#### THE HUDSON SESSIONS Session 2

#### Adam H. Grimes Tuesday 16 May 2023



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# To every thing there is a season, and a time to every purpose under the heaven.

#### -Ecclesiastes 3:1



# Tonight's Outline

#### Wyckoff Cycle

- What it is
- What we can do with it

**Support and Resistance** 

#### The Four Trades



# **Discretionary Trading**

Why not just quantify everything and use a computer to trade?

What advantages might a discretionary trader have?

- Adaptability
- Superior pattern recognition
- Implicit learning



"The left-brained analytic system on Wall Street has become overdeveloped. Like a tree that has grown too large for its place in the forest, it has crowded out intuition, vision, creativity, and gestalt sensing, which are the properties of the right hemisphere.

As professionals of the Street continue to try to overpower darkness, opportunities will exist for those who can sense new directions."

#### -Bennet Goodspeed (1984)



## Discretionary Weaknesses

Intuition can be highly misleading

Your emotional state is a key part of your process
Same data + different "you" = different decisions

#### Can be very hard to be consistent

- Same data, different decisions?
- The market is a wicked learning environment
  - Deliberate practice is not possible
  - Implicit learning is suspect



## Theory of Mind

Ability to understand people by creating some "theory" of what might be going on in their heads

•Animals seem to be capable of this too!

Research shows that traders, even inexperienced traders, are good at this

Can misfire, but it's a valuable guide How to structure and train ToM?



## Richard D. Wyckoff (1873-1934)

Stock market speculator and educator

Accumulated considerable wealth from his trading

Was an active trader and daytrader

Became interested in protecting the public from market scams

- Wrote articles
- Created a set of courses

Key ideas:

- Find right places to trade
- Use stops to get out if you're wrong
- Match techniques to the market environment
- Understand impact of order flow on prices



# The Composite Man

One of Wyckoff's goals was to reveal the "true reasons" behind the market's movements

He discovered large groups manipulating stock prices

Claimed to be able to see their operations in the patterns they left on prices

And proposed that it was useful to think of them as a "composite operator" or "composite man"



### Is This True?

We don't know, so I would tend to assume not true

But it does not matter

Markets are always manipulated

Personifying "market forces" is a useful mental trickBut be careful not to go too far!

I'm more likely to say "buyers" and "sellers", but there is 1:1 overlap with Wyckoff's composite operator



## The Goal of the Composite Operator

To buy inventory without alerting the public

To sell to the public while prices are going up

#### To be positioned correctly before the market makes its movement



## The Market Cycle

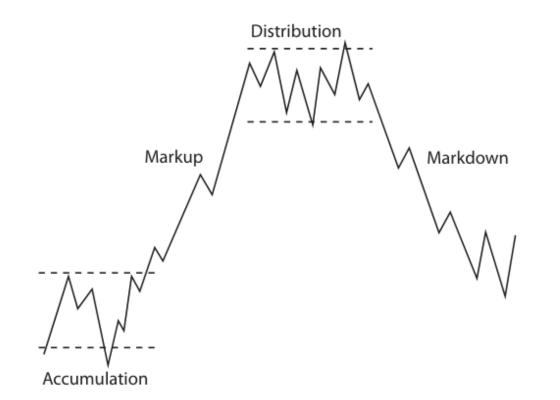
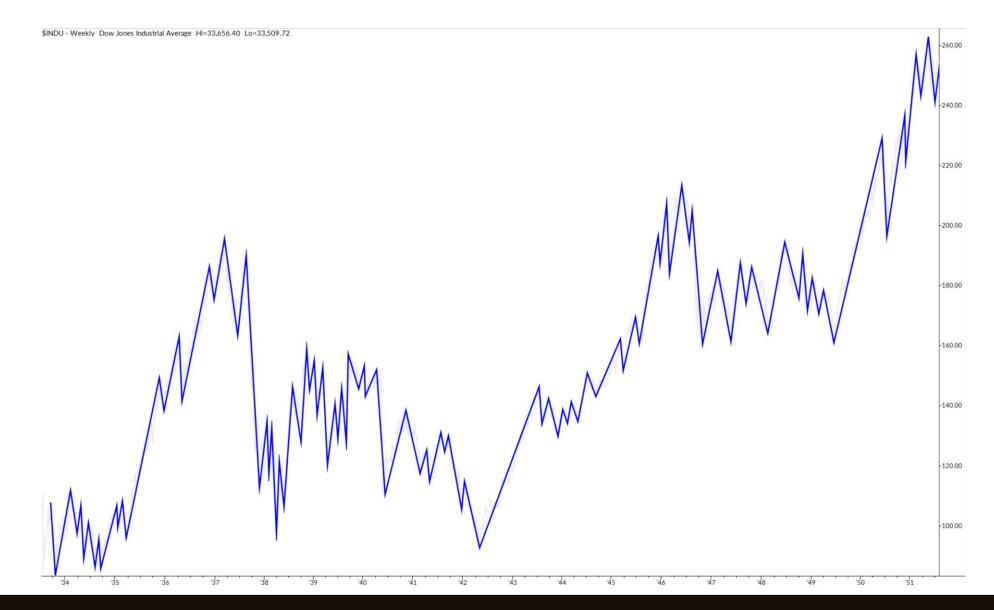


