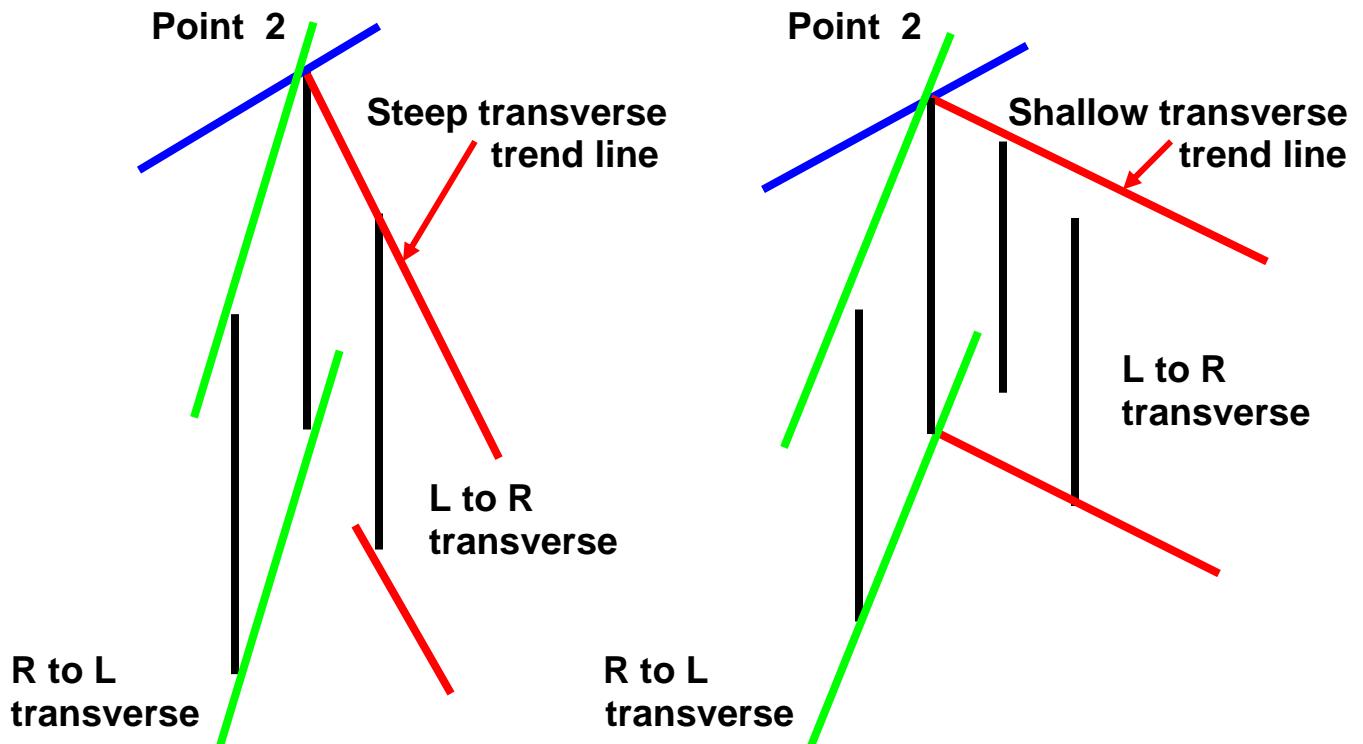
The above paragraphs described the trading the initial R to L traverse and reversing to trade the L to R traverse. Our job is to use the initial consecutive bar ends to define the traverses and project them.

By the end of the second traverse, you have enough boundary points to define a trend and you have taken profits twice. A trapezoid gave you the first traverse and as you reversed on its left price line, you continued to hold as the second traverse continued in the extending trapezoid. You followed the short diagonal for this trade.

The basic mechanics of channels hinge upon annotating the end of the L to R traverse.

The test of this is direct, singular and mechanical. We need to look closely. We need to back up to see and understand the beginnings of things and how to use them to make timely decisions.

You reach a point where you stop making money on your hold, following the short diagonal or you have previously sidelined at, or just after, the left side because you do not feel there is a money-making opportunity and you are awaiting a break out (BO) and it's new channel.



The right side of a channel or traverse is a trend line (TL). Its slope is less than vertically up or more than (less negative) vertically down. Two adjacent bar ends start the right

Trend Line. You have a slope that gives you a money velocity. Always, the first of those two bars is an overlapping bar that ends and begins. The extreme end (most profitable end) gives you a reference value, the length of that bar gives you an indication of volatility which, in turn, relates directly to the width of each traverse channel.

Invariably, the second bar has an end that is used in relation to the extreme of the first bar. This value determines the slope relative to the extreme end of the first bar and is the last point of three points needed to define the trading opportunity.

To make money, the singular result of using channels ASAP and extending them to form the “inside”, is that you can either reverse on extremes or exit and re-enter one bar later knowing the current money velocity of the price change that is in effect.

To consider all of this, in the absence of other aspects of any approach, makes the brief descriptions somewhat trite. Certainly, there are “what ifs” and a myriad of confusing factors. Here we do have the basic mechanics described and scoped out, and this is where to begin anything.

1. Price movement in channels

Channels form the envelope, in advance, in which price moves. All price moves are either traverses or formations. Depending upon the steepness of the channel, opposite (long or short) traverses alternate. Five common and statistically significant formations occur: Head and shoulders, double bottoms and double tops, and three pennants. The three pennants are: flat top pennant (FTP), flat bottom pennant (FBP) and symmetric pennant (SP).

2. Beginnings

Channels begin with a seeming contradiction. They begin with a breakout, however, the breakout occurs during the overlap of the old channel and the new channel. For stocks the scoring situation is the move from 0 to 7 when a trough occurs, when going from short to long. Conversely, when the scoring is from 4 to 3 and a peak is reached the move is from long to short.

When trading commodities, all of the above is true and the additional signals in volume on YM Red to Red and Black to Black (R2R AND B2B) indicate the beginning of a new trend. This occurs at the time of a reversal from the prior trend.

3. Endings

The significant five formations can occur at the ends of channels. However, the most common occurrence on the dominant traverse within a channel is the failure to traverse (FTT). What is occurring in the trending channel is that price can no longer advance in the direction of the existing trend because it is not supported by the additional volume required. This FTT, forms point 3 of the new emerging channel.

4. Overlap

The fact that channels overlap is a great aid to the trader. How to take advantage of this fact requires a great deal of experience where the appropriate knowledge and skills are acquired. Looking forward to this acquisition should always be on the mind of the learning trader. The overlap begins on the left channel line (point 1) of the old channel. Following this, a non dominant traverse occurs bringing price back to the right channel line (point 2 on the trend line). Price then leaves the trend line and proceeds to stall out creating a failure to traverse at approximately mid channel (point 3). At this point in time, the trader has all the information needed to draw and project the new channel into the future. Price will soon breakout through the old trend line and the price volume relationship will dictate the new trend of the new channel. To make the best of the matter, the trade has to occur to exit at point 1 and in the case of commodities to reverse at point 1. By the time the reader understands this paper and has acquired confidence all of the surrounding details, the occurrence of point one will be clear. This is an example of how much more money can be made by exiting on the left channel line instead of the later exiting (reversing) on the breakout of the trend line.

D. Channel Belief system

Learning about and using channels, turns out to be a 2 part simultaneous process. This is because all decisions are made using a referent basis from the memory. Excellence comes from repeated iterative refinements of retained knowledge and understanding.

Escaping from making decisions based upon singular high impact data, at the time it is discovered, can come only from establishing a decision making process that is

surrounded, before and after, by routine collective step by step efforts. We use four steps to monitor, analyze, decide and act. Channels are related to the first three steps. Annotating channels is part of the housekeeping and can most closely be related to actions that are in addition to trading actions.

The housekeeping of annotating channels; monitoring them, doing an analysis of the channel data and integrating it with all other monitoring components, comparing the analysis results with beliefs (provisional as well as trusted ones) gets you to a mind set than is immune to the formerly highly impacting singular screen events.

Appendix C - Practice Charts and Appendix D - Debriefing Rules; bound the channel learning and using effort. In between these extremes, Part II - Annotating Techniques, has three parts from which to learn. Part III - Getting Started, introduce the real time dynamic of how bar by bar the channel story unfolds, when housekeeping is demanded, and how iterative refinements may be discovered, learned and used. Part IV - Making Money, finishes the process with five sections that show how to make money by using channels. No stone is left unturned.

How do you acquire beliefs in this milieu? You work to attain a goal. The goal is knowing, and believing, that channels work.

There is nothing wrong with not acquiring this belief. There are many ways to make money without using channels. The shortest path to meeting the above goal is to have it and to prove it to your self. There are several items that act as sufficient proofs for me. For you, all may not be required.

Drawing channels after the fact and reading book chapters on channels written by experts, is very helpful. They look very good and the reading is great. And, it has nothing to do with you personally and your acquisition of expertise for trading.

We draw channels at the beginning of the channel and extend the channel into the future as a container of unfolding price action. By drawing such channels consistently using a comprehensive technique, monitoring them lets you find out how well they work. My personal most effective measure is noting how well the channel serves as guide for future turning points of future traverses and, secondly, how trends end, either by failing to traverse from right to left or on left sides of channels. I regard this as a verification of consistent human behavior among active trades on a very short-term basis or set of circumstances.

A better proof involves money or simulated money. Using channels that have been drawn consistently, should generate a learning curve for making money. This is called forward testing. If done alone, or with a partner or mentor, you should be able to generate ever increasingly better results.

When you meet this goal, you will know it. You will believe channels work. The experience of using channels successfully is not an osmosis sort of thing. It is a sudden recognition at some point in the trading day where you have a vital recognition and feelings and emotions that you cannot go back to what you were like before this event. It is like pregnancy in many ways. You are or you are not.

Knowing channels work is a provisional belief at first. And it moves to a reality when it displaces all the beliefs that are not compatible with it. There are many, of course.

Displacement occurs through repeated successes. It is exactly the same as for repeated losses causing a person to never be able to trade again.

When you acquire the belief, then you can be effecting in using channels. You will housekeep, monitor and do analysis, all according to what you have learned and practiced. When your analysis is compared to “what you know” and you act upon it, you get results. The feedback of greater effectiveness over time is like changing a black and white picture into a technicolor picture by coloring in all the parts that you realize are there to behold and use correctly.

You will know channels work when they answer these three questions for you:

Where am I now?

How fast are things changing?

What comes next?

When you are making money in a trend, it turns out that you are in a channel now that started in the past and the channel is continuing into the future. You will draw channels and traverse properly because the way to do it is defined to work, how price works, in channels.

II. Annotating Techniques

This Part has three sections: A. Chart Selection; B. Family of Channels; and C. Trading Chart. It deals passively (statically) with charts and using channels. There are many tradeoffs, in trading, and here we examine them where channels are part of the trading approach. To be an expert, and to be able to optimize making money, there are many considerations; here we determine the monitoring set up to get all of these issues handled. Once that is done, a high level of comfort is achievable in the money process.

There are four major trade offs to consider (Section A). The existing family of channels (Section B) establishes the context of price movement and consequently the context for optimum trading. How a trading chart delivers is extremely important. Scoping and bounding the functions of the chosen chart is done in (Section C). These subsections deal with getting oriented daily, determining what is dominating for making money, how standard methods play out, and the impact of pace and pace changes during the day. Four additional subsections outline the ancillary considerations that have some affect on what is dominating the day's action. (Subsections f, g, h, and i).

A. Chart Selection

To trade and make optimal money using a holistic technical analysis (TA) approach requires an excellent chart set up. Mostly, the determining factors have to do with you and, not primarily, the market in which you trade.

All involve the use of your time. Where, choosing the time duration of the fractal is how you make your approach is most efficient. This provides the best trading signals for how you will analyze data.

Four subsections; each compare and contrast where the sides of these issues must be decided:

1. Trading vs. Housekeeping

At expert levels of trading time is at a premium. The major concern of experts is optimizing their earnings curve. It continually drifts into higher ground because more and more capital is acquired and applied up to a given level. For this exposition, the capital caps out at 20 contracts on the ES. From that point on, a weekly extraction is made to go into personal budgets and the investment program where big money resides.

Time is divided among trading and housekeeping, two parallel simultaneous efforts. The available time is divided by making compromises. For channels, the house keeping requires that extensions are always in place and notes are up to date. Extensions deal with trading holds, primarily, and channel notes deal with trading actions. Trading on the other hand, deals with monitoring sweeps to provide data sets for analysis, decision making and using the computer trading platform to complete trading actions. 30 to 40 actions daily are normal, excluding scaling, for a comfortable continuous profit making modus. A fewer number of trades can be done using the envelope above. About one third of the above actions are normal for this approach. Trading more frequently is definitely possible and approximately 100 to 200 actions mat be normal for this type of harvesting approach.

Housekeeping is done periodically in a context of minutes, and sweeping for data sets is done several times a bar and usually is repeated over more than 10 seconds per sweep. Housekeeping needs arise out of sweeping observations.

A day of regular market hours (RMH) is about 400 minutes. You can see that for any approach, housekeeping is wedged in between trades and trades have priority over housekeeping. The two divisions of housekeeping relate directly to the “holds” of trading and the “actions” of trading. Do hold housekeeping before holding (no action required). Do housekeeping after actions are indicated. **The simplest rule is: when notation is recognized as coming up, go to the platform and trade the note and after the action, put the note on the chart** (There is a choice of four notes).

There are other uses of your time during the day. The trading log is essential to success in many ways. So you keep it up to date during the day when holding the mouse is not necessary. Trading and housekeeping are mouse oriented for most. The keyboard is used too.

Your hold/sideline time ratio will gradually rise over time. The concurrent shift will be that you annotate and notate more often as well. You get busy as you make more and more money and as you trade more and more contracts.

So choosing the trading chart is a compromise. For expert trading we choose the 5 min chart as a result of the above considerations.

2. The Yellow Brick Road

Appendix B contains an excel spreadsheet for practicing designing equity curves. It shows how to compare what the market offers with what you can extract, considering your skills and abilities.

For differing trading fractals a chart of results does not yield a Gaussian curve. It is skewed to the smaller time periods. While less and less is made per trade as the fractal shortens, the effect of more trades dominates the result. At some point the effectiveness of a given method will affect the person's efficiency. With respect to channels, using them weighs heavily on making money. In this exposition our fastest fractal chart is the YM 2 minute chart that provides leading indicators. This "smart money", top drawer and continually adroit trading, is a profound guide. We neither trade on that fractal, in that market, nor with that skill level. We choose a moderate route and use the 5-minute chart as our trading chart.

You can use the second sheet in Appendix D, to determine the family of bars involved in this purview. It shows how "noise" is involved in trading.

3. Holistic Trading vs. Set-up Trading

Philosophical matters are not important for making money. The trading approach of a trader is a practical pragmatic matter. Holistic trading is a fundamental broad based approach. Since the market has to be watched all the time to make money, using a holistic set up seems more reasonable than using a set up and protective stop approach

that focuses on specific prevailing market conditions for entry and volatility (or other) conditions for setting stops.

It turns out that exits are where profits are taken and it is extremely important to have control at all times after the entry. The market must be understood, and understanding it leads to the conclusion that money can be made when there is price movement.

All set ups are found in holistic trading approaches. And conversely, holistic traders stand a better chance of handling the exits on set up entries.

It is more difficult to learn to trade holistically and to design or adopt a holistic system. Set up trading is simpler from the entry point of view and for having protection using optimized stops. Optimized stops are a stringent requirement that ordinary mathematical routines handle. There are two caveats. It is said that markets change for edge traders; therefore they must do maintenance all the time on their specific set up details and their routine for optimizing stops. These two caveats drive reasoning, with principles, to the place where the support system for edge trading requires a holistic approach and, yet, edge traders do not make use of many market-trading opportunities. In the final analysis, this becomes a dilemma for optimization.

There are many difficulties associated with holistic trading. Having the knowledge is the most difficult hurdle. Second, a novice begins with a faulty belief system based upon his life experience. Third, the repeated failure encountered by a new trader, erodes the person's mental abilities to make progress. It may, if fact, stunt the process permanently. Finally, the emotional component that pairs automatically with sensing injects the "fight or flight" human heredity function into the picture.

This exposition on channels shows how they fit into dealing with each of these four factors.

Charting with channels is THE fast track for learning markets and their behavior. It is self-policing as well. That is, mistakes in annotation and notation, quickly reveal where the novice is not knowledgeable. Continuous diligent effort frees the novice from errors of understanding. Patterns appear, consistency is recognizable and rewards are provided. This is a classic iterative refinement process. Deepening understanding follows for the entire trader's career.

By learning primarily in the context of a practicum, there are stages of progress that allow existing belief systems to be modified. Seeing "channels work" in a money-making context is a high impact experience. Provisional beliefs follow from this. The sooner a person goes from "hindsight" to "extensions of trends" into the future, the sooner they have the experience of seeing price fill channels. (See illustrations in Part III - Getting Started, A. The Dynamic).

Channels eliminate a lot of the kinds of failures encountered during all stages of trading development. (See Appendix D - Common Mistakes and Their Cures). This is particularly true for novices. The simple requirement of drawing channels and traverses before making entries, allows most people to earn success from the get go. Then when failure occurs, a novice can use the channel as a standard for debriefing on the errors that happened. Fear dominates when repeated failure occurs. Trading in channels allows for a comfort zone from the beginning. By trading in the zone, and using the channel to define it, the novice finds his personal trading environment and context. Progress comes over time in the process of learning, developing kills, acquiring

provisional beliefs, replacing older less effective beliefs, and making more and more money. Channels support all of this.

4. Singular Signal Impact vs. Sweeping Channels

Chart selection is dictated by the monitoring method largely. When channels are used, they have so many aspects that looking for singular signals is not likely. Alarms are most suitable for monitoring singular signals. This would work well, except for the fact that people keep adding provisos to their signals as a way of not screwing up their set up entries. Alarms are not possible after all.

This topic is like considering night and day. On one hand, some people are looking for something and on the other hand, some people are repeatedly sweeping through a data set to be able to analyze the unfolding market situation repeatedly. Channels enhance the data set and the annotations and notations provide even more focus. Seeking signals versus letting the market talk to you is like comparing the ancient practices for survival; hunting and gleaning. Society assigns these classes of jobs to this day. Elite trader (ET) is riddled with depictions of hunters (macho) and gleaning (steady as you go). You may even see the word “winning” once in a while in ET.

Taking money out of the market is a strikingly accommodating process. By continually doing, repeatedly, the four steps using channels one rises to a performance level that is very efficient relative to the capacity of the market to deliver to you. This is the final basis for determining the chart selection and how it is set up. We want to continue to glean from the market all that is possible with continually advancing skills, experience and tools.

B. Family of Channels

Three conventional trend durations are well established by convention and economic analysis. These are: long term (LT); intermediate term (IT) and short term (ST). They are like containers of shells. Bull and Bear markets are long term and they sometimes extend for years. Indexes are used to characterize these, and their arrival and departure cause great debate. The final determinations are made in hindsight usually and some prognosticators are correct and others incorrect. A score is kept by the media.

Showing these on charts is conventionally done with EOD charts or longer. Annual charts are used for the long term most of the time. You now have the public view of things.

For making money we turn to other considerations. The LT and IT for us are ‘outside’ of what we do but they are there and provide a general context. Occasionally, they come into view and can have a nice positive affect on making more than the usual amount of money when our trend channels are banging against these trend channels.

We use charts and they have names. I use the following set: **1, 5, 15 and 30 minute charts plus the daily, weekly, monthly and quarterly charts.** With little exception the ratio of durations chart to chart is in small whole numbers. The little exceptions are the closeness of the 15 and 30 and I slip the 2 minute chart in as an advance warning system in a differing market.

For indexes we trade those as front quarters so they come and go within the long term. The following sub section serve as an orientation for choosing where to trade, in terms of time durations shown on charts.

1. Beyond quarterly rollovers

Since we trade in futures, under a quarterly roll over scheme, we have to take that into consideration. One front contract expires and rolls over into another quarterly. The values in futures contracts are, therefore, tied to the future expiration date the current value is comparable to the cash value of the associated index. The futures index value and the cash value converges to a common value on or near the rollover date each quarter. The name of the difference is called the “premium”. It is listed, and value is streamed to various trading platforms. Under the channel aegis, we use the premium as a leading indicator of ES price when, specifically, the YM and Dow industrials average (INDU) are compared on a two minute chart.

