

Wyckoff 2.0: Structures, Volume Profile and Order Flow

Combining the logic of the Wyckoff Methodology and the objectivity of the Volume Profile

Rubén Villahermosa Chaves

Copyright © 2021 Rubén Villahermosa Chaves

Copyright © 2021 Rubén Villahermosa Chaves

All rights reserved

ISBN: 978-3-96931-344-2

Verlag GD Publishing Ltd. & Co KG, Berlin

E-Book Distribution: XinXii

www.xinxii.com

No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, or by photocopying, recording, or otherwise, without the express permission of the publisher.

Content

Prologue

Part 1. Advanced concepts of the Wyckoff methodology

1.1 The labels

1.2 Price & Volume

1.3 Advanced chart types

1.3.1 Tick charts

1.3.2 Volume charts

1.3.3 Range charts

1.4 Accumulation or distribution failure

1.5 Structural failure

1.5.1 Weakness

1.5.2 Strength

1.6 Shortening of the Thrust (SOT)

1.7 Other types of structures

1.7.1 Structures with a slope

1.7.2 Unusual schemes

Part 2. Resolution of frequent doubts

2.1 Efficient use of lines

2.1.1 The importance of context

2.2 Label changes and scenario planning

2.3 How do you distinguish between accumulation and distribution?

2.4 How to analyze a chart from 0?

2.4.1 Structures

2.4.2 Operational zones

2.4.3 Decrease in temporality. Structures from major to minor

2.4.4 Increase in temporality. Structures from minor to major

2.5 What to do when the context is not clear?

2.5.1 The controller

Part 3. The current trading ecosystem

3.1 Types of participants in the financial Markets

3.2 Electronic markets

3.2.1 Algorhithmic trading

3.2.2 High Frequency Trading

3.3 Over The Counter Markets

3.4 Dark Pools

3.5 Are markets random or deterministic?

3.5.1 The adaptive market hypothesis

3.5.2 Where does the Wyckoff methodology fit in?

Part 4. The importance of volume

4.1 Auction Market Theory

4.1.1 The variables

4.1.2 Value perception

4.1.3 The four steps of market activity

4.2 The Law of Supply and Demand

4.2.1 Common interpretation errors

4.2.2 BID/ASK, Spread and Liquidity

4.2.3 Types of participants based on their behavior

4.2.4 How does the price move?

4.2.5 How do market turns occur?

4.3 Order Types

4.3.1 Advanced order types

4.4 Tools for volume analysis

[4.4.1 Order Book](#)

[4.4.2 Time & Sells](#)

[4.4.3 Footprint](#)

[4.4.4 Delta](#)

4.5 The Order Flow Problem

[4.5.1 Problem #1 Price Divergence](#)

[4.5.2 Problem #2 Delta Divergence](#)

[4.5.3 Price & Volume Operator](#)

[4.5.4 Conclusion](#)

Part 5. Volume Profile

[5.1 Auction Market Theory + Volume Profile](#)

[5.2 Volume Profile Composition](#)

[5.3 Profile Types](#)

[5.4 Difference between vertical and horizontal volume](#)

[5.5 Difference between Volume Profile and Market Profile](#)

[5.6 Profile Shapes](#)

[5.6.1 P-shape Profile](#)

[5.6.2 b-shape Profile](#)

[5.7 Volume Profile uses](#)

[5.7.1 Structure identification](#)

[5.7.2 Determining market bias](#)

[5.7.3 Trend Health Analysis](#)

[5.7.4 VPOC Migration](#)

[5.7.5 Calibration of position management](#)

[5.8 Operative principles with value áreas](#)

[5.8.1 Trading range principle](#)

[5.8.2 Reversion principle](#)

[5.8.3 Continuation principle](#)

[5.8.4 Failed reversion principle](#)

[5.8.5 Summary table of operating principles with value áreas](#)

[Part 6. Order Flow](#)

[6.1 Reading the Footprint](#)

[6.2 Imbalances](#)

[6.3 Rotation pattern](#)

[6.3.1 Bearish rotation pattern: Buying absorption and initiative Selling](#)

[6.3.2 Bullish rotation pattern: Selling absorption and initiative Buying](#)

[6.4 Continuation pattern](#)

[6.5 Fractality](#)

Part 7. Wyckoff 2.0

7.1 Context analysis

7.1.1 Trading Range Context

7.1.2 Trend Context

7.1.3 Operating in trading range

7.1.4 Operating in trend

7.2 Identification of zones and operational levels

7.3 Setting up scenarios

7.4 Position Management

7.4.1 Entry

7.4.2 Stop Loss

7.4.3 Take Profit

7.4.4 What to do when the price leaves without us?

Part 8. Case studies

8.1 Euro/Dollar Cross Currency (\$6E)

8.2 Pound/Dollar Cross Currency (\$6B)

8.3 S&P500 Index (\$ES)

[8.4 US dollar/Canadian dollar Cross Currency \(\\$6C\)](#)

[8.5 Pound/Dollar Cross Currency \(\\$6B\)](#)

[8.6 Euro/Dollar Cross Currency \(\\$6E\)](#)

[Bibliografy](#)

[Acknowledgements](#)

[About the author](#)

[Books of this author](#)

Prologue

With the publication of this new content we give continuity to the first book "The Wyckoff Methodology in Depth", where all the analytical tools that this methodology covers are presented in a clear way, as well as the more theoretical aspect in the study of the behavior of financial markets.

In this book we will go a step further and discuss more complex concepts; we will review the doubts most commonly raised by students of the methodology and incorporate new tools based on the information provided by the volume data that will be very useful, such as the Volume Profile and Order Flow.

I strongly recommend that before starting the study of this book you have previously internalized all the concepts covered in the first one, since everything seen is taken as understood and, if not, it could cause some confusion or lack of understanding.

Part 1. Advanced concepts of the Wyckoff methodology

Both the previous book "The Wyckoff Methodology in Depth" and this one do not intend to divulge at any time the approach of the Wyckoff methodology from its purest point of view. There may be Wyckoff operators who do but we understand that today's markets have changed substantially from those studied by Richard Wyckoff and it is our task to know how to adapt to these changes.

But if there is one thing that is invariable and where the advantage of this approach over others really lies, it is the principles on which his teachings are based. Regardless of how markets and their operators have changed, everything continues to be governed by the universal law of supply and demand; and this is the cornerstone of the methodology.

This new way that I propose to analyze the markets has caused me some discussion with known (purist) disseminators of the method. As I said, my objective is not to teach the most primitive form of the methodology, but to take the principles I consider valid and enhance them together with the most modern tools of volume analysis.

In fact, I believe that spreading Richard Wyckoff's teachings as he shared them is practically impossible. In the end, each one teaches his point of view of the methodology together with the tools that give him more confidence; and this does not mean that any one is above the rest. The important thing is to obtain profitability from the market regardless of the approach used.

Having said that, I am sure that if Richard Wyckoff were alive today, he would have taken care to evolve his own teachings by adapting them to new markets.

As he was at the time, he would still be a student of volume, and this would have led him to delve deeper into tools such as the Volume Profile and Order Flow.

And this is exactly what we have done and what I will present to you throughout the book; bringing together the most solid principles of market analysis with the most advanced tools of volume analysis.

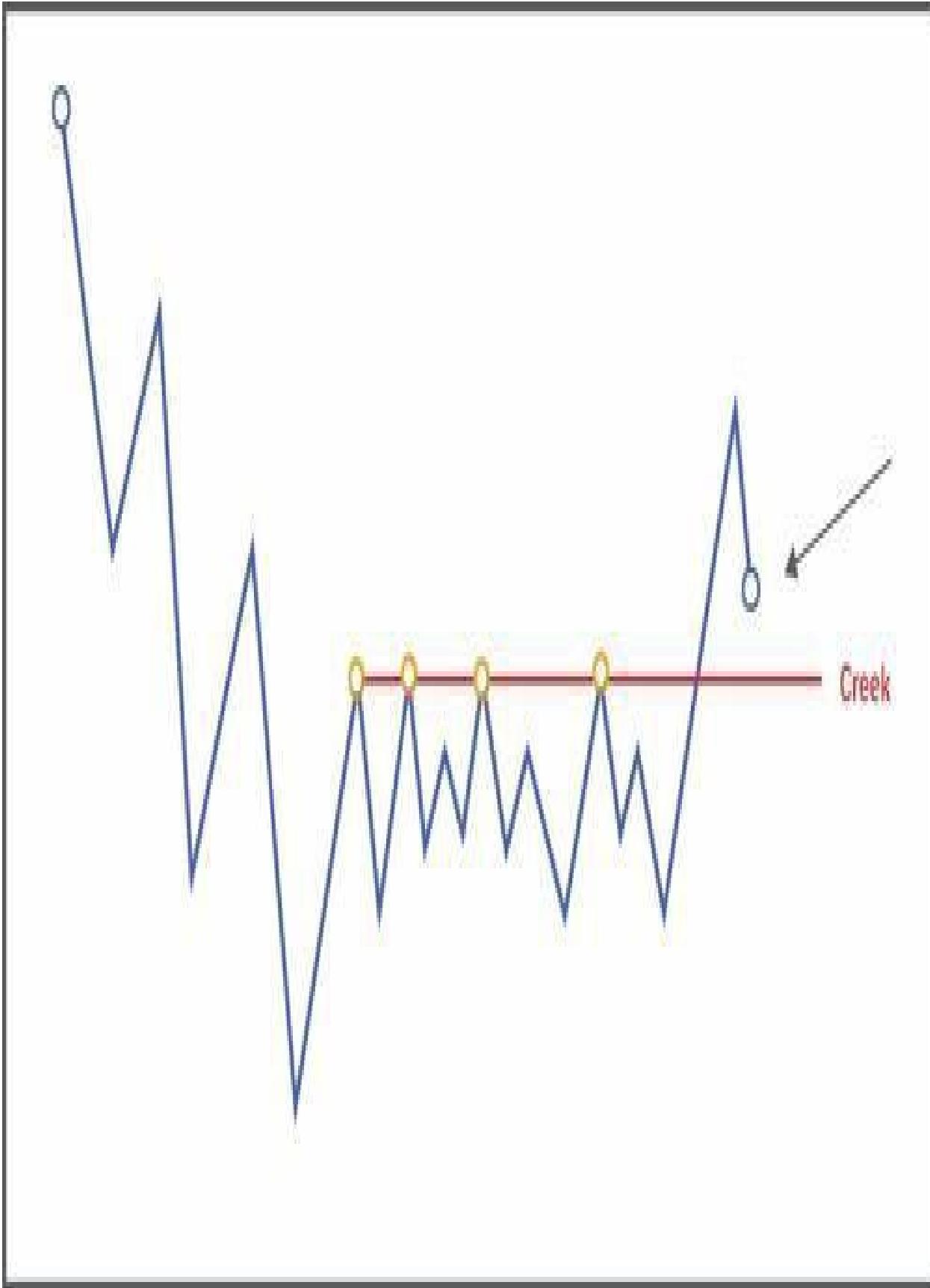
But before we get to that point let's add some advanced concepts that you should know and clarify a number of doubts that occur frequently.

1.1 The labels

The entire theoretical section seen in the first book is a necessary and indispensable content to master this approach and truly understand how the market moves, but the Wyckoff methodology, or my way of understanding it, goes much further.

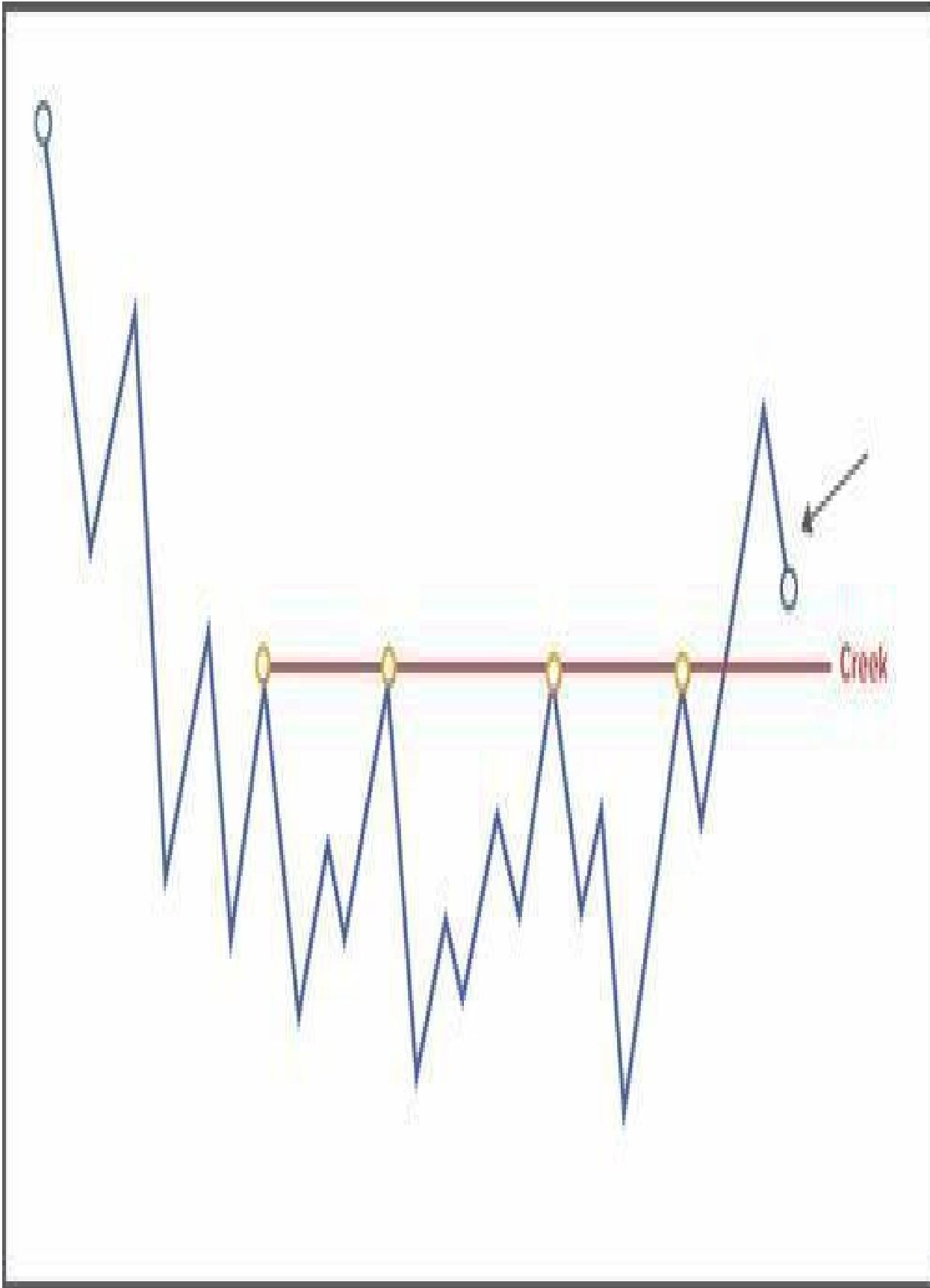
It is not simply a matter of labeling a chart almost robotically and that's it. We've learned what's behind each event; how it's formed, how it's represented on the chart, the psychology behind it, and so on. But as I say, the method is much richer.

I mention this because, by the very nature of the market, it is practically impossible for two completely equal structures to occur. Although it is true that every day we see "book" diagrams, which are very genuinely adapted to the classic examples, in most cases the market will develop less conventional structures, where the identification of such events will be more complex.

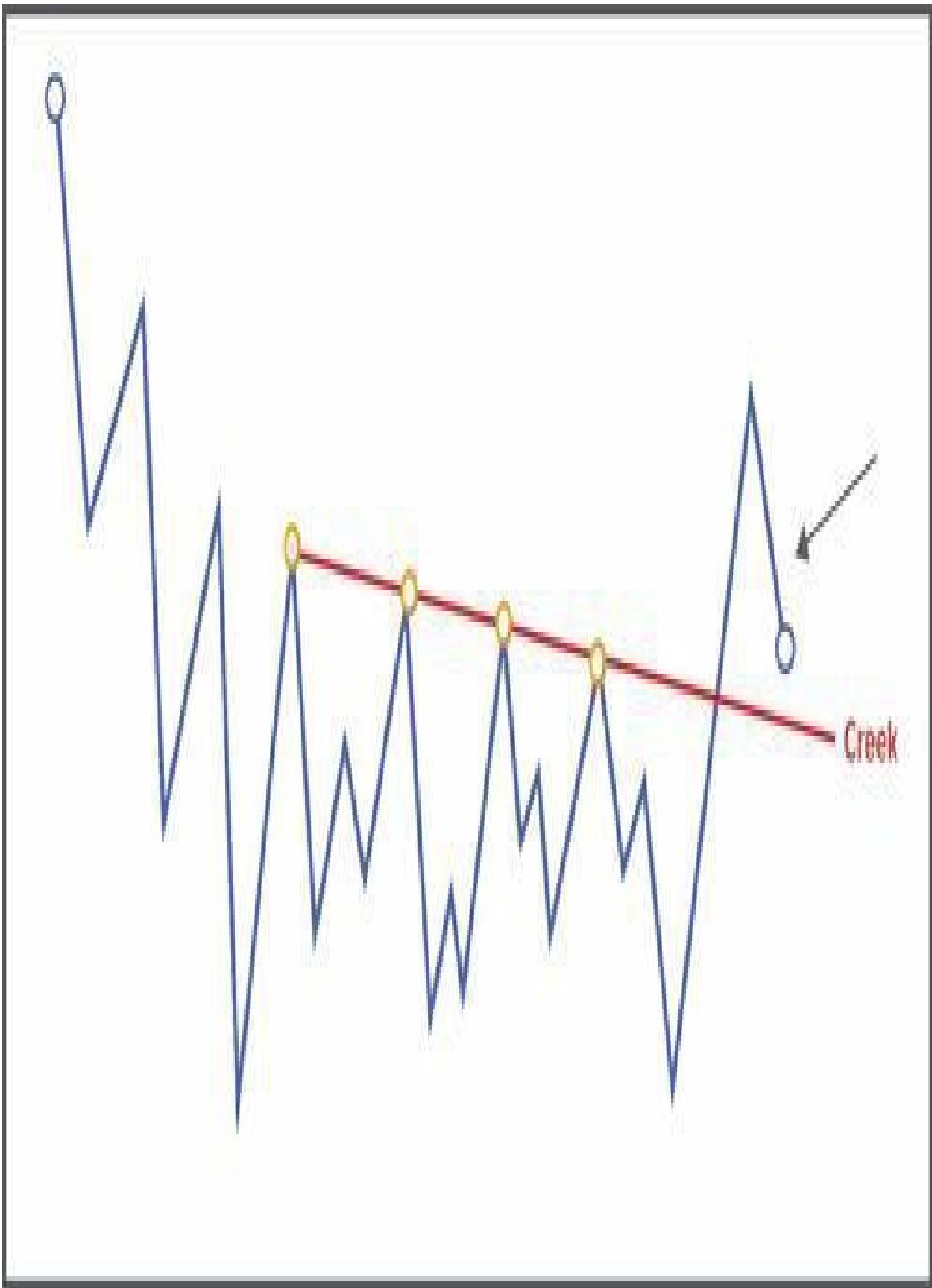


It is therefore essential not to focus on the exact search for the events (mainly the stop events that make up Phase A) and to stay with the fact that what is really important is the action as a whole. That is, in many chartics we will see that a trend movement stops and starts a lateralization process, but we are not able to correctly identify those first 4 stop events. Maybe in view of this, we discard the asset and we are missing a future operational opportunity. This is a mistake. As I say, the important thing is not that we are able to identify those 4 stop events, but that the market has objectively stopped the trend movement. It may not identify the Climax, the Reaction and the Test in a genuine way, but the objective is that the market has stopped and has started a change of character (migration from trend to lateral state).

As we see in the examples, although these structures do not look anything like the classic ones already studied; if we open the chart and we find ourselves in that point that I mark with the arrow, it is not unreasonable to think that possibly below they have developed a process of accumulation. It will be more or less difficult to identify the events of the methodology, but the objective is that we see a level where the price has rejected on several occasions (Creek) and that it has finally managed to break through and position itself above. This is the key.



Surely if we force ourselves we can label each and every movement but I repeat that this is not the important thing. What is important about the methodology is the logic behind it: that for the price to go up there must first be an accumulation; and for a distribution to go down. The way or manner in which these processes develop should not be the determining factor.



The level of open-mindedness required is very great. Some may even have their heads blown off, but this is the reality. Fortunately we often see classic structures but the continuous interaction between supply and demand means that these processes can develop in infinite ways, and we have to be prepared to see them as well.

Rather than thinking about labeling each and every price movement, let's focus on trying to identify according to the fingerprints we observe who is probably gaining market control based on the theory studied.

1.2 Price & Volume

In our way of conceiving the market analysis initially we do not value the possibility of not taking into account any of these two data, price and volume. But as you delve deeper into the ecosystem that surrounds the financial world, you begin to see some pitfalls.

Without going too far, I have to say that in my view the price data are certainly more relevant than the volume data. And I will now reason out this statement on the basis of two elements.



On the one hand, the intraday volume that we can analyse on any asset can be very misleading depending on the time of the session. For example, at the opening of the S&P500 US session in its local time (ETH), we will always see a large volume, much larger than that seen prior to that opening during the regular time (RTH). And of course, all of the previous analysis will be somewhat biased.

As we can see from the ES chart (SP500 future), the highest volatility and therefore price shift occurs during the American session, with the lack of participation during regular trading hours being very clear. It wouldn't make much sense to analyze the overall price and volume action as it could lead to confusion.

It is not that during regular hours we have identified a movement with lack of interest (low volume); but that low volume is due to an absence of traders at that time. The same would happen with other moments of the session, such as at the mid-day stop or just before the start of the day's final stretch, when there is also a significant increase in volume.

Once we know this, we have two ways to solve this situation:

If we want to continue operating in intraday time frames we must necessarily analyze price and volume in comparative terms; on the one hand that observed during local time and on the other hand that seen during regular hours.

In addition, the best way to avoid confusion is to analyze the daily chart. As this timing covers both sessions (ETH and RTH), there is no need to distinguish between them for analysis. But of course, this would already require a total change in trading style.

If there is one piece of information that already incorporates all the information, it is the price. The price is the chartic representation of all the orders already executed. We could be analyzing an asset at any time and the price action would be faithfully reflected without having to be aware of the time of the session and perform comparative analysis. This is the advantage of price.

Although without volume we lose a large part of the available information, the continuous interaction between supply and demand leaves its mark on the price and this develops patterns that are certainly repetitive (not in form but in substance).

Obviously I am not recommending trading without analyzing the volume data, it is not necessary, I simply wanted to highlight the prevalence of price over volume for our understanding and trading of the markets.

Later on we will see another drawback of the volume data due to the Over The Counter (OTC) and Dark Pools markets.

1.3 Advanced chart types

In recent times, other forms of representation of market activity have also appeared. Among these types of charts, tick, volume and range charts stand out.

The main advantage of these charts is that they reduce the noise present in the time charts. These three types of charts have the common feature that they eliminate the time variable, which can be very useful precisely for conditions such as those described above, where the market covers different activity environments.

1.3.1 Tick charts



A tick represents a transaction, a negotiation between two parties. Therefore, the tick chart will be updated (the current candlestick will be closed and a new one will be opened) when a certain number of transactions (ticks) have taken place.

The configuration of the chart (the number of ticks) will vary between markets as the volatility is different from one market to another. That's why you will have to make different tests until you find the most suitable one.

Generally the volume will be very similar in all the candlesticks generated, but there will be subtle differences that can give us interesting information since this type of chart measures activity in terms of transactions, but does not take into account the volume or amount traded in those transactions.

In other words, a chart set at 1000 ticks will generate a new candlestick when those 1000 ticks occur, but the amount traded in those thousand transactions will differ. It may be that 1 or more contracts are traded in one transaction.

1.3.2 Volume charts



The difference between tick and volume charts has to do with the amount traded. While the tick chart measures the number of transactions regardless of how many contracts, shares or units have been traded in each; the volume chart measures that number of contracts, shares or units traded before a new candlestick is generated.

For example, a chart set to 1000 volume will generate a new candlestick when that amount is traded, regardless of the number of transactions that were required to complete it.

The main negative aspect of using this type of chart is that it disables us from using volume analysis techniques

1.3.3 Range charts



While the two types previously presented based their representation on volume data, the range chart is based on price data.

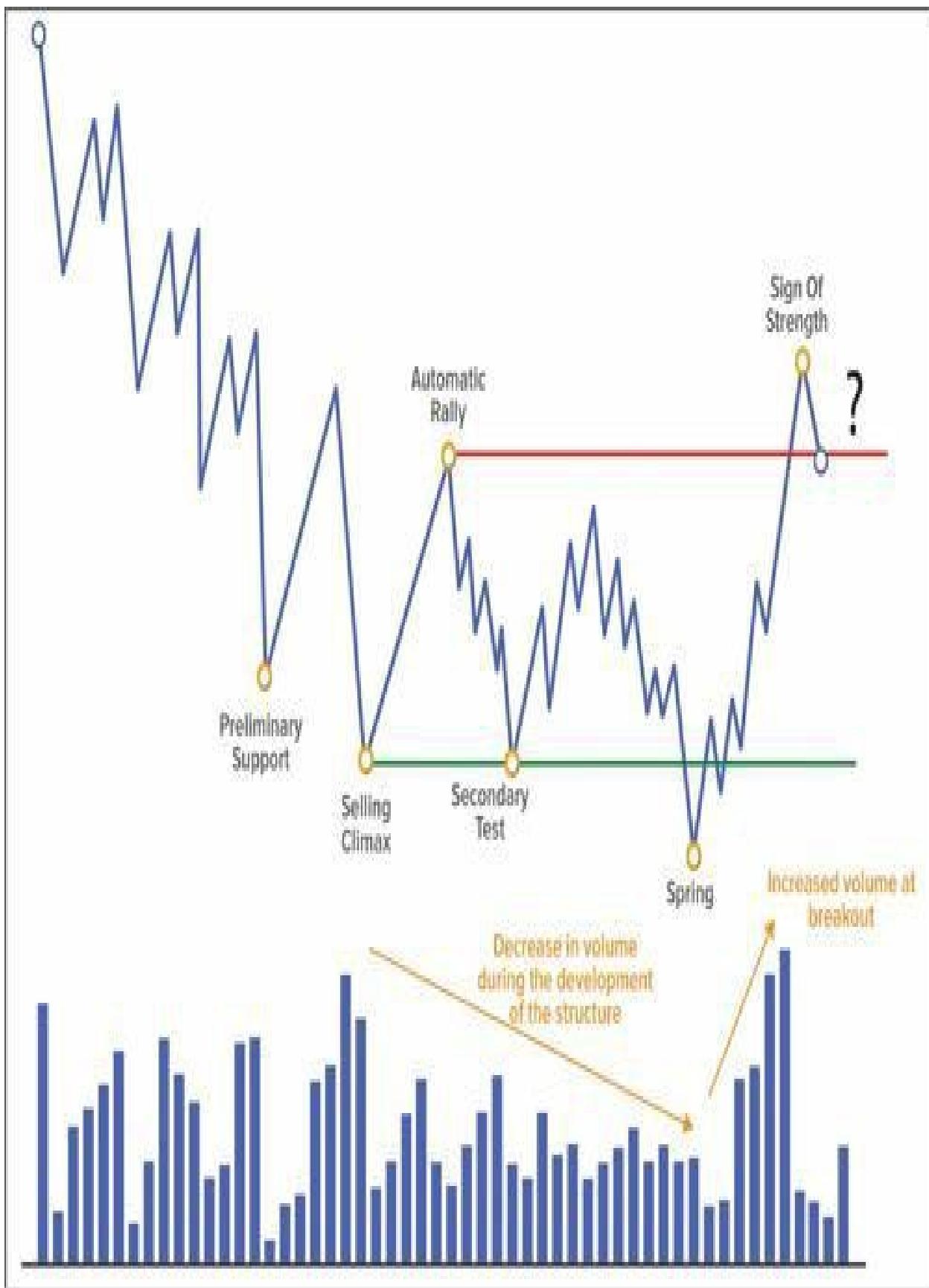
This type of chart represents market activity from the point of view of price movement. All of your bars will be displayed with the same size, regardless of how long it took for them to form. In high volatility environments more bars will appear and vice versa for low volatility environments.

If you set the chart to range 15, new bars will appear when the price moves 15 ticks in one direction or the other.

1.4 Accumulation or distribution failure

When the analysis of all the traces that are observed on the chart suggest that the imbalance is occurring on one side but at the moment of truth the opposite side is pressing more aggressively, we are talking about a failed structure.

During the development of the structures, the control of the market is at stake and it can change sides (in favour of buyers or sellers) continuously, depending on the types of operators and the valuations they make of the asset.



Since we know that until the effect of a cause is visualized we cannot determine what it is (accumulation or distribution), it would almost be logical to avoid using this term of failed structure since really a failed accumulation will always be a distribution structure and vice versa. But it is a very interesting concept that helps us to understand an important dynamic of the market, which is none other than the knowledge of the different types of operators and how they intervene on the basis of temporality.

When the price makes a potential Spring at the low of the structure and from there it manages to reach again the high part of the same one, it is obvious that down there the buyers have entered with certain aggressiveness; but we do not know when these will decide to close their positions. It could be that they are simply very short term traders who take advantage of visiting some liquidity zone (either at the top of the structure or in an intermediate zone) to find the counterpart with which to match their orders and close their positions there obtaining benefits. This closing of buy positions would cause a loss of upward momentum and possibly a new downward turn.

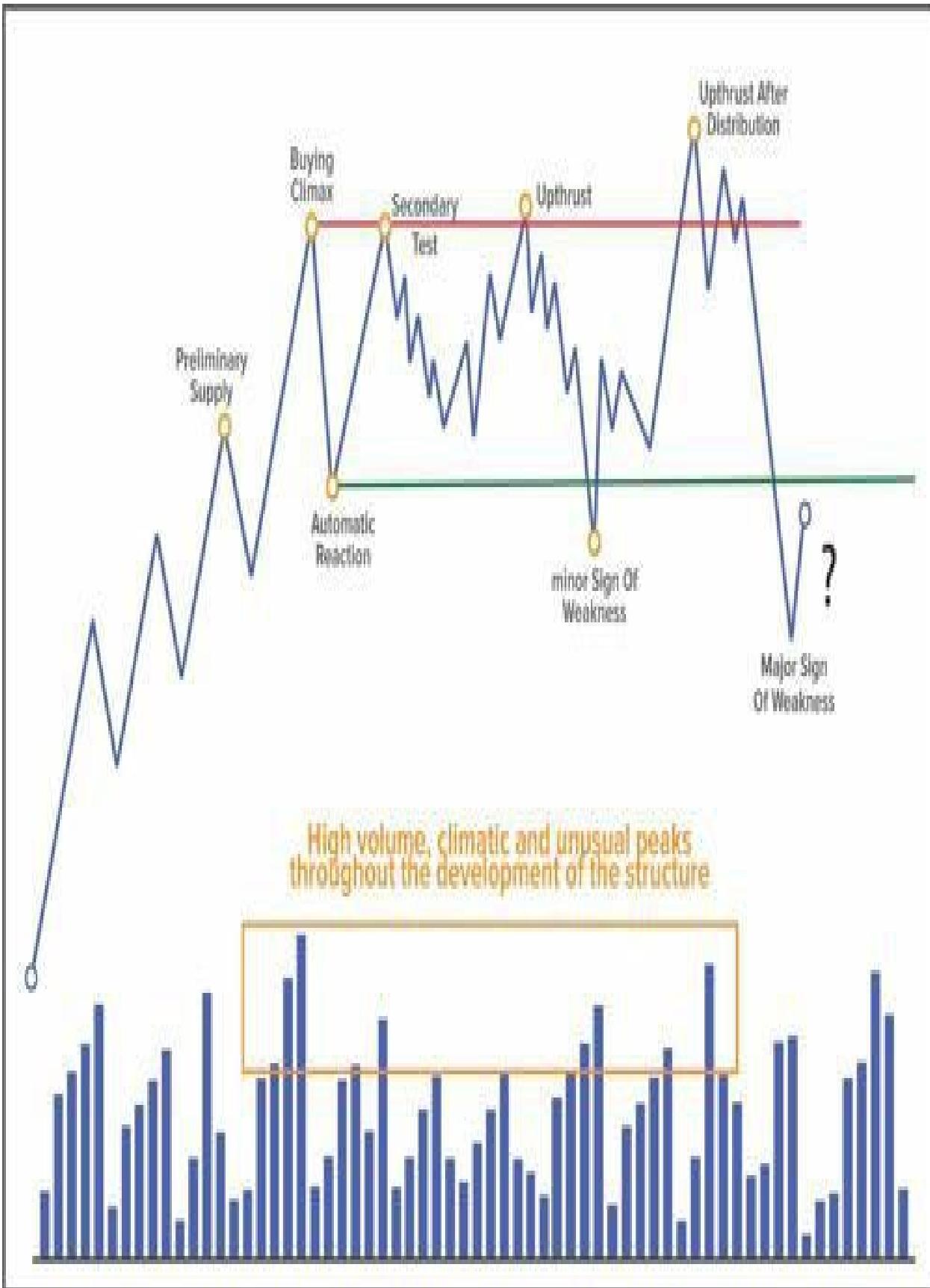
Or, traders who have bought in the Spring may have a longer term perspective and do their best to stay in the market and defend their position if necessary, resulting in the full development of the build-up.

Also, we do not know if there can be longer term traders, with a greater capacity to move the markets pending that upward movement to take advantage of it and go short aggressively.

On the other hand, we also have to remember that not all the big operators win in a systematic and recurrent way over time. Sometimes many of them are forced to assume losses and this context of failed structure could be a perfect example. As Al Brooks says in his books on Price Action, in liquid markets every single price movement is generated because one big trader is buying and another one is

selling. It is a battle between these big capitals and therefore there will be part of them that will generate losses in some of their operations.

The key to determining that we are facing a failed structure is that it has absolutely all the traces in favor of one direction but at the decisive moment (in the test after the break), it fails and generates an imbalance in favor of the opposite side.



For the example of failed accumulation, we would have to see that all the traces suggest that the control of the market is in the hands of the buyers, that in addition the price has to develop a potential spring, that the upward break is genuine from the point of view of the price and volume action; but that finally in the position of potential BUEC the price does not manage to continue rising, and an imbalance is caused in favor of the sellers, leaving the structure as distributive.

Exactly the same but in reverse we would need to see to determine a failed distribution: traces in favor of sellers, development of potential Upthrust, genuine downward breakage and in test position after breakage aggressive buying that rotate the structure as accumulation.

It is important to be aware that we do not know the capacity that the operators have to continue controlling the market since at any moment a operator with a higher capacity can appear and cause the rotation. What at first seemed to be unbalanced towards one side, finally with this new appearance makes the imbalance to be confirmed towards the opposite side.

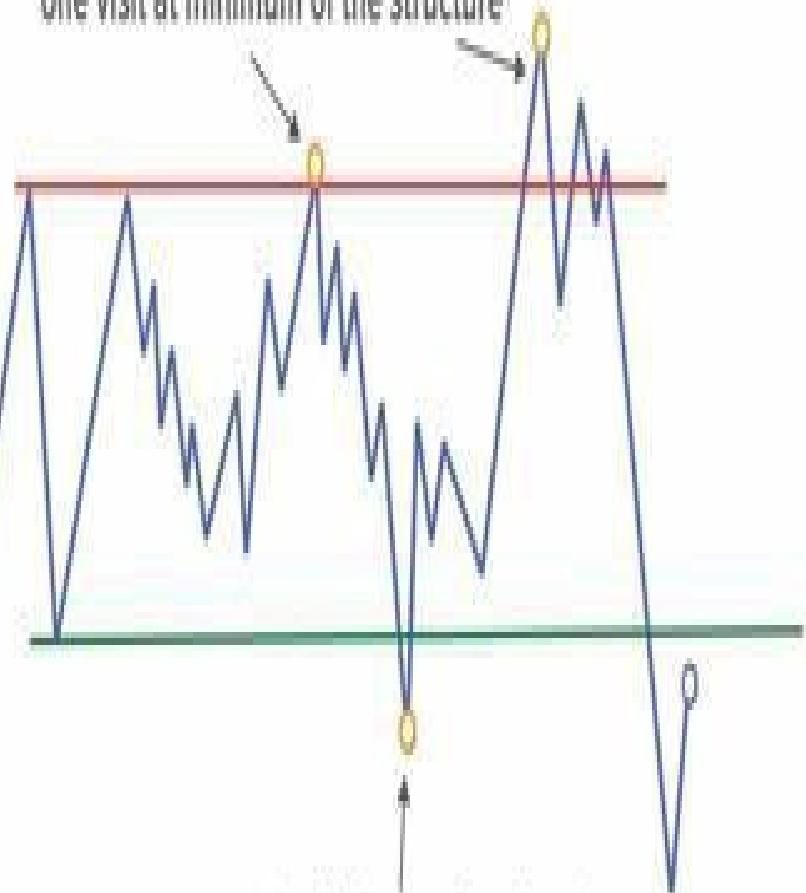
So we have these two very important casuistries to evaluate:

We do not know the intention of the operators who are supporting the current movement. Whether they are short term traders who will close positions in the next liquidity zone or whether they have a longer term perspective and will continue until the structure is fully developed.

We don't know if traders with a higher capacity can intervene. At the moment of truth, in the breakout test that would confirm the directionality of the structure, aggressive traders with a greater capacity to move the market may appear pressing in the opposite direction as in the longer term they may have a different view.

Obviously we encounter this difficulty continuously, so our advantage is to operate in favour of the last imbalance and for this it is vital to identify the dominant event: the shock.

potential Upthrust, favouring at least one visit at minimum of the structure



potential Spring, favoring at least one visit to maximums of the structure

The shock, as already mentioned, is the most decisive action in the functioning of the market. Its underlying logic is so powerful that it leads us to always be biased in favour of it. So, if the rest of the signs go with it, we will always be favouring operating in the direction of the last shake; that is, long after seeing a potential Spring; and short after seeing an Upthrust.

Some may conclude that waiting for the price at the extremes and operating only Upthrust/Potential Spring situations is the most convenient measure to simplify the whole analysis; and it is not something that is totally out of place. It is the beauty of the Wyckoff methodology that by offering a way to understand as objectively as possible how the market moves, each trader can use its principles to develop its own strategies.

In my opinion, the footprints offered by the development of structures from the beginning are significant and help us to establish scenarios with a higher probability. For example, if I observe certain distributive characteristics in a structure and later it is in a position of potential bearish breakout and Potential Spring, the analysis of the context will lead me to favor the bearish breakout; while the trader who only operates the shocks at the extremes without evaluating anything else will do the opposite. And generally the market will develop (in this example) in favor of the distributive continuation because the imbalance is latent and has been evident during the development of the trading range.

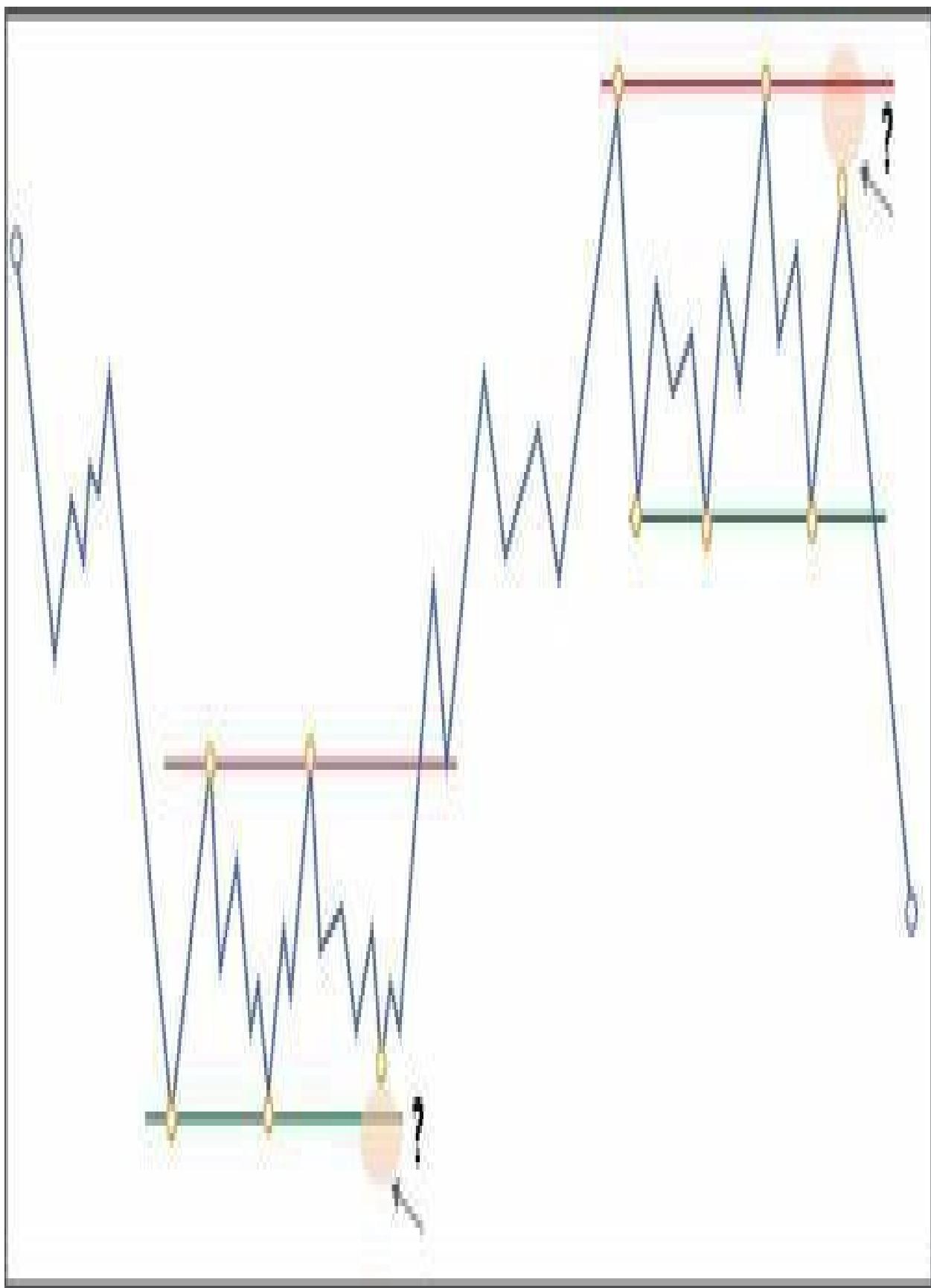
1.5 Structural failure

It is a very simple concept that can help us when evaluating the dynamics of the movements.

This fault can be found in all types of structures; both in structures with upward or downward slopes and in horizontal, convergent or divergent structures.

The first thing is to identify the structural logic that decides to follow the price. This will be determined by the successful touches that respect a structure formed by two zones of supply and demand. This is the initial key: to identify the structure that the price has validated. The more touches you have, the more confidence you will have in that structure.

At that point, and under the principle of favoring the continuity of what the price has been doing, the logical thing would be to think that the market will continue to move respecting that structural logic, moving from end to end.



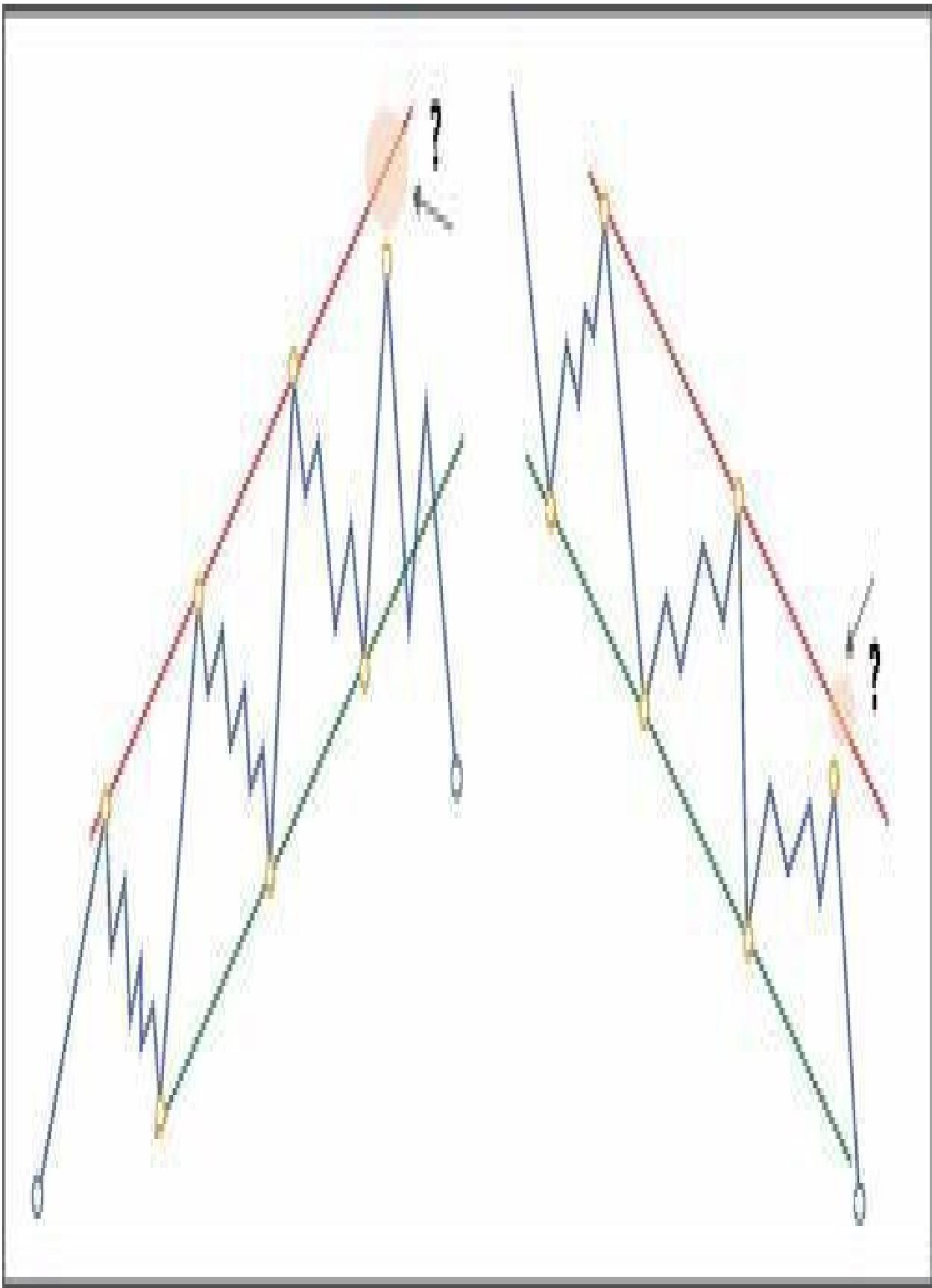
If the price does not manage to develop a new test on the opposite side and instead generates a turn before reaching that area, we will say that it has developed a structural failure since it has not continued with the dynamics it was bringing and this signal adds strength to the scenario in favor of that last turn.

Hand in hand with this concept, it is understood that the event of the last support of supply or demand (Last Point of Support and Last Point of Supply) are structural failures in which the price is blocked in its attempt to go looking for the shock event to start from that point the subsequent movement of breakage of the structure.

1.5.1 Weakness

The example of structural failure that denotes weakness is found when the price, after validating a structure on several occasions, is unable to continue moving under that logic of movements and cannot reach the high part of it.

This inability to continue moving as it has been doing up to that point denotes underlying weakness. The buyers have ceased to be in control of the market and it is the sellers who have begun to appear more significantly.

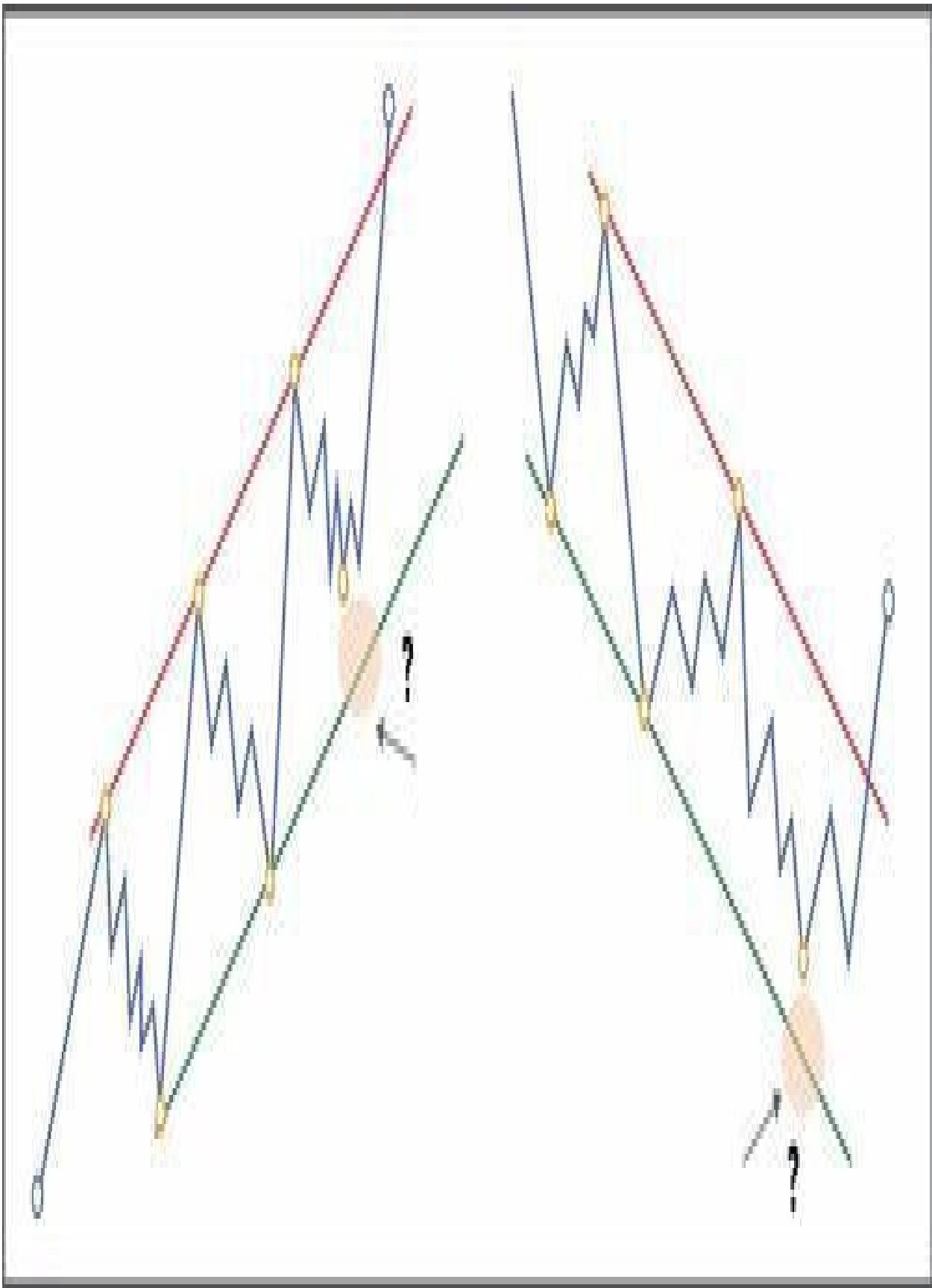


This indication does not suggest an immediate downward reversal; it is just another element to be taken into account when reading the market context correctly.

It could simply be a temporary stop in the previous trend to develop from there a period of consolidation during which to reaccumulate stock and continue to rise.

1.5.2 Strength

The stock that would denote fundamental strength would be obtained by seeing that the price cannot reach the bottom of the structure that has been working.



In other words, if the price has been developing a series of decreasing highs and lows whose shares fit perfectly within the upper and lower limits, we will encourage the market to continue behaving in the same way and therefore we will look for a new test on the opposite side of the structure. If, for example, you have just carried out a test on the upper part of the structure, the dynamics suggest that you should now carry out a new test on the lower part. If during the development of such a movement the price turns without reaching that low part we will say that the market has generated a structural failure and it is a sign of market strength since the buyers have not allowed the price to fall lower.

If, in addition to this track, this movement manages to shake some relevant previous minimum, we would be in a potential situation of Spring with greater background strength due to the fact that it converges with this structural failure.

The reasoning behind such action is that buyers have entered aggressively unbalancing control in their favour. These buyers have higher interests and block the price drop. They do not want the price to fall. They don't want anyone else to be able to jump into the upward movement.

This indication does not suggest an immediate upward reversal; it is just another element to be considered when reading the market context correctly.

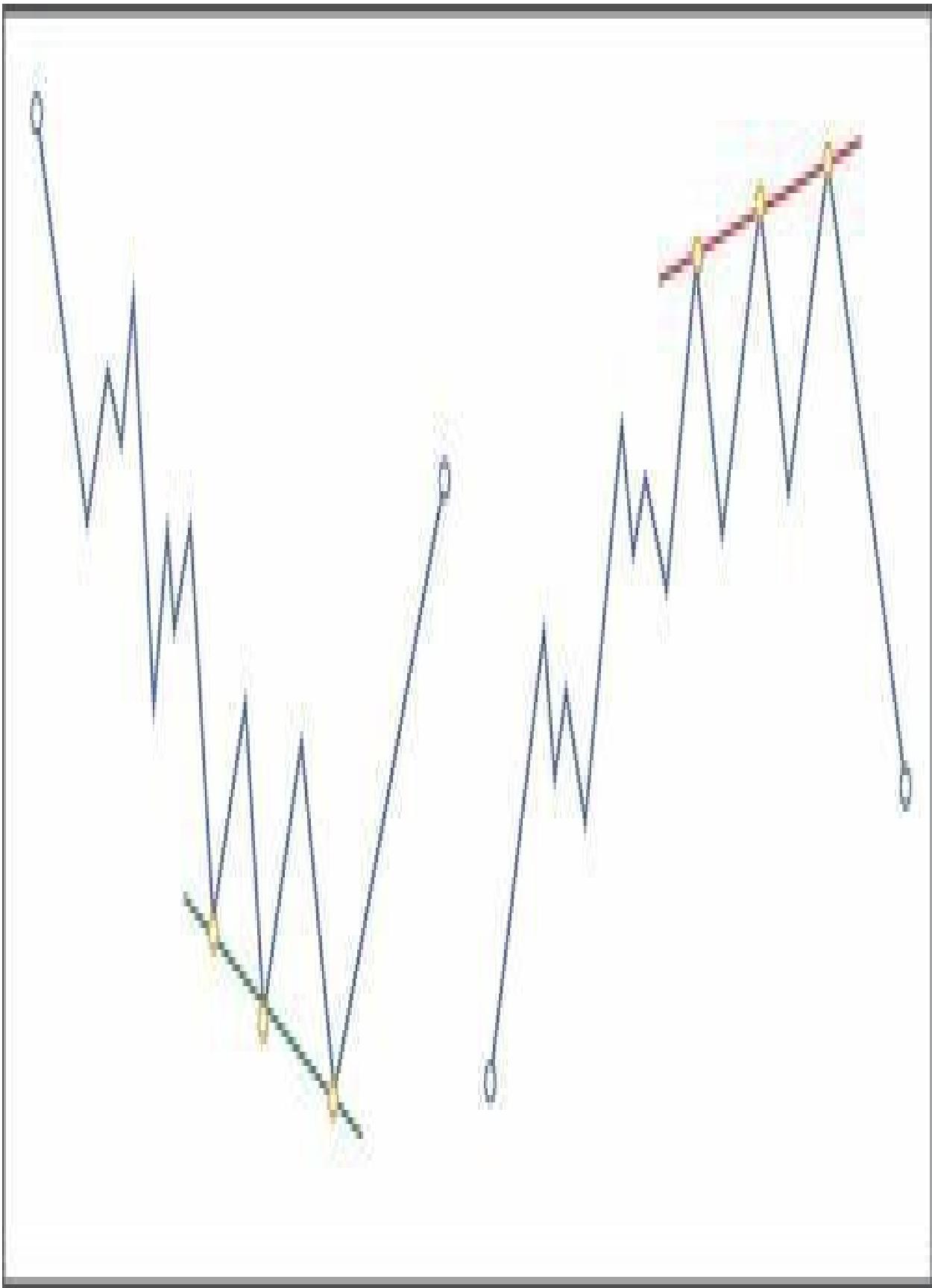
1.6 Shortening of the Thrust (SOT)

This is a pattern of change of direction. It is an analytical tool originally used by Wyckoff to measure the loss of momentum or exhaustion of an impulsive movement or thrust.

Visually, each new end travels a shorter distance than the previous end and is therefore said to be shortening the thrust.

For the example in the uptrend, we would observe how each new high travels a shorter distance than the previous high; this suggests a deterioration in demand and signals a possible downward shift.

For the example in the downtrend, we would observe a decrease in the distance the new low travels in relation to the distance the previous low travels, suggesting a deterioration in supply and signaling a possible upward turn.



The main idea is a lack of continuity in that direction. A depletion of the forces that until now seemed to control the market. The loss of momentum anticipates a major reversal and sometimes even a reversal of the trend.

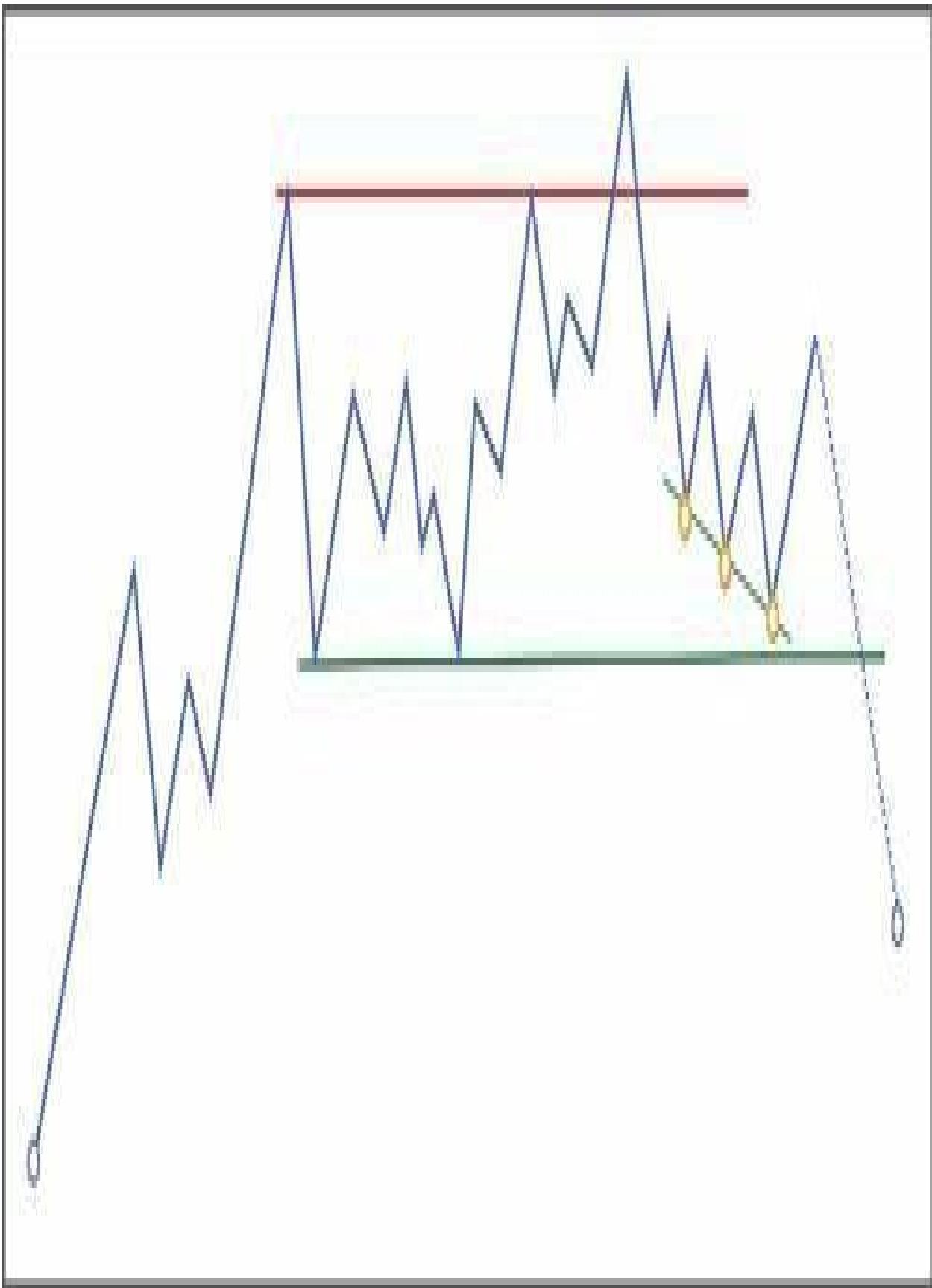
For this behavior to be valid, a minimum of three pushes in the direction of the trend is required. From three or four impulsive movements, it is useful to start looking for this shortening pattern in the final push.

When the price advance is shortened but there is a strong volume, it means that the big effort got little reward: Effort/Result Divergence. In the case of a bearish example, the demand would be appearing; and in a bullish example the supply would be appearing.

When the price advance is shortened and there is also weak volume, it means exhaustion. In the case of a bearish example, supply would be withdrawing; and in a bullish example, it would be the buyers withdrawing from the market.

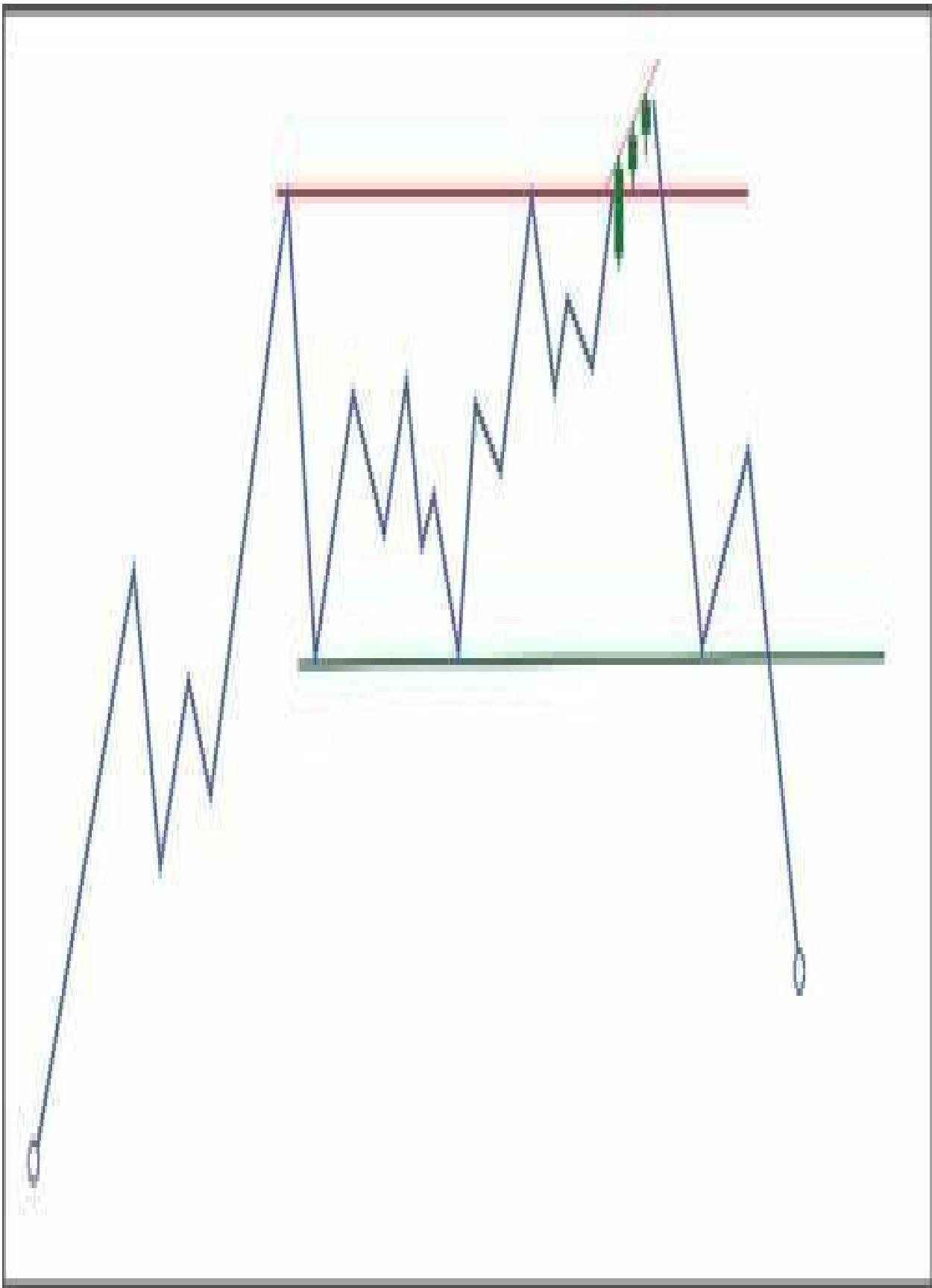
When there are more than four pushes and the shortening persists, the trend may be too strong to trade against it.

What would confirm the change in direction would be a strong impulsive move in the opposite direction. After the shortening of the thrust, we want to see the new thrust in the opposite direction have a high volume, denoting intent. After this impulse that changes direction we could wait for a backward movement to seek to incorporate ourselves in the direction of the new impulsive movement.



Always bear in mind the context in which the shortening of the thrust takes place:

If the price breaks the ceiling of a trading range and reverses, this action is a potential Upthrust. If after a few downward waves there is a shortening of the momentum and it suggests a buy trade; you should be aware that the price comes from developing an upthrust and it will most likely continue to fall. Any buying operation should be avoided, and if taken, closed quickly after a weak response. The same would happen in case of observing the bearish pattern after a potential Spring, the directional bias would be marked by the shock so the short operating idea of the SOT should be questioned.



The Shortening Of the Thrust pattern can also be seen in individual bars as well as in movements. In this case, one would observe how successive bars make less and less progress. If it also coincides in an operating zone where by context we would be able to look for a counter operation, the situation would be ideal.

1.7 Other types of structures

Initially, structures with horizontal development have been presented as basic schematics. They are the easiest to identify and for the operator who is beginning to study the Wyckoff methodology in depth for the first time, I would recommend working with this type of scheme almost exclusively.

As we have already commented on several occasions, the market is a living entity that is constantly changing due to the continuous interaction between supply and demand. This interaction is what causes the generation of structures, which can be developed in various ways.

It would not make any sense to approach the market thinking that it should behave as established in the basic schemes initially studied. The reality is that every moment is unique and will be different to another future since it is practically impossible for the same circumstances to occur at two different moments.

For two structures to develop completely equally, the same participants should be in both moments and also behave in exactly the same way, which is impossible.

This is why it is important to have an open mind and try to go one step further in deepening the understanding of the methodology. Wyckoff gave us some guidelines to follow that stand out above all: how markets move; the processes of accumulation and distribution; and the three fundamental laws.

This is the theoretical framework that supports the methodology. The operator Wyckoff uses these tools to analyze the chart in order to try to elucidate who is in control of the market and thus be able to pose judicious scenarios.

The next step is to be able to identify the development of a structure even if it does not look ideal. On many occasions we will be able to work in real time with structures that are very genuinely adapted to the classic structures studied, but there will be other occasions when this will not be the case.

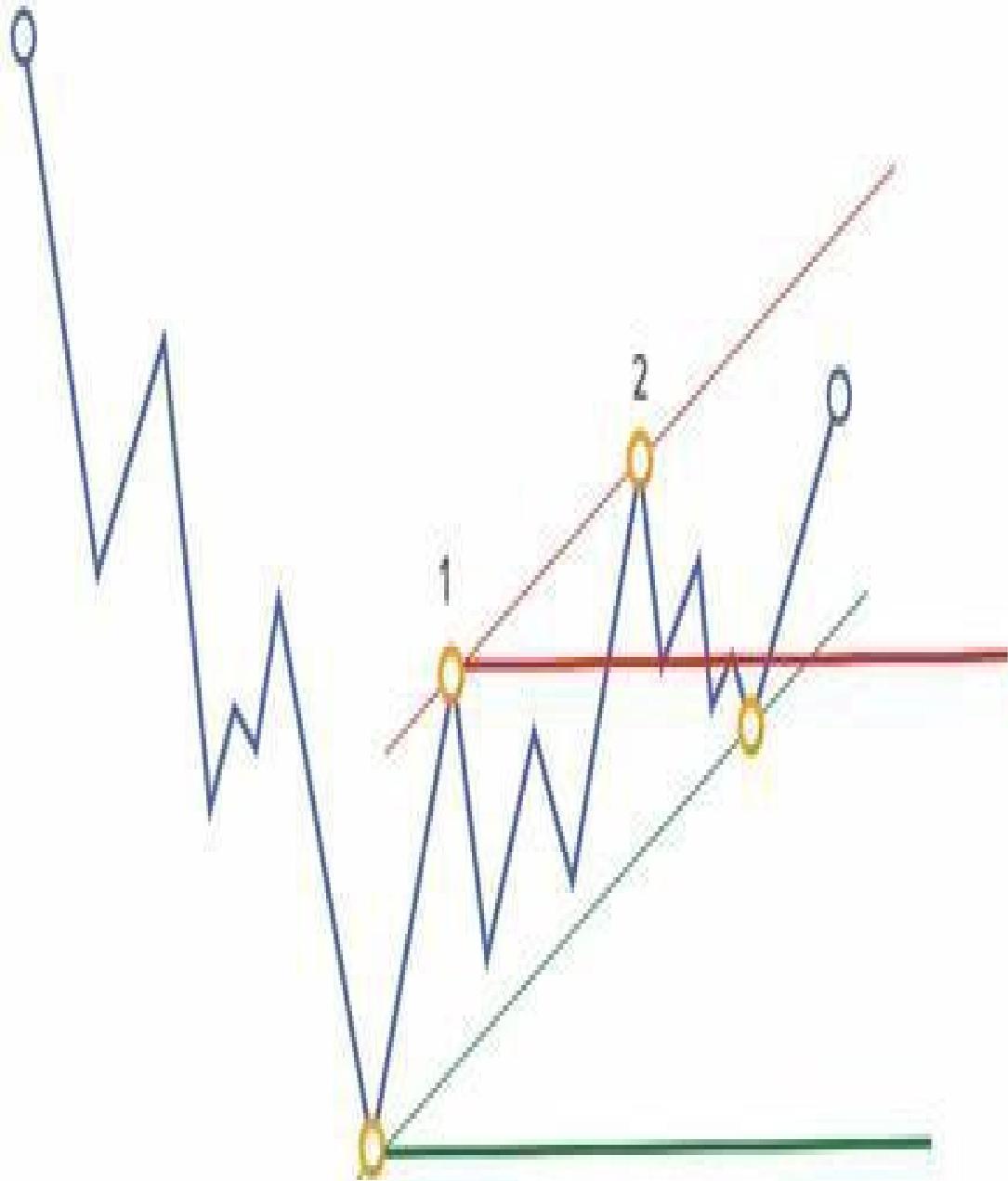
And this should not be a reason for disappointment. Advanced Wyckoff operators understand that these accumulation and distribution processes can be presented in different ways depending on how balanced or unbalanced the market is in favor of buyers and sellers.

This is the key to everything. Based on the condition of the market at that time (whoever is most in control), the price will develop one type of structure or another.

We will now look at some types of unconventional structures.

1.7.1 Structures with a slope

Although they are certainly more difficult to see, in reality they develop exactly like horizontal structures. Try it out; take one of the examples and mentally try to turn the image until it fits the structure as if it were horizontal. You will see that the general behavior, events and phases have an identical development to the horizontal ranges. The only element that varies is the condition of the market, and that is that there will be situations where either buyers or sellers will initially have more control.



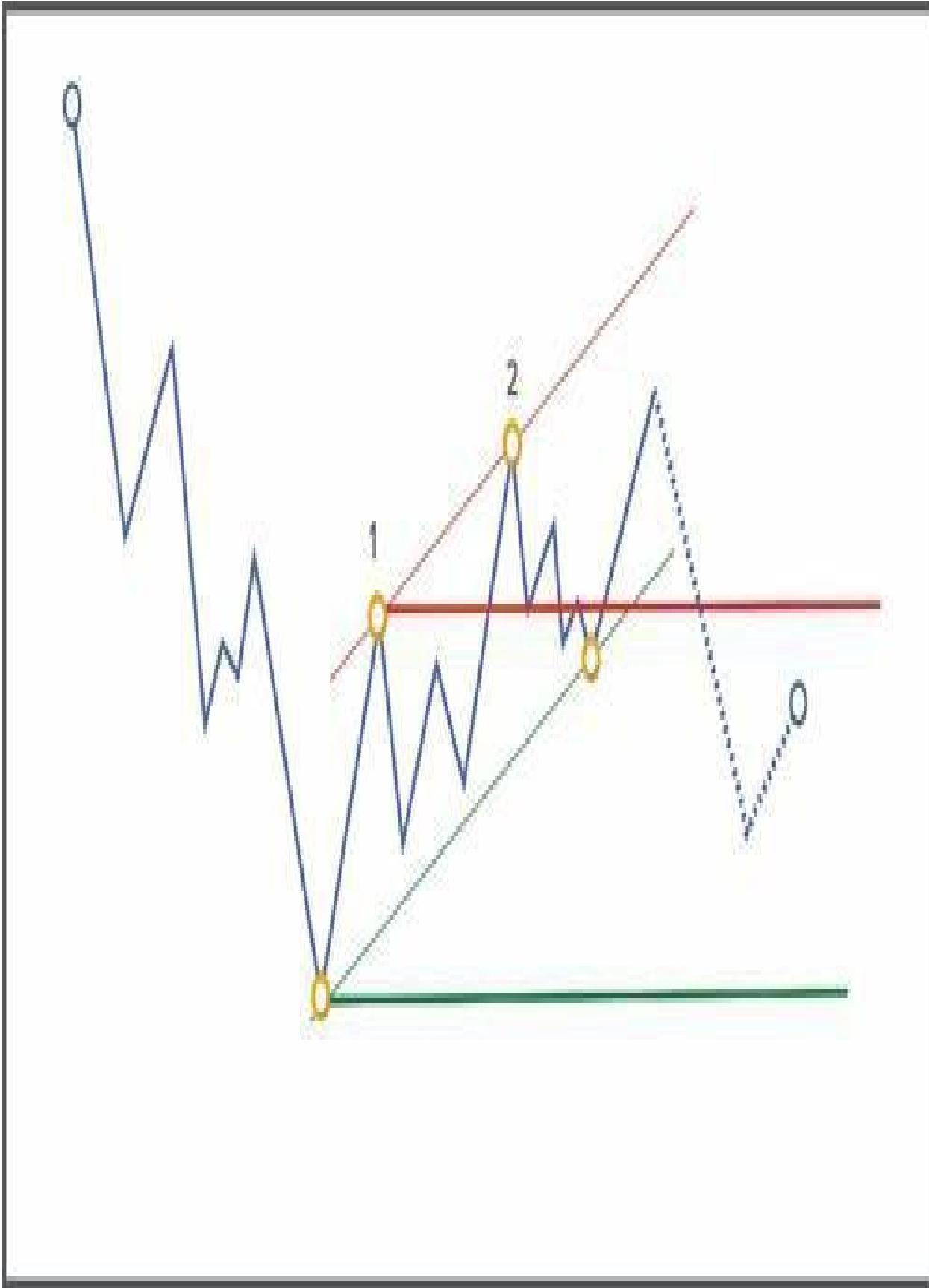
In general, we will be left with a structure with a rising slope suggesting a certain basic strength, i.e. greater control by buyers, and a structure with a falling slope suggesting a certain weakness, i.e. greater control by sellers.

Initially, by identifying the Stop Phase A we will set the limits of the range horizontally. If we observe that in Phase B the price does not respect these extremes and starts to move out of the structure, it will be the moment to start thinking about a possible structure with a slope. We will connect these extremes and see if the price really respects the limits of this structure.

In other occasions we will simply open a chart and it will be very visual how the price has respected the extremes of a structure with a slope. Connect the minima and maxima of Phases A, B and C. You can draw one end first and clone the line at the opposite end. The important thing is that the channel contains virtually all of the price action within it. The more you touch those ends, the stronger that the structure is being worked on (respected).

It is relevant to note that we do not need to see perfect price touches at those ends to determine that the price is working that structure. It doesn't have to be totally accurate, the key is that it should be something that is obvious and that allows us to connect all the ends even if it is necessary to draw a certain width, instead of a line.

Likewise, I would always recommend not discarding the horizontal levels completely. They particularly offer me greater confidence and there is a possibility that the price will return to the original structure and we can continue to work on it.



There are four possible structures with a slope that we can find:

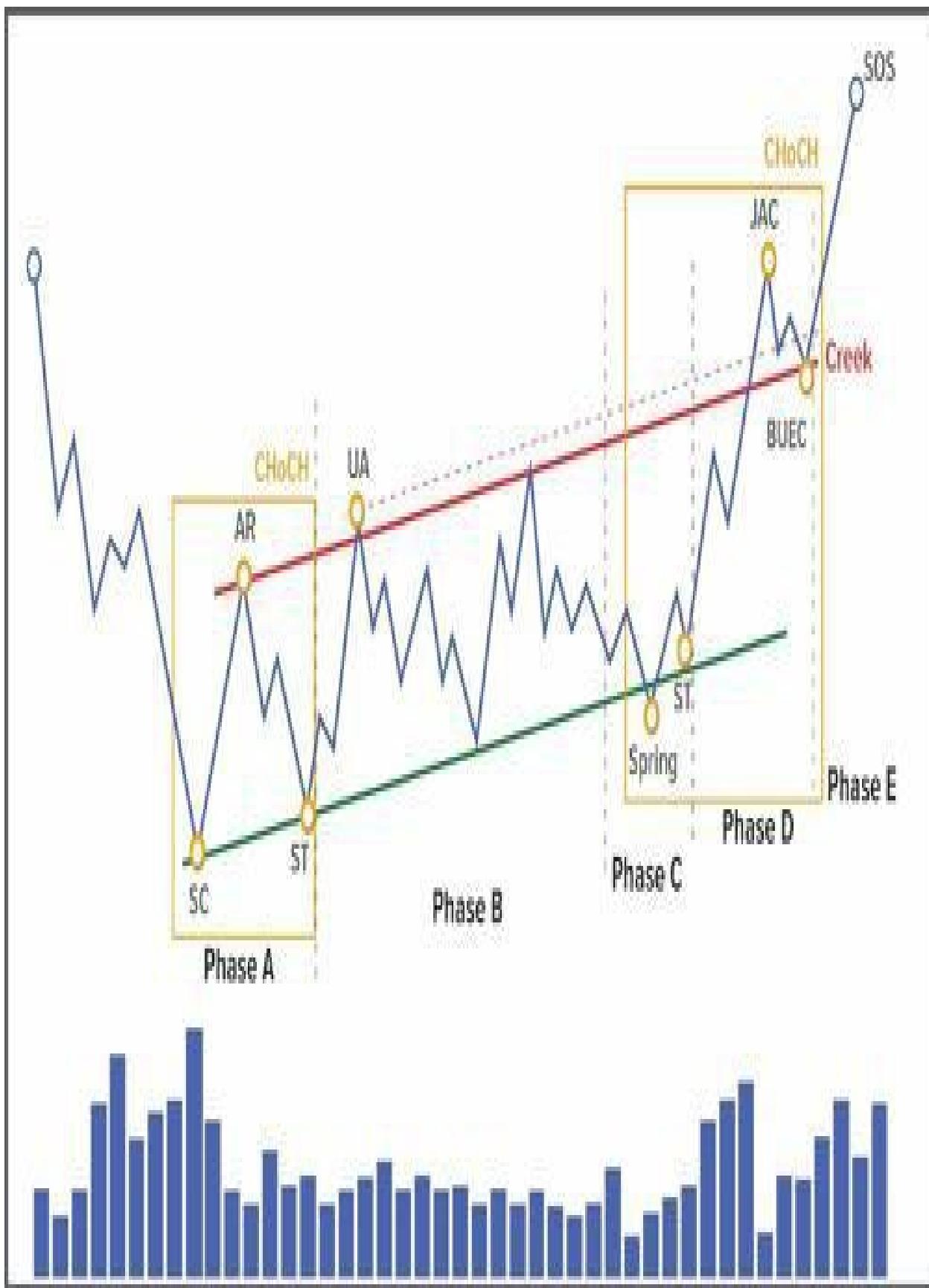
Accumulation structure with an upward slope.