FIGURE 2.1 The Classic Wyckoff Cycle

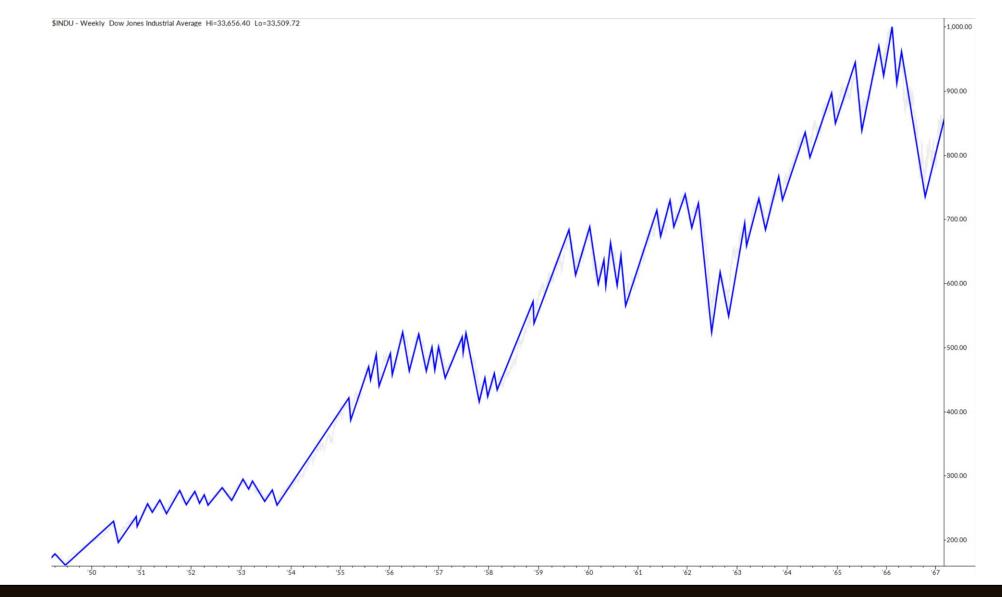


#### **Does This Work?**



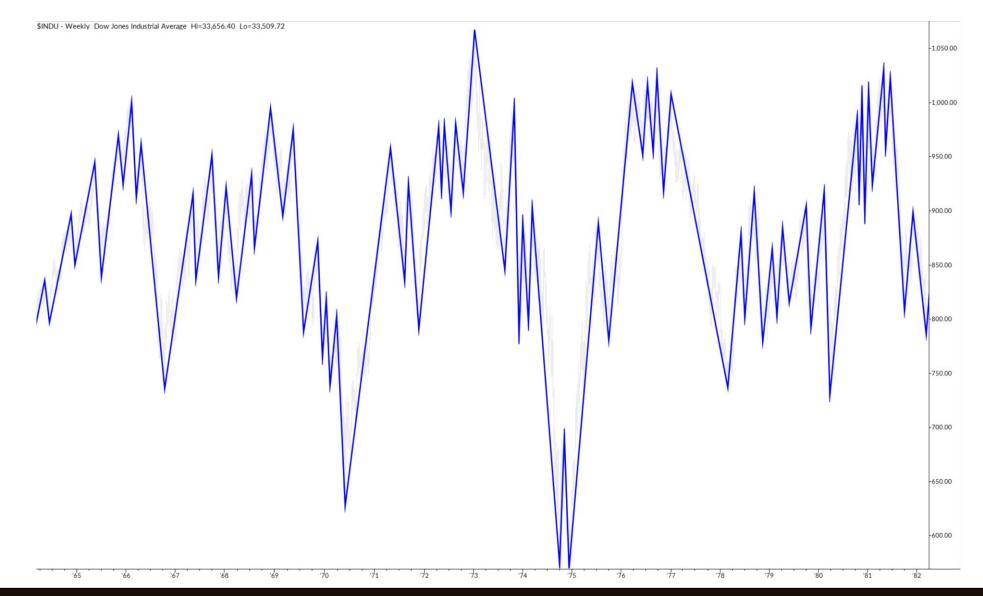


Wyckoff Cycle



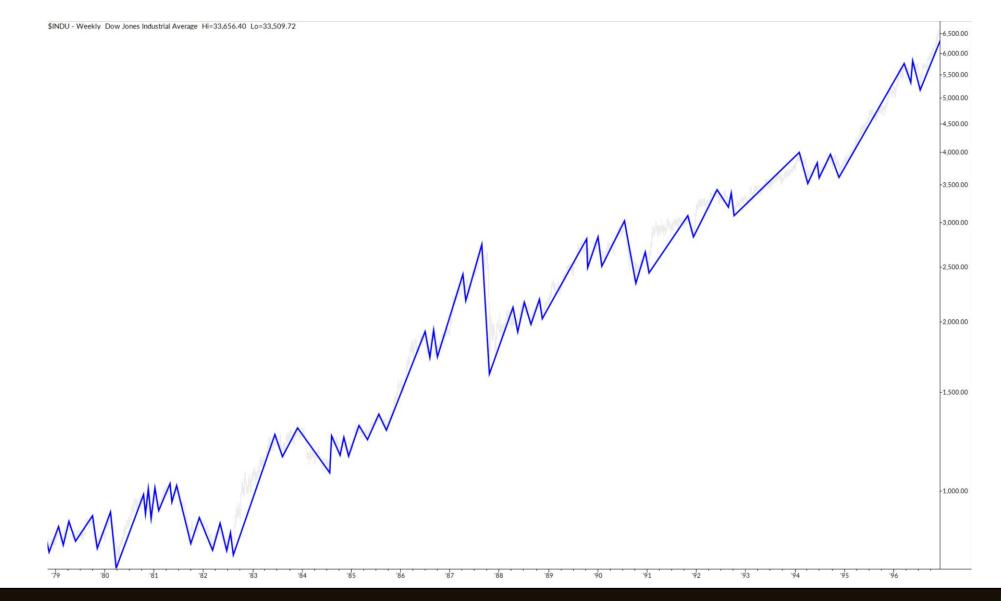


Wyckoff Cycle?