2. Long Term

We will use the “nature” of the economy as reflected in the long term. It gives us the “propensity” of the market; it is a cast shadow for us. The key ingredient it provides is the bias for news, formal and informal. A “Greenspan” is a unit of measure I use for the INDU. One unit is 150 points and the duration is 30 minutes. Formal FOMC news rates a Greenspan perturbation in price range and for three 30-minute oscillations. Usually the second move a retrace is also a HVS of about 2 bar full cycle duration. The long term cast determines the order of the moves. So we know what the market cast is, at

all times, by simply looking at the “premium”. If it is positive, a Bull cast is at play. If it is negative, a Bear cast is at play. We are just pragmatic here, that is all.

3. Intermediate term

The envelope of trading operations revolves around the IT. It is the outer horizon of the “outside” that our trends are “inside” of. It is, as Columbus wouldn’t say, the “edge of the Earth”. LT throws a premium cast and IT is the flavor of the preferred trend direction towards the future and away from the past. It traverses the bounds of the LT and they are more or less a quarter or so long.

The high / low (H/L) range of the LT changes gradually, usually in response to the size of the economic venue. Larger is the common direction. IT channels have an additional direction than the two directions of the LT. It is common for any channels that have the characteristic of traveling within other channels to move in one of three ways at a given time; the choices are long, short and lateral. Since the LT is more or less limited to two directions, the way the IT bounces off the LT can be either hard or soft. Cat health is used to describe this. Below IT, it is common for the soft bounce forming lateral to “ride” the channel line.

4. Position Trading channels (short term)

Inside of IT channels there are traversing short-term channels. Position trading (longer than 1 day) is done mostly in a short-term context. For this exposition I will stick with a 5 to 8 day period for defining the short term. I often refer to this as IT when the focus is

intraday trading. I have done it for ease of differentiation instead of getting into specifics on position trading periodicities. Most of my financial efforts are in the short-term “natural” cycle arena. Here we will limit intraday trading to 20 contracts and a high / low (H/L) referenced daily yield of about 3 times the H/L. All index trading at and above this periodicity can be considered as independent, when it is carried out on one or more of these term designations simultaneously in segmented or independent accounts. There are names for participants on these separate levels

5. Intraday trading channels

This is the heart of making money. We build up from the fastest action to the best action during the day’s run.

A. Chart Selection, above, laid the groundwork for these channels and what they potentially hold for us. Using geometry and parallelogram drawing, you can rough out traverses and trend channels formed from the traverses. Occasionally you have an additional envelope where trend channels work to form another envelope of trending. This is what is called a “trending” day. Just knowing this is a great help for assigning risk in trend channel retraces within the envelope. The hindsight expression that best covers the trend channel retrace is “Gee, that was shorter than I expected”.

We see 30 to 40 actions a day in the usual day. This implies that there are 15 to 20 traverses and you have a minimum of two traverses for a trend channel made of traverses.

What chart is all of the above on? What determines where to look? Are bar charts where it is at, even? For making money, the question is: How can I monitor to best connect to the market and take as much out as possible?

In the dark ages when I grew up financially, the vacuum tube mainframes had just over 10 instructions (that was the word used then). “Add” was one. A differential analyzer (GE) that I worked on meant putting in “step functions” by halting and changing gear ratios. Shaped cones were used for “integrating”.

Look at the possible range of considerations (modus) and consider the convenience of the combination of the 5-minute chart and the 2-minute chart for this work. Compare this to 5 other scenarios. And trade off different pros and cons that are there.

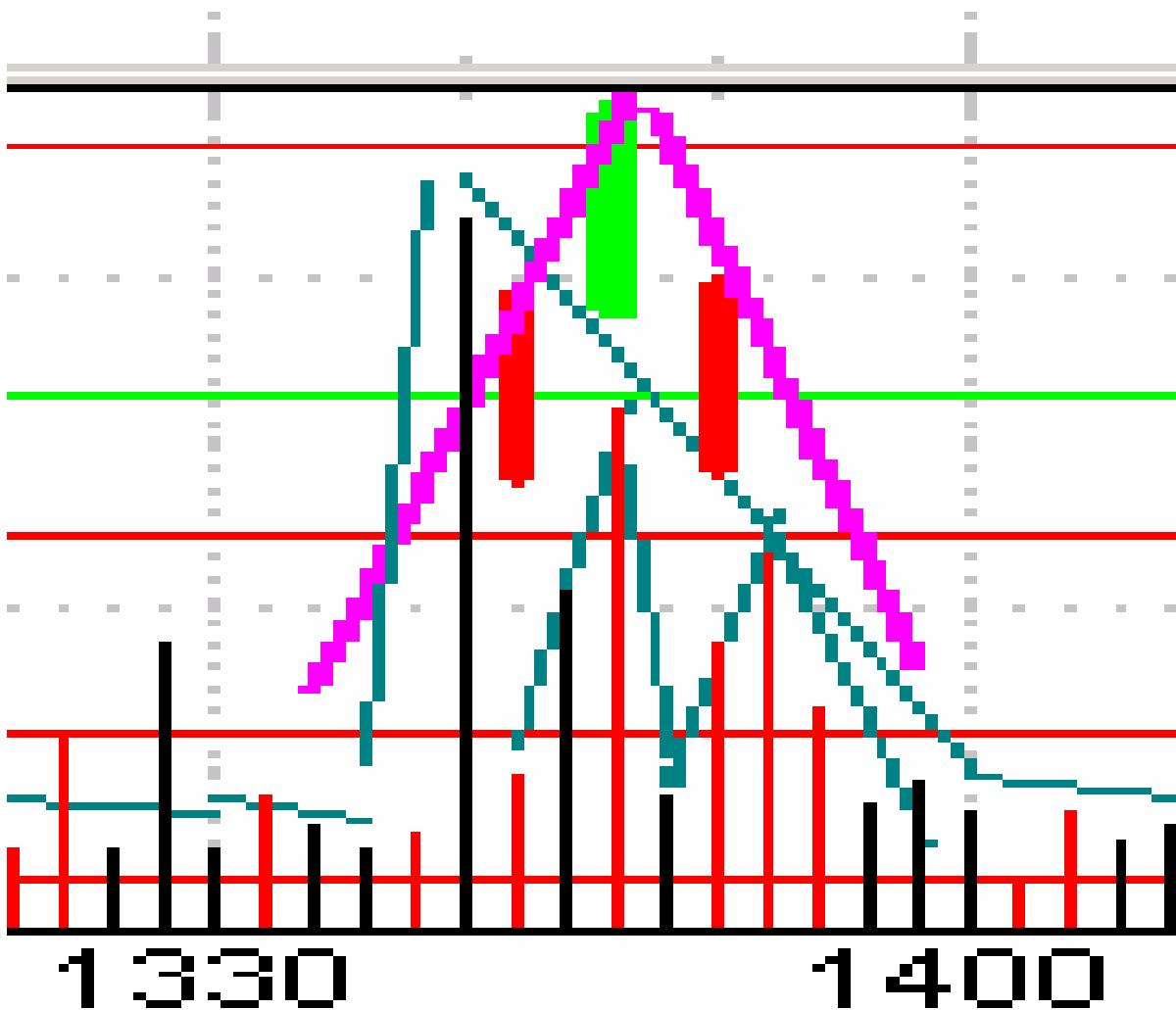
What the five minute chart shows is a continuous price movement (it is the same on all charts fractals) that can be monitored and analyzed completely from a practical point of view. Examining it allows you to see that pulling profits can be done daily and profits can be compared to the daily H/L range for planning purposes. You now have your work cut out for you. This foundation is sufficient to assemble all you need to make money.

C. Trading Chart (fractal)

We use the 5 minute ES chart as well as the 2-minute YM chart. We build the chart to trade to make money. The channel work is done with price and volume and other facets for money making come with the charts. The P / V relationship has two parts: one lends itself to holding entries and the other deals with taking profits (exits). See Part I, Section

B. The charts are set up with price bars on top and volume bars underneath. A standard scale division is used on each: 2 points for ES and 10 points for YM.

Sweeps are made to monitor data sets from the chart. To complete the analysis requirements to make money the primary measure is the time rate of change of volume. Increasing signifies continuation (hold) and decreasing signifies change and that profit taking is imminent. Since many sweeps occur per bar fluctuations in the time rate of change can occur often. Usually however what happens is that the condition that is determined from analysis is not a constantly changing conclusion. The scenario is more like long periods of one result followed by long conditions of another result. This is a statement about human character and how it is reflected in market activity. Several notes like this will be made in this exposition. What is long can be defined because we have a context. Long is the rough size of a traverse on the ES and YM charts.



The chart above characterizes the increase followed by the decrease. The five parts of the chart are apparent after they are described. The heliotrope color is the envelope of the usual Gaussian. The longest bar is somewhat unusual be that as it may. Usually the left side looks like the right side but this degree of departure is understandable.

The increasing bars continue until a maximum volume arrives and then decreasing volume follows. This is a “black/red” Gaussian in 2 minute YM volume bars.

The rise is up to the wide green annotation. It takes 10 minutes (five bars). So, number bar 5 at the bottom and then number back to bar 1. Just before that is the minimum bar, bar 0. Bars 6 through 11 (number them) complete the decrease. 22 minutes is the width of the increasing/decreasing volume scenario. II lines are drawn to annotate it comprehensively. All the lines are not necessary, of course but it happens they were drawn as a normal part of the discussion.

The additional factors are the red annotations. There is a decreasing volume period for each followed by a rise again. One is on the rising price traverse and the other (latter one) is on the falling price traverse. These are known, in price terminology, as hitches, dips or stalls. Were we using the P / V aspects of this to make money, we would sit for 22 minutes and do the following. Enter long (black) on prorata volume (PRV) of bar 2 almost immediately after its beginning (probably before price movement starts); hold through the bar and then hold through the hitch of bar 3 and hold on the PRV “resume” of increasing volume of bar 4 and also on bar 5. A reversal on peak price occurs on the hitch bars 6 and some of 7 where we ease through the reversal to be on the right side of the trade (red) as the volume decreases for several bars (8, 9 and 10). Bar 11 is a duplicate of the inactivity of that is what price did for bar 10. We exit on bar 11.

This Gaussian made money on two trade cycles and we used the P / V relation to trade the advance of the existing trend (long because volume is increasing); exit on the end of the increasing volume; reenter on the “change” (retrace of the initial long trend); and exit at the end (flat low volume) of the retrace. For the trend channel that the Gaussian volume display occurred in, we have completed a parallelogram (long) and a parallelogram (short).



The ideal has no imperfections, it just goes up and down volume wise and the color of the up is one color and the opposite color applies to the falling volume. The usual is where we have hitches on both sides of the peak. This is the human condition entering

the picture. In 22 minutes of market activity (5% of the day approximately) there are usually pauses in considerations (hitches). We learn to read hitches, dips and stalls on volume.

Now we have built the price and volume charts and can annotate them with price channels and volume Gaussians.

Since we have them there we calibrate them and calibrate ourselves. The scale is kept the same and the whole area of the chart is used. We have a standard zoom, so to speak. Further, we permanently annotate the volume with horizontal rays that depict market pace. On YM, the three trend pace zones are center lined with rays (DU, Slow, Medium and Fast). Four, red zone, center-lines. The green ray depicts the minimum volume needed to extend the H/L within a day. The illustration goes from the DU zone at volume BO into the slow zone through it to the medium zone and up to the green line which can move price into new extended areas of highs (H) (in this case) and then back down into DU and no appreciable price movement. The BO is rapid and does almost extend into the fast pace.

All of this comes from the volume chart and its annotation. There are lines there that are not spoken of. They are short term helpers that just orient. They get us in and out of hitches and stuff. On the chart, above, the price movement is seen. Note that it is in a channel that was established long before.

1. Hindsight Channel Drawing

Set up your monitoring screen and go back for two weeks and print daily pairs of charts.

Draw in the stuff you “see”. Do you find trades during each day? Make a chart of the day’s trades for two weeks. 10 entries, and in a column for the totals and a H/L range. Also, record the answer you get when you divide the H/L for the day into your daily totals. Divide the total profits for the 10 days by the margin requirement. Use the compound interest formula, to determine how long it takes the capital you are growing to get to 20 times the contract margin. Naturally you did not lose any money on the trades the volume and channel annotations gave you. Why not?

2. Getting and keeping oriented

Use the 10 charts to come to a consensus on how the day begins and always use a carry over channel from the prior day. While you cannot see the advantage, it is there and influences the day’s trading. Once the day begins, there is a dominant market direction; you must glean this from how volume supports price movement ASAP.

a. Opening and synch

Fifteen minutes is given over for letting the market synchronize. This high risk time can be used to establish traverses from pairs of bars starting with bars 1 and 2. Be messy and glean meaning. Points 1, 2 and possibly 3 of the first trend channel come after the synch. You complete an entry and up to two reverses by the time you get to point 3.

b. First price movement after the open

The first traverse, of the first trend of the day, constitutes the first daily price movement.

It is often a tape and always is fast paced on both ES and your leading indicator of ES, YM. You are fresh, the day is new and it starts off the same old way.

3. Establishing the dominant market direction after open

A major item as you use charts effectively is to know if the day is beginning as a black/red or a red/black. YM Gaussians tell you this. The rising volume color is the price trending color. Traverses in the dominant color are R to L traverses and then L to R price move is a retrenchment of the dominant trend color.

4. Standard methods during the day.

Using the knowledge you have gained from static understandings, translates into dynamics refinements of the knowledge and finally you use the same knowledge in the real time trading environment. There are no exceptions simply because you operate in a holistic context. Each Part is a repetitious pass on the basic principle and it is done by deepening and interpolating within the scope of the principle.

a. Traverse channels

Traverse channels on the ES are **THE** trading money extraction device. On the YM they are the leading indicators of the ES traverses.

b. Combining consecutive traverses to get trends into channels

Traverses build trend channels for intraday trading. The 5-minute chart gives you the two fractal levels for making money; the traverses which form the daily trends. Trends give you boundaries for the traverses as you extend them forward in time.

5. Adding pace to trading channels

Pace is a term I use to describe the movement of the market. Think of it as how your transmission works on your car. I just set my transmission electronically for normal, economy or sport. I get differing applications of power from the V-12 for different velocity ranges. There are three or four “speeds” in each. We use slow, medium and fast paces for the ES and the YM. For some reason I use bracketed zones on ES and I use centerlines of zones on the YM. With these different speeds you make money at different velocities. To do the best, you have to “lead the target” more for higher speeds. Since we work sequentially, leading the target comes down to being very cognizant of how sequences unfold. As a person learns, they change how they handle monitoring and the trading platform. The platform has to be prepared for the possible actions in advance. Monitoring and decisions have to be made so there is enough time to execute in a timely manner. Knowing the pace of the market is the best leading indicator you can have.

a. Determining pace

You can use your daily hindsight charts to get the pace annotations set up on your trading chart. The software for computers for trading is not very far along as yet. So we still have to do crude things here and there. So far, cloning is the closest to channels we can get. Pace is not too different. Use a few charts and colored ball points to find the high, medium and low volume ranges for trending periods. Also, before you draw them, draw a line for DU. DU is the lowest volume and when it is there no, market movement is going on. You can note the bar lengths then too. Once you have DU established then you can scope out slow medium and fast trending volume. On the YM you see slow volume centers on about 300 +/- ; medium centers on 600+/- ; fast is about 1,250+/. I use rays for these lines and extend them to the right. For DU I have a line on 80. This is all for the 2 minute YM volume chart. ES ranges, turn out to be 4,500 to 6,000 for slow pace; medium is 6,000 to 10,000; and fast is 10,000 to 12,500. Above 12,500 to 20,000, is extraordinary. For DU and very dry up (VDU) on ES I use 2,500 to 4,500 and below 2,500, respectively.

b. Pace changes

The pace is usually one pace or another; it is not a continuum for some reasons. The human nature of the traders is the driving force. This is mostly caused by what the mix of trader types is at any given time of the day. It is not that every trader has fits and spells of trading. People do a lot of reasoning about markets and the aspect is generally quite screwed up by most. Actually, most people do not get to a level of sensitivity to consider market pace. (See BMBW, Appendix B. x. - Common Mistakes).

So you can count on steps of changes in market pace. The stepping is down from a fast pace beginning. Three steps occur: Fast to medium; medium to slow; and slow to DU. The pm start up usually rises on a BO in volume followed by a Price BO right up to fast pace. Then the pace steps down again as in the AM until the near end of the market.

The traders use the last 45 minutes in a way that subtends the last 45 minutes of the equities market daily pattern of activity. There are three standard activities in equities at the end of every day. There is one special aspect of the near end of the market. The futures markets are affected by the automated risk management rules of the commodities market makers. Introducing Brokers (IB's) risk comes in two sizes: low and high. Near the end of the day it switches according to rules. Pace is raised because of these mandatory actions in a brief time.

c. Price movement requirements

Price will not move when the pace is below a certain level. There must be enough volume to cause a slow pace before market movement occurs. When the market is not maintaining that volume level the market drifts and the bias of the drift is down or it is in the direction of the combination of the LT cast and the IT dominating direction. This is the only time macro analysis works and since there is only "drift" it is not possible to make money compared to the risk level encountered.

Knowing when movement comes to a halt is the most opportune thing in making money. This is especially true when you have leading indicators, which we do, for the advent of the end of no movement.

6. The usual trending scenario for a day

The market may be thought of as being like a steel concentric mechanical clock spring. It starts wound up every open and winds down until it no longer functions. Noise then prevails during the “rewind” period of midday. After that the PM repeats the unwinding once more. We examine pace all of the time to understand how the trending is working. There are other effects too, that are presented in the following four subsections.

7. W, M, up, down, flat

There are three main market descriptions for days. Trending days have three constructs: up (long), down (short) and flat (lateral). The days just go from beginning to end in the same trending manner. About the same amount of money (3 times the H/L range) is made in each when you use the 5 min chart.

Non-trending days are days where there are more trends of shorter durations. These days are more common and you get to do actions over the day, which often involve different holds through identical price ranges. These are the least likely times for falling off the edge of the Earth. Often they resemble four part days, that appear as either W's or M's. Midday is usually a lateral drift with the above cited influences.

The other kinds of days occur at ends of IT's or short term channel endings. They are described in appropriate locations below.

8. Prior day effects (carry over, gaps, flat (lateral) ON)

Markets are not continuous functions (data-wise). They turn on and off periodically. As time passes and globalization is enhanced we get closer to being able to use continuous functions. The downside is that not all time is equal. We take into account what is necessary and get on with making money. The 15 minutes of sync in the AM opening is a gracious gift to prevent mistakes. All closing channel are extended into the open. The Opening Neutral High / Low (ON H/L) is dashed in color for us to regard from the open. Dashes replace the ON values as the ON value extremes are exceeded. They fade away as time passes. Prior day effects simply act as “containers” for a while and then they go away.

9. S/R effects

Human aspects enter the picture here again with a vengeance. Support / Resistance (S/R) considerations can be thought of as “market memory”. We regard R and S to make money. As we have LT cast and IT dominance; there is market memory for past perceived Resistance and Support. Market formation are true to the P / V relationship and formations help you to deal with market price extremes. Do not use any ET guidance on S and R stuff, particularly with respect to hindsight oriented irrational reasoning. S and R are dynamically established as parallelogram channels that maybe circumscribed as slower trend channels surrounding our annotation and notation work for intraday trading on the 5-minute chart. These are short-term trend channels or IT channels. These channels all fit into the infinite scheme of things without any special rubric whatsoever.

Now we deal. You must know and use the concept of trends and you must know that trends have dominant direction and they occasionally retrace after advancing. This, humanly caused, trait from traders prevails constantly and eternally. Increasing volume parallels the dominant direction of price. When the advance is not under way, there is still the dominant direction in place and price is able to come to a balance in any number of places. All of these are within the H/L range of the bounding family of parallelograms that apply to successively longer time periods and are more and more outward from the price operating point.