Accumulation structure with a downward slope.

Distribution structure with a downward slope.

Distribution structure with an upward slope.

Accumulation structure with an upward slope



It is the variant that denotes the greatest background strength. After Phase A of the stop, the price begins to fluctuate up and down during the development of the structure, clearly observing a series of increasing highs and lows.

Buyers have a certain aggressiveness, value the price of the asset at higher levels and do not allow it to fall into oversold areas in order to protect their position.

These structures are not easy to operate mainly because when any previous maximum is exceeded, it will seem that we are facing a potential shock that will turn the market downwards. But in reality it is the very nature of the movement: impulses and reversals.

And this impression will be even more present in the BUEC potential zone. Although this is the most conservative entry point and gives us the most security, visually we see the price quoted at very high levels and it does not seem to us (subjectively) to be an optimal entry point.

The market, oblivious to all this, will follow its course and if it really is an accumulation process it will start from there the trend movement out of trading range in search of higher levels of liquidity.

MOUST 24 BRUNCE



This BTC example is very instructive since we can identify one of the concepts presented, the structural failure of strength.

We see how after the abrupt fall the price accumulates quickly (green box) to start a few levels above a new structure. This fact is already a sign of strength in itself. We see that there is a very high volume traded in that fall and the fact of seeing a subsequent reaction to the rise already suggests that at least in principle the feeling is bullish. If analyzing the context we see that below the current price there are high volumes we could make a simple interpretation as that in such volume the buyers have entered aggressively because otherwise the price could not have moved upwards.

Other interesting traces suggesting accumulation are the decrease of volume during the development of the structure and the predominance of the upward waves of the Weis indicator.

In addition to this, the key element that marks a before and after in the reading of the control in that structure we have in the Upthrust action. In the upper part of the structure it develops a minor distribution scheme. This scheme could very well have acted on UTAD and caused the downward break. This is the behavior that we expect to happen after a shock, but what we see is a total inability to fall. After this minor distribution scheme, the price does not even reach the bottom of this structure with an upward slope that has been working, and this is no more or less than a structural failure of strength.

Then it develops an internal shakeout that acts as a test event in Phase C, causing the final imbalance and continuing upward.

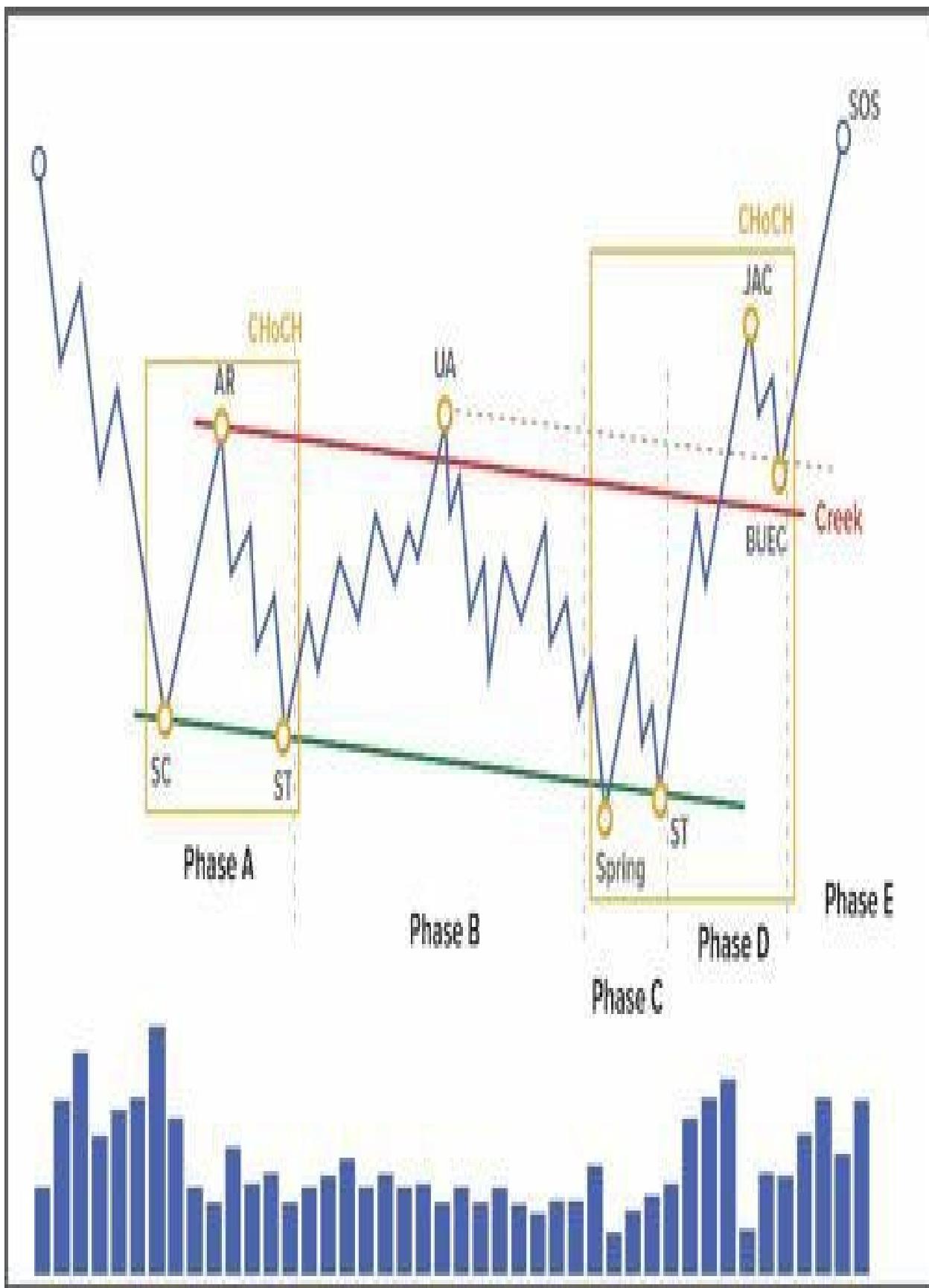


Also note the location of the High Volume Node and the VPOC of the structure. How the price is unable to cross this high trading zone, thus suggesting control of the bullish. These Volume Profile zones will be discussed later.

Here we see another example of a accumulation scheme with an upward slope. In this case the slope is quite steep which does not suggest that the current market condition is quite strong.

We see the definitive stop without climatic volume (Selling Exhaustion) and how from there the price begins a clear succession of rising highs and lows. Decreasing volume during the development of Phases A and B suggesting absorption. The price find it's difficult to position himself above the High Volume Node but once it does so after the shakeout it continues to show strength and manages to break through the rise with good upward candlesticks (SOSbar).

Very interesting how the Back Up develops over the high part of the structure (Creek) in confluence with an operative volume level (weekly VWAP).



Accumulation structure with a downward slope

It is the accumulation variant that presents the greatest weakness. The downward slope, that dynamic of decreasing highs and lows, already denotes a total control of the bearish operators. The weakness is latent but even so, eventually buyers appear and cause the accumulation outcome.

After observing the first stop-and-go events of the trend, the weakness will be so high that the market will not be able to sustain the development of a horizontal structure and instead will start to see signs of weakness that will generate lower and lower minimums.

Structurally the price will respect the downward dynamic, fluctuating between the upper and lower extremes of the channel. The new lows will travel a shorter and shorter distance and a very common pattern of trend depletion will be visually observed (Shortening Of The Thrust)

Furthermore, it is very possible that the market will develop some kind of structural failure where at a certain moment the price abandons the dynamics that would lead it to visit the lower part of the structure and instead finds support somewhere in between. Possibly you have made ground and are ready to start the upward trend movement.

What would confirm the SOT pattern and the structural failure would be that the price would now develop a strong upward momentum. We would prefer to see this momentum effectively break the bearish structure by changing the market dynamics. Now would be the time to wait for a bearish reversal to seek to build in favour of the imbalance caused by buyers.

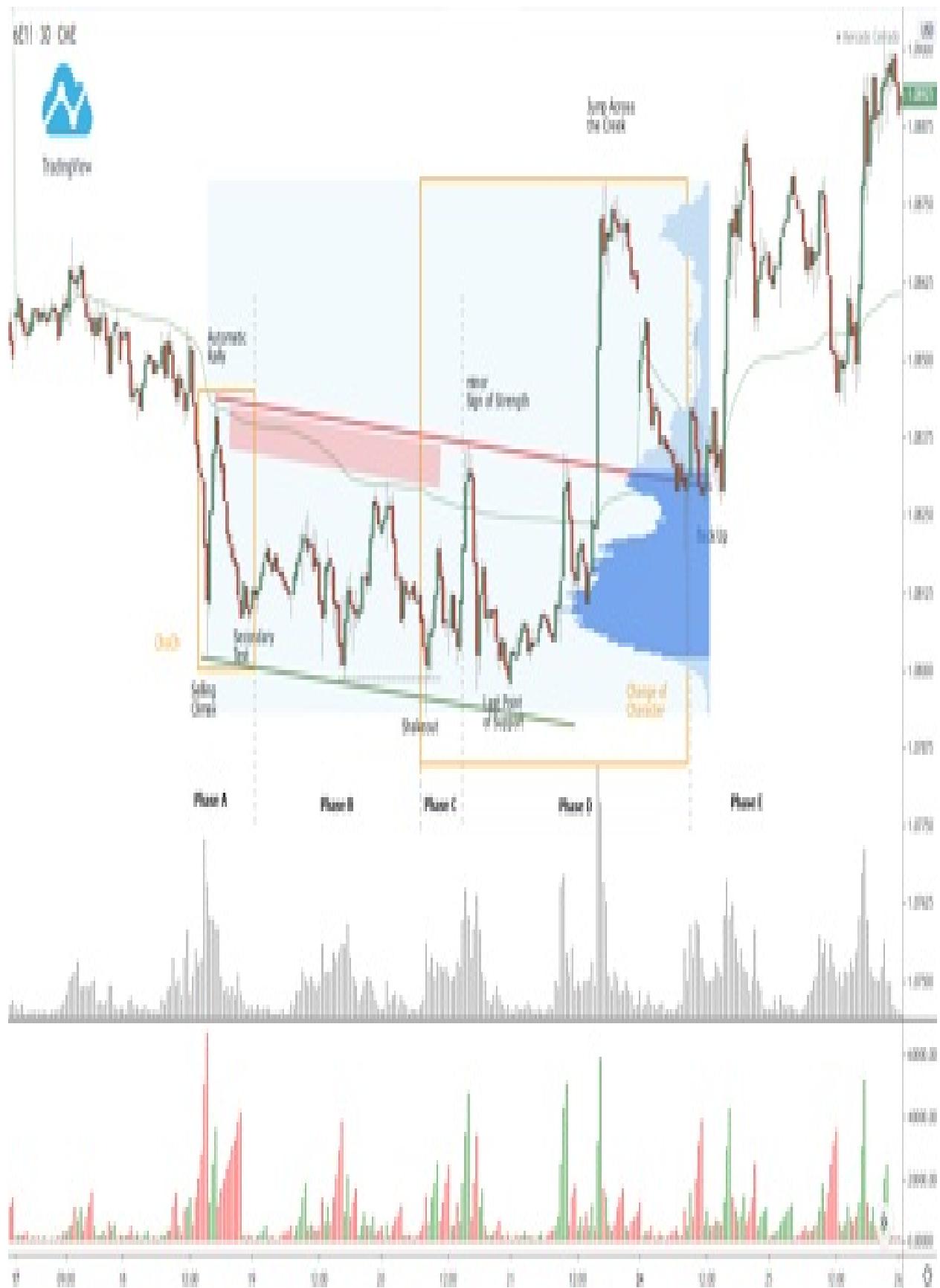


In this example we see how the price is respecting the extremes by turning up and down. As we have already said, the identification of this type of structure is subjective so they should be very visual and not forced. The idea is that they contain most of the price action.

A detail to highlight in this chart is how the monthly VWAP works. It is the darkest dynamic level and as you can see the price reacts on it every time they interact. From the first touch in the Secondary Test, the price remains constantly above it, a mark that would suggest some control by buyers.

As always, the key event is the total shock that causes the development of the effect built on that cause. After this shakeout the price develops an LPS above the VPOC of the structure, followed by the JAC and the Back Up which again goes looking for a confluence zone (weekly VWAP and Value Area High) to continue the development in Phase E out of trading range.

These areas and operational volume levels will be discussed in detail below.



Here we observe another clear accumulation structure with a downward slope full of details.

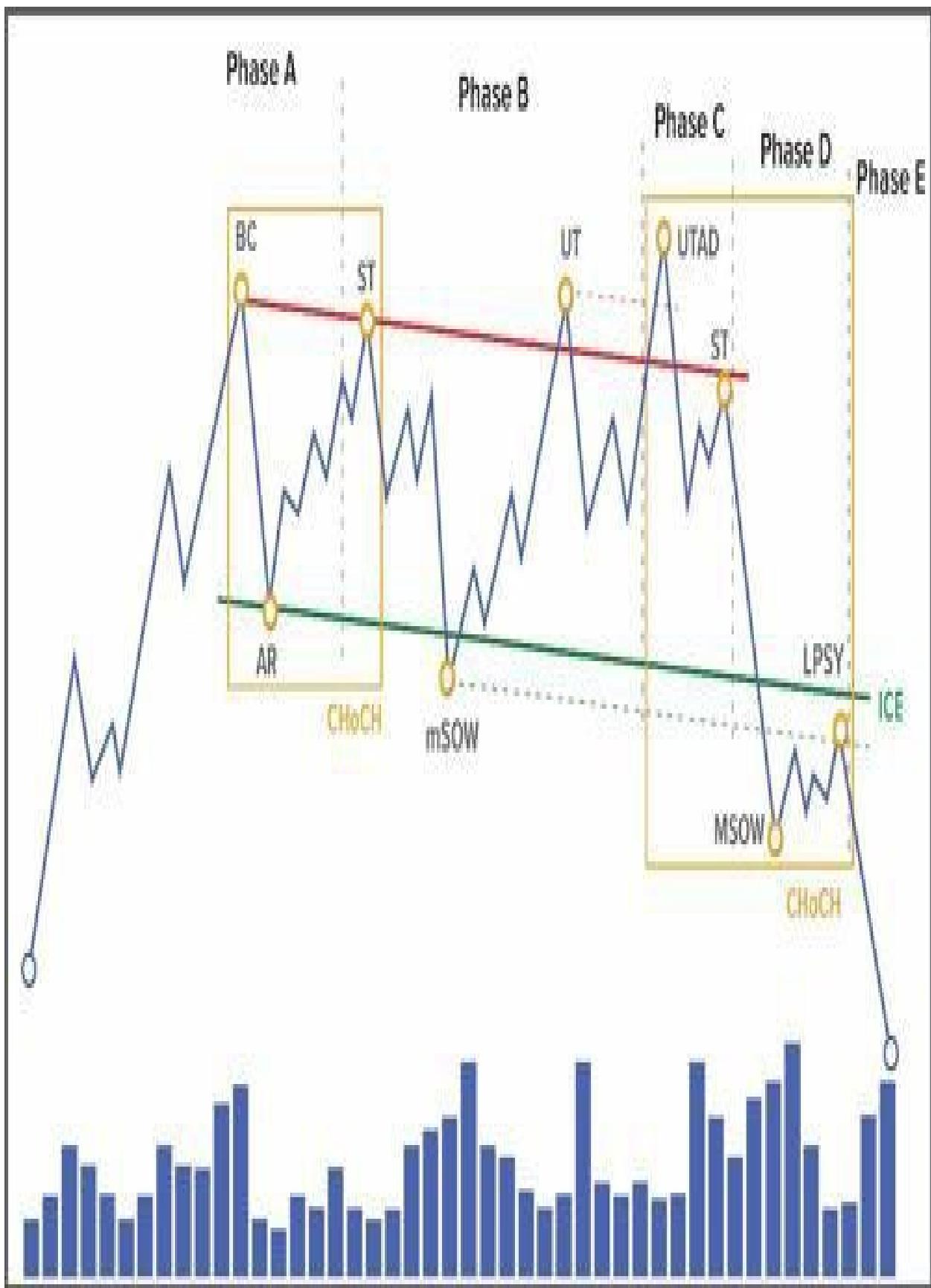
After the stop in Phase A we go as the price mainly quotes in the lower part of the range being unable to perform any kind of test to the high part, which suggests some background weakness. Little by little the volume decreases from the one seen in the SC and after the Shakeout a sample of strength is now able to send the price to the high part (minor Sign of Strength).

At that point we can already see how the lows of Phases A, B and C travel a ridiculous distance downwards, suggesting the appearance of the Shortening Of the Thrust (SOT) pattern and its upward implication in this case.

Although the first upward movement is not strong enough to break the structure, it is already a certain change of character to have managed to perform such a test. At that point the price develops an internal shock at a previous maximum in confluence with the weekly VWAP but this time the market is unable to test the lower part of the structure, developing a structural strength failure evidenced in that LPS. Objectively we already have the Shakeout, the strength sample and the structural failure = potential imbalance in favor of buyers.

From there and by means of two samples of strength the price manages to break the range and we see how the price is going to look for a zone of confluence to develop the test after breakage (Back Up). This zone is composed of the Creek of the broken structure, the weekly VWAP (dynamic green line) and the Value Area High of the profile. Another example of the functionality of this type of context-supported operating levels.

Distribution structure with a downward slope



This is the weakest distribution structure. After the identification of the first events that suggest the stop of the previous trend movement, the strong condition of weakness that floods the market will cause the development of the subsequent movements in the form of decreasing highs and lows.

Visually, a downward channel will be observed where the price bounces off its extremes respecting the dynamics.

The key, as always, will be in the correct identification of the Phase C Test event that gives rise to the downward breaking movement. We will constantly be looking for that test event to do it in a shakedown format (in this case, Upthrust After Distribution -UTAD-). It has already been commented many times that it is the event that can give more confidence to an operator when it comes to setting up scenarios and therefore in most cases we should wait for it to appear.

This final shock can be expected either in the form of excess in the upper part of the structure suggesting a condition of overbuying, or as a local shock to some previous relevant maximum. The more showy and exaggerated the shock, the more confidence it will give us since it will suggest that it has captured a greater liquidity and that therefore the subsequent movement will have a greater impulse.

The main difference with respect to accumulation structures that also have a downward slope is that in this case we will not observe that loss of momentum characteristic of the Shortening Of the Thrust pattern nor will we see any kind of structural failure.

It is certainly a difficult type of scenario to trade as subjectively the trader

observes how the price is relatively low and may determine that it is not the place to go short. But we must work to eliminate subjectivity and retain the certain objectivity that this type of reading provides.

Due to the almost total control that sellers have, the price will move very quickly. We must be fully concentrated, otherwise we are likely to lose the movement. And this is not bad news because if you have been able to make a correct reading and see that the imbalance is in favor of the bears, you may lose the operative opportunity for not being fast in your decisions, but at



least you will not be in a position to enter the wrong side of the market (buying) avoiding a loss.

In this example of redistribution with a downward slope we see that the stop occurs with a large volume during the entire development of Phase A and that during Phase B we also observe peaks of unusual volumes, characteristic of the distributive schemes. In addition to that, the downward Weis waves predominate at all times.

The price manages to position itself below the high volume node and a subsequent upward retracement movement will test this area leaving the Last Point of Supply event to generate the effective bearish break (SOW) from there. Once below the structure, another test to the lower part of it and continue in the fall.

An operator who does not take into account this structure dynamics and who does not know how to analyze judiciously all the traces inside it would very possibly see the price fall, away from the VWAP, in a possible oversold condition and perhaps have an upward bias. But the truth is that the market was at all times flooded with weakness and this was reflected in the price and volume action.

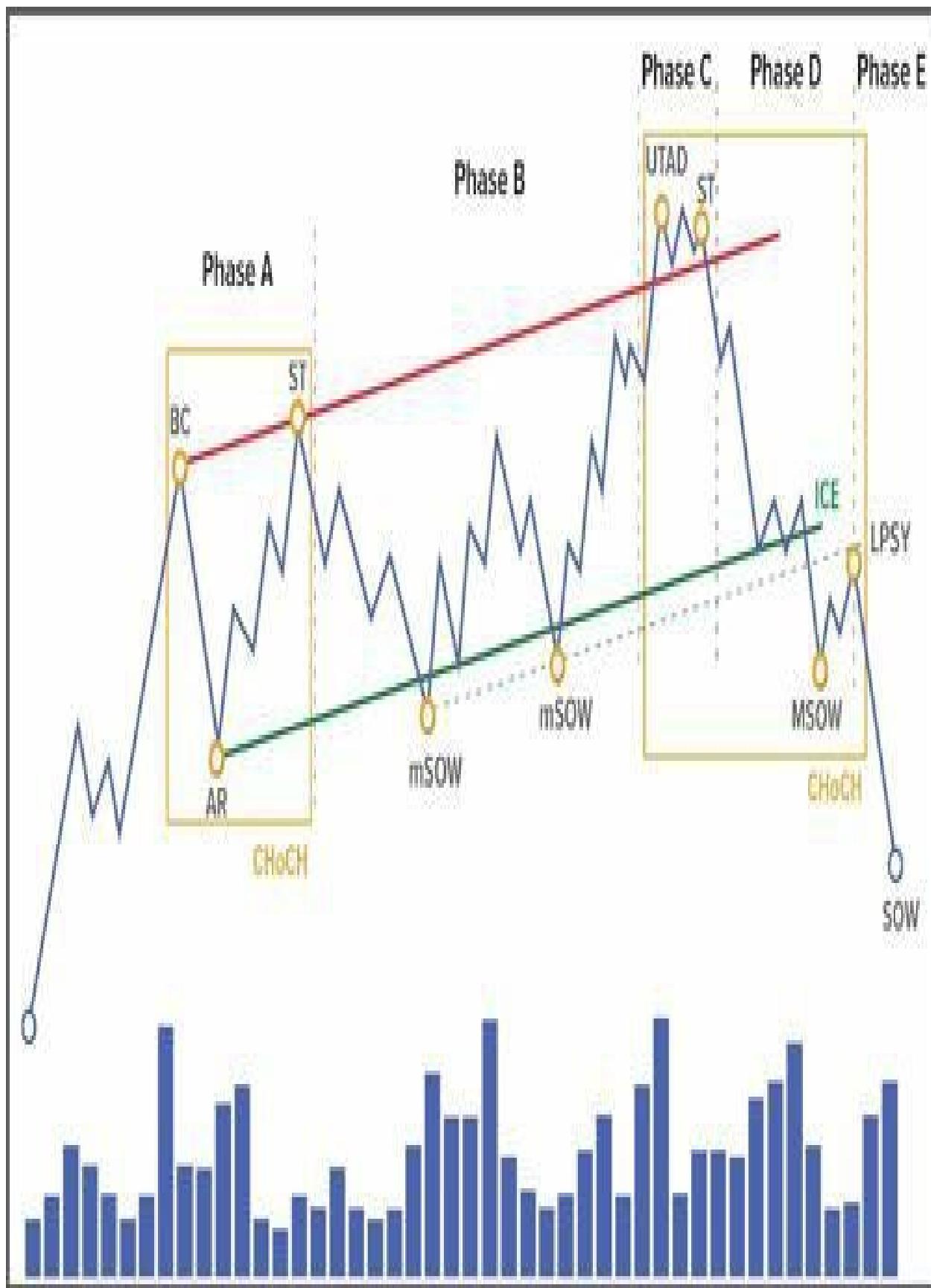


New example of distribution scheme with very characteristic footprints. Peaks of volume, predominant Weis and shaking in Phase C that originates the downward breaking movement.

The UTAD test happens in a very important location, in the VPOC range. This is the most traded price level. In addition, it converges with the upper part of the structure. It is the ideal location to look for a short trigger. New example of how the Volume Profile can help us to better analyze the market context.

Such was the underlying weakness that it gave no possibility of LPSY test on the lower part of the structure.

Distribution structure with a upward slope



This type of dynamic initially presents a certain strength, evidenced by this succession of growing highs and lows until, in its final development, the aggressiveness of the sellers becomes evident by rotating the structure as distributive.

As commented in the previous structures, a useful tool for its evaluation can be the identification of the Shortening Of the Thrust pattern. In this case, the price may make new highs but travel a short distance from previous highs, denoting that lack of momentum.

If it also leaves some kind of structural failure that denotes weakness (it does not reach the top of the structure), it is one more indication that suggests that the control may be rotating towards the bearish side.

As always, the reading will be enhanced by observing a shake (UTAD) either to the top of the structure in the form of excess reaching an overbought condition; or to some relevant previous maximum.

Let's not forget either the analysis of the complementary tools that analyze the volume data, such as the Volume Profile and the Weis Wave Analysis. The location of the operative zones of the volume profile will always help us in the decision making process, while the wave analysis will allow us to put the magnifying glass on the negotiated interest in the movements and sometimes it will be key for a correct analysis.



Example of a distribution structure with an upward slope and no extreme shock. As more important details we see that climatic volume in the middle of the range. It is a warning signal as it should not appear as a general rule in the accumulation schemes and therefore could be a footprint to add in favour of the downward control.

Also very visual is the Shortening Of the Thrust pattern between the maxima that establish the RA in Phase A, the UT in Phase B and the UTAD in Phase C. New highs but with little movement between them suggesting that loss of momentum.

In the Phase C UTAD we see how the price tries to leave the value area of the composite profile and is rejected. The market is not interested in trading at higher prices and a new signal is added in favor of sellers. This action could also be observed as the test event in Phase C where it shakes maxima from the inside of the structure. This is undoubtedly a difficult scheme to trade in real time.

After a first movement of weakness the price manages to position itself below the VPOC of the profile and this action is accompanied by a large wave of bearish Weis. At that point the directional bias should be clear and we are already in a position to come up with some short trading ideas.

Again we see the great importance of taking into account volume levels. The LPSY test will look for the confluence zone of the broken structure and the VPOC to start from there the bearish continuation in Phase E.



This time the test event in Phase C does reach the top of the structure by shaking all the maxima of the structure. As we know, this action adds greater strength to the bearish scenario.

It is very striking the degree of upward tilt, suggesting at the beginning of the same a great strength in the background. This strength is dissipated and blocked by the appearance of volume peaks during Phase C.

Unquestionable sign of weakness that sends the price to the origin of the movement in the RA and also manages to develop a new downward leg. Not before going to visit up to two times the most traded volume level (VPOC) of the structure and from there continue to trade downwards. Again, an impressive demonstration of the effectiveness of these volume levels.

All concepts concerning the Volume Profile as well as its operational implications will be explained in depth in the last part of the book.

1.7.2 Unusual schemes

Within this category we will include the rest of the structures that do not follow a horizontal or sloping formation.

If we wanted to be exquisite we could frame as structures of the Wyckoff methodology practically all the ranges of accumulation or distribution independently of their form, including the classic patterns of chartism that we all know as the head and shoulders, wedges, triangles and others.

In my view, trying to justify every single movement and development of structures under the approach of the Wyckoff methodology does not do it any favors. Wyckoff has little to do with those robotic patterns, his study is much deeper so the most intelligent thing would be to distance oneself from that possible link that could associate the classical chartist patterns with the Wyckoff method.

In retrospect, any range can be labeled with some success. But this has no operational validity. Labeling past charts is a very interesting exercise for initiated operators with the objective of putting their knowledge into practice and feeding their subconscious to prepare it for real time operation. But once you have a certain level of study of the methodology, continuing to label past charts ceases to make sense.

The key is that any structure, if we force ourselves a little, we can turn it into a beautiful structure that would fit perfectly within the events and phases of the Wyckoff methodology. But our focus shouldn't be here. What's the use of

knowing the location of the labels in a hypodermic (V-shaped) market turn if in real time I won't be able to operate it?

As I say, it is a waste of time and energy to try to study unusual structures, mainly because, as its name indicates, they do not appear with certain regularity. Our advantage is in waiting for classical structures to appear.

Classical structures, with a strict development of their events and phases, but at the same time allowing a certain fluidity based on the particular conditions of the market. The perfect example of this would be the structures with a slope: classic formations where all the events and phases are perfectly observed, and at the same time the background condition slightly modifies the final development (certain upward or downward dynamics).

POANCI BH-EURO



This FDAX chart is a very good example of what I'm talking about. Once it is finished I can go back and label every single movement if I want to, but in real time it is practically impossible to trade. A structure locked in minima but developing increasing maxima at the same time. There's no point in putting the focus there.



Besides this type of inoperable structures it is a good time to remember that theory and practice in real time often do not go together and that it is necessary to have a sufficiently open mind.

In this chart of the SP500, while it is true that there is a very genuine structure in its final part, many in real time may have found it difficult to identify Phase A.

The price has been rising, developing a wide downward movement and from there another upward movement that exceeds the previous maximum. Could this succession be the BC, AR, ST? It could, but that's not what's relevant. What is relevant is that there has been a change in character; that the price has gone from a trend state to a state of lateralization and that a cause is going to be constructed again that will have an effect. This is the only thing that matters, the context behind the price action.



Many may continue to look only for "book" structures and, although we already see them appearing continuously, the reading that the methodology offers us is much more interesting than just standing there.

Here we see another example exactly like it. If we look at the market from a strict point of view seeking to identify the perfect movements within the proportionality that in theory there should be between phases we may have problems in identifying them.

If we treat those three movements that I mark as SC, AR and ST, Phase B would have very little duration since the only objective event that is observed on the chart is the shock of Phase C. What do we do then if the theory tells us that Phase B must be longer than Phases A and C? Well, then nothing, theory is all very well for generalizing events, but operation and analysis in real time will require a much more open mind.

Once a trader reaches a certain degree of knowledge of the methodology he should focus on seeing the market in terms of price dynamics and not in terms of labels.

Part 2. Resolution of frequent doubts

In this section I will go into some of the most frequent questions that I am asked by students of the Wyckoff methodology.

I am particularly satisfied when someone raises a complex question with me, as this is a sign that the study has been deepened enough. The student bombards his brain with all the concepts over and over again; and at the moment of standing in front of a chart, confusion begins to appear.

This is normal and even more so in a discretionary approach where there are so many elements to consider.

2.1 Efficient use of lines

When the retail trader first approaches the markets he likes to draw lines to identify support and resistance levels in the hope that the market will respect them. But we should know one thing, the market doesn't care how many lines you have drawn on the chart, or whether they are thicker or thinner or coloured.

In no case, unless you have a statistical study that verifies it, should you take into account in operational terms the use of the lines in isolation. In other words, it is not recommended to buy or sell simply because the price has touched a certain line.

The film that the lines tell us has to do with who is in control of the market mainly. If we look at a bull market where a line or a bull channel can be clearly drawn, the objective reasoning is that buyers are in control. If what we can visualize is a clear downward movement channeled between two extremes what we will have is control by the sellers. And finally, a horizontal lateralization with repeated turns on two extremes will show us a balance between both participants.

Therefore, the idea behind drawing lines, either to build horizontal ranges, all kinds of channels or simple trend lines should aim at:

To get one more imprint of the market sentiment.

Offer us an interesting location to bias the directionality.

Let's keep working on the logic. If we have just reasoned that an uptrend line or channel shows us a market controlled by buyers, with this background information it seems that the most sensible thing to do would be:

Encourage buying.

Only short trade after seeing the breakout of those lines (of that upward dynamic).

Here we should clarify that the fact that the market is rising does not mean that a strategy that follows the trend (in this case, buying) necessarily has a better result than a strategy against the trend (in this case, selling). It is simply a matter of identifying where the path of least resistance is (through upward or downward dynamics) since seeking incorporations in its favor would offer us a priori operations with a greater chance of success (since we are operating in favor of the one in control).

Both in case you want to buy or sell when identifying a bullish channel, which locations would be the most suitable to look for trades? There is no doubt that the best thing would be to wait for the price at the extremes.

If you are looking to anticipate a market turnaround (which is not recommended), at least wait for the breakout of the trend line that determines the last dynamics that the price is following. It could be a sign of loss of momentum but without taking into account anything else any trade to try to turn the price would seem too risky.

However, following the example of the uptrend, if the price is approaching the bottom of your channel or trendline, is being in this location reason enough to buy? Absolutely not, except for the exception mentioned above.

In this example what we observe is that the price is following a dynamic that goes through visiting both extremes; and under the principle of favoring that the market continues doing what it has previously been doing, it would be interesting to look for the incorporation in buying looking for a new upward impulse. But that's it, at this point the power of the lines ends. It offers us an imprint on market sentiment and can help determine market bias. Based on the dynamics of price we would be in an interesting area to look for buying, which does not mean that we should necessarily buy.

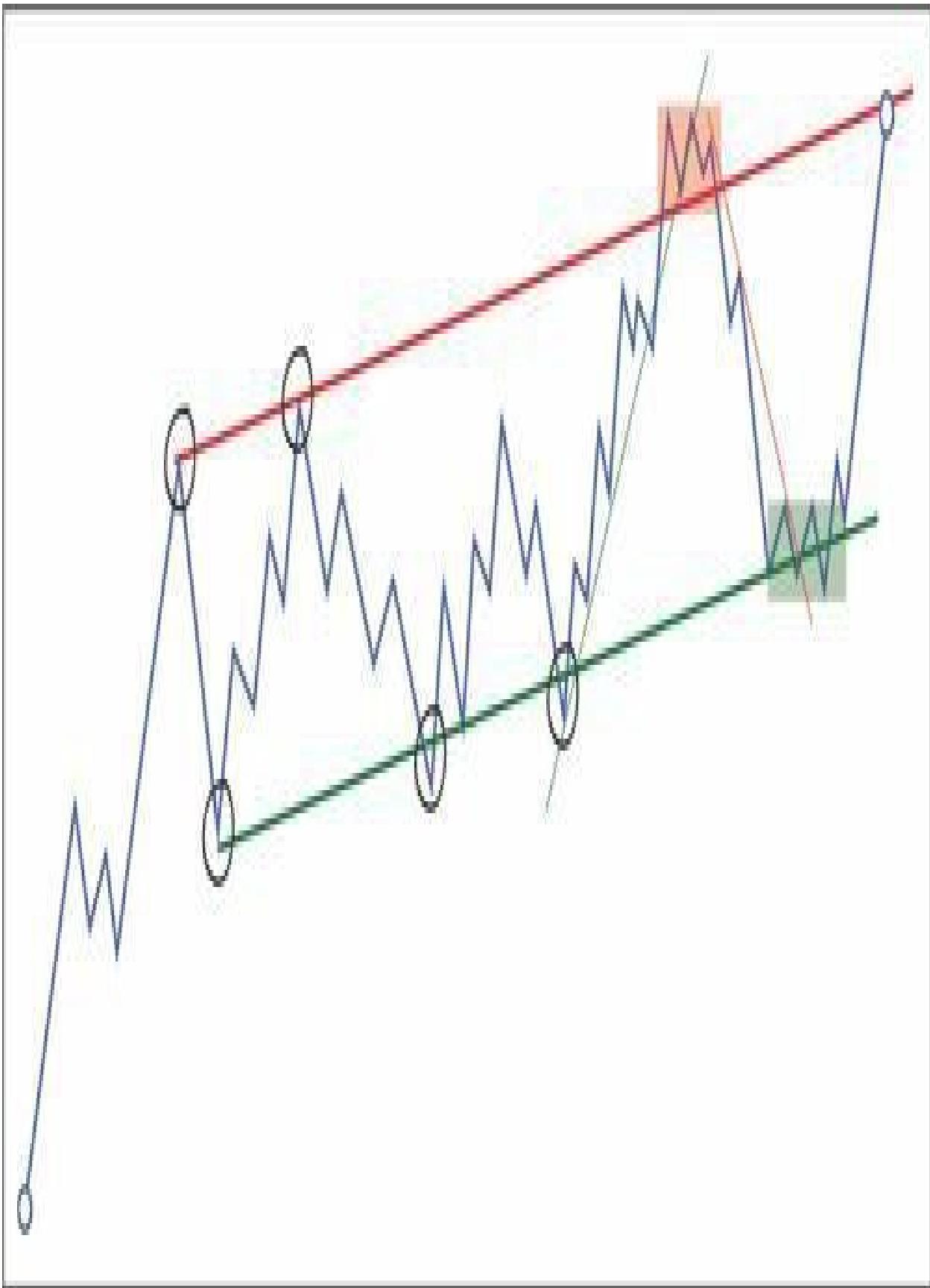
The most advisable use would be to use it together with other analytical tools, such as the Wyckoff methodology approach. If we identify the price in a location where it is interesting to look for buying, instead of buying directly, how would it be possible to wait for the price to develop some accumulation scheme in that area? This would seem to be a useful use of the lines.

1. Identify price dynamics

2. Wait until it reaches some extreme to bias directionality

3. Seek to develop some accumulation/distribution structure

2.1.1 The importance of context



If by means of the analysis with the lines, either of tendency or of some type of channel, we determine that we are in interesting operative zone (in extremes), it could be the moment of, if the operator decides it, to lower of temporality to look for on that location a smaller scheme of accumulation/distribution.

Analyzing a high temporality chart we would be located in an interesting zone to make that turn looking for a movement to the opposite extreme so an efficient use of the context would be to go down of temporality to try to operate that minor structure of accumulation that will generate the turn.

As we can see, the predictive power of the lines is not very convincing by itself; but used together with other tools they can offer us an operationally interesting use.

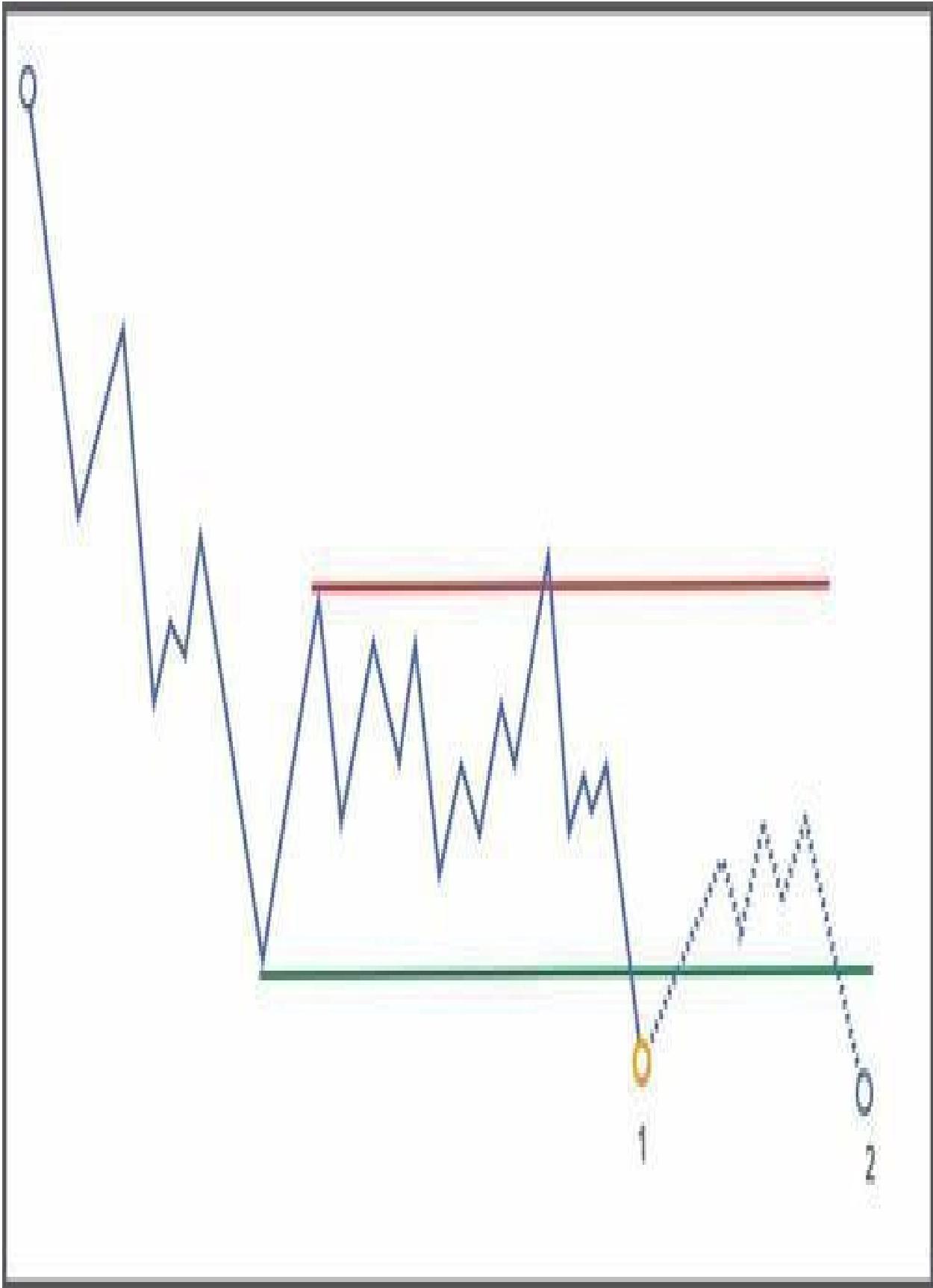
2.2 Label changes and scenario planning

As market control can vary during the development of a structure, we need to make a continuous evaluation of price action and volume as new information comes to market and is displayed on the chart. Then, we will always give more relevance to the latest information we have.

When we propose a scenario, we always do it taking into account all the information available so far; that is, based on the market conditions at that moment. The present moment is the most important, and the second most important is the one immediately preceding it.

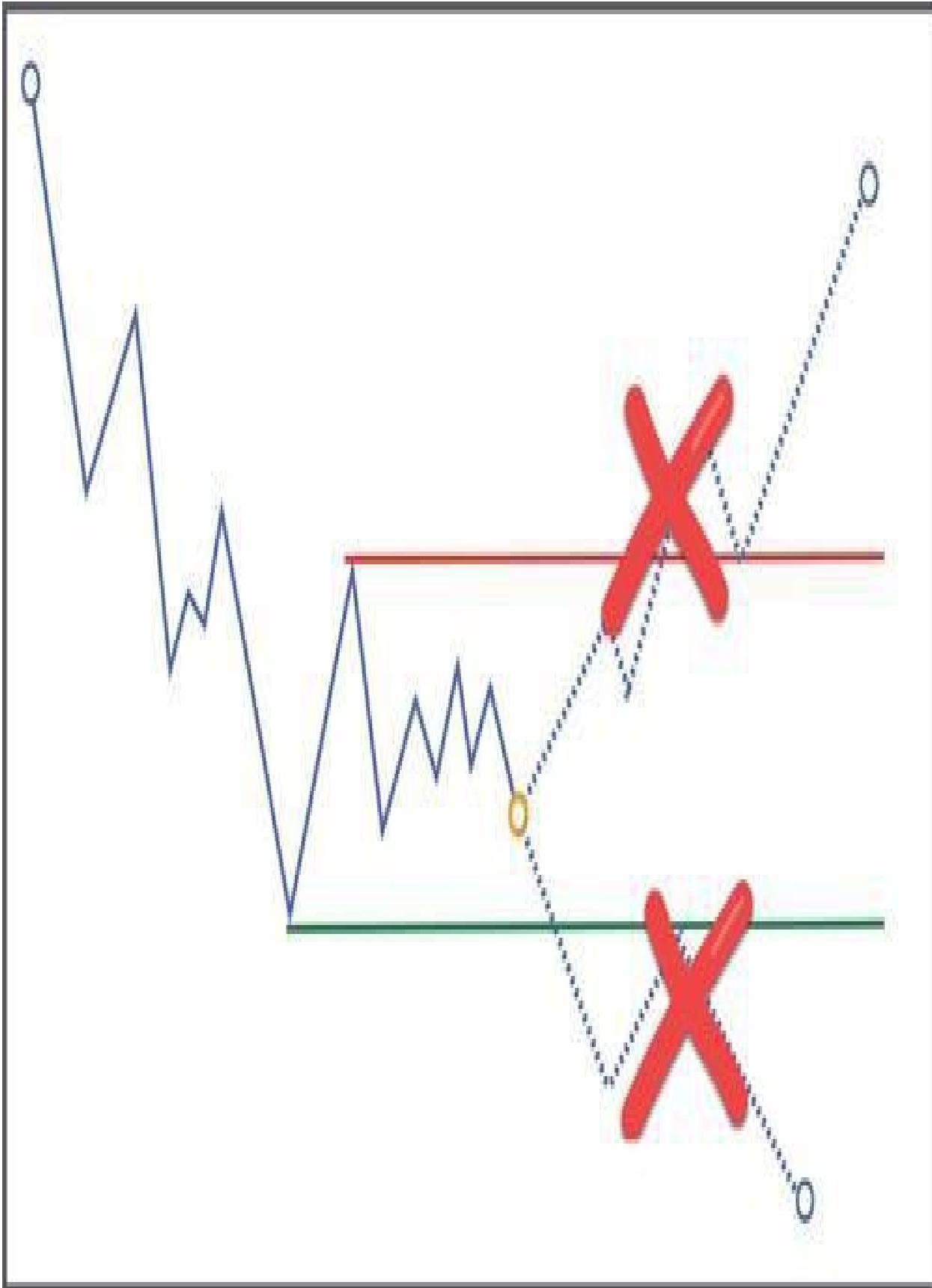
This is why sometimes what may initially suggest a particular stock may change its condition, as all movements have to be confirmed or rejected by subsequent movements.

There is no point in keeping a scenario active permanently. Many detractors of technical analysis use this very thing to try to discredit it. They see a scenario and do not conceive of the fact that it can be changed. The reality is that the market is not static and that each moment is unique where new data continues to enter uninterruptedly.

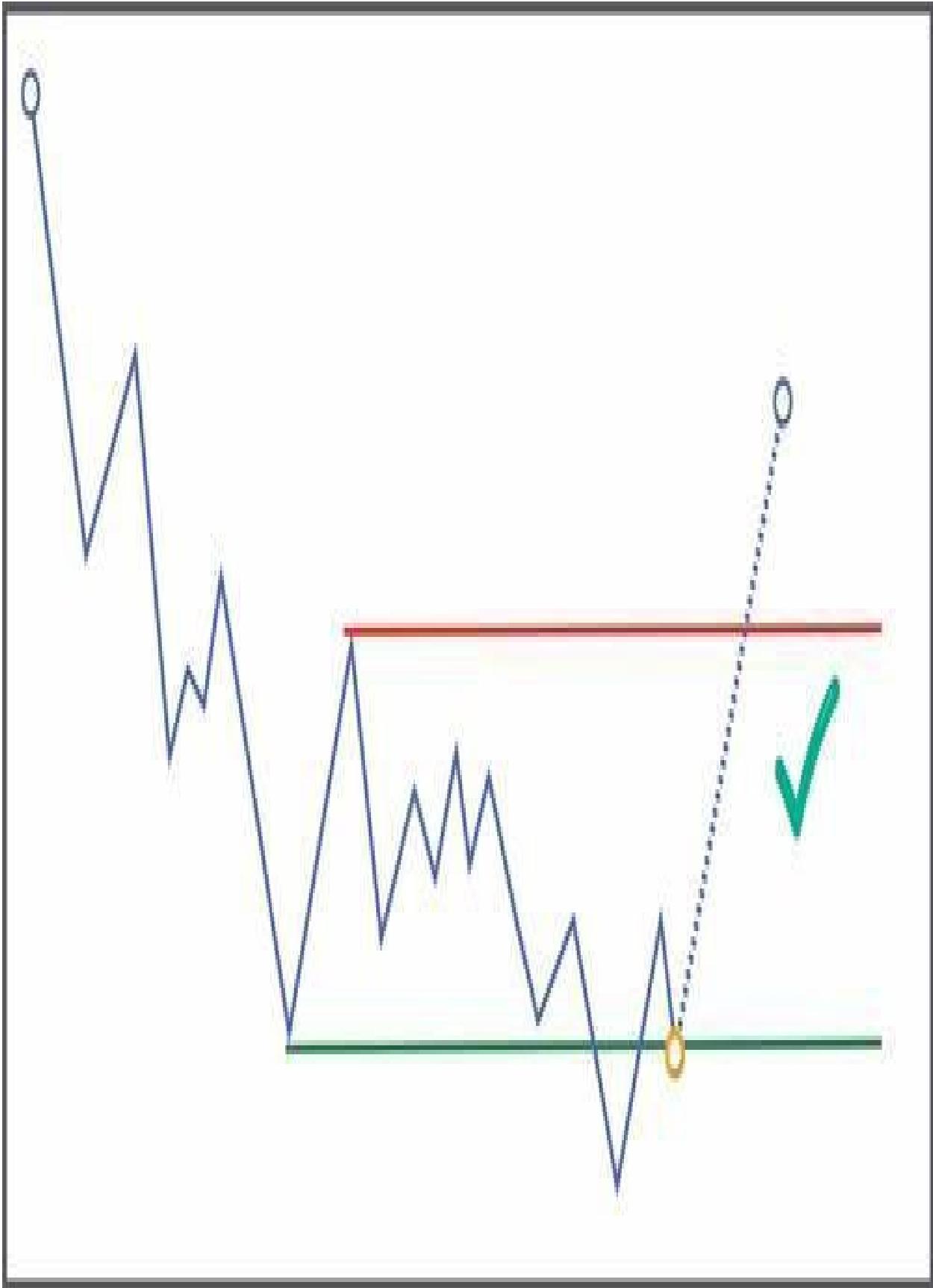


That is why sometimes we will be forced to change the feeling of a behavior and therefore the label that we initially give it. As we have already mentioned, the labels are not really important; what is important is the action behind it, which suggests that movement. And what that movement suggests to us is determined by the action that follows it.

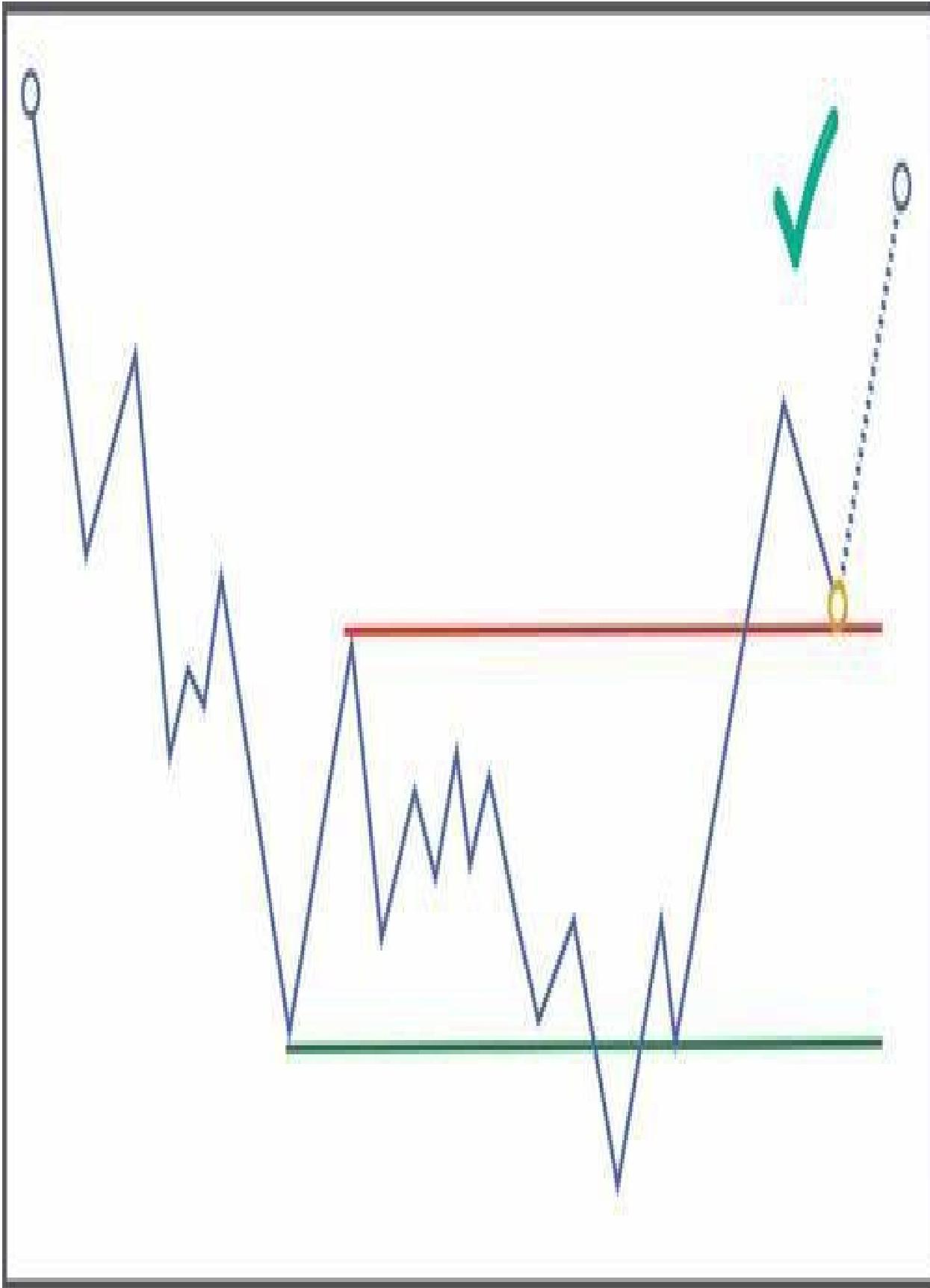
It may be that what in principle seems to us to be a shake with a test function in Phase C (to give rise to the rupture and continuation outside the range), is simply a test that denotes intentionality in that direction. But we can only evaluate this after seeing the subsequent price action. For example, if a potential Spring fails to develop even one upward movement that denotes a certain strength (at least a minorSOS), that action would have to change its sentiment and instead of seeing it as a shock that biases us in its direction, see it more as a test of weakness.

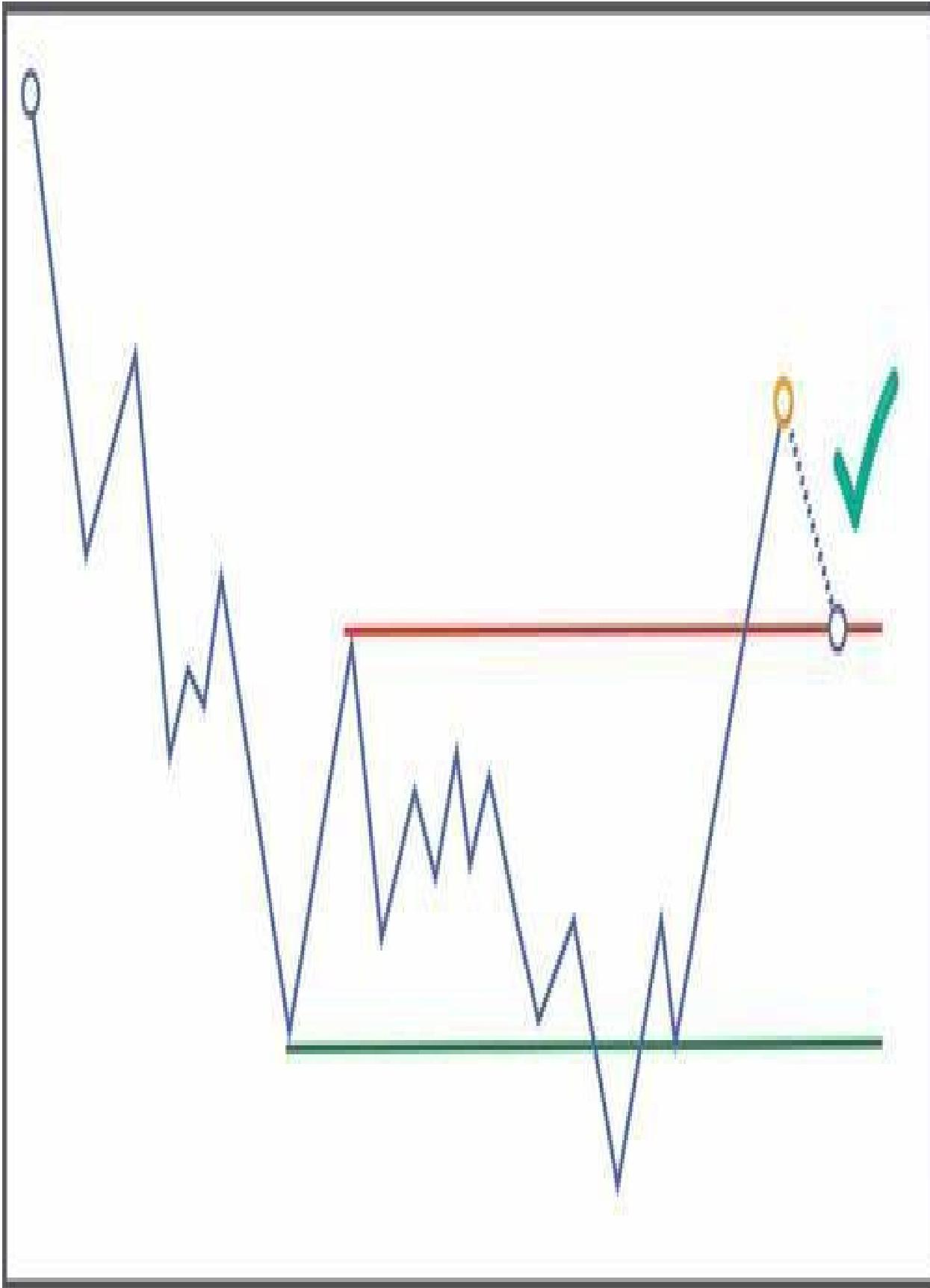


In addition, it is also important to keep in mind that we can only pose solid scenarios about the next move and never beyond. Based on what the price has been doing, we will give probability to the development of a certain movement later on. And when that move is completed, we will be in a position to make the next one. It does not make any sense that, for example, we are in Phase B and already suggest the possibility of a accumulation or distributive scheme. This is totally out of the question.



And here lies one of the advantages of the Wyckoff methodology, in the fact that it provides us with a clear road map, a context in which to expect price movements. When the price is in a position of potential downward movement (Spring) and our analysis confirms this, we will wait for the subsequent upward breakout movement. And when this develops in the way and form we expect (with increasing price and volume), we can propose the next movement back to the level of the broken structure. And when we are in such a position of BUEC, we will be able to evaluate to raise the subsequent trend movement out of the range.





This is the dynamic, it is not about inventing anything but simply following and evaluating in real time the price and volume action to propose the next movement as more probable.

Why is simple; and the reasoning is found again in the casuistry previously seen of the failed schemes:

We don't know the intention of the traders who are supporting the current move. Whether they are short term traders who will close positions in the next liquidity zone or whether they have a longer term perspective and will continue until the full development of the structure.

We don't know if traders with a higher capacity can intervene. At the moment of truth, in the breakout test that would confirm the directionality of the structure, aggressive traders with a greater capacity to move the market may appear pressing in the opposite direction as in the longer term they may have a different view.

2.3 How do you distinguish between accumulation and distribution?

It is the most recurrent doubt and it is totally logical since if we had found the objective answer we would have finally found the definitive strategy to make money.

But no, unfortunately this is not the case. In real time we cannot know what it is really about; whether it is accumulation or distribution. The only time we can confirm what has happened in that range is when the total development of the structure takes place; when we have the cause and effect fully developed. This is the field of work of all those who analyze charts to past torus. Let's move away from this.

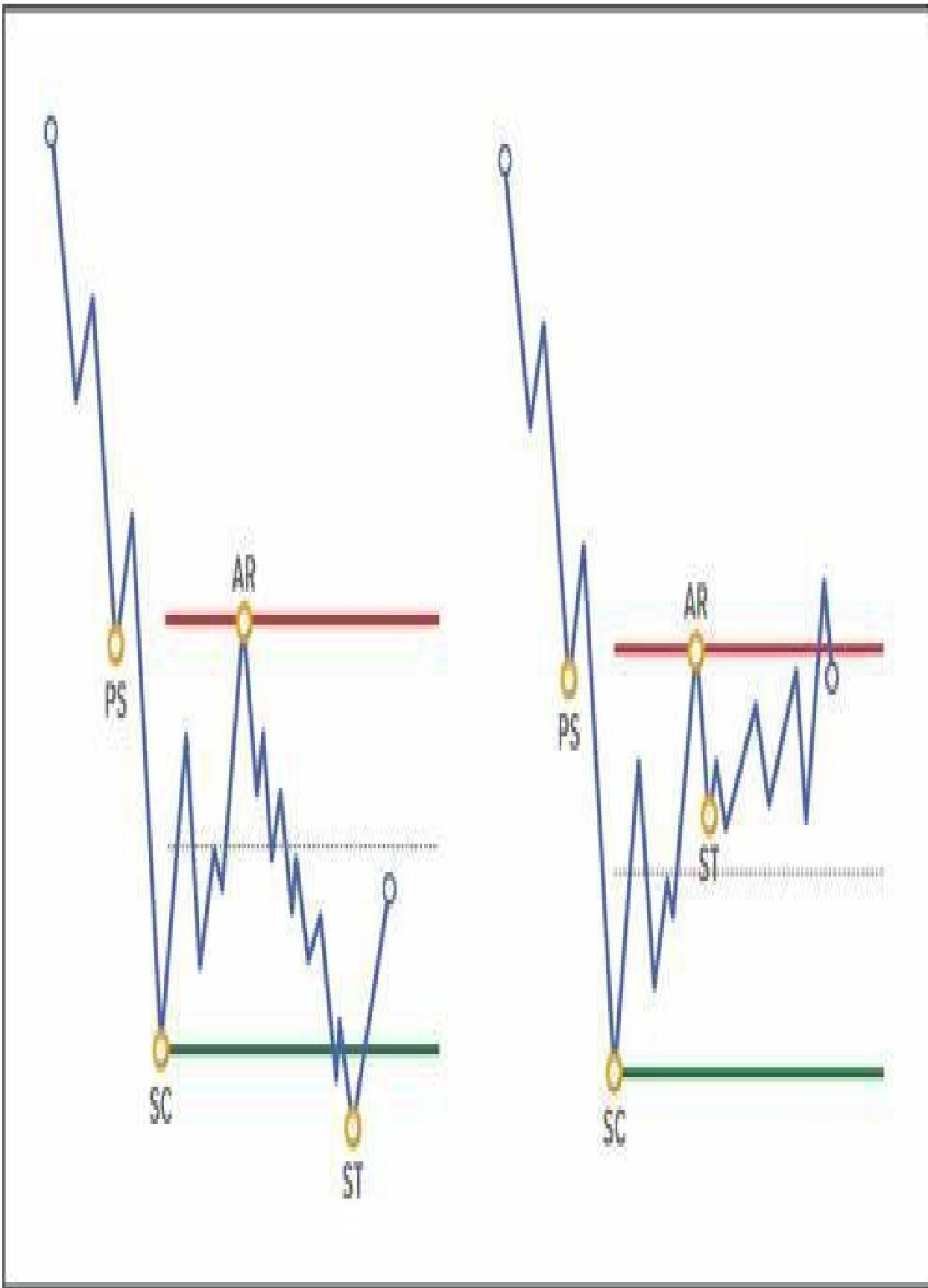
When everything is finished, it is no longer of any use to us, it is too late to take advantage of the market. We need to get into the market before the effect of the cause is fully developed.

When setting up a scenario we always speak in conditional terms using the word "potential" as there is no certainty of anything. The market is an environment of total uncertainty and our focus should be on analyzing the footprints we are observing so far in the most objective way possible in order to try to determine where the imbalance will occur.

As we have studied in the content of the first book "The Wyckoff Methodology in Depth", there are certain signs that inform us during the creation of the cause who is taking control of the market. We will now make a kind of summary highlighting the most important points to take into account when evaluating the

market's bottom line.

1. Type of test in Phase A



This is the first indication to be evaluated of the whole structure. The generality is simple: we are going to divide the vertical distance of the structure in three thirds and depending on where the Secondary Test is developed, it will give us some information about the condition of the market until that moment.

If the Secondary Test takes place in the lower third of the structure, or even below the lower end, this will indicate a certain underlying weakness.

If the Secondary Test ends in the upper third of the frame, or even above the top end it will denote background strength.

Analyzing the type of test in Phase A is a very early action in the development of the structure, but it is interesting to evaluate from the beginning under which condition the subsequent development starts. It is a matter of adding up indications in favour of one side or the other (buyers against sellers).

2. Type of Phase B test and reaction

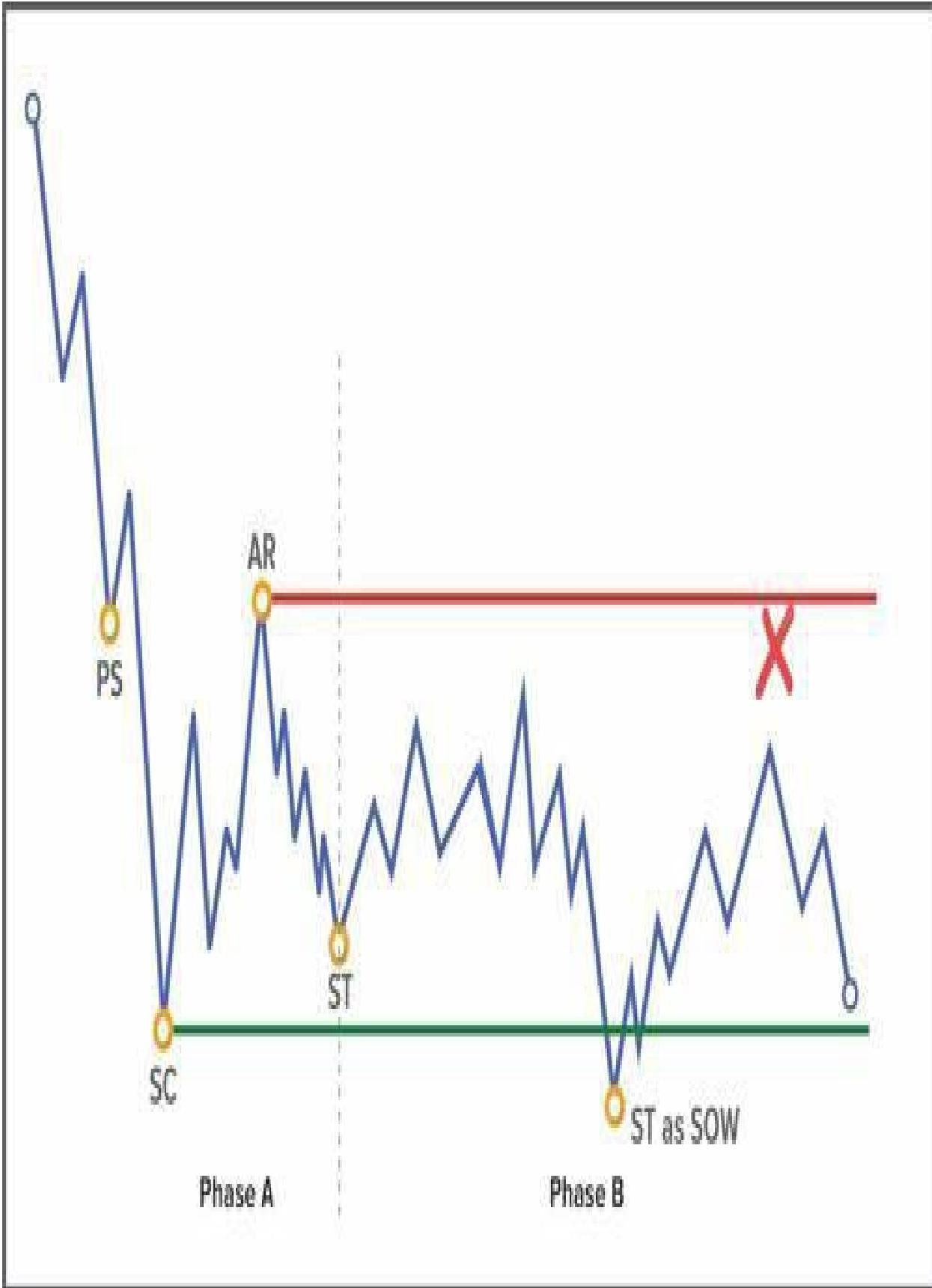
It is the second of the signs with which we can evaluate the apparent strength or weakness of the market's background.

From a general point of view we will draw two clear conclusions:

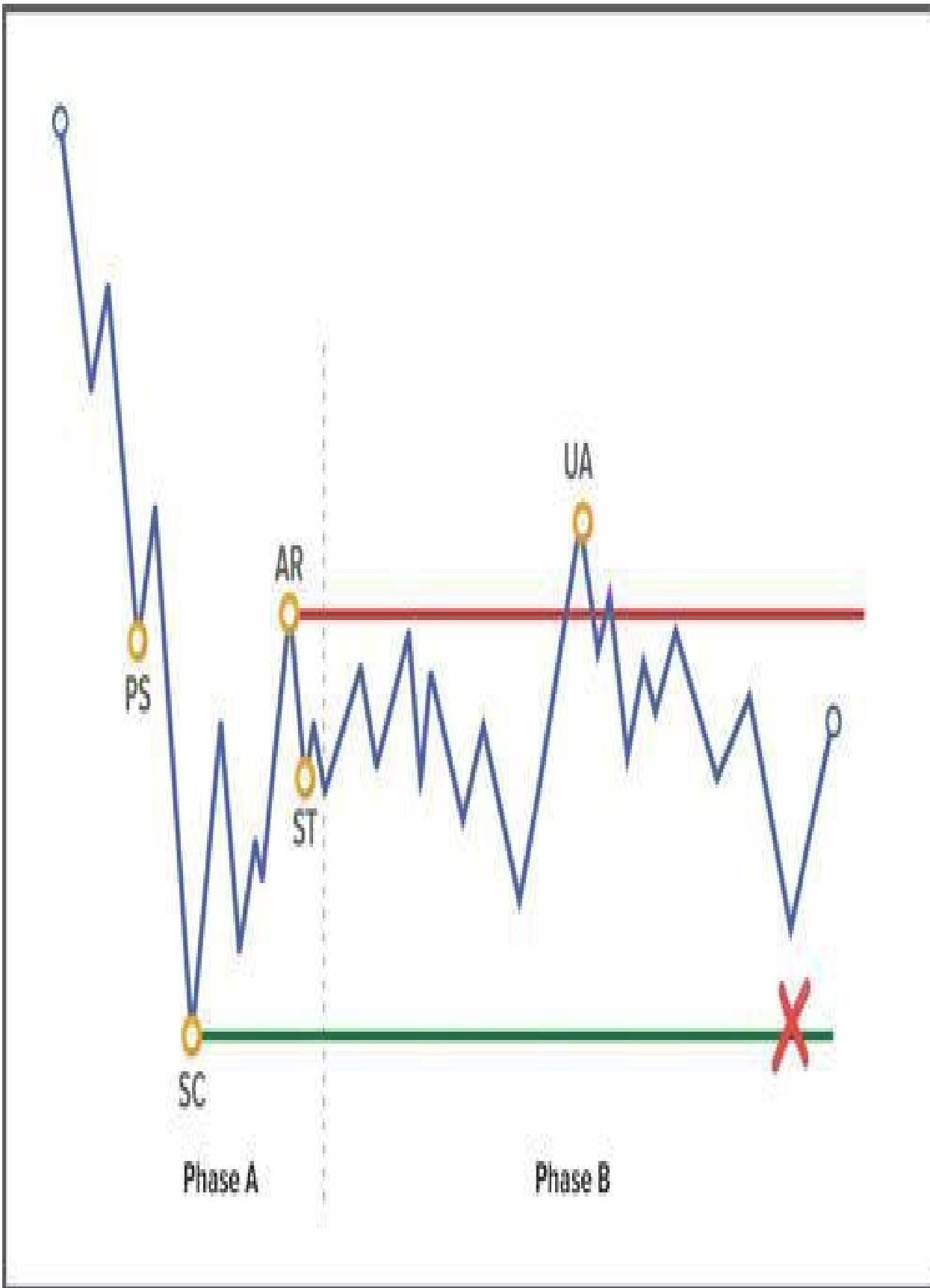
Test on the top of the structure would denote strength.

Test on the lower part of the structure would denote weakness.

The logic behind these conclusions is that it is impossible for the price to move to that end of the structure and even cause some penetration if there are no large operators supporting that movement with conviction. This gives us some confidence in determining whether a movement is harmonious in its development.



In general terms, as it occurs at a very early stage in the development of the structure, this type of test would denote a certain urgency in the direction in which it occurs. A test at the upper end suggests buying momentum while a test at the lower end would indicate great market weakness.



A later evaluation of the price action will serve to determine if that move has served to jump the stops of traders who are positioned on the opposite side, thus releasing the market from resistance; or if on the contrary the move has been used to aggressively enter the opposite direction.

In other words, a test on the top of the structure that manages to break even slightly the highs and reach that zone of liquidity has these two readings:

On the one hand, this movement may have served to absorb the stop loss orders of those who are positioned short. With this they manage to eliminate that downward pressure and later start the upward movement with a lower cost. This action would be confirmed later when observing that the price finds some support being unable to continue falling.

On the other hand, other large traders may have taken advantage of such a test move at highs to enter a sell. Such action would be later confirmed by a visit to the structure's lows, a genuine representation of weakness.

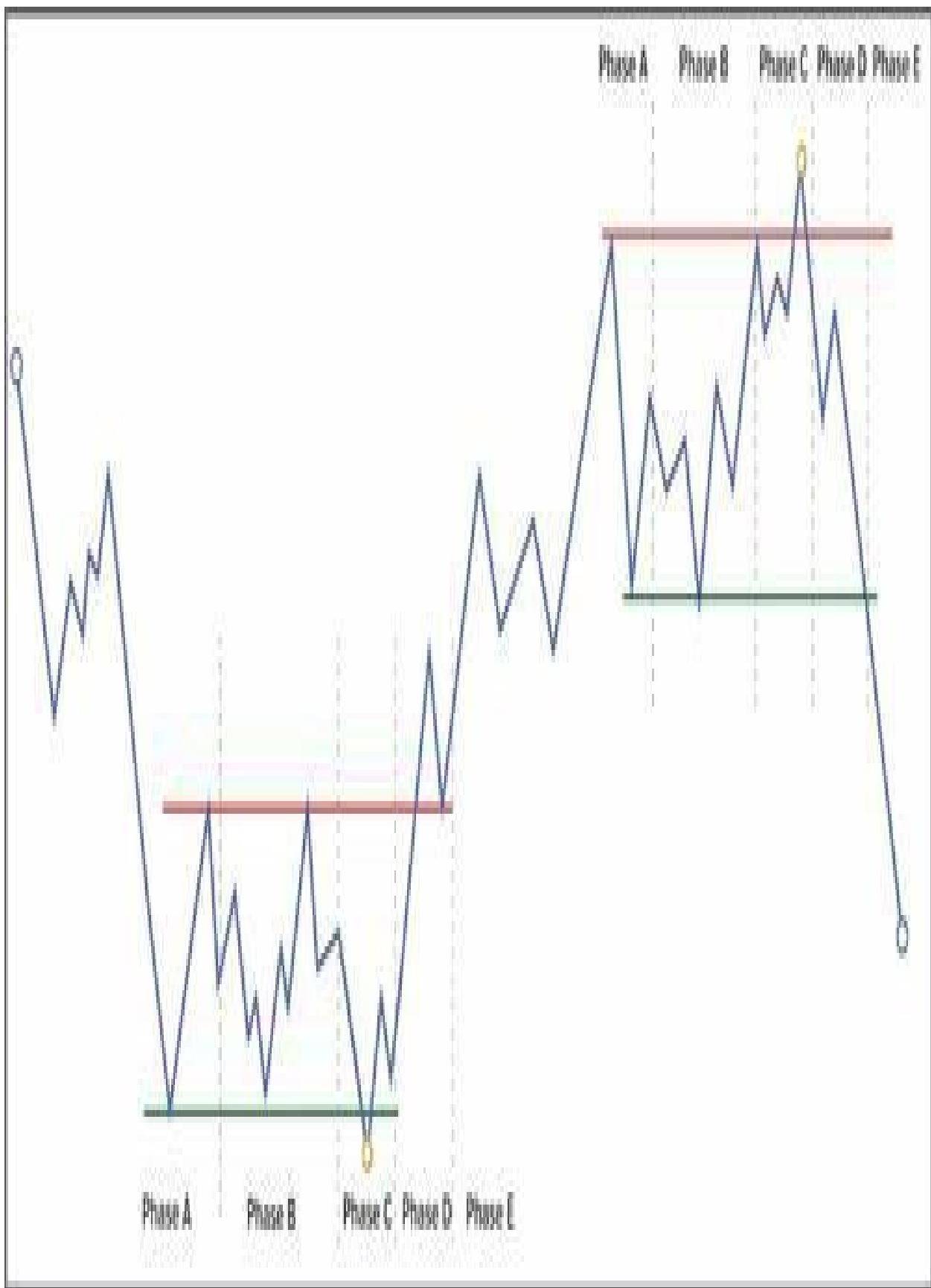
Therefore, what happens after such a test will be very useful for analysis. We could even be looking at the test event in Phase C, hence the importance of evaluating the subsequent price reaction. An inability to visit the opposite end would alert us to a structural failure, which would add strength in the opposite direction; since if it were really the C-shaped shock the price should at least reach the opposite end almost immediately.

This type of behavior with test at one end and then structural failure at the opposite end is generally characteristic of schemes that initiate out-of-range trend movement without prior shake at the full ends of the range.

For the case of the accumulation example the test at the top (UA) plus the inability to reach the bottom denotes a lot of bottom strength and very probably the market will generate the upward breakout from some intermediate point of the structure (LPS) without developing that spring we always look for at the bottom.

In the distribution example, the test at the bottom (ST as SOW) followed by the inability to develop a test at the top of the structure denotes a lot of weakness and very possibly the market will develop a LPSY as a test event in Phase C.

3. The shake in Phase C



The third and most important print. This is the dominant event in our analysis and approach.

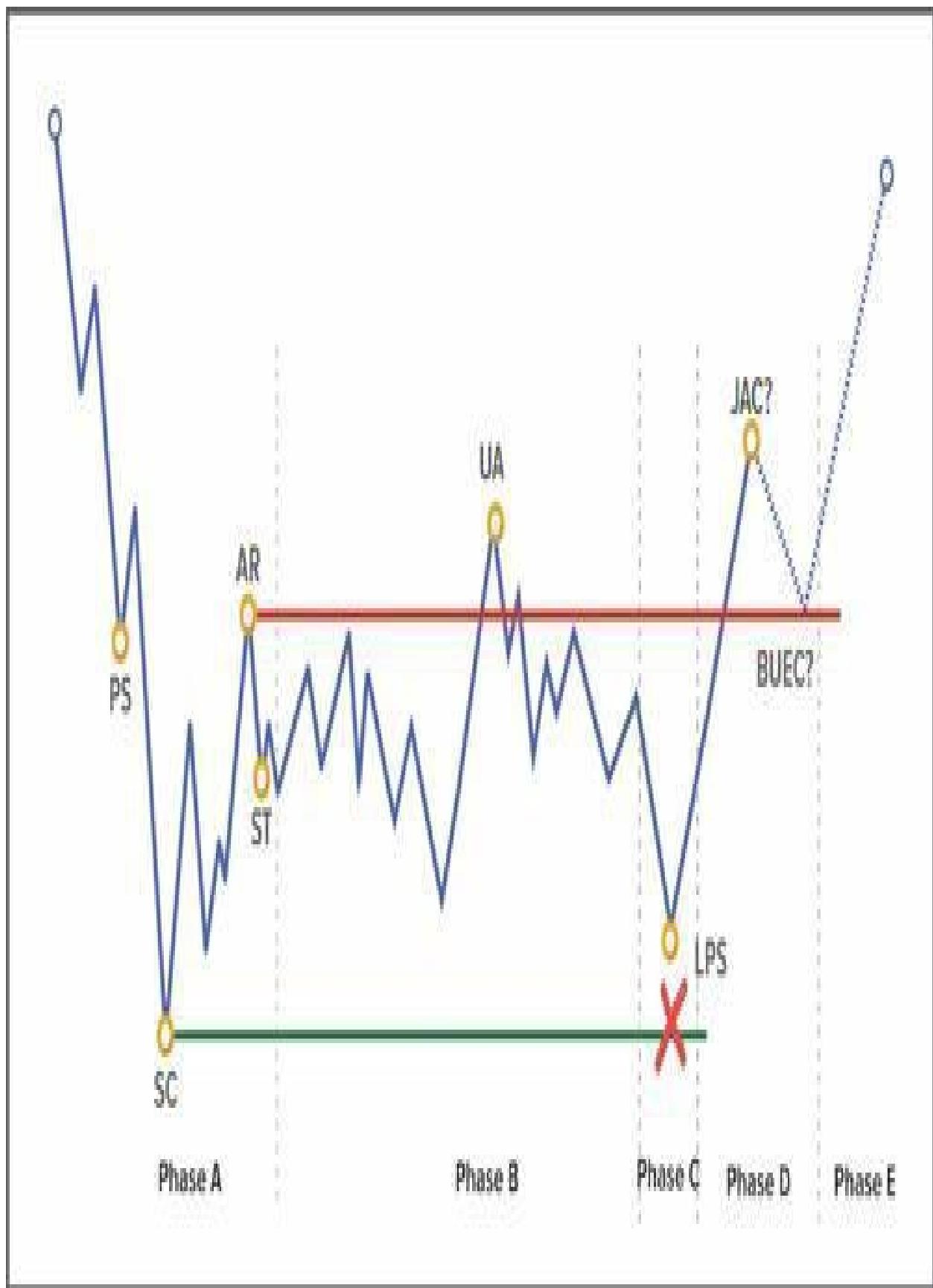
It is the behavior that gives us the most confidence when operating. A shock to a liquidity zone plus the subsequent re-entry into the range denotes a strong rejection of the price to continue moving in that direction and at that point the path of least resistance is towards the opposite side.