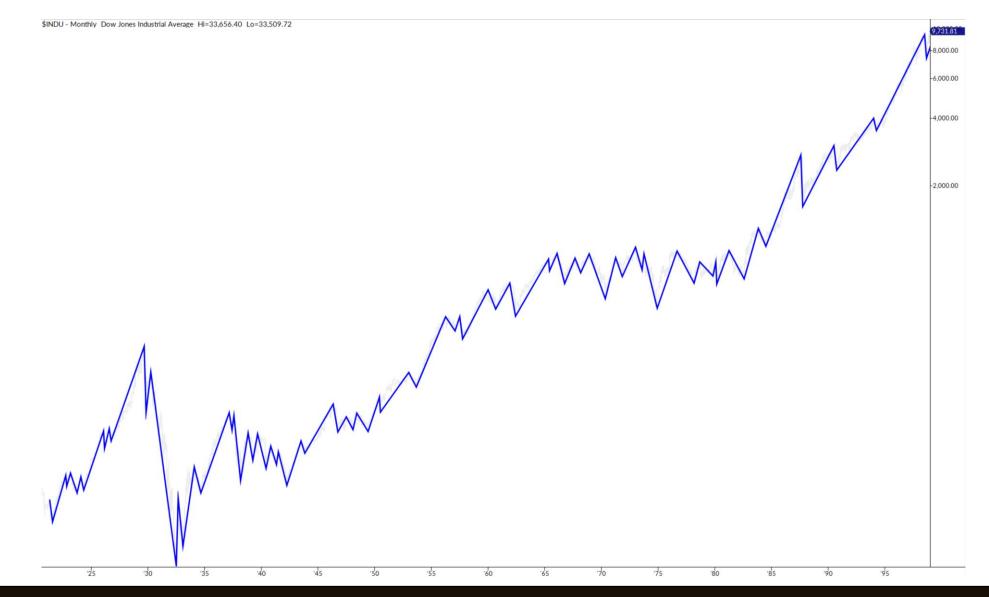


Wyckoff Cycle??





## How About Bigger Picture?





## So, What Do We Do With This?

Don't expect any theoretical framework to fit real data very well

In particular, don't expect the natural cycle to find predictable expression

- Useful take-aways:
  - Composite operator
  - Hidden manipulation
  - Market moving in cycle of trend and not-trend
  - What does manipulation look like on a chart?



## Accumulation / Distribution

#### The basic concept is:

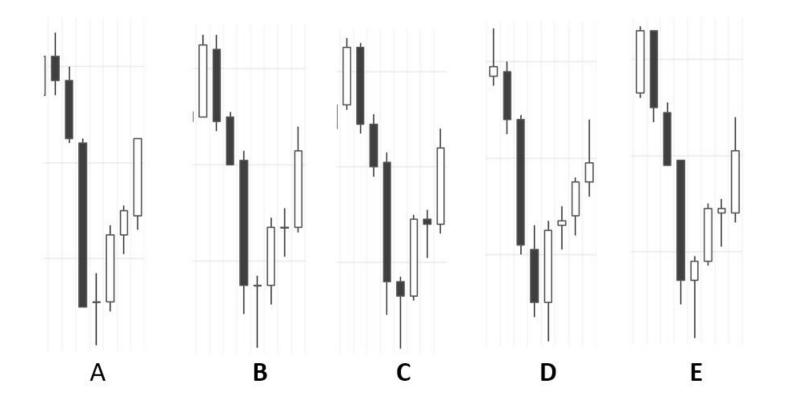
- Support will hold in accumulation
- Resistance will hold in distribution
- Small patterns may show when this is happening

#### Failure tests at the level are common

- Wyckoff called them
  - Springs
  - Upthrusts (potentially misleading this is bearish)
- I would also consider "reversal complexes"



#### Reversal Complexes (Remember last session's offsets!)





### Accumulation & Distribution





Support/Resistance





Every Pivot? (Not really...)





# Cognitive Bias: Apophenia

- The human brain is a fantastic pattern-recognition and pattern-matching machine
- But this machinery misfires often (and brutally)
- We will happily find patterns where none exist
  - And feel very confident in those patterns
- The classic example is seeing faces in clouds
  - But conspiracy theories are also an expression of this
    - Not just visual



### Practical Lessons

- Any line you put on a chart is going to seem to be important
   Horizontal grid lines are usually at round numbers
- Any trendline will seem to be important
- Any horizontal line from a pivot will seem to be important
- Any ratio you watch will seem to "work"
- Closes of bars (e.g., intraday) will seem to be significant
- Patterns of bars that imply lines will look really good

# Maybe any or all of these are real, but **you cannot trust your perception!**



### But Don't Go Too Far...

# The presence of a pattern in random data does not invalidate the pattern in real data



## **Random Lines**

In 2010, I did a public illustration of drawing random lines on a stock chart. You should watch it: <u>https://adamhgrimes.com/randomsrlevels/</u>

Why haven't I updated it?