More of the time price migrates to and from a multiple linear regression (MLR) line that may be determined by using the same periodicities as for the parallelograms. Think of a spring attached to the MLR line and the mass of the price wanting to zing around it, to and fro. Volume is the ping pong paddle. High continuous volume will hammer the price against the R or S with every stroke of the paddle. But the price will not bust through. This is slaloming along the R or S in a lateral channel tipped at the angle of the dynamic of the R or S LEFT side and NOT THE TL side of the parallelogram. If you happen to do S/R analysis and not use trend channels, you are SOL. All consistent analysis for S and R stuff requires that you do NOT use TL's and that you must use first approximations of price movement "away" from the TL. Opposite the TL, vis-à-vis, price migration.

The TL is where the ping pong paddle hits the price and on high volume and drives it to the top of R or bottom of S (hence my continuing use of this terminology). This is the BOUNCE OFF and AWAY from the TL, of the trend, along the path of price.

Faster shorter term trends bash into the limits of the market, ride the limit in lateral channels and finally end. This ending is the climax run of the longer term envelope that the prior shorter term trends have been traversing over and over for the life of the longer term trend.

Thus, at some point, the Failure to Break Out (FBO) of the lateral high volume trend to go past the top of R or the bottom of S, results in a new envelope for these past traverses. The direction change on high volume, AWAY from the limit, begins the first trend traverse of the new dynamic range of R/S and it is a traverse within the trend that is making the first traverse of the new, longer term, market boundary.

So the normal S/R effect that we encounter is seeing a channel line of longer-term boundaries come into view on our daily chart. This line is near horizontal compared to other lines we use for annotation. And it reminds us of the forces needed to approach and ride the line. We trade the traverses as that ride is within the lateral trend that we encounter.

Sometimes the trend “bounces” away from the limit and ends. Then a trend reversal within the boundary has occurred and we can expect the new trend to bounce again at the other extreme of the boundary.

All of this is within our grasp and we use it to color our trading just as we use the cast of the long term and the dominance of the IT.

10. How longer trends set the daily context

The above subsections have provided a good segue into this subsection. The Bull/ Bear LT gives its cast. The IT is riding to and fro in the LT, and have trend dominance. It remains, and shorter trend movements in the IT wax towards the IT direction and retrace against the IT direction and all the while they maintain the dominance. The waning trends are not reversals per se. Reversals would also demonstrate a reversal of dominance. Since successive IT trends start before prior IT ends, it is possible to see this happen occasionally.

III. Getting Started

Thus begins the dynamic part of the exposition, in the following three sections: A. The Dynamic; B. making Improvements; and C. Debriefing. In prior parts, the emphasis is on the basic knowledge of complete charts and not charts that are forming in real time. The difference is stark. Almost all of the text coming up is about one bar, the one on the right of the chart; it forms the present end of the parallelogram.

Charts are ordinarily positioned in order that there is blank space between the last forming bar and the right scale. We keep the channel lines extended into this space. And, we have a list of what is coming up soon.

A. The Dynamic

Charts move to the left and the NOW price stays in the same place by software design.

It is not usually possible to have a day's chart fill itself in on a blank chart going from left to right. There are not many other things we do or observe in a similar manner. So we have our work cut out for us to adapt here and there. We have to take our knowledge which is whole pictures of beliefs and truths and focus them on one bar forming on the right of what we monitor as time passes.

When you drive a car on a trip based upon a map you have a similar experience, sort of. The map is not enough to give you all of the details that you continually drive through. You observe, analyze, make decisions and take actions to be safe and get to where you are going. Skiing, sailing and gliding are the same and each has its context.

In investing, time passes as above and new data continually arrives. This seems to be the same as above. You continually analyze. That is the same as above. From here on in, things get as different as much as they seem the same. It is a puzzle to most people.

To be safe, a necessity, you must be protective. To get to where you are going, you must endure risk. We use knowledge and control to achieve this as we monitor. The current bar is the only thing we consider and we surround it with everything available to achieve excellence in this dynamic.

After entry everything changes (See section IV.G. on EHE, EHR and RHR) and we are focused on holding or ending the trade.

To drive, it would be like looking steadily out the windshield a specific distance from the car; to ski, it would be like looking 30 feet ahead; to sail, it would be like looking 100 yards ahead; to glide, looking doesn't even count; gliding is like "feeling" the current bar only.

In trading, we do not have a view of where we are going but we have the puzzle of being safe and getting to a goal. We can't see the future, so we must enter a trade and then substitute something for being able to see ahead.

Edge folks bet on the future and limit their losses. We create a comprehensive substitute for betting. A process is required to achieve this creating. This exposition creates channels. Others will create other complimentary tools.

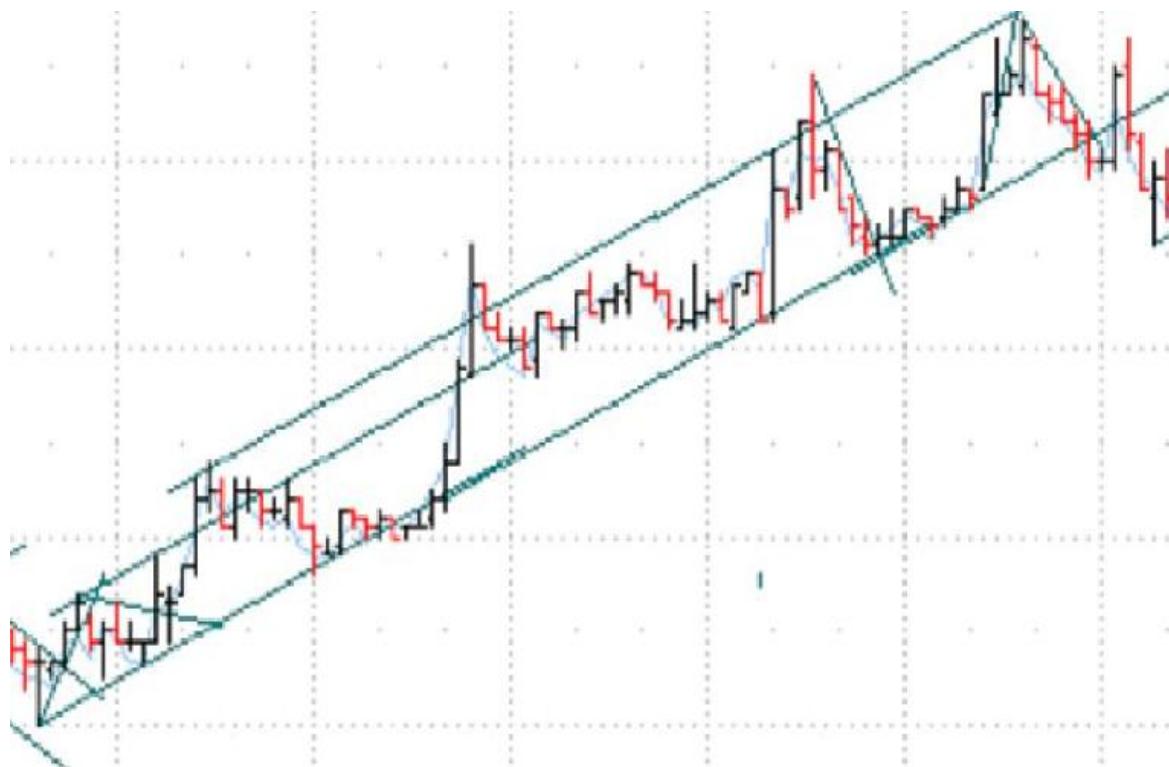
The three charts show the substitute for seeing the future. That is half the story. The other half is monitoring to answer NOW questions and use the answers to compare them with what we know and believe. That done, we stay safe and reach the goal that is NOW possible. The Dynamic.



Chart 1 (above) shows an FTT ending a short trend channel.



Chart 2 shows the FTT and point 1. It also shows the TL's of each traverse. A maximum is reached at the end of the R to L first traverse from the FTT. This is point 2. A minimum is reached and ends the L to R traverse, forming point 3. The parallelogram is drawn at this point. The extensions may also be drawn at this time.



What happened following the drawing of the extensions is shown in Chart 3. The third and fourth traverses come to and touch the trend lines. Higher volume on the fifth traverse extends the volatility of the channel on the left side (volatility may broaden the channel away from the trend line.). A lateral low volume sixth traverse takes nine bars to reach the TL and then the bars follow the trend line for another 8 bars on low DU volume. A volume BO begins the seventh traverse. Four more traverses follow in the extended channel lines.

The substitute for not knowing (seeing) the future and still being safe and meeting goals, is extending channel lines, monitoring, and observing that price continues to move to allow profits to accumulate within the channel constraints.

As the last bar is watched over and over, and as it completes, the second half of the dynamic comes into play. The NOW questions are continually resolved. They are: where am I NOW? How fast are things changing? And what comes next? We answer the first two questions. And, use our knowledge of channels and sequences of indicators and our other set up monitoring elements to: 1. Know what to look for; 2. Know if anything unexpected shows up; and 3. Know what fails to appear that is expected. These two answers and the focus of monitoring NOW with three elements to look for, allow us to be safe and to reach the goal that is seen to be the potential of the chart.

To draw three points, extend channel lines, and have them bound twelve traverses before the next FTT within the lines, is a pragmatic demonstration of “Channels Work”. That channels work, in this dynamic, can become a belief. The belief is reinforced as channels are used dynamically ALL the time. A consequence is that there is the same comfort level trading as for driving, skiing, sailing and gliding.

The price movement on the long diagonal of the parallelogram is a rewarding amount. The fact that the long diagonal forms each time the left channel line is reached is a convincing point to reverse. Reversing again when the TL is reached is helpful too. The sum of these trades is a multiple of the long diagonal. Each pair (the R to L and the L to R traverses) completes a parallelogram. There are six along the extension. The date of this chart is 20 AUG 04 and it is the YM chart used as a leading indicator of the ES trading channel. The time division grid is a 30 min grid.

Four subsections on the dynamic follow this introduction.

1. Forming a parallelogram; each bar counts

We will go through a day from bar 1 onward to deal with how to establish and maintain channels on all levels for intraday trading. The illustrations are from 20AUG04. By taking snapshots through the day and using channel extensions relative to the last bar we get to put ourselves in the position of a trader who is monitoring the chart set up that is recommended.



a. Beginning the day

Parallelograms for traverses are what come up first. By the end of the first two ES bars you are half way through the opening adjustments of synch. Four ends are available and you draw the trend line on the right. In chart 1 you see this drawn and indicating a long traverse. The same is true on the YM using the first two lower bar ends. The left lines are drawn at the close of bar 2 (ten minutes into the day). On ES, bars 1 and 2 are similar so the offset creates a long direction “tape”. On YM bars 3 and 4 serve to delineate the channel width. Bar 3 began 6 minutes into the day and bar 4 began 8 minutes into the day. The YM demonstrates that the early high volume driven price rise is tapering off on declining volume. Four bars are creating a stall and the initial traverse is finished. Also, A L to R traverse is complete. On ES bar three, of equal volatility, is sagging off on decreasing volume as well.

We are three quarters of the way through synch and we are getting our bearings as we stay sidelined through the synch. We notice additional items: the ON top has been broken. The H/L range ON is narrow (flat). The red line above the action is significant too. It is an IT (position) trend line.

b. Beginning the traverses of the day

This chart separates the men from the boys (and the women from the girls). You see the ES end of synch (end of bar three). After 9:45 you may enter on bar 4. YM bar 9:44 to 9:46 is the red bar that potentially finishes the stall across to the potential point three TL. Potential minimum YM volume was reached on the 9:42 to 9:44 prior bar.

My first “adroit” comment to nwbprop (a trader) was in this equivalent situation.

What are the other sweep factors that are apparent on the charts being used for channel annotation and notation as bar 4 begins? The ON Green, the carry over channel TL BO and thus ending it, the R to L traverse ending on the top end of bar 3 thus giving you point 2, the bar 4 open and it's potential **bottom on the TL of the first trend channel of the day thus giving you point 3**, increasing YM PRV volume and increasing ES PRV volume.





c. Beginning the trend

As bar 4 unfolds you may find comfort in entering well before the BO up because you see point 3 on YM and the potential of the bottom of bar 4, already set, being point 3 on the ES. What you get is an entry that gives you the spread of the long trend channel (point 1, 2, and 3) that forms first on the YM and simultaneously represents the R to L traverse of the tape on the ES third traverse of the day on volume that is PRV, greater than fast pace. This is what "adroit" adds up to around 9:45 or at least by the start of the 9:46 YM bar that locks in the point 3 on the YM price chart.

Learning the dynamic of using channels from the beginning of the day can be a very quick immersion with trades being called for right from synch onward. The YM is more staccato than the ES and because of this you have a continuing leading signal for your ES trading. While here we are digesting the dynamic, primarily, we also find that every bar counts in trading.

The example shows entry at the beginning of bar 4 going long and on bar 5 you confirm clearly that you are riding the left side of the channel. As usual, volume peaks before price. Volume peaking is the reversal precursor for a price action to reverse on the left side of the trend channel. Established with point 1 on the bottom of bar 1 and point 2 established by tops of bar 2 and 3, and point 3 established by the bottom of bar 4 where soon after or as the bottom was left, the long trade was entered. The story on the YM is identical with more bars flowing to give points 1, 2, and 3.

Using the third traverse for the first trade of the day is normal regular business. Channel annotations are following the notations of point 1, 2, and 3. You can ink them in on the chart below now. You can see the segments used to further extend the channel on the YM chart.

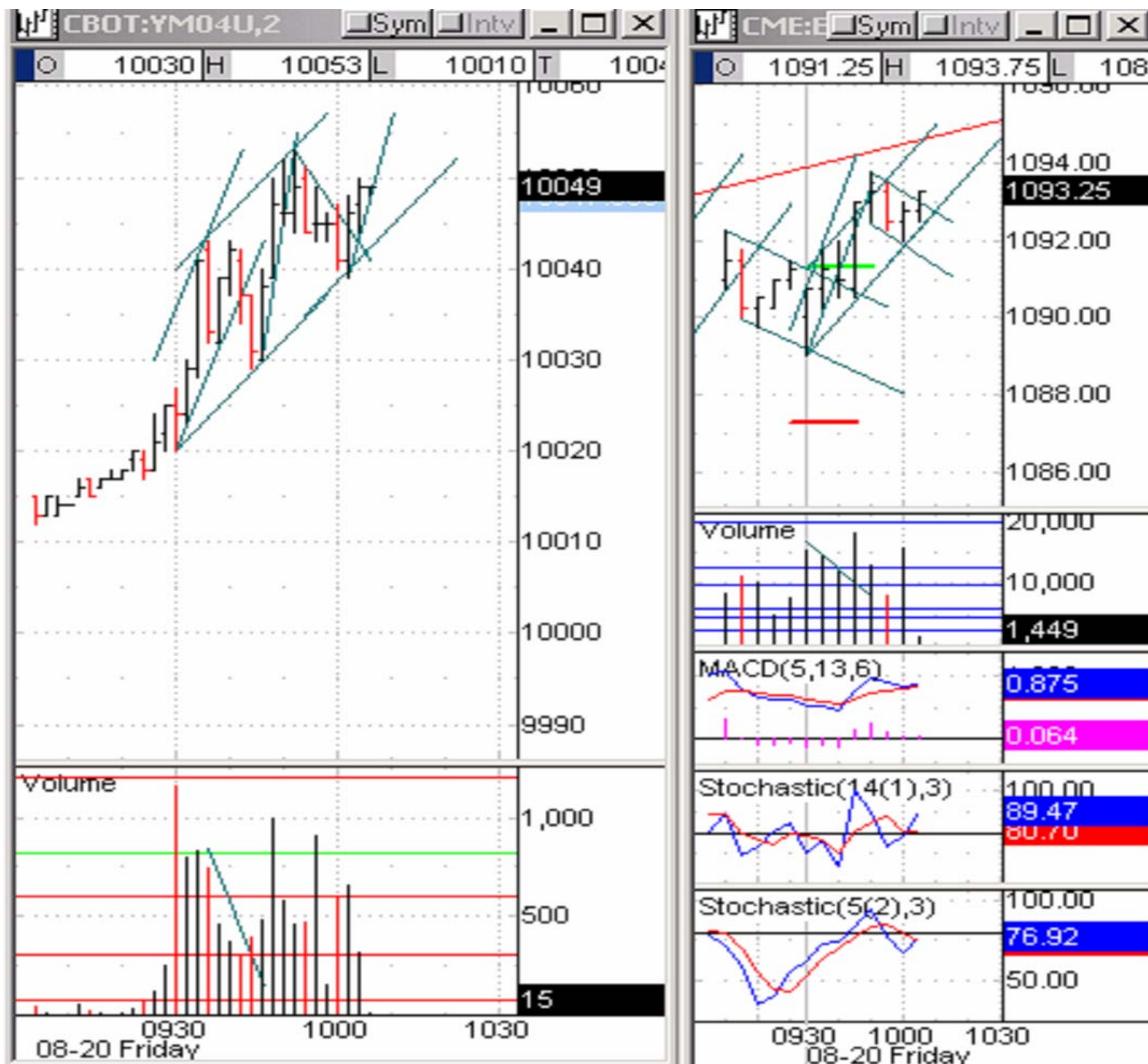
The last chart confirms several things, specifically, about the efficacy of channels. You can see the first reversal trade of the day on bar 5. This trade is taken as a direct consequence of channel annotations. The channel is drawn as point three is set on the YM. You do the ES based upon the YM conditions being met as you are holding a long entry.

The parallel line through point 2 is extended and it goes past many upcoming bars all still in the future. A region is established using this dynamic of extending the channel that is geometrically established.

The bars on YM and on ES again approach the upper limit of their run up and it coincides with the extensions of the left side of the channel. When the price hits these extensions, you have a completed parallelogram and a long diagonal representing the maximum profit of the parallelogram. You continue to sweep, collecting data sets and doing analysis, and compare the analysis with your channel beliefs. The decision will be to reverse into the upcoming L to R traverse of the channel. The reversal takes the profit available in the long diagonal. If you waited for the BO up on bar 4 you have the conservative entry after synch and the same reversal. You can be conservative and just exit and wait to re-enter when you have set the slope of the L to R traverse.

2. Ending a parallelogram

The first chart continues from the open of the day described above. Three charts were used to progress from 3 bars to 5 bars to 7 bars. This covered 30 minutes and the first four traverses that supported an entry and a profit taking reversal, all after the opening synch. This happened in less than 10% of the day. Bar 5, where the reversal occurred, did end the first parallelogram. We drew the right line of the fourth traverse and the first chart shows the other channel line (left) of this traverse. You can see on the YM, that laziness has set in on the annotator's part. I am getting the help of a person who is with me and we are trading together on his account.