The minimum objective of a shock is a visit to the opposite end of the structure; and if we are facing the test event in Phase C, it will give rise to the effective breakout and subsequent trend development outside the range.

The most important thing when analyzing a chart is the present, what is making the price right now in relation to what it had been doing. And the second most important thing is the one immediately before the present. That is, if the current movement is preceded by a shock, that shock is the dominant event that would mark the directional bias of our analysis.

As the control of the market can vary during the development of the structure, we need to make a continuous evaluation of the new information that is coming into the market. Then, we will always give greater relevance to the latest information available to us.

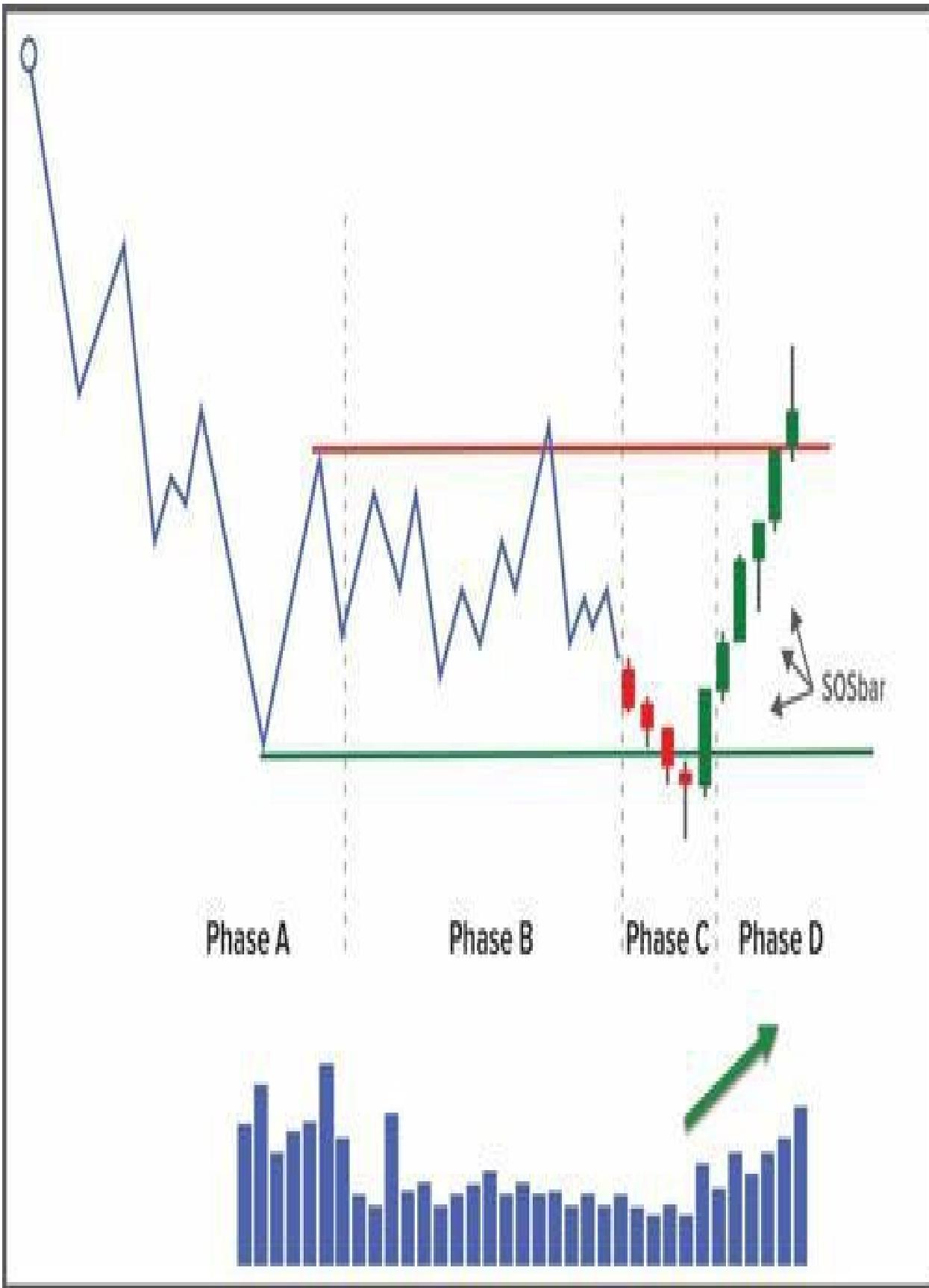
Does this mean that the shock is more important than any other action that has previously occurred in the range? Absolutely, yes. By the very nature of the movement, the shock itself should be valid enough to bias us in its direction.



Shall we then discard the previous analysis? At the operator's discretion. In my view, they are small footprints that add up to the overall analysis. It's a matter of analyzing objectively and adding up evidence in favor of one side or the other. And remember that there is not always such a shake at the ends. As we have just seen in the previous section, knowing how to read the footprints puts us on the alert for the imminent development of the effect.

If we are in a situation of a potential upward break and previously we have not had a spring to minimums of the structure but we do have a test at the top and then a structural failure at the bottom, we know that such behavior is characteristic of accumulation schemes whose test event in Phase C is a simple LPS and therefore we will be equally in a position to favor the BUEC and continuation of the upward trend.

4. Price and volume action in Phase D

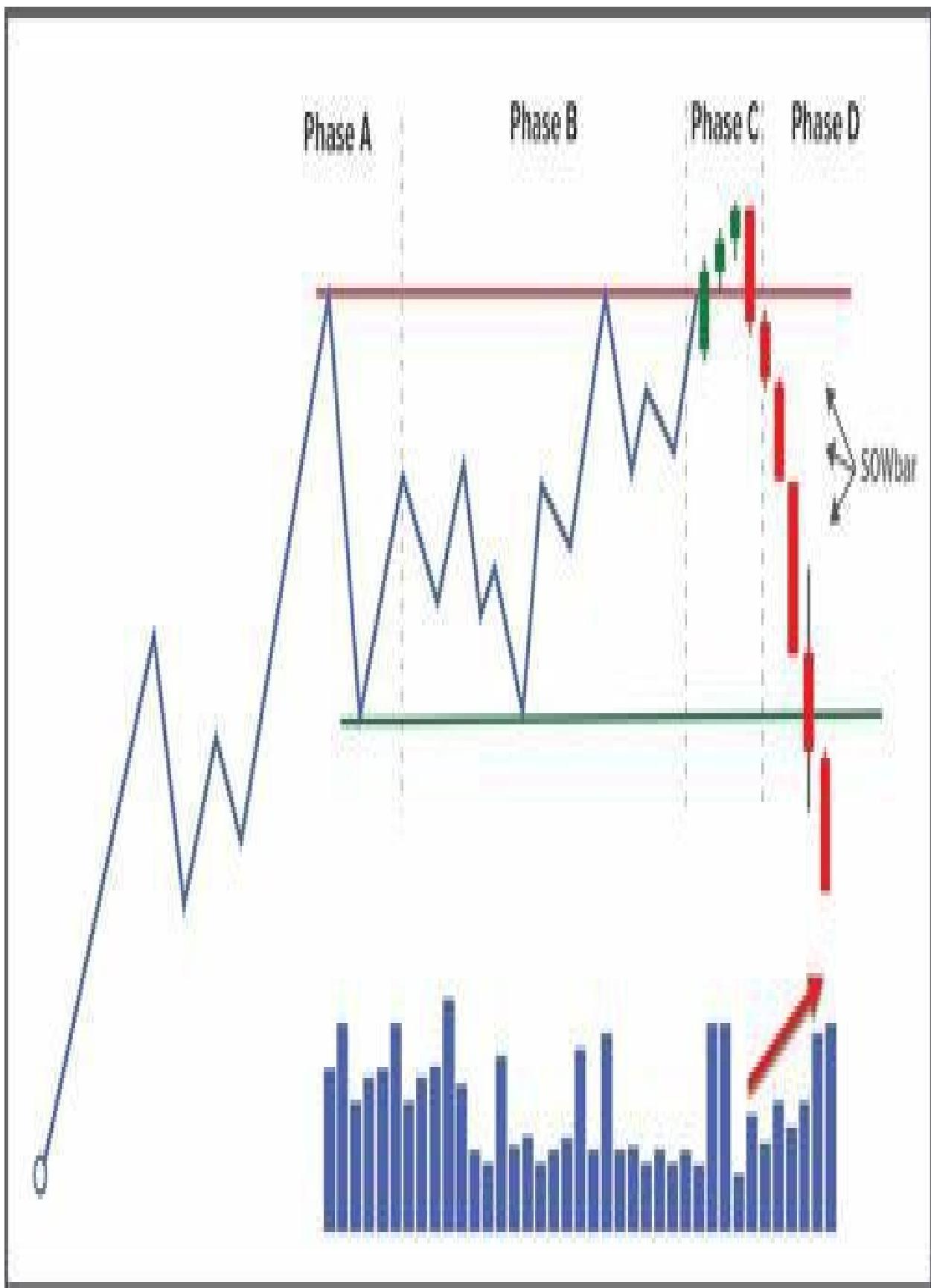


This footprint simply tries to apply the Law of Effort and Result between price and volume action.

We want to see candlesticks that denote intentionality in favour of movement subsequent to the shock and this intentionality is represented by wide ranges and high volume (SOS/SOW bar).

The real value of a shake is seen in whether or not it has a continuation. As already mentioned, all actions must be confirmed or rejected later. We could be in a position of potential shock and initially treat that action as such; but if the subsequent movement that is the rupture of the structure does not develop, the market sentiment changes.

The shock is a search for liquidity but must also be able to subsequently generate a movement with a certain momentum that at least reaches the opposite end of the structure and preferably causes its rupture.



For example, if we observe a potential UpThrust After Distribution (UTAD), ideally we will want to see that it is followed by a movement with strong downward momentum that manages to break the minimums of the structure to continue the distributive development. If due to the condition of the market it does not manage to break the structure, we should at least demand that it reaches that low part leaving such movement as a minor Sign of Weakness (mSOW). Otherwise the market would show some underlying strength and would question whether this was really the genuine shock.

That the price is moving with wide ranges, good movement and an increase in volume is the maximum representation that this movement is being supported by large operators. The market could not develop such movements without their intervention.

In lower time frame charts such intentionality movement will be observed as a succession of decreasing highs and lows, the ideal representation of a healthy downward trend movement.

In the concrete action of the breakout we want to see the appearance of a high volume that suggests intentionality and absorption of all passive orders located in that liquidity zone. Sometimes a candlestick may even appear with a wide displacement and a wick at its end. For example, in the case of an upward breakout attempt, this type of candlestick with a wick at the top could initially suggest the possibility of a shock since such a wick objectively indicates the entry of a sell. But we must remember that we are in a liquidity zone and therefore the execution of these orders would be within the expected range. The key is the capacity of the buyers to absorb this offer, keep pushing and not let the price return to the range.

Although it is true that we could see a genuine break with a low volume (due to lack of interest from the opposite side), under normal conditions an absence of

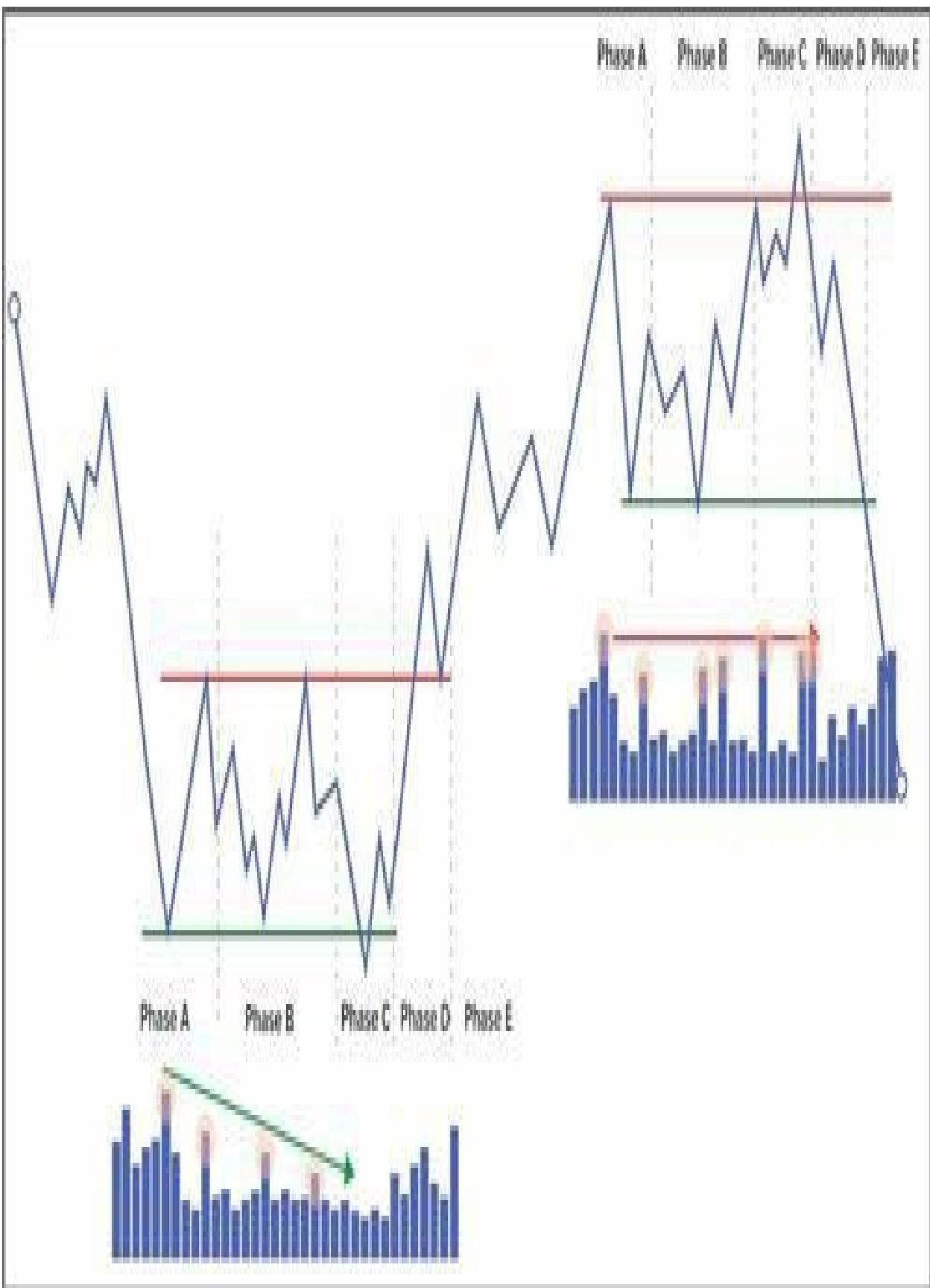
volume in such behavior would initially put us more in the position of treating the stock as a potential shock; although obviously we would have to wait for the subsequent reaction of the price.

Therefore, the most visual feature of the genuine breakout movement will be to observe a wide range candlestick that manages to close on the extreme and is accompanied by high volume. We can then say that this imprint is the second most important after the shock.

5. The overall volume during the development of the range

The fifth most important print. As a general rule the volume in isolation during the development of the structure also shows some identifiable pattern:

The processes of accumulation will be accompanied by a decreasing volume during the development of the structure.



In the distribution processes, high or unusual volumes can be identified during the development of the range.

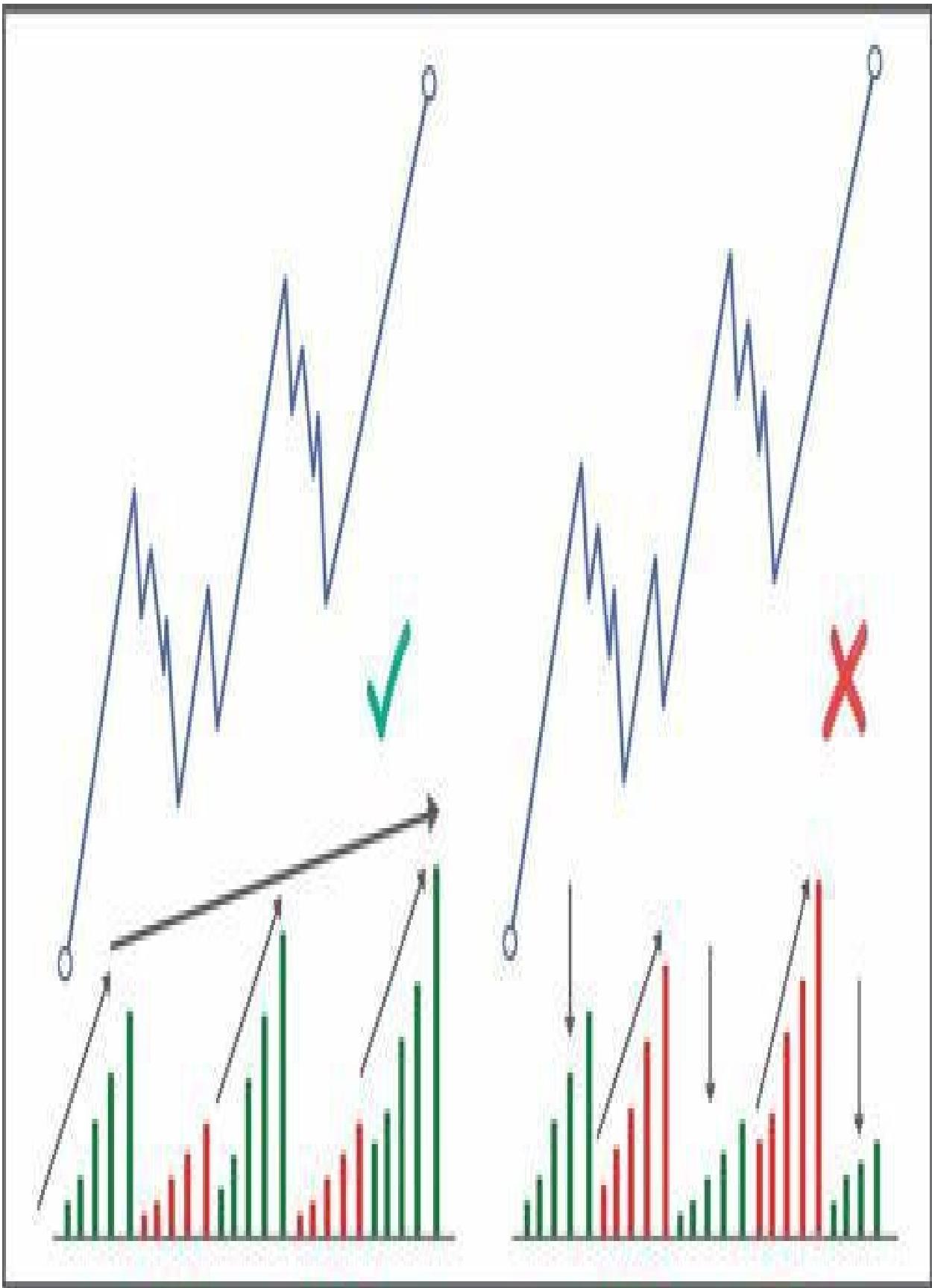
Obviously this is a general pattern, which means that this will not always be the case.

For the accumulation example, a decreasing volume suggests that a process of absorption of the available stock is taking place. As there are initially many operators willing to sell, a greater number of transactions are produced, which leads to higher volumes. As time is consumed during the development of the range, units continue to be exchanged but obviously with less intensity, which is represented as a decreasing volume. By the time the generation of the test event in Phase C is about to start, practically all the floating offer has been eliminated.

Something very different occurs in the distributive processes. An important characteristic of these schemes is that they tend to develop much faster than accumulation ones. And this is why you can see large fluctuations in price and high, constant volumes. This shorter duration forces to execute the transactions with certain speed; while in the accumulation campaigns a certain time is consumed until the stocks are exhausted, in the distribution processes the urgency to sell causes a fast development accompanied with a high volatility.

6. The Weis Wave Indicator Analysis

This tool has nothing to do with the conventional indicators known to all.

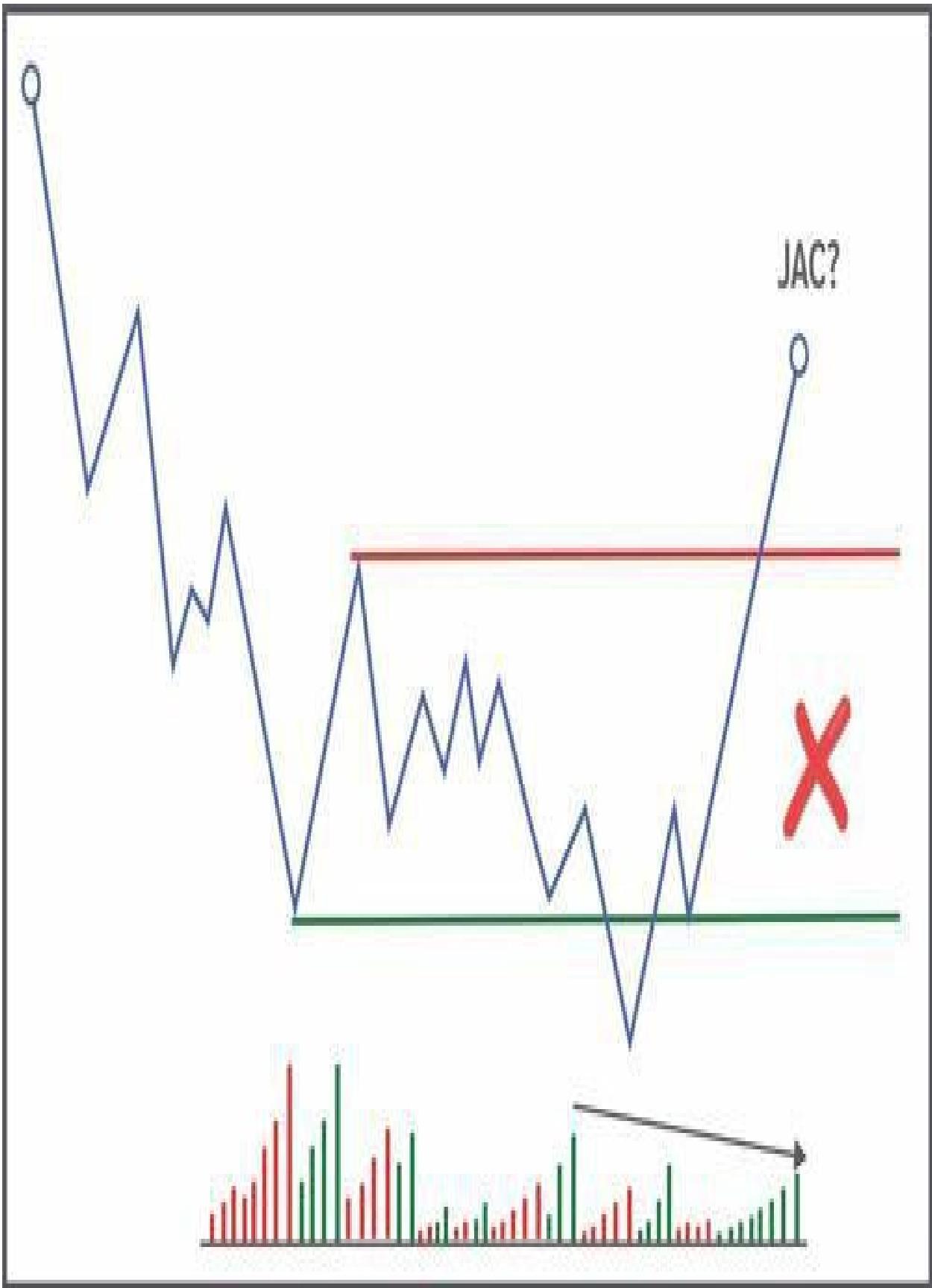


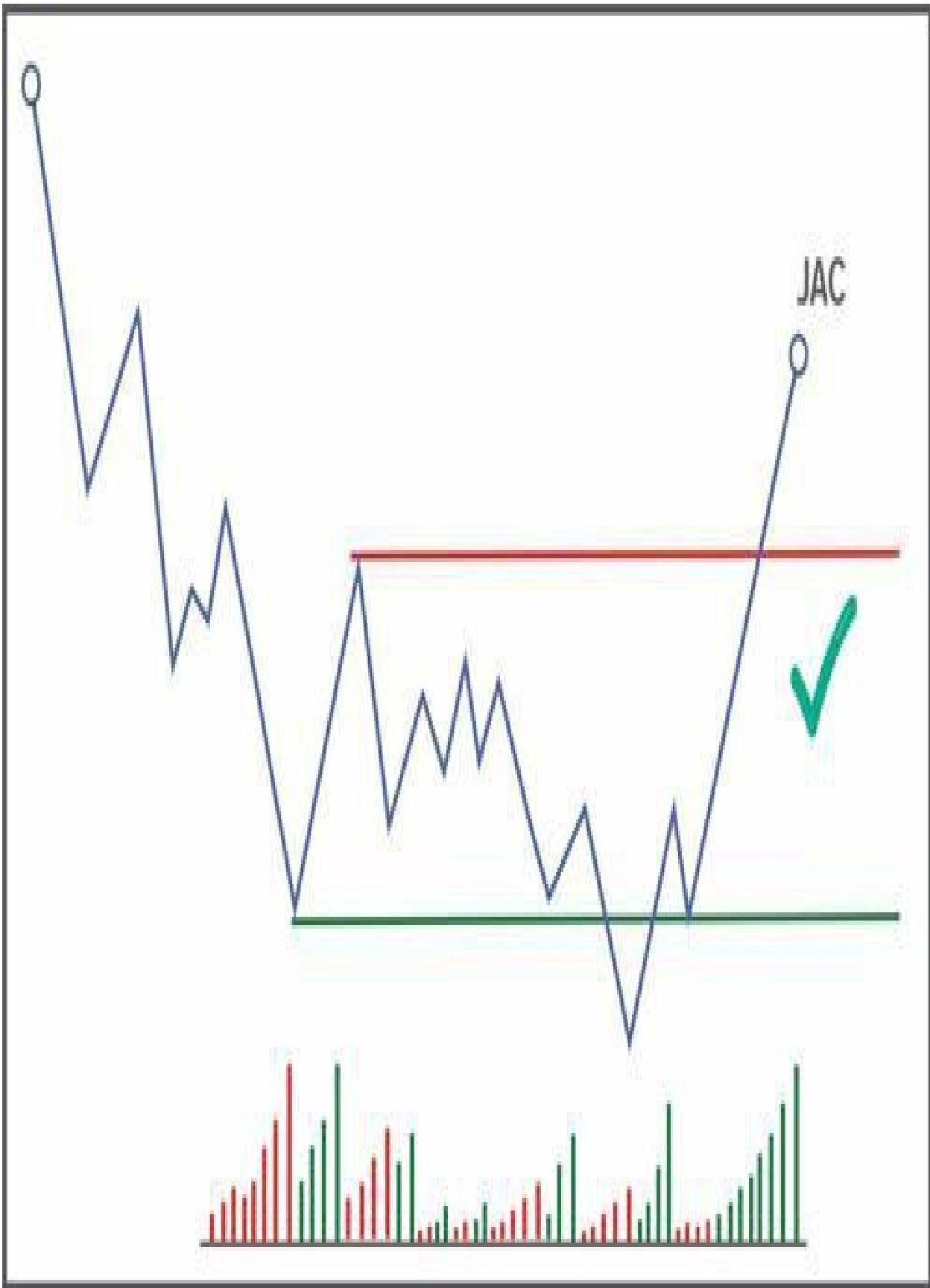
The Weis Wave Indicator collects and analyzes volume data to chartically represent the accumulation of trades made by price movements. That is, depending on the settings we assign to it, the first thing the code does is identify the start and end point of a price movement. Once this is determined, it adds up all the volume traded during the development of that movement and represents it in the form of waves.

As can be seen in the chart, all the waves start from a base set at 0 (the same as the classic vertical volume).

This tool is basically used to carry out analysis under the Law of Effort and Result. At the time of developing these analyses we will be able to focus it in different ways:

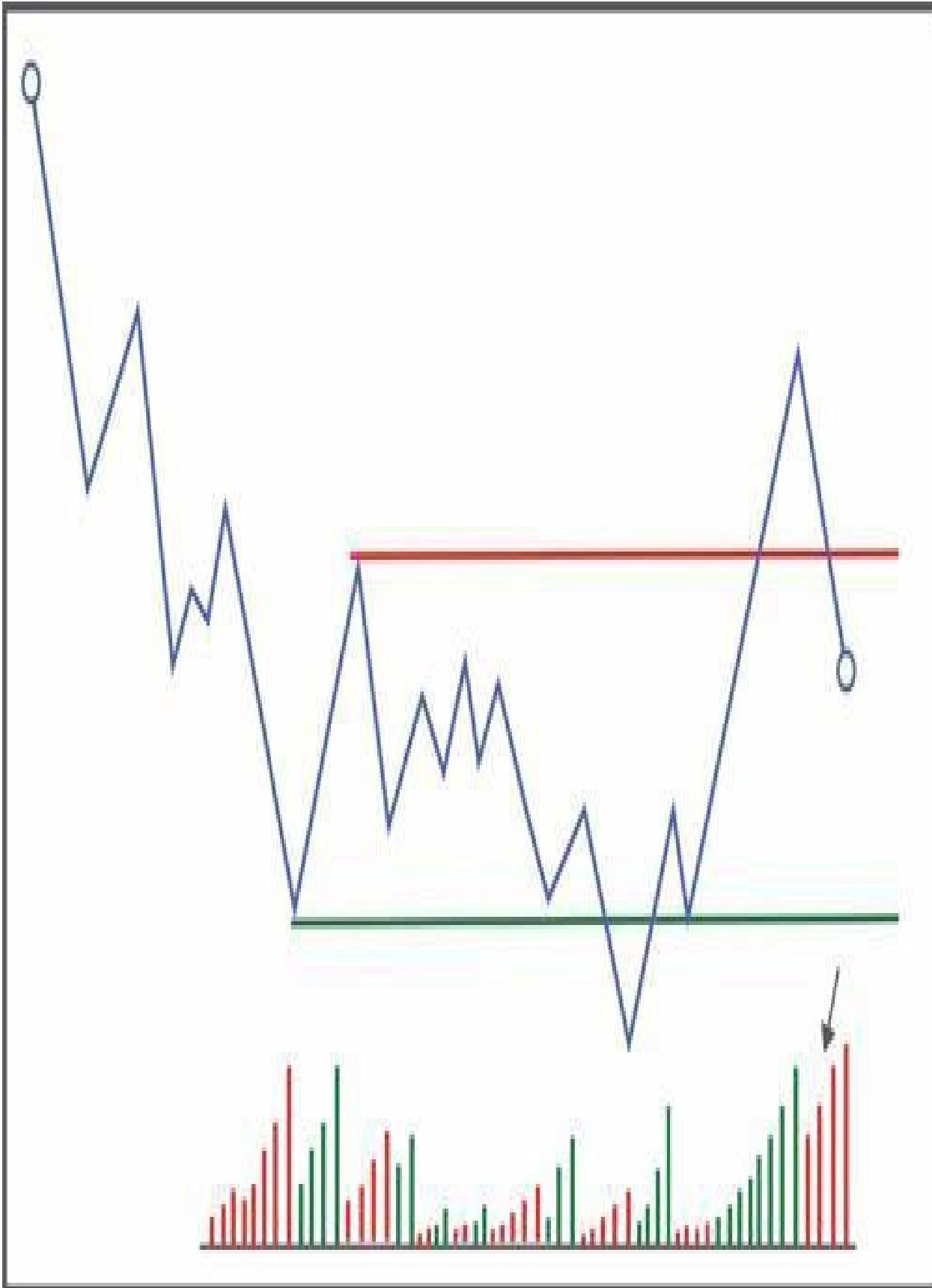
In the development of movements. The basic rule when looking for harmony and divergence is that the movements that initially we try to be impulsive should be accompanied by big waves, increasing waves with respect to the previous ones, which would suggest an increase of interest in the direction of that movement. On the other hand, movements of a corrective nature should be shown by small, decreasing waves in comparative terms, suggesting a certain lack of interest in that direction.



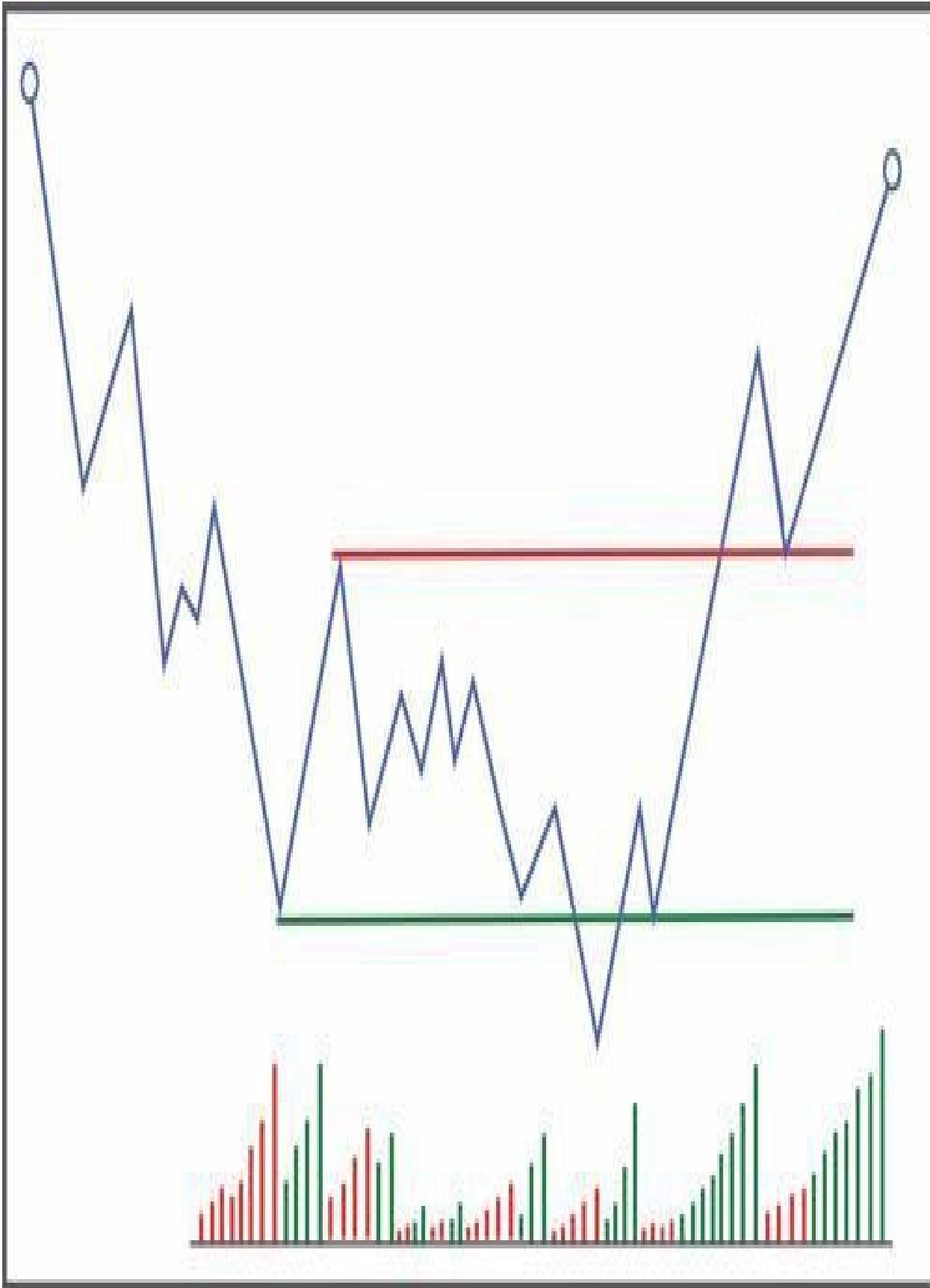


When reaching operational zones. Similarly, a harmony analysis would be obtained by identifying a large bullish wave whose price movement manages to break a resistance zone. The reading we make is that this impulsive movement has achieved the effective breakage. With respect to an analysis that would suggest divergence it would be to visualize the same bullish movement that breaks a previous resistance but does so with a very small Weis wave, denoting that very little volume has been traded and therefore suggesting that the great professional is not supporting the movement.

We must be aware again of the importance of continuous analysis. We may see a potential Spring followed by a bullish movement accompanied by a large Weis wave that manages to break the Creek of the structure (so far the ideal scenario). At that point we will be favoring the continuation of the upward movement (BUEC potential); but it may be that strong volume enters that makes the price re-enter the range and a great bearish wave is observed, suggesting



now the possibility of Potential Upthrust.



The idea is that simply because we see that the signs are in favor of the initial approach it does not have to develop yes or no. As previously mentioned, new information is continually coming into the market and we must be aware of this. In the example described above, in a situation of BUEC potential, we will need to see bearish waves that denote a lack of interest in order to present the bullish scenario with greater confidence.

2.4 How to analyze a chart from 0?

This is one of the first barriers for the beginner trader who is starting to analyze charts from the point of view of price action and volume.

The first thing that should be made clear is that a chart, the cleaner, the better. It's no use having a hundred thousand objects drawn on it. The only thing we get out of it is to hide the information that is really important: the price. That is why I am in favour of, as soon as a structure has been fully developed, eliminating absolutely everything that is labelled. In this way we eliminate the possibility that everything that is charted can interfere with further analysis. At most, we leave the levels of the structures drawn so that we can quickly see where we came from.

In this type of analysis, where what we are looking for is to understand what the market context is, it becomes indispensable to start the analysis from higher time frames in order to go down from there. But from what time frame in particular do we start? From the one that is necessary. Generally the weekly chart will already show all the relevant price action and it will not be necessary to go up to the monthly chart.

Once the chart is open, the first thing we will look for is the stop events of some trend movement and the subsequent price lateralization. Operationally what interests us is to see that the market is building the cause of the subsequent movement; that is, it is in Phase B.

Obviously, on many occasions you will open the chart of an asset and you will

not see anything clear, or it may still be in the development of a trend movement that has been preceded by a range of balance. In these cases there is nothing to do but wait to see that change in character that determines the appearance of Phase A.

On other occasions you will identify those stop events plus the generation of a certain cause in Phase B and the market may be in a situation of potential rupture/shaking. It is the ideal context to go down the time frame.

The idea is to identify the general context in this higher time frame in order to determine which scenario would be more interesting to work on, whether to propose a long or short entry. In short, placing ourselves effectively on the longer-term chart serves to bias the directionality of our future scenarios.

Until we are clear about the context of the upper chart, we cannot go down the scale of temporality. As context we understand the combination of structures and operational areas:

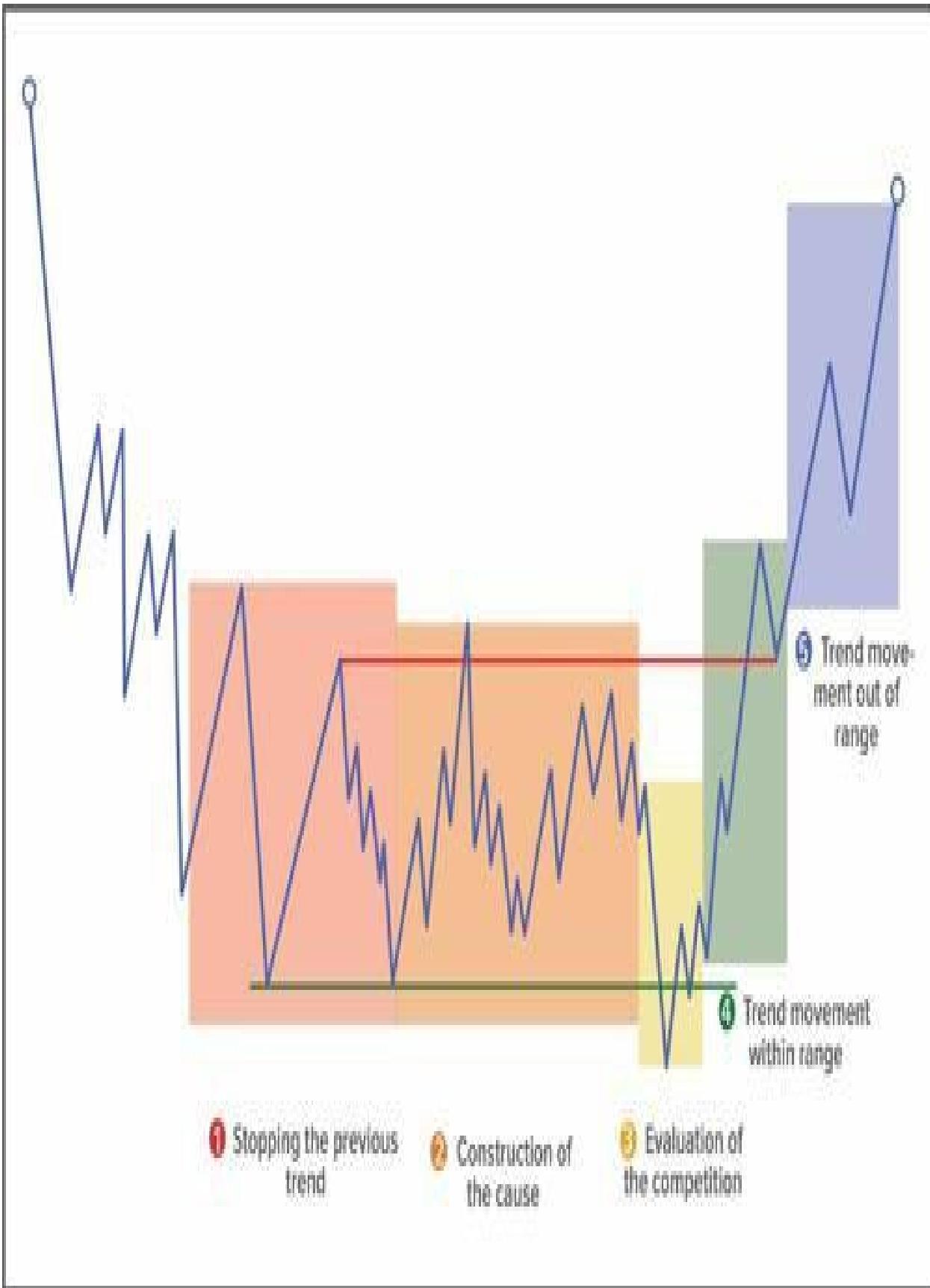
2.4.1 Structures

This is where the importance of having thoroughly studied the entire theoretical section of the first book "The Wyckoff Method in Depth" comes in. The structures provide us with a clear road map that will guide our scenario approaches. For example:

If we are in Phase B building the cause, we will wait for the price at the ends of the structure to look for the break/break action.

If we are in a position to confirm a shock, we will wait for the price to reach the opposite end with some momentum.

If we are in a position of potential genuine breakout, we will wait for some kind of test to the broken structure to continue development out of range.



If we do not really know how the market moves from this point of view of structure development it is impossible for us to make judicious scenarios. That is why the first thing is to internalize how these processes of accumulation and distribution generally develop:

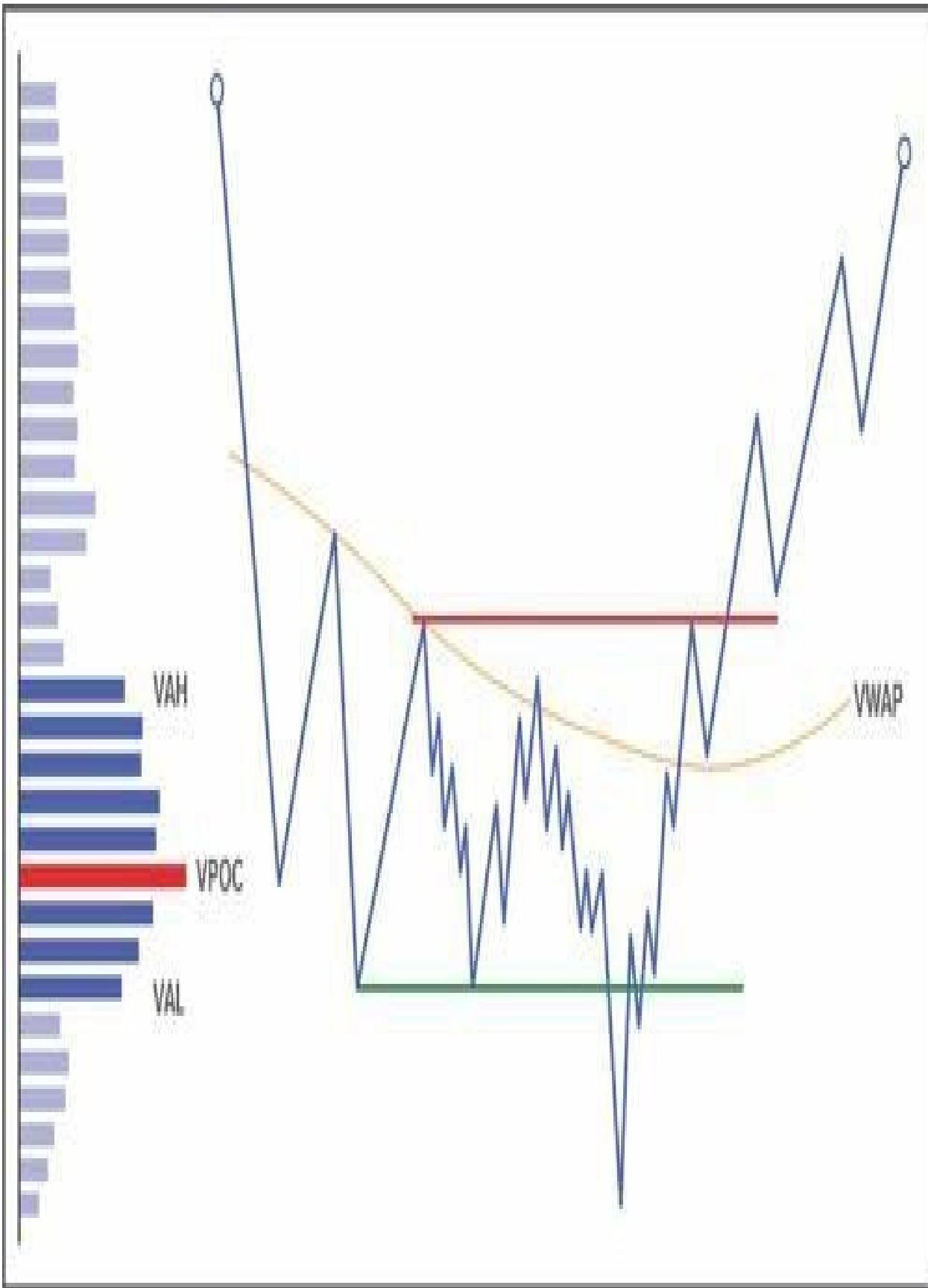
Stopping the previous trend

Construction of the cause

Evaluation of the competition

Trend movement within range

Trend movement out of range



2.4.2 Operational zones

The objective is to identify the location of the trading areas according to price levels.

To do this we will rely on the Volume Profile tool. Although we will deal in depth with this tool later on, for the time being we will only use it to identify trading zones and operational levels based on volume, which will be very useful for setting up scenarios, among other things.

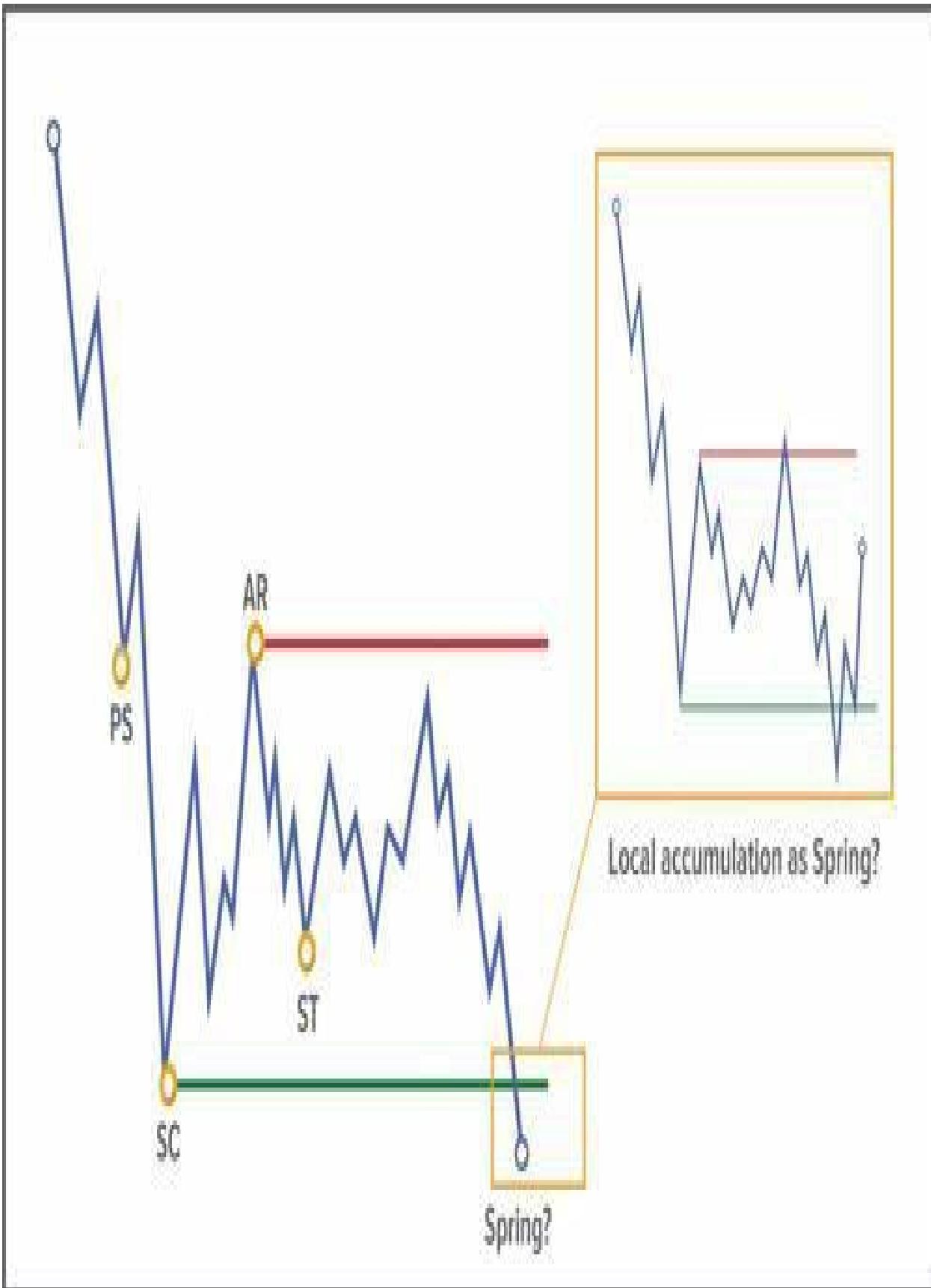
As the market moves from one balance zone to another, we must know where we are at the present time and which are the top and bottom trading zones in order to take them into account as possible targets to visit.

The Volume Profile is a tool that adds objectivity to our analysis, and in confluence with the reading of the market offered by the Wyckoff methodology enables us to better determine who is likely to be in control of the market.

2.4.3 Decrease in temporality. Structures from major to minor

Once this general context is clear; that based on where the price is on the top chart we determine as more interesting to raise long or short; and that we have identified the operating areas both above and below, we can go down in time to start a new analysis there.

We could then open the 8, 4 or 2 hour chart as an intermediate temporality.



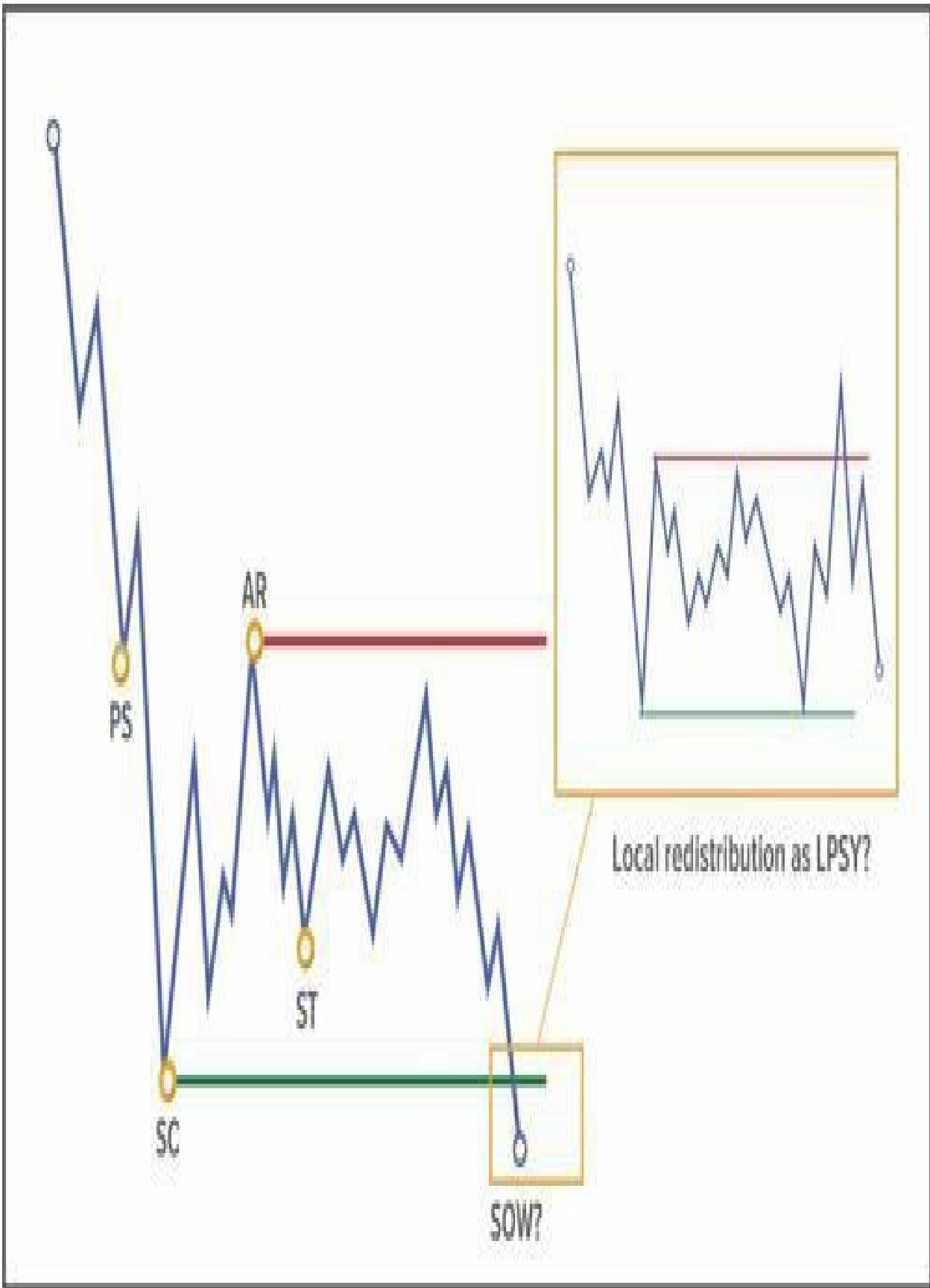
Once the first more general analysis is done (on the monthly, weekly or daily chart), we may determine that the market situation is favorable to look for a buy incorporation. At that point, it would be interesting to see the development of a smaller accumulation structure that would support such an idea. For example:

If we are in a situation of potential Spring (Phase C) of the upper time frame, observing traces in a minor structure that suggests a certain entry of buyers would be the ideal situation. On the one hand we are in an interesting operational situation of the macro structure and at the same time we observe a potential acaccumulation minor structure. We would be in front of a potential minor accumulation structure that if confirmed would act according to the potential Spring of the major structure.

If we are in a situation of BUEC potential (Phase D) after an upward rupture and the analysis of the footprints accompanies it, in this position we should favour the continuation of the route map of the development of the structures and therefore look for a minor structure of reaccumulation in function of test to the broken structure to continue later with the tendential movement out of range.

If we find ourselves during the development of an upward trend movement (Phase E), we will favour the development of minor structures of reaccumulation to try to incorporate the long in favour of the movement. We do not know the momentum with which the market can move and the imbalance in favor of that direction may have some urgency. This urgency can generate the development of rapid structures and that is where we want to be.

This is why we go down the road: to look for smaller structures that fit into the context of the analysis of larger structures. This is the dynamic we have to keep in mind with regard to context analysis, where minor structures fit within major structures.



But be careful because the fact that we are initially biased towards one direction should not mean that we are not totally objective when analyzing that minor structure, because as we already know, we would be in a key zone, a liquidity zone, and it is susceptible to provoke the entrance of great volume to the market. In other words:

The Potential Spring situation is also at the same time a situation of potential effective bearish break. The analysis of the major structure may suggest that the control is in the hands of the buyers; but if during the development of that minor structure we do not observe these same signs, and on the contrary we see the appearance of strong selling, it would not make sense to continue favoring the accumulation scheme and instead we should propose the bearish scenario.

The situation of potential upward break is also at the same time a situation of potential upthrust. If the time comes, where we should favor the development of a smaller accumulation scheme depending on BUEC of the larger structure, the price generates a smaller distribution structure, this would activate the short scenario and leave such a smaller distribution structure depending on the upthrust of the larger one.

Hence the importance of having an open mind and not being too rigid with respect to directional biases. In addition, it is always necessary to have both long and short scenarios prepared in order not to hesitate when the time comes to make decisions.

If you wish, you can continue to lower the timeframe for structure analysis. The key point is to favour the development of the larger structures over the smaller ones. With this principle in mind, it is already at the discretion of each operator to decide how far to go down in temporality. Keep in mind that the more you go down, the more noise you will see.

2.4.4 Increase in temporality. Structures from minor to major

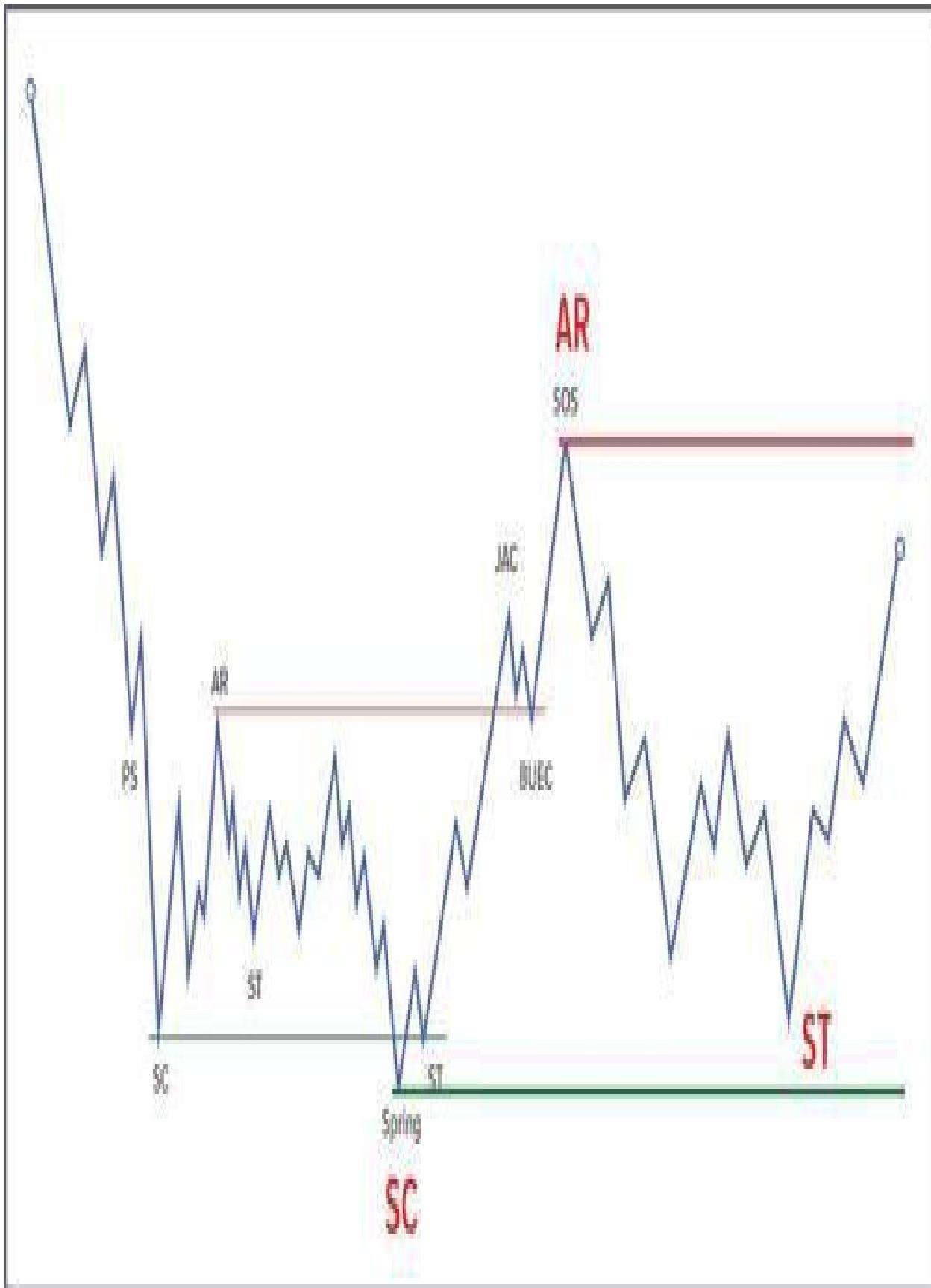
Another very recurrent question is what type of structure to work with, how to decide to move from one structure to another.

It is a somewhat more complex question that already denotes some knowledge of the methodology. After internalizing all the theoretical knowledge, the subconscious begins to reason and raise this type of interesting doubts; and this fact is tremendously significant as a sign that good work is being done.

Unlike what happens in the analysis of the context where the development of the major structures is prioritized by fitting the minor structures within them; when it comes to the first identification of a structure we are going to prioritize the development of the lower time frame structures and then move on to higher time frames in case the price tells us so.

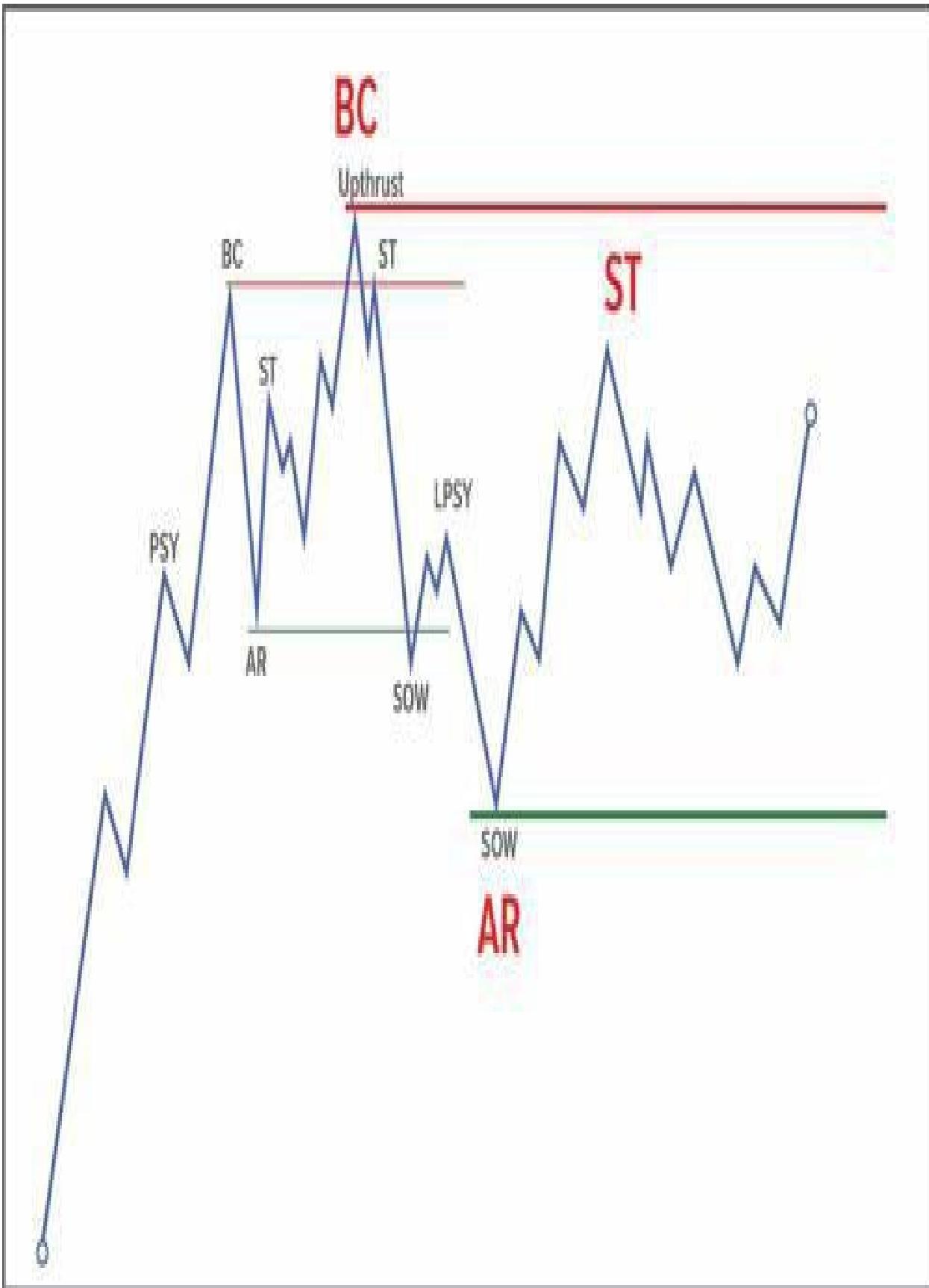
When the market is developing the effect (trend movement) of a previous cause (accumulation/distributive range) we will be observing lower time frames mainly for two reasons: to identify minor structures with which we can join the movement; and to identify the stop of such trend movement.

The first of those reasons has already been commented in the previous section and it is one of the situations for which to lower temporality. On this occasion, it is a matter of analyzing at what moment to go up in temporality.



In this context of speed, minor structures may begin to develop and these could be the origin of the development of major events visible on higher time frames. For example, if the market has been falling and we observe the development of a rapid accumulation scheme over a small time frame, the effect of this minor accumulation could be the generation of the Automatic Rally event visible over a higher time frame.

This may seem a bit confusing at first, but it is not at all. I repeat the example in reverse: If the market is rising during the development of Phase E after an accumulation, we may observe a distribution scheme that will act as a Buying Climax event, and the effect of this distribution would act as an Automatic Reaction event on some higher time frame.



Obviously it is not necessary to go down the time frame to identify such events, everything will depend on the type of operation you decide to carry out. There are experienced operators that operate this type of minor structures against a trend but being aware that they must be short term movements, according to the structure that has been developed.

It is only a matter of exemplifying under which condition it is reasonable to go up in time to have a clear general analysis.



In this real example we see at the confluence a failed accumulation structure that rotates towards a larger accumulation structure.

The concept has been originally explained as a minor structure that is fully developed and in turn is part of a major structure. In this example we see another way in which this concept can appear on the market.

We observe the development of all the events of a minor accumulation structure and how at the moment of truth, in a position of potential BUEC, the market leaves a failure of continuity upwards. It is right there where the operator may want to consider as more logical the possibility of observing all that price action as a whole as if it were part of a larger structure. In this way, the Automatic Rally of the longer term will be determined from the minimum of the SC to the maximum of the UA of the smaller structure. Likewise the JAC will now be seen as a simple test denoting strength (UA) and from there the rest of the accumulation events will appear.

From the first moment, the strength that existed in the background should be highlighted, evidenced by the inability of the price to visit the lower part of both structures. Another interesting detail is to see that the major BUEC develops it just over the High Volume Node that also coincides with the VPOC of the whole structure.

2.5 What to do when the context is not clear?

We may open a chart and see absolutely nothing clear. Neither a clear trend movement, nor a lateralization preceded by a stop phase. In this situation we have two options:

1. Increase the time frame

As we know, the smaller the time frame, the more noise we observe. It is very healthy on these occasions to increase the time frame to see the general image of where we are.

Maybe what seems to be a chaos on intraday charts you can see the logic in higher temporalities.

If you have done a good analysis from scratch as we proposed, you will have gone from higher to lower time frames. So, just stay in the timeframe where you see the price action most clearly and don't go any lower.

For example, if doing the context analysis you are well placed in H1, you go down to M15 but don't feel comfortable there, go back up to H1 and discard the possibility of analyzing lower charts.

2. Change assets

You may not be able to place yourself solidly on any time frame. At this point, and considering the amount of tradable assets out there today, what need do we have to trade something that we don't really see clearly? It doesn't make sense.

Whether you're trading stocks, indices, currencies, commodities or cryptocurrencies, the number of these tradable assets is large enough that you don't have to force the analysis, so if something isn't clear to you, you go right to the next one.

2.5.1 The controller

This doubt also comes in handy when identifying one of the big mistakes some traders make when deciding to trade only one asset. This leads them to want to control every single price movement, which can be disastrous for the account. That word, control, may be one of the most damaging in the trading world. You can't control anything at all. Our focus should be on trading only the clearest settings and with the best possible risk/benefit ratio.

A very curious thing is that it is often agreed that the trader who trades only one asset does so over small time frames. It is the perfect combination for ruin. And as you will surely like the labels (for the fact of having controlled every movement), because we have a trader who is leaving his eyes and mind trying to decipher every movement and on top of that he practically does not see what the price does since he will have a 1 or 2 minute chart full of labels.

Let's get away from this because it's impossible for anyone to hold out like this for long. The energy expenditure is brutal and the ability to concentrate required to maintain an optimal level of judgment is very high. Very few people will actually be able to do this kind of trading. The vast majority are bound to be severely distracted.

Let's move up the time frame and embrace more assets. No doubt it is good to specialize in some market (since each one has its own peculiarities regarding better schedules, volatility etc.), but do not focus exclusively on one. Have a list of a few (even 3 or 4) to follow and specialize in if you want to.

Finally, comment that on top of all this we keep forgetting that most market movements are of a random nature; and this means quite simply that they have no directionality behind them. As I commented in the first pages of my first book, some of the ranges fluctuate up and down without any intentionality behind them, without constructing any kind of cause. This is pure randomness. They are those ranges in which you see absolutely no clear footprint and you cannot make a judicious analysis about who can have control of the market. We must be aware of this.

Part 3. The current trading ecosystem

Although the following section is not directly related to the more technical approach of the Wyckoff methodology, it is important and enriching to understand the general context in which today's markets move.

Markets have undergone a paradigm shift and have migrated in just a few years from an operation carried out entirely by people in a face-to-face manner to one that is fully electronic thanks to technological advances.

This has contributed to the emergence of new actors within the investment world, new ways of operating and even new markets.

Undoubtedly, all this has led to a democratization of investment allowing access to the retail operator, which had vetoed its participation not so many years ago. In this respect, it is not by chance that most retail operators lose. The whole industry is set up to make this happen and their participation simply serves as another (very small) source of proportion of liquidity to the market.

It is important to keep your feet on the ground. The world of trading and investment is too complex for a home based retail trader with an internet connection and a computer to get any return on his capital. It has everything against it, starting with the fact that it is an area dominated by large institutions which devote huge amounts of money both to developing powerful tools and to hiring the most skilled people.

Next we will address from a very basic point of view some of the lesser known

aspects of the current trading ecosystem that have some relevance since they could influence our operations.

3.1 Types of participants in the financial Markets

Knowing those who have the ability to influence the price movement gives us a more solid point of view when making trading and investment decisions.

Financial markets are made up of diverse agents with different ways of trading based on their needs at that specific moment.

One of the biggest mistakes we can make is to think that all market movements are orchestrated by a single entity. Some even refer to the "caretaker" of the market by referring to some of the most traded assets. Nothing could be further from the truth.

Al Brooks explains this very well in his books. 90% or more of the traded volume comes from institutions, which means that the market is completely controlled by them. No trade can be executed without one institution being willing to take one side of the position and another institution being willing to take the opposite side. It is a battle between them. The market will not be able to move at the slightest tick if there is no institution behind the move.

Our goal therefore is to analyze the behavior of the chart to try to determine on which side is most of the institutional money.

We will categorize the different market participants according to their intention:

Hedgers

Basically, it is the execution of financial operations aimed at cancelling or reducing risk. They consist of the acquisition or sell of a product that is correlated with the asset on which the coverage is to be established.

Although the main objective of the hedge is to limit the risk, it can also be used to ensure a latent profit or preserve the value of an asset.

These operators do not care what direction the price takes since it is not their company's core business. They do not operate with a directional intent and have a more long-term vision.

Although there are different ways to carry out the coverage, the most traditional is the producer-oriented one:

An example would be an airline company that buys oil futures as a resource to balance its fuel costs.

Another example could be a large international importer/exporter company that buying foreign currency to hedge against price changes.

Market makers would also be included in this category as they could go to the market depending on their needs in order to maintain a neutral risk of their total positions.

Speculators

Unlike hedge traders, who operate primarily to reduce their risk exposure, speculative traders take risk by opening their positions.

If given current market conditions they consider the price of the asset in question to be cheap they will buy and vice versa if they consider it to be expensive with the sole objective of making a profit from the price movement.

Here we find Hedge funds, funds, trading firms and in general any institution that operates directionally in the market to seek a return.

They cover different temporalities and execute operations also by means of high frequency algorithms.

They are the most active operators in the financial market. They basically focus on the search for liquidity zones since, due to the large amount of volume they move, they need that counterparty to match their orders.

There is a very common mistake when thinking that all institutions are profitable. Many of these institutions are the preferred victims in the financial market since they move significant amounts of volume and may have an unsound operating approach.

Although not purely speculative in nature, some options traders may fall into this category because if they have a large open position in the options market, they

are very likely to turn to the futures market to try to defend it if necessary.

Arbitrage

It consists of taking advantage of the imperfections of the financial market. These operators observe inefficiency in prices and execute transactions with the objective of correcting it and adjusting prices.

There are different ways to arbitrage: either by trading a single product, trading different correlated products, trading between different markets and even trading between contracts with the same and different expiration dates.

An example would be trading a mismatch between two markets for the same asset, such as the spot market and the future. We can have for example the cross of currencies of the Euro against the Dollar (EURUSD) and the derivative in the futures market (6E). An arbitrage strategy will take advantage of the minuscule price difference that may exist between these two markets to obtain an economic benefit.

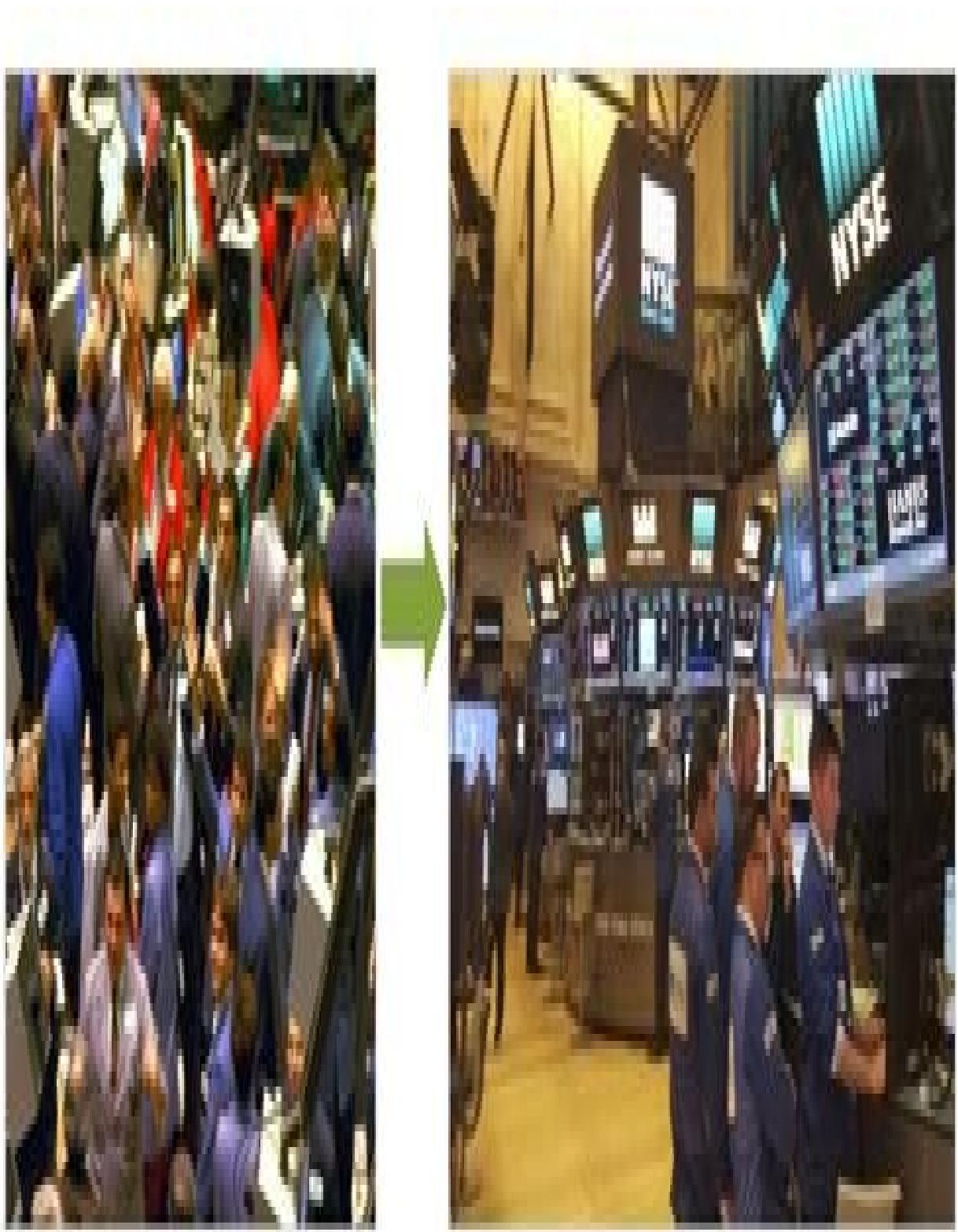
Far from this we also have the Central Banks. They are the ones with the greatest capacity since they direct the monetary policies of the countries mainly through the establishment of interest rates.

Of the rates seen, the only one that would enter the market with the directional objective of adding pressure towards one side or the other would be the speculative operator. The rest of the transactions would have a different intention but would still ultimately be represented on the price.

The fact that not all transactions are speculative in nature is a very important factor to take into account. Many make the mistake of thinking that every trade has a directional interest behind it and in most cases this is not the case. There are many types of participants who interact in the market and the needs of each one are different.

In addition to the intentionality of the operation, it is important to highlight the different uses of temporalities that each operator works with. While some take into account the short term, others maintain medium or long term strategies. The key point is that each and every one of the market's movements is being supported by a large institution and that at any moment another one with a longer term perspective with a greater capacity to influence the price can enter.