- The "file drawer" problem
- This was the first and only time I intended to create this

But don't take my word for it: repeat it yourself!

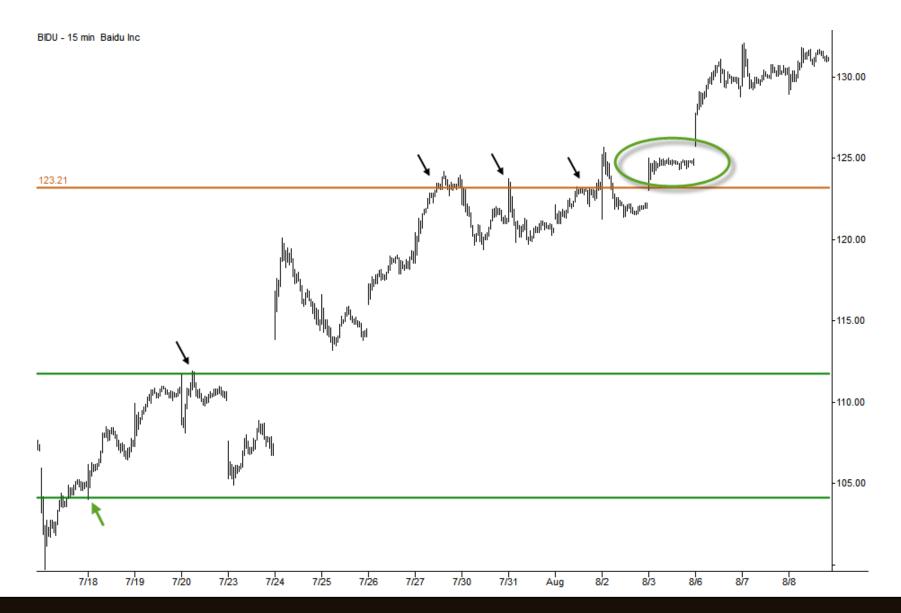


#### These are Random Levels!



MarketLife

#### These are Random Levels!



MarketLife

## If This Bothers You...

#### Good

It's always good to think deeply

- About the tools we use
- About the simplications we make
- About our perceptions
- About ourselves

A good discussion on this topic, started after I did the initial illustration: <u>https://futures.io/traders-</u> <u>hideout/7364-random-line-theory.html</u>



## The Key Question in All Quant Testing

# Is this any better than what I could expect from random chance?

# (How different is this test from what I could expect if there were, in fact, no value in the signal?)



## A Test of Levels

In 2019, we asked 1,535 traders to look at 20 panels

- Each panel showed a "real" level and a "fake" level, randomized
- The task was to choose which was the real level
- Levels studied were:
  - Round numbers in EURUSD (apologies to Bob Volman)
  - In S&P futures, PDH/PDL and GBH/GBL



## Real vs. Fake Levels

We avoided all test specifications by simply asking traders which levels "looked" real

- •Used pattern recognition of brain
- Traders' training and experience were not assessed
- For ES 5 minute charts: plotted levels on day session
  - So, anchors were not visible from prior data
  - No axis labels
  - For fake levels, shifted prices +/- 20% of daily ATR



## **EURUSD** Levels

Many traders believe round numbers are important

Understanding Price Action (Bob Volman, 2014)

- Numbers such as 1.3300, 1.3250, 1.3200 are important
- Presents well over 400 charts, many of which focus on this

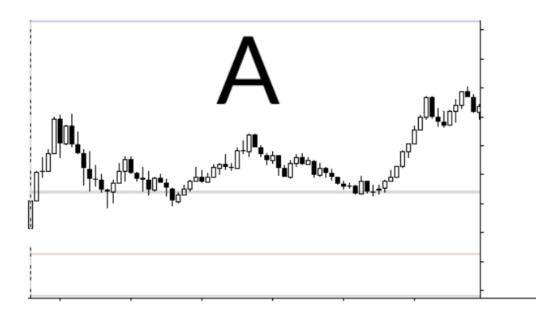
We repeated this procedure with EURUSD 5 minute charts

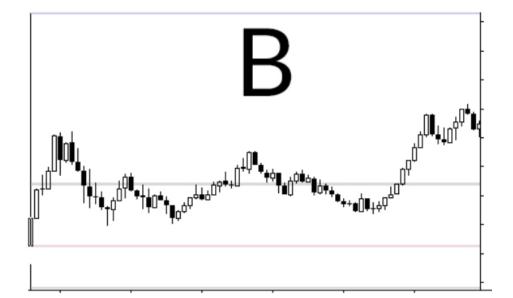
- Shift in this case was "half round number" (.0025)
- Used the time period covered in his book so presented the same data, just in case the market has changed