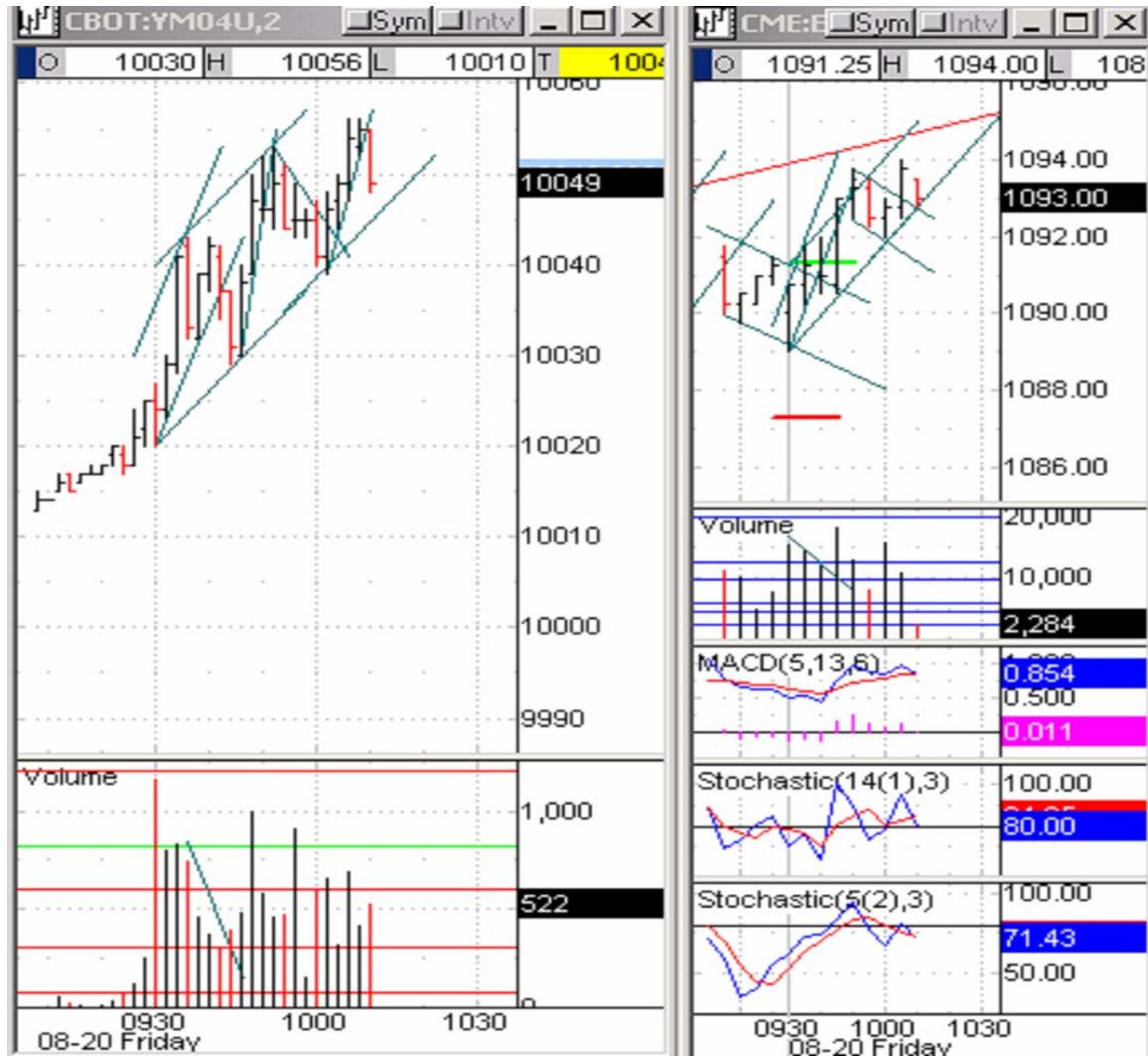


What you see that has happened on this chart (above), past the last one, is that the bar 7 finished and the bar 8 is beginning a traverse. Look closely and see on the YM that the traverse line is already drawn. By doing this, we get a mind set for the current price action on both YM and ES with YM leading.

To go into detail here about the status now and the sweep data sets that intervened before now, is very important. The single reason to do it is to allow yourself to see how the charts fully inform you. And further, how money is made from this information.

The first parallelogram long diagonal went from 90.2 to 93.3 where we reversed and price went to 92 even from 93.3. We reversed on the YM bounce off of the extended TL that was set up using bars 1 and 4 for points 1 and 3, respectively. The YM TL duplicated this as well for the DJIA data.

So far we have done two reversals on parallelogram geometric constructions that use the P / V relation as their pragmatic theorem basis. In this exposition the underlying precept is two words: "Channels work". This market action set of observations serves several purposes. For me it is making money, following what I do. For the annotator, notator, and trader, it is skill improvement and gaining practical reinforcing experience in a setting where there is a live resource. For those that read this, it is a lot of other things. A spectrum of beliefs is represented. Here we have, trust, and use the beliefs to make money. The steps of beginning and taking steps to becoming a practicing expert is a process, and the process is definable. This exposition is done to articulate how it happens along a learning path.



Now, the chart is 8 bars long and the extensions of the trend channel have been used twice to make money. We continue in the market. The sequence that we are using with the channels part of the set up is to reverse on the channel lines. There are additional levels of detail available to consider for refining when the reverse is done. The channels do not give us the finest detail, however. Other set up elements do. The channel portion of the sweep ends with either "holding" (continuation) or going to other portions of the set up. This section focuses on the details that can be used while you are in the channel portion of the sweeping.

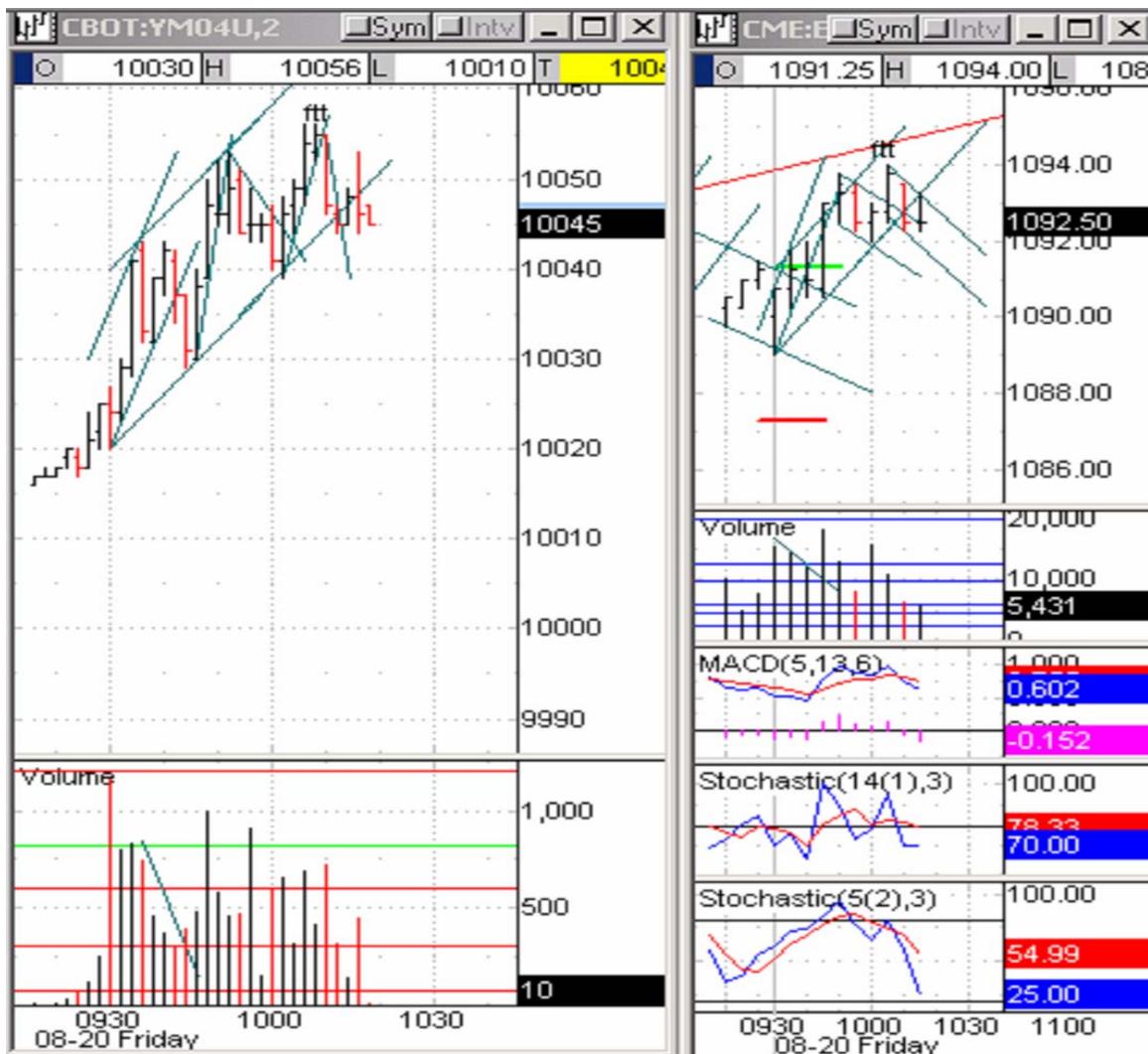
Sweep elements exist for the charts: annotating and notating, PACE, and volume formations. Once we have these in hand we can focus, in detail, on these subsections.

a. On the left line

The left line was drawn during the start of our first trend channel of the day. We also, from a trading point of view, used the point beyond point 2 where the price came to the left line after our entry. We chose to reverse on the left line, on bar 5, after it peaked in value. Bar 6 and 7 move us across the ES channel that we have already laid out.

b. On the right line

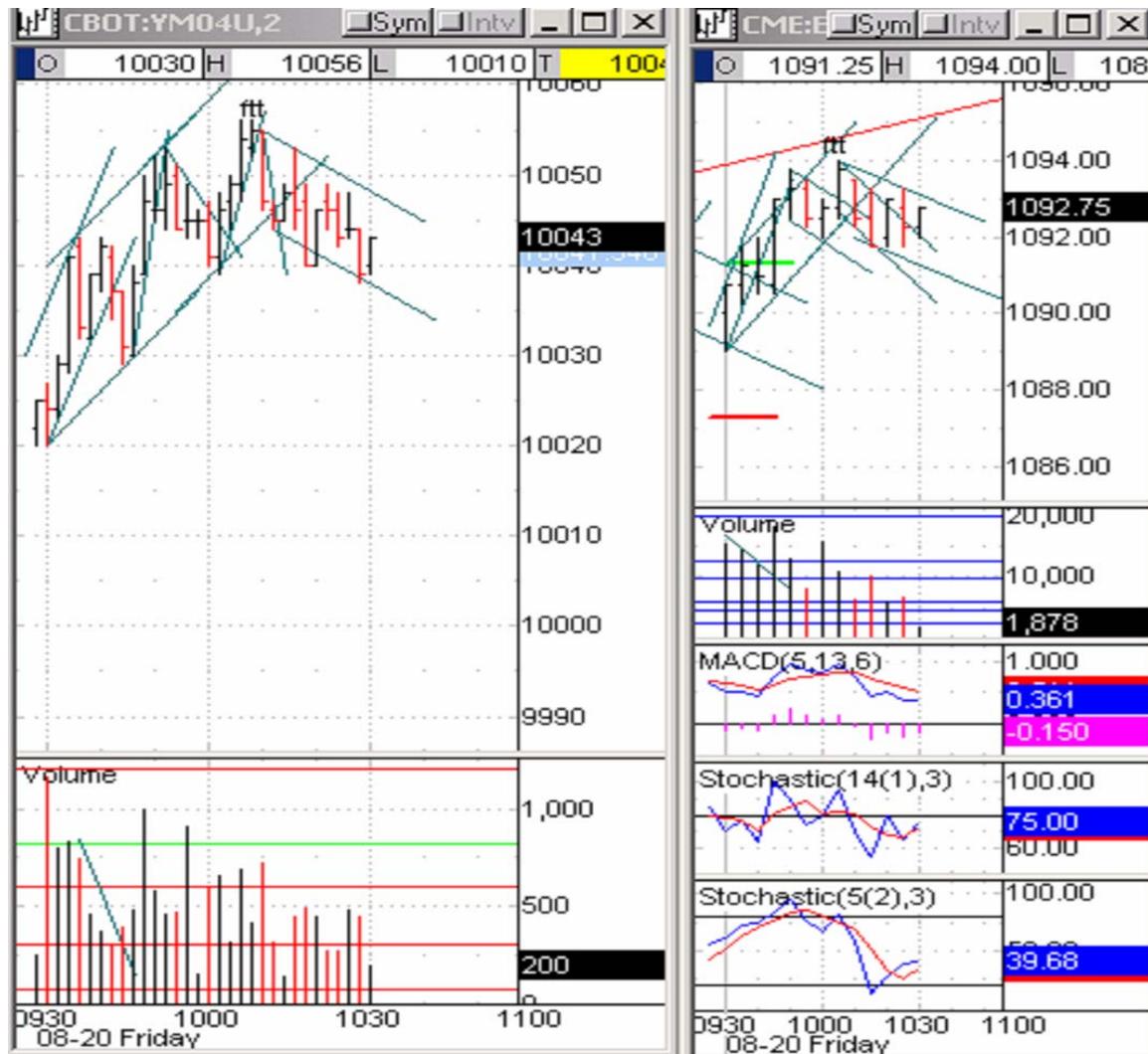
As bar 7 opens and price moves down to the TL, The TL is the right lines and as the price moves off the TL it is our reversal confirmation. The YM reversal precedes the ES and we use this signal to take action. The YM traverse TL is drawn using the 10:02 and 10:04 bars after the trading platform is used to reverse. We hold through bar 7 and on to the beginning of bar 8. Since before 10:00 am on YM, the volume has been increasing from a DU bar.



We ALWAYS look for DU bars because we know after this lull by traders, the market picks up in volume and direction. The dominant volume resumes from the "inside" bar that formed on the DU volume. Two volatile "outside" bars follow and the reversal off the TL has telegraphed our trade (reversal out of short and entry into long) on the ES, on bar 7. Use the second chart to analyze all of this.

c. On an FTT

The last and adjacent chart shows a traverse out of the FTT on the YM. Bar 8 on ES ends on the top of the bar. We use the hitches on black volume to size up how the R to L traverse is proceeding. While panic is not called for, any hitches (hitches are short stalls) that occur, mar forward trending progress. Peaking volume is again followed by a hitch on lower volume. We reverse on the evaporation of momentum mid YM channel around 35 minutes into the day. The ES volume is highest for the R to L traverse and, at the same time it is less than the volume on bar 5 that previously drove the price to the left line of the channel. This is an FTT on YM followed by what turns out to be an FTT on ES when volume shuts down there. The chart ends 10 contracts into the YM last bar. Flat bottom pennants all around and we are holding short with the TL broken on YM and on ES, the bar 10 top just touches. The black DU volume bar on YM expresses the trader hesitation in the markets on these flat bottom pennants (FBP)'s. We are 12% of the way through the day and in our fourth trade.



3. Understanding the advantages of overlap

Trends overlap. The first traverse of a trend begins in the prior trend. It is either from the left side or as the result of a R to L traverse failing when the volume loses sufficient momentum (FTT).

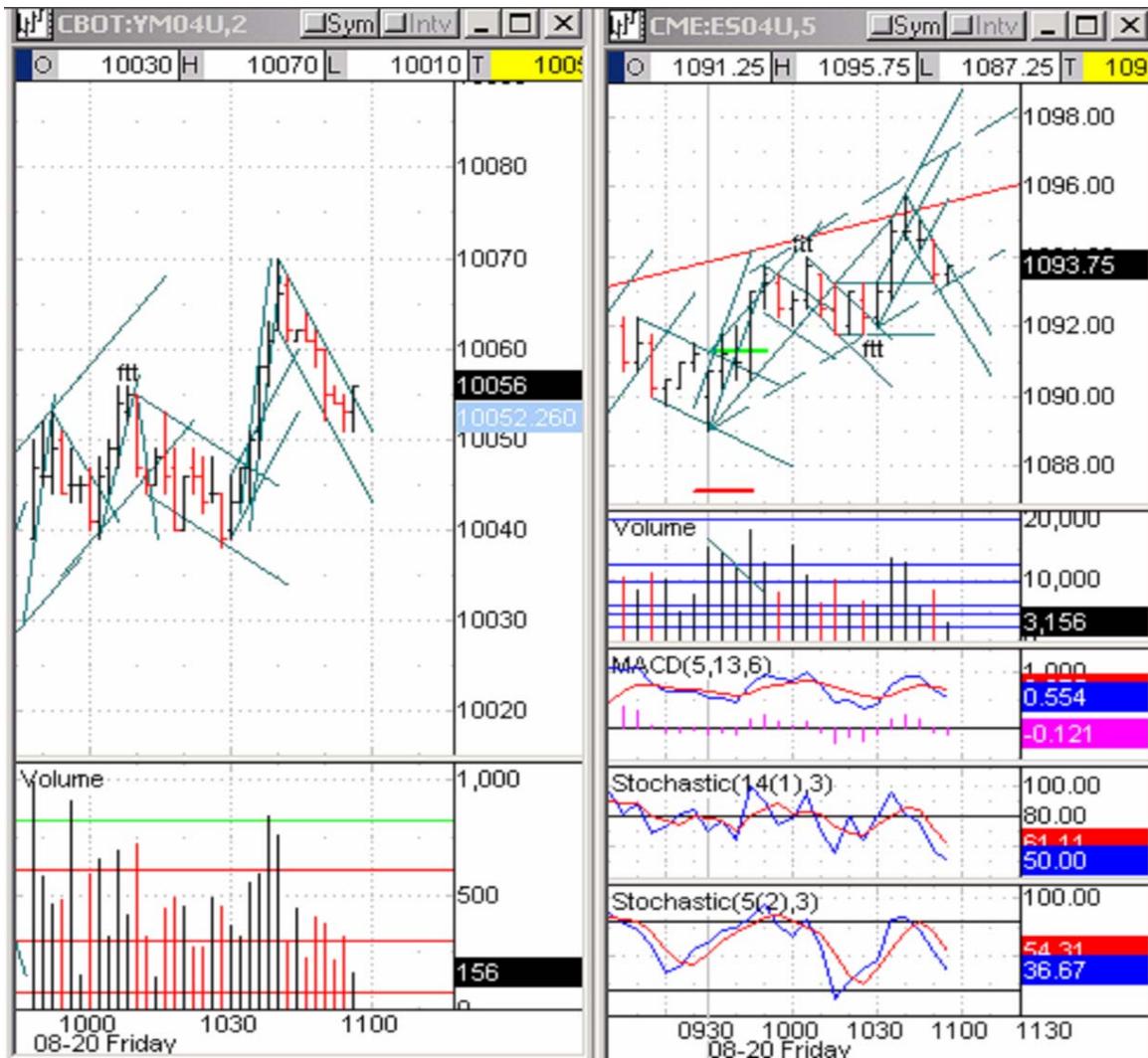
Reversing on either limit prepares you for the new trend formation of point 1 and 2 on the first new trend traverse. Points 1 and 2 occur at the beginning and end of this traverse, respectively.

Here you see differing conditions in the YM and ES after the first traverse is completed. For 5 YM the point 3 is back in the prior channel there is so much overlap. The cause is the spike up on a volume even higher than the peaking volume. The second pair of traverses on YM is synonymous with point 3 on the ES.

By 10:30 the new trend is free of overlap and on its own ground. Many of the prices on ES are being traversed five times. This is an indication that the pace is slackening and so is the trend slope as well. There is much to consider and to integrate.

a. Individual bars; multi roles

Traverses overlap. We do reverses on bars to optimally, take profits and continue in the beginning traverse. The market dynamic is such that we do have more than one chance to take action. Ordinarily, bars tend to overlap and have several common price values. But under extreme circumstances ends of bars simply “spike”. Within the graphical representation during the “spiking” price values are hit, as has been shown on tick chart records. Our monitoring choice is to combine sweep data set elements in such a way to move off the charts to price only data and use the depth of the market (DOM) as our sequential indicator.



The first and second charts in the section show how trends continue to begin and end.

Trend 1 lasted from bar 1 to bar 8. (almost forty minutes). Three turns were completed and the traverse out of the trend begun. Bar 8 served two purposes. Trend 2 went from bar 8 to bar 12. Five turns were completed, one for each traverse and, then, on the right line the fourth was begun as the market was in a High Velocity Stall (HVS) as the pace of the market declined. The fourth and fifth turns were part of the HVS. The FTT reverse in the channel took us out of trend 2. The slow pace of the YM is typical of the HVS circumstance and the Gaussian shifted from R/B to B/R during the stall ending trade 4 and beginning trade 5. This is a typical telegraphing that ends a trend. We zap out of the trend on the first R to L traverse in trend 3.