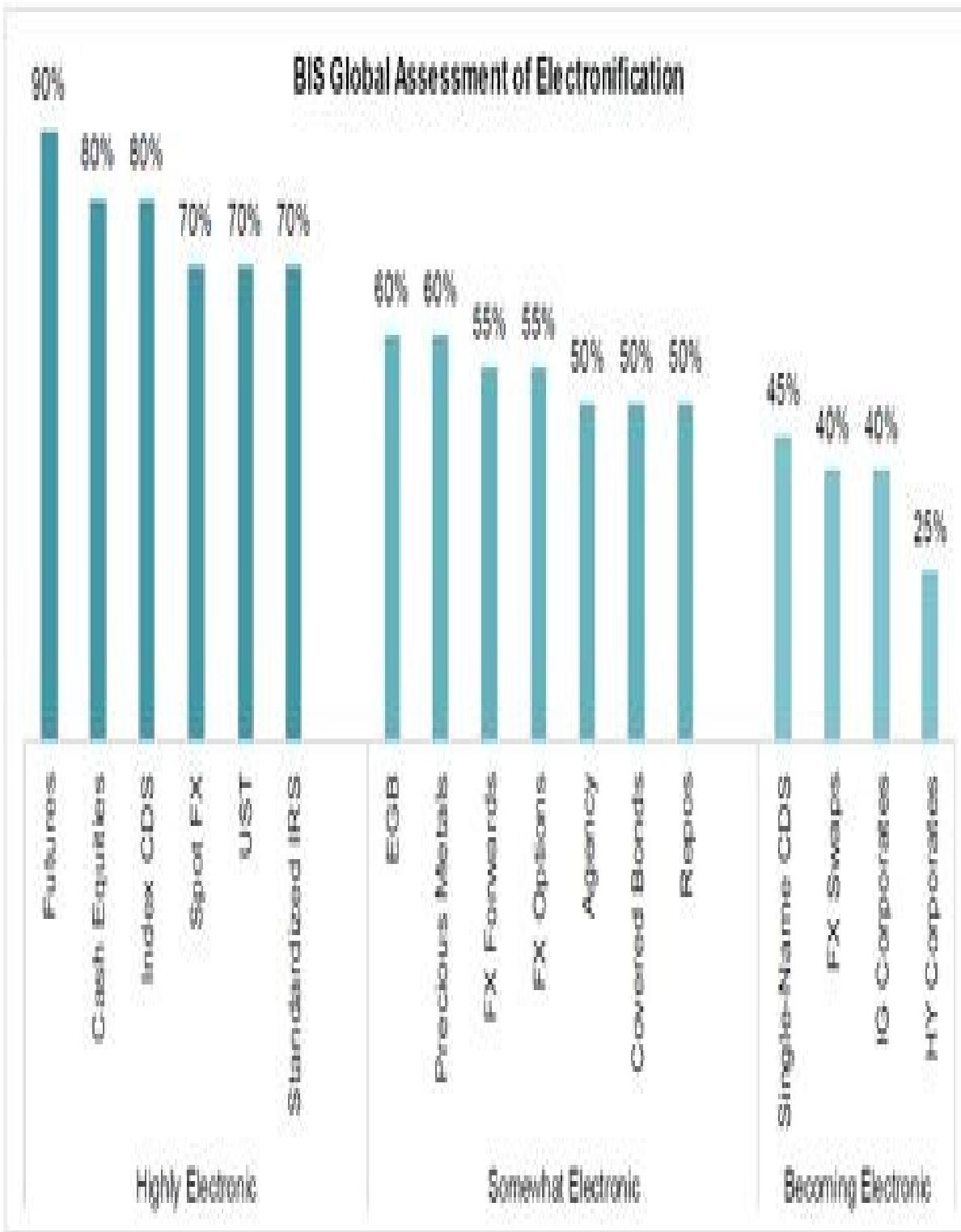
3.2 Electronic markets



Source: SIFMA Insights, Electronic Trading Market Structure Primer

Since 2007, the bags have gone from being controlled by humans to a fully automated and electronic environment where the only thing that really exists is computers to perform order matching processing.

With the arrival of new technologies, computer advances and regulatory changes to the financial world, the importance of speed in transmitting and receiving data has grown, reaching the present moment where electronic trading represents the majority of the volume traded.



Source: SIFMA Insights, Electronic Trading Market Structure Primer

The most traded products such as futures, stocks and index CDS show the highest degrees of electronification with 90%, 80% and 80% respectively. On the other hand, corporate bonds are at the lower end of the spectrum as they are more customised products, representing 40% and 25%.

All of these advances have helped to improve market efficiency by adding liquidity, reducing costs, increasing the speed of execution, improving risk management and allowing access to specific markets.

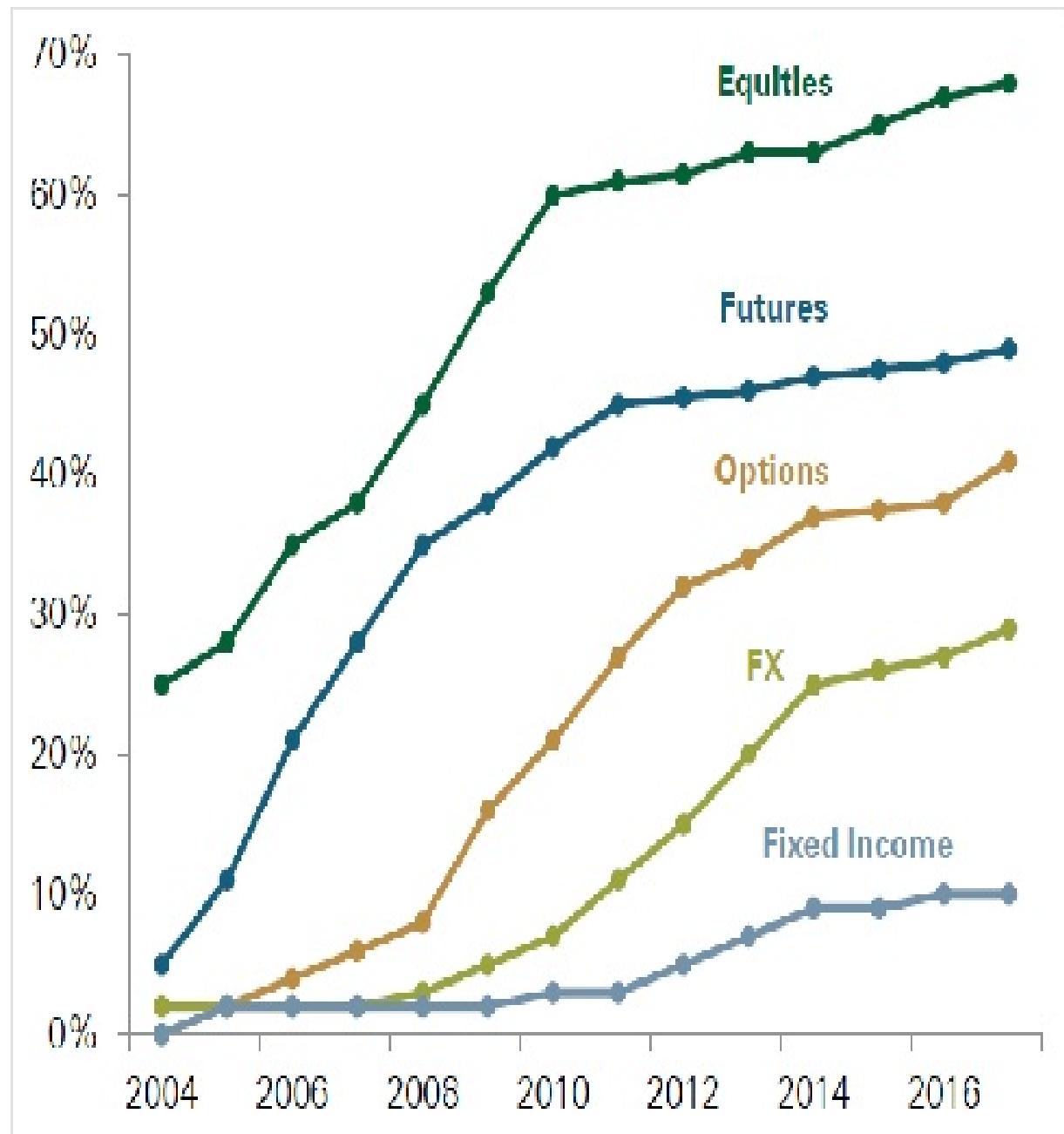
3.2.1 Algorithmic trading

It is a process of order execution based on well-defined and coded rules carried out by a computer automatically, thus avoiding human participation.

It uses complex statistical and econometric models on advanced platforms to make decisions electronically and independently.

It mainly uses price, time and volume as variables; and was developed to take advantage of the speed and data processing advantages that computers have over human operators.

Exhibit 2: Market Share of Algorithmic Trading by Asset Class



As of 2017.

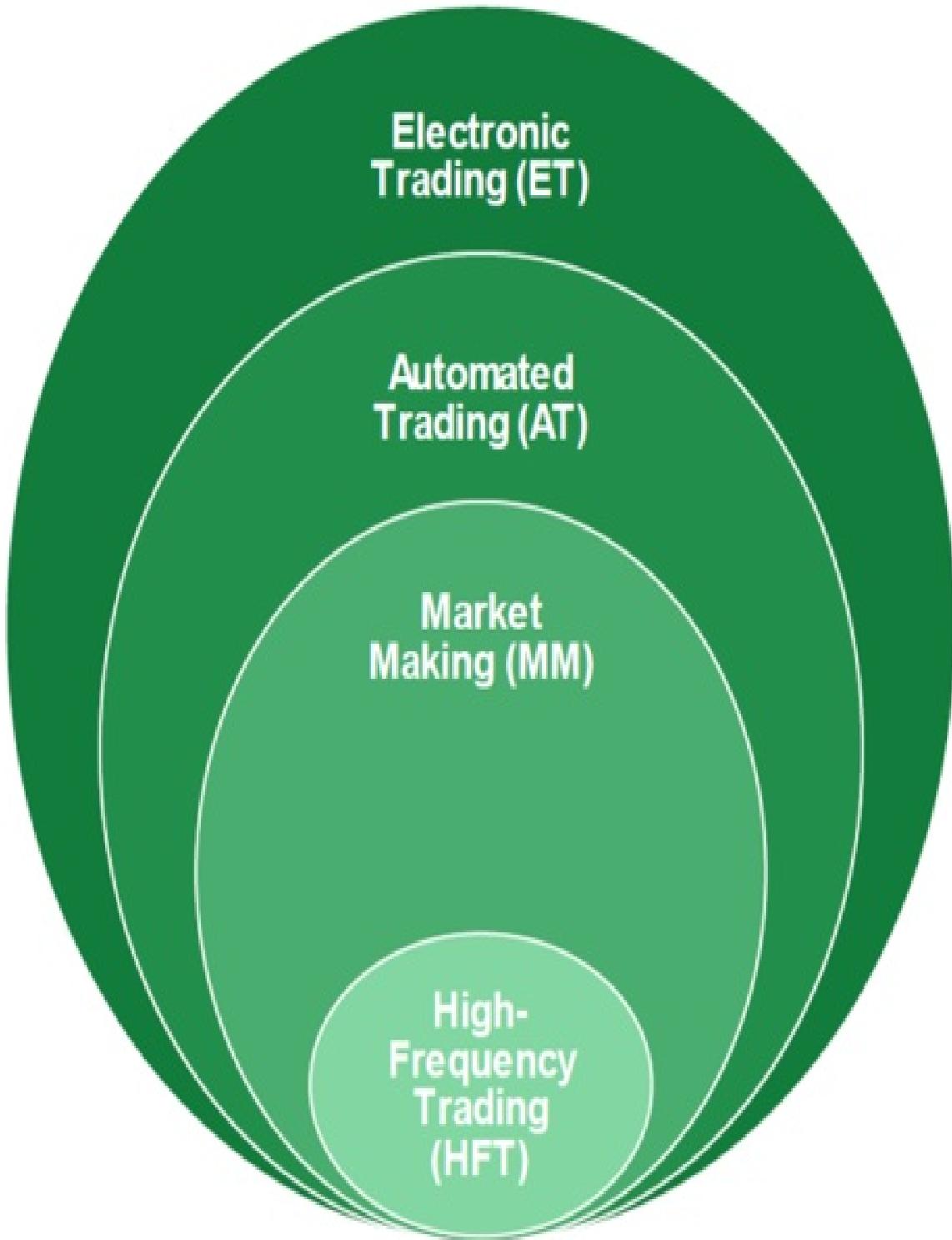
Source: Goldman Sachs, AiteGroup

These strategies interpret market signals and implement trading strategies automatically based on them, with operations of varying duration.

The increase in market share in recent years of algorithmic trading in all asset types is simply spectacular, and forecasts for subsequent years follow the same dynamics.

One of the reasons for this growth is due to the appearance of artificial intelligence in the financial sector.

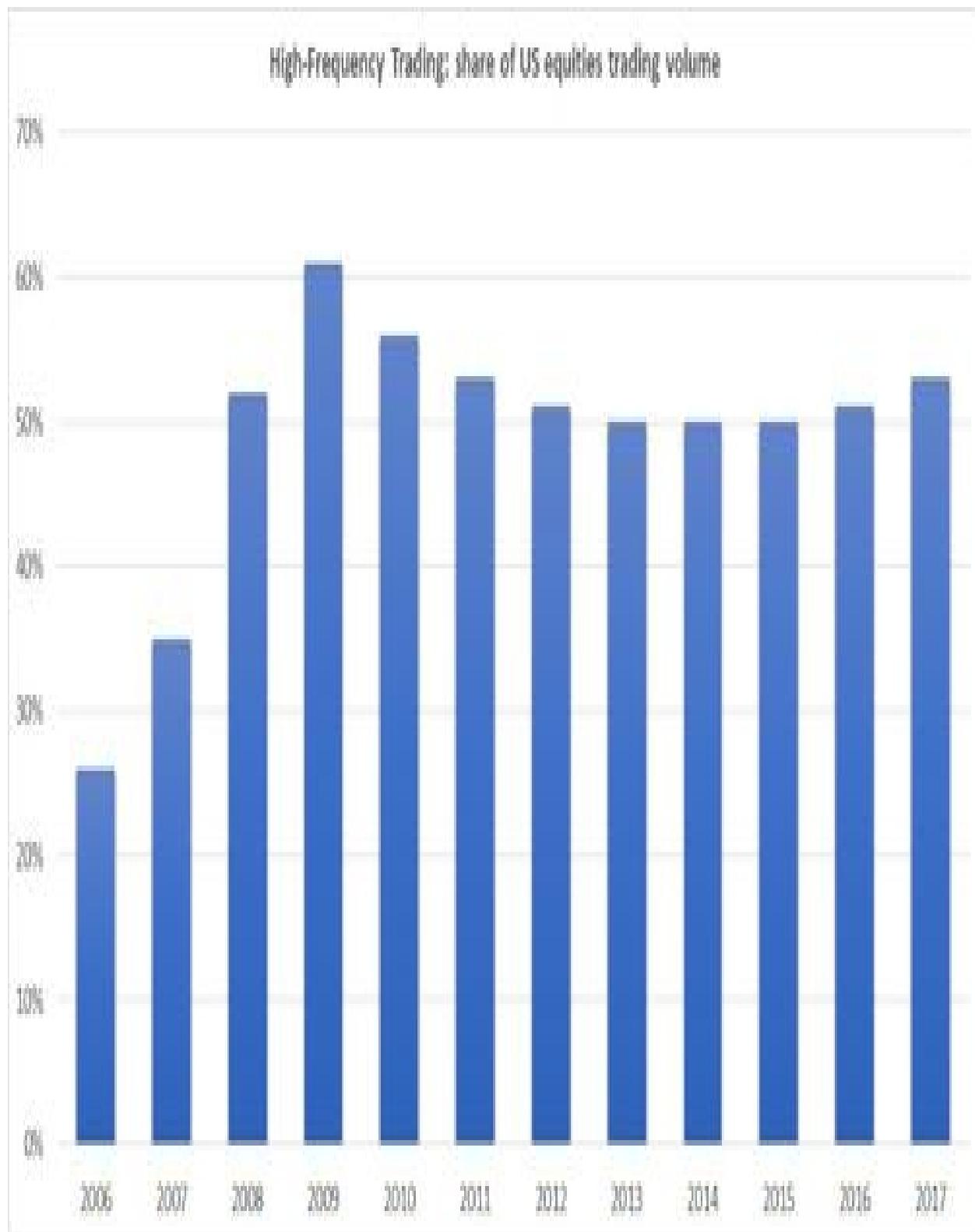
3.2.2 High Frequency Trading



Source: SIFMA Insights. Electronic Trading Market Structure Primer

High Frequency Trading is a type of algorithmic trading but applied on a microsecond scale trying to take advantage of very small changes in asset prices.

It is based on the use of mathematical algorithms with which orders are analyzed and executed according to market conditions. They make thousands of trades in a short period of time managing to make money in a systematic way and with a high probability.



Source: TABB Group, Deutsche Bank, ResearchGate

Their main advantage is the speed of processing and execution, which they achieve thanks to the dedication of powerful computers. That is why the general public that operates from home simply does not have the means to access this type of operation. Therefore, it is a style reserved almost exclusively for institutional operators with large capital.

Although in Europe it is slightly lower, the share in the American stock market represents continuously over 50% of the total volume traded. It is interesting to note how the 2009 crisis led to a decrease in HFT's share mainly due to increased competitiveness, high costs and low volatility.

Do not confuse High Frequency Trading with the automatic systems that can be created by a retail trader (which can fall into the category of algorithmic trading). Generally these types of tools (known as EAs, robots or bots) are not very effective; something very different from High Frequency Trading, which costs millions of dollars and has been developed by large financial firms to trade significant amounts daily.

How do high-frequency algorithms affect us?

The fact that in today's markets most of the traded volume comes from high frequency algorithms does not greatly influence the structure-based analyses that we can do mainly because we do not compete to exploit the same anomalies.

While our analyses seek to take advantage of a deterministic section of the market where we try to elucidate who has more control (buyers or sellers), high frequency algorithms seem to be more located in the random section of the market, mainly because of their categorization: arbitrage, directional (momentum and event-based) strategies and market creation (proportion of liquidity).

Although it is true that some algorithms can execute directional strategies (with the aim of benefiting from price movements), these cover the shortest term and although they may distort our analysis, the advantage offered by the study of the Wyckoff methodology is that it provides us with a structural framework thanks to which we can minimize some of the noise originating in the smaller scales and obtain a more objective feeling of the current market conditions taking into account a larger context than that covered by these algorithms.

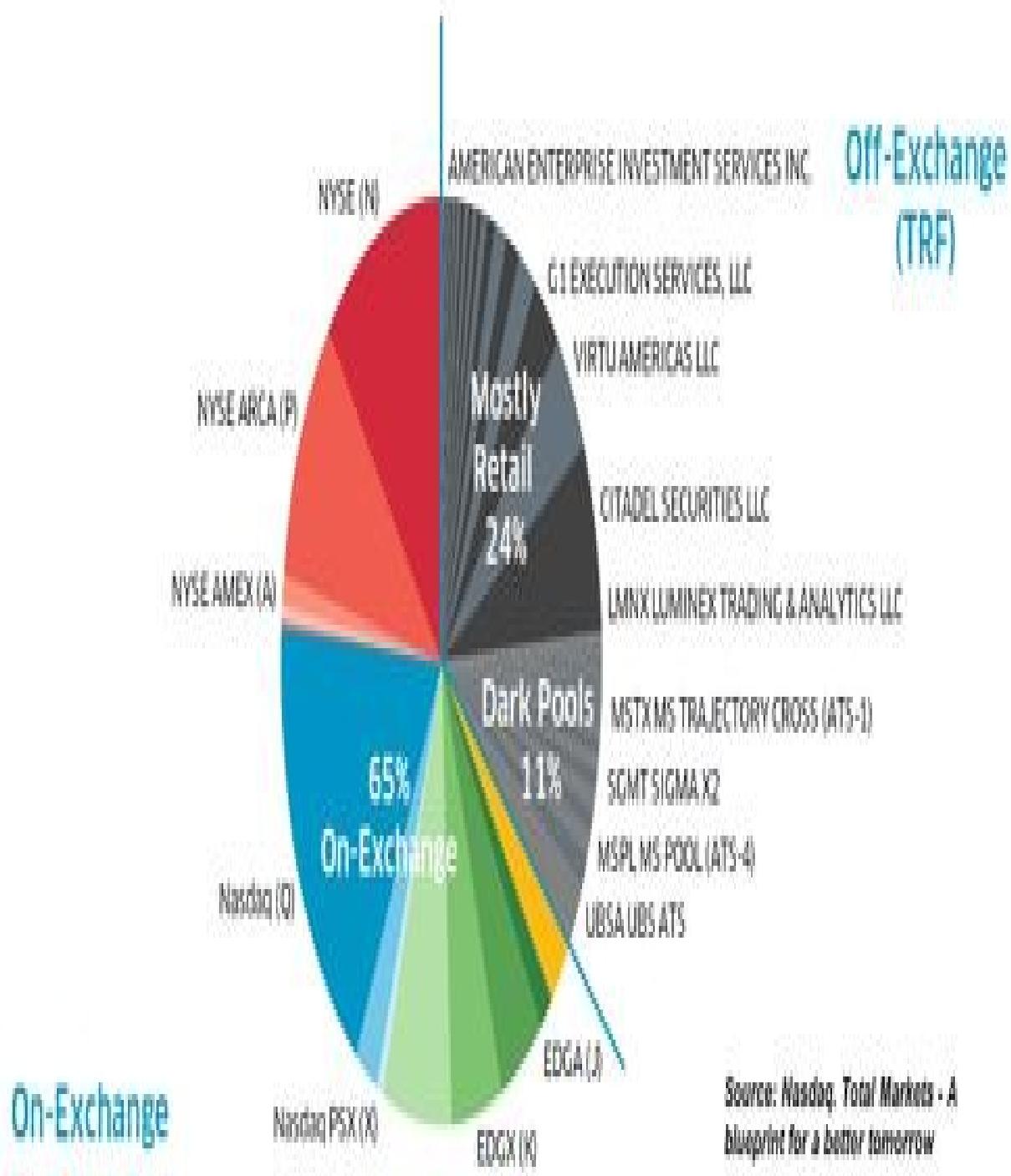
3.3 Over The Counter Markets

This is a type of electronic market where financial assets are traded between two parties without the control and supervision of a regulator, as is the case in the stock and futures markets.

The main difference we find between centralized (On-Exchange) and non-centralized (Off-Exchange) markets is that in centralized markets there is a single order book which is responsible for linking all participants in that market; while in non-centralized markets there are multiple order books (as many as there are market makers) where the lack of transparency with respect to market depth is evident by showing only the price of the IDB and the ASK.

Total Market Equity Share

Total volume based on October-November 2018



Source: Nasdaq, Total Markets - A blueprint for a better tomorrow

In recent years the American market has suffered a process of fragmentation where more and more decentralized markets have been created. Currently, the liquidity of US stocks is divided among about 88 different sources, with almost 40% of the transactions taking place in non-centralized markets.

Within non-centralized markets we find different brokers based on the treatment they give to their clients' orders. On the one hand there are those who have a trading desk (Dealing Desk) that act as the client's counterpart (known as Market Makers); and on the other hand those who do not have a trading desk (Non Dealing Desk) that act as intermediaries between the client and the rest of the market.

This second type, non-dealing desk brokers, is the one we recommend working with. The reason is because Market Makers are in charge of offering the final price of the asset, making the process less transparent.

Having the ability to take the counterpart in their clients' operations opens the door to possible conflicts of interest, since if the client wins the broker loses and vice versa. And obviously the broker will do everything possible to keep your business profitable.

When you add the fact that the owner of the market is in charge of offering the final price together with the possibility of being the counterparty at the same time, one of the main dangers for the retail operator appears and is that he is exposed to suffer some kind of manipulation in the price movements.

It is also important to know that, by the very nature of this type of non-centralized market, there can be different prices for the same asset. This means that if you want to trade the EUR/USD currency cross, each market maker will

offer you a different price and volume.

How do OTC markets affect us?

The problem we find here is that the analyses we make under this type of market will be based on data that, although they could be a significant and valid representation of the entire market, in reality do not genuinely represent all the price and volume data.

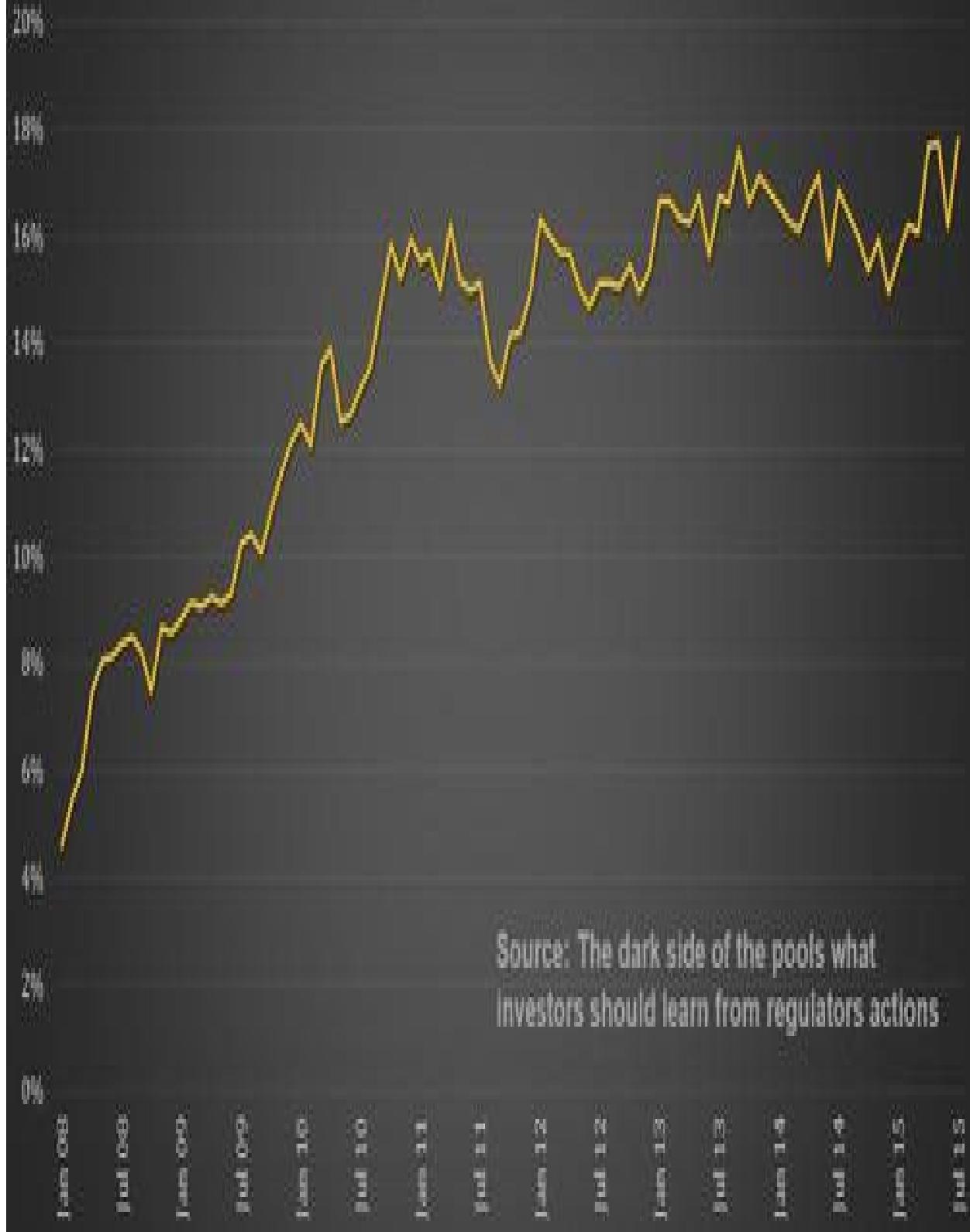
In order to have a reliable data, we will have to analyze this asset under a centralized market. Following the example of the EUR/USD, we should analyze the futures market (centralized market) which corresponds to the ticker \$6E.

What is recommended therefore is, if you do not have the economic capacity (sufficient capital) to operate this futures market, we can analyze the asset in this futures market and execute the operation through another financial derivative more affordable as the CFD (Contract For Different) with a good broker (which is not market maker). An intermediate option would be to trade the small version of the future, the micro future, which in the case of the EURUSD corresponds to the ticker \$M6E.

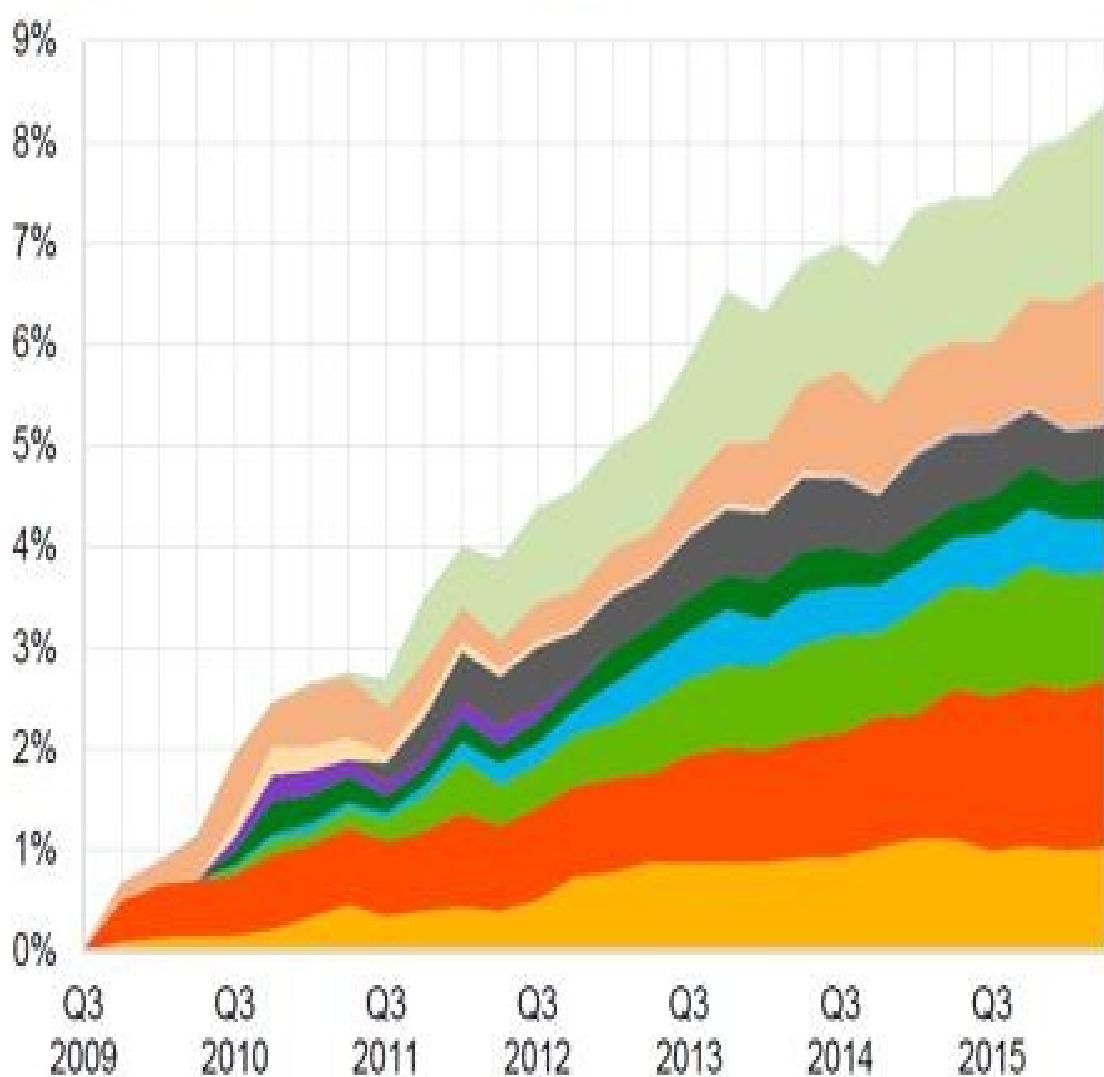
If we open a chart of the future (6E) and the CFD (EURUSD) we will see that the price movements are practically the same even if they are different markets. This is possible thanks to an arbitrage process carried out by high frequency algorithms and that occurs systematically between both markets.

3.4 Dark Pools

Dark Pools - % of Consolidated Volume



A Dark Pool is a private market (Off-Exchange) that connects institutional investors and facilitates the exchange of financial assets with the peculiarity that their transactions are not reported immediately, the amount traded (the volume) is not known until within 24 hours.



Source: Dark pools in European equity markets: emergence, competition and implications

The transactions in non-centralized markets of shares in the USA are approximately 35%, being carried out in Dark Pools from 16 to 18%. And according to a Bloomberg study, Dark Pools operations already account for over 30% of the total volume traded.

The market share of Dark Pools in European stock trading has expanded rapidly in recent years, growing from 1% in 2009 to 8% in 2016.

When a large institution wants to buy or sell a huge amount of an asset it goes to this type of market mainly because it knows that if it accesses the public market it will have a hard time finding a counterpart, which will possibly get a worse price in addition to being exposed to predatory techniques such as Front Running executed by high frequency algorithms. In this type of market they avoid this negative impact and at the same time obtain better commissions since they save the fees demanded by the public markets.

Unlike what many people may think, Dark Pools are highly regulated since their owners are registered with the SEC (Securities and Exchange Commission) and FINRA (The Financial Industry Regulatory Authority) and therefore are subject to regular audits and examinations similar to those of a public market.

In addition to private financial institutions, there are public exchanges that have their own Dark Pools such as the New York Stock Exchange (NYSE), the most traded and liquid exchange in the world.

The CME (Chicago Mercantile Exchange), which is the market with the largest number of options and futures contracts in the world, also has its own Dark Pool and offers this opaque trading service through what they have called "Block Trades". In their own web they explain in detail the information about it, to be

highlighted:

“A Block Trade is a privately negotiated futures, options or combination transaction that is permitted to be executed apart from the public auction market. Participation in block trades is restricted to Eligible Contract Participants as that term is defined in the Commodity Exchange Act.

Rule 526 ("Block Trades") governs block trading in CME, CBOT, NYMEX and COMEX products. Block trades are permitted in specified products and are subject to minimum transaction size requirements which vary according to the product, the type of transaction and the time of execution. Block trades may be executed at any time at a fair and reasonable price.”

How do the Dark Pools affect us?

The activity carried out in the Dark Pools has an important role in the determination of the intraday yields and in the uncertainty that can be related to them, having therefore important microstructural implications.

It turns out that we may be analyzing an asset in which very significant transactions have taken place in a hidden way and obviously we cannot even value the intentions of the buyer.

These transactions, since they are not determined by the supply and demand of the public market, do not have an immediate impact on price formation; but there are studies that state that public market operators react to the report of orders executed in the Dark Pool once it is released, and can significantly alter the analysis of the interaction up to that moment.

3.5 Are markets random or deterministic?

This issue is another of the great debates within the trading community and is certainly generating a lot of controversy. The vast majority of those who position themselves in favor of the randomness of the market do so with the aim of discrediting the usefulness of technical analysis. On the other hand we have those who observe each and every one of the price movements and give it an intention, a gross error. Not everything is black or white.

Randomness is based on the premise of market efficiency while determinism (non-randomness) is based on market inefficiency.

The random market approach suggests that the current price already reflects all the information of the events occurred in the past and even the events that the market expects to occur in the future. In other words, all the information about the asset is absolutely discounted and therefore it is not possible to predict future price action. The reasoning is that, when participants try to take advantage of new information, together they neutralize such advantage. This would lead to the conclusion that it is not possible to take advantage of the market's own interpretation, unless the trader has access to insider information.

The deterministic market approach suggests that price movements are influenced by external factors so by knowing what those factors are you can predict future price action and therefore can benefit from the market's interpretation.

When we speak of randomness we mean that this market movement does not have a logical intention behind it; it is simply a price fluctuation. Randomness is

born as a result of the innumerable variables that take place in the market. No one can know how the other market participants will act. If someone knew, they would have a deterministic system whose predictions would be right every time.

On the one hand, if the Efficient Markets Hypothesis (EMH) and the randomness of the market were valid, no one would be able to profit on a recurring basis. And it has been shown throughout history that this is not the case. We all know great traders in the financial markets who have managed to make profits with different approaches (technical, fundamental and quantitative). Besides this fact, the efficient markets hypothesis has suffered many criticisms mainly because it assumes a rational behavior of the agents in their decision making.

On the other hand, financial markets cannot be modeled as a totally deterministic process where there is no randomness since this would mean that there would be strategies with a 100% probability of success and this (which is known) is not the case either.

3.5.1 The adaptive market hypothesis

We therefore conclude that financial markets are composed of a percentage of randomness and another percentage of determinism, without knowing how much weight each has.

This theory would be supported by the Adaptive Markets Hypothesis (AMH) which shows the efficiency of financial markets not as a present or absent characteristic, but as a quality that varies according to market conditions (the environment, context), which are determined by the interactions between its agents.

This hypothesis has been presented by the American financial economist Andrew W. Lo in his book *Adaptive Markets* published in 2017 and is mainly based on:

The efficiency of the market depends on its conditions. This changing characteristic is the result of participants' interactions that in turn depend on market conditions.

The agent is not totally rational and is subject to cognitive biases. A purely rational model cannot be applied since participants form expectations based on different factors. Furthermore, with the same information, different expectations can be created, not to mention that each agent has different degrees of risk aversion.

Although the author refers to agents as personal individuals, this is equally applicable to the current trading ecosystem where we have already commented

that practically all actions are done by algorithms in an electronic way. This fact does not change the basis of the adaptive hypothesis since, independently of the market participant and the way in which he or she interacts with the rest of the market, the latter will make his or her decisions based on the valuations, motives or needs that they have at a given moment; and that given moment will be conditioned by different factors; factors that will change over time and therefore make the valuations, motives or needs of the participants change.

The AMH does not focus on discrediting the Efficient Markets Hypothesis, it simply treats it as incomplete. It places more emphasis on changing market conditions (due to the arrival of new information) and how participants can react to them. It focuses on the fact that rationality and irrationality (efficiency and inefficiency) can coexist in the market at the same time depending on the conditions.

3.5.2 Where does the Wyckoff methodology fit in?

Landing on what we are concerned with, the reading of the market under the principles of the Wyckoff methodology is based on a deterministic event of the market: The law of Cause and Effect, and that is that for the market to develop an effect (trend) there must first be a cause (accumulation/distribution). There are other deterministic events that can offer an advantage, such as seasonality.

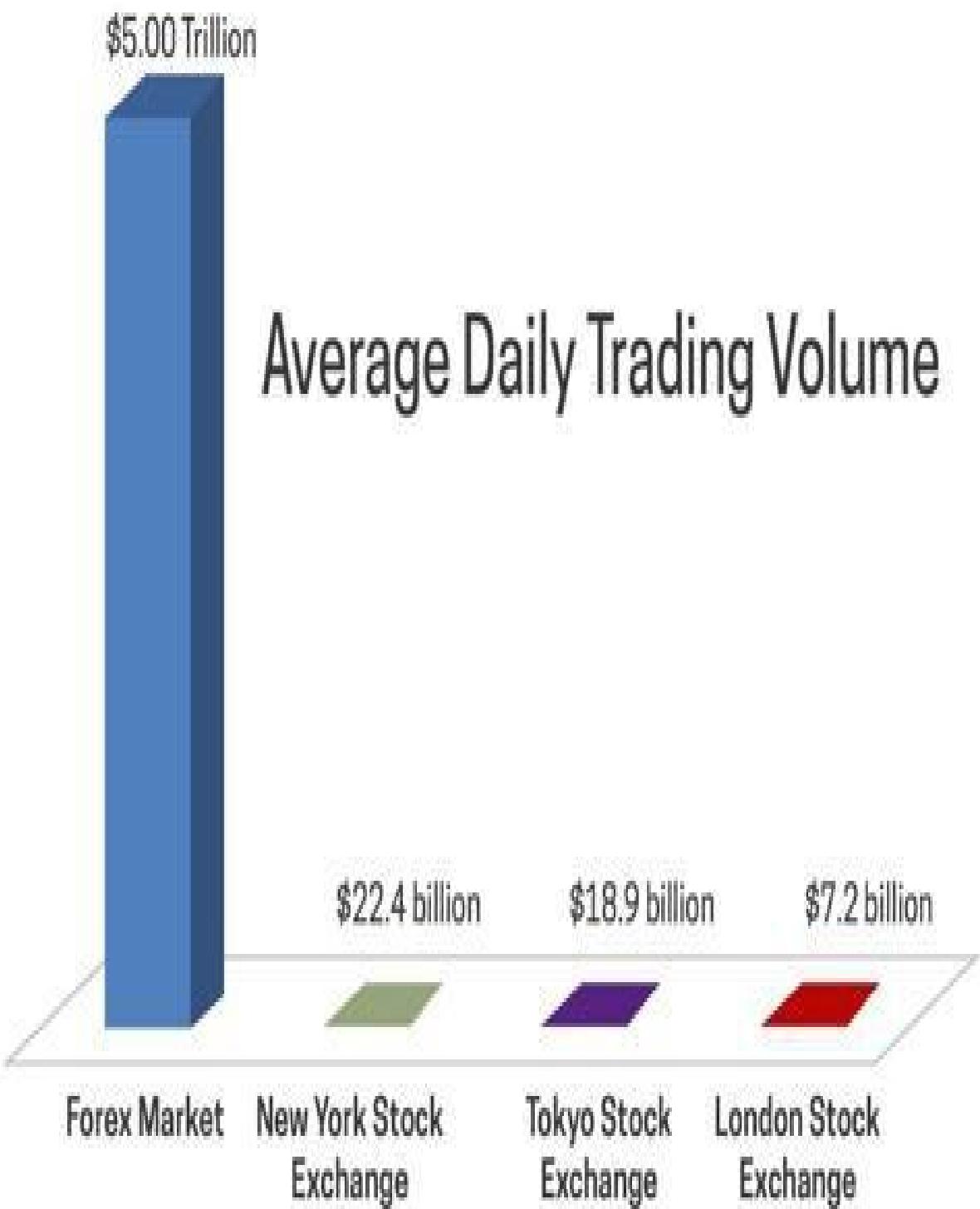
An example of random behavior can be seen in High Frequency Algorithms. We have already commented on some of their uses and they are the perfect example of forces that have the capacity to move the market and that do not necessarily have a directional logic behind them.

Finally, it is worth mentioning that most studies that defend the randomness of the market use classic chartist patterns such as triangles, shoulder head, flags, etc. or some price pattern without an underlying logic behind it to confirm the lack of predictability of the technical analysis in general. Our approach to trading the markets is far removed from all of this.

There are studies where using an analytical tool as simple as trend lines has shown non-random behavior in the financial markets being able to even exploit an anomaly to obtain certain returns.

Part 4. The importance of volume

As we have seen, in the context in which we find ourselves today, the volume has burst with even greater significance than in past decades. More and more money is moving through all the financial markets and this has caused certain changes; from the way of operating to the appearance of new tools.



At the beginning of the 20th century, markets, which were entirely manually operated, were guided mainly by the cognitive biases of their participants. Emotions such as fear and greed were present and caused much of the decision making carried out by its participants. This irrationality of the individual provoked very beneficial situations for the well informed operators of the time.

As everybody knows by now, the current ecosystem is that the great totality of the operated volume is made in an electronic way, that huge amounts of volume are moved daily and that in order to satisfy all those orders it is necessary to emphasize the concepts of counterpart, liquidity and order matching; in short, the importance of volume.

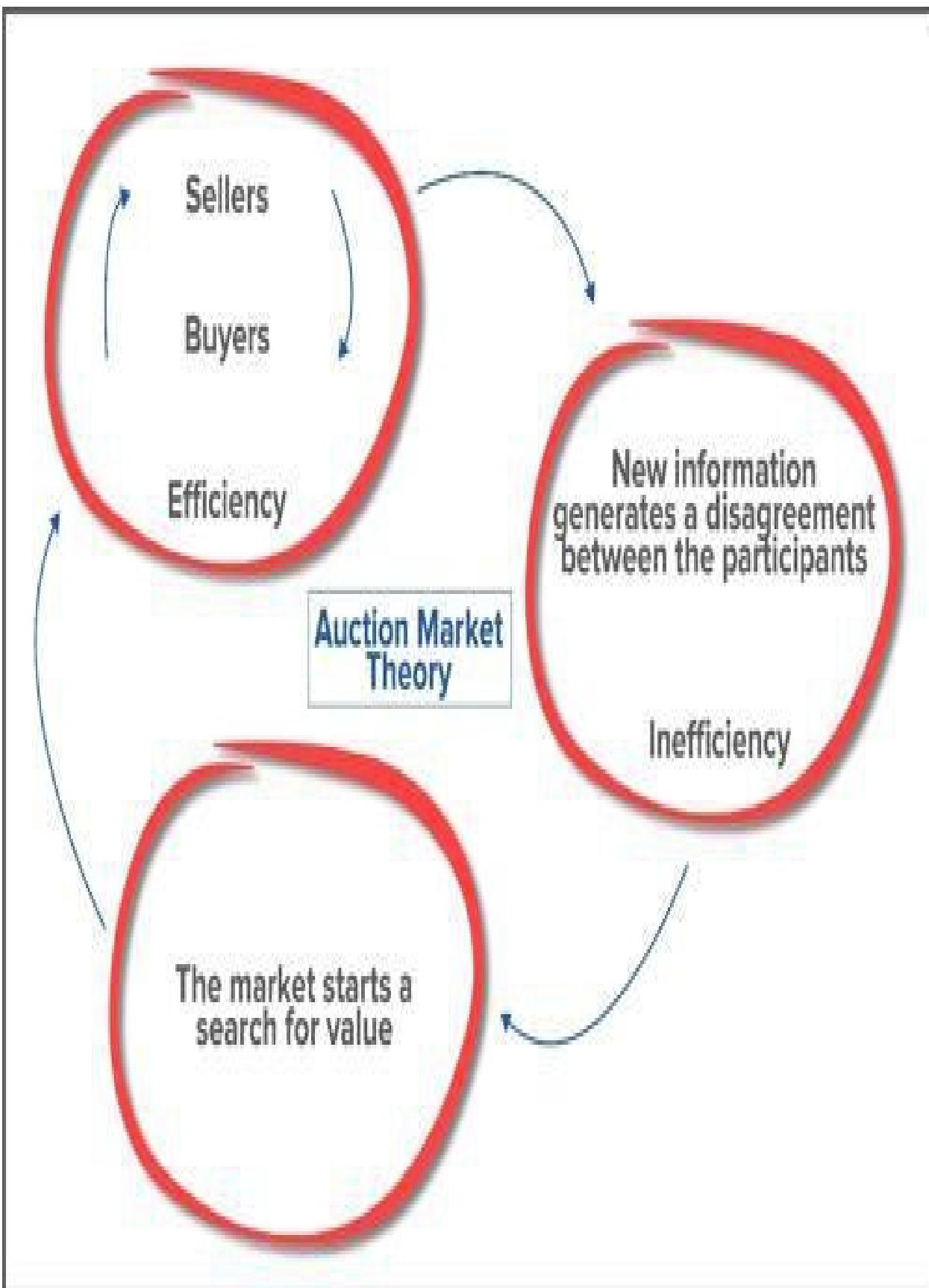
In this section we will study in depth the auction theory and we will see some tools that will allow us to make a more precise volume data analysis

4.1 Auction Market Theory

The theory of the auction was born mainly from J.P. Steidlmayer's studies on the Market Profile. Later, together with other authors such as James Dalton and Donald L. Jones, they defined a series of concepts that constitute this theory.

It is based on the fact that the market, with the priority objective of facilitating the negotiation between its participants and under the principles of the law of supply and demand, will always move in search of efficiency, also known as balance or fair value.

Efficiency indicates that buyers and sellers are comfortable negotiating and neither has a clear control. That comfort comes because, based on current market conditions, the valuations of both are very similar. The way in which this balance is visually observed on a price chart is with a continuous rotation (trading ranges). These price lateralizations represent this balance. It is the evidence of the facilitation of the negotiation and it is the state in which to seek to be always the market.



On the other hand we have the moments of inefficiency or imbalance and these are represented in the trend movements. When new information arrives to the market, it can cause that the value that both buyers and sellers perceive on that asset changes generating a disagreement between them. One of the two will take control and move the price away from the previous balance zone, offering us a profitable operating opportunity. What is evident in this context is that the market is not facilitating the negotiation and therefore it is considered an inefficient condition.

The market will be constantly moving in the search and confirmation of value; in situations where buyers and sellers are in a position to exchange stock. When this happens it is because the valuations that these participants have on the price is very similar. At that moment the negotiation will generate a new zone of balance. This cycle will repeat itself over and over again in an uninterrupted manner.

The general idea is that the market will move from one zone of balance to another by means of trend movements and that these will start when the market feeling of both buyers and sellers on the current value differs causing the imbalance. The market will now start looking for the next area that will generate consensus among most participants about value.

It should be noted that the market spends most of its time during periods of balance, which is logical due to the nature of the market based on favoring trading among its participants. This is where these processes of accumulation and distribution take place, which as we all know is where Wyckoff's methodology focuses.

4.1.1 The variables

The auction process in the financial markets is based on value. To try to decipher where such value lies, three additional elements need to be evaluated:

Price

In the auction mechanism the price is used as a discovery tool. Negotiation is facilitated by the movement of the price, which fluctuates up and down exploring the different levels in order to see how the participants react to this exploration.

These price movements announce opportunities. If participants respond to that exploration by observing the price as fair it will trigger negotiation among them. Conversely, if these discoveries of new price levels are not perceived as attractive to both participants it will cause rejection.

Time

When the market promotes an opportunity (reaches an attractive level), it will use the time to regulate the duration that such opportunity will be available.

The price will spend very little time in those areas that are advantageous to one of the two sides (buyers or sellers).

An area of efficiency or balance will be characterized by a greater consumption of time; while an area of inefficiency or imbalance will be represented by a short consumption of time.

Volume

The volume represents the activity, the amount that has been exchanged from an asset. This amount suggests interest or lack of interest at certain levels.

Based on the volume, there are areas that are more valuable than others. The basic rule is that the more activity you see in a certain area, the more value market participants assign to it

-

$$\text{Price} + \text{Time} + \text{Volume} = \text{Value}$$

-

These three elements are responsible for providing us with a logical perspective on, based on current conditions, where market participants believe the value of a particular asset lies.

Through price the market discovers new levels, time consumption suggests that there is some acceptance in that new area and finally volume generation confirms that participants have created a new value zone where they trade comfortably.

As we know, conditions are changing and therefore the continuous re-evaluation of these elements is needed. Knowing where the value is located is key since it defines the condition of the market and based on this we will be able to raise different operational ideas.

4.1.2 Value perception

The market is constantly rotating between two phases: horizontal development (balance) or vertical development (imbalance). Horizontal development suggests agreement among participants while vertical development is a market in search of value, in search of participants with whom to trade.

**Auction Market
Theory**
+
**Wyckoff
Methodology**

Balance



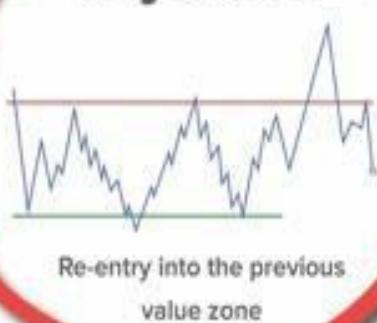
Imbalance



Acceptance



Rejection



The fact that the price is moving comfortably in a trading range (horizontal development) represents acceptance in that area, it is a context where price and value coincide according to the participants. When the market is in a trend state (vertical development) price and value do not coincide; in this context the price will move forward and the value will follow or not (as a sign of acceptance and rejection).

In an balance area the fairest price will be located in the middle and the extremes at both the top and bottom will represent levels that are unfair or not accepted by participants.

Based on the fact that the fairest value is in the middle of the range, a move to the top end will be seen by buyers as an expensive price and at the same time sellers will consider it cheap, so their actions will lead to sending the price back to the fairest area. Similarly a move to the lower end of the range will be seen as cheap by buyers and expensive by sellers, which will cause a further upward shift.

In this context, we seek to buy at lows and sell at highs in the hope that the price will continue to reject those extremes. And normally the market will continue to do so until its condition changes.

The interesting thing comes when an imbalance occurs and the price leaves the value zone. What will happen then? When the price leaves a trading range, a change in the perception of value can occur.

The task of the operator is now to evaluate whether these new price quotation levels are accepted or rejected. The price is ahead of the other two variables in determining potential value areas, but it is time in the first instance and volume

in the last that will confirm whether that new area is accepted or rejected.

We interpret acceptance to a new area when the price is able to be maintained (time consuming) and contracts between buyers and sellers start to be negotiated (volume) representing all this as a certain sideways movement of the price. On the contrary, we would identify rejection when the price quickly reverts back to its old value zone denoting lack of interest and evidenced by a sharp turn.

All horizontal developments end when there is no longer an agreement among the participants about the value; while all vertical developments end when the price reaches a zone where there is again agreement among them. This is the continuous cycle of the market. This idea in itself is very powerful and with the right approach trading strategies could be created around it.

As with one of the universal principles of technical analysis (price discounts everything), we do not need to go into what actually produces this change in the participants' perception of value. We know that based on the current conditions, based on the information that we have at that precise moment, all the participants give a valuation to the price of the asset. Later, something may happen at a fundamental level that changes this perception, but the goodness of this approach is that it takes us away from the need to know and interpret what has happened so that the perception of the participants has changed.

It is important to emphasize that this theory of the auction is universal and that therefore it serves us to evaluate any type of financial market independently of the temporality used.

4.1.3 The four steps of market activity

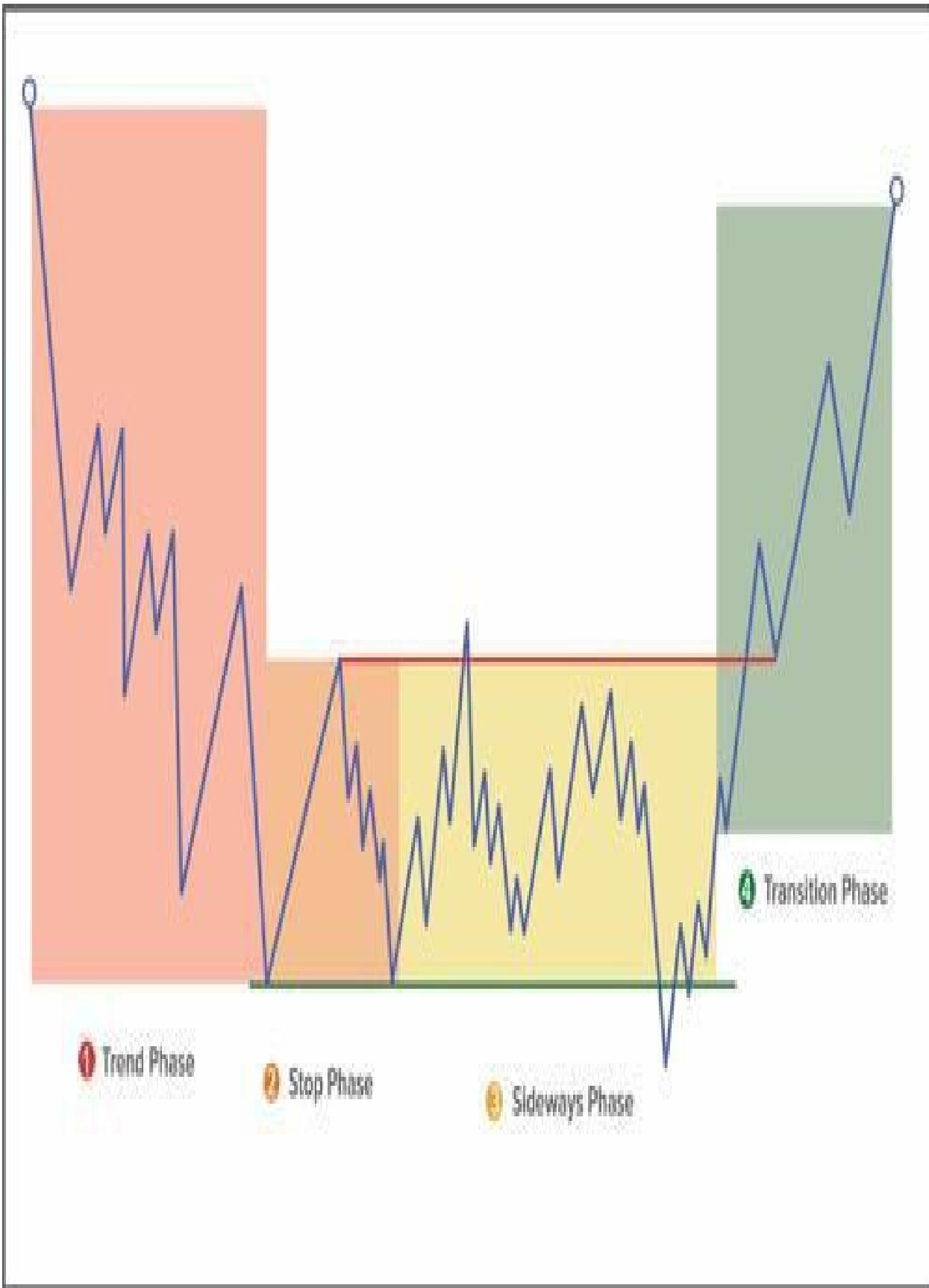
This is a process with which Steidlmayer represented the different phases that the market went through during the development of its movements.

The four phases are:

Trend phase. Vertical development, unbalanced price in favour of one direction.

Stop phase. Operators begin to appear in the opposite direction and the previous trend movement stops. The limits of the upper and lower range are established.

Sideways phase. Horizontal development. Negotiation around the stop price and within the limits of the new range of balance.



Transition phase. The price leaves the range and a new imbalance begins in search of value. This movement may be a reversal or a continuation of the previous trend movement.

Once the transition phase is over, the market is in a position to start a new cycle. This protocol will be developed without interruption and is observable in all temporalities.

Visually up to step three a P or b profile would be observed. The formation of this type of profile as well as the proposal of a type of operation based on it will be seen in greater depth later on.

For the operators of structures this four-phase protocol will be familiar to them, because in essence it is exactly the development from Phase A to Phase E proposed by the Wyckoff methodology:

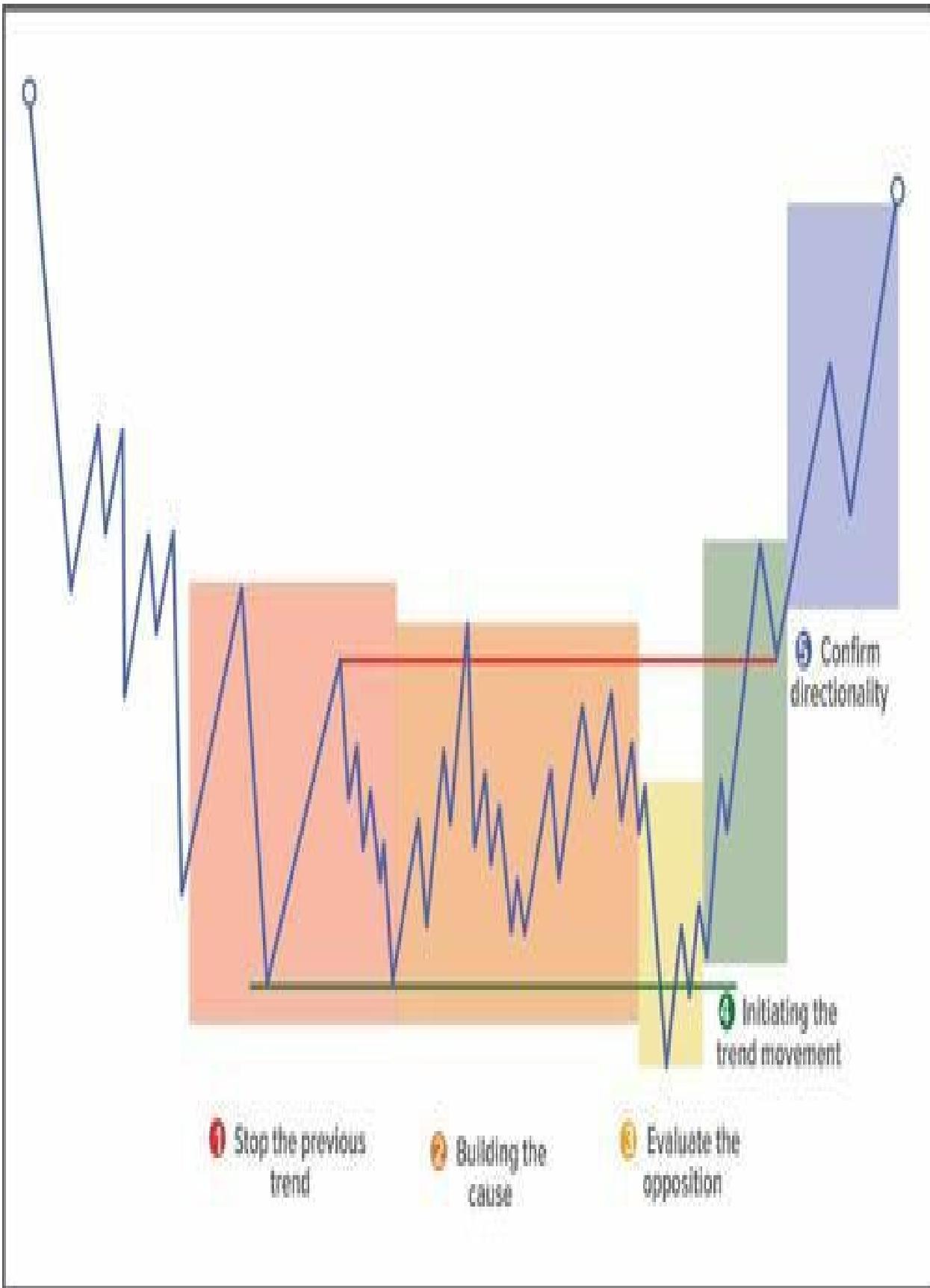
Stop the previous trend

Building the cause

Evaluate the opposition

Initiating the trend movement

Confirm directionality



Although Richard Wyckoff, as well as his later students and other operators who have contributed to the divulgence of his ideas were based solely on analytical tools and principles of technical analysis, we see that they already worked implicitly on these concepts proposed in the theory of the auction even though they did not use such terms.

This is why it is considered the only approach to technical analysis based on a real underlying logic: auction theory and the law of supply and demand.

4.2 The Law of Supply and Demand

It is the basic law on which the auction theory is based and therefore governs all price changes. Initially the studies that Richard Wyckoff proposed on this law told us that:

If demand was greater than supply, the price of the product would rise.

If supply was greater than demand, the price of the product would fall.

If supply and demand were in balance, the price of the product would remain the same.

4.2.1 Common interpretation errors

This idea is very general and must be qualified since a series of conceptual errors have been generated around this law of supply and demand.

Error #1: Prices go up because there are more buyers than sellers or they go down because there are more sellers than buyers.

In the market there are always the same number of buyers and sellers; because for someone to buy, there must be someone to sell to them. No matter how much someone wants to buy, as there is no seller willing to offer him the counterpart, it is impossible for the negotiation to take place.

The key is in the attitude (aggressive or passive) that traders take when participating in the market.

Error #2: Prices go up because there is more demand than supply or they go down because there is more supply than demand.

The problem with this statement is to call demand everything that has to do with buying and supply everything that has to do with selling. In reality, they are different concepts and it is convenient to separate them when referring to one or the other.

Supply and Demand are the limited orders that both buyers and sellers place in the columns of the BID and the ASK remaining pending execution, which is known as liquidity.

4.2.2 BID/ASK, Spread and Liquidity

In the financial markets there is no single price. It is something that is obvious but that many people do not understand. When a participant goes to the market he finds two prices: the buy and the sell.

BID. The BID column is the part of the order book where buyers come to place their demand (buy limit orders) and where sellers come to match their sell orders. The highest price level within the BID column is known as the Best BID and represents the best price at which you can sell.

ASK. The ASK column is the part of the order book where sellers go to place their supply (sell limit orders) and where buyers go to find the counterpart for their buy orders. The lowest price level within the ASK column is known as the Best ASK and represents the best price at which to buy.

BID	PRICE	ASK
	108	600
	107	980
	106	900
	105	720
	104	550
	103	500
	102	120
	101	90
	100	75
50	99	
66	98	
95	97	
130	96	
249	95	
120	94	
97	93	
90	92	

Last Crossing Price

Best BID

Demand
Buy Limit Orders

Supply
Sell Limit Orders

Best ASK

Therefore, it is the order execution mechanism that determines the price. The difference between the BID and the ASK is called the Spread and is an indicator to take into account when evaluating the liquidity of the asset. The lower the Spread, the more liquid it is.

Liquidity is an extremely important concept. It is the amount of volume that an asset trades. We should try to trade assets as much as possible because this will mean that it will be more difficult for a large trader to move the price individually. It is therefore a measure to avoid possible manipulation. If you're trading an asset that operates very little volume most likely that if a large institution enters can move the price relatively easily. These environments should be avoided.

4.2.3 Types of participants based on their behavior

The key element that clarifies the errors in the interpretation of the Supply and Demand Law is the behavior of the operators since they can participate in the market in different ways:

Aggressively. Liquidity takers through the use of "market" orders. They have an urge to enter and they attack the Best BID and the Best ASK where the limit orders remain located. These types of aggressive orders are the true engine of the market since they are the ones that initiate the transactions.

In a passive way. Liquidity makers by using "limit" orders. Sellers create supply by leaving their orders pending execution in the ASK column; and buyers create demand by leaving their orders placed in the IDB column.

BID	PRICE	ASK
	108	600
	107	980
	106	900
	105	720
	104	550
	103	500
	102	120
	101	90
	100	75
50	99	
66	98	
95	97	
130	96	
249	95	
120	94	
97	93	
90	92	

Agressive Seller

Takes liquidity
from the BID

Passive Buyer

Provides liquidity
in the BID

Passive Seller

Provides liquidity
in the ASK

Agressive Buyer

Takes liquidity
from the ASK

4.2.4 How does the price move?

We then come to the moment of examining what must happen for the price to move. The idea here is clear: the aggressive participation of traders is necessary to produce a change in price. Passive orders represent in the first instance intention, and in case they are executed they have the capacity to stop a movement; but not the capacity to make the price move. This requires initiative.

Initiative

In order for the price to move up, buyers have to buy all the sell orders (supply) that are available at that price level and also keep buying aggressively to force the price up one level and be able to find new sellers to trade with there.

BID	PRICE	ASK
	108	600
	107	980
	106	900
	105	720
	104	550
	103	500
	102	120
	101	90
50	100	75
66	99	
95	98	
130	97	
249	96	
120	95	
97	94	
90	93	
90	92	

For the price to move down one level sellers must consume those 50 limit orders

For the price to move up one level buyers must consume those 75 limit orders

Passive buy orders slow down the downward movement, but by themselves they cannot drive the price up. The only orders that have the ability to move the price up are market buys or those whose order crosses over into market buys (such as short position stop-losses).

In order for the price to move down, sellers have to buying all the buy orders (demand) that are available at that price level and keep pushing downward forcing the price to go in search of buyers at lower levels.

Passive sell orders cause the upward movement to slow down, but do not have the ability to bring the price down by themselves. The only orders that have the ability to move the price down are market sells or those whose order crosses over into market sells (long position stop-losses).

Exhaustion

The price needs aggressiveness to move, but it is very interesting to note also that the lack of interest on the opposite side can facilitate this task.

BID	PRICE	ASK
	108	134
	107	100
	106	180
	105	120
	104	44
	103	26
	102	15
	101	7
	100	5
50	99	
66	98	
95	97	
130	96	
249	95	
120	94	
97	93	
90	92	

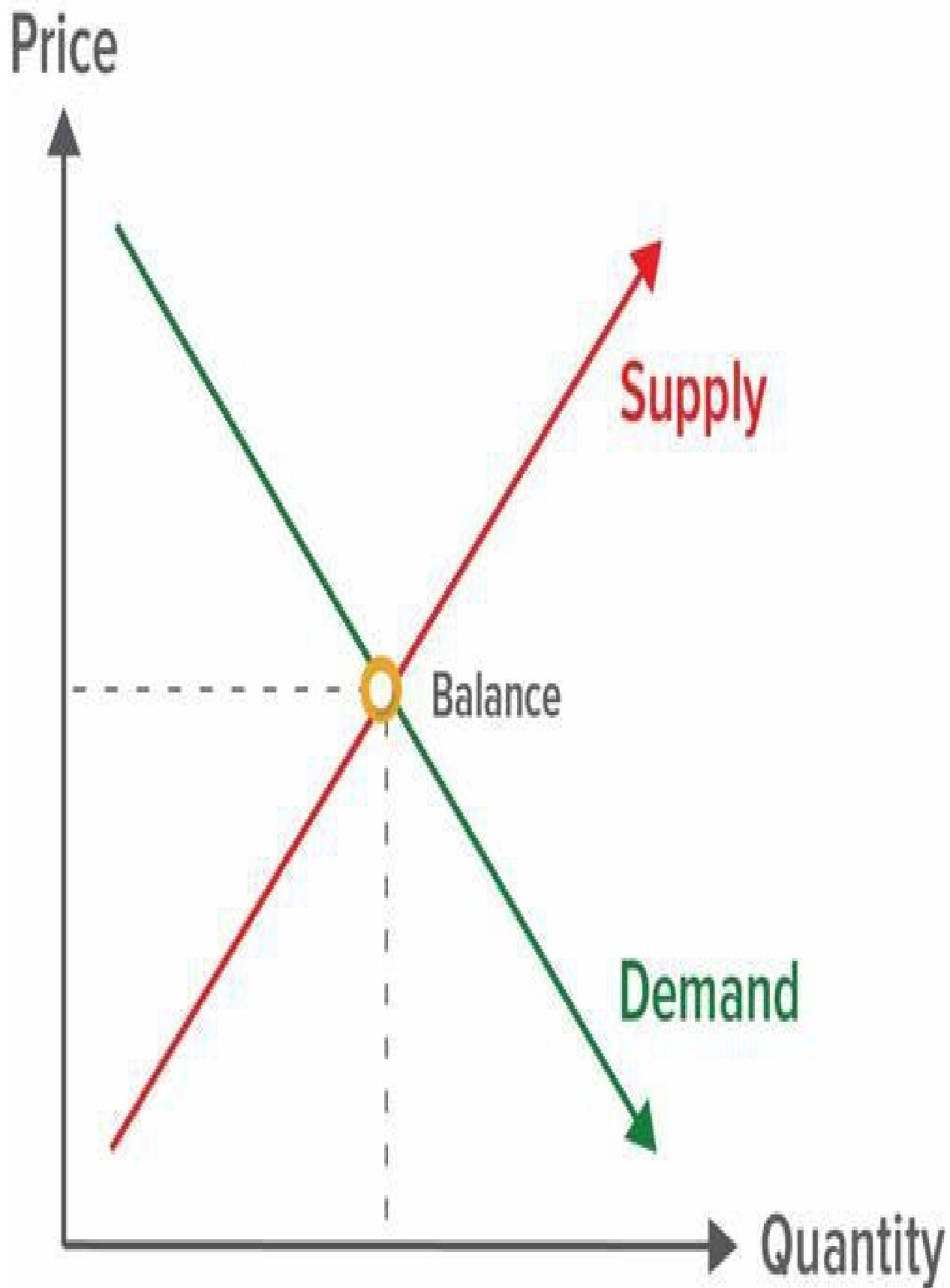
Large imbalance between
buy and sell limit orders =
Lack of selling interest

An absence of supply can facilitate the rise in price just as an absence of demand can facilitate its fall.

When the offer is withdrawn, this lack of interest will be represented as a smaller number of contracts placed in the ASK column and therefore the price can be more easily moved upwards with very little buy power.

On the contrary, if it is the demand that is withdrawn, it will be visualized with a reduction in the contracts that the buyers have placed in the BID and this will cause the price to fall with very little selling initiative.

4.2.5 How do market turns occur?



Keep in mind that the market, in order to facilitate negotiation, will go up in search of sellers and down in search of buyers; or in other words, it will always move towards the point of balance where supply and demand will be equalized.

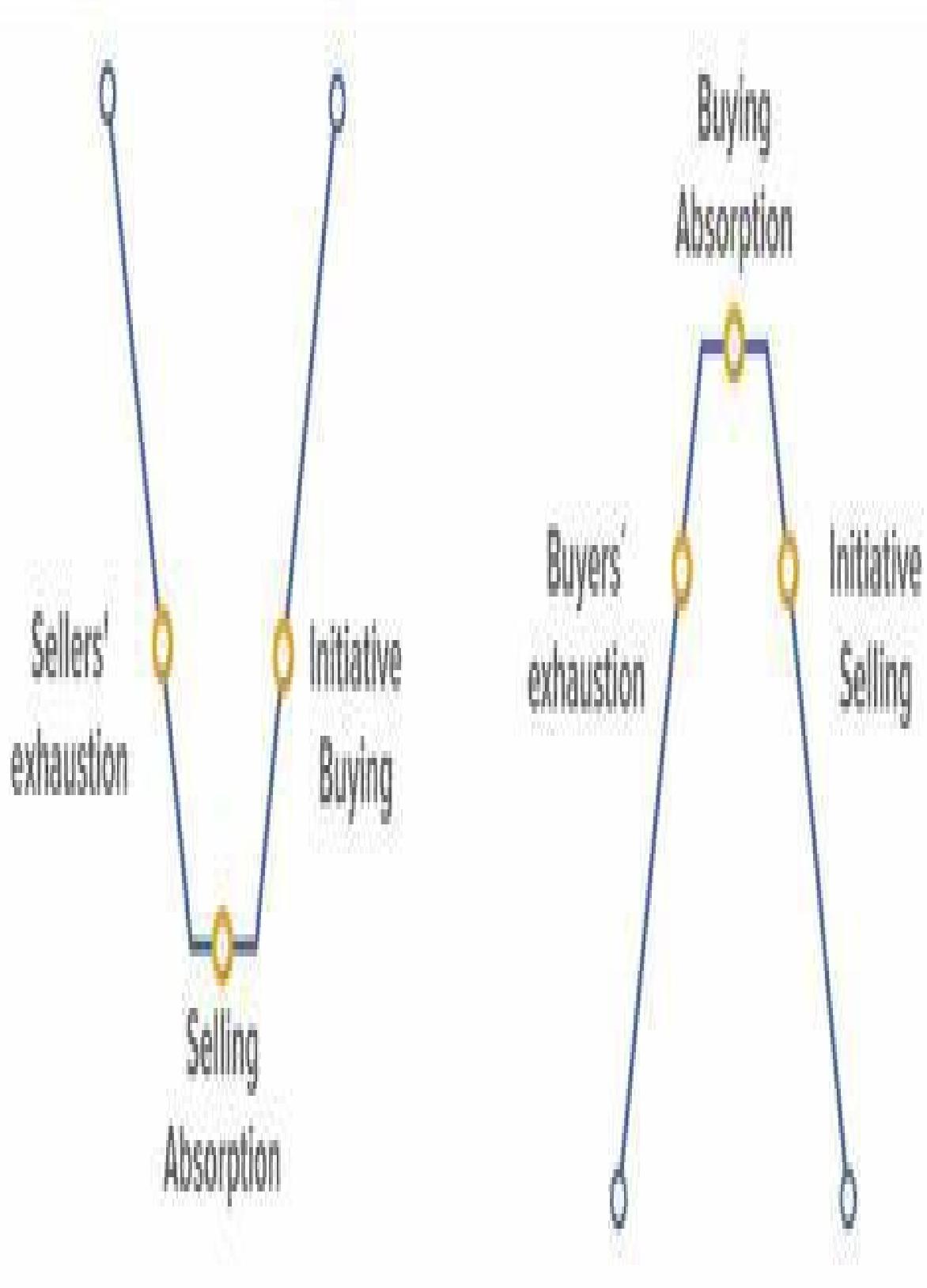
Moreover, logic leads us to think that as the price goes up, the interest of the buyers decreases (they see the price as increasingly expensive) and the interest of the sellers increases (they see the price as increasingly cheap); and as the price goes down, the interest of the sellers decreases and the interest of the buyers increases.

In a market that is moving upwards, as long as the buying initiative is able to consume all the liquidity (supply) that is at the higher levels, the price will continue to rise. On the other hand, in a falling market, as long as the selling initiative is able to consume all the liquidity (demand) it finds at lower levels, the price will continue to fall.

At the time of a market turnaround we will normally always have a three-step process:

Exhaustion.

Absorption.



Initiative.

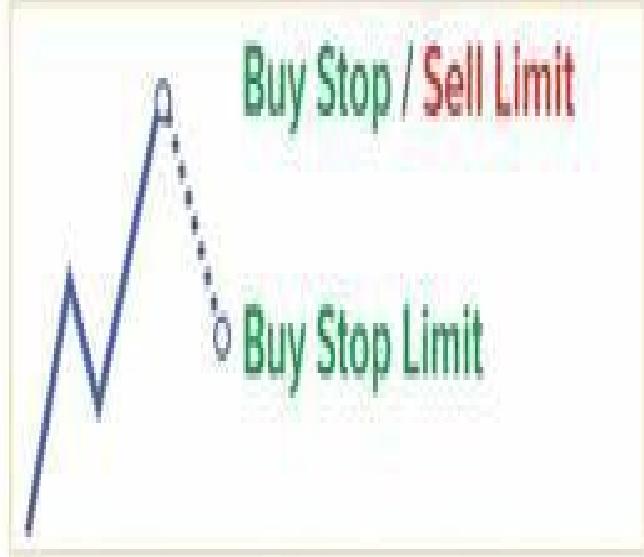
To reverse an upward movement, the lack of interest (exhaustion) of the buyers to continue buying, the first entry of sell by the big operators in a passive way (absorption) and the aggressiveness (initiative) of the sellers will come together.

In the opposite way to the example of the upward turn: exhaustion of the sellers, passive positioning through absorption of the sells and buying initiative with aggression in the ASK.

In essence this three-step protocol is nothing more than processes of accumulation and distribution regardless of the time scale in which they take place.

4.3 Order Types

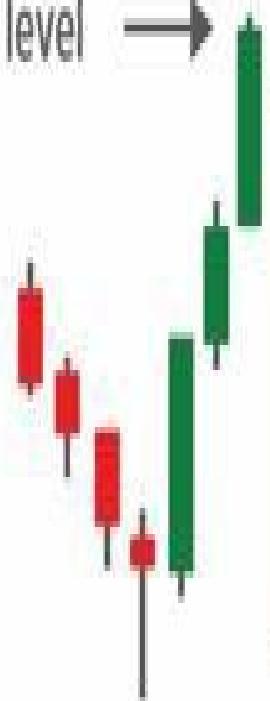
Above current price



Current price level



Buy Market / Sell Market



Below current price

When participating in the market we can do so mainly by using four different types of orders.

Market. Aggressive order that is executed at the best available buy and sell price (Best BID/ASK). Immediate execution that guarantees the entry to the market but not the specific price entered due to the constant change in the quotation and the application of the Spread.

Limit. Passive order that is executed at a specific price. Entry at that specific price is guaranteed but not the execution. In other words, the price may never go to that level and therefore not enter the market. As long as they are not executed they can be deleted at any time.

Stop. Passive order that is executed at a specific price. When the price reaches it, it becomes a market order and is therefore executed at the best available price (Best BID/ASK).

Stop-Limit. It combines the features of limit and stop orders. Once a certain price level is reached (a function of stop orders), an order is generated at a specific level (a function of limit orders). Operationally it works exactly the same as limit orders.

Based on the four types of orders we have just seen, here is the full spectrum of the basic orders available according to the intention and what it is used for:

Buy Market. Aggressive order at current price. Used for:

Enter the market to buy.

Close a sell position (either profit or loss).

Buy Stop. Pending order above the current price. Used for:

Enter the market to buy.

Close a sell position (by Stop Loss).

Buy Limit. Pending order below current price. Used for:

Enter the market to buy.

Close a sell position (by Take Profit).

Buy Stop Limit. Pending order below price after reaching a level. Used for:

Enter the market to buy.

Close a sell position (by Take Profit).

Sell Market. Aggressive order at current price. Used for:

Enter the market to sell.

Close a buy position (either profit or loss).