# The shifts should have obliterated any real influence from the levels



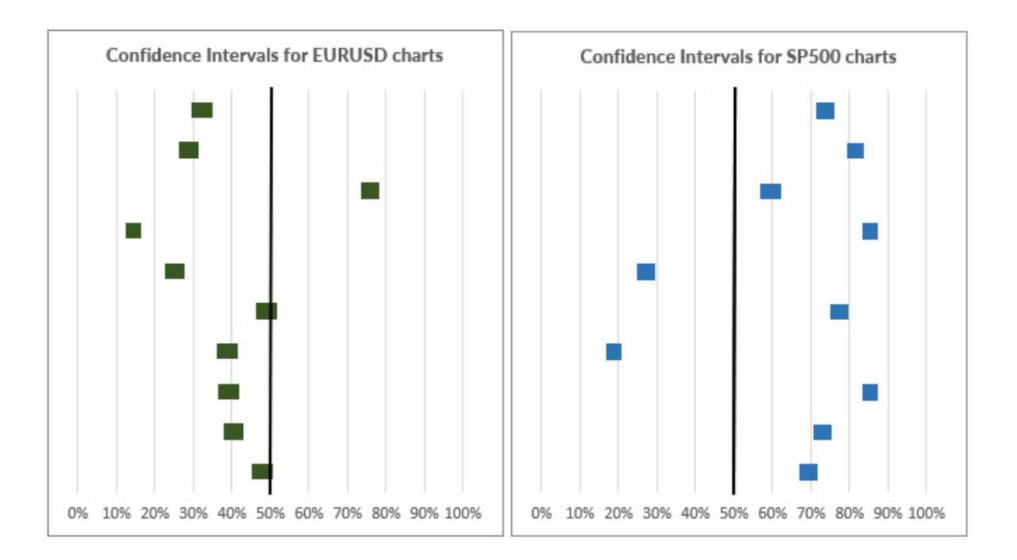
# Sample Panel







### What We Learned





#### **Results Max to Min**

	EURUSD	SP500
	75.9%	85.6%
	48.9%	85.3%
	47.9%	81.4%
	40.3%	77.3%
	39.0%	74.2%
	38.8%	73.2%
	31.7%	69.0%
	28.7%	59.2%
	24.9%	26.8%
	14.3%	18.6%
Total	32.5%	65.1%





We found no evidence that round numbers matter in EURUSD

We found strong confirmation that previous day and overnight highs and lows are significant in S&P futures

These are only tendencies

We might have missed something

(But this does overlap with common sense...)



# Extending the Concept

We have done conceptually similar testing on other levels

- Fibonacci levels
- Moving averages
- Other calculated levels
- Trader-supplied levels

Always looking for evidence that something is a significant departure from randomness

Our conclusions, in almost all cases, are that there's nothing there



### Guiding Principle of Data Analysis

### Something cannot be both profoundly important and invisible in the data



### Practical Lessons

We can find many of the patterns we find in markets in random data

This does not necessarily invalidate the patterns

But it should be a call for humility in pattern recognition



### So Let's Get Back to Practice

But that context and warning must always inform our thinking

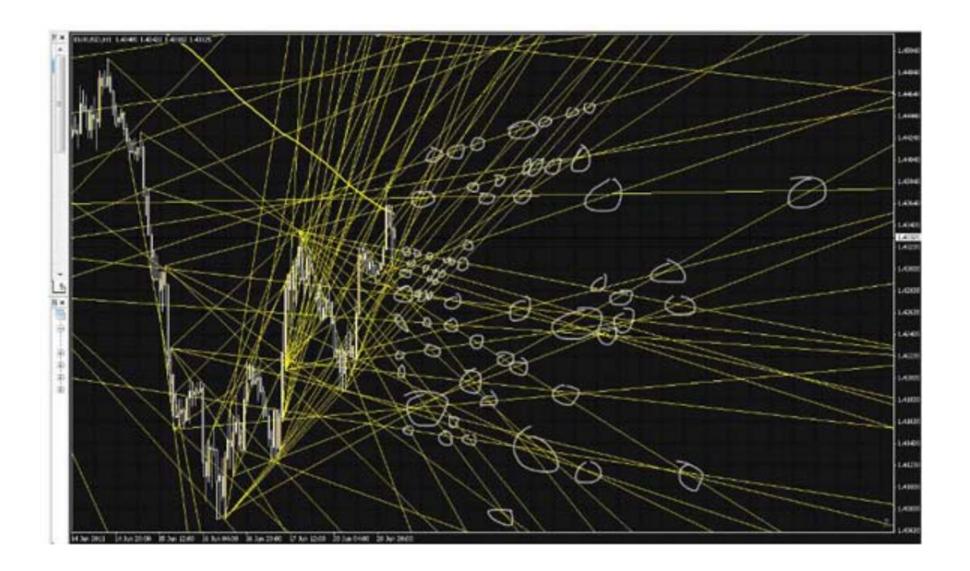
- You cannot trust your perception of any one case
- Must understand behavior over a large sample size
- It's better to think correctly than to be misled
  - But don't get paralyzed or discouraged