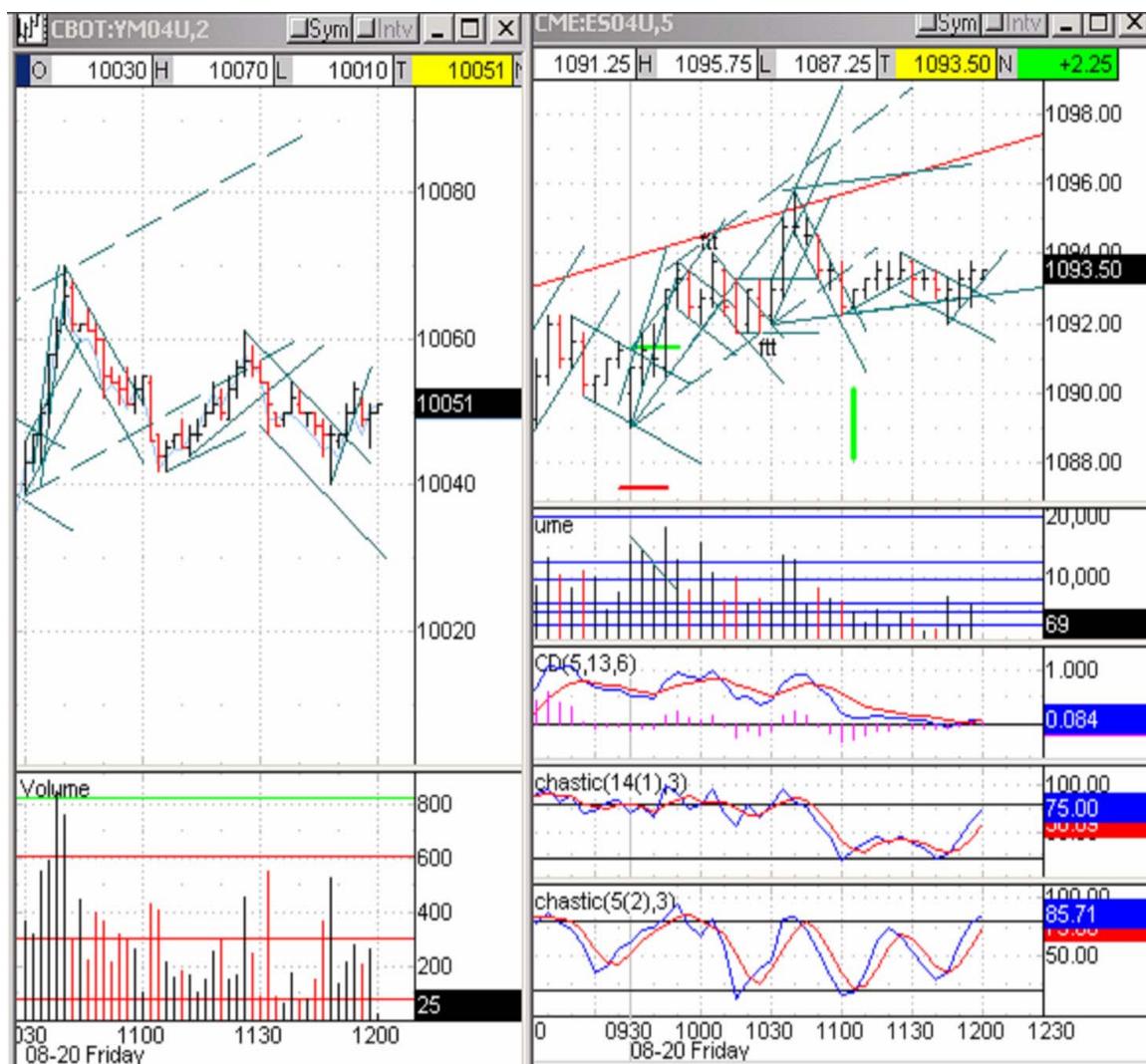
The dashed channel of the trend of trends is normal housekeeping, as a way to have daily perspective. It is an indication of a “trending” day. The black / red (B/R) Gaussian has been in play most of the time as well.

b. The last pairs and first pairs

By now annotating and notating is becoming second nature. Use the charts to add your notations. Add all the 1's, 2's and 3's. You do see the FTT's but the others have been deleted so you can work on the charts as you read. The key to drawing lines as the market flows along is pairs of bars and particularly their ends. Ends are of the pairs are the two points required to form a line. We extend the line segment formed into the future. There is nothing more crude. This arbitrary and crude effort, when made, gives us pictures of the market's “inside” and “outside”. This division is crude as well. By keeping this crudity in mind we are able to get the job done without worrying if we are right or wrong. We are right until we make things better. And the time we drew is in the past from the drawing time onward. The lines are there and extended to where we are NOW and beyond. That is what is important.

Using pairs of bars to start traverses crudely does contain the price well enough that we can see the price inside and then leaving to go outside when it does.

If you scrimp, as you see done here, then be sure to at least have a TL going for each level of movement in effect at all times. The last chart shows the AM end and DU of midday taking charge.



B. Making Improvements

Always make improvements in what you do; learning never ends.

1. As Soon As Possible (ASAP)

AH HA's and ah ha's can happen anytime. When they do, from that point on, the learning trader incorporates what they have learned through experience into the knowledge residing in their mind and into their operating skills routine. Always log any discoveries and during the next debriefing expand upon the log annotation.

2. Extending Lines and Annotations

Here is an opportunity to articulate the rhythm of the market. By extending lines and making annotations you get to focus on anticipation but not do prediction. Extending lines and making annotations is a way to illustrate anticipation of the boundaries of the market and to annotate by tic marks (small indication of milestones as to when they will be occurring). It is actually possible to be extending lines within lines, that is, traverses within channels. Tic marks can be used to mark the approximate timing of R2R and B2B troughs. You can also mark the approximate locations of where price will be hitting any boundary lines in the near term future.

C. Debriefing

Debriefing occurs after hours and not during times of trading. During trading you log notes for recall later during debriefing. As Kenny Rogers taught us all you don't count your chips while you are playing the game. The same is true for debriefing. It is more obvious that you don't count profits during trading hours but in fact what you do during debriefing has greater value than any profits on any given day. Your best AH HA's and ah ha's actually come during debriefing. Further, as a matter of fact, almost all "religious experiences" come during debriefing. It is true that the religious experience jells after you have slept on it, but it must be remembered that the debriefing is where you get the chance to sleep on something.

After hours you go through your evening routine of completing Initial Analysis Sheets (IAS), Daily Analysis Sheets (DAS), and Possible Buys Check Sheet (PBCS). As you do these routines always add new aspects that you have seen during trading hours. That is

when you have Ah Ha's that you log then debrief. You have arrived at a new plateau. You take this new acquired knowledge and skills and use it in your routines to make them even more pertinent. It is like adding arrows to your quiver and remembering to use the arrows when the opportunity permits.

All of this is where the major effort is made to accomplish iterative refinement. The only other place you have opportunity to do iterative refinement is when you take all of the progress you make in debriefing and apply it to your trading sessions in the future.

IV Making Money

Experts reading this paper for the first time will arrive here after reading Parts 1, 2 and 3 thoroughly. Go back if you, by accident, skipped ahead to this part first.

Section A, Obey, is a reminder section about the four step routine and the P / V relationship. Section B, Sidelining, is presented before the main body of making money because it is important to know when not to be in the market during situations where it is possible to avoid success. This is the section that presents major limitations. Section C, How I Trade Channels to Make Money, is a pragmatic narrative where the channels aspect of making money is emphasized. Section D, Monitoring Set Up, is there to make sure you understand that what you are looking at establishes the context for making money. Section E Channel Sweeping, instructs you in the process of monitoring the market in an orderly manner. Section F, Updating Annotations, presents the mechanics of how you keep the monitoring screen up to date. Section G, Upgrading Your Level of Trading Using Channels, explains the three modes of trading using channels: beginning

with entering and exiting (EHE); going to entering and reversing (EHR) and going to reversing and reversing (RHR).

A. Obey

Trading is a profession or practice of amateurs that has one major uniqueness when compared to other financial operations. The partnership between the trader and the market has a reality that is unchanging with respect to what is true and what isn't. The expression "the market is never wrong" always applies, therefore, it is incumbent on the trader to always act using his knowledge, skills and experience based upon the truths of the market. Kidding oneself, and others, in normal business money dealings is a possibility. But as far as the market is concerned there is zero tolerance for any kind of kidding, especially kidding oneself. The market will bite you every time you kid yourself about what is going on in your partnership with the market.

The market contributes the P / V relationship as the fundamental principal of its operation. You can always know and use the P / V relationship to figure out each and every aspect of what you are sensing aurally, visually and/or kinesthetically.

You contribute the routines you perform as your share of the partnership with the market. To optimize your effectiveness and efficiency you must use this routine, in its four parts, to do your job. The four parts comprise four independent thought processes for monitoring, analysis, decision making, and taking timely action. Each of these four is developed through experience which provides knowledge to you directly and you acquire skills through getting the job done in the right way by repeating the routine. You may not

do sub-loops of parts of the routine and you may not skip steps of the routine. You may never just see something and take an action as a consequence.

4 steps and P / V

B. Sidelining

One of the most important understandings a trader has to have is when he cannot make money in the market. The determination is made as a simple matter of considering risk. Risk comes in two forms: market risk and personal risk. Below a section is devoted to each.

1. Market Risk

The risks of the market can be divided into three dictates: volume, price and when non-channel formations dominate. The sections below articulate these considerations.

a. Dictates of Volume

Market volume dictates sidelining when the market is no longer functional as a direct and immediate consequence of insufficient volume to carry out the activities of the market under the P / V relationship. This, coincidentally, is the only time when the theories of random walk and chaos apply. Insufficient volume can be defined as a total noise market condition. At this time there is no concept of action and reaction that is applicable on either a macro or micro basis. For our purposes, as traders, we simply draw a ray from left to right on our volume display where the ray is set at the level of the

lowest reoccurring volume bars. Our terminology for this value of volume is Dry Up (DU). Therefore, Dry Up simply means that the market is un-tradable and presents the highest risk imaginable, a risk that occurs as a consequence of total noise in the market place.

b. Dictates of Price

Price can dictate risk when price is at limit. Notable limits are Support (S) and Resistance (R). It is important to note price values when volume is in Dry Up. These prices are such that any change in price could go in either direction. Therefore, our entry trades around such prices are always done as bracket entries instead of betting on which way the price will go and entering either long or short, we bracket with potential long or short entries that the market, should it choose, may move to. When the market comes to our bracket price then the market has zeroed out the risk associated with betting.

With respect to stocks considering and owning stocks below the \$10 arbitrary value is not done. This is because the P / V relationship is unreliable when prices are approaching the minimum for existence.

c. When Non-channel Formations Dominate

There are two times when non-channel formations dominate channels: the opening of the market and under conditions that occur mid-day when everyone is out to lunch.

i. During open (new)

For those statisticians that work with markets, the fact that they open and close every day is the bane of their existence. If markets were always open, then all the mathematics associated with the markets could be considered continuous functions. The only math remaining is that which applies to non continuous functions. For convenience most market mathematics that is done, is some form of statistics.

Our focus on being sidelined during the open is a consequence of the high risk which is incurred as a consequence of the trauma of market start up. The world has made another revolution since the market closed and as a consequence all of the other global markets and their dynamics have to be taken into consideration at the open. Furthermore, not all markets in the U.S. open at the same time; for example, the commodities markets in Chicago open at a different time than the stock markets in New York. We sideline through the period of time that is required to get the cash markets and the futures markets to come in synchronicity (Synch). Usually the markets take approximately 15 to 20 minutes to come into Synch. All forms of damping occur as possibilities. The wild swings of under damping are most common. Critical damping almost never occurs and it is common to see gaps. It is in fact a myth of the market that all gaps are covered by retraces immediately following Synch. Over damping rarely occurs simply because of the large size of all of the markets.

ii. In DU before PM breakouts (new)

This condition occurs every day in the market. At this time the dictates of volume lead to the three pennant formations. The terminology for the phases for this transition is

Congestion, Convergence, and Centering. (CCC). Convergence will be seen at volume levels just above Dry Up and the market will cycle (slalom). As volume declines further the volatility of the slalom declines and the boundaries above and below the price converge. Finally, when Dry Up volume occurs, the price centers on an average value between the boundaries. Through each stage of this succession the risk of holding a position continually increases.

2. Personal Risk

Personal risk largely occurs as a consequence of a lack of knowledge, skills and experience. The only cure is to acquire these in an orderly manner. Until that time a trader is required to sideline at each and every time he encounters the unknown, does not have the ability to make decisions, or is under emotional stress as a consequence of the sensory messages which are confusing him. In the briefest of terms, always get out of the market when you don't know what's going on. It is a cardinal rule that you have to be in the market to make money. Further, price has to be changing and concurrently it is your job to know everything about what is going on. As stated in BMBW the learning trader gradually develops knowledge and skills by at first operating in the lowest risk climate. As acquisitions occur the trader maintains his low personal risk as a consequence of his acquired knowledge, skills and experience.

C. How to Trade Channels to Make Money

The parts of this section are set up to be used independently after a person is in the groove. It directly emphasizes channel thinking as a boundary of consideration. Mechanically speaking, channels bound the potential range of

price operation and the boundaries are known in advance. To make money there are many other considerations than channels, but all of these concerns happen as a result of the limitations set by channel boundaries. We look at “what” a channel is and “how” drawing channels is carried out to be sure that our operations that follow are being corroborated and reinforced and have been correctly determined.

1. What is a Channel?

A channel is made up of 2 parallel lines called left and right. The inside of the parallel channel encompasses price and acts as boundaries for the price to oscillate in. The right and left lines are made using 3 points; pt1, pt2, and pt 3. The right side of the channel should be made by connecting pts 1and 3 and the left side of the channel is made by drawing a parallel line to the right side using pt 2. This is the channel where price traverses within.

Pt 1 and 2 is formed after a tape is made. The tape that forms the pt 1 and 2 is under a certain pace. This is the first leg of a trend. Once pace decreases, you get pt 2 and are forming the pt 3 for the trend channel. This will ensue until the pace picks up again and you get a right to left traverse. A textbook traverse will have a steady pace band in volume and will hit the left side of the channel. Once it hits the left side of the channel, pace will decrease and make its L to R traverse back to the right side. While this happens, price always stays within the channel drawn.

a. Tapes

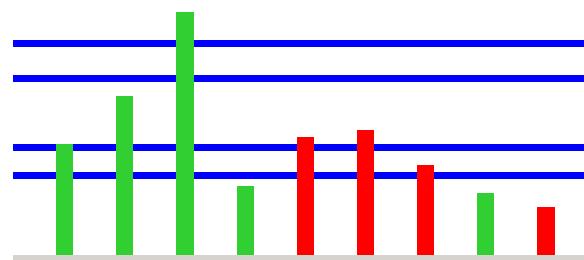
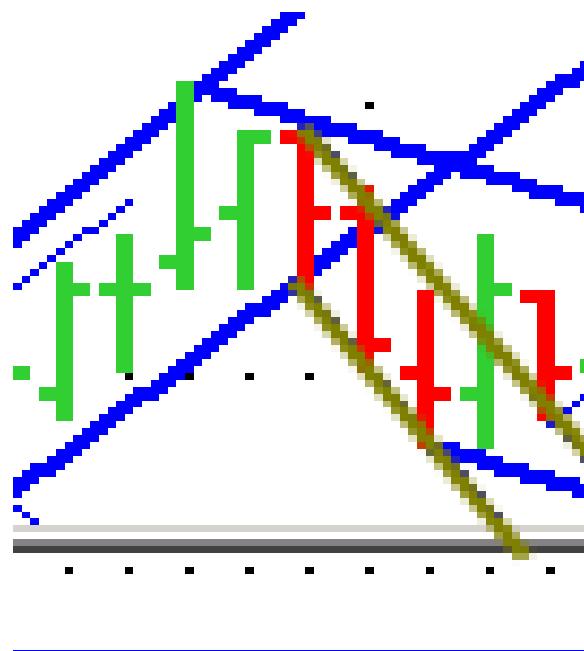
A Tape is a channel that is more or less touched by the high and low of each bar. Each bar traverses the width of the channel. It is first made by connecting the right side of 2

bars and making a parallel left side channel connected to bar 1 or bar 2. If it's bar 2 or bar 3, use bar 1 for the left side (pt 2) tape. ***If the tape channel works better with bar 2 as pt 2, you can use that. See b2.

i. Short Tape Combination Examples

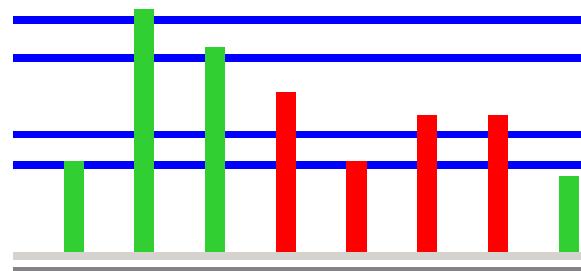
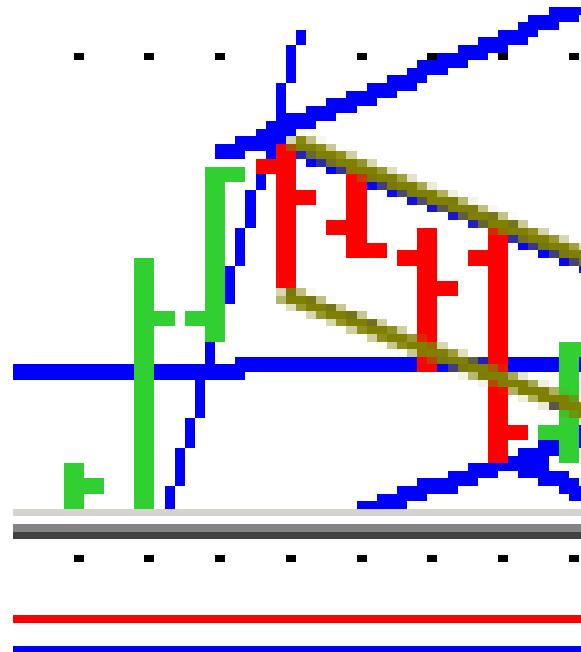
a. Bar 2 has a lower high and lower low than bar 1(taping)

- For a short trend, the parallel left side should be drawn from the low of bar 1 or bar 2. The bar with the lower low is the one you use for the left side tape.