Sell Stop. Pending order below current price. Used for:

Enter the market to sell.

Close a buy position (by Stop Loss).

Sell Limit. Pending order above the current price. Used for:

Enter the market to sell.

Close a buy position (by Take Profit).

Sell Stop Limit. Pending order above the price after reaching a level. Used for:

Enter the market to sell.

Close a buy position (by Take Profit).

4.3.1 Advanced order types

There are certain advanced instructions that can be applied, depending on the broker, to orders to enter and exit the market:

One-Cancels-Other (OCO). Introduction of two orders into the market with one of them being cancelled when the other is executed.

Order-Sends-Order (OSO). Instruction to execute secondary orders when the initial one is executed.

Market-If-Touched (MIT). Conditional order to trade a market order when a specific level is reached. Used to buy below the current price and to sell above the current price.

Limit-If-Touched (LIT). Conditional order to trade with a pending order (Limit) when a specific level is reached. Used to buy above the current price and to sell below the current price.

Good-Til-Cancelled (GTC). It includes a temporary period of execution which is usually the duration of the session. If at that point the order has not been executed, it will be cancelled.

Good-Til-Date (GTD). The order remains active until a specific date.

Immediate-Or-Cancel (IOC). Instruction to execute the order immediately. If any portion of the order remains unfilled, that portion is cancelled.

Fill-Or-Kill (FOK). It does not allow partial execution. When the price is reached, it either enters the market with full volume or is cancelled.

All-Or-None (AON). Similar to FOK orders with the difference that in case it reaches the price and is not executed because it cannot cover all its volume, it remains active until it obtains all the counterpart or is cancelled by the operator.

At-The-Opening (ATO). Instruction to execute an order at the opening of the session. In case it is not possible to cancel it.

At-The-Close (ATC). Instruction to execute an order at the end of the session.

4.4 Tools for volume analysis

Thanks to certain tools that analyze the order flow we can see all the interaction between buyers and sellers who participate in the market in different ways.

We will mainly distinguish them by the type of orders they handle since not all of these tools are based on the same data:

Analysis of pending orders: Order Book, also called Depth of Market (DOM).

Analysis of executed orders: Tape (Time & Sells) and Footprint.

We will point out their most important characteristics in order to provide the reader with a basic knowledge of the peculiarities of each one.

4.4.1 Order Book

SuperDOM



Buy	Price	Sell
	3143,25	87
	3143,00	76
	3142,75	34
	3142,50	128
	3142,25	51
	3142,00	33
	3141,75	24
	3141,50	28
	3141,25	13
	(2) 3141,00	8
4	3140,75	
48	3140,50	
39	3140,25	
28	3140,00	
28	3139,75	
35	3139,50	
47	3139,25	
51	3139,00	
33	3138,75	

Market

PnL

Market

C

It identifies all the pending orders for execution (liquidity) that are located in the columns of the BID and the ASK; as we already know, the BID represents the buy limit orders and the ASK represents the sell limit orders.

Since these software programs are only Level II deep, most markets can only show ten levels of liquidity above and below the current price. This is relevant because beyond those ten levels there will still be located liquidity, but it is only visible to those who have Level III depth (mainly liquidity providers).

The analysis of the order book presents some problems. One of them is that the visible liquidity in no case is the liquidity actually located at those levels. The liquidity that can be displayed in the order book comes only from limit orders. By their very nature, market orders cannot be seen anywhere as they are born from an initiative and are executed instantly. On the other hand, Stop orders, by becoming a market order when their price is reached, are also not displayed in the Order Book.

Besides this, as we have seen in the advanced features of some orders, there are certain instructions that cause them not to be visualized in this book either, so we would actually be analyzing a not very high percentage of the total of the pending orders to be executed.

Another big problem with the analysis of the order book or any other tool based on this liquidity data is that such pending orders can be eliminated by whoever placed them there at any time before they were executed. Due to this peculiarity, different forms of manipulation have arisen, carried out by algorithms:

Spoofing

This is the placement of huge amounts of contracts in the BID and ASK columns (limit orders) without the intention of actually executing those orders. The objective is to give the sensation of an "insurmountable barrier" and cause the price to move to the opposite side. These are false orders because when the price is going to reach its level, these are cancelled and are not executed.

It is an interesting concept that values the capacity of limit orders with respect to price movement. As we have mentioned, limit orders by themselves and by their own nature do not have the capacity to move the market, but using this form of manipulative activity we see how the price can move influenced by them in certain moments. Not directly based on their execution, but indirectly based on their influence.

Imagine that you normally observe quantities of limit orders around 50 contracts per price level. What will the rest of the participants think if they suddenly observe 500 contracts? Well, the most logical thing is that they will see that it is too expensive to pay for the price to cross that level and most likely will cause a lack of interest to go against those orders. And of course, this will translate into a movement in the opposite direction of the huge order. Manipulation of large traders to drive the price in the direction they want.

Iceberg orders

This is the partitioning of a large limited order into smaller portions. The motivation for this type of action has to do with wanting to hide the actual size of the original order.

It is mainly used by institutional traders who want to execute a huge amount of

contracts in a certain price range and who use algorithms programmed with this technology to be able to do it passively and without putting the price against it. It is important to note that there is only one source behind such an order, only one large trader, not a set of them.

It is very visual to take the example of a real Iceberg. On the surface what you see is a seemingly normal amount of contracts, but what you don't know is that that order is simply a part of a much larger one. And that when this small part is filled by the market the big order quickly replaces it.

It is the clearest example of what an absorption. There may be many aggressive buyers pushing the ASK and all those Buy Markets are crossing the Sell Limits of an Iceberg order which do not allow the price to move up. We will say that an absorption of these buy orders is taking place.

The same would be true for the absorption of sells. Sell Markets pressing on the BID column with the objective of aggressively entering short sells but the price does not move down because they are blocked by Buy Limits that consume all that liquidity.

4.4.2 Time & Sells

Thanks to Time & Sells we can see in real time all the crossing of orders already executed. The analysis of the tape becomes very complex due to the speed at which the current markets move (mainly the futures markets).

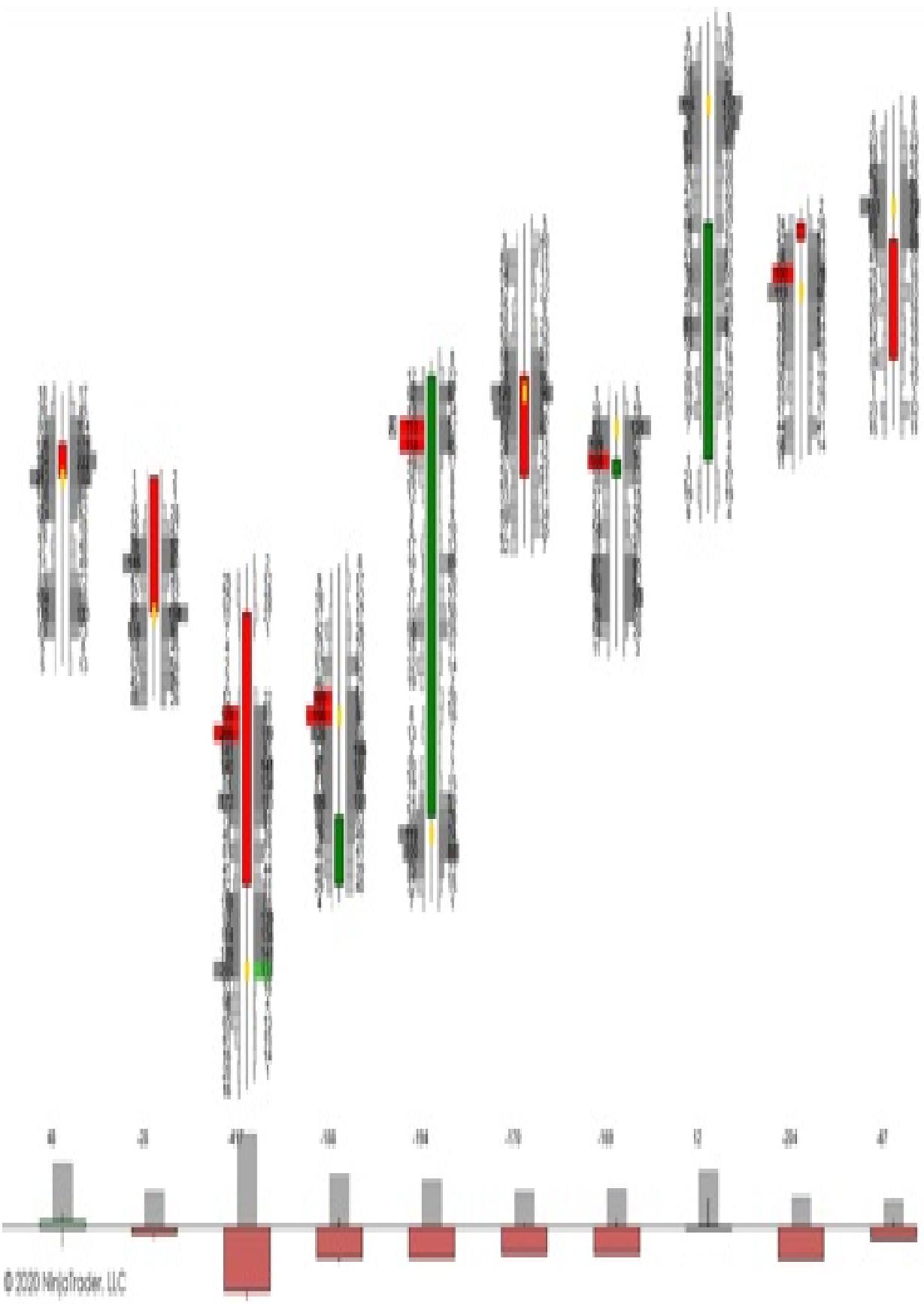
Depending on the software we can access different types of information. Usually it includes at least the columns with the time of execution, the price level and the number of contracts.

It can certainly be useful for identifying large volumes executed in a single order, which is known as "big trade". More modern versions also allow the grouping of orders executed by blocks, pointing to the same trader as the origin of different transactions spaced in time.

A positive point of the T&S with respect to the Order Book is that the tape represents the past, the orders already executed and therefore is not susceptible to manipulation.

It operates only by analyzing the tape is not available to everyone because it requires a huge experience in addition to having a great capacity for concentration due to the speed at which it moves.

4.4.3 Footprint



When most people refer to the Order Flow they are actually referring to this section of the order flow, to the use of Footprint. Order Flow is a general term.

The Footprint charts the data provided by the Time & Sells (orders already executed) and represents it in a much more visual way. It would be like putting a magnifying glass inside the candlesticksticks and observing the amount of contracts executed at each price level.

The advantage of analyzing the Footprint is that it allows us to quantify in detail the interaction between buyers and sellers. Observing the balance and imbalance between the participants as well as being able to identify in which column the most volume is being negotiated can certainly be useful at certain times.

There are different Footprint chart types based on:

The nature of the data: it can be configured with time, range, volume, rotation etc.

To the representation protocol: Profile, Delta, Imbalance, Histogram, Ladder or BID/ASK.

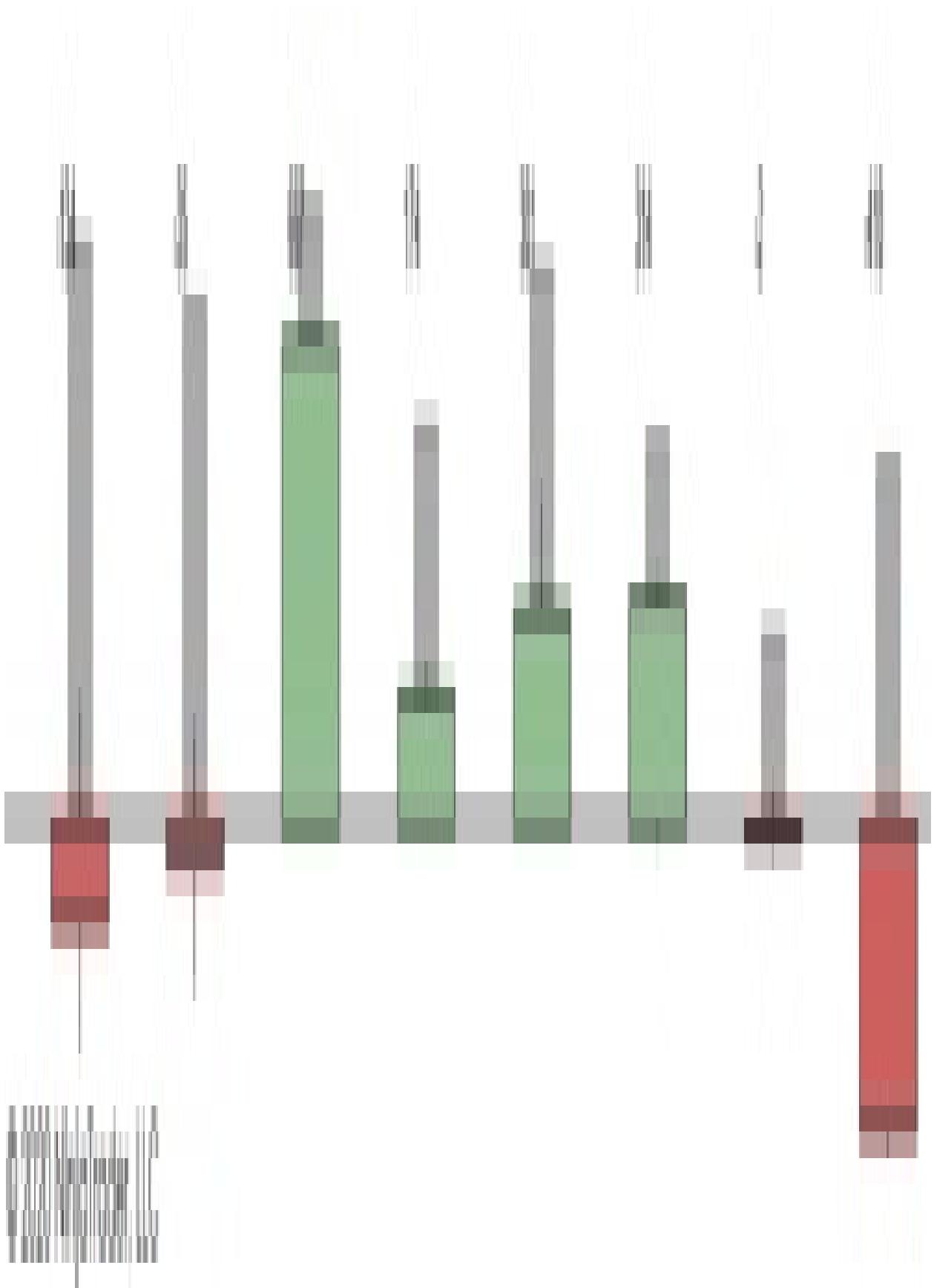
It is a highly configurable tool that generally includes multiple functionalities although it basically analyzes executed orders by price levels with the objective of looking for imbalances, absorptions, initiatives, unfinished auctions, clusters, big trades etc.

Once you know in depth how the order crossing is executed, you will conclude

that its analysis is very subjective and that trading based on this tool without taking into account anything else is not recommended.

4.4.4 Delta

A more specific and popular tool within the world of Order Flow analysis is the Delta. The delta is an indicator that simply measures the difference between traded volume in the BID and traded volume in the ASK in a given period of time. If the difference is positive the delta will be positive and vice versa if it is negative. In addition, the difference between deltas can also be displayed, since normally the indicators will show them with different sizes.



There is a very common error when thinking that all the volume traded in the ASK "are buys" and that all the volume crossed in the BID "are sells", although in reality with that statement they refer to that they have a directional origin; that is to say, that they have an intention to add pressure towards one of the sides. If this were so, why do we sometimes see downward movements with positive deltas and upward movements with negative deltas? Believe me, it is not that simple. If it were so, we would have found the Holy Grail. Again it has to do with the order-crossing mechanism.

For now we will stay with that visually observed on a horizontal axis with a value of 0 and depending on the column where the transactions are executed will be displayed positively and negatively on the axis. This representation would be for the example of the normal Delta as there is another variant, the accumulated, where it is charted continuously without taking into account the horizontal axis.

The delta is updated with every order executed and therefore gives rise to the possibility that, as with the price, strands are represented at its ends. If we observe a delta with a wick in its lower part, what it means is that at a certain point in its development the difference in favor of the BID was extraordinarily large, and at a certain point it has begun to negotiate much more actively in the ASK column, generating that reversal that leaves its mark in the form of a wick.

As it happens in general terms with the analysis of the footprint, although its interpretation is not as basic as I have explained above, it can provide us with some usefulness in certain specific moments.

4.5 The Order Flow Problem

As a basis we must have clear a series of ideas that will facilitate the understanding of the rest of the content:

A buy order is matched with a sell order and vice versa.

An aggressive order is matched with a passive order.

In the columns of the BID and the ASK only the aggressiveness is reflected.

Order type	Matches with	Appears in
Buy Market	Sell Limit	ASK
Buy Limit	Sell Market	BID
Buy Stop	Sell Limit	ASK
Buy Stop Limit	Sell Market	BID
Sell Market	Buy Limit	BID
Sell Limit	Buy Market	ASK
Sell Stop	Buy Limit	BID
Sell Stop Limit	Buy Market	ASK

Taking into account the different types of orders, it is now necessary to understand what mechanism is used to match orders among participants and in which column such execution is reflected.

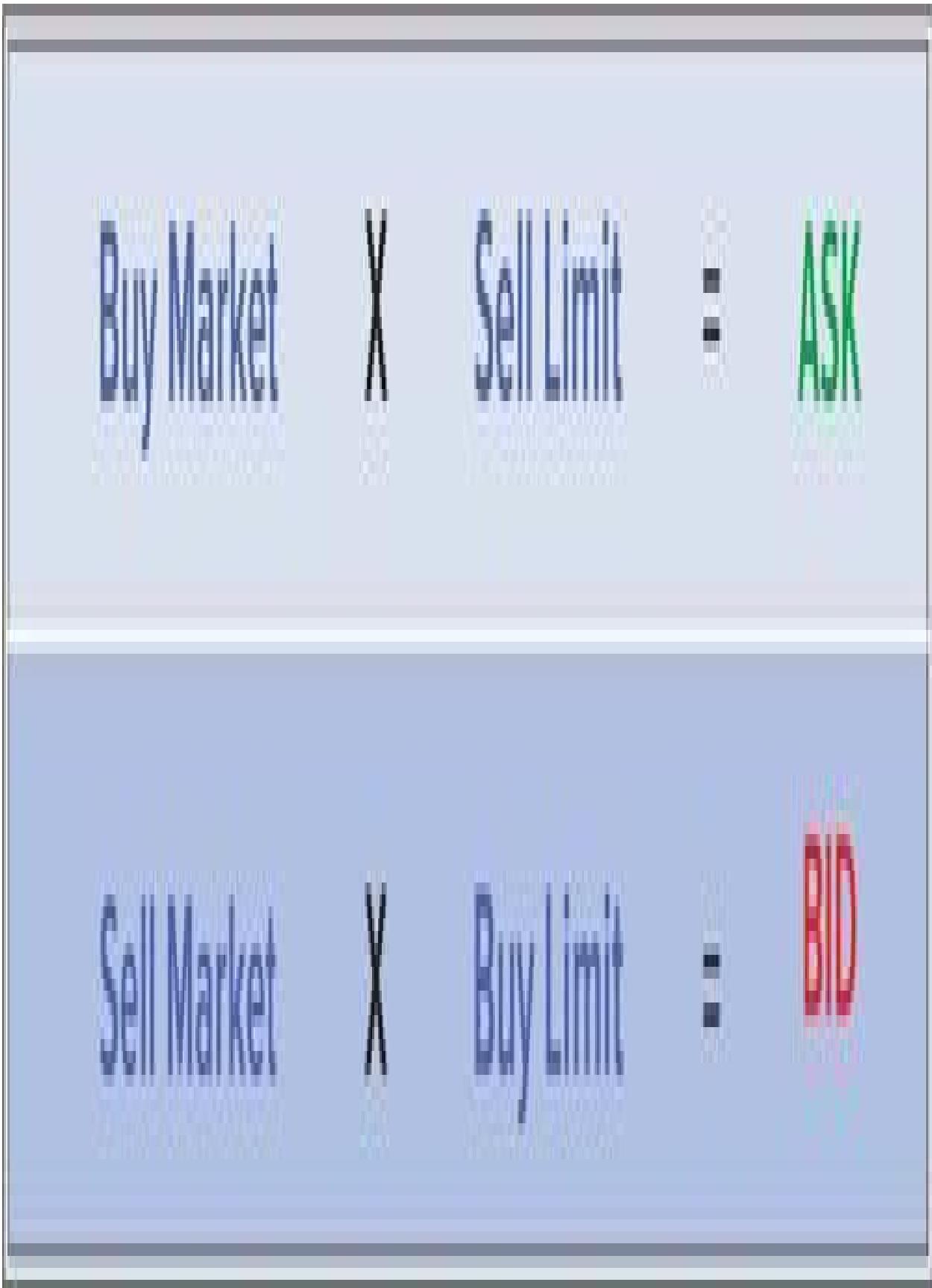
Stop orders become Market orders when they are reached.

Stop limit orders become limit orders when the price set by the stop order is reached.

When the trader executes a Buy Market order, the mechanism that processes the orders goes into action and goes to the Order Book to find the first Sell Limit order located in the column of the ASK to match this buy.

The same happens when a Sell Market order is executed. The processing mechanism directs that order to the most immediate price level in the BID column to find the counterpart in the Buy Limit that is pending there to be matched.

With limited orders the process is the same. A participant leaves his order pending execution in one of the two columns and will stay there until an aggressive operator arrives who needs to match his order.



This is essentially what happens over and over again at great speed. Regardless of the type of order used to enter the market, the end result will always be that an aggressive order will intersect with a passive one:

And the column on which those order crosses will be displayed will depend on the order that has initiated it. Therefore:

Buy Market is crossed with Sell Limit and shown in the column of the ASK, since the order that has initiated the transaction is the aggressive buy.

Sell Market is crossed with Buy Limit and shown in the column of the BID since the initiation comes from the aggressive sell.



Now we are going to do a reasoning exercise using the example of a trader who enters the market with a short position (sell). This trader has different ways to get out of that position:

Through a manual exit, either in loss or in gain by executing a buy Market order (and it would appear in the ASK).

Through the execution of a stop loss, whose order will be a buy stop (and would appear on the ASK).

Through the execution of take profit, whose order is a buy limit (and would appear in the BID).

In the same way, a trader who enters the market with a long position (buy), will be able to exit it through three options:

Through a manual exit, either in loss or in gain by executing a sell market order (and it would appear in the BID).

Through the execution of the stop loss whose order will be a sell stop (and would appear in the BID).



Executing a take profit order, which will be a sell limit order (and will appear on the ASK).

What this example is intended to convey is that the same action, such as closing a position, can be shown in different columns (BID and ASK) depending on the type of order used for it.

To understand this information is of tremendous importance because many analysis of the order crossing are wrong when starting from wrong premises.

The first conclusion should therefore be that not everything that appears executed in the ASK column is a buy with the intention of adding buying pressure to the market, nor is everything that appears in the BID column a sell with the intention of adding selling pressure. This is the problem when analyzing the order flow in any of its variants.

These programs based on the mechanism of order crossing are configured to always reflect aggressiveness, the problem is that you can't distinguish what intention is behind the executed orders.

Intent of the orders
executed at the 

Intent of the orders
executed at the 

Aggressive selling

Aggressive buying

Passive buying

Passive selling

Manual closing of a buy

Manual closing of a sell

Stop Loss of a buy

Stop Loss of a sell

Take profit of a sell position

Take profit of a buy position

When we see a cross executed in the ASK it will always be a Buy Market with Sell Limit order; while when we see a cross executed in the BID it will be a Sell Market with Buy Limit order, but what we will not know is the origin/intention behind such cross orders:

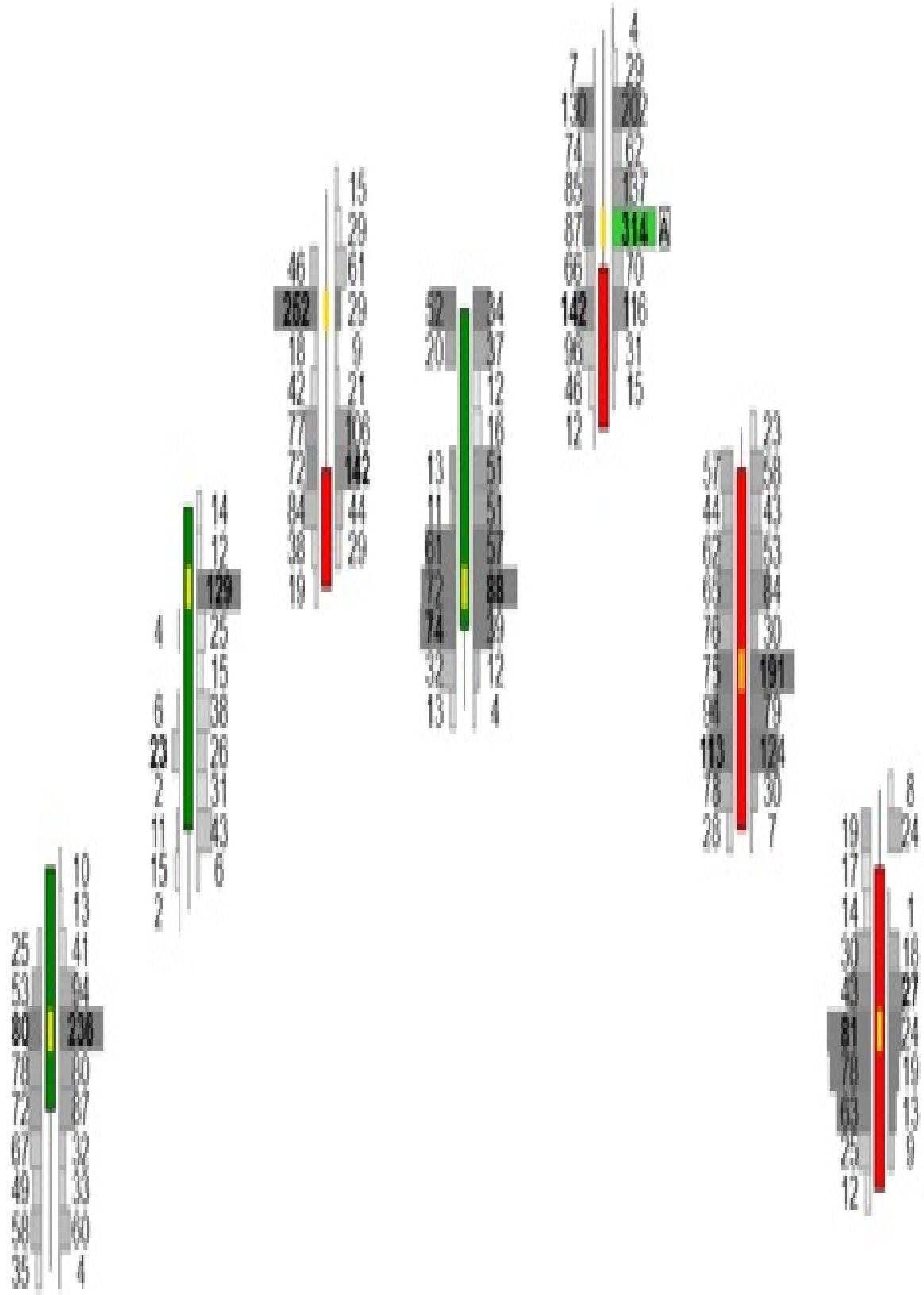
The main source of error when it comes to order flow analysis comes from the belief that everything executed in the ASK has a buyer's initiative origin and everything executed in the BID has a seller's initiative origin, but as we have just seen, nothing could be further from the truth. This type of software makes a reduction to the execution of aggressive orders with passive, but they cannot know what is the origin/intention of those orders.

What would happen if you crossed a Stop Loss from a sell (Buy Market) and a take profit from a buy (Sell Limit)? That type of crossing will be reflected in the ASK, but is there really an intention to add buying pressure to the market? Obviously not, as we see in this example both traders would be out of the market and yet their transaction would be reflected in the ASK. This is the problem with Order Flow: it is still a tremendously subjective tool. Even more so when it is not perfectly known how the order flow Works.

The same problem can be found in the BID column. There could be the possibility of a matching of orders from someone who has hit the stop loss of a buy position (Sell Market) with someone who wants to take profit from a sell position (Buy Limit). This crossing would be reflected in the BID column but both are out, there is no new selling pressure.

I will now propose two different contexts to illustrate once again the problem of Order Flow:

4.5.1 Problem #1 Price Divergence



For example, if analyzing the chart of the footprint we see an upward development in which in its high part we observe an imbalance (green background) in favor of the ASK with a downward turn immediately after; this fact offers us different interpretations.

Some will say that they are trapped buyers (assuming that imbalance in the ASK as aggressive buying with directional intent); others will say that they are stop-loss executions of sell positions; still others will say that they are profit-taking of long positions; and finally some may say that they are passive entry of sellers (absorption through sell limit orders).

Surely everyone is right. And the truth is that there is most likely a little bit of all of it. Besides, at that point the delta will most probably be negative, showing us a divergence.

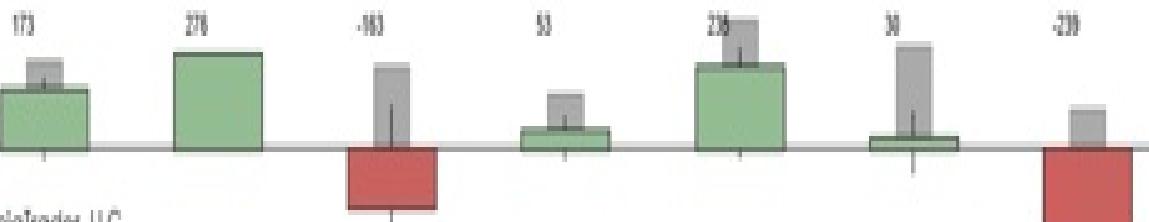
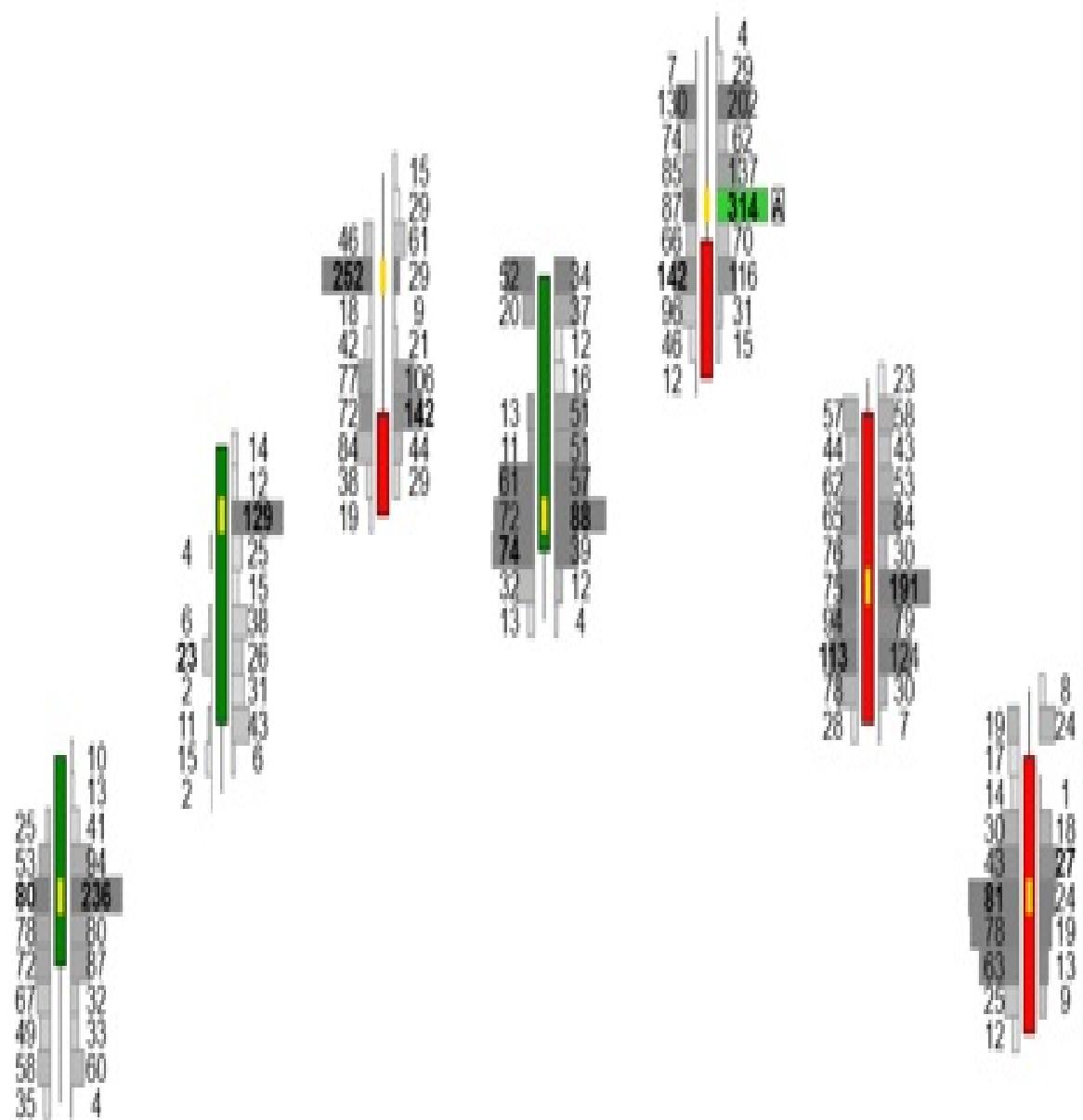
This is where the problem becomes apparent when analyzing the Order Flow. The truth is that in real time we cannot determine exactly what the real origin of these executions is. In many cases, in order to justify a proposed scenario, reference will be made to one of these particular reasons. For example, someone who is looking for a downward movement or who is already positioned short will see those big orders executed in the ASK and will assume them as "trapped buyers", since that is the reason that would justify their downward approach.

The only objective in this example is that, as it appears in the ASK column, it is a cross between Buy Market and Sell Limit orders; but from there to state categorically that it is any of the possible origins already described does not seem a very solid approach.

Hence the importance that, if you decide to work with Order Flow, the most

logical thing to do would be to subordinate your analysis to the context that another approach, such as the Wyckoff methodology, can provide. The reason for this is because due to the complexity and nature of order matching we are going to find these types of imbalances anywhere on the chart and this does not offer us an advantage.

4.5.2 Problem #2 Delta Divergence

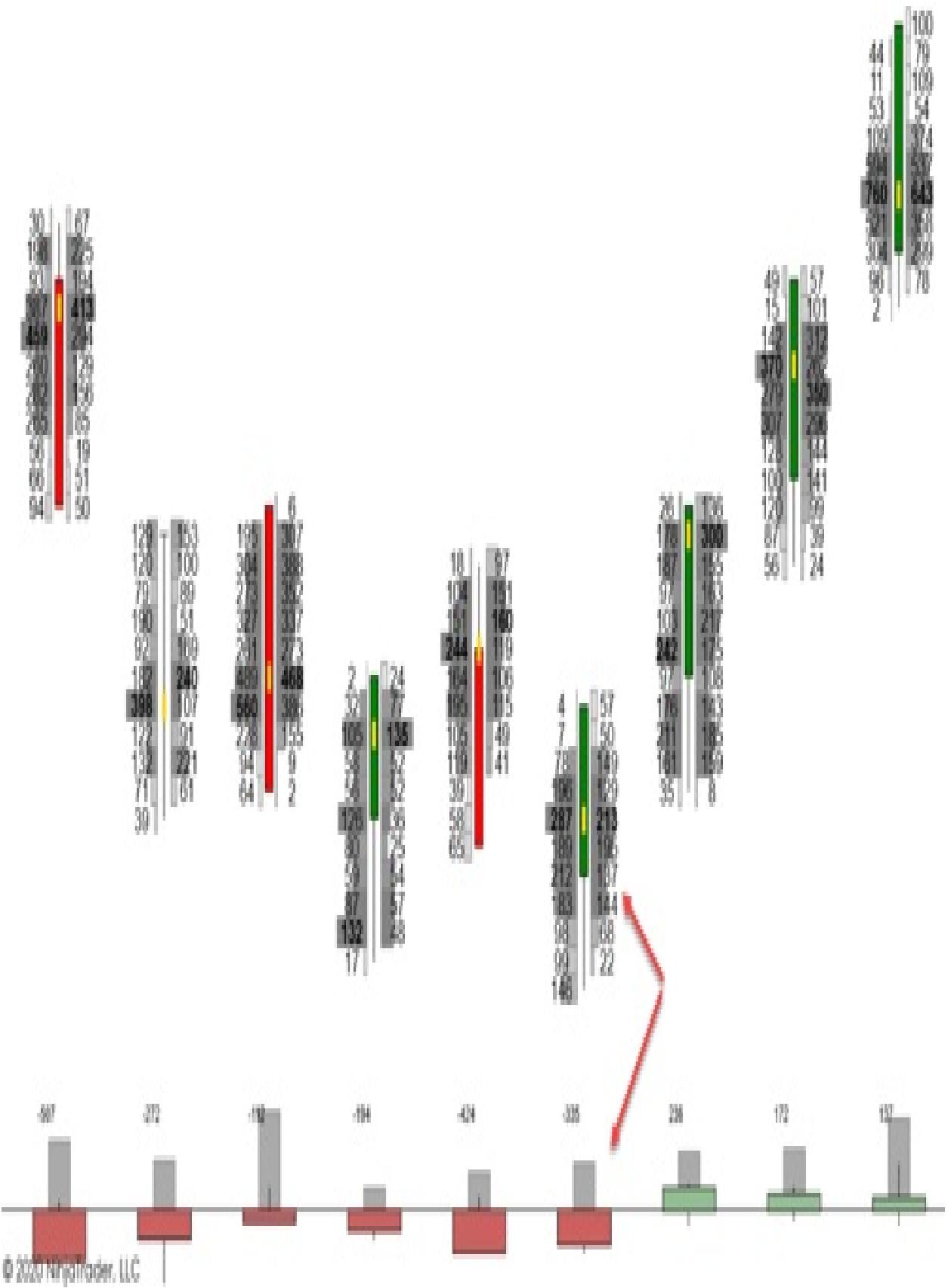


What happens when the Delta doesn't agree with the price? In a positive Delta your candlestick is expected to be bullish; and in a negative Delta, bearish. The divergence would appear when we observe a negative Delta in a bullish candlestick or a positive Delta in a bearish candlestick.

If all that appears on the ASK were buys to market with the intention of adding upward pressure it is impossible for a positive Delta to result in a bearish candlestick.

Continuing with the same example above, we see that the bearish candlestick that originates the turn has a very positive delta (+235).

The reasoning for this situation could be as follows: The positive delta may be the result of many aggressive buys (Buy Market) that have been blocked with passive sells (Sell Limit) and have not allowed the price to rise. All these cross orders appear in the ASK. Later on, as it was the case that there was little demand in the BID (few Buy Limits orders), a few aggressive sells now would cause the price to fall. And this is one way in which a positive delta with a bearish candlestick would finally be observed.



As you may have concluded, delta divergences implicitly identify an absorption so if they appear in the right place they usually anticipate interesting turns. This does not mean that all divergences will establish turns, since sometimes they will occur over an area of little interest and without that intentionality of absorption behind, hence the problem of its use arbitrarily

4.5.3 Price & Volume Operator

In the end, our task as traders is to identify when supply and demand imbalances occur and these will eventually be displayed on the price and volume chart.

A trader who only takes into account price and volume action may enter the market with a certain delay and not have certain information available (the real interaction between participants) but his trading will be much smoother as he does not have to interpret those order crosses.

In the previous example of the price divergence, the operator who simply analyzes the price action and volume will only focus on the fact that an anomaly, an effort result divergence, has occurred in that action. That large number of executed orders will most likely be accompanied by an increase in volume and a narrow range already denoting some divergence. In addition, a subsequent downward turn would confirm this anomaly.

Beyond the question of whether there has been a stops running, profit taking, entry of short positions or that buyers have been trapped; as we have already mentioned it is probably a little bit of all the above, what is relevant is the final action and the trader who does not observe the flow of orders but knows how to interpret the chart will eventually reach the same conclusion, but with less stress.

4.5.4 Conclusion

In addition to all that has been mentioned regarding order matching, it is also the right time to remember the different types of agents operating in the market and the intention behind their actions (hedging, speculation and arbitrage). The orders that these participants execute are also shown on the BID and the ASK, and as we have seen, not all of them have directional intentions that are ultimately those that seek to shift the price.

This is not a minor issue as the only ones who will appear again to defend their position in case they have aggressively entered the market looking for a profit from the price movement will be speculative traders. We may see the execution of a large order at one price level coming from some institution with the objective of hedging a position held in another parallel market, or it may be the activation of an arbitrage strategy, to name a few possibilities.

We therefore add a new layer of opacity and subjectivity. On the one hand, not all participants come to the market with a speculative interest; and on the other hand, the matching of orders cannot determine the origin of such negotiation.

We conclude therefore that the use of Order Flow of a independent way could be totally meaningless since in no case can it offer us what is the most important aspect to be determined in the market: the context; knowing exactly where we are going to look for trades and in which direction. Trying to understand this is vital in order to be able to make solid analysis and scenarios.

Part 5. Volume Profile

The Volume Profile is a variant of the Market Profile®, a tool designed by J. Peter Steidlmayer in 1985 for the Chicago Board of Trade (CBOT®).

Steidlmayer was a trader and executive member in this important futures and options market for over 40 years. This new method of representing the auction was initially intended only for CBOT members but quickly spread abroad. We can therefore sense that his approach to how the market moves does not seem to have a bad foundation.

Unlike the Order Flow analysis, the Volume Profile is totally objective as it does not require any interpretation and therefore provides us with very useful information for our analysis and scenario planning.

With the analysis of the Volume Profile we return to all the concepts initially presented in the Auction Market Theory. We do not focus on determining what intention a particular order crossing has, but rather expand the image to identify the most relevant trading areas.

The Volume Profile is not an indicator. It is simply another form of representation of the volume data. It identifies very clearly and precisely the number of contracts negotiated at the different price levels.

5.1 Auction Market Theory + Volume Profile

The Volume Profile uses the principles of Auction Market Theory to put it into practice and to visualize the areas of interest on the chart. Interest is simply measured by the activity that has been generated in a particular area; and that activity is identified by the volume traded.

This tool will therefore make it easier for us to identify the areas of greatest and least interest and will serve to evaluate the price when interacting with them in order to determine whether acceptance or rejection is occurring.

All these principles are based on the premise that the market has memory and tends to repeat behavior. Therefore, it is expected that in the future certain areas will behave in the same way as they did in the past.

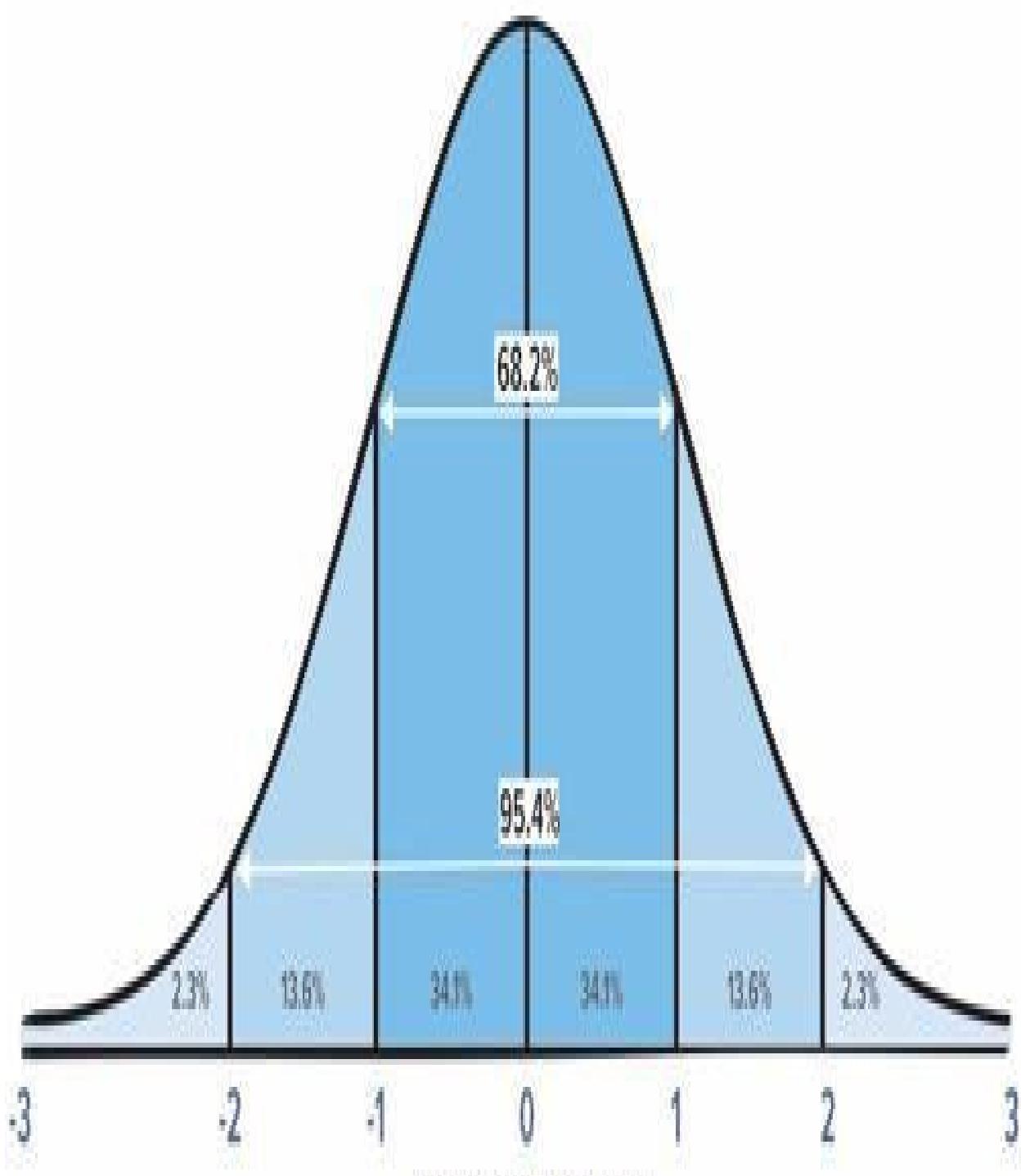
A precaution to be taken into account is that the market's memory is mainly short-term. This means that more recent trading areas are more important than older ones. If the price initiates an imbalance the first zone to take into account will be the most immediate previous balance zone.

The longer the price has been out of a certain area of acceptance, the less significance it will have. If we do not have another reference, it will still be useful to value it, but it is important to be aware that the most immediate areas of balance will most likely be the ones that the market will look for in the first place, since they are the ones that best represent the value at the present time.

5.2 Volume Profile Composition

The volume profiles are visually observed on the chart as a horizontal histogram where their values are distributed according to the negotiation that each price level has had.

Depending on the amount of contracts traded at each price level the form of the distribution will vary. The more transactions, the longer the length of the horizontal line; while a short horizontal line represents little trading.



Desviación estándar

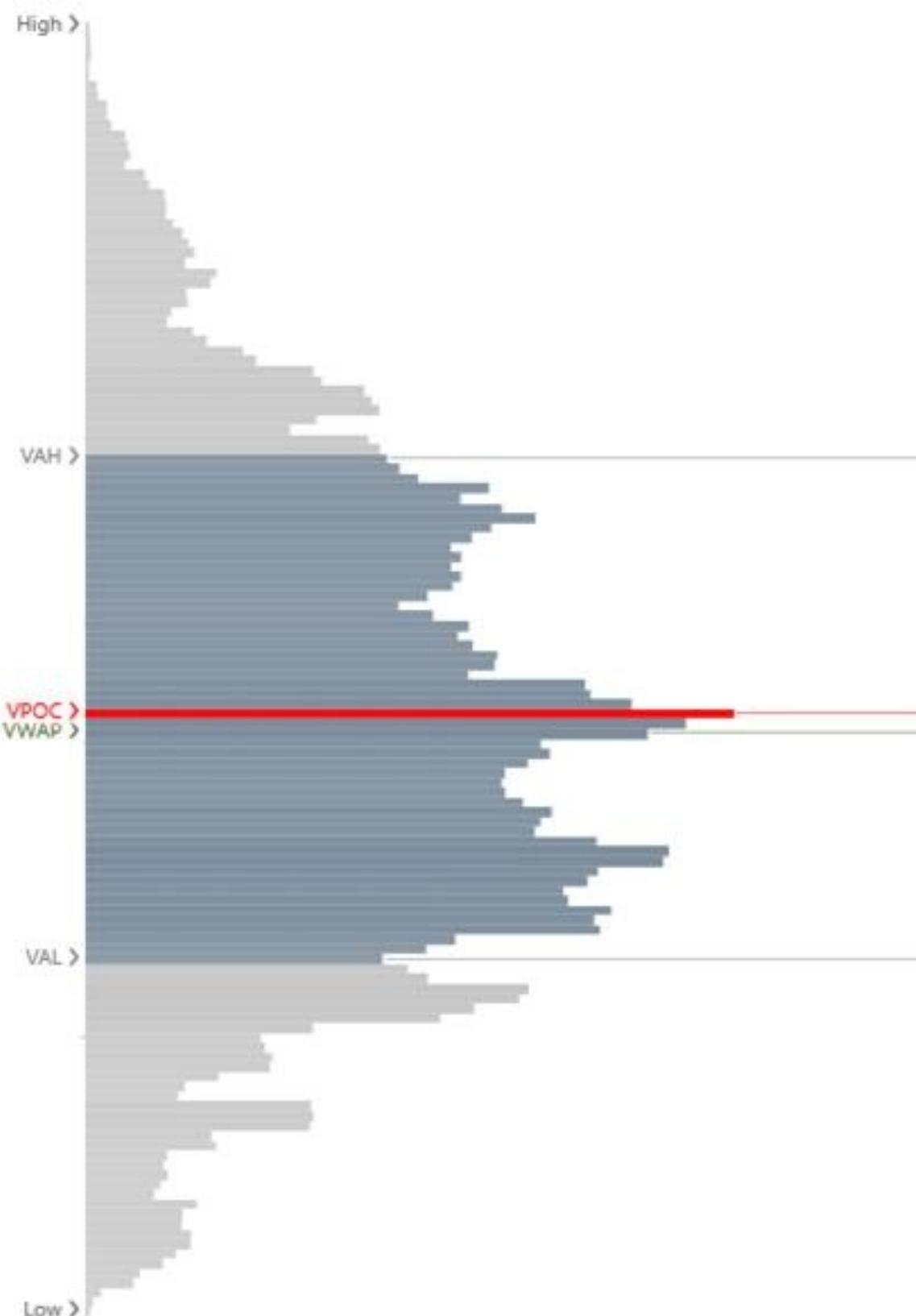
As a reference we will take a normal distribution or Gaussian bell to understand the most important statistical concepts:

The data are distributed symmetrically with respect to the central point where the mean, median and mode coincide.

It has three standard deviations on each side, which are located at equal distances and measure the amount of variability or dispersion around an average. It is also a measure of volatility.

The first standard deviation comprises 68.2% of the data and up to the second deviation 95.4% is reached.

Value Area (VA)



This real example is in the form of a normal distribution where the values are distributed above and below around the central point.

The data is organized by a vertical axis where the price is located and a horizontal axis representing the volume variable.

The value area is determined between the Value Area High (VAH) and the Value Area Low (VAL), is part of the first standard deviation and represents exactly 68.2% of the total volume negotiated in that profile. It is the most traded area of the profile and is therefore considered an acceptance area.

The volume traded outside the value area comprises the remaining 31.8%. This is the least negotiated area of the profile and is therefore considered a rejection area.

The high and low levels of the value zone (VAH and VAL) will act as support and resistance areas since some interaction is expected above them.

The breadth of the value area leaves traces about the market conditions. A large Value Area suggests that there is a large participation of all traders, all are buying and selling at the prices they want; while a narrow Value Area is a sign of low activity

Extremes

This is the highest (High) and lowest (Low) price achieved in that profile. These

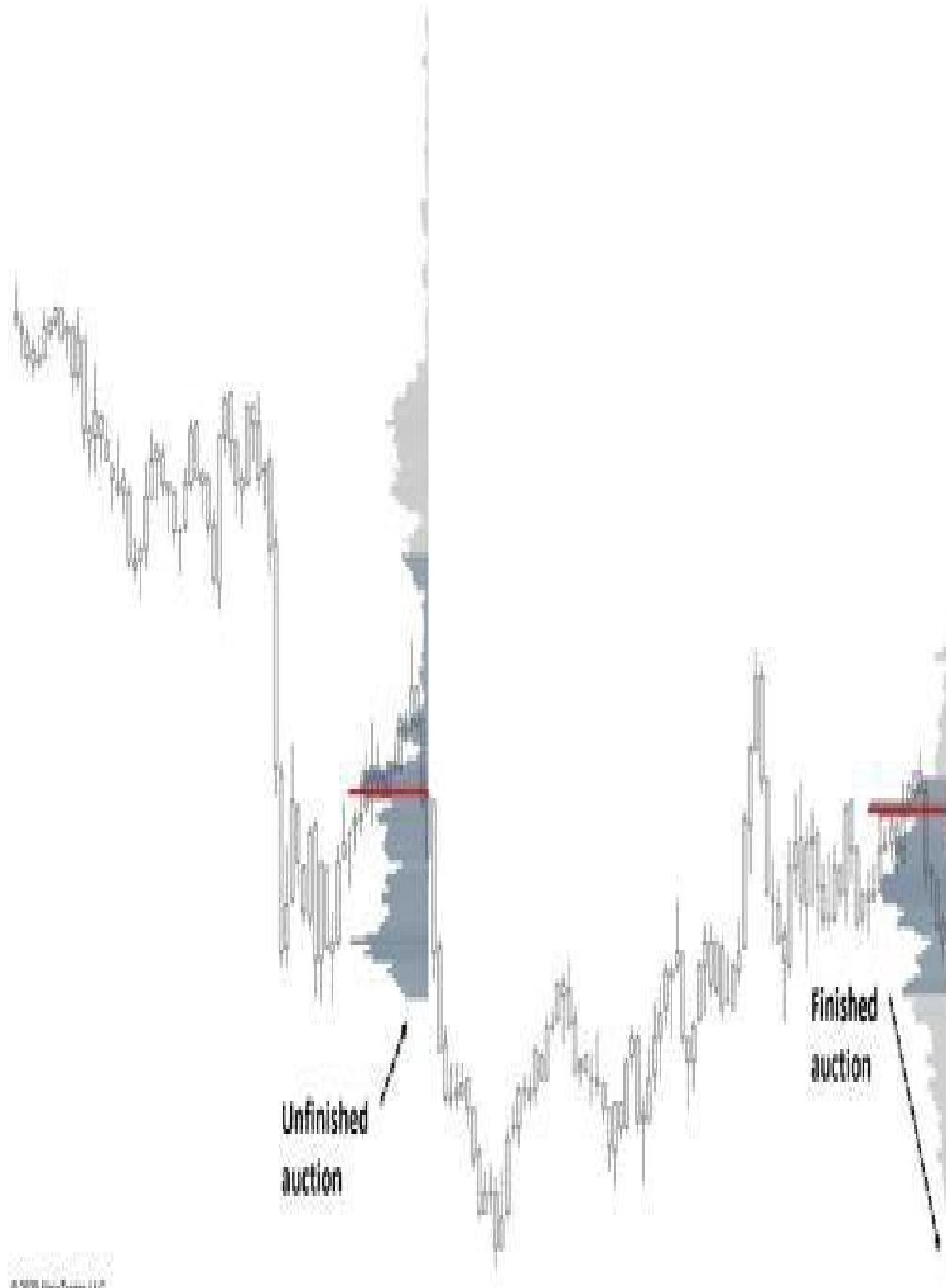
price levels should always be seen as key reference points.

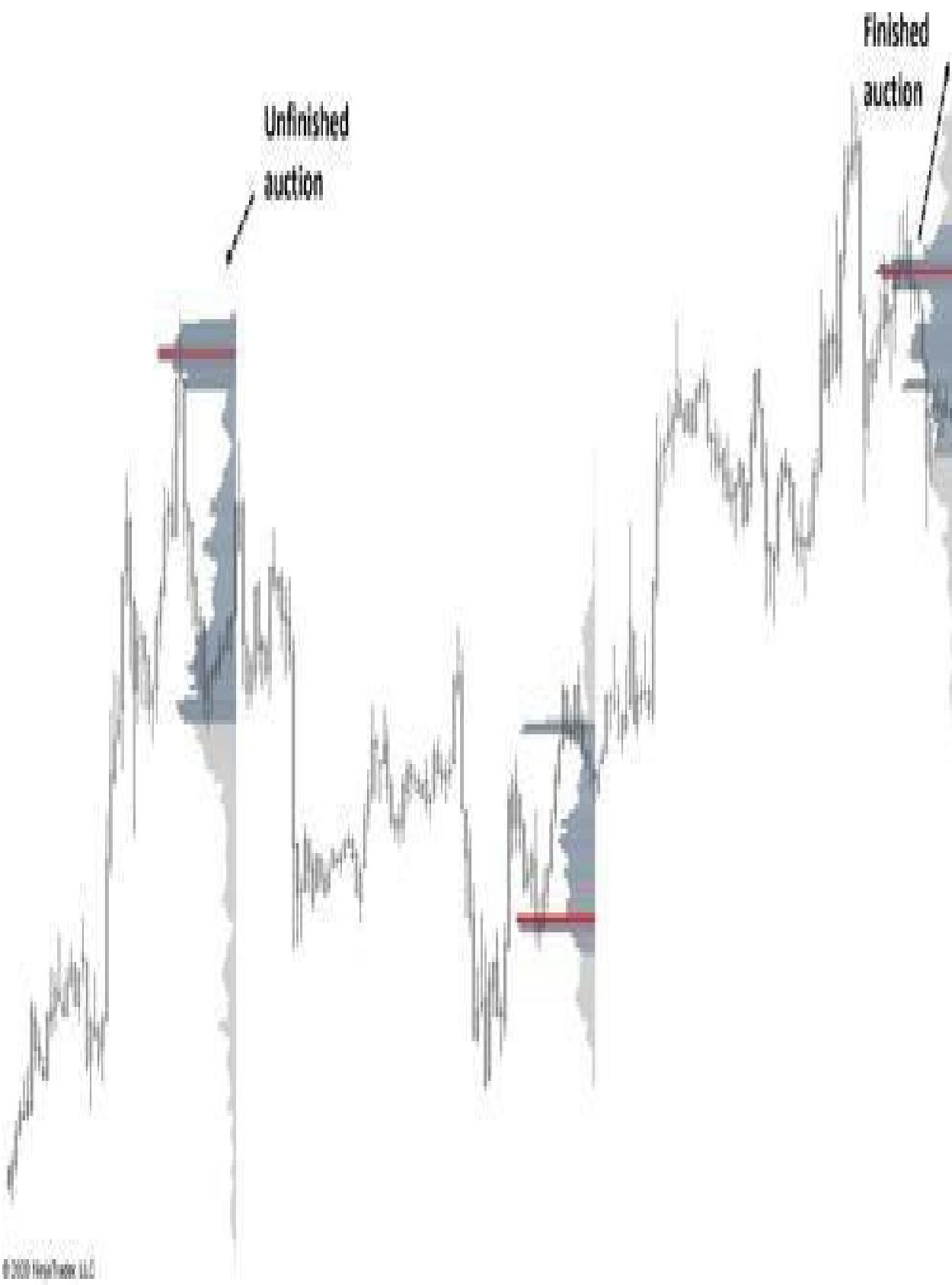
Depending on the negotiation that is generated at these extremes we can consider that they represent finished or unfinished auctions.

Finished auction. It is observed visually with a decreasing negotiation towards the extreme. It represents a lack of interest as the price reaches levels farther away from the value zone, finally suggesting a clear rejection of the market to trade in that zone. By its very nature it is a Low Volume Node.

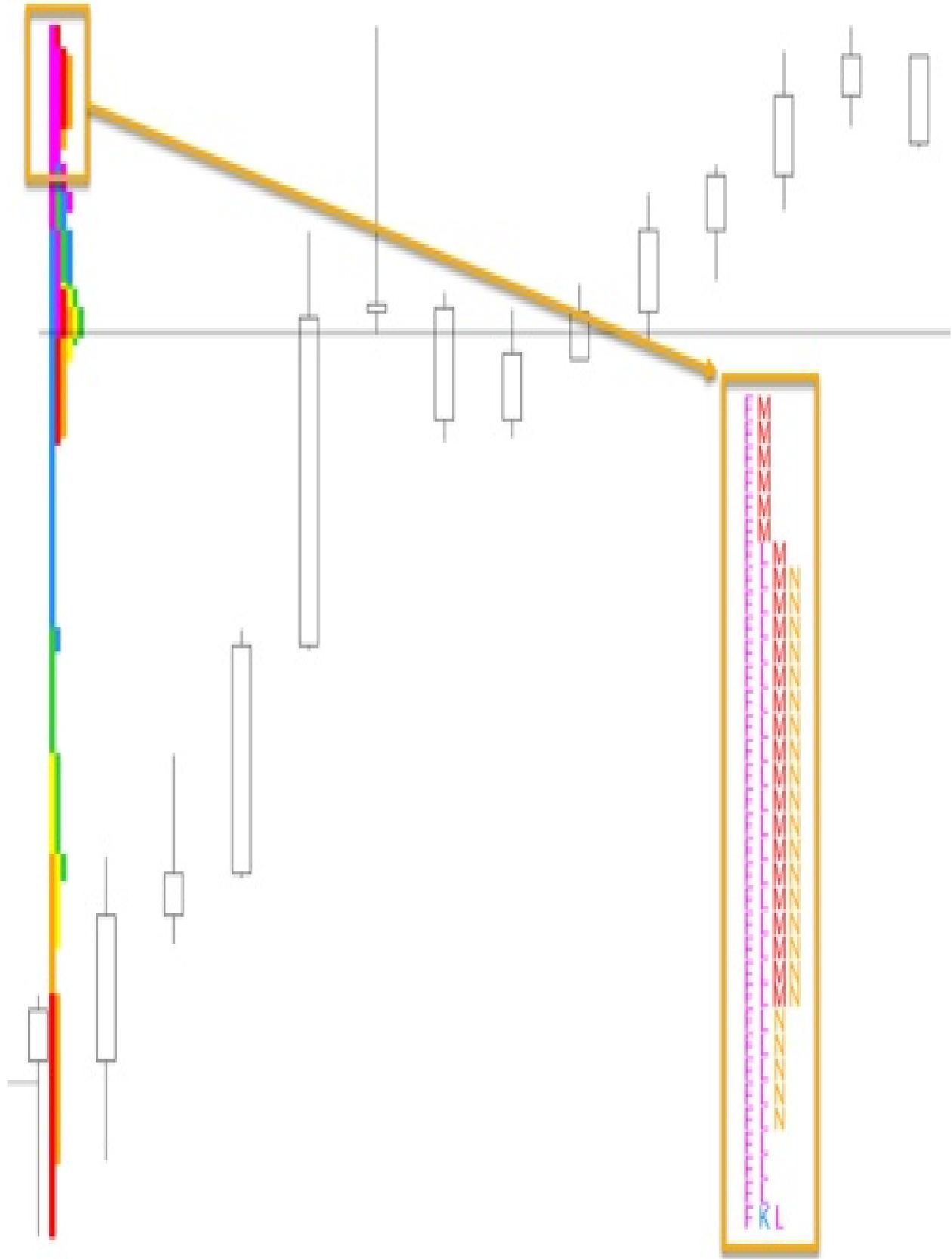
Prices have reached a point where some traders have considered it an advantageous opportunity and have entered causing that rejection. The lack of participation from the opposite side is represented by this decrease in volume.

Unfinished auction. It appears as a High Volume Node on the end of the profile. Implicitly it represents interest to negotiate in that zone and therefore suggests a later visit of the price in case you have previously moved away from it. In the future visit it will be necessary to evaluate the intention behind it as it could be developed with the aim of finishing the auction and turning around, or with the aim of continuing to negotiate and continue in that direction.





This concept of a finished or unfinished auction can be very useful because if, for example, we are evaluating the possibility that the price leaves a zone of balance upwards, we will want to see that in the lower part of this zone a finished auction is observed that would suggest a lack of interest in negotiating there. In case of observing a possible unfinished auction it would be convenient to quarantine the scenario since the most probable thing is that before starting the upward movement there will be a visit of the price in that low part with the objective of testing the interest in that zone.



When in doubt about whether we are in a possible finished or unfinished auction, it is advisable to treat it as finished. Unfinished auctions should be very visual and should not be involved in much subjectivity. Generally we will observe them as an abnormal cut in the profile distribution and in many occasions it will coincide with one of the two Value Area limits.

In Market Profile this concept is totally objective: an unfinished auction (Poor High & Poor Low) appears at an end where at least two TPOs are observed; or what is the same, a finished auction will be represented with only one TPO in the price level (Single Print).

Volume Point of Control (VPOC)

It is the level of highest volume concentration in that profile. It represents the most accepted price by both buyers and sellers (fairest) and sets the level from which the value area is calculated.

Since most of the volume comes from large institutions, it is the place where these large traders have accumulated most of their positions. They usually accumulate contracts in a range of prices but VPOC represents a benchmark because it identifies where the interest is greatest.

As this is a level that will attract many operations, it is generally advised to avoid operating in its vicinity. Broad consensus among participants will cause fluctuations around this level. Behavior that will be maintained until new information appears that unbalances the perception of the participants.

VPOC allows us to establish who is in control of the market. If the price is above it, we will determine that the buyers will have control, so it would make more sense to trade long; if it is below it, the sellers will have control, so trading short would be a better option.

Note that VPOC, by its very nature, will always be a High Volume Node, but not all High Volume Nodes will be VPOCs.

Volume Weighted Average Price (VWAP)

If there is one level widely used by large institutions it is the VWAP. Huge transactions seek to be executed at the price level where the VWAP is found and that is why it has raised its level of importance.

The VWAP represents the average price of all contracts traded during a particular time period. The formula for obtaining it is as follows:

No. of traded contracts X contract value / Total traded contracts

To understand it a little better we can say that above the VWAP there is the same volume operated as below it, so it represents an important level of balance. This equilibrium means that when the price reaches the VWAP there is the same probability that the price will go up or down.

It is displayed on the chart as a traditional moving average and its position varies as the transactions are executed. Generally, depending on the trading style, the

session, weekly or monthly VWAP is used.

The VWAP is used by institutional operators mainly as an average to determine the value of the asset at that particular moment so they consider that they have bought cheap if the price is below and that they have bought expensive if it is above.



The institutions have taken the VWAP as a reference measure with which to judge the quality of their executions, hence its relevance and that we treat it as an important operational level. When they receive an assignment, they do not execute all the contracts they need at one time, but will try to do so gradually, knowing that their work will be judged on the basis of that reference level.

Because it represents an important level of balance or fair pricing, it is a good measure of whether we are buying too expensive or selling too cheap. We can tell this by adding one or two standard deviations to the average. Just because the price is at some standard deviation doesn't mean it can't keep moving in that direction, we could simply use it as one more print to add to our analysis.

But be careful because everything depends on the market's assessment at that moment. In a market in equilibrium a price below the VWAP will be considered cheap and a price above expensive; but just when the market is unbalanced towards one or the other side the VWAP stops representing efficiency since now the perception of value has changed.

Depending on the time frame we can make use of different levels of VWAP. The most commonly used are session VWAP for intraday operators and weekly and monthly VWAP for medium and long term operators.

High Volume Nodes (HVN)



These are areas that represent balance and a high level of interest by all market participants since both buyers and sellers have been comfortable doing transactions there. The following are observed as peaks in the volume profile.

Although for this example we have used a Composite type profile, the fundamentals are equally valid and applicable to all profiles.

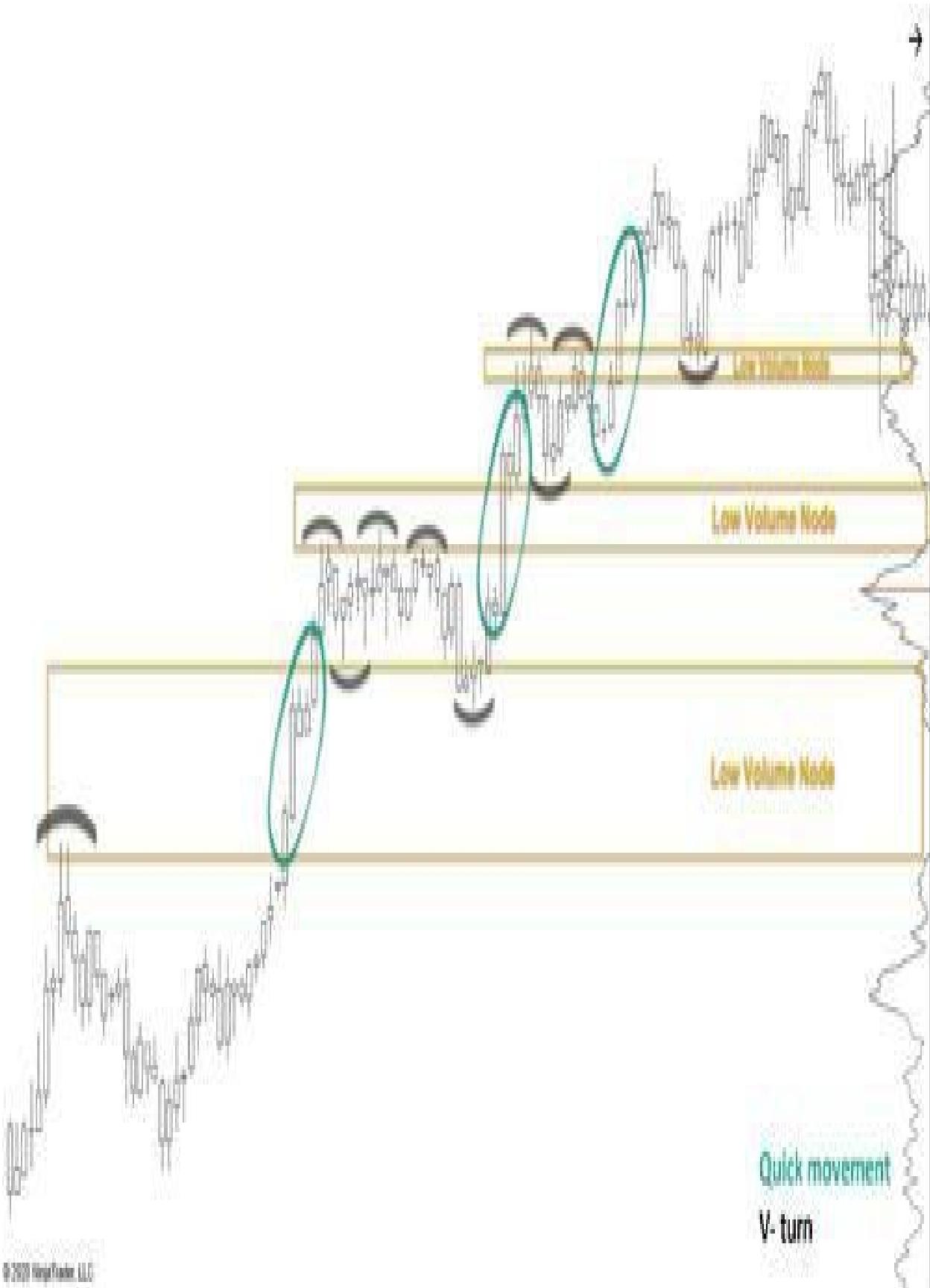
The past balance zones act as magnets attracting the price and keeping it there. As in the past there was some consensus between buyers and sellers, in the future exactly the same thing is expected to happen. This is why they are very interesting areas for target setting.

Within the same profile, different High Volume Nodes can be identified.

Low Volume Nodes (LVN)

These are areas that represent imbalance/rejection. Neither buyers nor sellers have been comfortable operating and therefore "unfair" prices are considered in some way. It is observed as valleys in the volume profile.

As in the past there was no consensus, it is expected that in the future there won't be either and they will cause some rejection, so they are interesting areas of support and resistance where to look for potential entries.



It is important to understand that rejection can be represented by the price in two ways:

V-turn. The perception of the value has not changed with respect to the previous zone of balance and there is a refusal to trade at those levels. The market turns completely around to re-enter the previous zone where buyers and sellers are comfortable trading.

What provokes this reaction in the price is firstly the location of passive orders waiting over this zone to block the movement, together with a subsequent aggression that confirms the V turn and return to the previous value area.

Visually it may be observed in the price as prominent wicks at the ends of the candlesticks which will suggest such rejection.

Quick movement. The participants' perception of value has changed and is represented in the price by a violent movement. The market, based on the new information rejects to trade in those levels of the LVN and crosses it quickly.

Technically what causes this rapid movement is on one hand the execution of the protection orders (Stop Loss) of those who are positioned on the opposite side; and the activation of the momentum strategies that enter aggressively with market orders.

Visually you will see on the chart candlesticksticks of wide range accompanied generally with a high volume.

As with HVNs, more than one Low Volume Node can be displayed within the same profile.

5.3 Profile Types

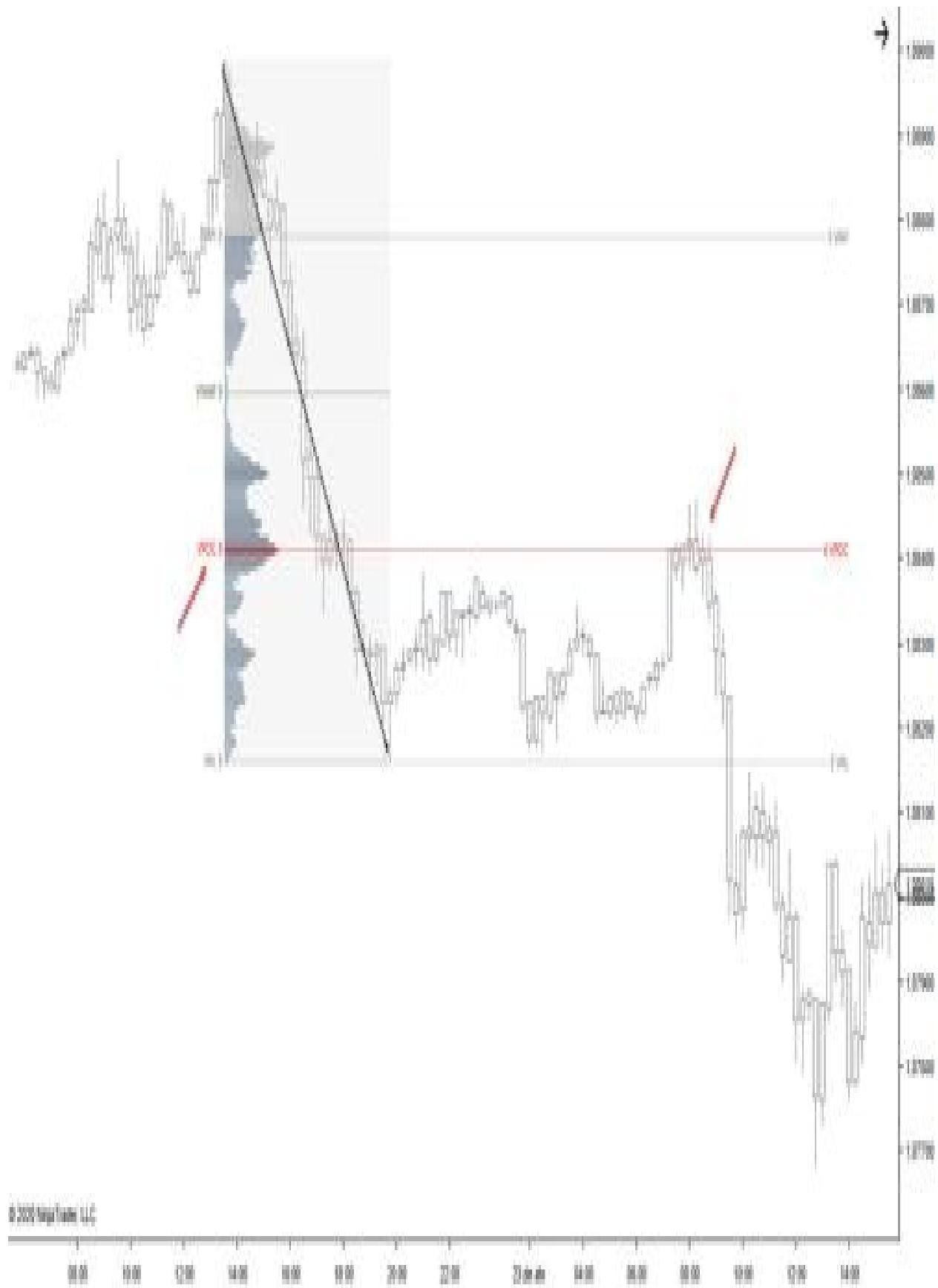
The volume profile is a tool that can be adapted according to the needs of the operator.

The main difference when using one type of profile or another will be determined by the temporality of work of the trader and the context he needs to cover in his analysis.

Basically we can differentiate three types of profiles:

Fixed range

This type is very versatile. Its peculiarity is that it allows us to throw profiles manually on any particular price action.



It is especially useful for identifying trading zones in two types of contexts: trend movements and ranges.

If we see a downward trend movement we can launch a profile of all the movement to identify the interesting areas where the price may go to make some kind of upward reversal. It is in those operating zones where we want to be prepared to evaluate the possibility of entering into the trend. In the example we see how the price tests the VPOC of the downward movement and from there a turn is generated that causes the development of a new downward movement.

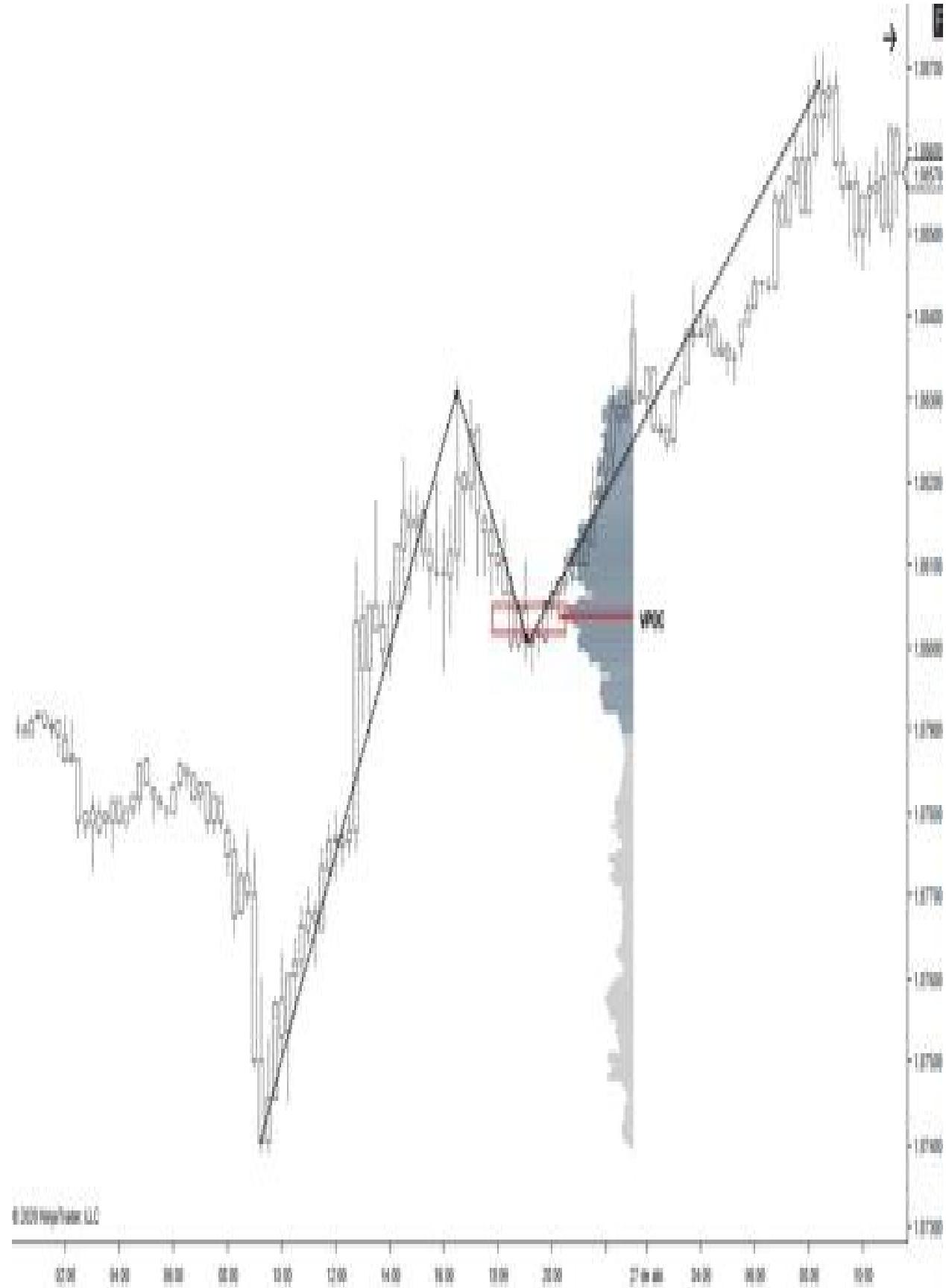
If what we have is a context of lateralization, a structure of which we work under the approach of the Wyckoff methodology, the profile will be very good for us to identify mainly where the VPOC is that determines the control of the market and the value zone with its extremes (VAH and VAL). These will be very interesting to take into account in order to seek on them the test after breakout the structure, as in the following example.