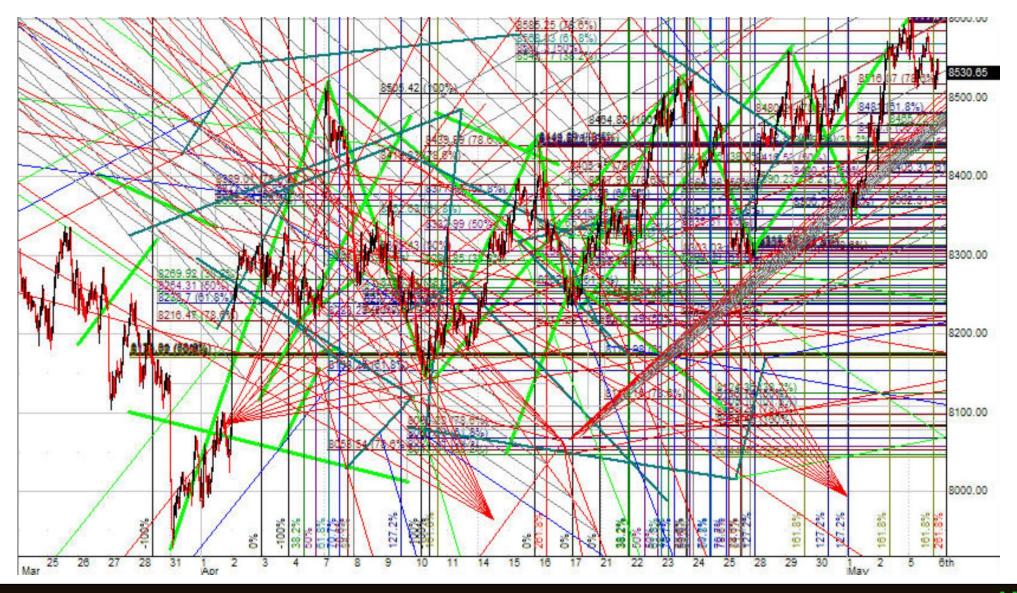
# So, Back to Support and Resistance...