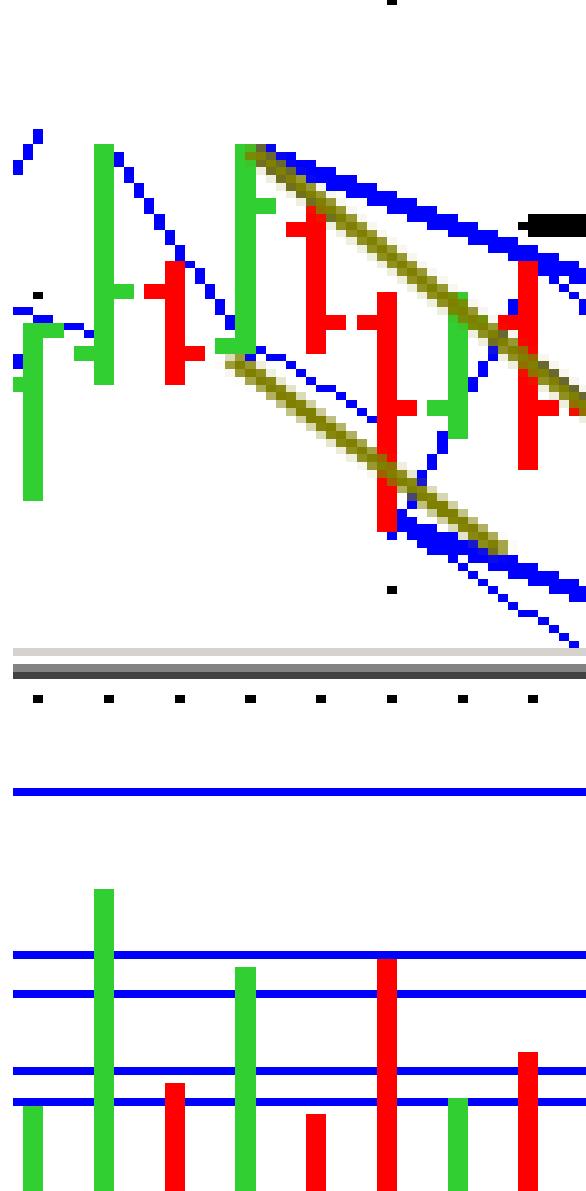
b. Bar 2 is an inside bar:

- Bar 3 determines the right side of the tape for this.
- If bar 3 has the same high and lower low than bar 2, you use bar 1 and high of bar 3 for tape channel.
- If bar 3 has a lower high, pivot a vertical line from high of bar 1 clockwise. Whichever bar (2, 3) it hits first is right side tape channel.
- Use bar 1 for the left side of the tape.



c. Bar 2 has a lower high and same low as bar 1 (fbp)

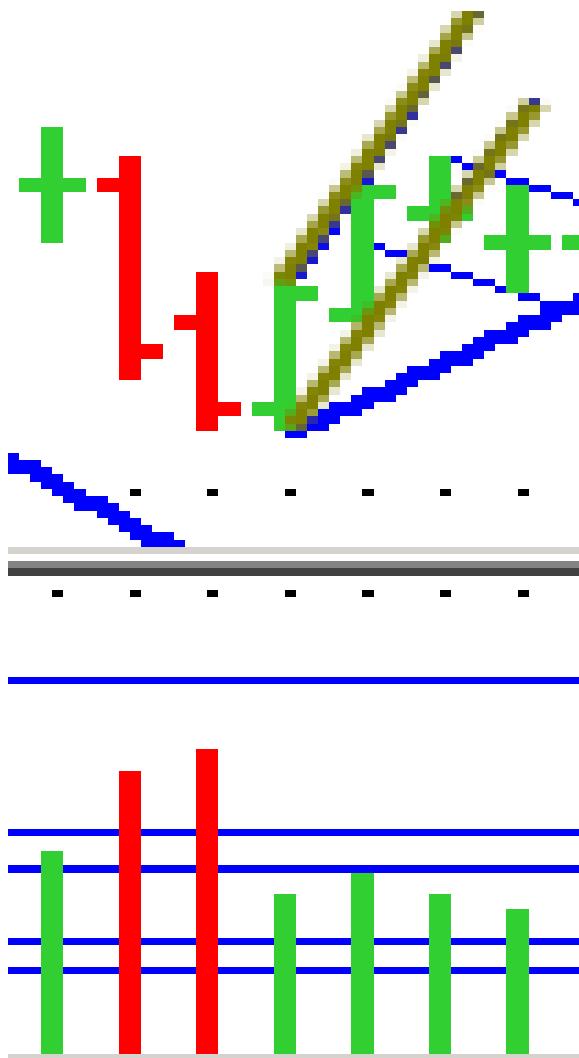
- Use bar 1 for the left side of the tape.



ii. Long Tape Combination Examples

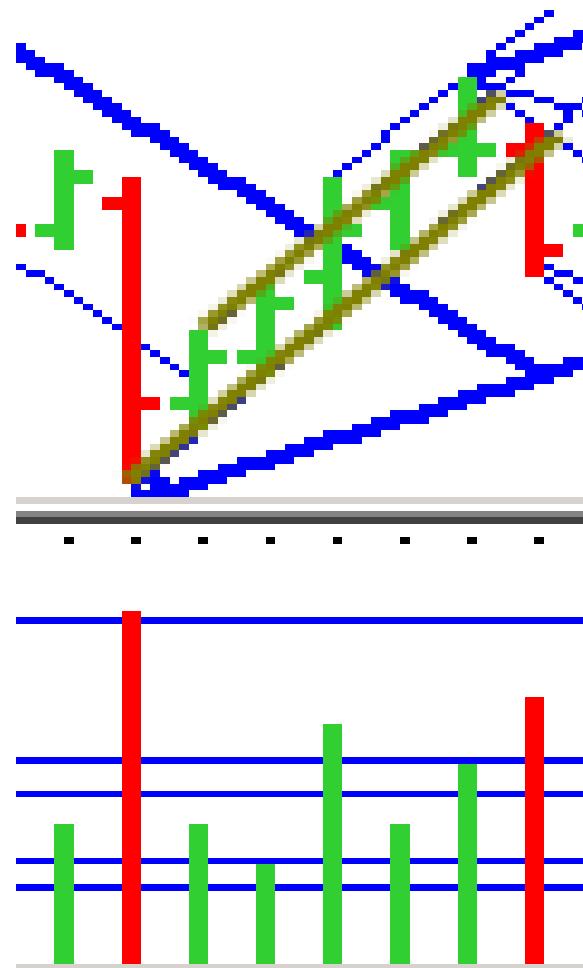
a. Bar 2 has a higher low and higher high than bar 1. (taping)

- The parallel left side should be drawn from the low of bar 1 or bar 2 for a short trend. The bar with the lower low is used for the left side of the tape.



b. Bar 2 is an inside bar (pt 3 during taping)

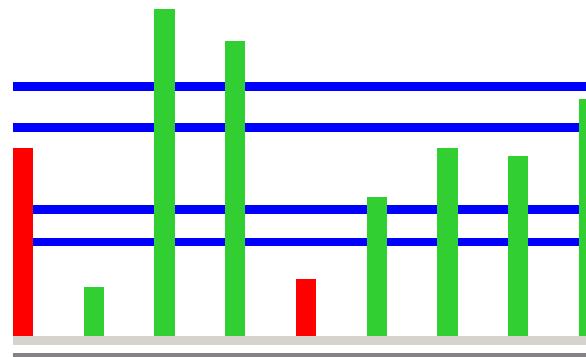
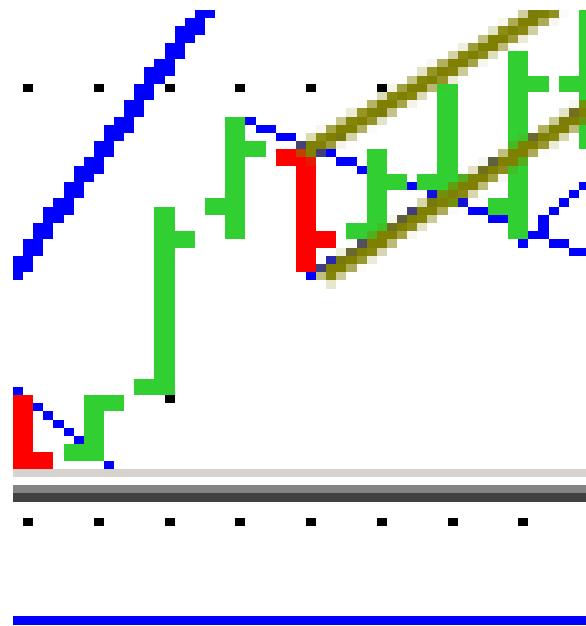
- Bar 3 determines the right side of the tape for this.
- If bar 3 has the same low and higher high than bar 2, you use bar 1 and the low of bar 3 for tape channel.
- If bar 3 has a higher low, pivot a vertical line from low of bar 1 counter-clockwise. Whichever bar (2, 3) it hits first, is the right side of the channel.
- Use bar 2 for the left side of the tape.



Sometimes, when you use bar 1 for the left side of the tape, bar 2 works better because of the length of pt 1. See 2(b) above.

c. Bar 2 has a higher low and same high as bar 1(ftp)

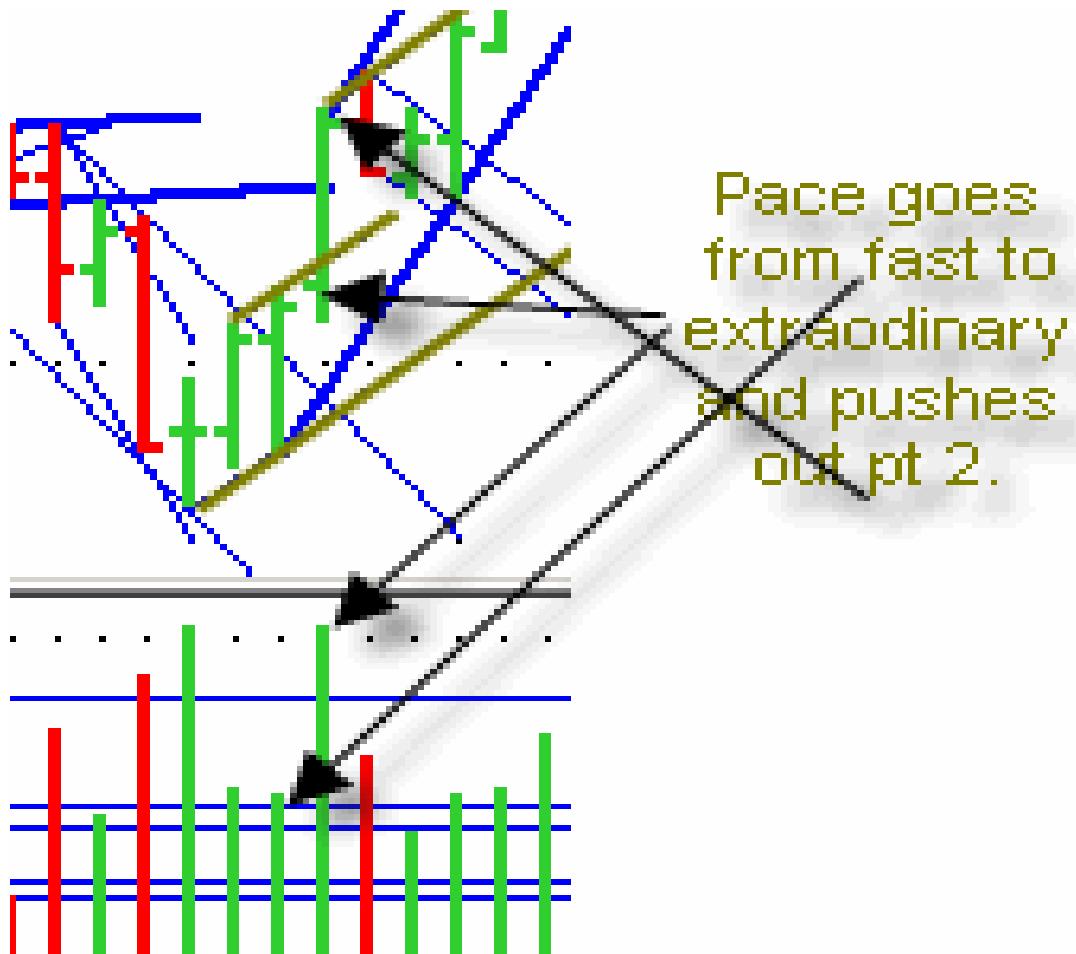
- Use bar 1 for the left side of the tape.



iii. Tape Extensions/Pace Increase

Once you have a tape. There is a possibility that the pt 2 can be pushed out. This happens when volume has an increase in pace.

- a. slow → medium
- b. medium → fast
- c. fast → extraordinary



When you have an increase in pace, you push the left side of the channel out. After the increase in pace and push pt 2 out, you get a pt 3 when the pace slows.

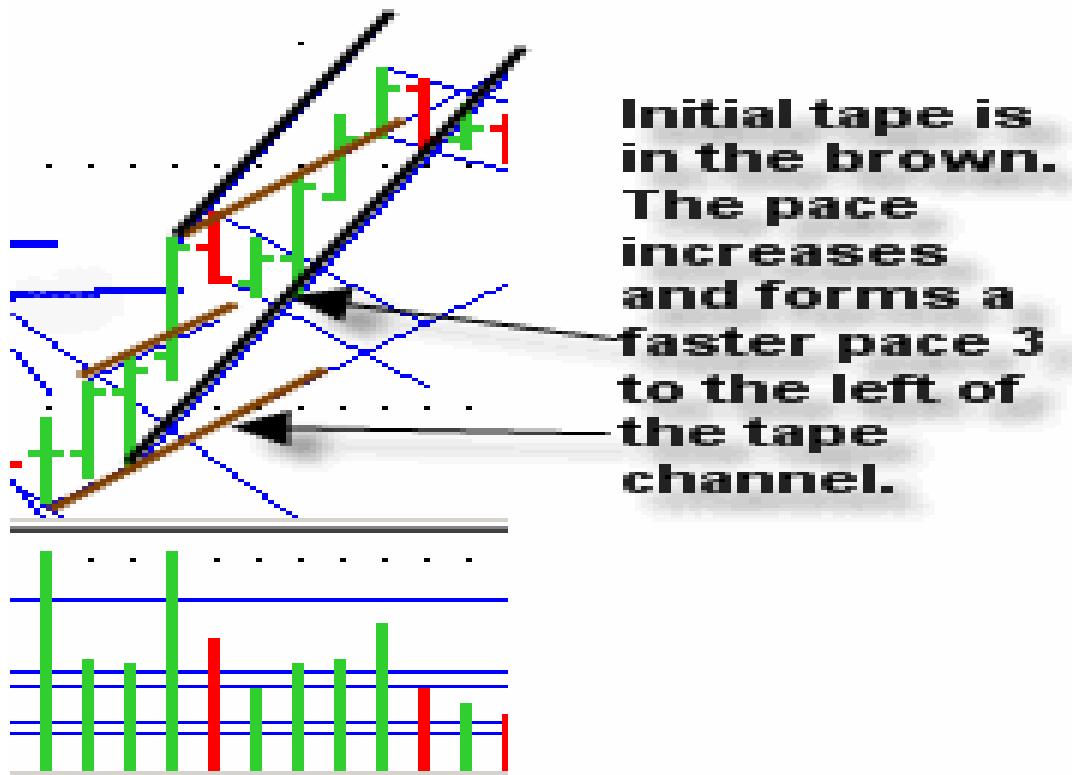
a. Point 3's

Points 3's are very important. Here we look at some of the common examples.

- (1). Tape Extension Pt 3s.

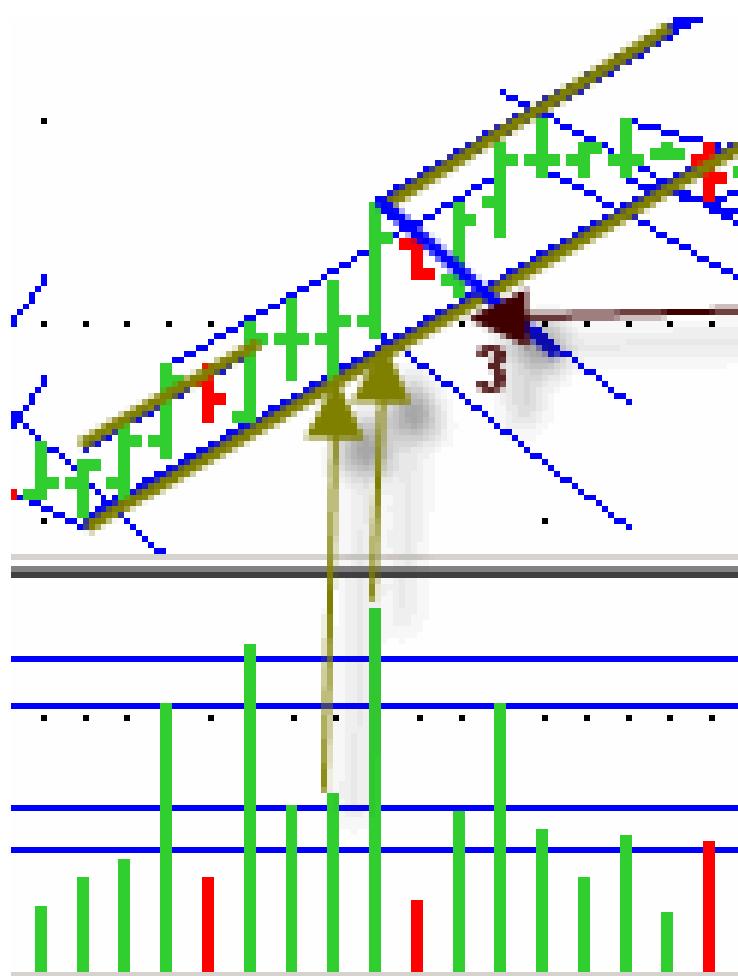
For tape extensions after the pace slow down leading to the inside bar on the ES. A pt 3 will occur.

- (2). Resumption Pt 3 within the extended tape channel



For this, you draw a new faster pace channel than the extended tape channel using the pt 3 within the tape channel. The tape channel pt 3 becomes pt 1 for the faster pace channel. Also draw the extended tape pt 3 channels. Sometimes it rides it.

(3). Resumption Pt 3 at the right side of the extended tape channel



**Example of a
pt 3 at the
right side of
the tape
channel**

(4). Resumption Pt 3 after it breaks the right side of the extended tape channel.

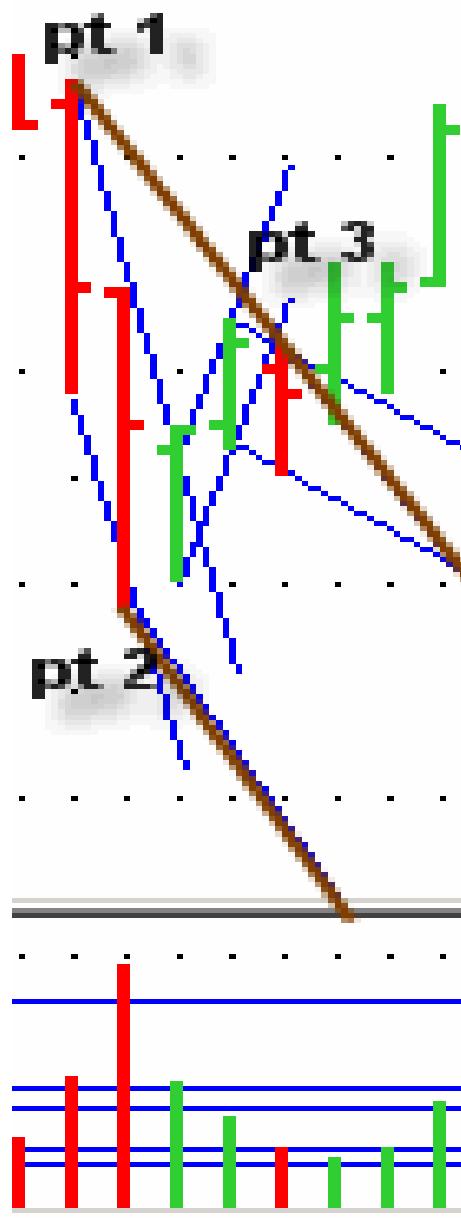


The blue channel is my extended channel. Price breaks the right side and then makes a pt 3 and traverses it.

b. Tape Point 3's.

For tapes that do not increase in pace, you get a pt 3 when you get a tape, inside bar, or a pennant in the opposite direction of the trend. This is the tape for the pt 2 to pt 3 tape traverse being made. The next time you get a tape, inside bar, pennant formation going

against the pt 2 to pt 3 tape, you are making a possible pt 3 for the channel. What confirms the point 3 after the inside bar or FTP / FBP is the next bar has to break the prior bar toward the resumption and an increase in pace (volume).



The brown lines are the channel and the blue lines are the tapes. The first pt 1 to pt 2 tape is broken on the right to form the pt 3.

iv. Point 1's

In order to make trend channels, you need to find the right pt 1s (first leg in a trend) to start of the sequence of using pts 1, 2, and 3. There are a few ways pt 1s are established.

a. FTT (failure to traverse, pt 3 right side to left side of channel)

FTT the channel is the easier one to make, in my opinion (IMO). That is where, after you have a pt 3 and volume resumes in pace, you get a FTT. This FTT is pt 1 and you are forming the first tape (leg) of the new reversal / lateral trend.



b. Right channel BO.