Unlike the other types of profiles, the fixed range is not updated and only analyzes the volume operated in the area determined.

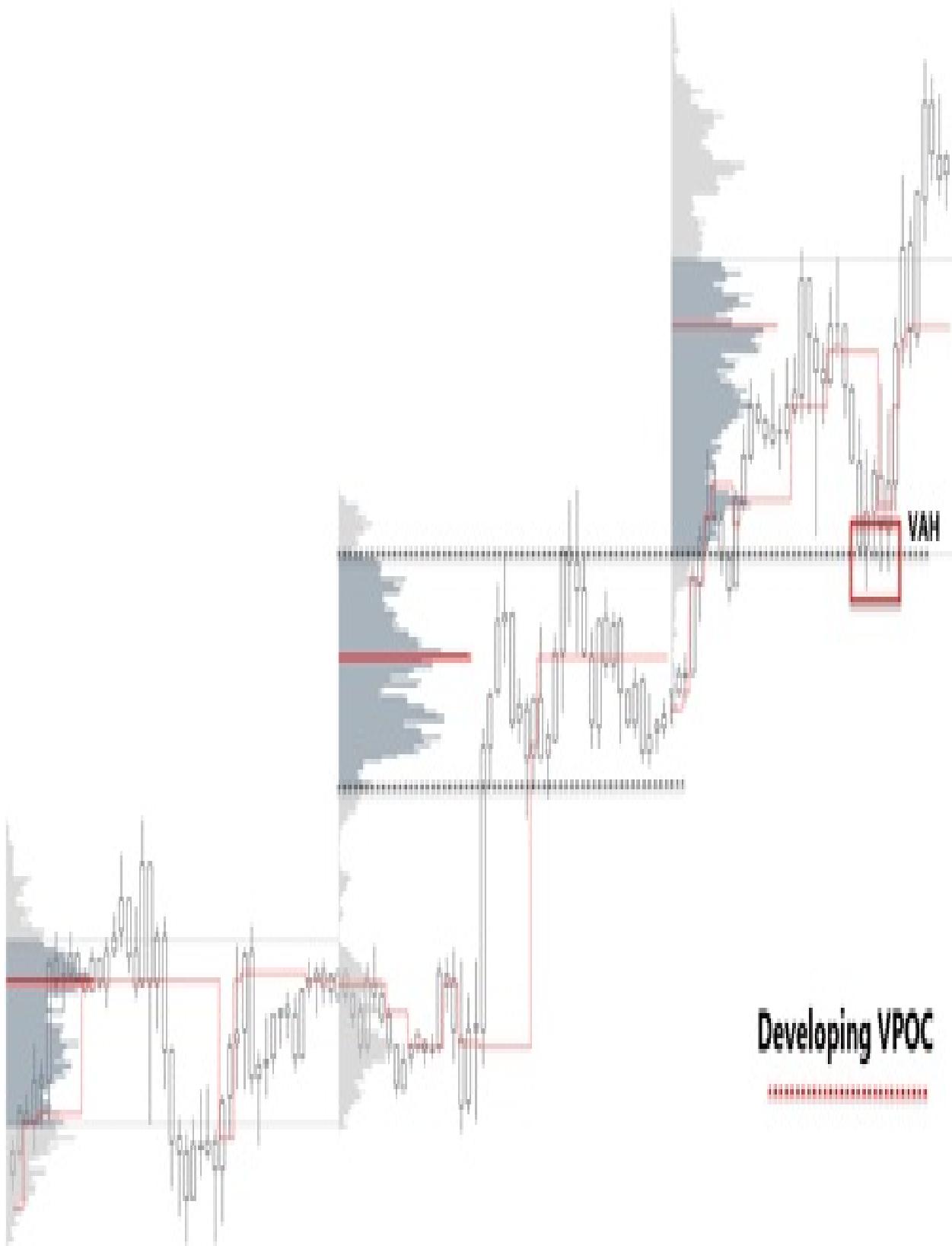
Regardless of whether you are going to work with structures or not under the Wyckoff methodology approach, it is very useful to throw away profiles that encompass several sessions in case we see an overlap between their value areas. If we see more than one session generating value over a certain range of prices, the most advisable thing to do is to launch a profile that includes all the price action, since the operational levels that such a profile can provide us with will have, by their very nature, a greater relevance.

Session Profile



This is the profile of the day. Especially useful for day trading where the most important trading areas of the session are taken into account. Its range is from the beginning to the end of the session, so it is updated as the day progresses.

Shorter term traders use both the session levels and the previous sessions to make their scenario proposals.



Developing VPOC

If we find ourselves observing an upward movement and a subsequent lateralization of the price it would be interesting to look for the incorporation in favor of the trend movement on some operative level. As we know, the most important level of the whole profile is the VPOC so we must take it into account to wait for our trigger.

Continuing with this same example, another interesting area on which to look for a test after a break could be some operating area from previous sessions. If we are above the value area of the previous session, the first operating level on which to wait for a test to seek the continuation of the upward trend will be the Value Area High of the profile of that previous session.

Composite

Originally, profiles were only displayed by session and this idea of grouping them was introduced by Donald L. Jones in his book "Value-Based Power Trading" in what he called "The Overlay Demand Curve". The objective was to try to eliminate the noise of the shorter term and thus obtain a better understanding of the market condition, of the context.

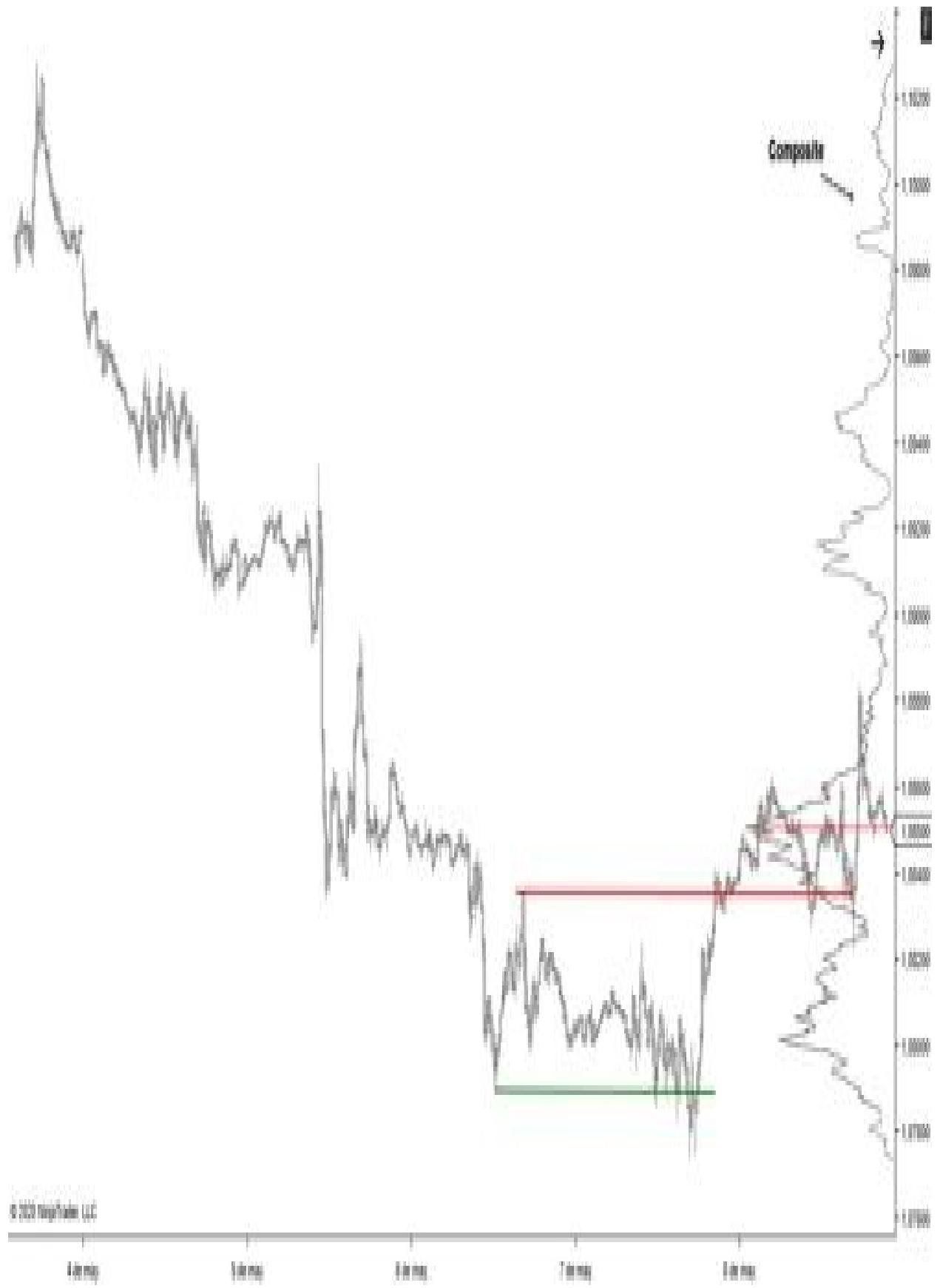
This type of profile can be configured in two ways:

Fixed. Within the fixed mode we have the possibility to select the range of dates we want to include in the profile analysis. You may want to know the profile of last week, last month or current year, this mode is designed for this particular requirement.

Variable. The variable mode has the important peculiarity that it shows the traded volume of all the price levels that there are at that moment on the chart. It

is important to keep this in mind because in case of moving the chart, the profile will change.

The best use that can be made of this type of profile, regardless of the time frame in which we are operating, is to analyze the general context and identify the trading zones (mainly the high and low volume nodes) that we have both above and below the current price.



These areas will serve to point out the market bias in a more macro context as well as to establish possible areas where to look for entries and exits.

If, for example, we are working on a structure, it is very interesting to analyze the profile of the composite in order to identify the longest term High Volume Nodes on which to establish objectives to take benefits.

Another use could be to identify in the macro context a large Low Volume Node and favor a shake. We could be working on a potential cumulative structure. If, when analyzing the context, we identify an LVN relatively close to the structure, it would be interesting to take into account the possibility that the Spring that generates the imbalance of the structure will occur on it.

5.4 Difference between vertical and horizontal volume

Many who view the Volume Profile with some suspicion suggest that it is not necessary to incorporate this type of tool in order to make sound analyses and approaches based on the volume data.

This is totally true, it is obvious that there is absolutely nothing necessary. The problem is that they fail to understand what kind of information they can acquire through their evaluation.

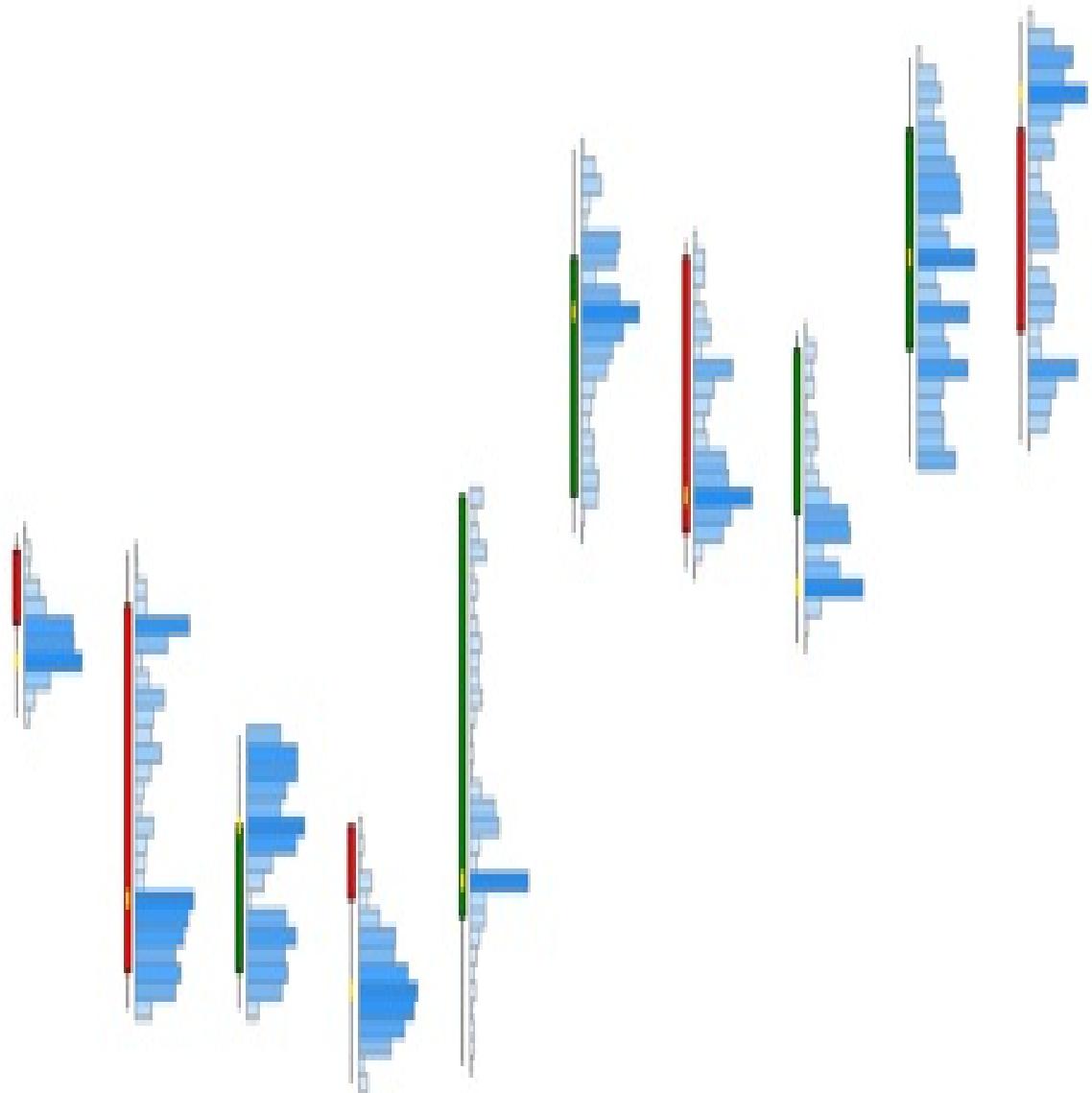
The first thing that should be conveyed is that the Volume Profile was not developed as a substitute for the classic volume. They provide different information and are therefore completely complementary.

In order to really understand what information the volume data provide, it is necessary to examine it from two points of view:

Volume at time: This is the classic volume that can be seen vertically on the chart. It has to do with the number of contracts exchanged within a certain period of time. It tells us when the large operators are active.

Volume at price: It is the Volume Profile and it can be seen in the form of horizontal bars. It tells us the number of contracts negotiated within a certain price level. It tells us where this activity of the large operators has taken place.

As we can see, both provide us with different information about the same action (the professional activity), the volume at time has to do with the when while the volume at price has to do with the where.



With the vertical volume we can know that during the development of a particular candlestick a number of specific contracts have been traded, but how has the trading been distributed across the different price levels? This is the information that the horizontal volume provides us and that the classic volume cannot. Another very different question is that you need to know this information for your trading.

5.5 Difference between Volume Profile and Market Profile

The main difference between both tools is that the Market Profile is designed as a function of time; while the Volume Profile is designed as a function of volume.



The Market Profile represents the price data on the chart in letter format, where each letter (called TPO or Time Price Opportunity) is identified with 30 minutes of trading. Then, the letter "A" will correspond to the first 30 minutes after the opening of the session, the letter "B" to the following 30 minutes and so on, letters and minutes will be added until the end of the day.

Traders who base their operations on Market Profile analyze the opening of the day with respect to the previous day's value area and the evolution of the Initial Balance (range covering the first hour of trading) to determine the type of day that is likely to occur and to propose scenarios based on this. Here we must point out that some operators determine the Initial Balance based on the first half hour only.

Although Volume Profile traders do not usually take the Initial Balance into account, the message it conveys can be very interesting mainly because:

The narrower the range, the more likely to have a trend day; and the wider range, the more likely to have a lateral day.

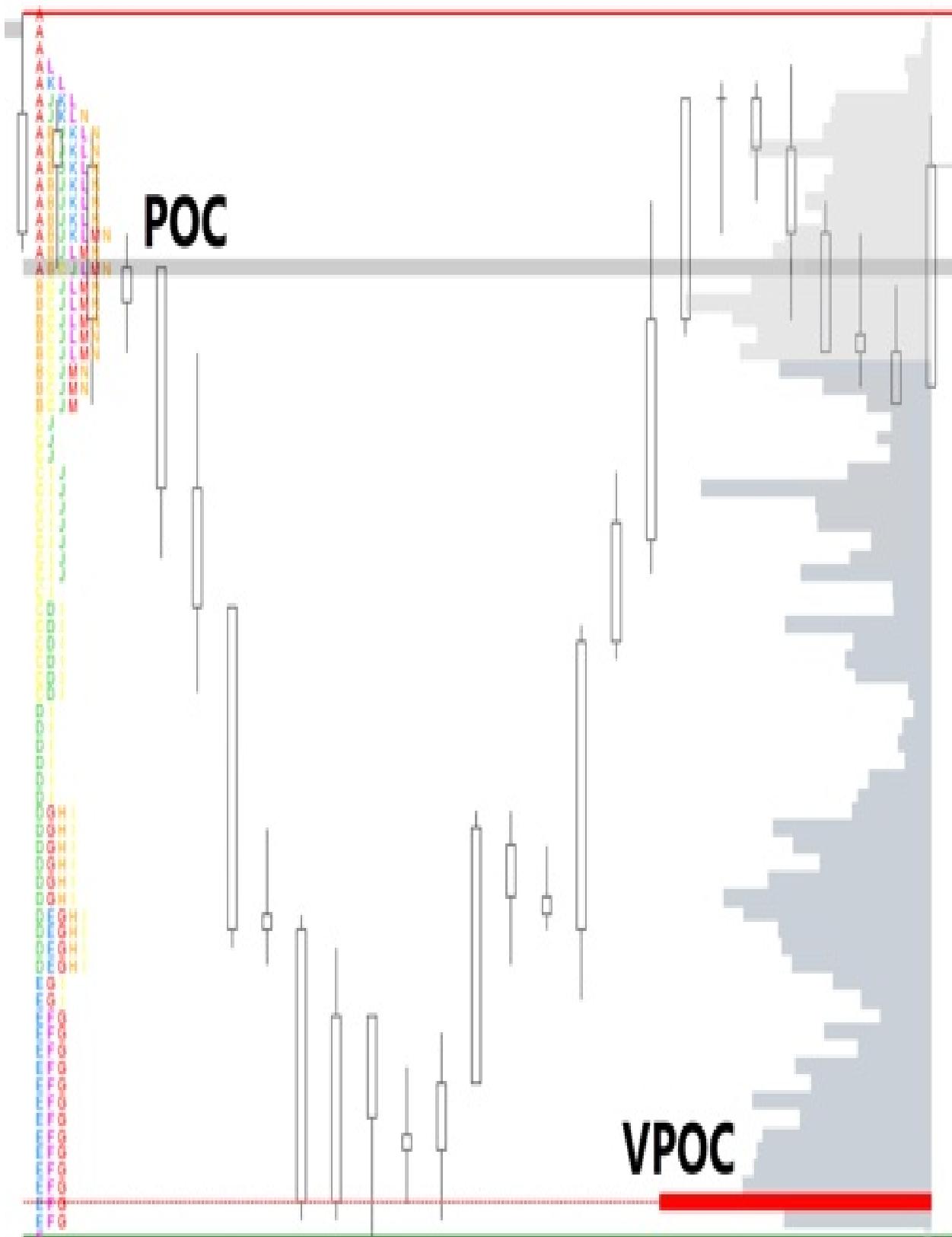
An interesting use of the MP is the objective determination of acceptance or rejection on a price level. While in Volume Profile this may be involved in subjectivity, the analysis through Market Profile eliminates this discretion: the rejection is visualized by 1 TPO; while 2 or more TPOs begin to represent acceptance.

The development of the distribution of the profiles of both tools will tend to be quite similar, although it is true that they will not be exactly the same. This is obvious since they do not use the same data for their representation. An accumulation of TPOs will indicate that the price has spent a lot of time at that

particular level; while an accumulation of volume will mean that a large number of contracts have been exchanged at that level.

In Volume Profile, since it is designed according to the volume, the most traded level will not necessarily be the level where the most time has been spent; because the price may reach a level that in a few seconds accumulates a large amount of orders and turns (as in the example). The time that the price has been at that level is little but the volume traded is a lot; so the POC of Volume Profile will be at that level while the POC of Market Profile will not.

Due to the current ecosystem of the financial markets where the importance of volume is evident, it would seem more interesting to use the combination of price + volume (Volume Profile) rather than price + time (Market Profile).



This does not mean that the time variable is unimportant or less important, nothing is further from the truth. Obviously time is a key element in establishing where participants decide the value of a particular market is at a particular time. The consumption of time over a certain area is an unquestionable sign of acceptance and therefore of value construction.

5.6 Profile Shapes

Obviously, the market will not always develop D-shaped profile distributions as this would mean that we are in an infinite context of balance.

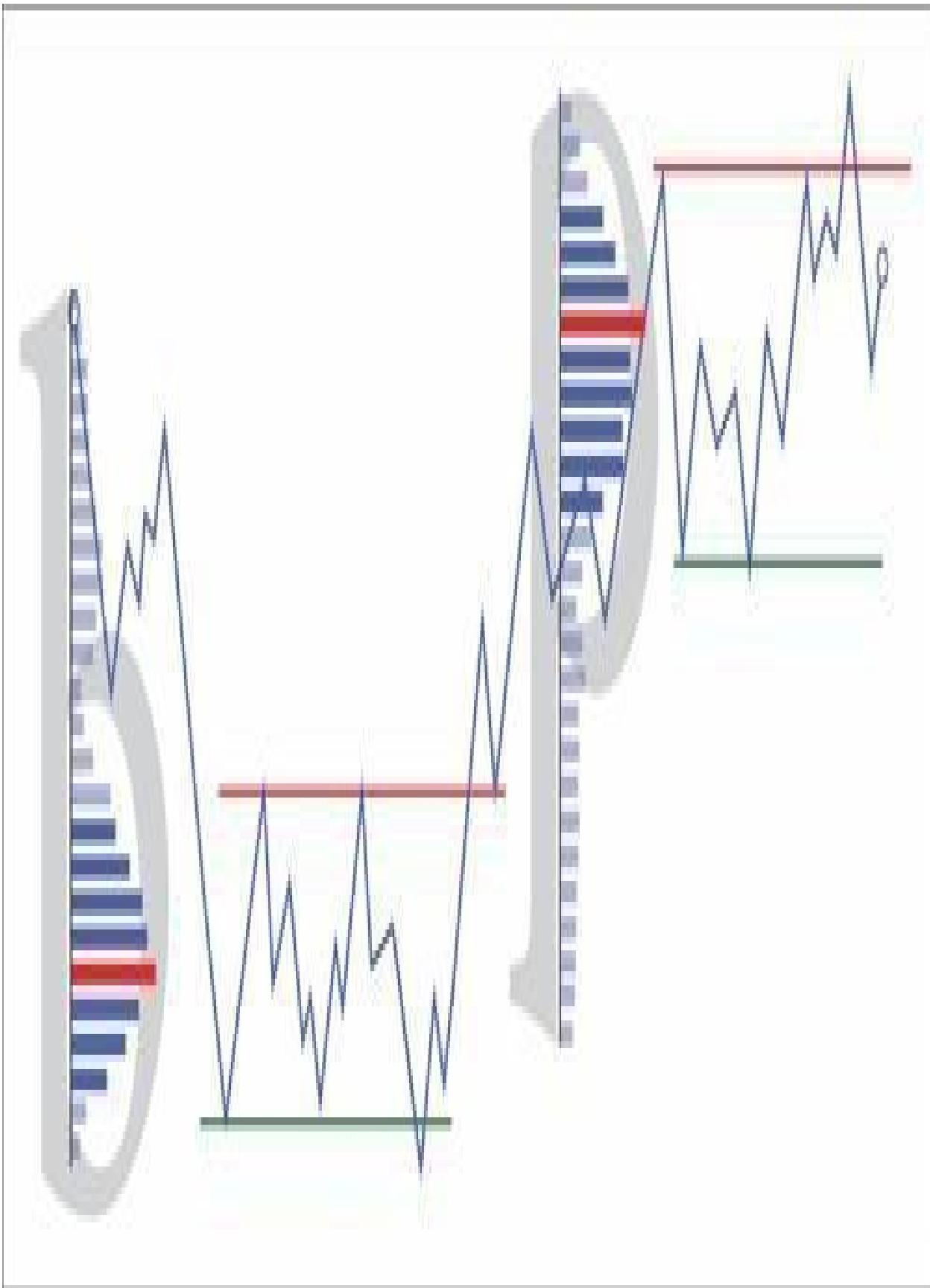
There is a lot of theory written in Market Profile about the different types of days based on the shape of the profile (normal day, normal variation, trend day, double-distribution trend day, non-trend day, neutral day, neutral day extreme).

The truth is that identifying the shape of such profiles to determine what kind of day we have had may be valid for the human mind from the point of view that we always want to control everything and need to find a logic to each behavior; but from an operational point of view it does not seem to be a very useful approach since the categorization is made by means of an a posteriori analysis.

In addition, over time evidence has been provided that it is not possible to consistently predict what type of day is most likely to be based solely on the categorization of the previous day. Steidlmayer himself finally recognized this. As it could not be otherwise, it is impossible to know what form the profile of the current session will take until it has been completed.

Exactly the same applies to the labeling of events, phases and structures under the Wyckoff methodology approach. It can be useful for the most beginners to feed the subconscious with the different ways in which the market can represent accumulations and distributions; but it is totally useless from the operational point of view since the confirmation of all this is done a posteriori.

It would seem more sensible therefore, with the aim of proposing operational scenarios, to focus on identifying the creation of a value zone (trading range) and evaluate the price continuously by interacting at its extremes with the aim of identifying acceptance or rejection. The analytical tools offered by the Wyckoff methodology help us determine who is most likely to be in control during the development of the range (buyers or sellers) and therefore in which direction is the path of least resistance.



During the development of the movements, the profiles will be generated and two very common forms in which the tendential and lateralization behavior is chartically observed are the b and P patterns.

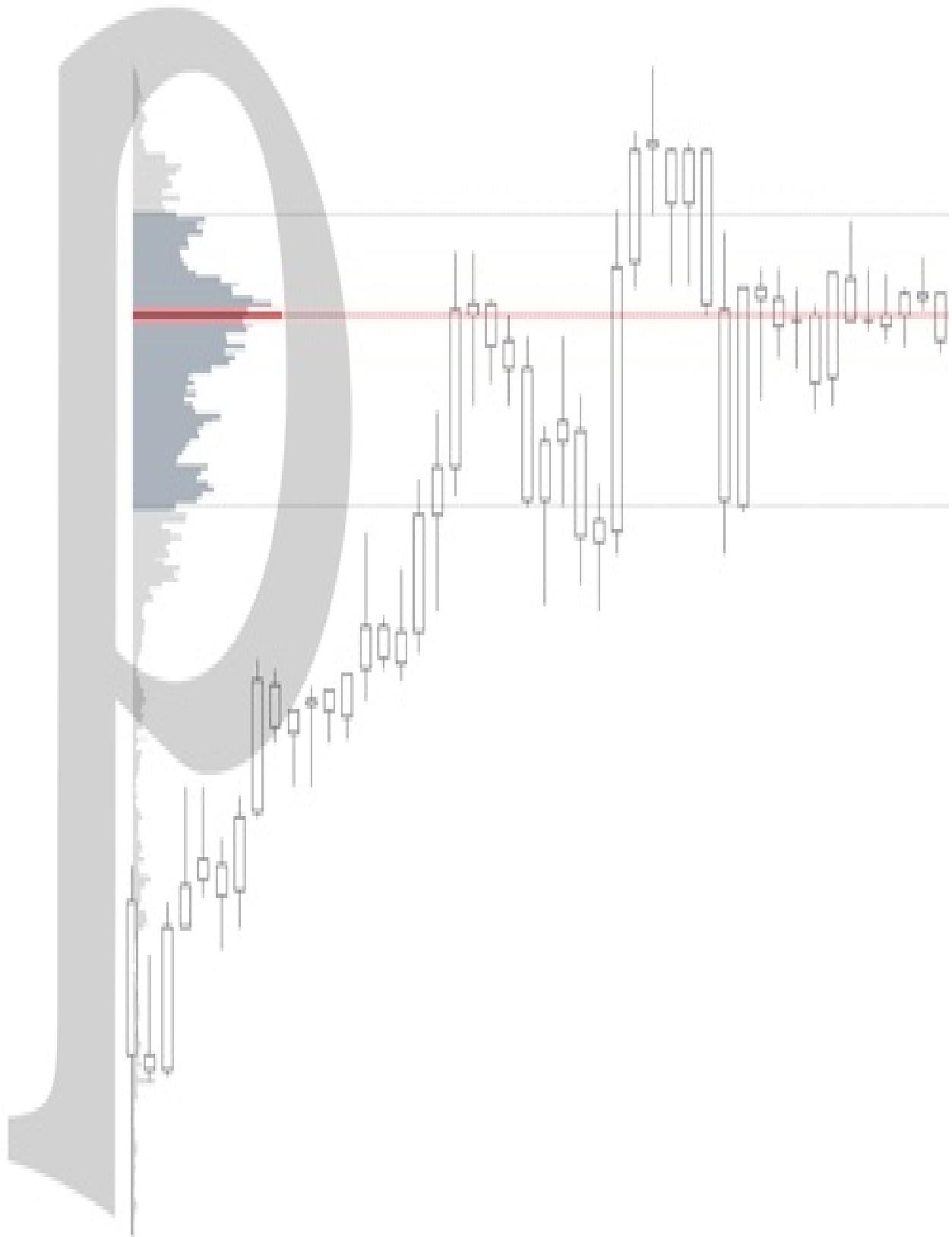
These patterns represent the first three phases of market activity that Steidlmayer presented in his first studies and that by Wyckoff methodology we identified as the A and B phases of structure development.

These patterns will alert us to the stop of the previous trend movement as well as to the new context of lateralization. These two types of profiles show the same behavior but in both directions. Firstly, in the low price zone the price moves with a certain fluidity developing the trend movement until finding traders willing to trade in the opposite direction. At that point a range of equilibrium begins to develop, a zone of high participation that generates the profile bell.

As long as the price is during the trend movement we should only be looking to trade in that direction. We can support on the developing VPOC and the rest of the operating levels to do so.

5.6.1 P-shape Profile

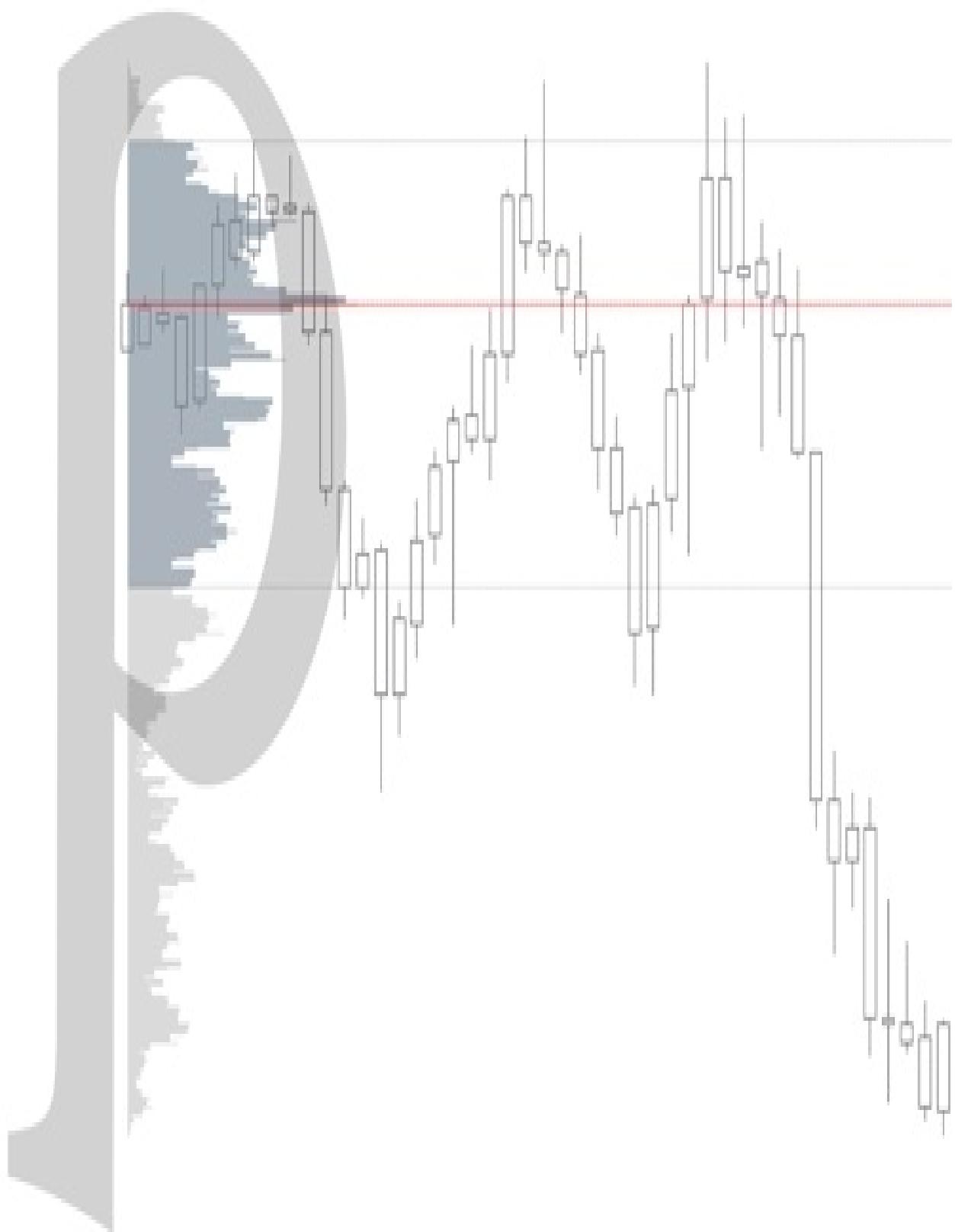
Characteristic of the upward trend movements and representative of the future distribution and reaccumulation schemes.



This type of profile suggests strength on the part of buyers who have had the ability to raise the price with relative ease until reaching a point where sellers begin to appear.

It consists of two parts: a first part where the imbalance is observed to rise and a second part where the market begins a process of rotation (trading range). This is important to keep in mind because if such a process occurs in reverse (first a rotation and then a downward trend) visually we will continue to see a P-shape profile with the big difference that it will have difficult operational validity.

All the concepts and tools that are being proposed have an operative sense; and in the case we are dealing with the P and b patterns they are only interesting if the last action of the price is the creation of new value (range) since it will be from there that the next profitable imbalance will be generated. That is, if we are at the end of the downward movement at the point of having already identified the mirror P pattern (with the imbalance on the right) completely, from the point of view of operating that imbalance we may be too late and the price will most likely generate a new zone of balance as a more immediate action. On the contrary, if we have a theoretical P pattern (with the imbalance on the left) we will be in a position to take advantage of the subsequent trend movement (which may be upwards or downwards).

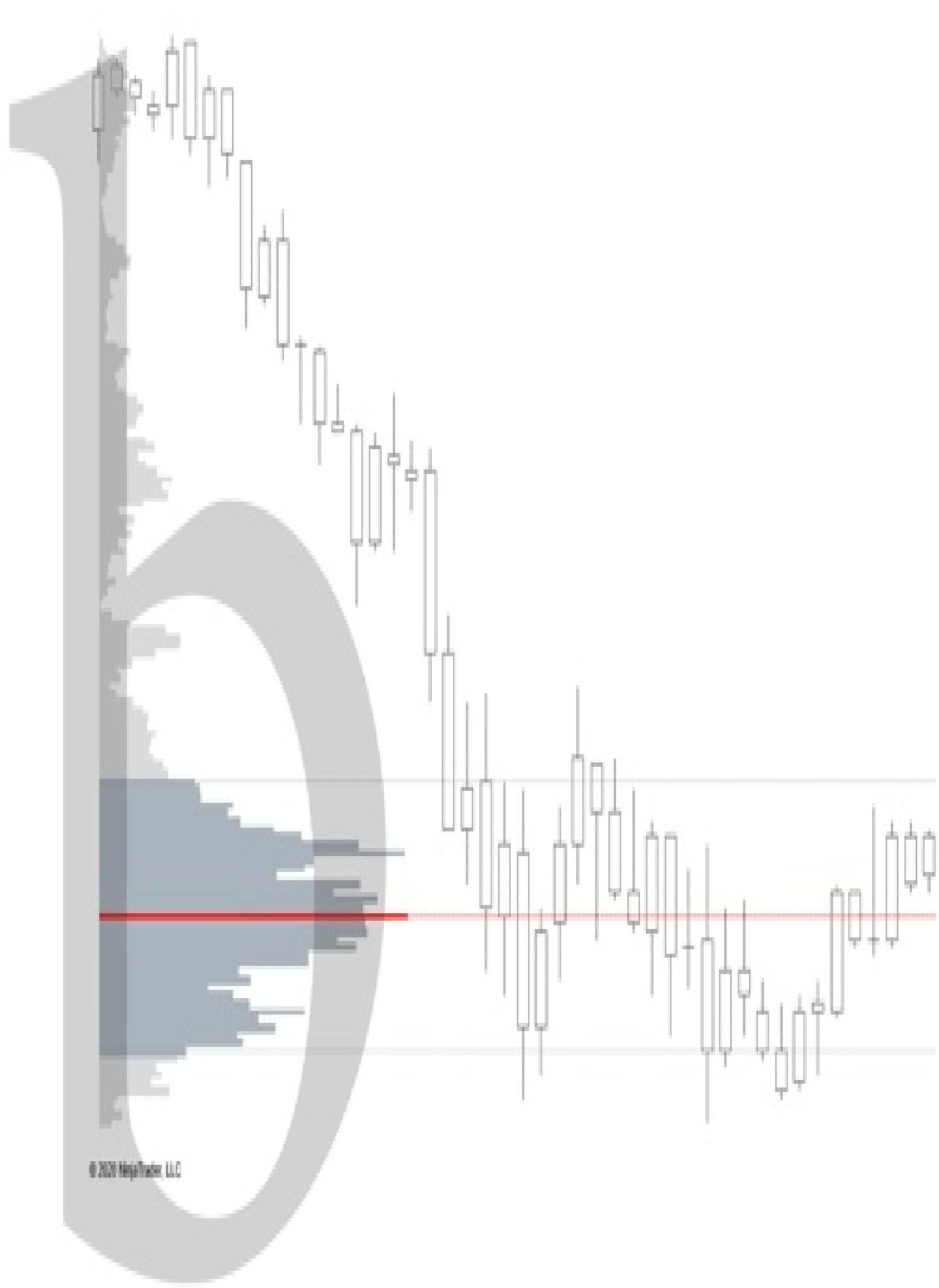


Besides seeing it in an isolated way (session profiles), it is interesting to know that a longer-term upward trend will be composed of several of these profiles in its internal development. In this case they will simply be reaccumulative schemes that originate the continuous upward development.

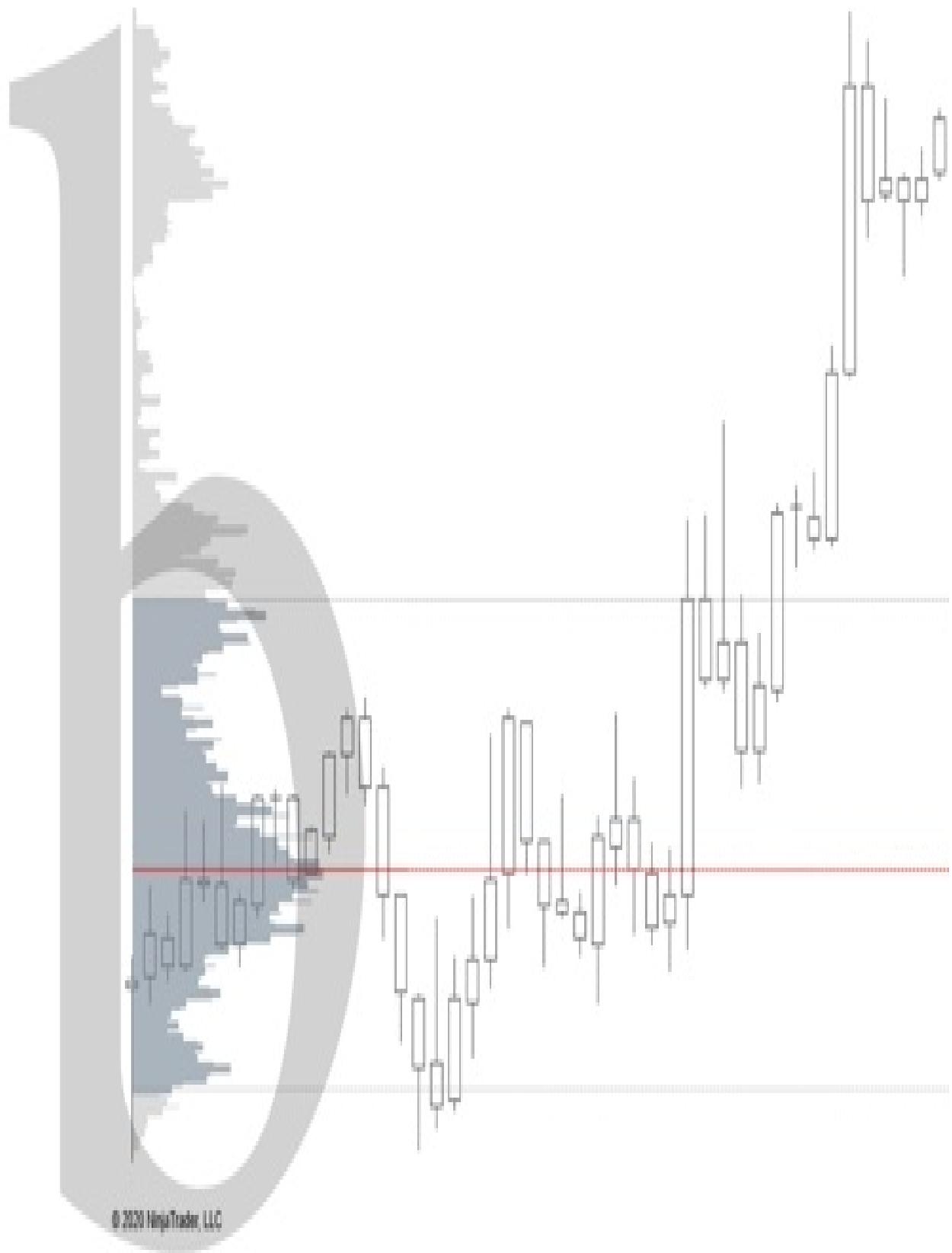
In case this type of profile appears after a prolonged downward trend it could alert us of its imminent end, at least temporarily. Here it is important to note that it refers to see the theoretical P pattern, because if what we see is a P pattern in mirror what we would have in reality would be a distribution and therefore the downward trend would denote strength.

5.6.2 b-shape Profile

Characteristic of downward trend movements and representative of future accumulation and redistribution patterns.



Individually, this type of profile indicates an imbalance in favour of sellers. The latter are in control and have strongly pushed the price down until finally some participants appear buying and a new rotation process is generated.



© 2020 NinjaTrader, LLC

As with the P pattern, the theoretical b type is formed by a downward imbalance as the first part and a value creation as the second. A rotation first and a subsequent upward imbalance would also appear visually with a b-shaped profile but operationally we may not be able to take advantage of that first imbalance. On the other hand, it would not have the same implications when analyzing the health of the preceding upward trend, where what is sought is the upward rejection and value creation below.

If we observe a b-shaped profile after a prolonged upward movement it could signal the end of that movement and sometimes the beginning of a new one towards the downward side.

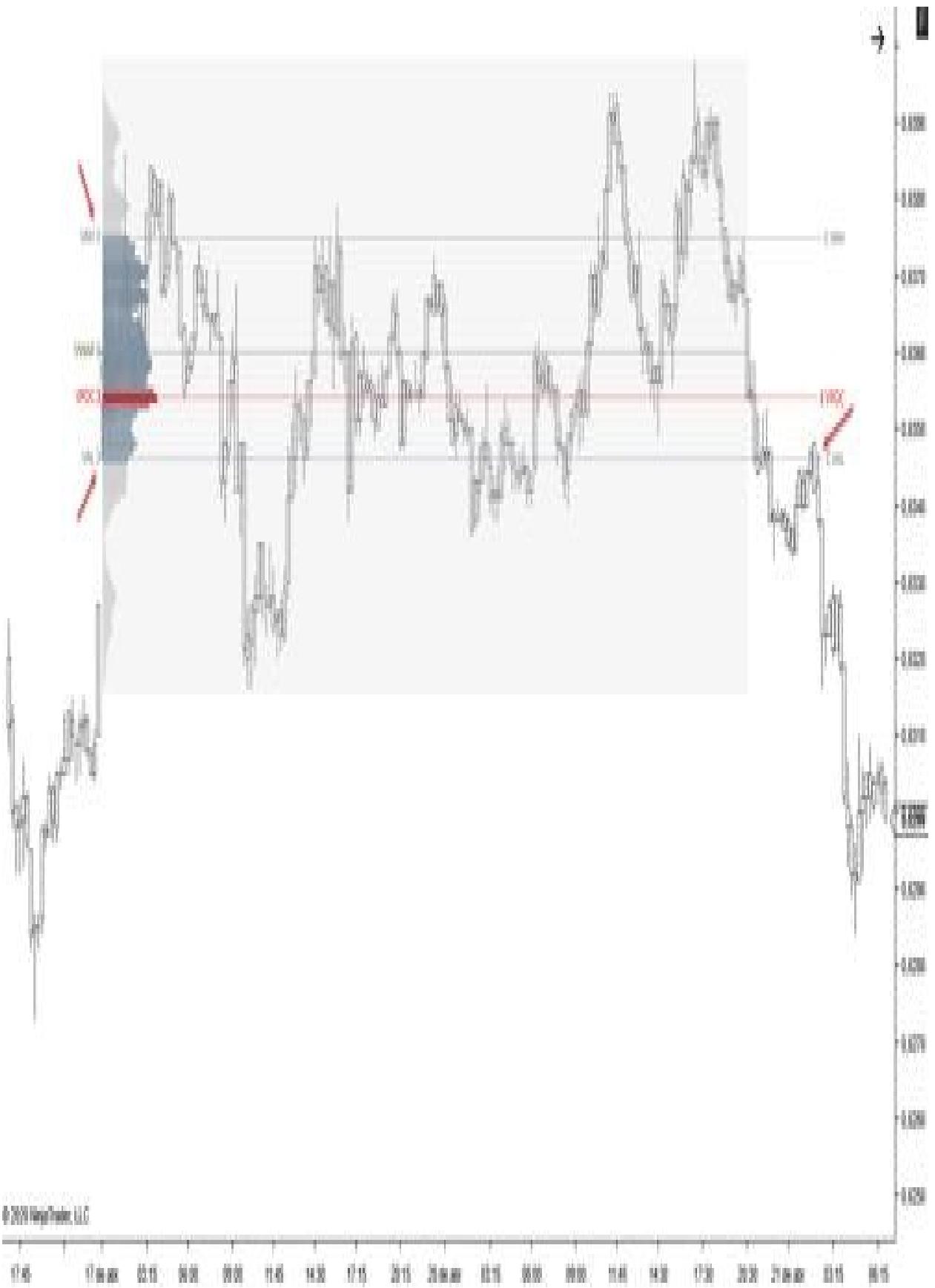
5.7 Volume Profile uses

This tool offers us totally objective information that fits perfectly within the context provided by the principles of the Wyckoff methodology and can help us mainly to:

5.7.1 Structure identification

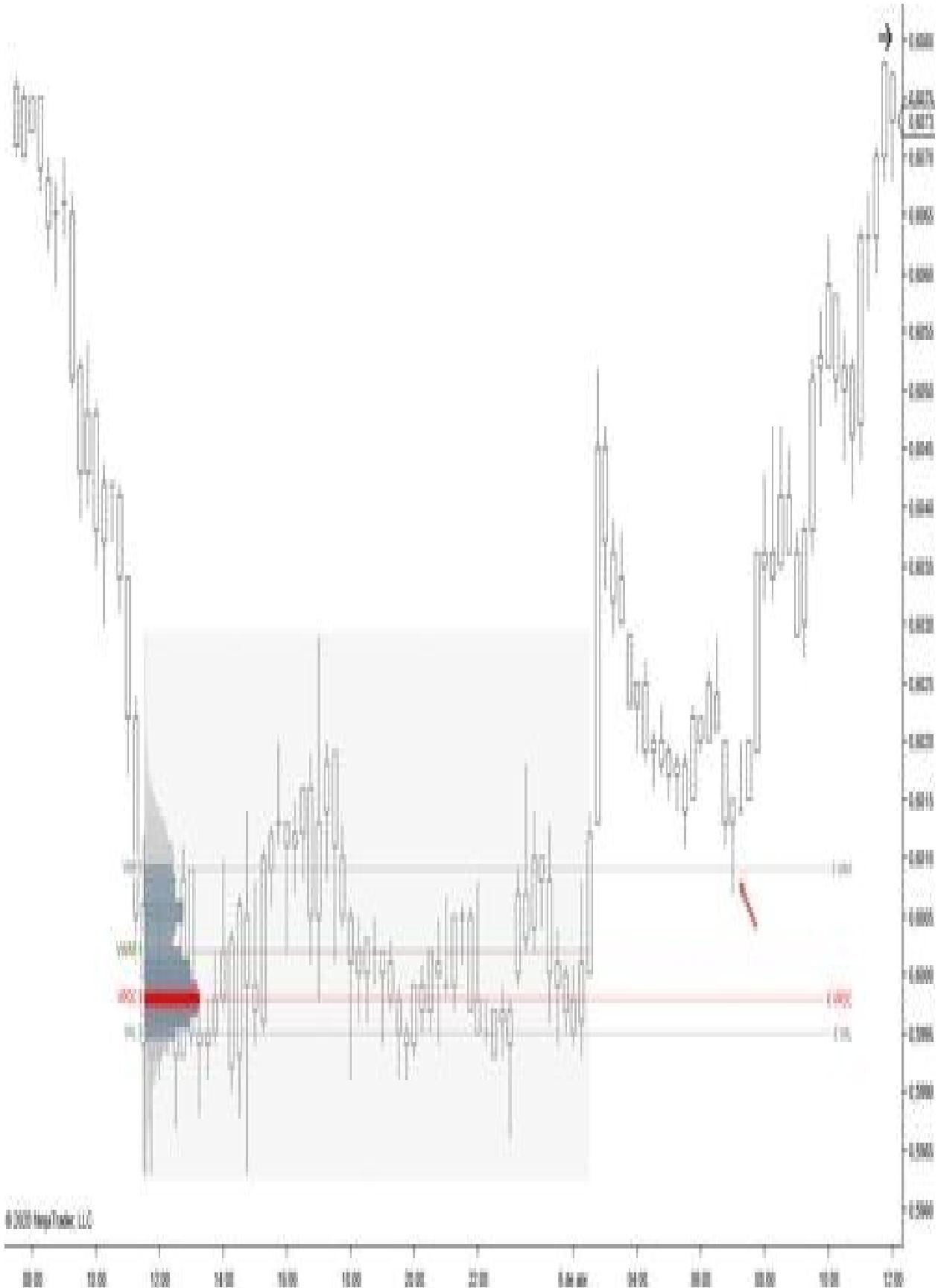
There will be occasions where the delineation of the extremes of the structures will not be very visual possibly because the price action has generated not very clean movements. In this context it can be very useful to help us from the Volume Profile to point out the high and low zones of the value area (VAH and VAL) assuming that area as the range that is generating the cause of the subsequent movement.

By their very nature, the upper and lower limits of the structures we work with according to the Wyckoff methodology will always be low negotiation zones (LVN). The price turns that generate the creation of these supports and resistances are zones where the price has not wanted to negotiate and therefore are identified as rejection. We already know that this rejection is visualized within the volume profile as an LVN.



In addition, on some occasions the natural extremes of the structures (Creek and Ice) will coincide with the extremes of the value area (VAH and VAL). By throwing a profile of that structure we can see how all the price action contained within the range will be part of the value area.

As seen in the chart, the bullish movement stop does not show a very clear price action where stop events are genuinely displayed. If we are in the final part of the development of such a structure we could pull a profile of the whole structure to identify the key levels by Volume Profile. In this case we see how after the final shake-up the price quickly crosses the entire value zone including VPOC and VWAP. At this point we should be favoring the distribution and therefore the first short scenario would be to wait for the test after break (LPSY) on one of the operating levels. The first of these levels to be taken into account would be the Value Area Low since it is the first one the market would find. We can see how this test was done to continue the bearish development from there. The next and last level on which to look for the potential LPSY would be the VPOC of the profile.



In this other example something similar happens. The stop events may not be the most visual ones, and it is also difficult to frame that upward movement that leaves the value zone and then re-enters it. The objective is that, if we find ourselves seeing an imbalance after the development of a structure already with a certain maturity, we can launch a profile to identify the operating levels on which to expect the price to develop the test looking for the continuation of the movement. Again we see how after the movement of breakout the test does just on the end of the value area of the profile, in this case on the Value Area High, is the perfect area for the search for the long entry trigger.

The extent of the profile should include all price action from the start of the rotation until just before the imbalance occurs. Some operators may also include the breakout action within the profile, which does not mean it is incorrect. Just keep in mind that from an operational point of view what we are looking for is that this test after a break will look for some operational level of the previous accumulation/distribution and this would leave out both the unbalance and the subsequent movement until the test.

As we can see, most of the structures that develop the markets in real time are not as genuine as shown in the ideal book examples, and they are all different from each other. But this does not mean that they are not operable. That's where the levels provided by the Volume Profile tool come into their own.

5.7.2 Determining market bias

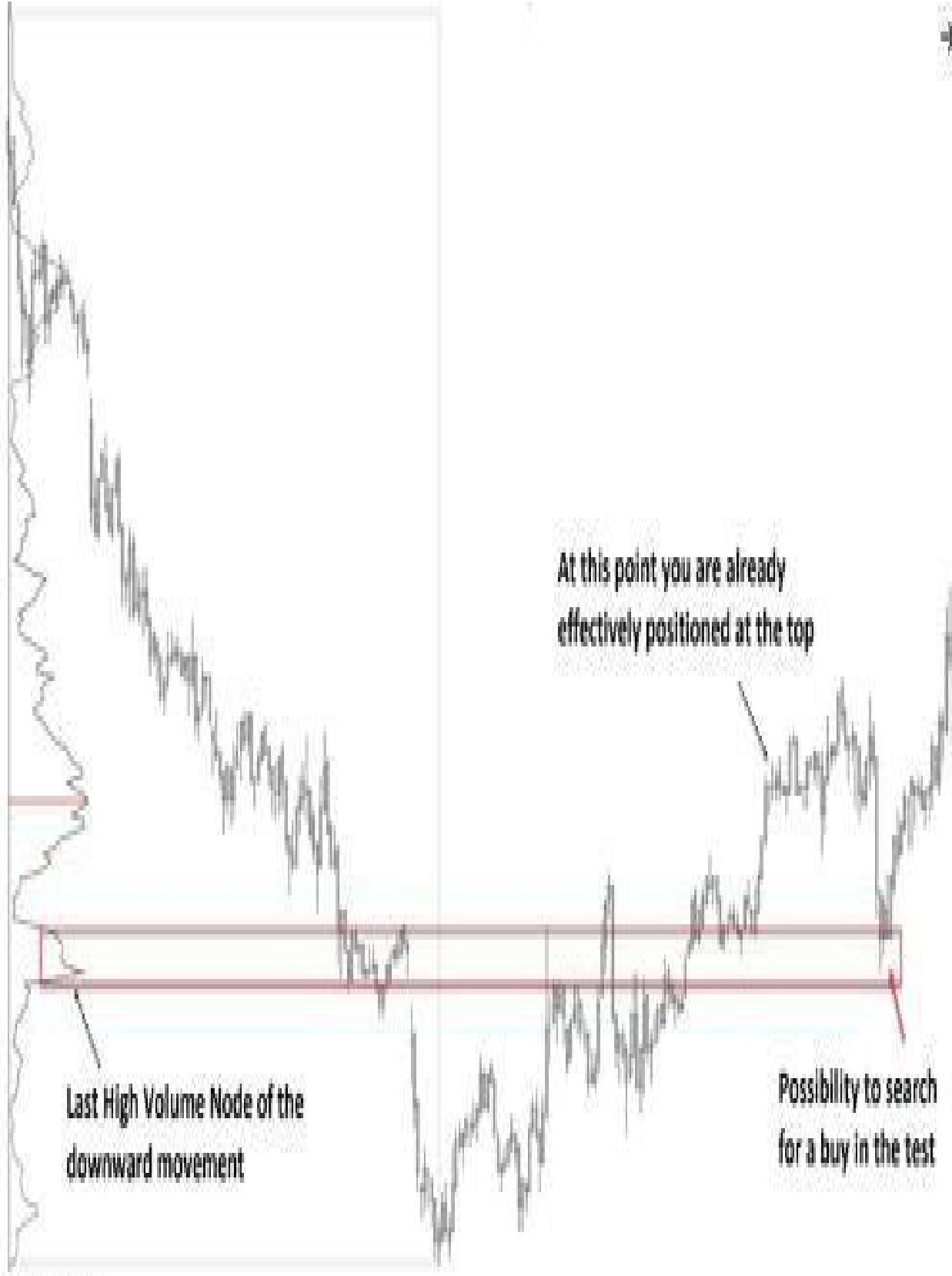
Through the analysis of the negotiation zones

We will always favor the operation in the direction of the last high volume node that has been generated. And we would only consider a scenario against this direction when the price has broken the zone that supported the last movement.

If the price is above a high volume node (HVN), we will determine that the control is in the hands of the buyers and we will only consider a short scenario when the price crosses the zone from below, which will suggest that the control has changed in favor of the sellers.



The logic is that in these nodes the price returns to an balance state and we will not be able to determine which direction it will move to later. Only after confirming the effective breakout of that zone would we be in a position to propose a scenario with some robustness.



In the previous chart this concept is very clear. If we are in the final part of the upward movement, above the last HVN, we will have to wait for it to breakout before looking for a short trade. The profile has been drawn covering only the upward movement (from 1 to 2), since what interests us is where the volume node supporting that movement is located. When this is crossed downwards we can suggest that the control has become in favor of the bearish ones and now we are in a position to pose some short scenario for example to the HVN test.

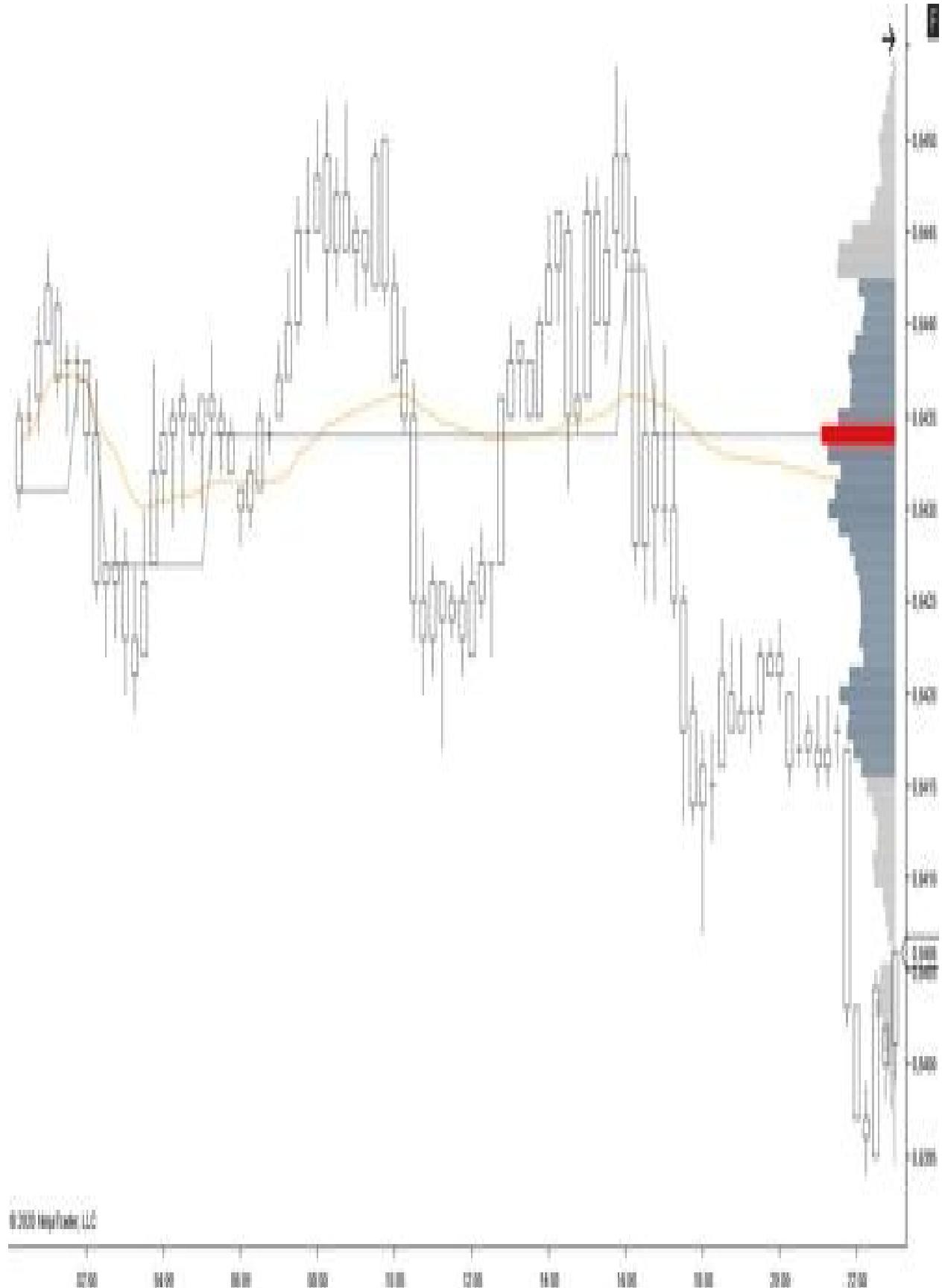
In this other example we have the same dynamics but in reverse. We locate the HVN of the prevailing bearish movement and the idea is to keep favoring short films until it is broken. Be careful, not until this HVN is broken, but the last one to be generated. That is, if the trend continues downward, we must continue to update the profile to identify where the last HVN is, and only at the moment of its upward break could we value long entries.

To emphasize that not necessarily the HVN that determines us the control of the movement must be in addition the VPOC of the profile. We will simply take into account the last one to develop, regardless of whether it is the VPOC or not.

Through analysis of the operative levels

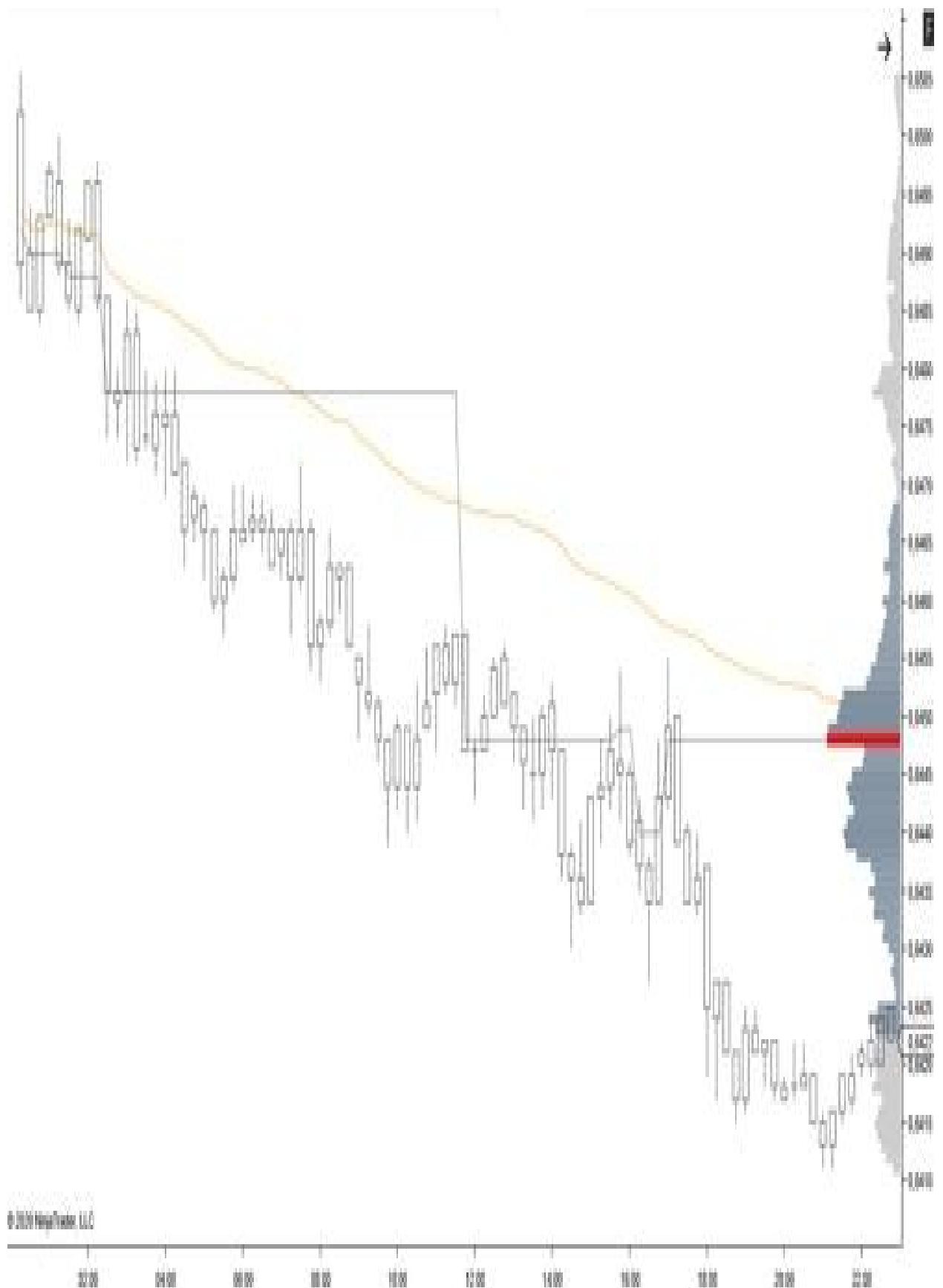
As a general rule, the most recommendable is to operate having in favor the more operative levels the better. That is, if I am proposing a long operating idea, I will want to have all operating levels below the price and vice versa if I am proposing a short idea. This context will suggest that the market is unbalanced in that direction and that it is therefore the path of least resistance.

If on top of this we have the possibility to evaluate the relationship between VPOC, VWAP and price, will be a signal that will add strength to the analysis.



A relatively close VWAP and VPOC is a signal that confirms the overall balance of the market. Possibly the price is in an extremely narrow trading range and the only operational approach here would be to look for the reversal at the extremes.

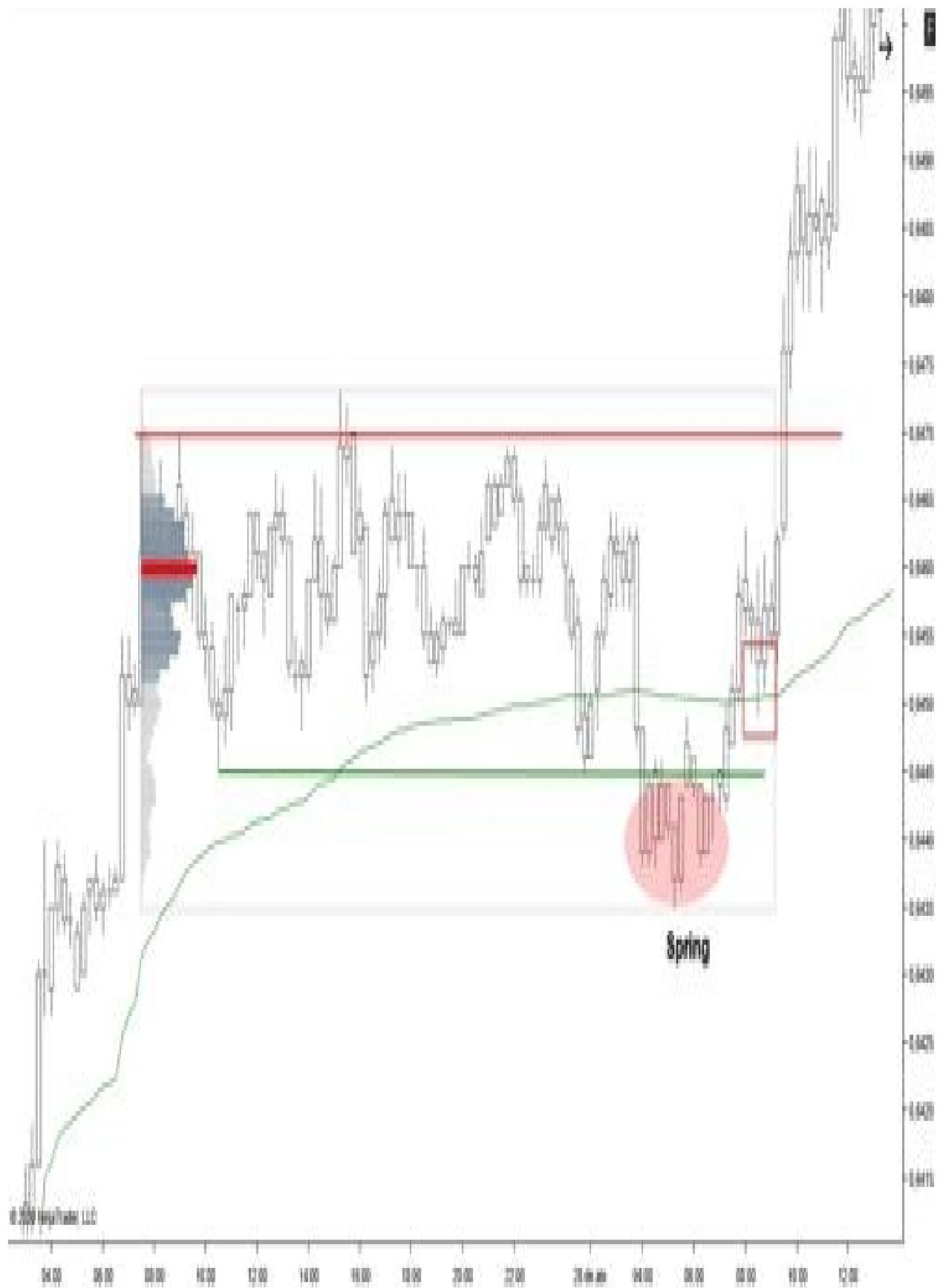
This is exactly what happens on this chart. The dark dotted line is the VPOC of the session in progress and the orange dynamic line corresponds to the VWAP. Until a final imbalance occurs from below both levels are kept relatively close and this generates constant fluctuations between them, causing a day's range.



To determine an imbalance in favor of buyers we want to see the price above both VWAP and VPOC; while for control in favor of sellers we want to see the price below both levels.

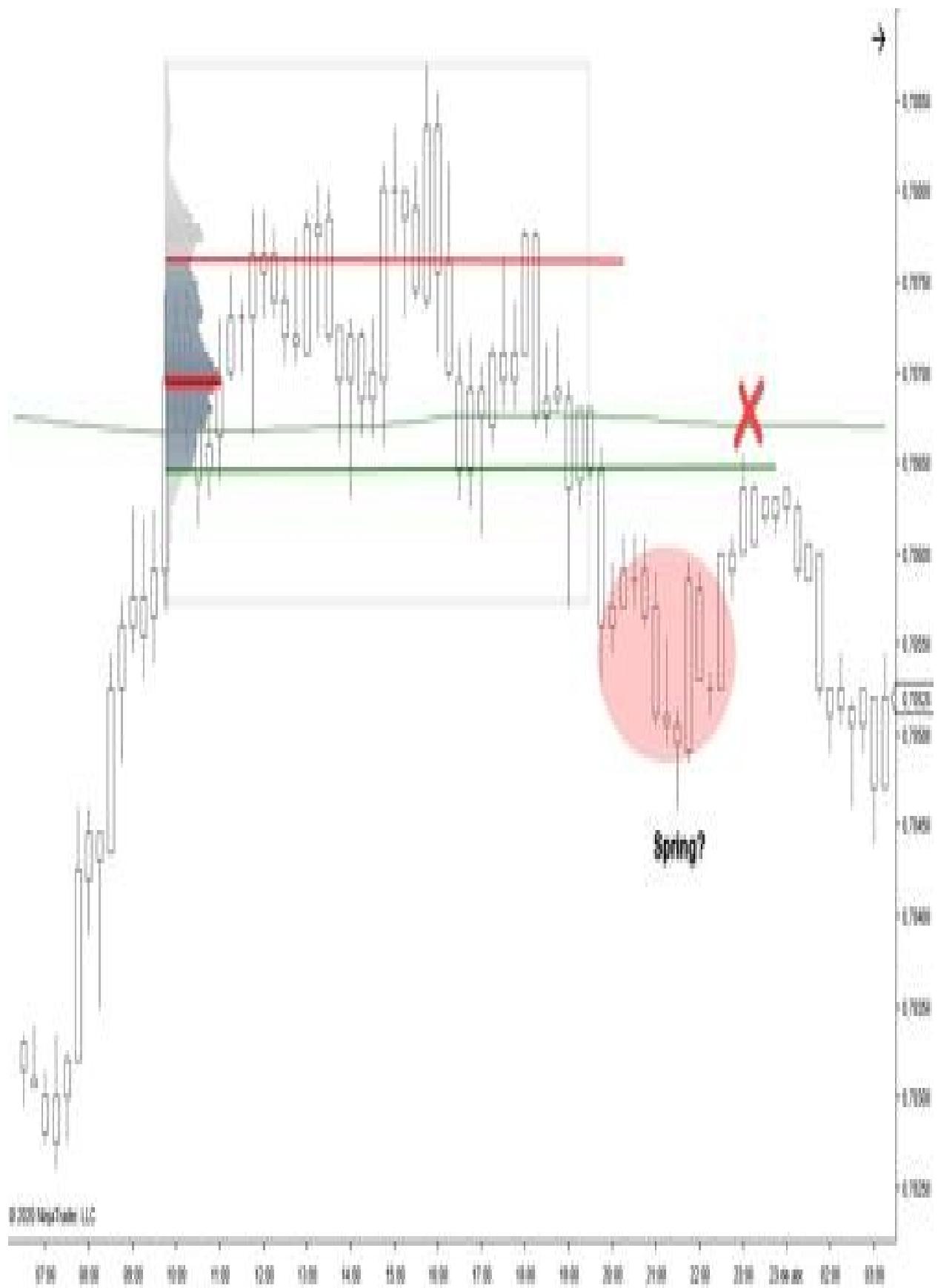
In this chart we see an example of clear bearish control where at all times of the session the price is below both the VWAP and the VPOC, acting in turn as resistance to cause new downward movements.

The temporality to be used in those operational levels, as everything, will depend on the operator. For an intraday trader, it is best to use the levels from the previous session and the current session. Longer term traders may find it more useful to use these levels on a weekly basis (weekly VPOC and VWAP). Particularly as a structure trader, I find it useful to consider the weekly VWAP in conjunction with the VPOC of the structure, thus eliminating temporality. It is a matter of taste and this configuration should be adapted to the trading style of each operator



In this chart in which we are analyzing a structure we could throw a profile of it and add the weekly VWAP (green dynamic line). It is a very good example to put in value the importance of the context above any other element.

If we observe a potential Spring that manages to position itself above the VWAP we would already be in a position to look for some long entry. But if we look closely, the VPOC of the profile would still be against the VWAP in this test. We are suggesting the possibility of operating in favor of the more operational levels the better, what do we do then? The context should predominate in cases like this. We know that VPOC is a very important equilibrium level, but we also know that the market will initiate an imbalance sooner or later; and that shake from below suggests the potential initiation of such an imbalance from above. In such a context we should assign greater relevance to the development of the structure above VPOC.



Very different reasoning would have been made if the price behind the potential Spring had not even had the ability to be higher than the VWAP. That lack of strength would have suggested some bearish control and even an entry in the opposite direction could have been valued by seeing the movement labeled Spring as a genuine bearish breakout event. Every action must be confirmed or rejected with the subsequent price action.

This is just what we have in this example. In a situation of potential Spring the price tries to re-enter the trading range but is unable to position itself above the end of the structure, the VAL of the profile and the weekly VWAP. This is a signal of significant weakness that would make us ready to treat such a scheme as distributive.

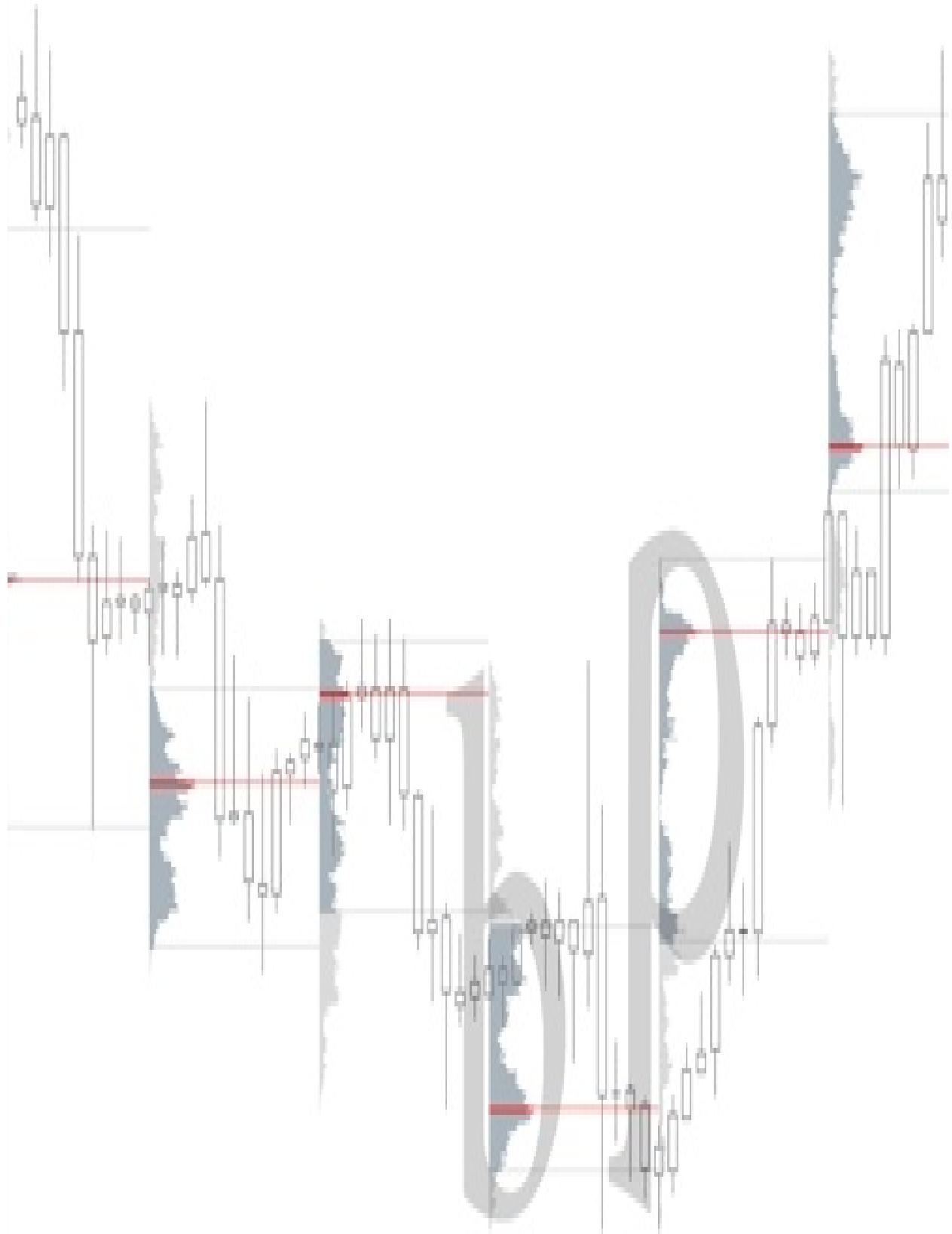
When working with different levels is also important to note that we can use several temporalities in conjunction, for example, two VWAP in weekly and monthly temporality. This configuration is really interesting if we decide to analyze a longer term context.