# Thinking About Evolving Support/Resistance



















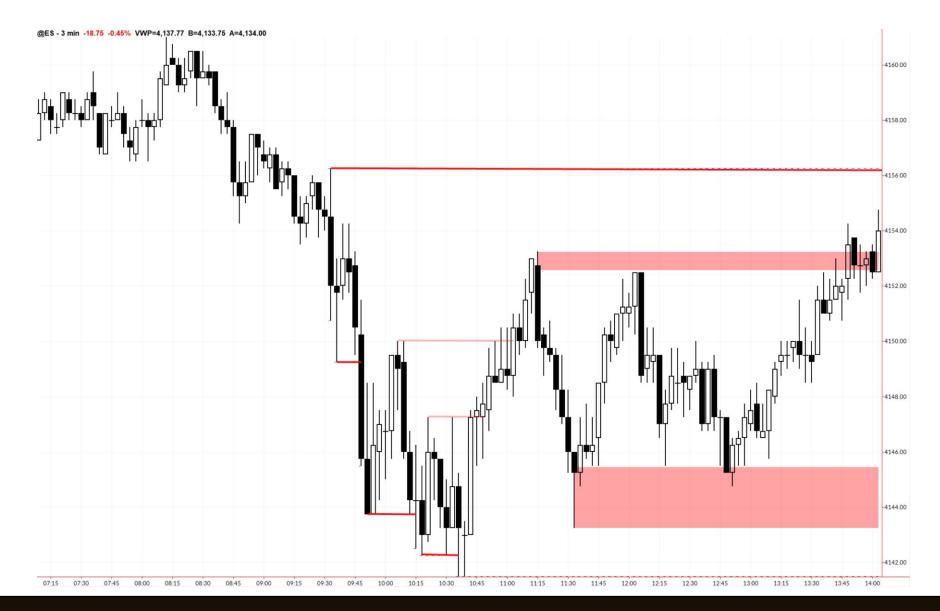








IIII MarketLife























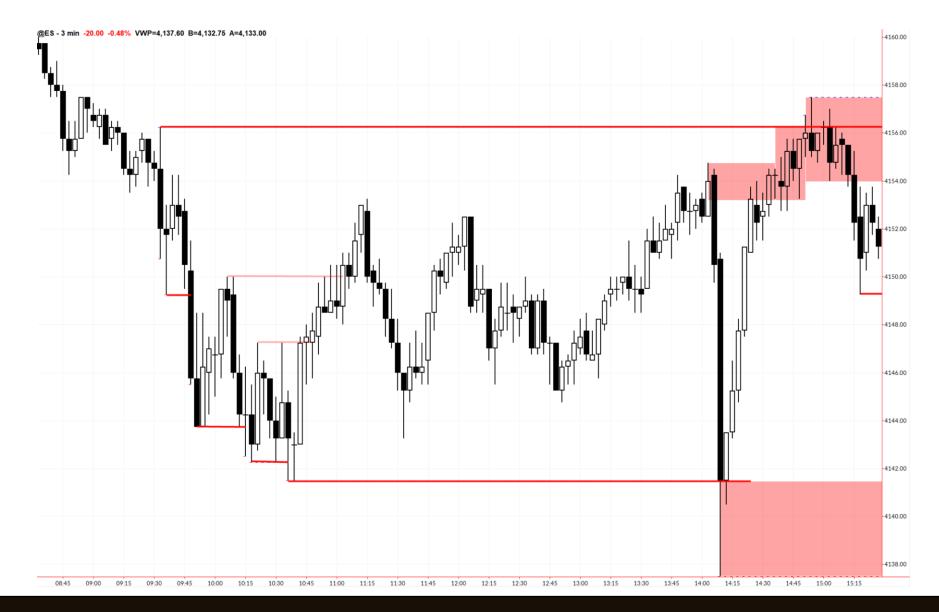










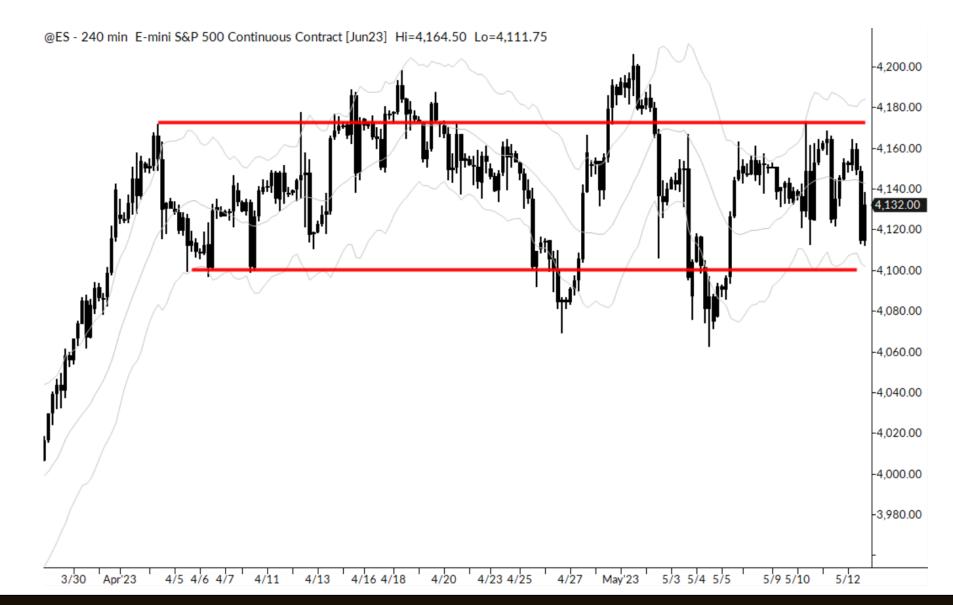






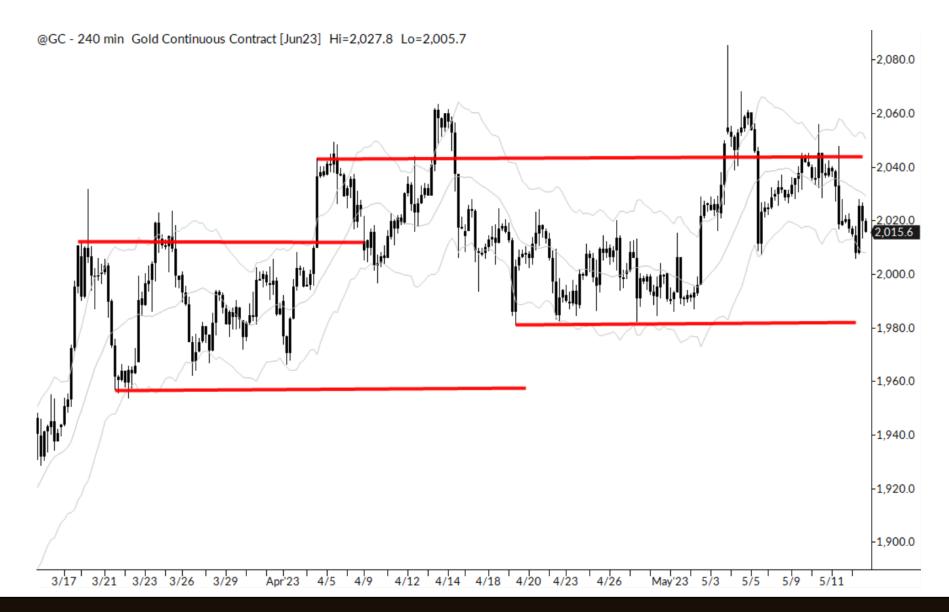








#### Internal S/R



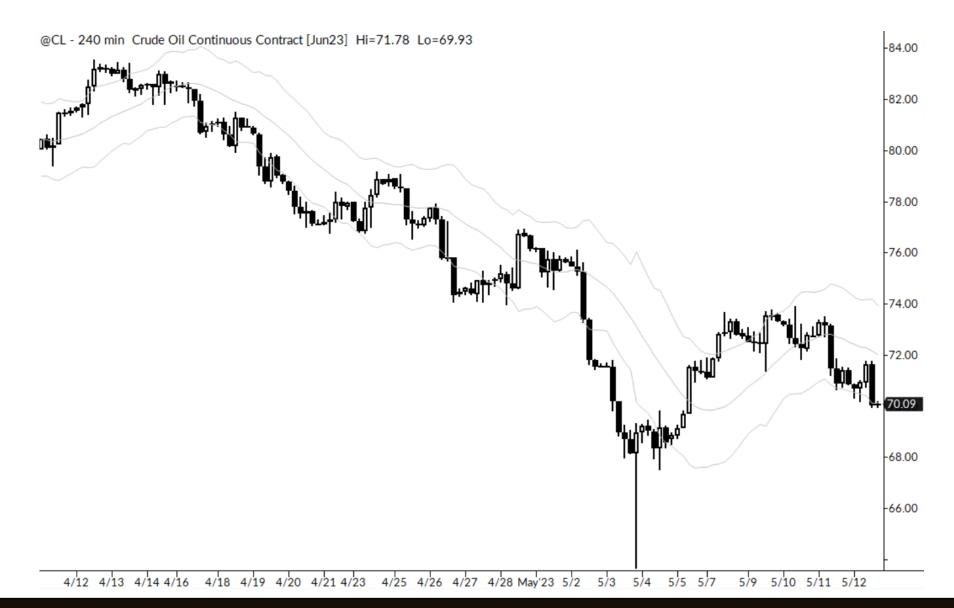


### S/R in Trending Market



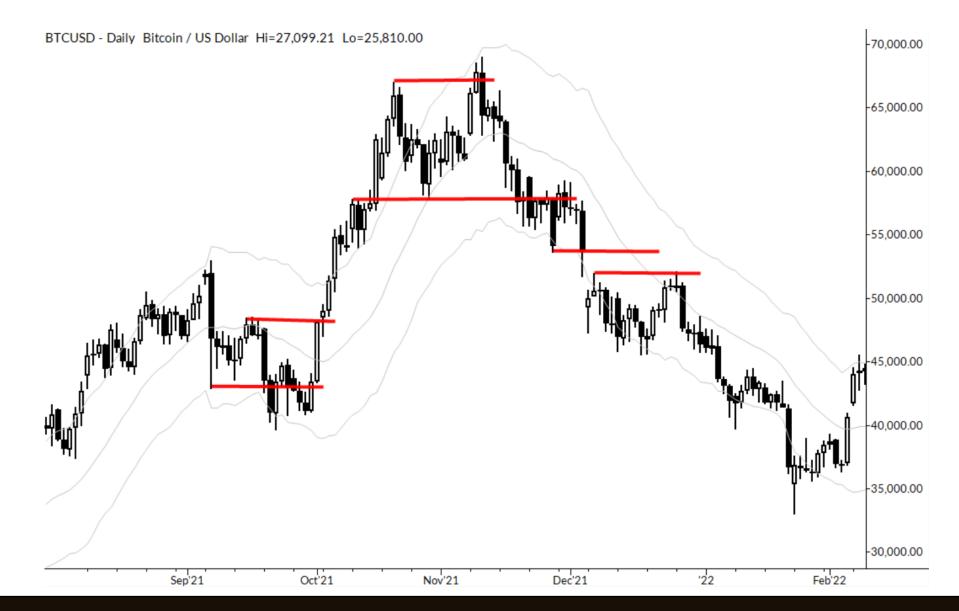


#### Trends Break S/R





#### But S/R Is Not Useless in Trends!





## Support / Resistance Practical Advice

- Best levels are obvious levelsHTF can be useful
- You want people to take action around those levels
- May be different in different markets
  - Understand microstructure

Support and resistance are areas where something might happen

- That might be the most important point in this entire presentation
- Important to monitor action around levels to see what is happening



# "Potential" Support and Resistance

All developing traders should use this vocabulary

Words are a mind-trap! Be precise in how you think

You can probably relax this after you trade well for a decade or two because you will be well-aligned with what to expect around S/R



### The Four Trades

There are only four possible directional trades

- **Trend Continuation**
- **Trend Termination**
- **Support/Resistance Holding**
- **Support/Resistance Failing**



#### **Trend Continuation**

#### **Classic examples:**

- Pullbacks or pauses in trends
- Breakouts that might lead to start of trend

Markets have "inertia", so there is a natural edge to trend continuation

Every trade is a test of a hypothesis Every trade involves uncertainty



### **Trend Termination**

These are not "trend reversal" trades

- If we successfully find the end of a trend:
  - Trend reversal
  - Transition into range
    - Which might become a reversal
    - Or a continuation
  - Pause in the existing trend which then continues
    - At a new rate