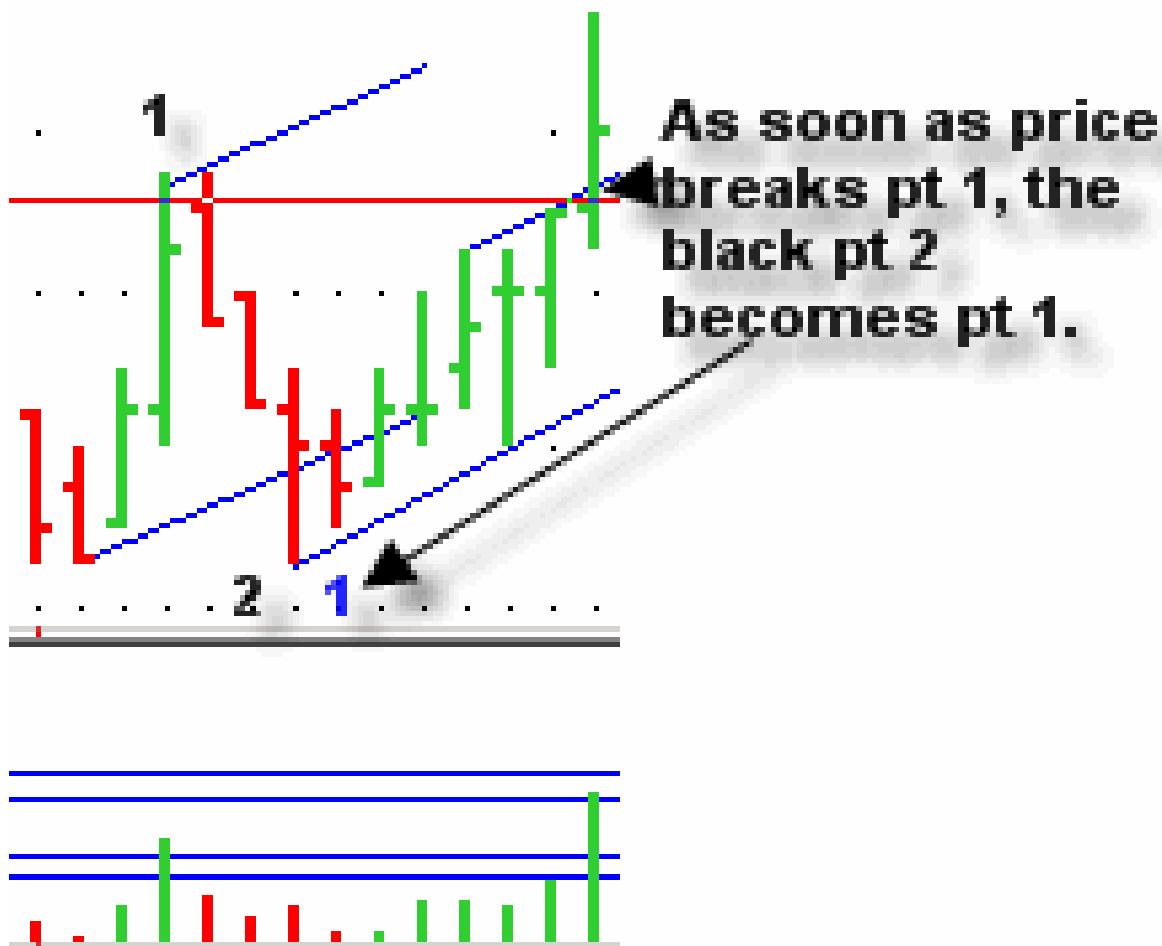
This happens after you have a pt 3 that has made a full traverse from right to left. When the left to right traverse occurs, it fails to resume when it hits the right side of the channel. Instead, it breaks the right side of the channel. I am using the bar that hit the left side for the full traverse as pt 1. You should also have a tape going from the left side of the channel to the right side of the channel. This is the first tape of the reversal/lateral trend.



The brown lines are the channel. The blue pt 1 is the full traverse point. Price breaks the right side channel without a resumption once it comes to the right side. Blue lines are the new tape for pt 1 to pt 2.

c. Pt 2 becomes Pt 1.

When you have a pt 1 using bar 1 or bar 2 and have pt 2. Pt 3 should resume **before** reaching the same value of pt 1 is reached. If pt 3 is below pt 1 for a long trend, your pt 2 becomes the new pt 1 and the end of the tape that you are on becomes pt 2.



b. Expanding to the More General Aspects of Trading Channels.

i. Right to Left Traverse (dominant traverse)

When trading channels, most of the time, trades are done within the existing defined channel of the trading fractal that is chosen. Choosing the trading fractal is a much more significant topic than just the channels of that fractal. The fractal determines the money velocity of the capital appreciation of the equity curve. It is a big deal.

The focus of the trading becomes how to use the channel of the fractal to make money. A person can just ride the channel and extract the money from each trend channel. However, it is more likely that the person will also trade the traverses that occur within the fractal channel under most conditions. This means that half the trades will follow the dominant direction of the fractal channel and half will be contrarian trades that make use of the retrace traverse of the fractal channel. The faster the pace of the market (how much the fractal channel is tipped in the direction of the channel) the more likely it is that the trader will just hold through the retrace traverse. In any event, more short term money is made on dominant traverses than on retrace traverses.

a. Volume

Volume is increasing on the right to left traverse as the traverse forwards the progress of the trend. The “bounce” in price off the channel trend line is always accompanied with a shot of increasing volume. It is a comforting feeling during this advance of profits. It comes to an end as the price approaches the projected left channel line of the fractal channel. The traverse outline, in the form of a channel within the channel, may be

projected also and the intersection of the two left respective channel lines is a good approximation of the pending exit or anticipated reversal price.

b. Stretch/Squeeze

The stretch and squeeze of the offset between the cash and index of the Dow Jones industrials may be used as the direction leading indicator of price movement of the Standard and Poor's e-mini (ESXX). Depending upon which value is greatest (cash or index) the stretch and squeeze means; the opposite or the same direction respectively. As an example, use a long term positive market orientation. This means the natural offset of the index is greater than the value of the cash. The DJXX and YMXX indexes are traded by "smart money" and as a consequence the "smart money" moves in advance of the cash and in advance of the ESXX standard and Poor's e-mini. This means that just before the ES advances there is a "stretch in the INDU and DJXX offset. This is a vector (directional) leading indicator. The extent of the stretch is a measure of the pending intensity of the move that is beginning. The stretch then fades into a normal offset value as the dominant traverse continues.

c. Hitch

As dominant traverses proceed the price change there is, at first, an almost continuous advance. Therefore, from bar to bar, the offsets and the bar length repeat one after another. Progress can soften after a period of time and it shows up as a momentary one or two bar repeat. Repeat means that consecutive nearly identical bars show up. The bars often do not have the volatility of the prior advancing bars. Volume will flag

somewhat preceding this phenomena. Then the price resumes its prior advance. The market has momentarily caught its breath, so to speak.

d. Dip

Dips are like hitches only they are more pronounced, meaning that a small noticeable retrace for one bar may occur. The corresponding volume flagging is more pronounced.

e. Stall

Stalls are longer hitches and the volatility may not be less than prior bars. Picture it as a definite pause and dwell period that occurs not too close to the left fractal channel line. Volume will oscillate somewhat by flagging and then refreshing and flagging again.

f. High Volatility Stall

This formation usually occurs near the limits of the market's range and early in the day when volume is brisk and the market opens somewhat near the prior day's range. A high volatility stall can be traded at the rate of one cycle per two bars and it can be traded in both directions with a neutral bias. The tick length of the bars gives a comfortable value of profit and leaves room for market fills that may not be at the limits of the lateral values of the range of volatility in a bar.

ii. Failure to Traverse (FTT)

This phenomenon only occurs on the dominant right to left traverse direction. It is a mid fractal channel failure to reach the left channel line. It is the second proof of the end of the existing channel. An existing channel is most likely hitting the extreme of the trading range (either R for long trades or S for short trades). It is possible that the FTT is point 3 of a reversal into a new fractal channel or it can be a midday lateral channel where, under lesser volumes, the R or S is being unsuccessfully tested. The price movement will be to oscillate (traverse repeatedly) in what ever new fractal channel emerges. By regarding all the ancillary indicators and P / V action, the proper new channel formation can be handled profitably.

iii. Left to Right Traverse (retrace)

Retraces occur in fractal channels like clockwork, usually. Expect more than a pair per channel. Two advances and two retraces are quite common. After this, it is usual to see a FTT during the next attempt to advance price. A lot of human nature is showing up in the picture. Retraces exhibit the opposite characteristics of the volume of advances. That is, the volume continues to decline from a peak throughout the retrace. The retrace is the second half of the Gaussian volume distribution of each pair of traverses. A stretch / squeeze characteristic is also present as a consequence of the attentive smart money in the YM and DJ.

iv. Lateral Channels

Lateral channels form at the limits of the fractal channel at the times that the R or S is reached at any time other than midday. The channels are retesting channels of R or S. Unsuccessful tests are recurring periodically. This periodicity generates Gaussians in volume as shown before. The lateral channels come to an end as a consequence of the time change that occurs during the day. Either midday arrives or the day ends.

v. Congestion, Convergence and Centering

At the beginning of midday and well within the fractal channel there is a common occurrence. Trading activity diminishes to the point where the residual volume is insufficient to allow the P / V relation to continue to function. At first, with an above DU volume, congestion reigns as a tight lateral low volatility channel. Then as volume flags further, this become a convergence of the trading range with the same ebb and flow as in the congestion just before. Finally on DU or VDU the price just comes to a lowest volatility centering. This is the precursor to the PM BO (afternoon Break Out).

D. Monitoring Set Up

1. The set Up We Use

The channel portion of the set up consists of two Price Volume charts and an ancillary additional price chart. The 5-minute ES chart is the trading chart, so it happens to have three indicators as well. The “leading” chart is chart of the “smart money” bars on a 2-

minute YM chart with a 1unit MA of INDU superimposed. The ancillary, price only, chart is a 2-minute chart of INDU with a 1-unit MA of YM that is superimposed.



This set up affords you two fractals and a continuing comparison of two major futures markets and the cash market associated with the Dow Jones industrial average. All of this connects you to the economics that run the US and also a lot of the global economy.

This data set has liquidity and represents the construct of EMT. The two charts here show what you see for one arbitrary day.



The ES chart has 81 bars and the YM chart has 145 bars. The bars change continually and, then, at slightly different times and frequencies fully formed bars end. We sweep these periodically at a rate that is many times the YM bar length. The ES volume is pro rated up to 7 times in 5 minutes and the ES is done up to 8 times in 2 minutes. More often, when no potential action is planned, the PRV is not calculated but only a two bar comparison is made to determine the answer as to which of the two parts of the P / V relation is in effect: increasing volume or decreasing volume.

Price trends continue on increasing volume and price trends change during decreasing volume.

Trends are bounded on both charts with channel lines that are extended beyond the present. Trends on several fractal periods are visible on the two charts. All channels are circumscribed and extended by annotation and by notes of turning points of four different types. Price trends continue or change. Volume is a leading indicator of these possibilities.

From shortest to longest, the channels annotated through the day include:

Traverses on YM (solid lines) - two to 10 bars

Traverses on ES (solid lines) - two to 10 bars

Trends on YM (solid lines) - 4 to 8 per day

Trends on ES (solid lines) - 4 to 8 per day

Combinations of trends forming intraday channels on YM (dashed lines) - several

Combinations of trends forming intraday channels on ES (dashed lines) - occasional

Intermediate term (IT) ES channel lines - 5 to 8 day period

Long Term (LT) ES channel lines. - may be as long, in duration, as a quarter or more

(Bull /Bear)

The duration of these channels provides basic information on the hold periods that can potentially occur during trading.

The four types of turning points that are noted on charts include:

Point 1 – the beginning point on the trend line of a price move.

Point 2 –The end point of the first price move in a forming trend and the end of the first traverse (always a Right to Left traverse) of a trend channel.

Point 3 – The end of the second price move (retrace) in a trend that is now defined. The end of the second traverse of a trend channel (always a Left to Right traverse).

NB. For diligent annotators, the three points can be used to define the boundaries of traverses as a micro effort. This is not always necessary since most traverses “fill” their boundaries, usually.

FTT's - Failures to Traverse (FTT) occur on R to L traverses. They end trend movement and are noted when the failure is established (no more price movement in the direction of the trend). This marks a point 1 of a new trend and is so doubly noted.

It may be noted that these four points of change always occur in the order presented. The FTT may not occur if the TL of the trend is noted. This is termed a BO and it may be followed by an FBO (failure to BO). Once the price returns into the extended channel after the FBO, part of the sequence is after point 3 and before a potential FTT.

The channels on the charts provide a good degree of control for making money. They, as all monitoring elements do, have limitations.

By knowing the limitations clearly, it is possible to understand how to reinforce monitoring with other control devices. (See Part IV, section C, b.)

When looking at the two charts above. A scan conveys the connection of Price, Volume and the indicators and their signals. Further, the channel annotations are there and they buttress the connectedness. Adding the notes on points 1, 2, 3, and FTT equally highlight the construction and the ends of channels where entries and exits occur (These are not noted on these particular charts). All of these elements can be used based upon their sequences and leading / lagging valuations for analysis, once collected in data sets. From that, decisions can be made to look more deeply and to decide when actions are necessary.

The primary role of channels is in coarse and medium sweeping (See Sweeping Topic).

2. Channel Control Limitations

Having excellent control of trading opportunities goes a long way towards establishing your earnings curve. Control is a stepping off point for optimizing.

Holding, during trading, is not a control issue when all the sweep signals are saying “continue”. Control issues arise as decision-making times are on the table. This section deals with the limitations of control while using the annotated price volume and the subsidiary signals generated while monitoring.

The finest detail on charts are the bar ends, the current price and volume, and the “flapper” aspect of squeeze / stretch monitoring. There is also the change in each of

these that occurs during each sweep; this focus is related to price translation, PRV on two separate volumes and the squeeze / neutral / stretch sequencing and the flapper position change sequence.

Data feed snapshots are under a second, each (0.7 sec for IB). Sweep scans are usually a few times a minute (with the fastest about every 10 seconds).

Chart data changes are relatively slow it turns out. Housekeeping on annotations, hardens charts to a current status on a demand basis.

All of this drives to the conclusion that, at best, price bar ends and volume change extremes (acceleration/deceleration) and the leading indication of stretch / neutral / squeeze (the flapper pumps this), is where the charts reach their trading control limits.

So we use charts to have a good picture of NOW as we let them do “hand offs” to the finer control monitoring set up elements.

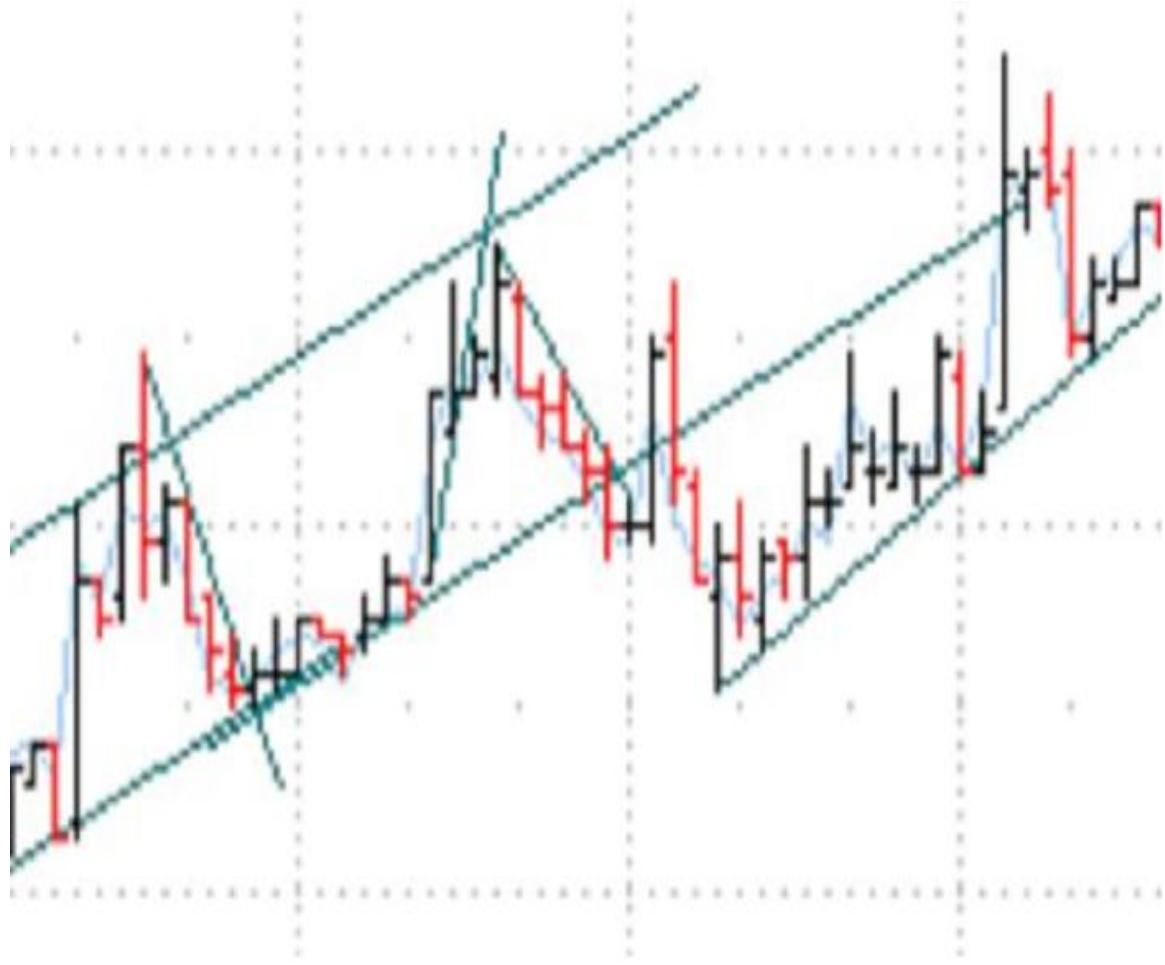
This makes channel control limited to a tick or two of precision. Such precision is adequate for our purposes most of the time.

It is precise enough to catch BO's of volume that precede price BO's. Further, the stretch / neutral / squeeze shifts precedes (leads) volume BO's. By having sequential control beliefs in place on coarse and medium channel sweeping, we get to anticipate where controlling actions are coming down the line to NOW. This makes it possible to go to the most precise parts of the set up just prior to the beginning of their operation.

If you can understand to annotate, if you can understand to make point and FTT notes, then you are well on the way to trading efficiently. The extended channel lines provide the ball park to play the game well. Notes further the process.

The ZONE of channels is around knowing channels and using a disciplined ASAP annotation technique, adding notes (1, 2, 3, and FTT) ASAP or just after you take trading actions when you “know” the 1, 2, 3, and FTT as it comes into view on the last graph bar.

In the above paragraph, we make a point. This is the “end of the bar” consideration. Most bar ending prices are not at the end of a specific bar. The ends of most bars are in place before the close of the bar and that gives an advance picture of the channel and points and FTT aspect of the control actions on the table. The too early (E1) and too late (E2) type errors are integral to this. The errors come from predicting instead of using NOW to just monitor data sets, etc... By being effective with sweeps, annotation and noting, control is maximized and other performance difficulties gradually become minimal.



The chart above makes the “end of bar” point for us. On one side, the bars are spiky and on the other side they are curvy. The spiky side is a “too late” control condition. The curvy side is the “second chance” side that we all find more desirable. Since this is a limitation, we counter it by knowing, for this illustration, for left side reversals, we need to go ASAP to finer controls. For TL reversals, we have more time and second chances. The pair, spiky and curvy, are always there and you see the scallops as holding water or being turned up-side-down. Control, while limited in channel usage, can be dealt with by

knowledge, practice, increasing sensitivity, and adroitness. When adroitness appears, it is a consequence of beliefs being in place and the trader having finger-tip control to make decisions whenever the beliefs come into play.

3. How channels fit into your sweeping

Your annotation and projecting of channels and their traverses provide the sweeping ballpark. There is no need to look out of the ballpark. You can also use “tick marks” to tag the eventual arrival spots of price within the areas that the channels contain. This prevents the “edge of the earth effect” from creeping into your mind. It is not a good idea to be sailing along with the pending thought of sailing off the edge of the earth at the forefront.

4. All of the details you need to consider and why.

Channels do not have details. They are just there and created by using simple parallel lines. It is extremely important to reach the conclusion that the pair of parallel lines is a truth of the market and the projection of that region into the future gets the job done completely and accurately. Channels come and go and you are able to annotate this ASAP. Do the projecting so that at no time, whatsoever, are you hanging out in the wind and slowly twisting.

E. Channel Sweeping

As part of making money, whether it be for position trading stocks or the faster paced intraday SCT trading, channels are the “ballpark” we monitor by sweeping the screen displays. Four sections allow us to zoom in from a general base and deal with the main monitoring ingredients that lead to quality analysis, decision making, and timely action. Our purpose is to collect the necessary vector information to be able to handle the market at all times whether we are in the market or sidelined because of risk levels.