5.7.3 Trend Health Analysis

A very interesting signal provided by the Volume Profile is the continuous analysis of the profile of the sessions. When we are looking at an upward trend movement, a symptom of healthy movement would be to observe that the value areas (and therefore the VPOCs) of the sessions are generated higher and higher. What this suggests to us is that the value of the asset is being accepted in the new trading areas it is reaching and therefore the trend is likely to continue. In this context of control by buyers, we should be looking for some retreat into operating zones predisposed to long incorporation.

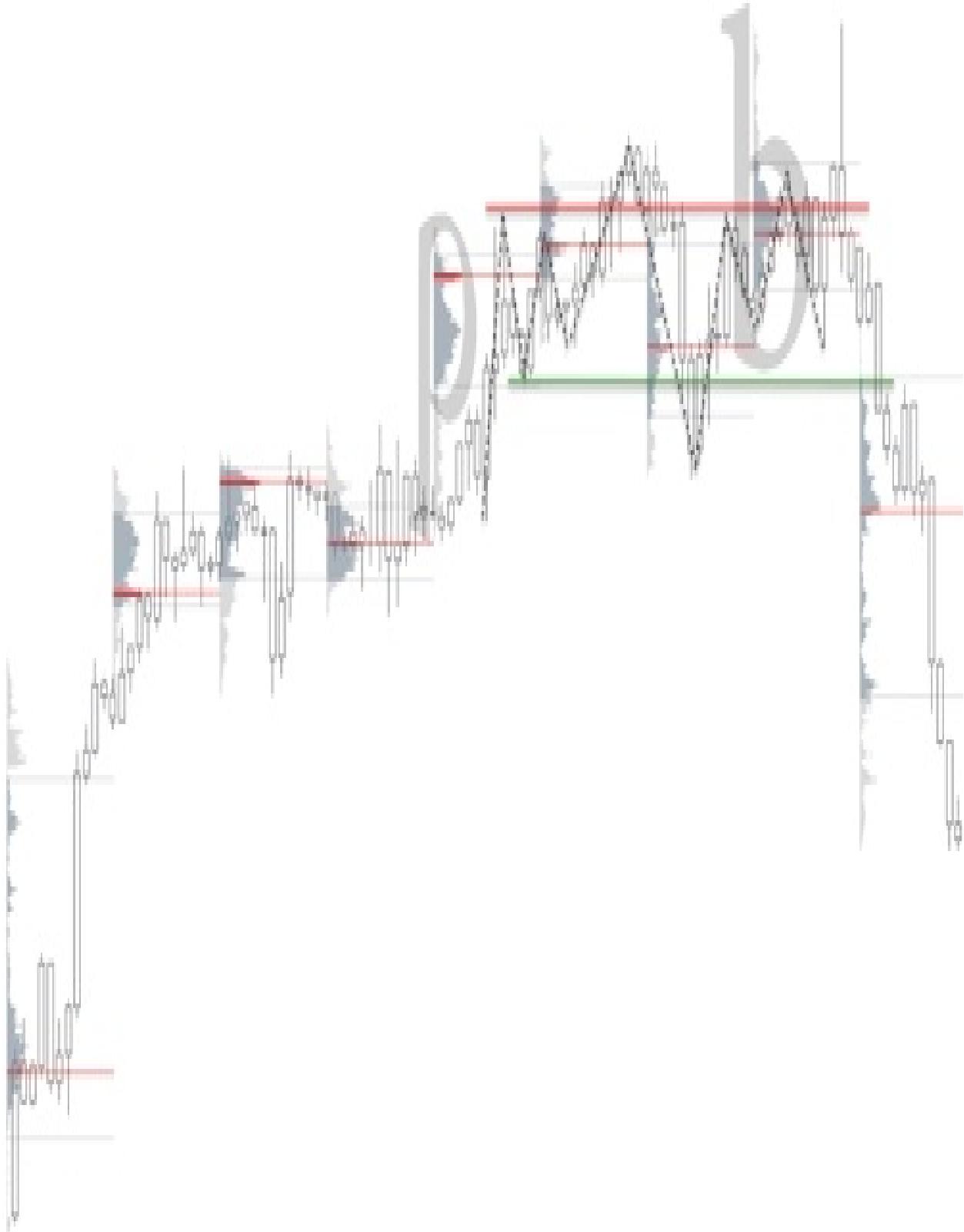
The same happens with downward trends. An unmistakable mark of their health would be to see that the areas of value left by the sessions are observed at lower and lower levels, denoting acceptance of the price. In this scenario of bearish control, the best thing to do is to identify areas of potential resistance in order to seek incorporation in shorts.

Something that would alert us to the health of such a movement would be to observe overlap between several areas of value as well as to see that some of them move against the direction of the trend, losing the dynamics it brought. We would already be observing a consolidation of the price and it could alert us to a change in character. By Wyckoff's methodology we could surely already identify a process of lateralization and it would be interesting to start analyzing the signals of such structure in order to try to determine in which direction the next imbalance will occur.



This potential change in the perception of value is visualized very clearly with the P and b patterns. If the market is in the middle of a downward trend leaving the value zones lower and lower and suddenly a bP pattern appears we could be facing the end of that downward movement or at least a temporary stop. The fact that the market has developed such a P-pattern after b suggests a change in the perception of value. At least temporarily we do not want to trade at lower prices and we could even be at the beginning of an upward trend.

More than seeking to clearly observe the ideal pattern, what is interesting is the evolution of value generation, that is, the rotation of the Value Areas. In this example the participants have had the capacity to generate value above the previous one and this alone should alert us to the health of the downward movement and even put us on alert to a possible accumulation.



The same would happen in reverse. If we are looking for a bearish market turn, a signal that would add strength to such an analysis would be to observe a Pb pattern.

This example is a little more complex and interesting to analyze. The first thing that calls our attention is that the pattern does not occur together, but two sessions follow each other. On the other hand, we see how profile b does not generate value below the Value Area of profile P. This is a real example, the market behaves erratically most of the time so looking for the appearance of perfect patterns can be a waste of time. It would seem more interesting to stay with the dynamics within them; which they implicitly suggest to us.

After the appearance of the P-shape profile, a change of character occurs and the market begins a process of rotation. The following two days the value areas overlap, showing the acceptance of the price at these levels by the vast majority of participants. Finally the creation of the type b profile triggers the downward imbalance. At that precise moment in which the price is below the value area of the profile b and after seeing everything previously analyzed, a short scenario could be proposed, looking for the effect of this potential distribution structure.

If we look closely at b, the imbalance does not occur at the beginning of the session either, as suggested by the theory, but rather in the latter part of the day. The key is that this imbalance is rejected and re-enters the value area. In essence this is the implication behind the pattern: it does not matter at what point the imbalance occurs as long as the price generates a rejection and re-enters the value area. For operational purposes what would be less interesting would be to observe the imbalance at the end of the session and whose closure is established outside the value area.

Although the ideal in the potential distributive schemes would be to observe first that rejection to continue to raise the generation of value more below the

previous sessions, the appearance of this protocol in reverse (first the generation of value below and then the refusal to quote at higher prices) implicitly suggests the same reading of change in the perception of value.

In the end, all accumulative and distributive schemes implicitly carry this change in the perception of value; and to a greater or lesser extent these P and b rotation patterns will always be visualized.

A downward turn with Pb pattern is nothing more than a distribution that will have a longer or shorter duration which has been confirmed with the generation of value in b and it is possible that lower prices will follow.

A bullish swing with a bP pattern is tacitly an accumulation whose change in the perception of value possibly originates in higher prices.

5.7.4 VPOC Migration

The current level of VPOC represents agreement by both parties on the value of the asset, but what do you read in the event of a VPOC migration?

This issue has brought many traders to their knees as the reading it offers has two different points of view. On the one hand, many advocate that it is an unmistakable sign of the health of the movement and therefore suggests continuity in the direction of the trend. Many others defend the position that a shift in the market is likely to occur.

The only objective is that it represents an area of value where the price has been accepted due to the high negotiation it has generated. The question would be to determine what sense that value migration has, whether as continuity or as a reversal.

Under the principle that each market action must be confirmed or rejected by its subsequent reaction, the key is to evaluate the subsequent price action after the checkpoint migration. As a general rule, if we do not see a continuation in the direction of the previous movement without consuming too much time we should question the health of that movement.

Trading with VPOC migrations

Since we cannot know in advance whether a VPOC migration will make sense to continue or to reverse, it is most useful to be prepared for both scenarios. To do

this, we are going to develop two simple protocols with the aim of establishing some general guidelines.

This section focuses on an intraday trading, although the underlying idea is equally valid to apply to any other temporality.

Protocol to favor reversion:

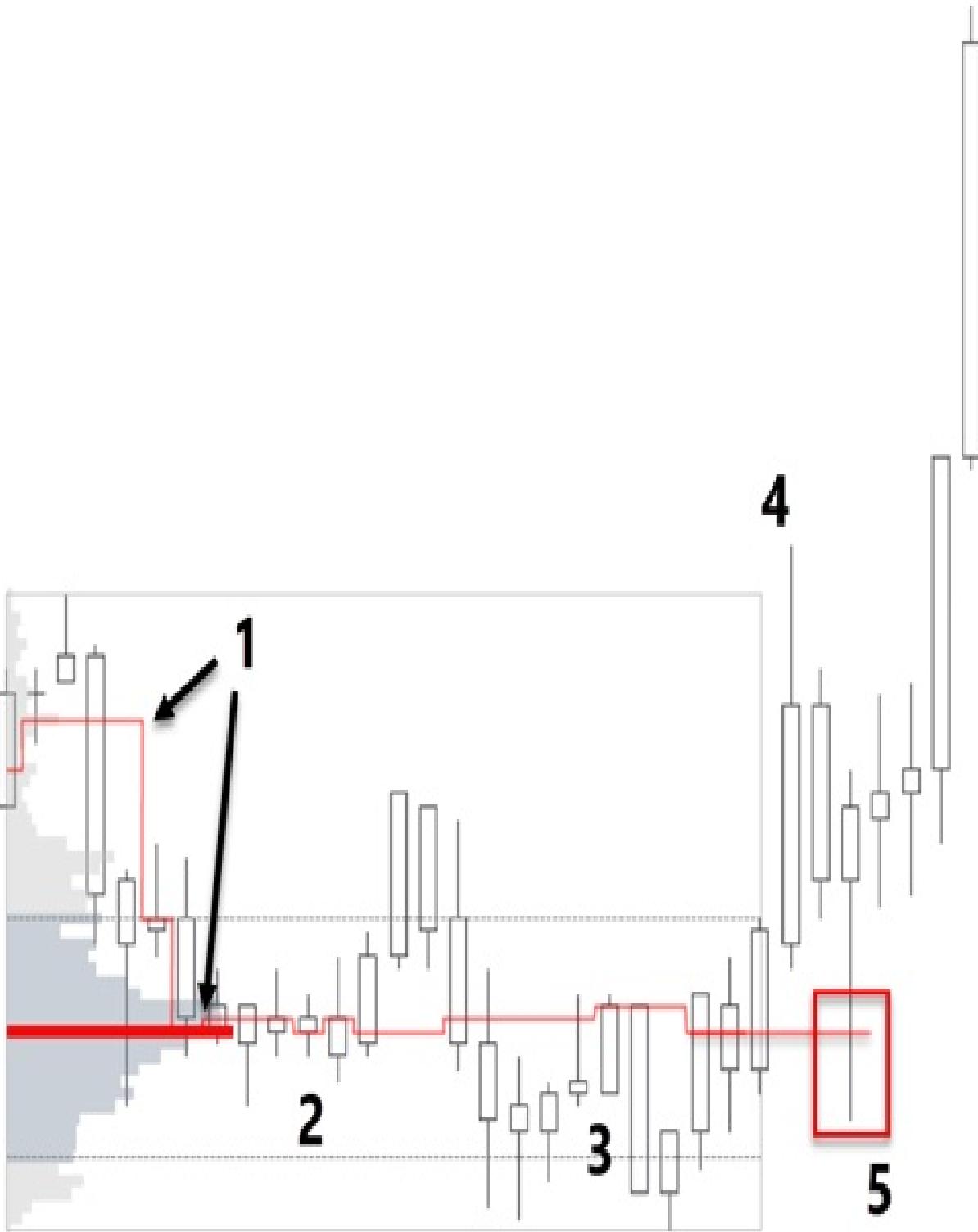
The VPOC migration. If the previous trend movement is healthy, after the VPOC migration we want to see a new momentum develop without consuming too much time.

The non-continuity. If, after the VPOC migration, the price does not have the capacity to continue moving in the direction of the previous trend, we would be in a position to at least begin to question the continuity of the movement.

Time consumption. This is a fundamental issue. The general rule is that the longer the price goes out of favor with the preceding trend movement after the VPOC migration, the more likely it is that there will be a market turnaround rather than a continuation.

If we want to look for the turnaround, we are going to observe mainly that it begins to lateralize consuming relatively a great amount of time in relation to what it was doing previously during the continuations.

The change of character. If the migration takes place, an excessive lateralization without the capacity to continue in the direction it had, and in addition an impulsive movement in the opposite direction now appears, we will be in a position to propose an operative idea in reversion.

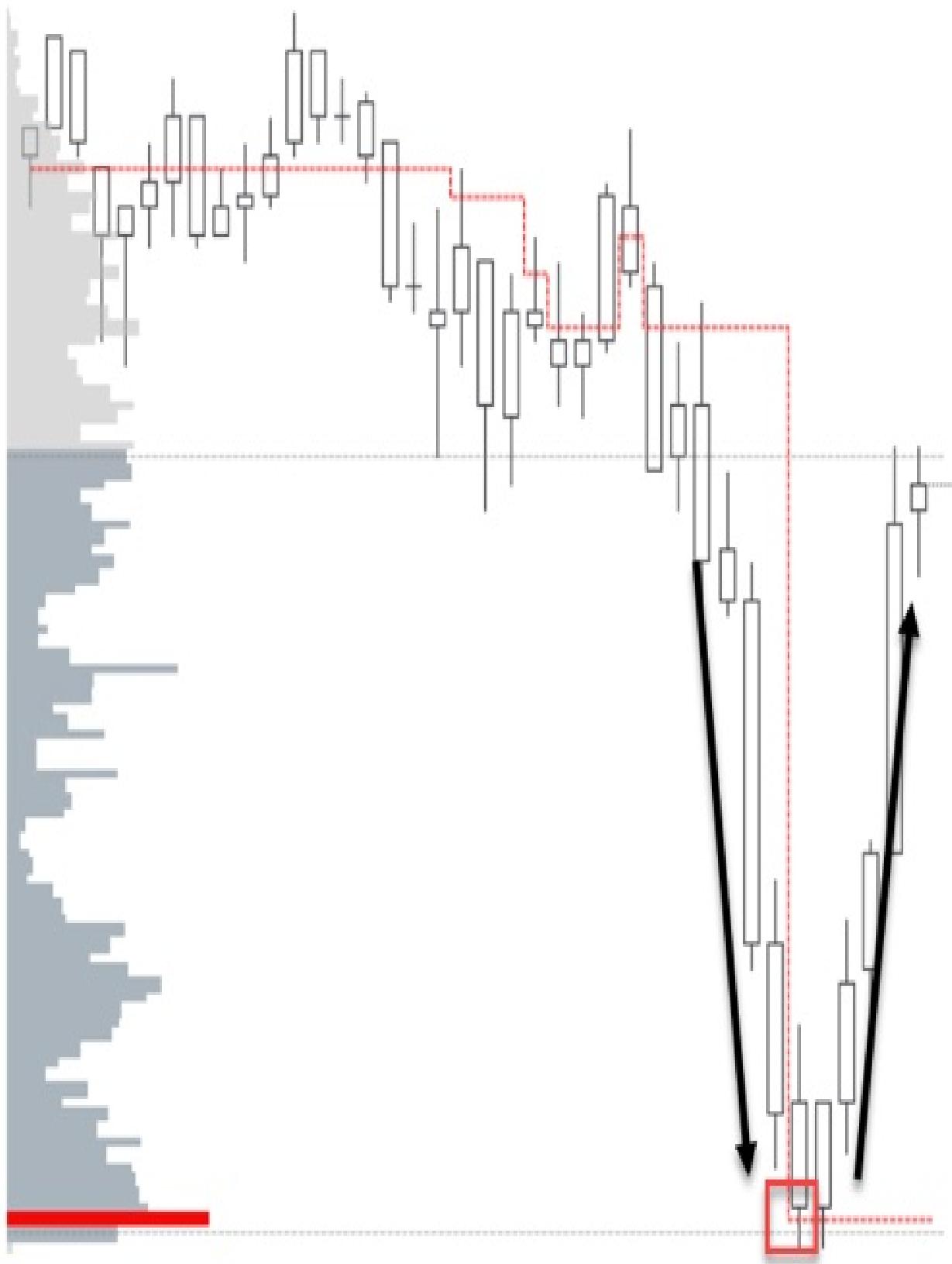


Trading idea. The first operative level that we will take into account to wait for the price and look for the entrance trigger will be the end of the broken value zone. If it breaks down we will wait in the VAL and if it breaks up in the VAH. As second level, the VPOC.

In this example (intraday reversion trade with b pattern) a manual profile has been pulled to see how the volume was distributed at that particular time. We see that after starting the session the price falls and the VPOC migrates (1), later it begins to rotate on it evidencing the non-continuity (2) and the time consumption (3). Then the character change occurs with the imbalance upwards (4) to finally go to perform a test in the old area of VPOC (5), where we could be looking for the long entry.

It should be noted that if we are operating with the profile of a session in progress it will continue to develop as the day progresses so after the breakout, we may identify the level of the Value Area where we will wait for the price and then change location. Although it is true that this would not be the ideal context, the same operating area could be maintained since from a logical point of view this is still a low volume node and therefore an interesting area of potential price rejection. In addition, the price is going to test the previous accumulation/distribution zone, so leaving the range profile is totally recommendable.

In this example we see what would be a migration of the VPOC with a sense of reversion (we know it after seeing the subsequent movement) but that does not follow the proposed protocol. When they do it with this urgency, with little preparation, it is practically impossible to operate.



© 2020 NinjaTrader, LLC

This is the problem of these V-turns.

The incorporation of this example aims to point out that not all migrations with a sense of reversion will follow the proposed protocol, far from it. With this series of steps we try to objectify the turn and that it is based on the Law of Cause and Effect, since once again this protocol is accumulative/distributive processes.

In addition, it is a very interesting chart to deal with the concept of acceptance and rejection. By definition, a VPOC migration suggests new acceptance at these price levels. The objective fact at that precise moment is that more contracts have been negotiated (more acceptance) and therefore the migration has taken place. But what reading would it leave if it generates a total reversal of the movement? Well, again, objectively, what we see is that if the session finally closes away from those levels, such action remains as a rejection even though that migration has taken place.

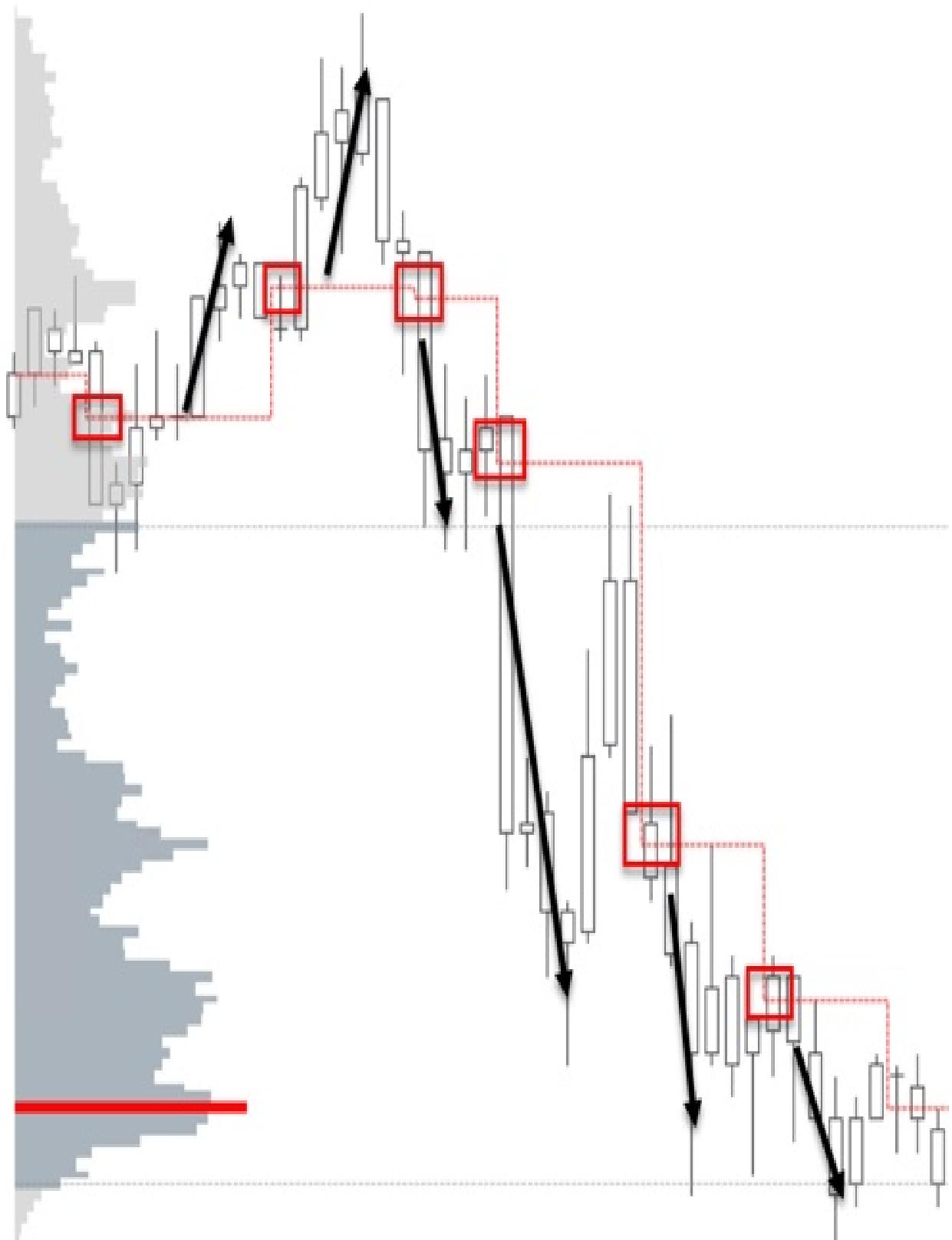
Again, the importance of the principle that any price action must be confirmed or rejected by the subsequent action appears. In this case the first action has been the VPOC migration, but that change in value has been rejected by the subsequent reaction, which has reversed the entire movement.

If we remember, a change in the perception of value occurs when the variables Price, Time and Volume work together. In this case we have the movement of discovery of the Price, the generation of Volume but fails the consumption of Time that would confirm us the Value.

Protocol to favour the continuation:

For the intraday continuation operation the protocol of action is much simpler:

VPOC migration. Generally when the market intends to continue in the direction of the previous movement, after the VPOC migration the price will start the new impulse with some speed. The urgency to keep moving in that direction will result in relatively little time being consumed before continuing in that direction.



Trigger. We are therefore ready to enter the market. It is simply a matter of waiting for our configuration to appear before entering.

In the example we see that in the third VPOC migration the price instead of continuing upward reverses downward leaving that left price action as distributive. From there on, subsequent migrations make sense as they are followed by downward impulses relatively quickly.

Although this type of operation has occurred intraday, during the development of a session; they can appear on the chart in different temporalities and the underlying idea will remain the same. It may be developed during the course of an individual session, it may be formed during more than one session or even it may be developed as a longer term structure. Regardless of its duration, the underlying logic is exactly the same.

5.7.5 Calibration of position management

The levels to use will depend on the type of profile used based on your trading style, but in general the logic will be exactly the same for all of them:

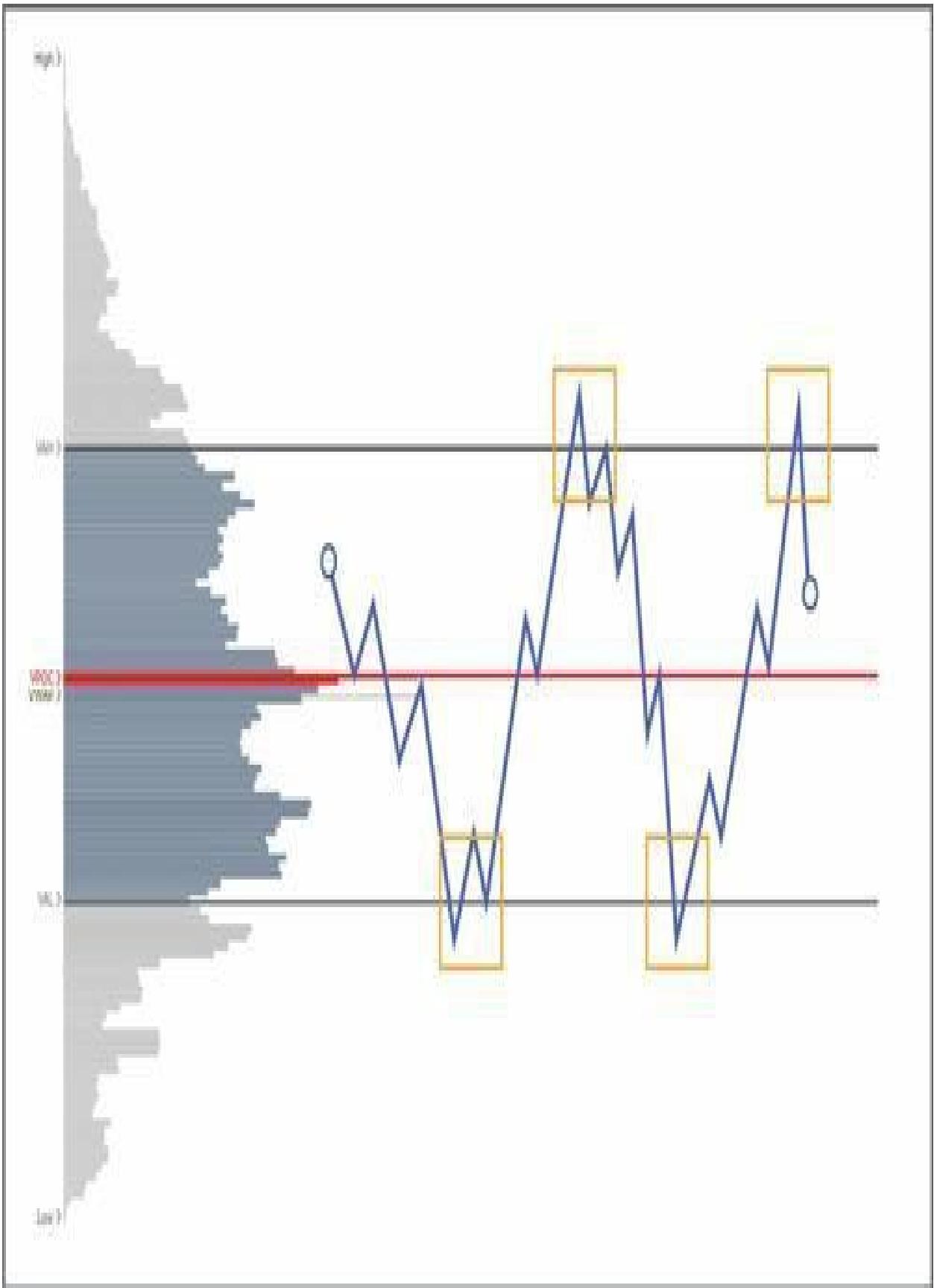
Entry. Regardless of whether we are in a trend or trading range context, the identification of operating levels, mainly the VWAP, VPOC and high and low zones of the value area (VAH and VAL) will be tremendously useful for us to wait on them to develop our market entry trigger.

Stop Loss. For the establishment of the stop loss we want to identify zones where previously there has been a rejection; and these are the Low Volume Nodes. The price generated a turn on them and we expect that in the future they will behave in the same way, therefore it is an excellent zone to locate our stop protection. Besides the LVN, the more operational levels we have in favor, the better.

Take Profit. For the establishment of take profit we will look for areas of high previous negotiation. As we have already mentioned, high volume nodes (HVN) produce a certain magnetism in the price and therefore are excellent areas for the location of the targets.

5.8 Operative principles with value áreas

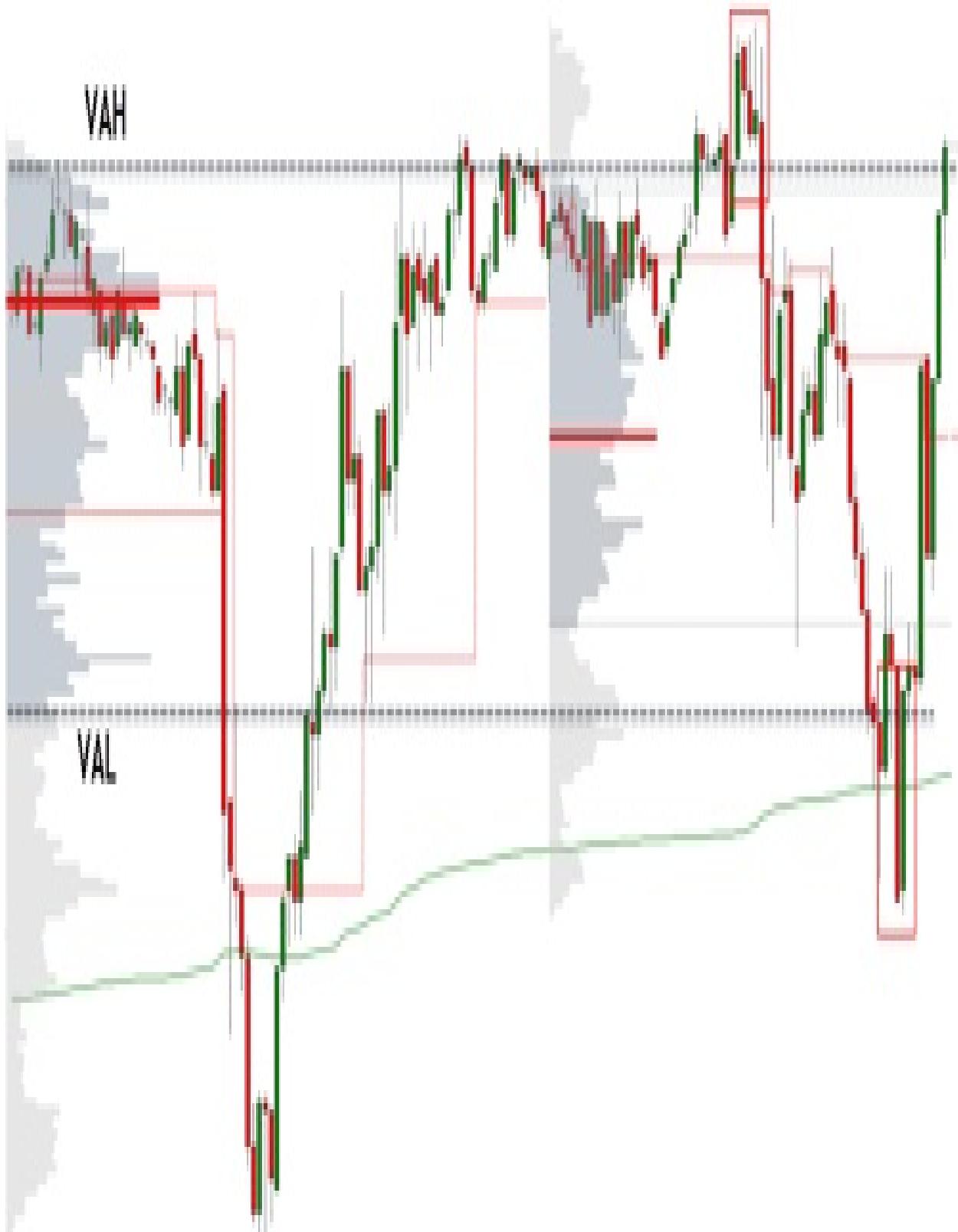
Regardless of the type of operator you decide to be and therefore of the temporality and structures to be used, these principles are universal with respect to the value zones of a given profile, whether it be that of a sail, session, movement or structure.



5.8.1 Trading range principle

If the price is within a value area, as long as the market condition does not change, the market is likely to continue to generate value around the central point so that the price will most likely be rejected when it reaches extremes. Buy low and sell high.

VAH



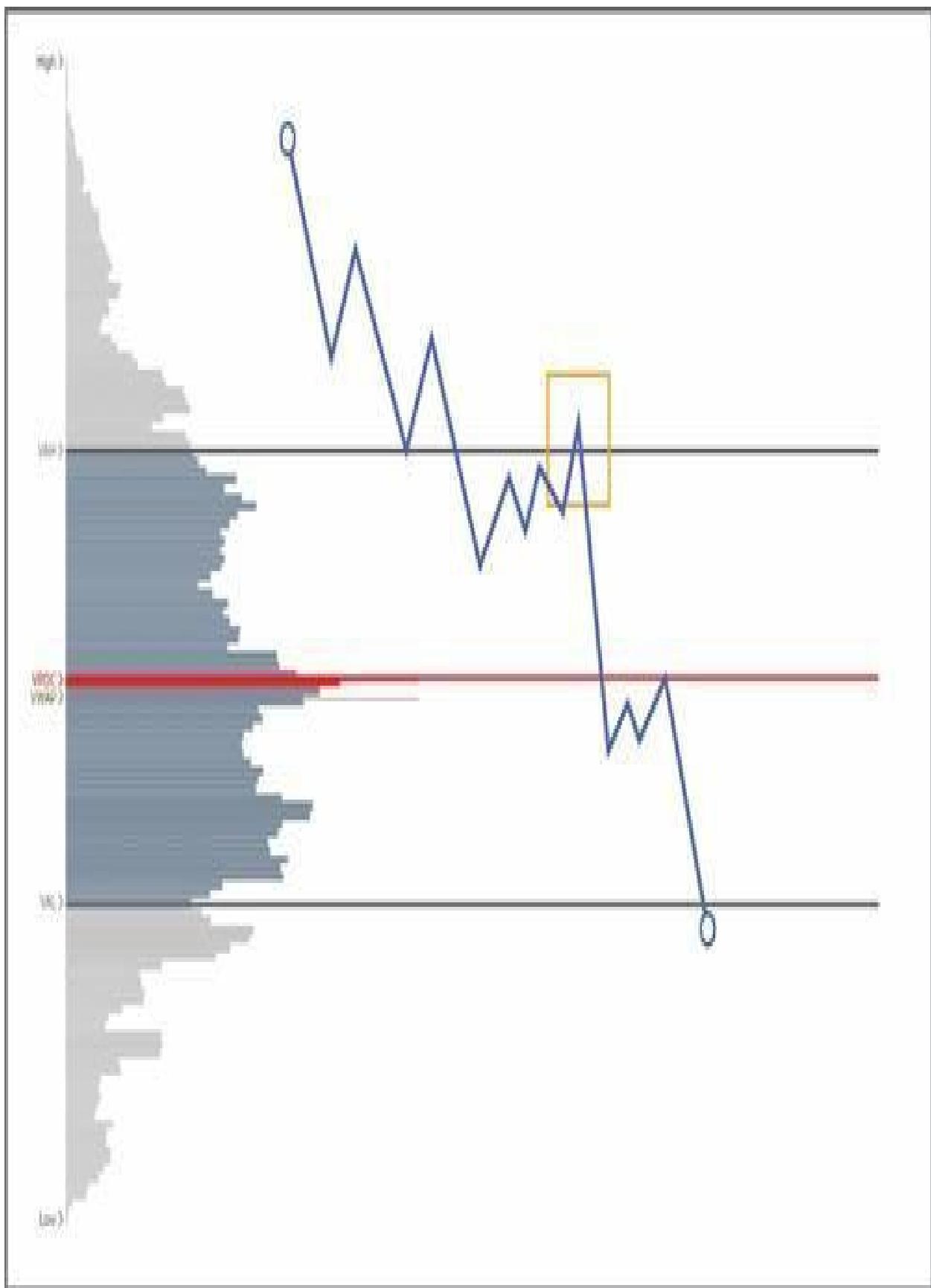
VAL

In the following chart we see a real example of the principle of trading range. It can be any asset or temporary; what we do have to take into account is a reference profile to work on. For an intraday approach, it is recommended to work on the profile of the previous session. For longer term approaches, weekly profiles or composite-type profiles that include more price action may be useful.

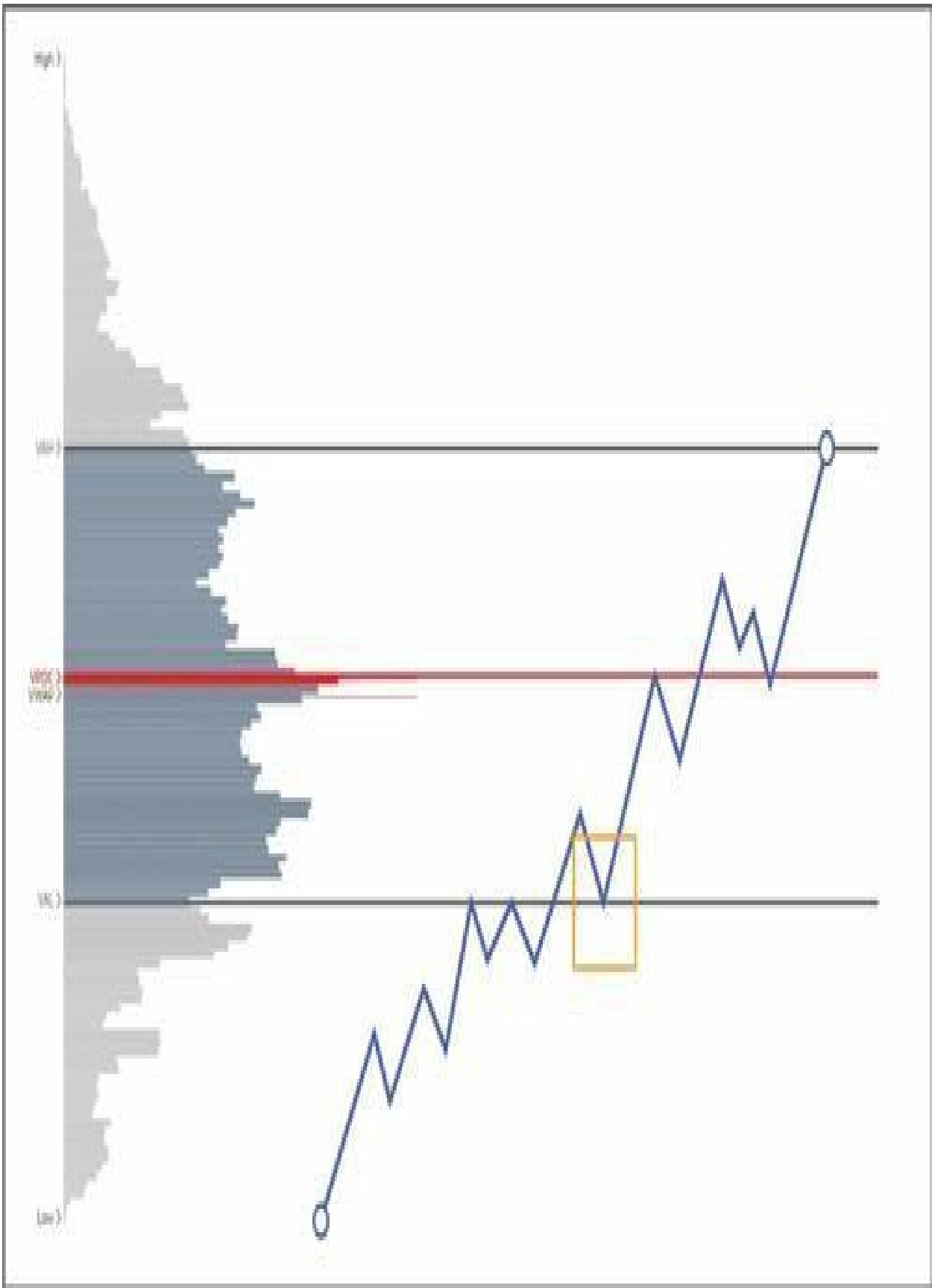
What is interesting in this case is that the price is within the previous day's value area, suggesting a balance in the market. With this basic idea, and as long as the participants' sentiment does not change, any trading idea should go through waiting for the reversal at the extremes of its value area, as seen in the chart.

The minimum objective of this reversion in extremes is a test to the control zone (VPOC), being the most ambitious objective a movement that goes through the entire value area and reaches the opposite extreme.

As always, the trades that will offer us more confidence will be those whose trigger is located in confluence on more than one operational level. In the example of the reversal that is given on the VAL we see that the price also performs a test on the weekly VWAP (green line) and an old control area (DevelopingVPOC).



5.8.2 Reversion principle



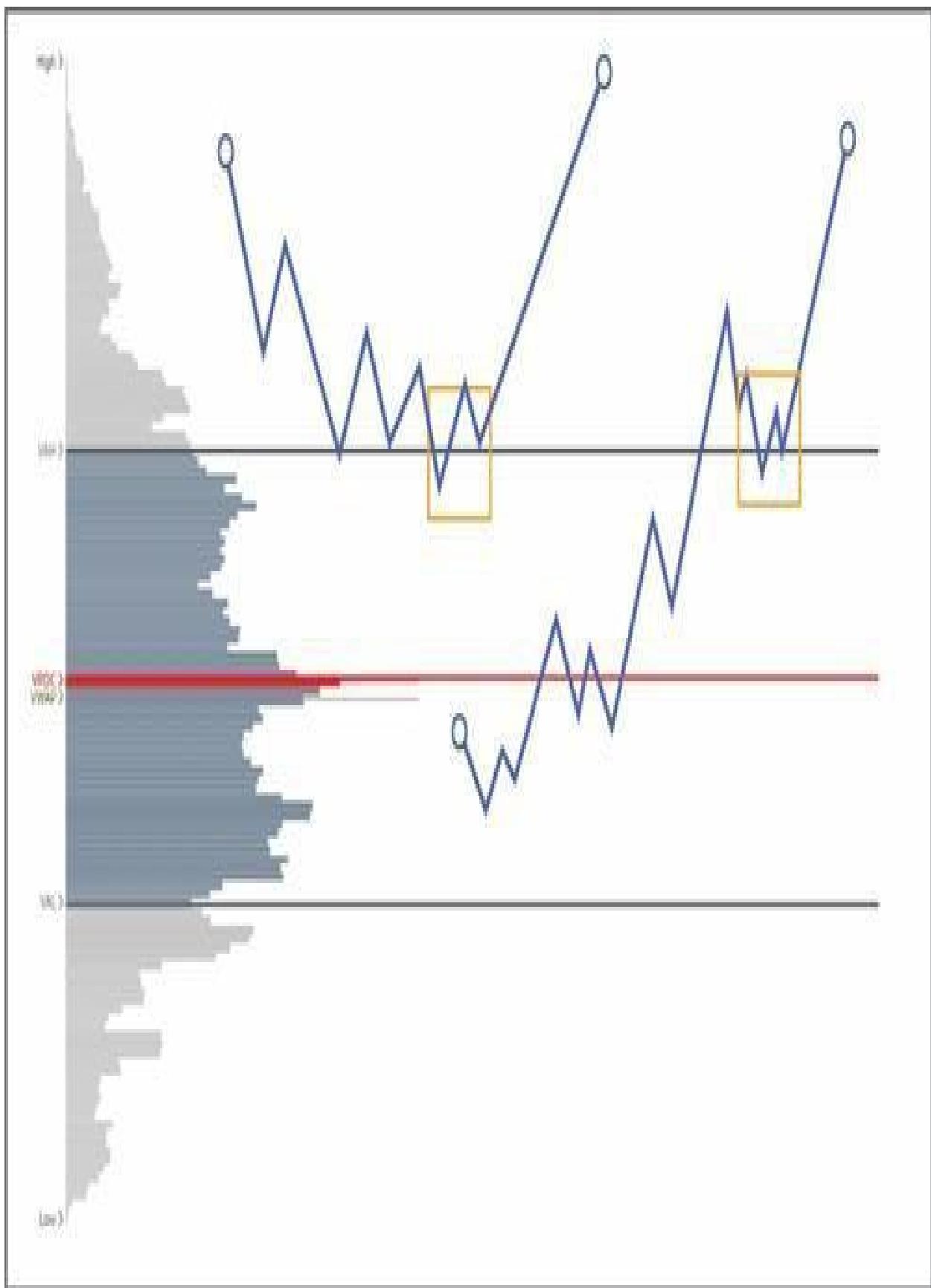
If the price tries to enter a value area and succeeds, it is most likely that you will visit the opposite extreme of that value area. The market has refused to trade at those price levels so it returns to the previous value area. Adaptation of the 80% Market Profile rule.

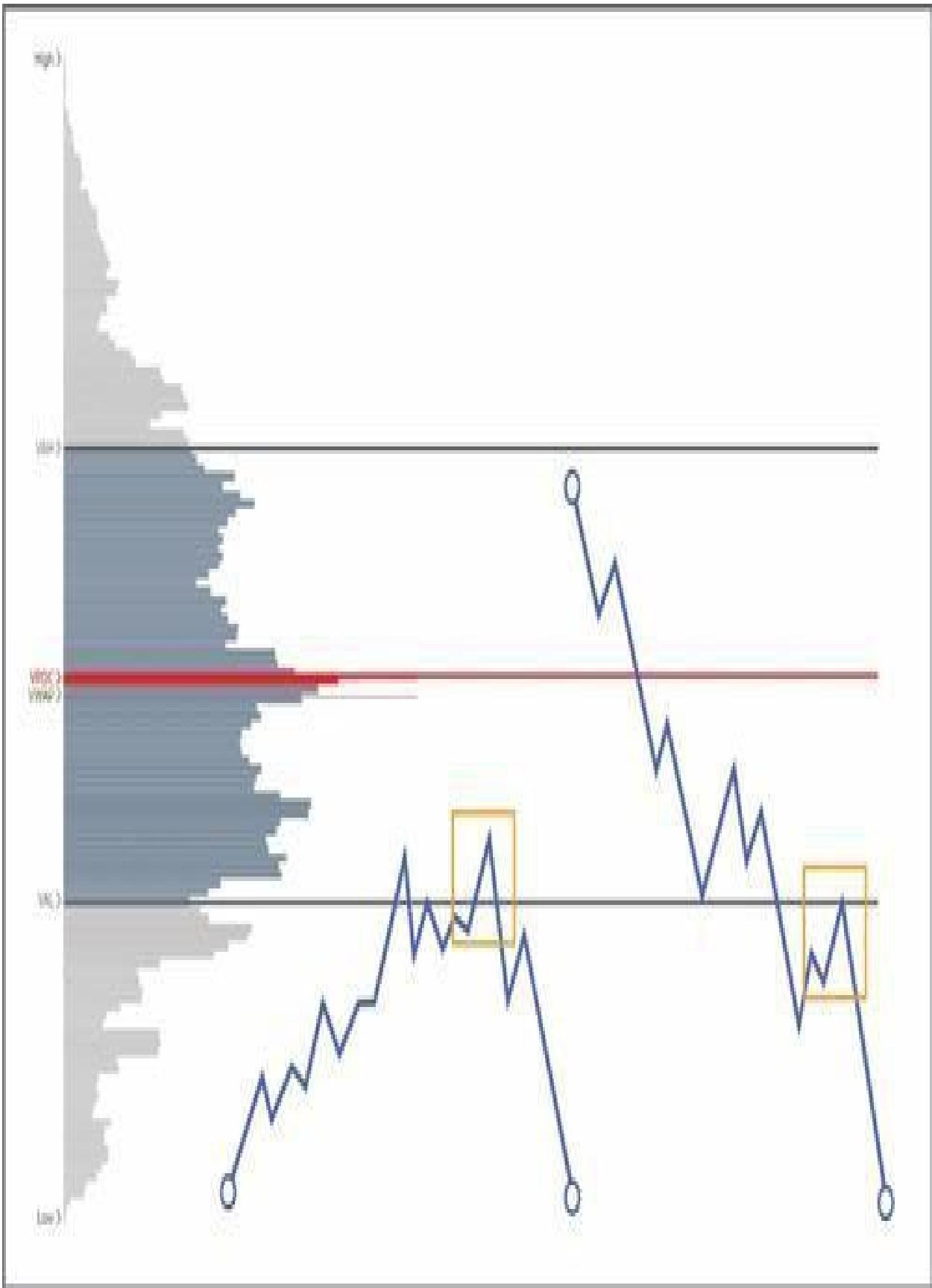


In this chart we can see the opening of the last session far from the value area of the previous day by its upper part, indicating an upward imbalance and therefore suggesting a buyer control initially. This control must be confirmed by accepting the imbalance and we see how the moment of truth has arrived, in a position of potential continuation of the upward movement over the Value Area High the price fails re-entering the previous value area.

This is a very instructive example to visualize the importance of having in mind both buying and selling scenarios in order to be prepared and react in time when the market tells us to. Initially in this case we would be looking for such a bullish continuation over the upper end of the value area; but seeing its inability and the subsequent re-entry, the reading now is that that bullish discovery of the price has not been accepted and therefore the probability now is that the price will visit the opposite end of the said value area.

After the initial re-entry, an internal test takes place on the VAH in confluence with the weekly VWAP (green line) to start from there the downward movement that goes through the whole value area. At that point the price returns to a condition of total equilibrium evidenced by that continuous bounce between the extremes of the Value Area.





5.8.3 Continuation principle

If the price tries to enter a value area and does not succeed in being rejected at the VA end or elsewhere, it will most likely initiate an imbalance in favor of that direction.

This is the test operation after breakout. The price leaves a value area and generates acceptance. This acceptance puts as most likely direction the sense in favor of the previous breakout.

It must be taken into account that the price can come from outside that value area or from within it. The operational logic would be exactly the same.



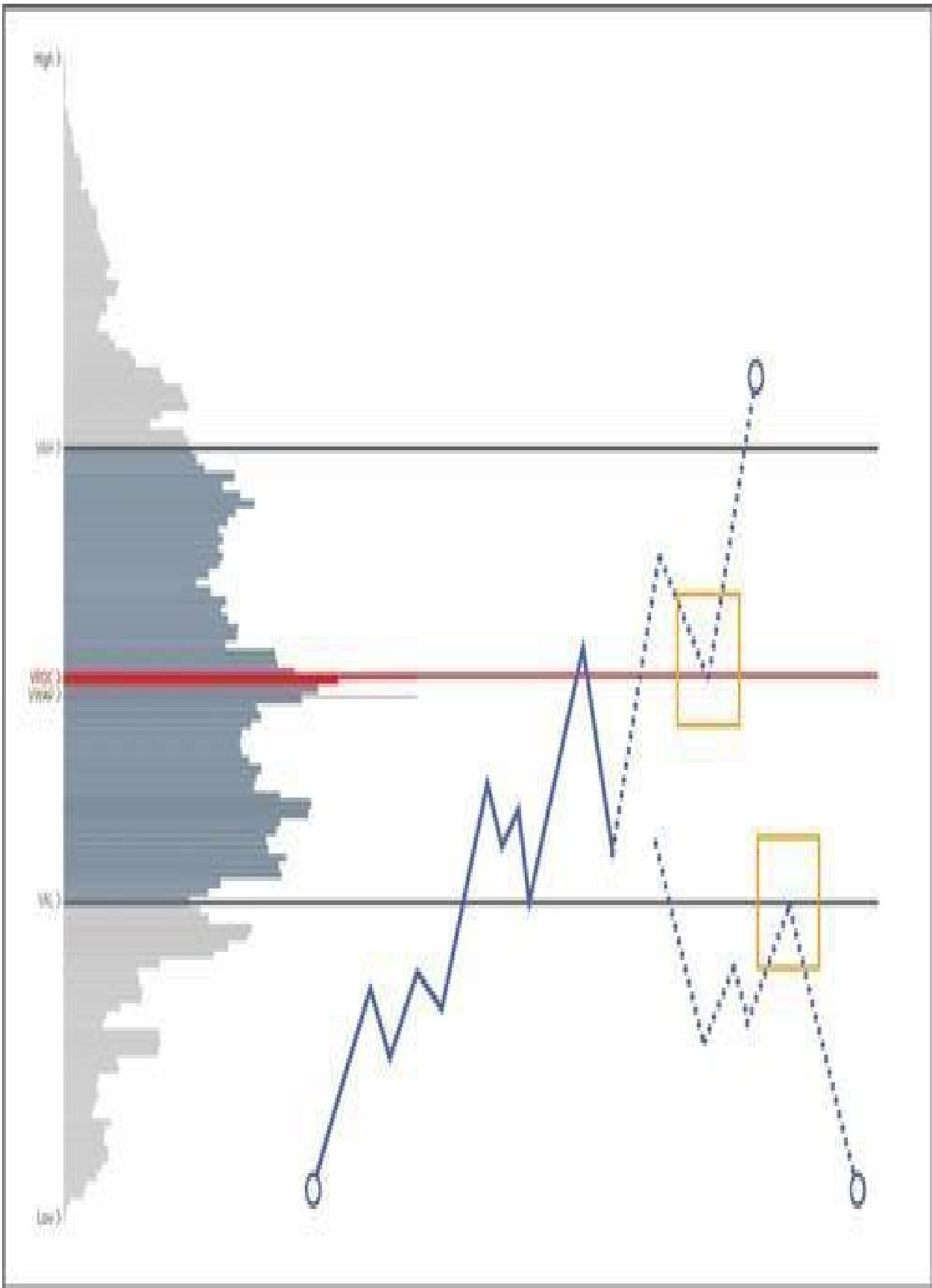
In the following example we see on real chart the development of this operating principle of continuation in its variant in which the price comes from outside the work profile.

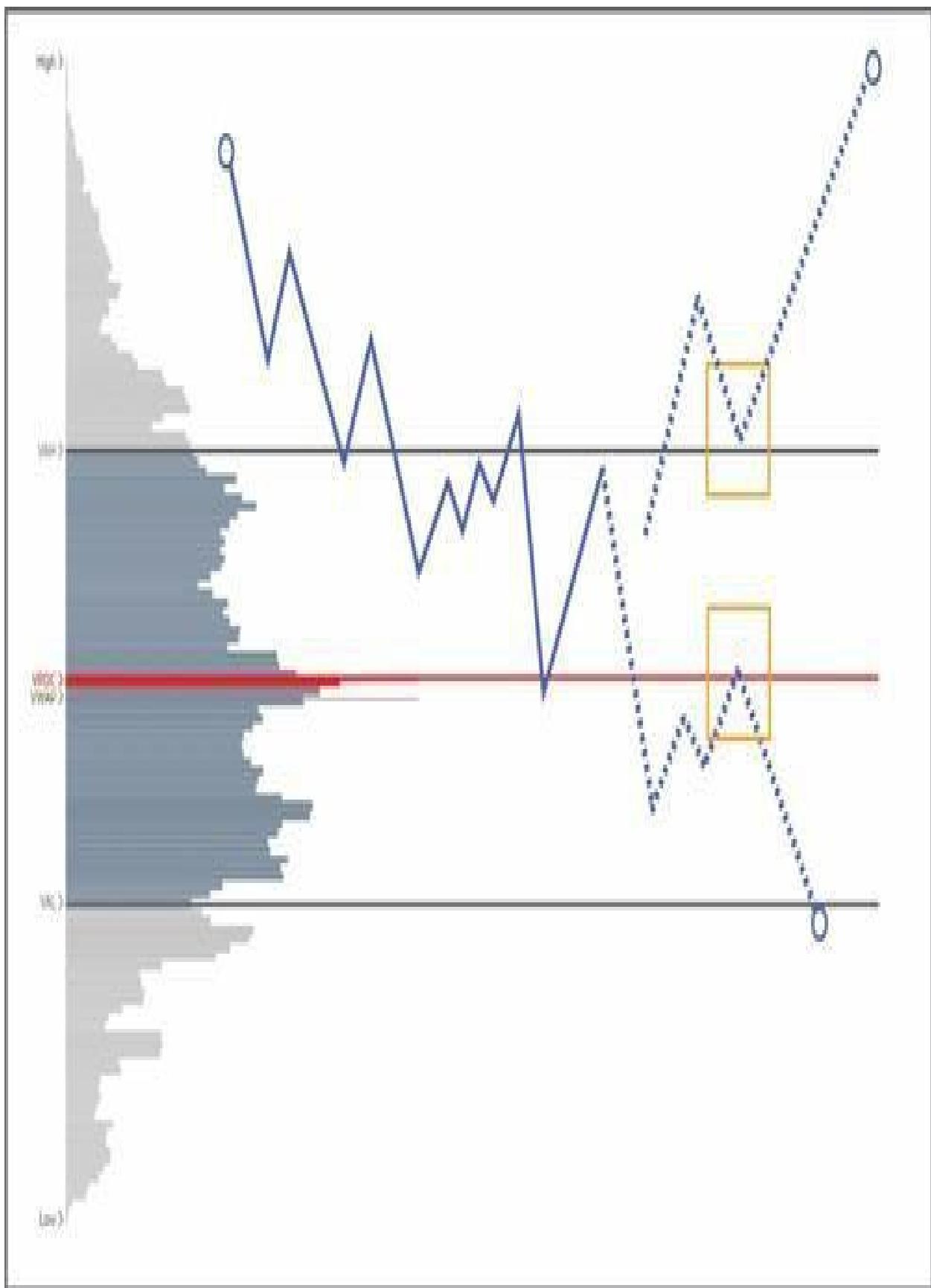
The opening occurs above the Value Area High of the profile so the first interpretation we must make is that there has been an upward imbalance in which buyers have had the ability to move the price away from its last value.

With this basic reasoning, in which the market seems to indicate that the buyers are in control, the first scenario would be to wait for some kind of test before continuing with the development in favour of the imbalance, in this case upwards.

The price opens the day and develops a certain lateralization to later go looking for the area of the VAH where it generates the upward turn that could offer us an opportunity to buy.

The most astute Wyckoff traders will be able to identify even a reaccumulative scheme from the beginning of that session, acting that test as a potential Spring of that structure. This is a very good example to visualize the importance of context: in buying operative zones we want to see potential accumulations, as is the case here.

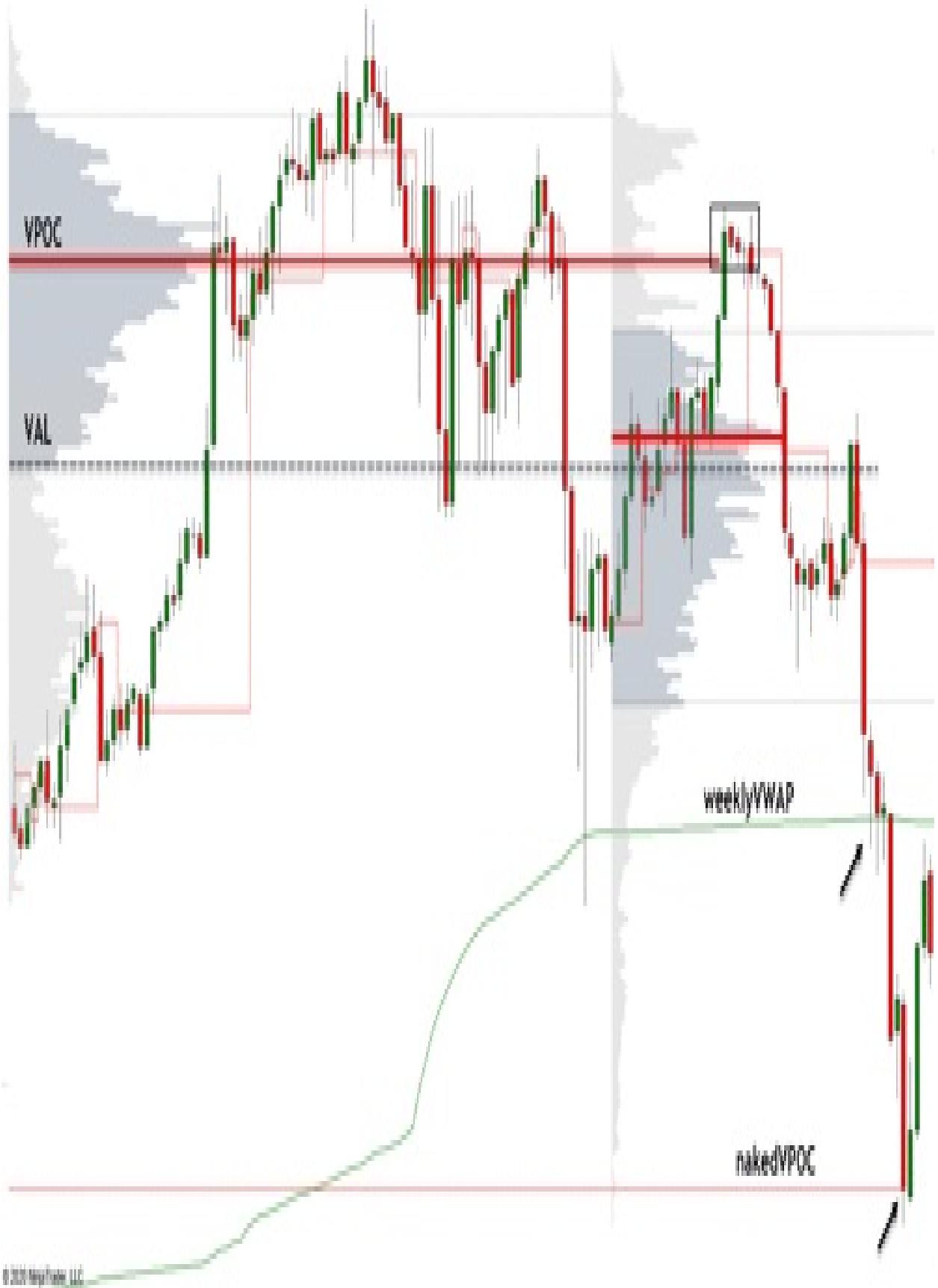




5.8.4 Failed reversion principle

If the price tries to enter a value area and succeeds, but is strongly rejected in the VPOC of that range, the reversal operation would be cancelled until seeing subsequent price action.

If it succeeds in recovering the end of the value area, the continuation operation would be activated; while if it finally effectively breaks the VPOC, the reversion scenario would continue to be active with the aim of testing the opposite end of the value area.



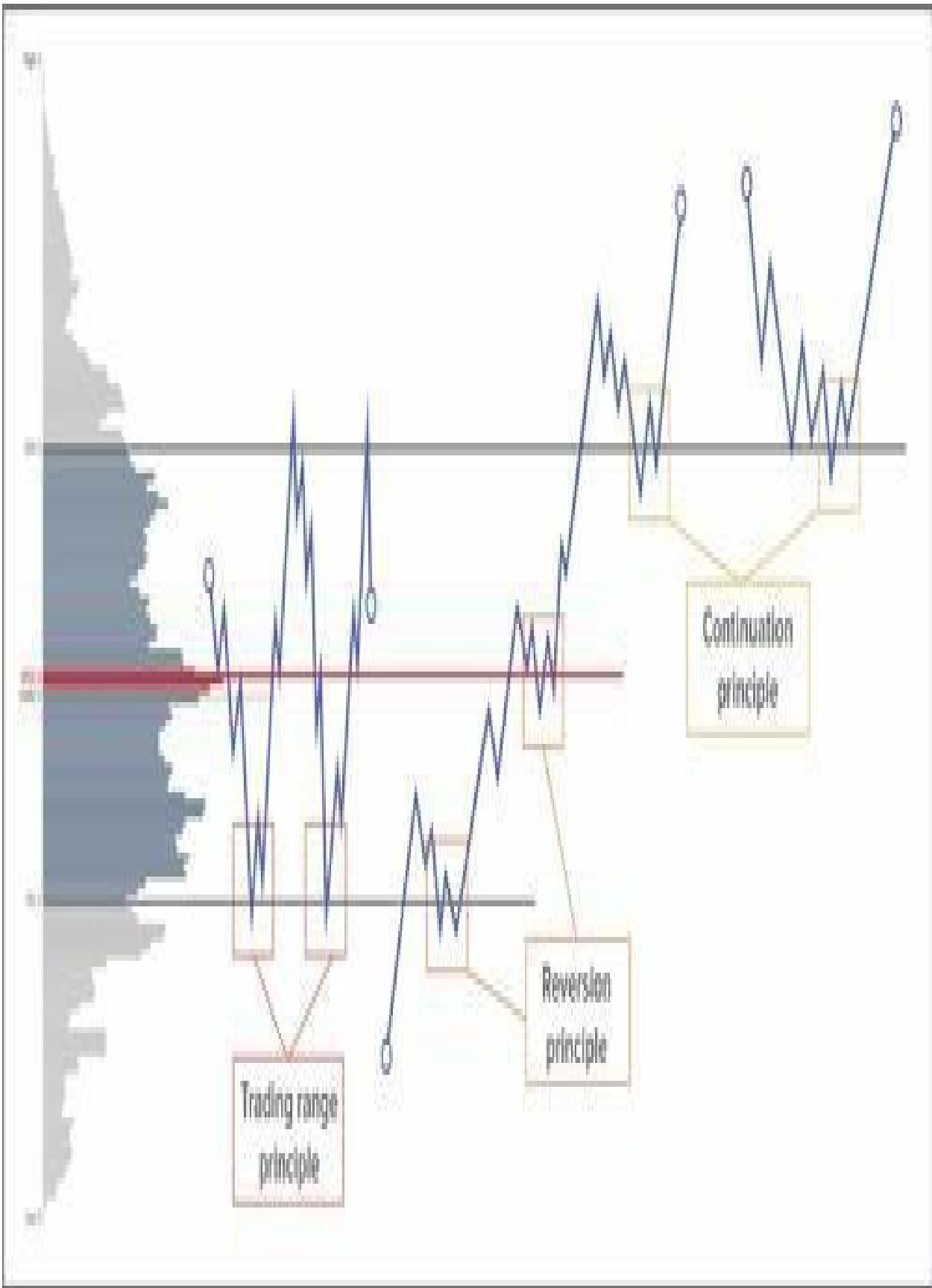
The session opens below the previous value zone so the first reasoning would be that the market is in imbalance and potential bearish control would need to be confirmed.

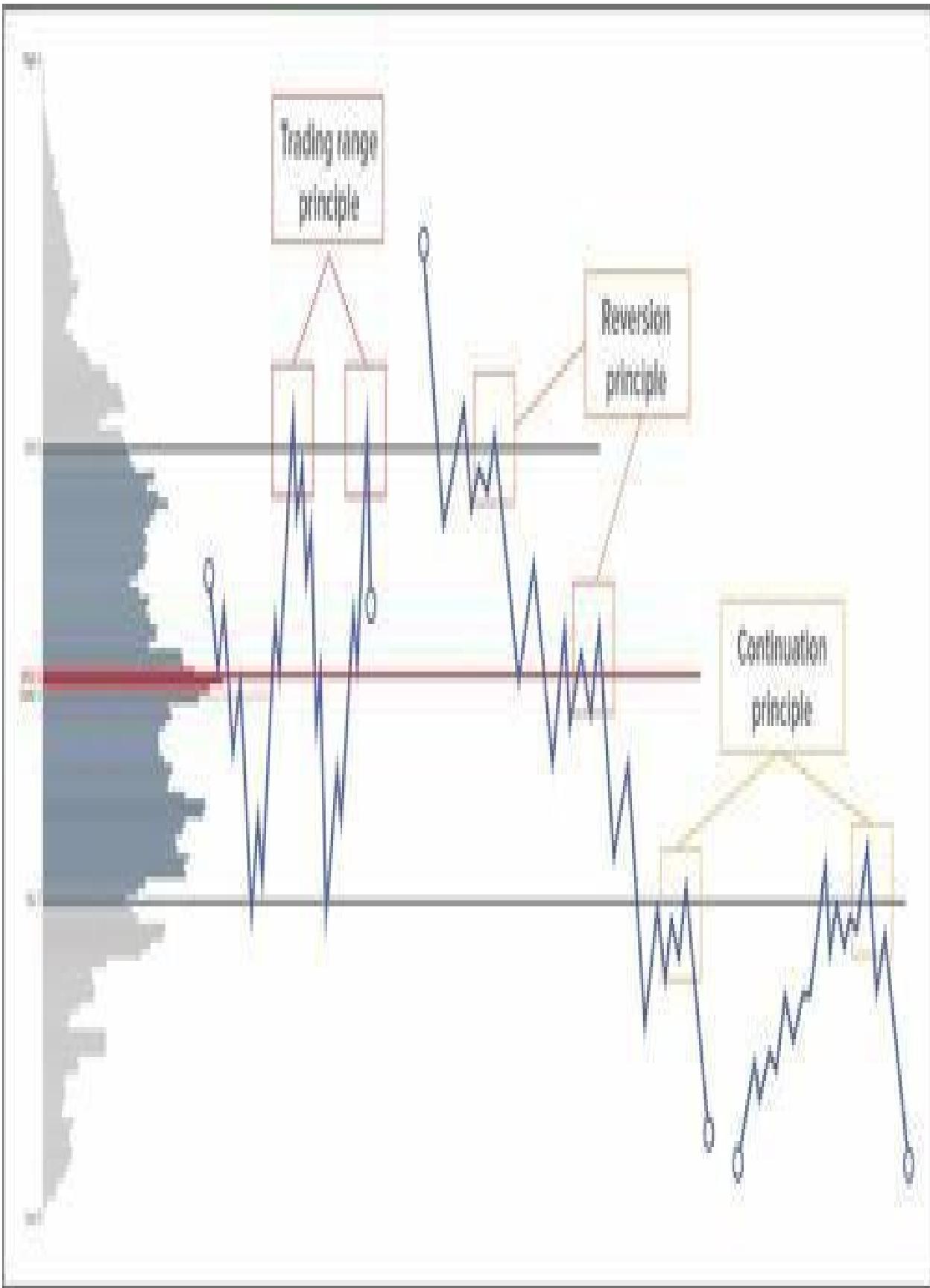
In the first zone to wait for the confirmation of the seller control (Value Area Low), the price cancels the scenario and returns to the value area, activating the reversal operation. As we will see later, any operation should be managed when the first relevant operational level is reached; and in this case, a potential buy on the VAL should necessarily be managed on the VPOC of the previous session.

After reaching that level, sellers appear, unbalancing the market again and causing a strong downward movement. This aggressive reaction pushes the price out of the value area again, changing the market sentiment and activating at that point the variant of failed reversal plus bearish continuation.

Now you do a successful test on the Value Area Low to start the downward movement from there with possible targets in the weekly VWAP and in a nakedVPOC below.

5.8.5 Summary table of operating principles with value áreas





Part 6. Order Flow

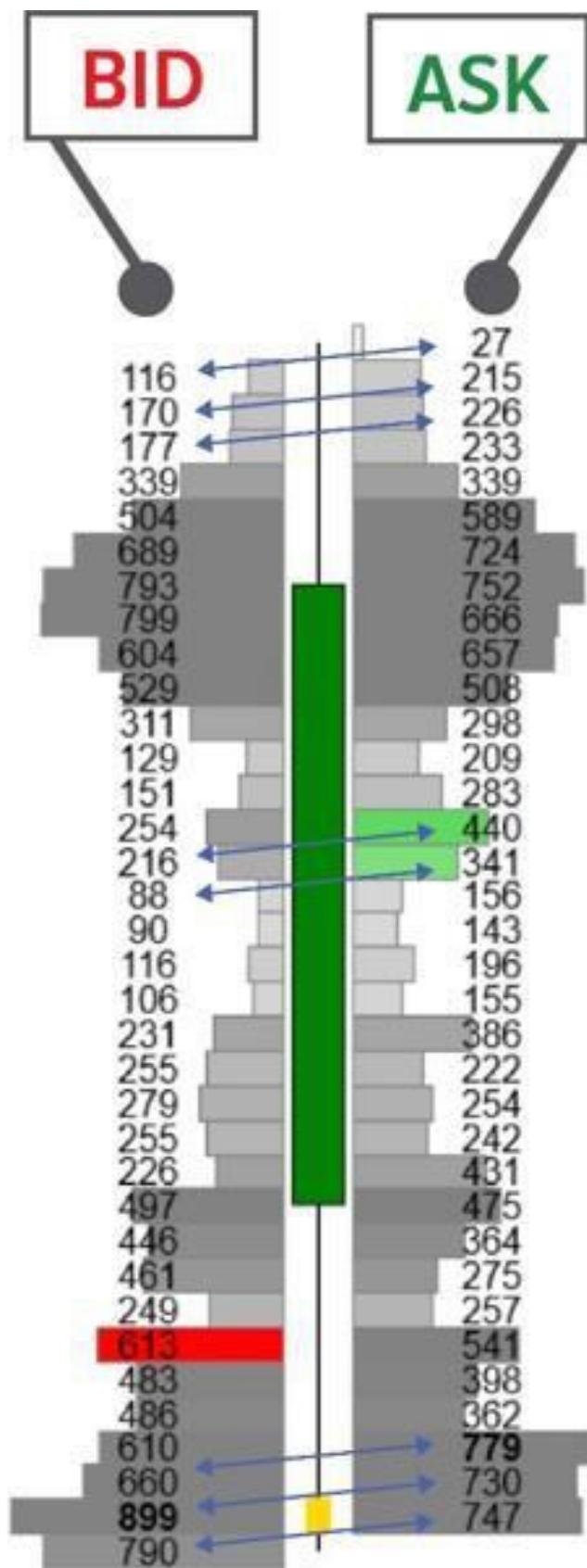
Once we know in depth the subjectivity involved in order flow analysis we arrive at the moment to continue reasoning to see if its use is really useful.

In general, the only time when it would be useful to put the magnifying glass on the chart and look inside the candlesticksticks to analyze the order flow would be when the price reached the operating areas where we are looking for the imbalances we expect to enter the market (everything is subject to context).

Being aware that the matching of orders has different intentions behind it, what we look for in these imbalances is the entry of large operators with the intention of taking risk, speculating, opening positions in favor of one or another direction. We will never know for sure if what we are really observing are directional orders and that is why we must limit the use of this tool only on key operating areas.

As we have already seen, the footprint analysis can be done in different ways based on the representation protocol. In particular, I find it more visual to observe the chart through a configuration known as Volume Ladder. This type of footprint allows us to observe the number of contracts executed in the different columns (BID x ASK) while making a representation of the traded volume at each price level inside the candlestick in the form of a histogram.

6.1 Reading the Footprint



The first thing to be clear is that the reading of the order flow is done diagonally and not horizontally. This is because of the very nature of the market in which participants can trade in different ways.

Buyers can participate either passively by leaving their demands at the BID or actively by hitting the ASK. Sellers can enter either by placing their bids on the ASK or by hitting the BID with market orders.

Participants therefore have two prices with which to trade: the BID and the ASK. There is no single price at which all participants can trade at the same time. If this were the case it would make more sense to do a horizontal rather than a diagonal analysis of the footprint.

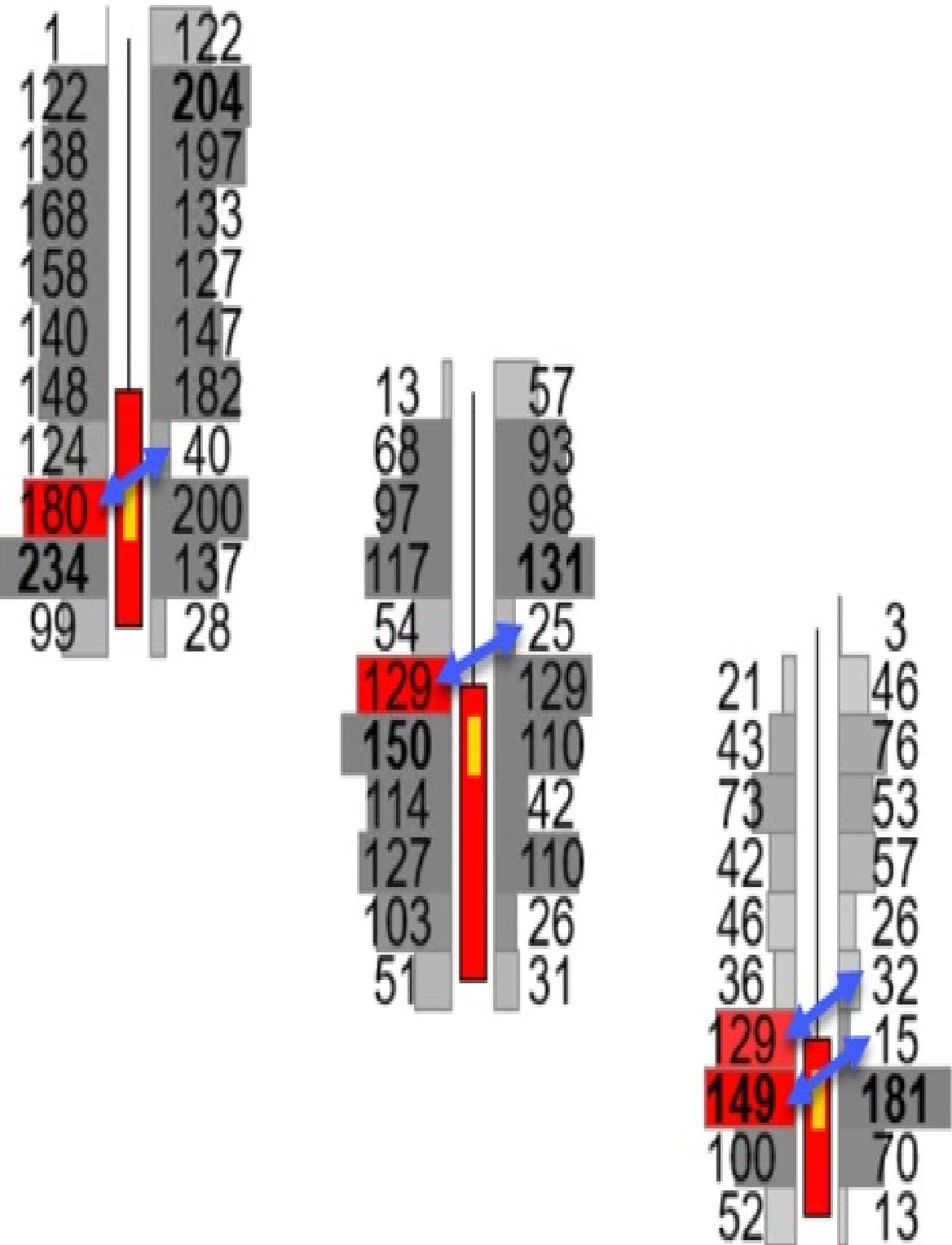
That is why to assess the strength or weakness among market participants at a given price level we will always compare orders executed diagonally upwards: one level from the BID to a higher level in the ASK column.