    - At a different rate
  - A test of extreme to stop you out



## Important Principle of Price Behavior

The market will do whatever it can to hurt the most traders

Why?

The market's job is to find activity and to facilitate trade

- Other traders know this
- Exchanges want this
- The market is an auction

The market tests and probes levels, looking for orders



# Support/Resistance Holding

- Must have some reason to expect a "good" S/R level
- Watch price upon approach to the level
- Certain characteristics of price behavior apply
  - Consider doing a study of LTF action around key levels
- These trades can be taken
  - Before a break of the level
  - At the level
  - After a penetration of the level fails



# Support/Resistance Breaking

- Of course, if one thing isn't happening, the other probably is...
- These are trades that occur when support or resistance fail to stop prices
- Markets probe beyond levels and find sufficient interest there to drive prices to new levels



### Define Your Trading Timeframe

- These trades often "nest"
- Most confusion is avoidable by clarifying expectations
- Which are most clearly related to the trading timeframe
- (We're not even touching on stops and targets yet...)



### Is This All Too Complex?

At its heart, trading is simple

Traders cannot be burdened with a heavy cognitive load when they are "in process"

Some traders suggest that technical analysis can be taught in less than an hour

How do we find the right balance of depth and complexity?



#### Review

- The Wyckoff Cycle is useful, but suspect
- The "Composite Man" is useful
- Support and resistance must be understood
- Testing trading ideas—key concepts
- The four trades framework defines every possible technical trade





#### Saturday 3 June 2023 @ 13:00 EDT

Register here: https://attendee.gotowebinar.com/register/798016 0168032814427

#### Will cover chapter 3: On Trends



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