1. Overall Effort

The landscape is scoped and bounded by channels and housekeeping gets them there. These containers, and their projection into the future, are the result of continually keeping our annotations up to date, and filled with special potential considerations, and fixing erroneous past housekeeping. This is certainly iterative refinement at its best.

a. Housekeeping

Housekeeping is the preparation for channel sweeping. All fractals needed are used to be sure that the family of channels is place projected and renewed, so that everything is available and showing on the trading fractal. The whole width of the screen is in play especially the future as shown on the right third of the screen.

The chart you work with, to do your housekeeping, is the actual chart that you have on display as you do your routine. Work from the outside in, to get your annotations completed for each chart display. Do the complete job on each chart in the approximate

following order. Zoom out to the weekly chart and use rays to complete the long term and intermediate term channels. All of this is done in hindsight and in a specific color. Heliotrope (pink) is popular because it is different and sort of glows. Zoom back to the daily chart next and draw in some trend lines of recent short term traverses (at least five) then number them from left to right and use these for your initial analysis sheet. The purpose of everything you're doing is to make money so be very careful with the details. Draw in a channel using the last movement of price. Extend the channel so that it conforms in duration to the other five you have already annotated. Clone the slope of a representative channel traverse and place it in the future area in the approximate place where you anticipate price will go to reach the left side of the intermediate term of the channel you drew on the weekly chart. This completes the channel housekeeping and it becomes the basis for the next two sections in this part.

b. Special notations

Special notations involve the volume and MACD (5, 13, 6) and stochastic (14, 1, 3) and stochastic (5, 2, 3). Draw in the volume DU, FRV, and peaking volumes as rays on the MACD. Use rays to mark the extreme values of MACD which are obtained as the price hits the limits of the IT channels you have drawn in. This is how you calibrate the stock performance. Put a tic mark on the MACD value line that you have just drawn. It should be located in the future at the approximate time you have estimated the impending traverse will hit the left channel line on the IT boundary. For each stochastic draw line segments above the 80 percentile that represent the entire duration of the impending traverse that you are going to be trading. Put a tic mark on the stochastic (5, 2, 3) where the fast line is expected to break the 80 percentile in advance of all the other indicator signals.

c. Doing revisions in hindsight

In the special notation section a lot of anticipatory annotations were completed. As time passes these may not turn out to be perfect. When it's appropriate (the first time you get an inkling) do revisions as required. This is like having a personal feedback loop between what you anticipate and what actually enfolds. Each time you make a revision it affects your mind and as a consequence it allows you to improve your estimating skills. There is no concept of right or wrong involved. It is just a matter of repeatedly iteratively refining your game plan. After you have done the first 100 charts you will find that this drill puts you in a place where simply glancing at any chart you see causes as shadow like effect of all of these annotations to automatically occur even though you haven't touched your mouse.

2. Continuation Considerations

There are six considerations for the continuation half of the P / V relationship for making money using channels. We are dealing with a confluence of many factors during continuation which is the time that you'll be holding a stock or in the market doing SCT trading. During any continuation period you are in the market, holding and performing the four step routine of; monitoring, analysis, decision making and taking the timely action. This is done to specifically reach completion by stating "HOLD". The following six sections specifically delve into your money making jobs with channels.

a. Broad brush strokes

As you monitor, survey the scene and pay particular attention to where the trade is (price) with respect to the limitations mapped out by the family of channel lines you have drawn. During continuation as Columbus would say “you are as far away from the edge of the earth, where you will fall off, as you could possibly be”. Annotating the channels proves to you that there is not spectacular edge off of which to fall.

b. Formations within traverses and trends

Within channels, during the continuation period of the right to left traverse, you will see an assortment of formations going from shortest to longest, these are hitches, dips, stalls, high volatility stalls and lateral channels. These occur in between taking formations that are seen when the market surges forward. The formations simply resemble the market taking a breath once in awhile as it completes the right to left traverse. All of these are described in the subsections of Part III, Getting Started. The channel traverse forms the envelope within which these formations appear. None of them tend to increase the volatility of the channel width.

c. Individual bar influences

Individual bars influence the channels you are trading. Their influence is primarily felt on the left side of the channel where a bar occasionally grows long, relatively speaking, as a volume search pushes it further along the trend. Use the extreme limit of the bar as a means of cloning the prior left line to make the channel volatility (width) wider. Once or twice a day you will have an “outside” bar. This unusual bar extends beyond the ends of

the prior bar. It also casts a shadow into the future. It is possible that several of the following bars will be found in the shadow that has been cast. This represents a lateral micro channel where price consolidates. While you are not making money during this period of hold, you are witnessing the extermination of the market impact of the bars and formations that occurred prior to the outside bar. At this time you mentally close the door on all of the incidents that have happened prior to the outside bar.

d. First zoom (volatility)

As the continuation phase of making money goes forward, you periodically check the volatility. At first it increases as bars stretch longer on higher volume. At some point you will notice that the volatility is not sustained and the bars that comprise the formations that are being built grow shorter. This is a clue that you are coming closer and closer to the left channel line boundary. Glance at all of your indicators and the range in which the volume is currently located. It will be declining further.

e. Second zoom (noise)

At some point in the continuation traverse the P / V relationship gets tested because the declining strength of the market gives the steady noise of the market a chance to make a greater impact. Check around with respect to all of the variables and see how noise is creating more and more roughness (the wiggle and jiggle factor).

f. How to deal with WWT and going to DOM

As noise begins to dominate once the volatility has declined during the continuation, and your making money interests turn to three things: Flaws, What Wasn't That (WWT) and DOM. Lack of market strength gives flaws a chance to rear their ugly heads. As you see these you also notice What Wasn't That. Things that you have learned that should be in the picture are missing. Flaws and WWT are messages to you, that tell you to go and look at the depth of market. There you will find that the prior translation during the continuation traverse is coming to an end. The DOM dwells on two pairs beginning about this time.

3. Change Considerations

Change considerations come in two sizes. Change considerations represent the second half of the P / V relation statement. As continuation considerations come to an end the timely action of holding also becomes questionable. What "enters" the picture at this time is your focus end effects. Two things can end. Most commonly it is the end of a traverse and secondarily it is possible that you are also coming to the end of the trend channel that bounds the traverses you have been making. This is the double whammy. In the two sections below we give consideration to these types of changes.

a. End of Traverses

The ends of traverses are marked by price arriving at the left channel line or the advent of a Failure to Traverse (FTT). In either case the traverse cannot continue as a consequence of insufficient volume and the rise in effect of noise. All of your indicators

will be giving you a signal that the trade is over and it is time to take action to exit a stock or to reverse your SCT position. The stochastic signal occurs when the fast and slow lines diverge as they drop below the 80 percentile for a long trade or if in a short trade, rise above the 20 percentile on the oscillator.

b. End of Trends

Trend endings are more impacting than the ends of traverses. Therefore, you will be in a situation where you take the same actions and following the action you will see the market regenerate itself into the beginnings of a new continuation period for both the initial traverse and the market characteristics that will prevail throughout the trend. This is a big note taking and logging time. You also have the satisfaction of having taken profits and you follow Kenny Roger's admonition as well.

4. Decision Time

This section summarizes how decision making occurs in continuation and change when you are using channels to make money. Volume and price dictate when you make decisions. It is not up to you to know when to do things by thinking up your reasons. Instead, what is going on for you with respect to decision time is that you are required to take direction from the market as indicated by volume and price.

a. Dictates of volume

When volume is increasing the market is dictating continuation to you. Each cycle of your routine concludes with the overt action of holding. When volume is in decline you

are focused on the end effects of traverses and trends at which time the market dictates your decision to act to exit or reverse. There are no exceptions.

b. Dictates of price

Channels that you annotate from the historical limits of price become the guides that the market gives you as the future moves to the present. Your projections of these channels forms a balance about the present to be able to see the future as based on the near term past. NOW is the fulcrum that divides the past and the future. You make money best by letting the price movement in channels dictate your decision making times.

F. Updating Annotations

The annotations that you placed in the future continually move across your screen from right to left. The present continues to move into the future. On your screen, always in the same place, a bar is forming and it happens bar after bar. Your annotations in the future were your estimates of what you anticipate. As time passes these efforts are refined and adjusted.

1. Advance warnings

Annotations that you have done in the past move to the present and give you advance warnings of market milestones. Keep adjusting these as they grow closer to the present as a refinement exercise. The adjustments apply not only to channels but to volume and the indicators you are using. Most adjustments stem from how price is moving in the

annotations you have projected. In this way you can see that channels begin the domino effect for all other aspects of annotations.

2. Using sweeps to discover price movement

Sweeping your screen is how you keep track of what is going on. For stocks you use the Daily Analysis Sheet and the Possible Buys Check Sheet. For SCT trading you are using the Sweeps Chart on three levels: coarse, medium and fine. Channel aspects of these efforts provide the context for making money.

3. How housekeeping works

The fact that housekeeping works is an important understanding. When you come to understand this, you will do housekeeping. The basic precept that leads the parade is the fact that you go through the discovery that, time after time, price moves by traverse after traverse in the channels that you have projected. In life this is a discovery for you. The channels discovery will rank as one of the most important of all your money making acquisitions in knowledge and practical skills. So make use of what you have acquired at every opportunity.

G. Upgrading your level of trading using channels

As time passes your knowledge and skills improve through continuing dedicated focused experience. Channels play a role in determining when and where you are allowed to trade based on your confidence. Three major break points occur when going from novice to expert.

1. Beginning with entering and exiting (EHE)

Stock trading does not change as you move from novice to expert however, how well you enter and exit does. A fully employed person begins by making all decisions after hours and simply calling in trades when the market opens in the morning. In effect, the person is entering late and leaving early with respect to the potential of the market cycle. This simultaneously minimizes risks and profits. It is the best way to build on success. Gradually a person gets to an intermediate stage where they can switch from EOD charts to a combination of EOD charts and 30 minute charts. By adding this fractal another level of channels also appears. This makes it possible not only to anticipate, but to actually trade in durations that may be extended a day at each end of the long half of the cycle. Finally at some point, income levels dictate real time stock trading. Here the person optimizes entry and exits by watching the market during trading hours.

The pathway in commodities to SCT trading begins with novice type trading, on rockets, only where trends are taping in channels. The MACD histogram divergence has exceeded 0.4 as an entry value and both stochastic are in 80 per cent regions throughout the extent of the trade.

2. Going to Entering and reversing (EHR)

This level of SCT trading is indicated by the advent of “linked” trades. Instead of the entry and exiting that a novice does, an intermediate trader links trades by proceeding to take profits and simultaneously reenter the market to carry out the routine for the next traversing movement. Being able to make money by linking trades comes largely as a consequence of the knowledge and skills acquired with respect to the use of channels.

3. Going to reversing and reversing (RHR)

SCT is based upon the premise that a trader can be in the market at all times to take advantage of the continuing price change in the market. Here, the trader is capable of handling traverses (micro channels) within short term trend channels that are encased in the IT boundaries. The trader is capable of “grooving” from pre-open to post-close every market day. Channels and annotations provide the basis and framework for this expeditious effort. Twenty to forty actions are taken per day and the result is trading profits which approximate three times the high low range every day.

V. Getting and Staying in Shape

Treat making money using channels as a sport. You can skip the competitive aspect but the conditions, mentally and physically, is a top consideration. There are four ways of staying in shape. Working with partners allows you to achieve prowess. Practice makes perfect scoring high performance through focused effort is a requirement for maintaining condition. The trophies for trading are your journal and your archives. They are resources which are much more than something shining and glowing on a shelf.

A. Partners

There is synergism by associating and working with your peers and when the time comes those you mentor. It is not like two people on opposite sides of a tennis net competing, it is more like a crew on a boat making it sail at optimum full speed. Partner with others on a regular basis. Be a critic and accept criticism. Seek opportunities to

mentor those who are able to understand that they too in time can pass forward knowledge, skills and experience.

B. Practice

At some point every trader discovers that they get better by practicing. Everything you should do must be intentional, i.e. have a specific purpose that you are aware of and have created specifically. Drills are the best type of practice aside from real time market trading. Drills build parallel pathways in the mind. Doing something 50 times with the same intention is an absolute guarantee that you are building your mind exponentially. It is a case of one plus one plus one equals 18. Everything you do in your routine can be considered a drill. If you formalize and formulate what you are doing in your journals you, will be able to construct very effective drills. Making profits on a given day is a lesser accomplishment than completing a set of drills for practice after hours. The simple reason for the power of these drills is that once you have completed them the results of the effort sticks with you in your mind for the rest of your life.

C. Performance

Channels support performance better than any other single fact. Every day that you perform your routine your channels work better and better. Continue to iteratively refine each facet of everything you do with regard to channels. Of the 8 doublings that are possible (see BMBW appendix B) channels have the greatest early impact and provide a framework of discipline that carries over into the other 7 doublings.

D. Journal and Archives

Keep records. Records are a resource. Journaling's are the logs of success. By writing things down and debriefing you build a record of who you are as a trader. At some point you will mentor others and all that has gone before this time will be deepened and strengthened to an extent that is probably greater than the initial compilation that you succeeded in doing. You will journal and archive as you mentor. This will form a deep and abiding composite of what excellence really is. Simply by knowing this is one of your ongoing tasks for success you put yourself into a place where you have the greatest insurance possible for success.

Appendix A Glossary, supplied separately.

Appendix B Yellow Brick Road

Yellow Brick Road - chart for eminis

Percent of original capital at end of duration
(Compounded using the fractal period)

Fractal:	quarterly	monthly	weekly	daily	30min	5 min	1 min
Change for the period	147	50	40	20	6	3	0.75
Base value	868	868	868	868	868	868	868
efficiency (%)							
combined	100	100	100	100	100	100	100
yours	100	100	100	100	100	100	100
market's	100	100	100	100	100	100	100
a day	186.9757			102.3041	110.8857	136.4139	140.0509
a week			104.6083	112.0640	167.6402	384.0499	538.8033
a month		105.7604	119.7470				
a quarter	116.9355	118.2957					
a year	186.9757						
5 years							
10 years							
25 years							
a lifetime							
retirement years							
long term care							

Appendix C Practice Charts

This appendix is designed as a drill set. It is also applicable to doing the daily routines (in the evening as well as real time monitoring) for position stock trading as well as doing the SCT trading monitoring display activities during real time trading hours.

The principle of doing drills is that repetition builds the mind exponentially and they also provide a permanent resource for applying knowledge and skills while trading. There is no better fast tracking device.

Part 1 Position Trading Stock Charts

To carry out position trading using the natural cycle of 4 to 8 days for a long portion of a total cycle, three separate fractal charts are necessary: weekly, daily and 30 minute. Three shells of channels are the result. Because the Universe of stocks for position trading is predetermined, it is not necessary to go through any chart selection processes for having appropriate charts with which to drill. Using chart drills after the universe is selected helps to do the IAS assessment and to get screens set up for any monitoring that is done.

The drills purposefully scope and bound the channel annotation system and they, on an ancillary basis demonstrate how channel annotations lead to volume and indicator annotations as well.

The key element of the drills is to use the past to project the near term future to establish the arena that price will occupy as the future moves into the present (NOW) where the four part routine is carried out. A 4 to 8 day period comprises the long half of the cycle

where all trades take place. The scoring range being considered is 1 and 0 pre trade, 7 through 4 for the trade and 3 for the post trade.

Do drills in sets of 10 or 15 charts and do several sets. Set aside enough time to do this. You will find that after you have done this drilling, you will see on future charts a sort of phantom appearance of the completed drill on any charts you see in the future. You will be doing this to all charts you use so doing the drill sets and their reps will condition you for efficient effort where you can deeply focus on what you learn about the potential buy as you go through the IAS or DAS or PBCS.

The drill is a step by step process:

1. Bring up the symbol on a default screen that contains, from top to bottom: price, volume MACD (5, 13, 6), MACD histogram, STOCH (14, 1, 3) and STOCH (5, 2, 3).
2. Go to a Weekly display.

NB. Predetermine different line weights and colors for three levels of channels. Use line segments for channel annotations and use rays for volume annotations. For annotating indicators and locations in time, use convenient tick marks (short line segments of high line weight)

3. Move the last bar to a point 1/3 of the way from the left side so the future is showing on the right side of the chart. You will be projecting lines to the right wall of the chart.

4. Draw the Intermediate term channel (s) on the screen and project the current one to the right edge. Make a mental note of the range (width of the channel and the price movement from lowest to highest and assure that this is a measure from the beginning of the chart to the present on the chart. All channels must be going from lower left to upper right as a direct consequence of the RS measurement that got the stock in the universe.
5. Switch to the daily display and note that part of the IT is showing on the display. Move the last bar to the place 1/3 from the right side of the display.
6. Use the rays to draw in the DU, FRV and peaking volumes. Note these on the IAS and DAS sheet.
7. Confirm that there are five peaks and also draw the traverses associated with these cyclical moves. Number the moves from left to right with 1 through 5.
8. You have just qualified the reliability and repeatability of the stock for position trading purposes. Fill in the price info on the traverses and determine the cycle duration in average days and determine the swing range average and determine this as a percent of the base price. You are now using arithmetic to get a feel of the stock's capability to make money for you. All of this is related to the channels you have drawn. Fill in the left channel lines on each of the five traverses. EOD data, so far, has been helpful and the basis of your opinions.

9. Go to the 30 min chart and look at the present. See the interval between cycles and determine if it is consistent. It should be. If not this is a flaw in the stock and the people who are trading it.
10. Begin to annotate where the next trading cycle is going to happen. Clone a recent traverse trend line to form the potential path of price. You will readily see where this hits the left IT channel line by adding the left trend line of the traverse by just duplicating the volatility that is showing on the prior IT channel traverse channels.
11. Confirm that the traverse will take about the average number of days that you have determined on the IAS.
12. Drop down to the volume part of the chart and sketch in where the peaking volume will occur and also note with a line segment a form for the daily volume to adhere to.
13. Go to the MACD and draw a ray from the extreme (greatest) prior traverse value forward. Put a tick on the ray that shows where the maximum will occur for the pending cycle.
14. Go to both STOCH 's and place a horizontal line segment where the fast and slow lines will be entwined above the 80 percentile for the duration of the trade. On the fast STOCH (5, 2, 3) add a tick mark where the fast line crosses the 80. This indicates the early entry time when price is initiating its first move.
15. If space permits, add the next trading cycle after the one you just annotated.

Part 2 SCT Trading Chart Set Up

Pairs of charts are used for SCT trading. In actuality you will have these two charts in play for your entire career. We still can get sets of 15 to work with. Just print up pairs of charts for fifteen different days. Use 2 min charts for the YM and 5 min charts for the ES. The charts show the same set of facets as the stock charts. This is a verification. The default indicators on the charts are correct and thus universal and vice versa. They can be trusted and they become part of your mind-set. This is a calibration of you as a partner with the stock and commodities markets. Welcome to the club.

Do sets as above and before you start set up the color scheme.

Here are the steps and they are continually repeated as the day goes by. You will be doing three separate routines, in effect. This is the annotation routine which is done as housekeeping ahead of the sweeping which is done as the first step of the four part trading routine: monitoring, analysis, decision making and taking timely actions.

What is neat about all of this is that emotions only occur during the sweeping and they are, thus, continually diffused by the other separate and independent other thinking processes. This is a very NEAT way to maintain PERSPECTIVE and also is a good replacement for medications used for stress sleep disorders and unbalanced drinking habits. Let us drill.

Follow the steps above cited for each of the charts (2 min and 5 min). Pay particular attention to how the YM leads the ES.

Appendix D Debriefing Rules

1. Print chart.
2. Hi-light losing bar train (yellow Hi Liter).
3. Hi-light prior smallest most recent formation that is of a channel nature immediately preceding micro channel) (green Hi Liter).
4. Redraw the period in red ball-point, correctly using hindsight.
5. Fill in the debriefing chart.
6. Using 4 and 5, write in journal / archive (See Part V, D.) what went wrong on chart annotating, analysis and decision making.

Debriefing Chart (See Appendix D)

Channel Condition*															
Bar Numbers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Monitoring															
2. Analysis															
3. Decision-making															
4. Actions															

Fill in yellow bars (step 2). Fill in green bars (step 3).

Fill in cells with comments for each listed 5 min bar.

*Use arrow to span bar range for each condition one after another. At least have a yellow and green span. Highlight them.