6.2 Imbalances

Many of the key actions that are tried to be identified in the order flow analysis have to do with imbalances. This behavior is composed of a high negotiation (large number of transactions) in one of the columns and at the same time a low negotiation in the opposite column (diagonally).

It must be taken into account that this imbalance should comply with some minimum parameters to determine it as such. The fact that simply a larger volume appears than that in the opposite column is not enough, there needs to be a disproportionate difference in volume. And this difference can be parameterized by configuring the platform to show these imbalances when a disparity of 200%, 300% or 400% appears between the levels to be compared. This will mean that on one column have been negotiated 2, 3 or 4 times more than the opposite column.

Many traders also add a minimum of contracts to calibrate the imbalance. If you have an in-depth knowledge of the market you are working in, this filter will help you refine the identification of such imbalances even further.



Using these percentage rotations allows the analysis to be better adapted to the market conditions and adds some confidence as these are target values.

In this example we see imbalances in favor of the BID with a difference of 400%; or what is the same, 4 times more contracts have been negotiated in the BID than in the ASK in relation to the opposite diagonal level.

The analysis to detect possible imbalances is done by nature in comparative terms for two reasons:

Because it takes into account the level of the opposite column to determine that there really is an imbalance.

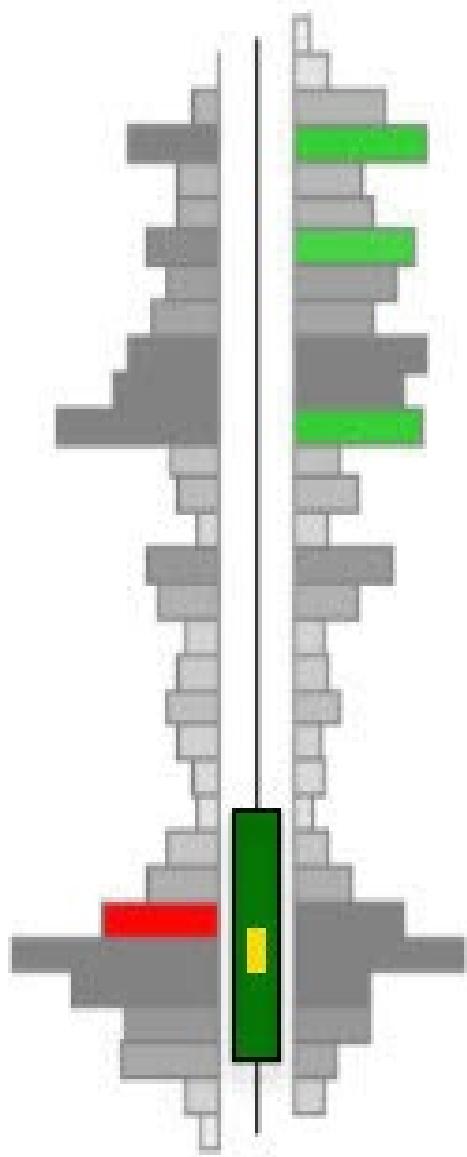
Because it depends on the volume operated on that particular candlestick. If such an action had happened at another time (where generally a greater volume would have been traded) it might not have been seen as such an imbalance.

6.3 Rotation pattern

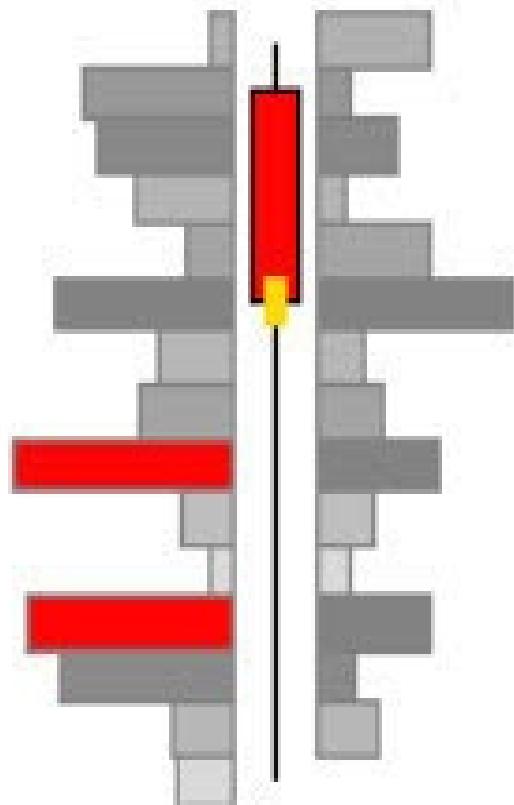
Order flow analysis involves many concepts. In an attempt to simplify and try to objectify its reading, and since we will only proceed to its analysis in potential operating situations, we will be looking for the events that suggest an effective turn of the market: potential absorption and initiative.

Absorption

It is a block by means of limited orders. There are large traders who do not want the price to keep moving in that direction and initially enter through passive orders to cause the movement to stop.



Potential
buying
absorption



Potential
selling
absorption

The interesting thing is to see that after this high negotiation the price has little or no movement in that direction. Sometimes these processes will take longer and large traders will be forced to perform such an action repeatedly over a range of prices, with the possible absorption being visualized over more than one footprint.

When determining a possible absorption initially we want to see that it appears with a relatively high volume. This data will minimize the possibility that we are at the wrong time in the market where such an action is not really taking place.

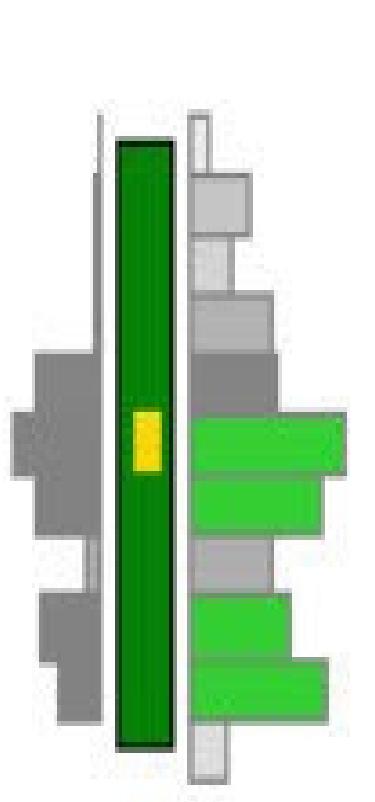
On the other hand, although the color of the candlestick is indifferent, its closing price should be against the imbalance. To treat such behavior as potential buy absorption we want to see that the imbalances are above the closing price; and below the closing price for the example of potential sell absorption. This is the greatest demonstration of blockage and refusal to move further in that direction.

As with any other market action, this is confirmed or rejected by the subsequent reaction. If we observe a high volume, a potential absorption and the inability of the price to keep moving in that direction, the chances that we are actually dealing with an absorption increase.

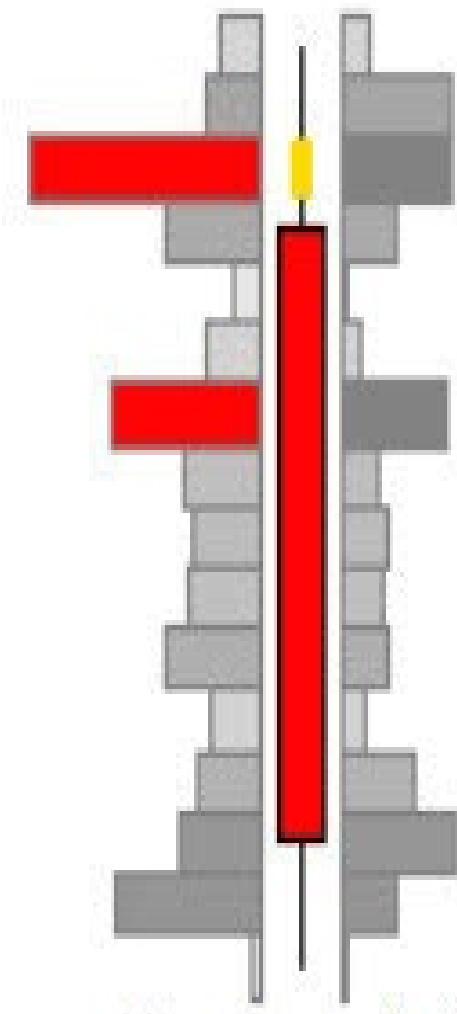
Although these absorptions may appear to leave wicks, this is not a necessary characteristic since they can also appear on candlesticks that close at the same end. The key here is to see that later the price does not continue in that direction.

Initiative

As we have already mentioned, the execution of passive orders alone does not have the capacity to move the price, it requires aggressiveness.



**Potential
initiative
buying**

A candlestick chart on the left side of the image. It features a large green body at the top, indicating a strong upward move. A smaller green wick extends from the bottom of the body. A yellow rectangular highlight is placed on the upper portion of the green body. The chart is set against a background of grey and white vertical bars.

**Potential
initiative
selling**

A candlestick chart on the right side of the image. It features a large red body at the top, indicating a strong downward move. A shorter red wick extends from the bottom of the body. A small yellow rectangular highlight is located near the top edge of the red body. The chart is set against a background of grey and white vertical bars.

If the analysis is correct and we are in the right place, after seeing a possible absorption, the appearance now of initiative will be the definitive signal to confirm the market turn we were looking for.

This initiative is represented as big negotiations executed with market orders on the column in which we seek to enter the market: If we want to buy we will look for aggression in the column of the ASK and if we want to sell we will look for aggression in the BID.

Again, we cite the principle that all action must be confirmed or rejected by the subsequent market reaction. If we see a possible initiative followed by a subsequent and immediate price shift in that direction, we will be in a position to confirm that action.

This initiative, this large volume executed will be very easy to identify on the track since the imbalance with respect to the rest of the levels of that same period will be very evident. Some authors use this term to refer to several imbalances together. Although it is true that the more imbalances we observe, the stronger the approach will be; the configuration of the imbalance has a great influence on its representation since it is not the same to configure the software so that it shows imbalances of 400% as of 150% where the latter will appear much more frequently.

As with absorption, the volume traded on the candlestick must be taken into account. In order to add confidence to the reading we want to see that the volume is relatively high.

Unlike absorption, in the case of potential initiative we want to see that the closing price is in favor of the imbalance; that is, in the case of a buying

initiative we want to see the imbalances at the bottom of the candlestick; and at the top in the case of a selling initiative. This signal suggests to us that there is harmony between that action and the subsequent and immediate movement of the price.

In essence this candlestick that denotes initiative is the same as the SOS/SOWbar that we work with under the Wyckoff methodology, and should therefore comply with their common characteristics:

Relatively high volume.

Wide range.

Closed at the extreme.

Sometimes such a market rotation pattern can be observed in one or two candlesticks (V-turn). Other times, after visualizing a possible absorption, the market will need to consume more time before the initiative appears. In case the market needs to consume that time before the effective turn what we want to see to add strength to the idea of absorption is a certain lateralization of the price where the inability of the market to continue in the direction it was bringing, it is a very evident sample sometimes of the action of absorption.

Another interesting detail that would add strength to the rotation pattern is that the market leaves a finished auction at the end. This would signal the refusal of traders to continue trading in that direction and such lack of interest would facilitate the turn in the opposite direction. If we are not able to identify the finished auction through footprint analysis, we can help ourselves from the Volume Profile as we have already seen.

6.3.1 Bearish rotation pattern: Buying absorption and initiative Selling

If at the present time we are waiting for the development of a sell trigger, we will look at the left side of the chart in order to identify any signal that suggests possible absorption of aggressive buying.

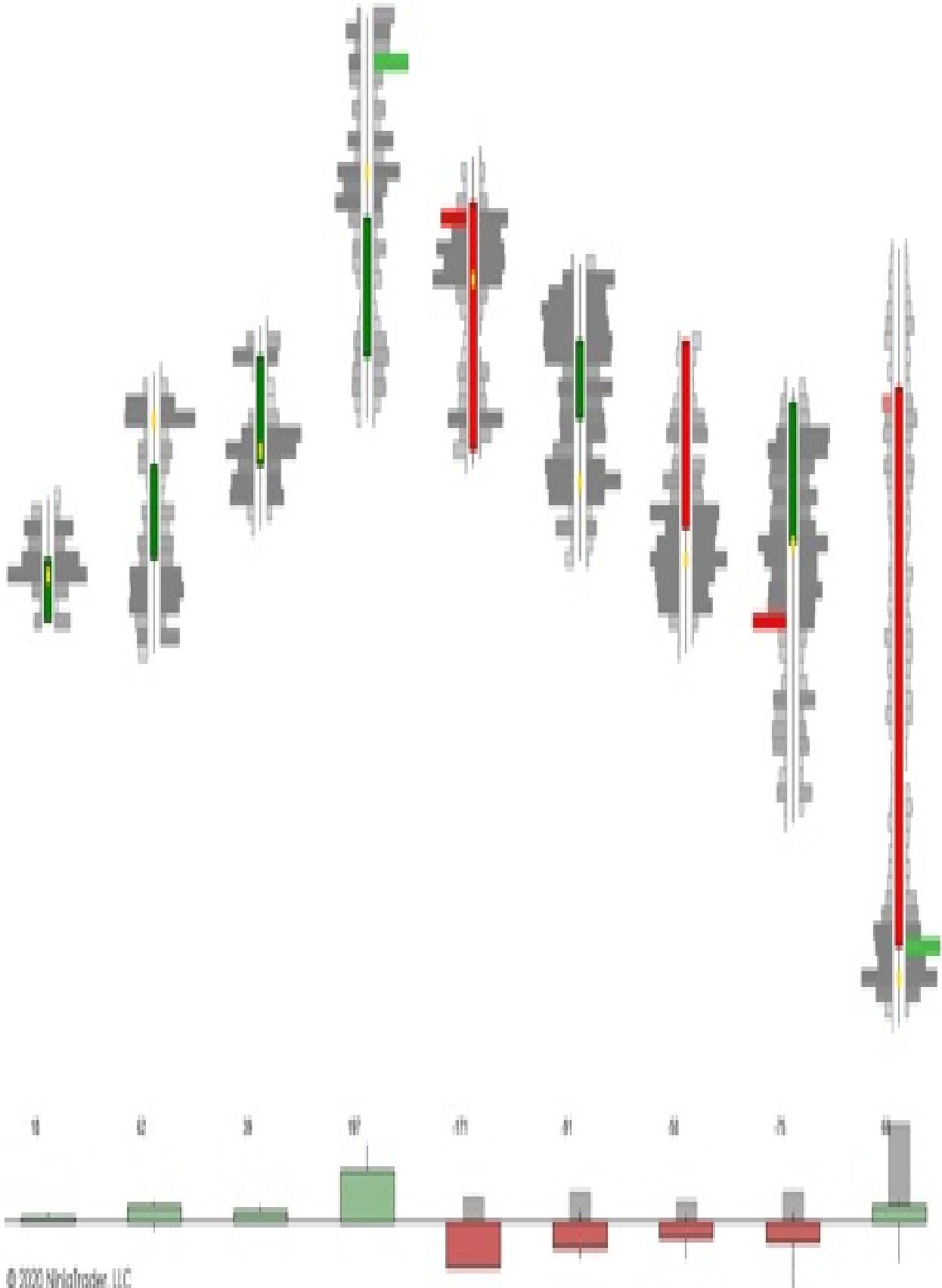
As we have already seen with the crossing of orders, aggressive buying are crossed with sell limits and this interaction appears in the column of the ASK. Therefore, what we want to see as a sample of possible absorption of buying are large negotiations in the column of the ASK on the operating area or in its vicinity.

But we would not be able to use any location for these big negotiations, the ideal would be to see them on the top of the candlesticks, because in case that really big operators want to enter with limited sells they are going to be in a high price level (they buy cheap and sell expensive).

This possible absorption alone is not enough to enter the market. We need to see aggressiveness that suggests selling intention, and we identify this with the emergence of major negotiations in the BID column. The BID's footprint is objectively the execution of aggressive sell orders (Sell Market) and given the context in which we find ourselves, we could interpret that the origin and intentionality of such orders is to enter the market directly by adding selling pressure.

The ideal location where we want these big deals to be shown is on the top of the footprint. If, in addition, we see a subsequent downward shift in the price, we

would be looking at another footprint that would suggest aggressive entry by sellers, visually and by methodology it would appear on the chart as a Sign of Weakness bar (SOWbar).



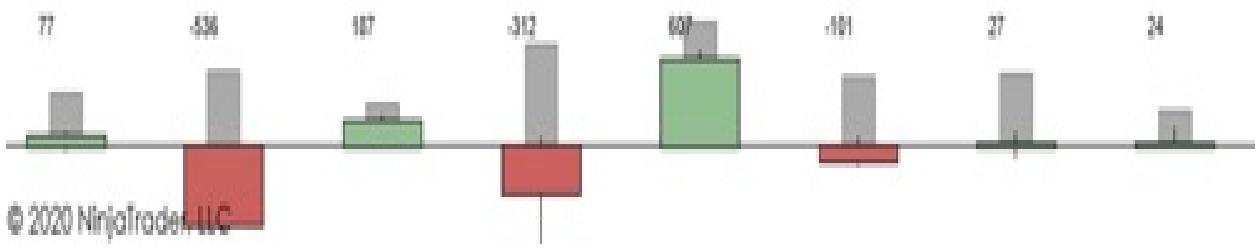
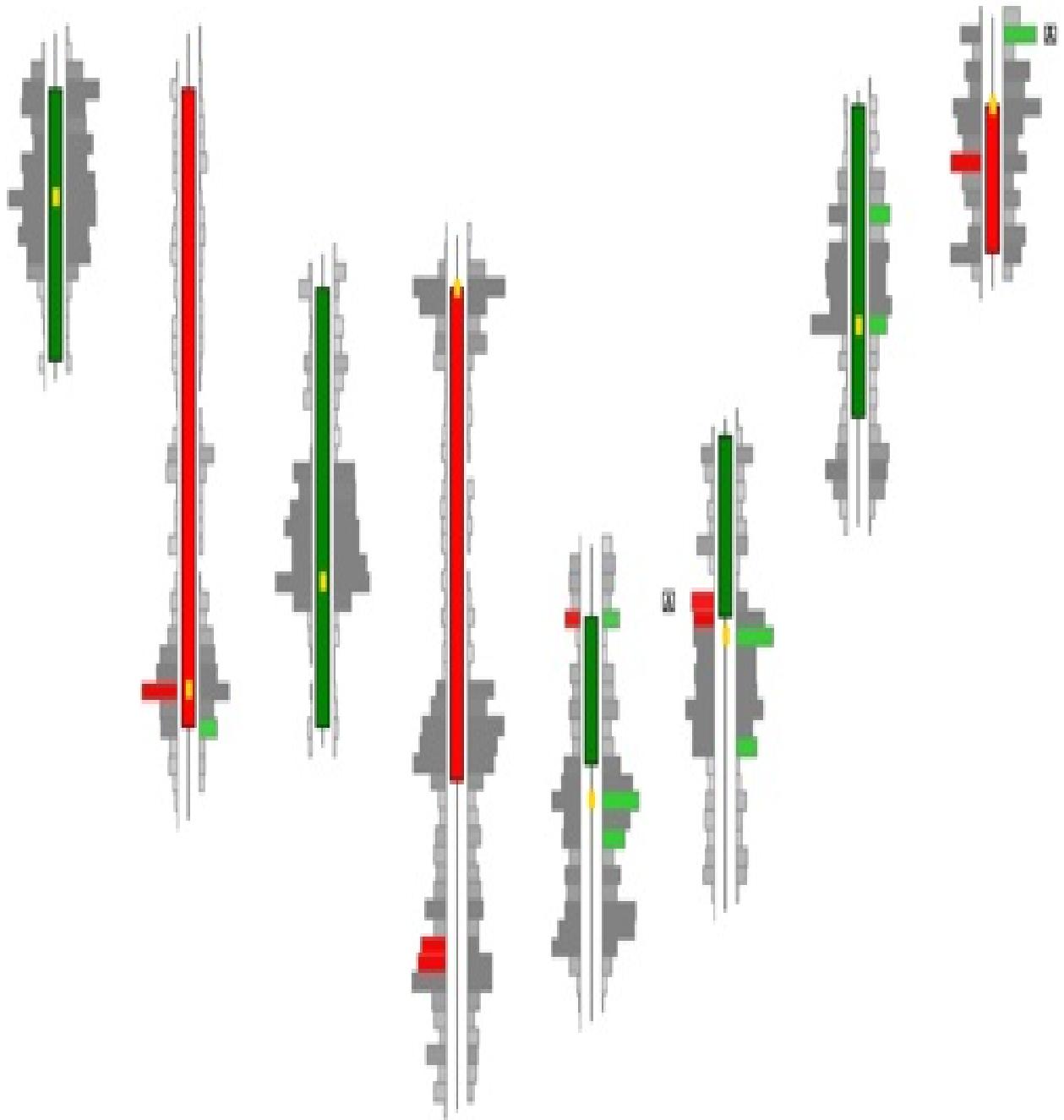
In this example we see how such a pattern of potential buying absorption plus selling initiative appears during the development of two contiguous candlesticks. This would be the exact theoretical representation of what we are looking for: an approach to the operating area with a movement that denotes lack of interest, a quasi-climate action where the imbalances in the ASK occur on the upper part of the candlestick, followed by a candlestick with imbalance in the BID also in its upper part that achieves a certain downward displacement and closes in minimums of the candlestick (SOWbar). We also see a significant rotation in the Delta from +197 to -171, suggesting a change in control in favor of the sellers, confirmed by the subsequent downward reaction.

6.3.2 Bullish rotation pattern: Selling absorption and initiative Buying

In a context of waiting for the development of the buy trigger we will be looking first for evidence that suggest selling absorption. Contrary to what has been explained above, this absorption should be shown as strong activity in the BID column. Absorption is a simple block where in this case the price is not dropped. All sell orders that attack the BID are matched with buy limit orders making it impossible to move the price down. It is a very important signal of professional accumulation.

Regarding the location of these big negotiations we want to see them in the lower part of the footprint as a faithful reflection of the blockade. If we see these huge volumes at the top it would make little sense to think about possible sells absorption.

Afterwards, what we want to see is a buying initiative: an attack on the ASK that suggests the intention of entering the market in a directional way by making the price rise. We want to see these imbalances remain below the closing price of the candlestick, which will suggest that this aggression has had some continuity upwards.



In essence a SOSbar is exactly that, aggression on the part of large operators who achieve a large price shift. The difference is that through the analysis of candlesticks we see the final representation and not the crossing of orders that takes place inside.

Here we see a genuine theoretical chart of a bullish rotation. If we look at it, before the turn we already see a potential absorption on the canopy that marks a -536 Delta. This is a very good example of the importance of the Delta. After this -536 a bullish candlestick follows, this is a first indication that we may be looking at a takeover since if the execution there was really aggressive sells the price would most logically have continued to fall. Instead the price reacts by rising; but this bullish candlestick does not have much commitment behind it since on the one hand it does not leave any imbalance that supports its movement, and on the other hand the delta is not very significant in relation to what was seen previously. Most probably the market is not yet ready to go up.

And that's when it develops the effective rotation in a two candlestick pattern. New absorptions can be seen in that first big downward candlestick which is accompanied by a delta of -312 and later a bullish initiative candlestick appears with imbalances in the ASK, a relatively high volume and a delta of +607 showing now a clear rotation in favor of the buyers.

6.4 Continuation pattern

The continuity patterns serve us mainly to confirm the directionality originated in the previous turn as well as allowing us to identify points where to look for incorporation when a trend movement is underway.

This pattern is composed of two actions: the creation of the control and its subsequent test.

Control

This pattern is the clearest sign of interest in favor of a direction. It is visualized on the footprint by means of imbalances. In essence it is the same as initiative with the only difference that it occurs once the movement has started.

Although we could determine a control with only one imbalance, the most advisable thing is to wait for the appearance of at least two. The logic is that the more imbalances the operators are capable of generating, the stronger the area will be. Again it is necessary to bear in mind that depending on the requirement at the time of parameterizing the software this one will show more or less imbalances. Therefore, it is not necessary to be restricted to theoretical definitions that are not totally objective. The fact that there is only one imbalance instead of two or three together does not mean that this event cannot be treated as a control.

This is because the action of the control is not only about the imbalances; other

characteristics such as the range of the candlestick, the close of the candlestick and the volume negotiated must be fulfilled.

We therefore identify a bullish control when we see imbalances in the column of the ASK on a candlestick with good volume that manages to close in the upper third of the total range. Preferably the lower the range of the candlestick the stronger the action.

Similarly, we identify a bearish control over the imbalances (the higher the range of the candlestick, the better) in the column of the BID over a high volume bearish candlestick that closes in the lower third of its range.

If we have not had the possibility to enter the turn pattern after seeing the absorption more initiative, the creation of the controls will offer us a new possibility to incorporate as long as there is still a considerable distance from the level where we will establish the target.

The participants who generate the pattern have had the ability to overshoot the number of aggressively operated contracts with respect to the operators in the opposite column. This action is very relevant since it is not a simple and isolated imbalance, but they have enough momentum to create three imbalances in a row at different price levels.

If after seeing a pattern of turning we observe such an appearance on the footprint it will offer us greater confidence that we are positioned in favor of the majority of professional money.

Control test

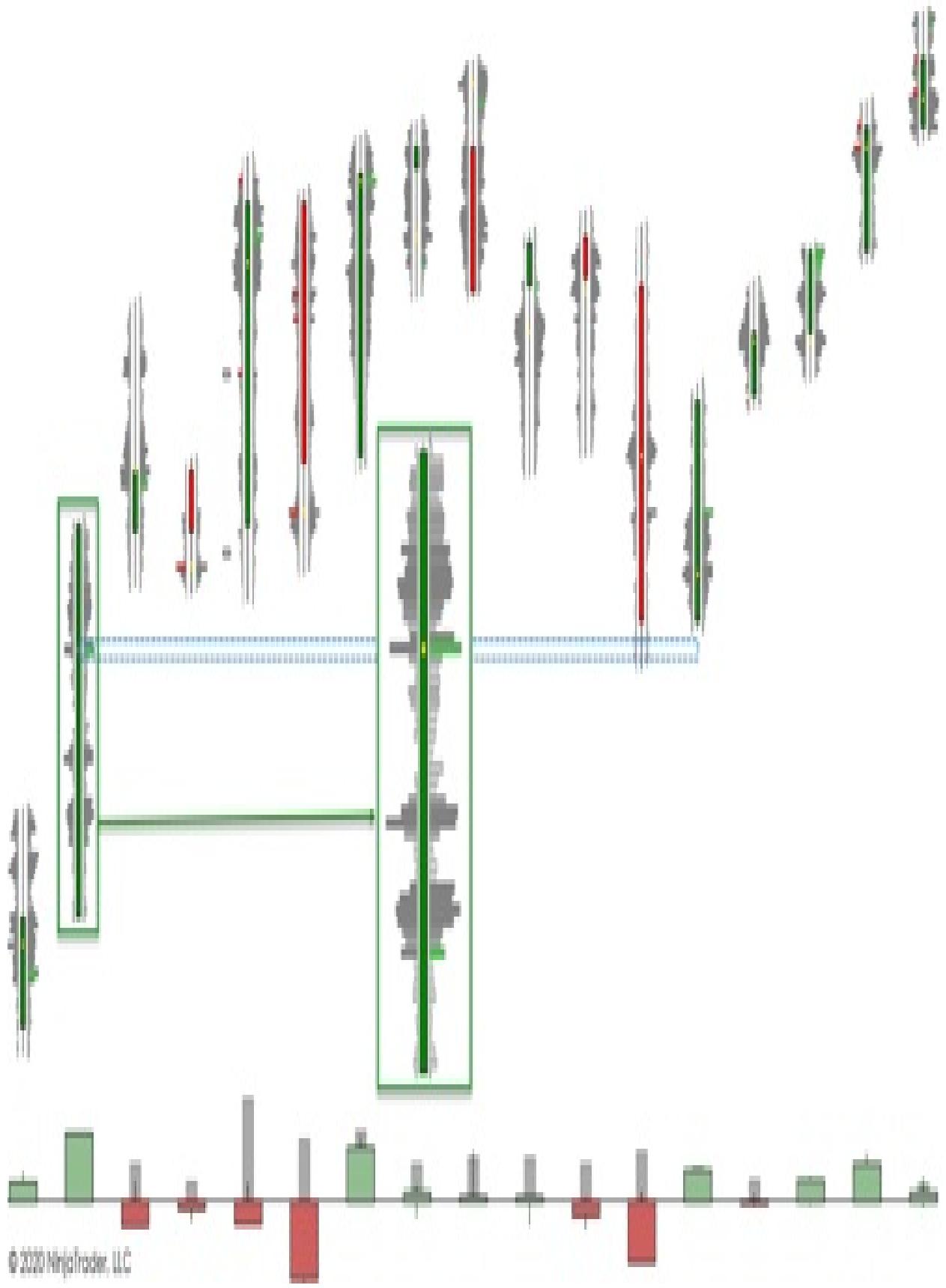
This is a movement that will test a previous area where potentially aggressive operators have entered.

The controls naturally identify a strong area where it is assumed that the operators who caused the previous imbalance will reappear if the market revisits the area.

That is the underlying logic behind that particular action. We will favour the fact that these traders will defend their position by not letting the price move against them, thus offering us a good opportunity.

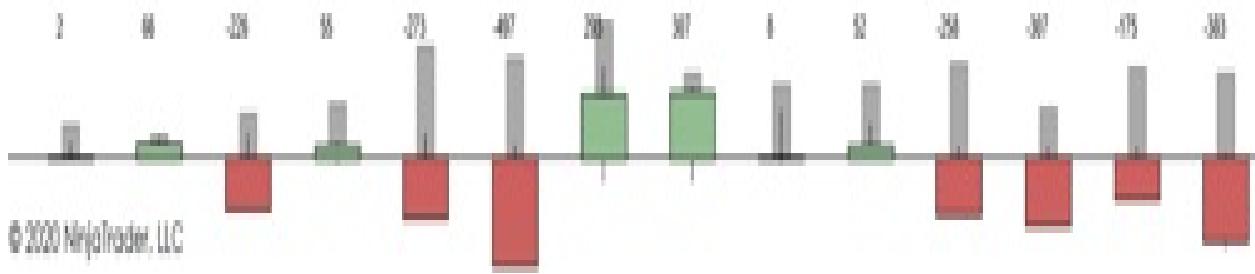
So what we're going to look for is the development of a new pattern of turnaround on the zone. Zone that will cover the price levels identified in the control. In this context, the absorption action may not be so noticeable since the great effort has already been made previously. What should be evident is a new show of initiative that suggests the aggressive entry of such operators defending their position. This should be the definitive signal to enter the market.

Sometimes this test will develop very quickly on the next candlestick in development. This will probably be seen as a wick that denotes a lack of interest to trade in that area leaving a total reversal of the candlestick later on. At other times there will be a small extension in that area where the price will temporarily seem to break it but eventually revert leaving a rejection. And there will be some occasions when the test leaves it practically to the tick. The key here is to be open-minded and flexible with respect to the representation of the test.



It should be noted that lack of interest should be evident in this behavior as in any other test action already known under price and volume analysis. Clear evidence of this inactivity as we already know would be observable by a relatively low volume.

In this example the price comes from generating a bullish turn and is in the middle of the movement. The bullish control is created on that wide range candlestickstick, good volume and positive delta. We identify the level of the imbalance that also matches the candlestickstick VPOC and extend it to the right as a potential long search operating zone. The price then moves back above that level and generates a two-candlestickstick rotation pattern with good delta rotation. It is interesting to observe how the downward candlestickstick reaches this level with a decrease in volume denoting rejection and how the upward candlestickstick subsequently generates a large volume leaving a new imbalance in the ASK. From there the price continues its upward development.



© 2020 NinjaTrader, LLC

In this other example we see how bearish control is generated over a high displacement candlestick, high volume with a large negative delta, suggesting strong aggressive entry by sellers.

If we look, the imbalance in the BID is generated along with other levels that have had a high negotiation so we can assume that area as a High Volume Node; and it will be this one that we will project in the future to look for the continuation of the bearish trend.

In this case, the chart is 15 minutes long, so if we want to fine-tune the entry, we could go down from temporality to 5 minutes to look for the downward trend: buying absorption and initiative selling. In case we want to keep the time frame, we would wait for the closing of the candlestick that tests this control to evaluate if sellers have entered again and our entry trigger is activated.

The key, as mentioned above, before two or more imbalances are generated together to treat such action as control is that even if only one, it appears on a candlestick with a wide range, close near the extreme and a relatively high volume as these are the signs that suggest the entry of large operators.

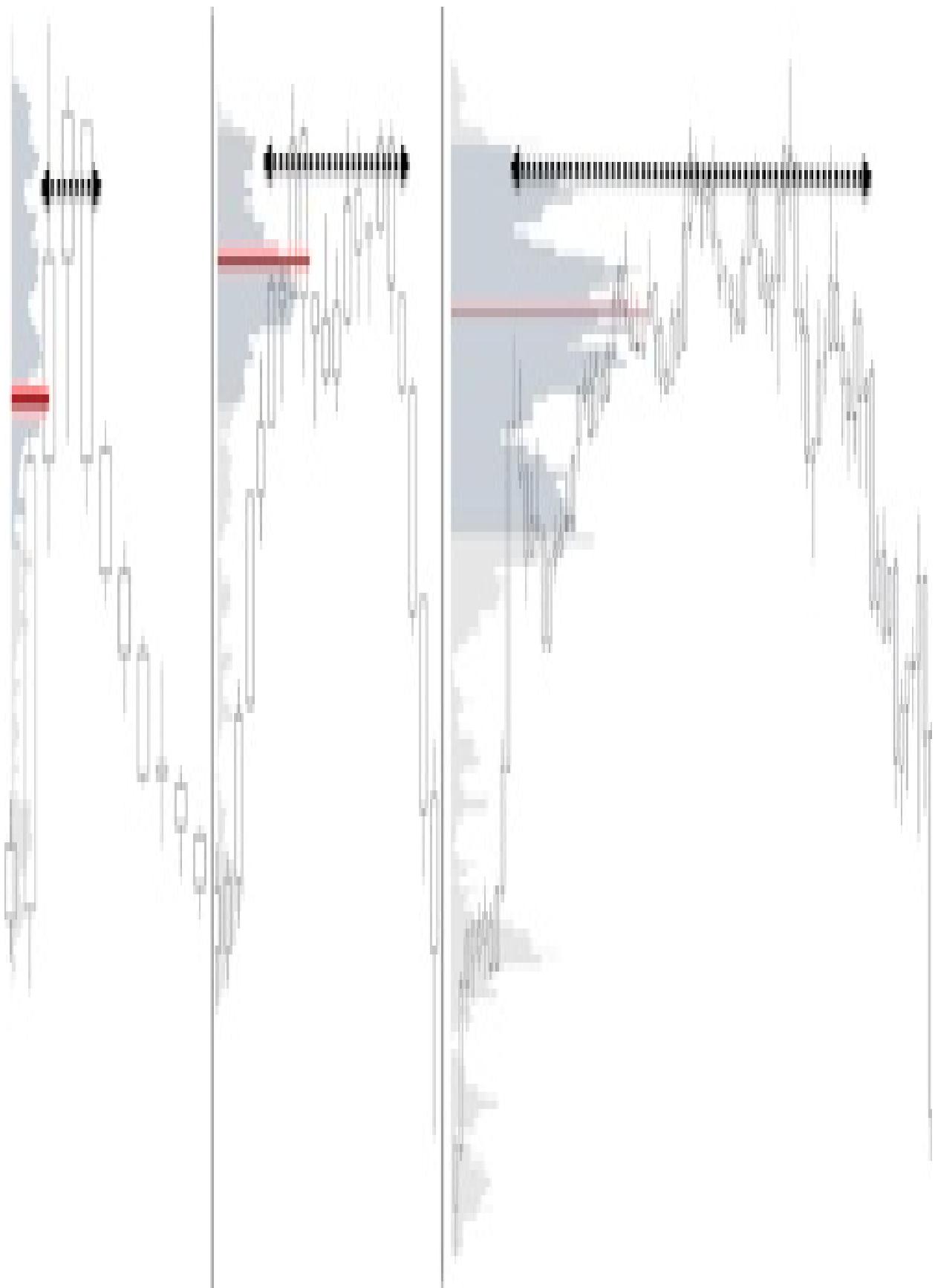
For the continuation pattern, we could also treat as the control on which to test that initial imbalance that we identified in the turning pattern initiative. Most probably it meets all the characteristics we are looking for so it would be the first area to project in which to look for the incorporation.

6.5 Fractality

Although basically the reading of this type of patterns is oriented to the intraday, this logic can be extrapolated in the same way to higher time frames.

In the turning pattern observable in the Order Flow footprint, absorption and initiative is no more than a representation on a minuscule scale of what in another temporality would be a accumulative or distributive scheme. The same pattern of rotation could be observed in a slightly larger perspective (during the development of one or several sessions) and would be visualized in the form of P and b patters, where the bell is nothing more than a process of absorption in its interior, with the initiative being subsequently represented as the movement of rupture of the value zone.

Assuming it in an even bigger scale we would have the medium and long term structures composed from several days to weeks. These structures again represent exactly the same behavior, where the process of absorption would be the range of accumulation/distribution, and the initiative would be the tendency movement although in a larger scale.



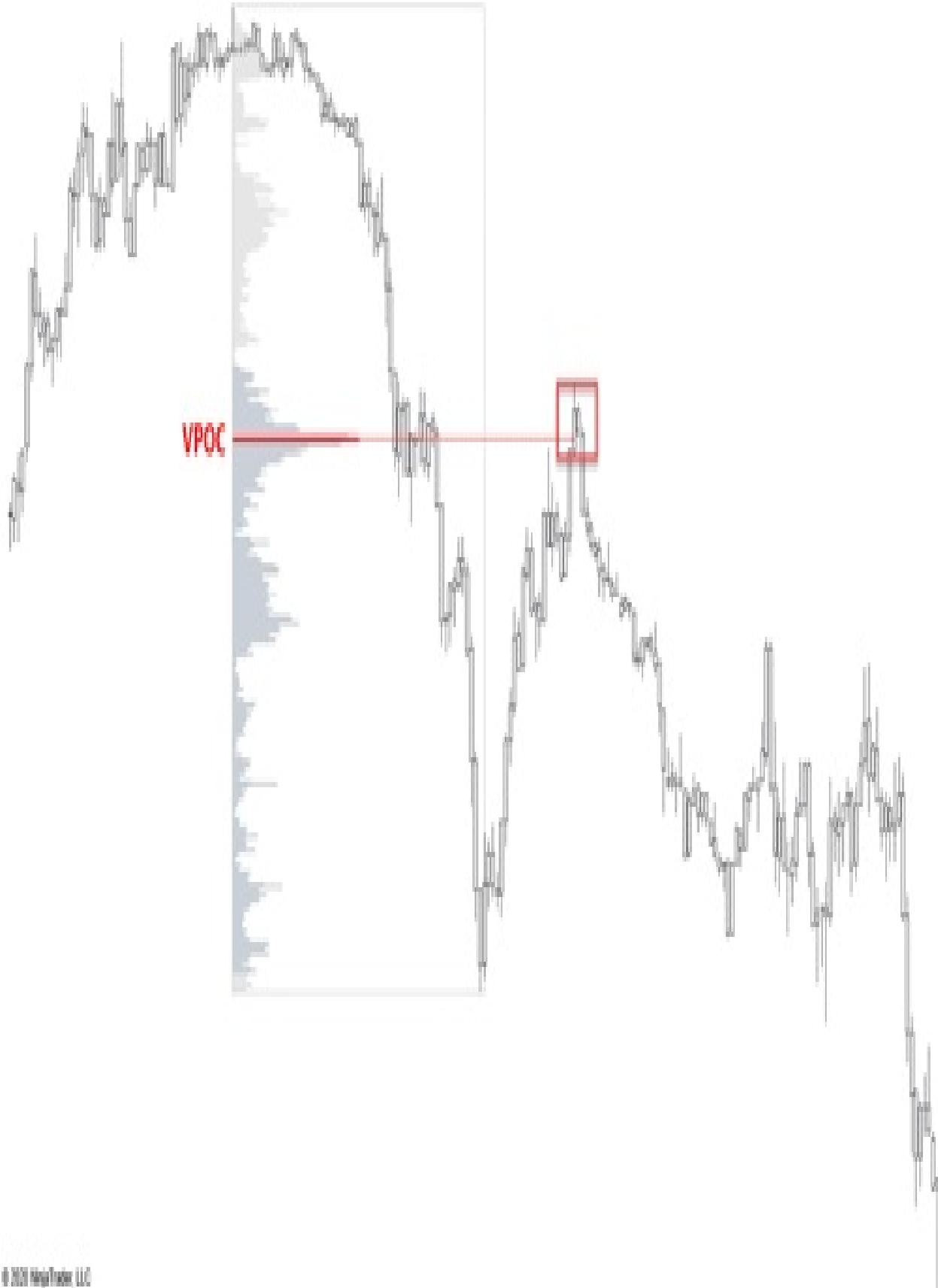
The only difference is the time consumption needed by the market to complete such an absorption process. In the following example we see how in the left chart he develops it in a three-candlestick pattern; in the middle he does it during the development of a session; and in the right chart he needs to consume several days to carry out the process leaving a clearer structure.

The same is true for continuation patterns. In essence a control will be part of an impulsive movement while a test of that control will be part of a corrective movement. This is the natural dynamic of tendential movements: impulse and correction.

Observing it on a higher scale, we can identify this control in VPOC if we throw a profile over the whole impulsive stretch. This VPOC would represent the control zone of all the movement. That is why these are levels to be taken into account on which to seek the end of a possible correction movement and start a new impulse.

And on a longer term scale, where we try to analyze the general context, we assign the control function over the high volume nodes (HVN), which represent accumulation/distribution structures over other time frames.

In the following chart we see an example of this concept of fractality with controls. We launch a profile of the last impulse and identify the VPOC of that stretch. This VPOC can be considered as the control zone of the sellers so a good strategy would be to try to incorporate short in a future test to the zone. The key to understanding the concept is to be clear that if that downward momentum was part of a single candlestick, the most traded level within it would be that VPOC. We also see how this control is generated by a minor redistribution scheme which causes the



creation of the High Volume Node.

This is the best explanation for understanding the fractality of the market. As we see, the behaviors are always the same regardless of the time variable. Here lies one of the advantages of this working methodology. Once this is internalized, we can be in a position to cover with greater solidity the operations in different temporalities.

Part 7. Wyckoff 2.0

We come to the final part after having presented what in my view are the most objective principles for discretionary and technical trading in the financial markets. This is what I have called Wyckoff 2.0

It is about bringing together the main ideas of the Wyckoff methodology; the principles of the Auction Market Theory and helping us with the Volume Profile and Order Flow tools in order to present the most robust scenarios possible.

1. Wyckoff Methodology

It is the cornerstone on which the operational approach is based mainly because it is based on a real underlying logic, because it provides us with a context with which to propose scenarios and because it offers us different analytical tools with which to evaluate who can have control of the market.

On the one hand, we speak of underlying logic because of the theoretical framework behind it. Many are the concepts that Richard Wyckoff tried to disseminate, but without a doubt the most relevant have been the three fundamental laws and the processes of accumulation and distribution.

Among the three laws, if there is one that stands out as a standard associated with the Wyckoff methodology, it is the Law of Supply and Demand. It is the true engine of the financial markets, even though they have evolved. Regardless of the type of participant, intention, valuation or anything else that has to do with the positioning of an order, in the end it's all about executing a transaction,

buying and selling; and this is universal.

In addition, the processes of accumulation and distribution, going hand in hand with the law of cause and effect offer us a very genuine image of how the market moves. There is no doubt that in order to visualize an effect in the form of an upward trend it will first be necessary to develop a cumulative cause; and that for a downward effect to take place it will first be necessary to have a distributive process. Another very different thing is how such processes will develop.

On the other hand, it is necessary to emphasize the importance of having a clear context on which to guide oneself. This is one of the most important sections of the strategy since it allows us the possibility of propose certain movements based on how the price is behaving so far.

We understand that the interaction between supply, demand, buyers and sellers creates structures that, although not in form but in substance, are constantly repeated. The genuine identification of these structures helps us to recognize the context in which we find ourselves in order to favor development on one side or the other. At this point, it is important to emphasize what we understand by fractality and how minor structures fit within larger ones.

Finally, the Wyckoff methodology approach provides us with a series of analytical tools with which to evaluate who is taking control of the market during the development of the structures.

Most market actions provide us with information about the commitment of buyers and sellers to take control. The fact of developing a movement in a specific way or the simple fact of not managing to develop a certain movement leaves us very subtle clues with which to evaluate the underlying strength or

weakness.

Finally, the analyses under the Law of Effort and Result are very useful with the objective of determining the harmony or divergence in the movements. In the end it is a matter of making analyses as objective as possible and adding up signs in favor of one side or the other until determining who is more likely to be in control.

2. Auction Market Theory

Although Richard Wyckoff did not use these concepts in his studies, balance and imbalance is still the reasoning behind lateral and trend movements.

A range of accumulation or distribution, terms that Wyckoff did use, are exactly zones of equilibrium where buyers and sellers exchange their contracts as a sign of market efficiency, a term used by the auction theory. The same happens with upward and downward trend movements, which in essence represent inefficiency and imbalance.

In the end the underlying logic of the Wyckoff methodology principles are based on exactly this, on the Auction Market Theory, the acceptance and rejection of certain areas; and this is what I try to transmit to anyone who refers to this approach as an outdated and totally inoperative method for today's markets.

Furthermore, we incorporate the principle that the market, in order to facilitate the negotiation between its participants, will always seek to go to old areas of high activity where both buyers and sellers negotiated a large number of contracts. This principle is tremendously useful to perform more accurate

analysis and locate logical areas for profit taking.

3. Volume Profile

The Volume Profile is a tool that objectively identifies the most important negotiation zones and operational levels based on volume.

For Wyckoff operators, profile analysis helps us to improve the identification of structures mainly for those cases where they develop in a more erratic way and where events are not so easily identified.

Other interesting uses it offers us are the determination of market bias through the analysis of trading areas and operating levels; as well as the analysis of trend health through the continuous evaluation of the evolution of value areas.

For those operators who do not take into account the Wyckoff methodology approach, the volume profiles also provide a context for the establishment of scenarios based on the operating principles with the value areas. While it is true that taking into account all the analytical tools offered by the Wyckoff methodology can help us in favoring operations towards one or the other side, these operating principles by Volume Profile also serve as a roadmap with which to expect specific price movements.

Finally, it can also be extremely useful to take into account to calibrate the position management; everything that has to do with the entry of the operation, the location of the stop loss and the establishment of the profit taking.

4. Order Flow

After studying in depth everything that has to do with the crossing of orders and evidencing the problems that its analysis has in an isolated way, we are in a position to limit its use only on the key operational areas.

Due to the discretion involved, using any type of Order Flow analysis without taking anything else into account does not seem to be the most solid way to approach it. If it is a subjective tool in itself, not having a clear route map can turn the operation into a coin toss.

That's where the importance of having a clear context and an established directional bias comes in again. Only when we are in a situation of potential entry is it time to, if at all, put the magnifying glass on and observe how the order crossing is taking place in order to validate our entry trigger.

Having as a fundamental base the imbalances, the analysis of the Footprint that is proposed would pass mainly through the identification right at the moment of the search of the trigger of the two key behaviors in the turns of the market: absorption and initiative.

In addition, and in the event that we have not been able to enter this turn, we still have the possibility of proposing an entry with a continuation pattern by identifying more test controls.

Operative scheme

Having as a fundamental basis the perception of value that we have studied with the Market Auction Theory, the context and the analytical tools that the Wyckoff methodology offers us, as well as the analysis of levels and zones of negotiation that we identified by Volume Profile, we are going to propose different operative strategies.

In order to facilitate the understanding of this section, we present a summary of the entire process.

1. Context analysis to bias the directionality

- a. Trading Range
 - i. In extremes
 - ii. In the inside
- b. Trend
 - i. Interacting with the value zone
 - ii. Away from the value zone

2. Identification of zones and operational levels depending on the type of strategy

- a. Operating areas of structures under Wyckoff methodology
- b. Negotiation zones: HVN and LVN
- c. Operational levels: VAH, VAL, VPOC and VWAP

3. Set-up of the scenario based on current price location

- a. Continuous validation protocol
- b. Alternative Scenario

4. Position management

- a. Entry
- b. Stop Loss
- c. Take Profit

Operative

1

Context

What - buy/sell

2

Zones and operational levels

Where - location

3

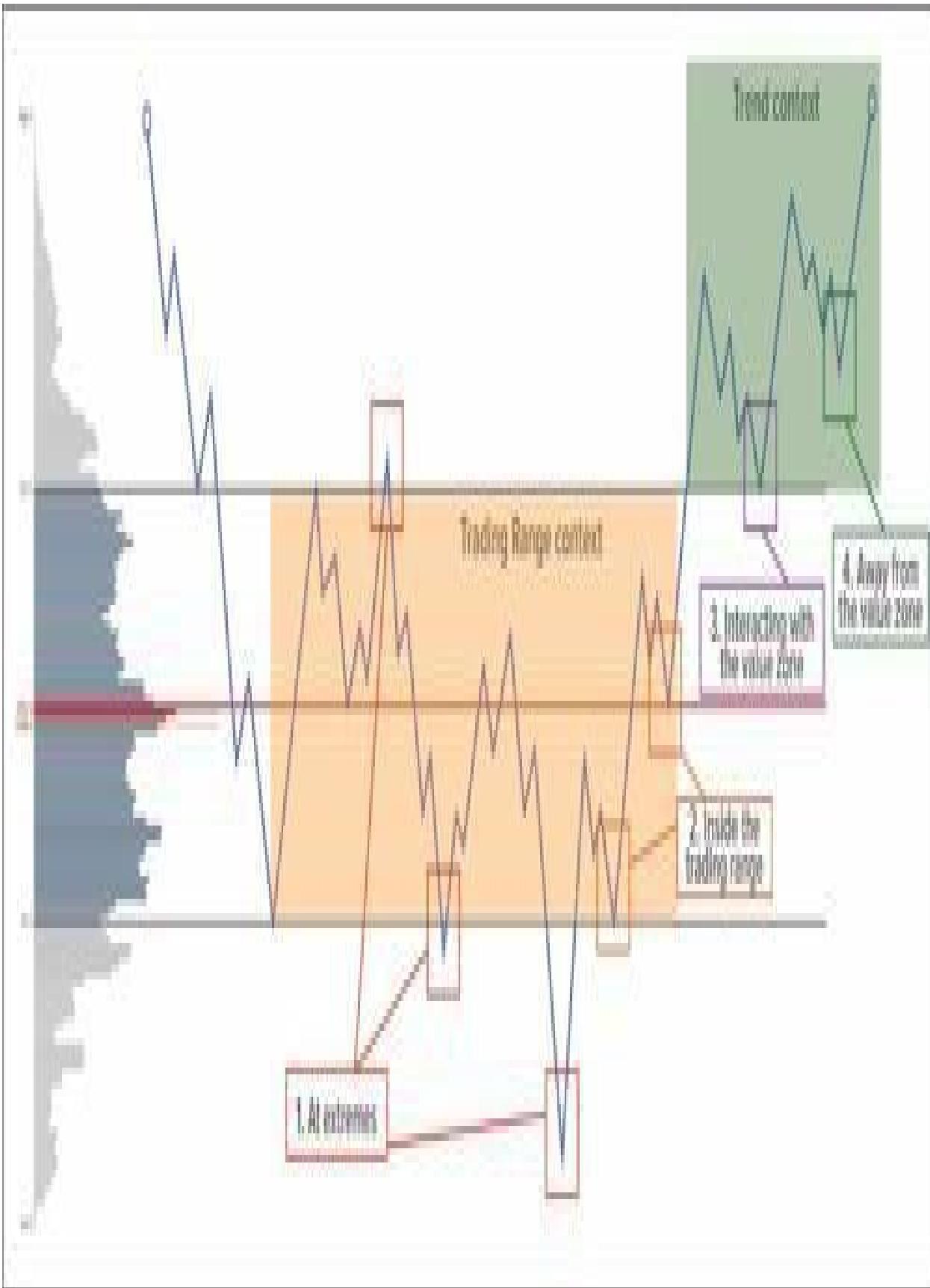
Set-up scenario

How- movements

4

Position management

7.1 Context analysis



The first thing to do when analyzing any chart is to determine the context in which the price is found: trading range or trend. Let's see a brief summary of the operating possibilities depending on the context:

In this chart we have an ideal accumulation scheme. We see how the operating context offered by the Wyckoff methodology converges with the operating principles by Volume Profile.

Within the first three operative opportunities in extremes (1) of the trading range context, it would fit with the principle of trading range operative by Volume Profile.

After the Spring, the price recovers the value zone and we see again the confluence of both principles: by Wyckoff methodology we would look for a test to the high part of the structure while by Volume Profile we would activate the operation in reversion where we would look for the visit to the opposite end of the profile value area. This movement to the opposite end would be in position to take advantage of it firstly on the Spring and secondly if it leaves us an operative opportunity inside (2), either on the potential test of the Spring or on some LPS.

Once the price leaves the trading range we would be in a trend context and in this situation the first operating opportunity would be in the test after a breakout (3) where by Wyckoff methodology we would look for the incorporation over the Creek; and based on the operating principles by Volume Profile the continuation operating scenario would be activated in which case we would do it over the end of the value area, in this example rising over the Value Area High.

When the price is already in the middle of the trend movement we would have to

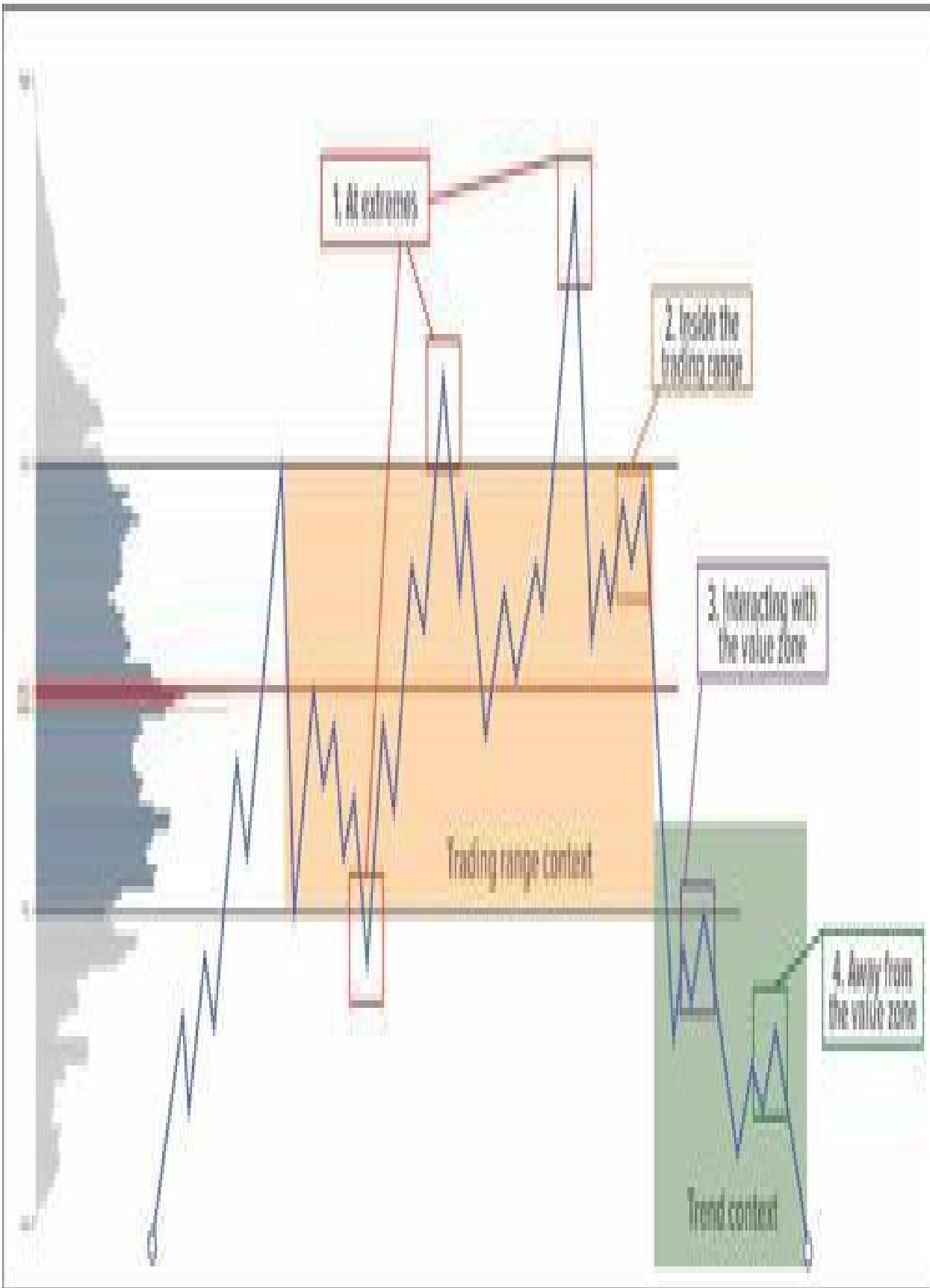
work with the context away from the value area (4) where we would expect some kind of backward movement to seek incorporation into the current movement.

7.1.1 Trading Range Context

It is the construction of the cause of the subsequent trend movement which will be upwards or downwards.

This rotation phase can appear during the course of one or several sessions (even weeks). If it contains several sessions, it is best to throw a volume profile together in order to identify the operating zones globally.

At extremes of the trading range. If we observe the stop of the previous trend movement and some posterior lateralization, we will determine that we are in a range context within a balance zone and the operation here would be based on the search for reversions in the extremes of the structure; that is, buying below and selling above.



Inside the trading range. If we are within a large trading range and we have enough space, we can also propose an operation looking for the extremes. This is especially recommended when we have seen a previous shock that provides us with a clearer directional context.

7.1.2 Trend Context

When a trend is identified, the trader should only trade in favor of it by waiting for the reversals to try to enter the market.

3. In trend interacting with the value zone. If after being sideways an inefficiency occurs that throws the price out of an equilibrium zone, we should evaluate the possibility of an effective breakout or a shake. If the previously analyzed traces suggest us that it could be the effective rupture, the operative here will be based on the search of the confirmation test on the broken structure or at some more immediate operative level.

4. In tendency away from the value zone. Once the effective rupture of the previous equilibrium zone has been confirmed, the price will now be in a trend context and the acceptance at these new levels where it is being quoted will make us base the operation on that direction.

The question we must constantly be asking ourselves is in what context is the market today. Your answer will determine the type of strategy to be applied. As we know, the only two conditions in which the market can be in balance or imbalance. Therefore, we will basically be working in range and in trend.

We will now go deeper into each of the operating contexts:

7.1.3 Operating in trading range

Mainly we are going to distinguish two scenarios within the operative in trading range according to the price in relation to the analyzed equilibrium zone:

At extremes

The fact that the price is quoted within an area of value suggests to us that the balance is total between buyers and sellers. Neither has control and therefore the price is expected to keep moving in the same dynamic.

The operating context here would be to favor reversals at the extremes:

By Wyckoff's methodology, it would be a matter of seeking entry into the Phase C shake. That is, if we are facing the high part of the structure we will favor the Upthrust; while if we are in the low part we will look for the Spring. Its genuine development will suggest the visit of the opposite end of the structure.

By Volume Profile we would try to operate the reversion on the limits of the value area. We would therefore look for the downward turn on the Value Area High and the upward turn on the Value Area Low. A rejection of such areas would suggest visiting the opposite end of the value area.

Inside the trading range

On the other hand, if the trading range is wide enough, some scenario could be raised within it. By Wyckoff's methodology, in case of observing that the price has possibly developed the test event in Phase C, it would be the entry into the trend movement within the trading range in Phase D. The only filter needed would be that it has enough travel available to offer a good risk/reward ratio.

In that case, we would need to be positioned in favor of the more operating levels the better. The fact that price is able to reach one of these levels and effectively break it will suggest that there is some control by operators in that direction. If we are also in favor of a High Volume Node we would already have identified the market bias.

Within a wide profile we will be able to identify different areas of high and low negotiation. We must remember that the last High Volume Node generated will be the one that determines the directional bias at least in the shortest term. As long as the price remains above, we will only propose bullish scenarios and vice versa if we find ourselves at the bottom.

A High Volume Node is a lateralization of the price. By pure logic, if we find ourselves above it, we can suggest that this HVN is an accumulation. Therefore, to buy, we want to be protected by an accumulation below it.

The opposite is true for distributions. If we find ourselves below an HVN, it will be identified as a distribution, which makes us think that favoring short ones would be the most appropriate thing to do.

This type of operation within the trading range will be subordinated to carrying out the management of the position necessarily when reaching the extremes of the zone of equilibrium since in principle we should continue to favour that

neither side has total control until the final unbalance is caused.

Supported by the operating principles of Volume Profile, in case the price comes from making a shock we would be in a context of operating in reversion applying the 80% rule adapted where the probability, after re-entering the area of value is in the visit of the opposite end.

7.1.4 Operating in trend

After a movement of intentionality in which the traces analyzed suggest that the imbalance is on one side or the other, we will seek to operate in that direction by waiting for a test at some relevant operational level.

Interacting with the value zone

New information has entered the market causing the imbalance and the first thing to evaluate is that it is not a failed break that generates a shock with re-entry into the value zone.

If the traces suggest that it is an effective rupture, our bias should now be to look for some operational idea in favour of that direction.

Under Wyckoff's methodology, if we observe an impulsive movement that intentionally breaks the structure we would look for the entry in the test of the break in Phase D.

This type of operation is also useful for traders who do not operate structures. The logic is exactly the same. Based on pure Volume Profile analysis we could wait for the price to leave a certain value area and then wait for the entry into the test of this area. This would be the continuation operation under Volume Profile operating principles.

In order to try to determine if we are indeed facing a potential genuine rupture,

we are going to analyze different signs. It is time to remember the content seen in the section How to distinguish between accumulation and distribution?

As the main traces to try to clarify whether the rupture will be genuine, we will take into account:

1. The shock. Key action, search for liquidity. The deeper the shock, the stronger the scenario. Although there are sometimes local shocks (above some maximum or minimum within the range), we will initially wait for the shaking to total extremes as it offers us greater confidence.
2. Price and volume action after the shock and at the break. Candlesticksticks with good displacement and high volume denoting control by one side (buyers or sellers). At the moment of the break, since we are facing a liquidity zone, it is likely that a relatively high volume will appear and even that some wick will be visually observed. This is normal and should not initially lead us to think that it may be a shock since the behavior of absorption has this characteristic: high volume and possibility of retraction in the sail. The key is in what happens next.
3. The reaction after the break looking for the non re-entry to the range. After the rupture of a value zone we must wait for the price to be accepted at those new levels where it will be quoted. This will be initially evidenced by a lateralization in the market outside the trading range.

A sample that would add greater strength to the acceptance scenario would be to observe the migration of the VPOC to that new area or the creation of a new one (perhaps that of a later session). This initially represents acceptance but would still need to wait to confirm the action, as we saw in the section on VPOC migration.

And the definitive fingerprint is obtained by visualizing the non-reentry back into the value area, the range. At that point we will already have a change in the perception of the value: price + time + volume where the probability would be in the continuation in favor of the movement of rupture.

It should be noted that the time consumption after the break should not be excessive. Enough to generate a new VPOC or its migration, but at the moment this happens the price should initiate the trend movement. The momentum behind the first imbalance should cause continuity with some speed.

Once the price is positioned and kept out of the value area we will determine that an imbalance has occurred, that such a move has not been rejected and therefore we will be in a position to seek incorporation in favor of that direction.

If we are in a potential breakout, all the volume seen from below, as well as the previous zone of equilibrium, can now be identified as a potential accumulation. As we know, the effect of an accumulation will be an upward trend movement and this is where we want to be positioned.

Conversely, when we find ourselves in a situation of a possible breakdown, if the price is capable of holding that zone and not re-enter the previous area of equilibrium we will be able to identify such a process as distributive and it will be time to look for the trigger with which to enter the sell to take advantage of the subsequent downward trend movement.

Away from the value zone

We may start analyzing a chart where the price is already outside a certain value area and move in search of a new zone of equilibrium. In this context of trend movement, the best thing to do is to wait for a test on one of the operating levels that we identify.

At this point it is convenient to remember the teachings of Richard Wyckoff about how markets move. It is well known that markets move in a rising and falling wave pattern: therefore, the proposed scenario necessarily involves waiting for that wave to correct before continuing in the direction of the trend imbalance.

The key now would be to identify possible areas where to expect that price to develop such a corrective movement. By Wyckoff's methodology, it would be a matter of seeking entry into the trend movement outside the range in Phase E. It is a confusing context since this operation according to the methodology involves the search for new intentionality candlesticks (SOS/SOWbar), minor structures and new shocks (Ordinary Shakeout/Upthrust), but it does not suggest the location on which to expect the development of such behaviors.

Here we see the importance of working with these levels and volume based operating zones. They help us determine clearer locations where price is feasible to go as well as give us one more footprint to analyze the health of the trend. The ideal scenario, for example, would be to wait for the development of a smaller structure over the zone where an operating level such as the weekly VWAP or any other is located.

A very interesting concept is that we will continue to operate in favor of the last accumulation/distribution until the market develops a structure in the opposite direction or until it loses the last identified value zone.

In a trend context we will point out the last relevant high volume zone supporting such movement. That is, if we are in an uptrend we will have the last high trading node (HVN) below the current price very much in mind and if we are in a downtrend we will have the last HVN identified just above the price. These nodes will ultimately determine the change in market control. Therefore, we will only propose a counter-trend scenario when the zone is breached. In order to go deeper into this concept, we will again review the determination of the market bias through the analysis of the trading zones seen in the section on uses in Volume Profile.

7.2 Identification of zones and operational levels

Once we know the context and have determined what we want to do (buy or sell), the second has to do with where. It is about identifying the exact location on which we will expect the price to develop our entry trigger.

The operational logic is exactly the same for all contexts, profiles and temporalities: identify the operational zones and levels and wait for our trigger to confirm the imbalance and enter the market.

Depending on the type of trading you do, you can adapt these same concepts to your operation.

If you are an intraday trader you may mainly use the profile of the previous session as a basis for setting up scenarios and the profile of the current session as a support.

If you are a longer term trader you may find it more interesting to analyze the previous week's profile as a basis for identifying trading zones; or a composite profile to cover weeks or months in order to identify high and low trading zones; as well as taking into account the VWAP of higher temporalities such as weekly and monthly.

If you operate structures, it may be more advisable to throw away fixed profiles anchored to the work structures and to raise scenarios based on their operational zones.

Or maybe what works best for you is to make a mix of all of the above. In the

end, each operator will have to do an individual job to determine how he feels most comfortable since there is no universal rule about which profile to work with. The important thing is that the concepts are exactly the same for the different operational contexts.

At this point it is useful to be clear that the profiles already completed are more relevant than the profiles in progress. By pure logic, a profile that is still under development is susceptible to modification in its levels and therefore the importance that we can give to these decreases. On the other hand, profiles that have already been completed ultimately represent the final consensus of the market and their levels become more relevant.

With regard to how much time period composite profiles should cover there is no general rule. You may want to consider the last week, the current week, the last month, the current month or the current year. Here you necessarily have to decide at your own discretion. There is no one profile better than another and that is why it is the operator's job to determine which one he will work with. What is advisable is that these profiles cover enough price action both above and below the current price in order to be able to identify the key areas of negotiation, mainly high and low volume nodes.

The search for the trigger to enter will therefore be done exclusively on the zones already indicated, distinguishing between them:

Operational zones of structures under Wyckoff methodology.

Negotiation zones: HVN and LVN.

Operational levels: VAH, VAL, VPOC and VWAP.

Depending on the operational context, we will favour waiting on one level or another:

1. At extremes of the trading range. This is the classic Wyckoff operation in the zone of potential maximum/minimum structure shaking. The shake itself can be operated as the most aggressive input and the shake test as the most conservative input.

VAH/VAL. Taking into account the operating levels of Volume Profile we will also be in a position to seek the reversal on the ends of the value area, which will sometimes coincide with the ends of the structure. Principle in trading range.

2. Inside the trading range. Always taking into account that we should be in favor of a High Volume Node and with enough distance we will wait for the price over:

LVN. Low-volume nodes by their very nature establish excellent areas in which to look for potential opportunities. In this context the ideal would be to identify such areas through a profile that covers the whole range.

VWAP and VPOC. Either that of the current session for more intraday operators or that of a profile covering several of them for structure operators.

These are the levels that determine the control of the market so we will wait for the price to produce the effective break over them and we will look for the first entry to the test of them.

This test could only be given on the closest level, although it is true that the confluence of both adds greater strength to the scenario.

Sometimes the price after producing this break will not leave any test and the momentum will move quickly to the price so a more aggressive entry would be

given after the movement of intentionality that breaks these levels.

3. In trend interacting with the value zone. After the beginning of the imbalance and already evaluated the possibility of continuity of the movement we will wait for a retracement to assess the entry on:

Level of the broken structure. For the structure operator, this is another of Wyckoff's classic entries: Entry to the test after breakout. Initially we will wait for the price in the area of the broken Creek/Ice, which by its very nature will be a Low Volume Node. We will also be aware of the nearby operating levels so as not to rule out the entry in case the price is going to look for any of these, mainly the end of the value area.

Extremes of value area. The intraday operator or simply does not operate taking into account structures could value the entry after leaving a certain value area (eg the current session) and wait for the price to make a test at the ends of its Value Area to enter. Principle of continuation.

VPOC of the trading range. It will be the last operating level to expect the reversal after the breakout. If it is very far from the broken end, the most advisable thing to do is to put the scenario in quarantine because at that point the price will have re-entered the value area and will already have some depth. In this case, and under the operating principles of Volume Profile, it would be necessary to activate the type of Failed reversion principle that manages to recover the end of the value area.

4. In trend away from the value zone. Unbalanced context so we will already have in favour of an HVN (accumulation/distribution).

We should expect some retracement at any operating level that the price is. If the first level is too close, it is more likely that it will look for the next one to develop a retracement with certain proportionality in relation to the previous impulse.

Levels of the previous session profile. Generally and because we are in a trend context, the levels that you will find the price before will correspond

to those of the previous session (Value Area Extremes, VWAP and VPOC). As the day progresses, we may also raise some scenarios about the levels of the current session.

Weekly VWAP. We will always be very attentive to the location of the weekly VWAP as it is especially useful in these contexts to seek on it the end of the retracement movement and the beginning of a new impulsive movement.

VPOC of the previous impulse. In addition, we can throw a fixed profile of the last price impulse and have located the location of your VPOC, as we already know that it is also a very interesting area to wait for the price.

LVN. It is interesting to identify low volume zones within the context we are operating. In this case we can use different profiles: composite to identify the general context; profile of the previous impulse and profile of previous sessions.

For all contexts we will want to operate in favour of the more operational levels the better. It is interesting to point out that the areas of confluence of operating levels are highly recommended to search on them the entries, highlighting the combination of VPOC and VWAP.

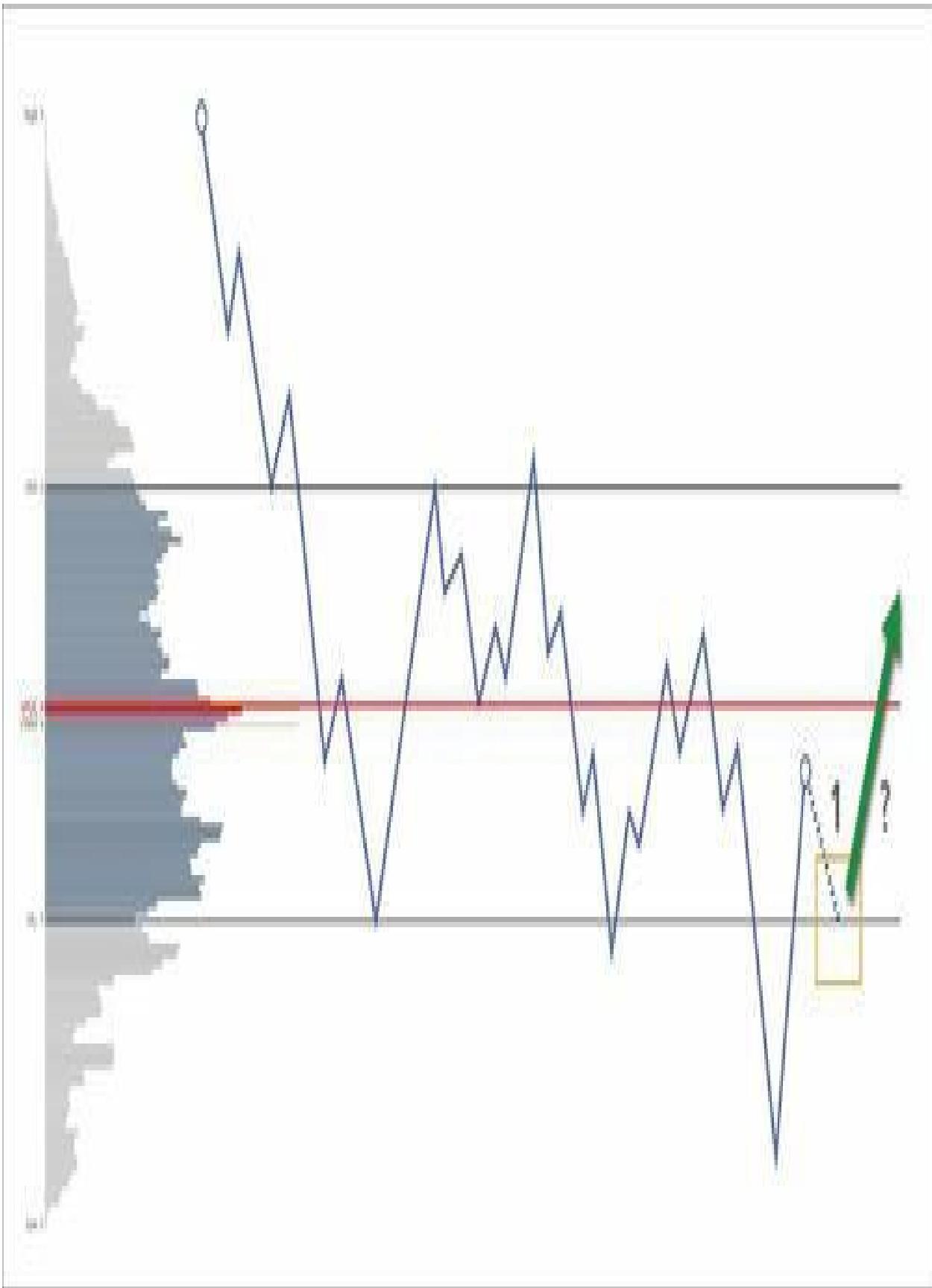
7.3 Setting up scenarios

Once we have the context clear, we know the type of strategy we are going to try to execute and we have identified the location on which to wait for the entry trigger, it is time to propose the scenario.

Normally, the scenario to look for the entry trigger is going to be composed by one or two movements:

A movement. The price will already be positioned in favor of our idea and therefore we should only wait for a simple action that will lead the price to the operating area.

If based on the context we want to buy, we will identify the operating levels we have below where the price is likely to go.



If, on the other hand, once we have analyzed the context, we determine that the best thing to do is to sell, we will identify the most immediate operating levels above which we will look for the short entry trigger.

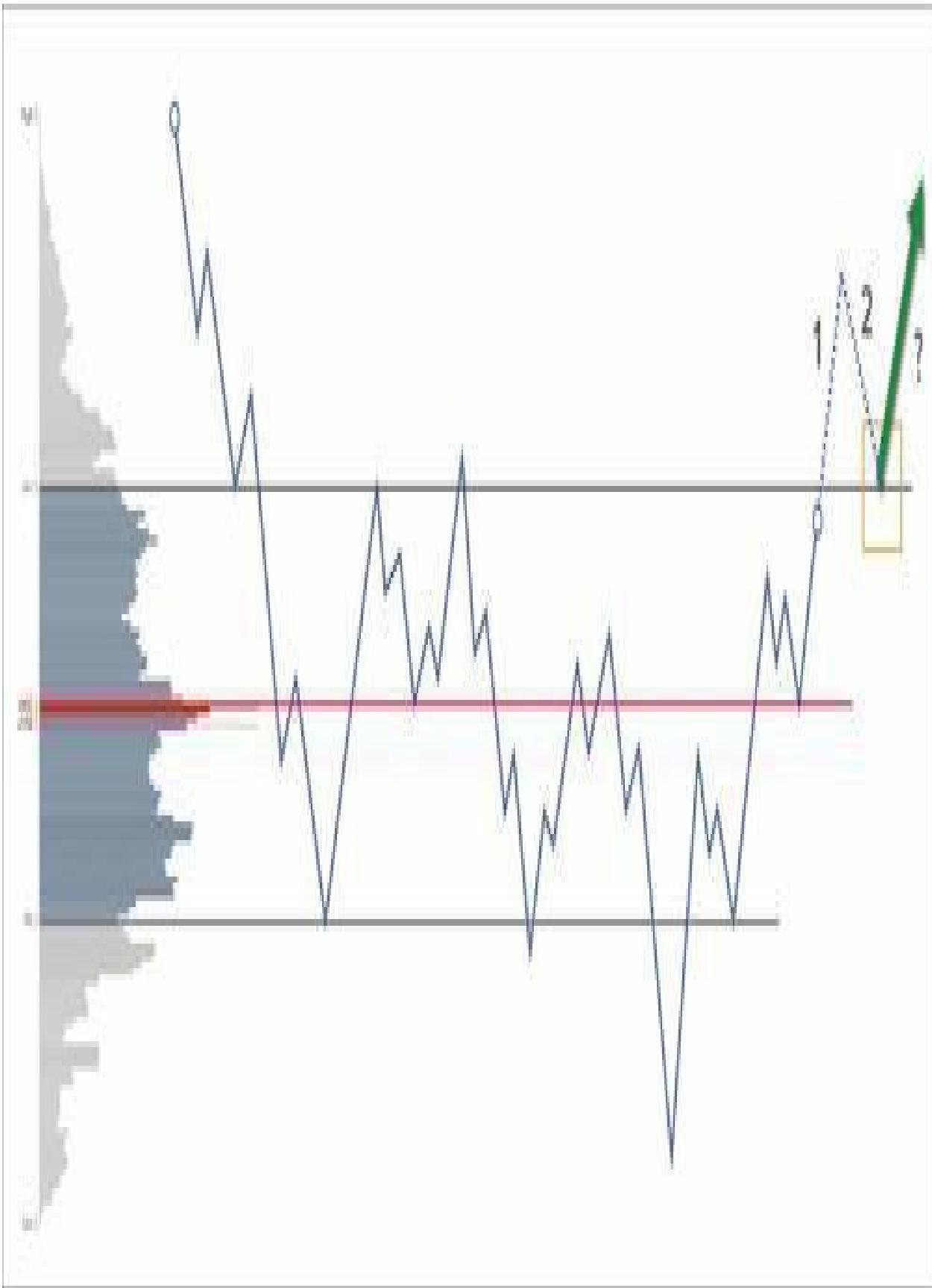
In this example we see that we are in a context of trading range and in a situation of potential Spring so the scenario approach would be to wait for a single movement to develop the test and look for the trigger to buy.

Two movements. We may only want to buy or sell if a certain price action occurs.

If based on the analysis of the context we want to buy, but the price is below the operating zone, we should expect a first positioning move above that zone and a second test move. Now we would be in a position to look for the entry trigger.

The same would happen if what we want is to sell but the price is above the operating zone; in this case we should wait for a first movement to recover the zone and a second test movement.

In this other example the reading we make is that we are in a trading range context in which the price comes from developing a potential Spring and has serious possibilities that it is a cumulative range.



At that precise moment and knowing the road map that the methodology offers us, we would be able to wait for the entry into buy after seeing the breakout (1) plus the subsequent test (2). For context we want to buy but the price is not in an operationally attractive area (since it will face the key area) so it is appropriate to raise a scenario of two movements.

As we know, the price could leave in 1 a shake (Upthrust) and re-enter the price to the equilibrium zone, but initially we should be biased upwards after seeing that the downward shakeout (Spring) and the breakout movement meet the characteristics.

The market will obviously not always follow our approaches. A lot of times we will see how we are forced to change our feelings based on what the price is doing. This is the key to the continuous analysis of the participants' reaction as new information comes into the market.

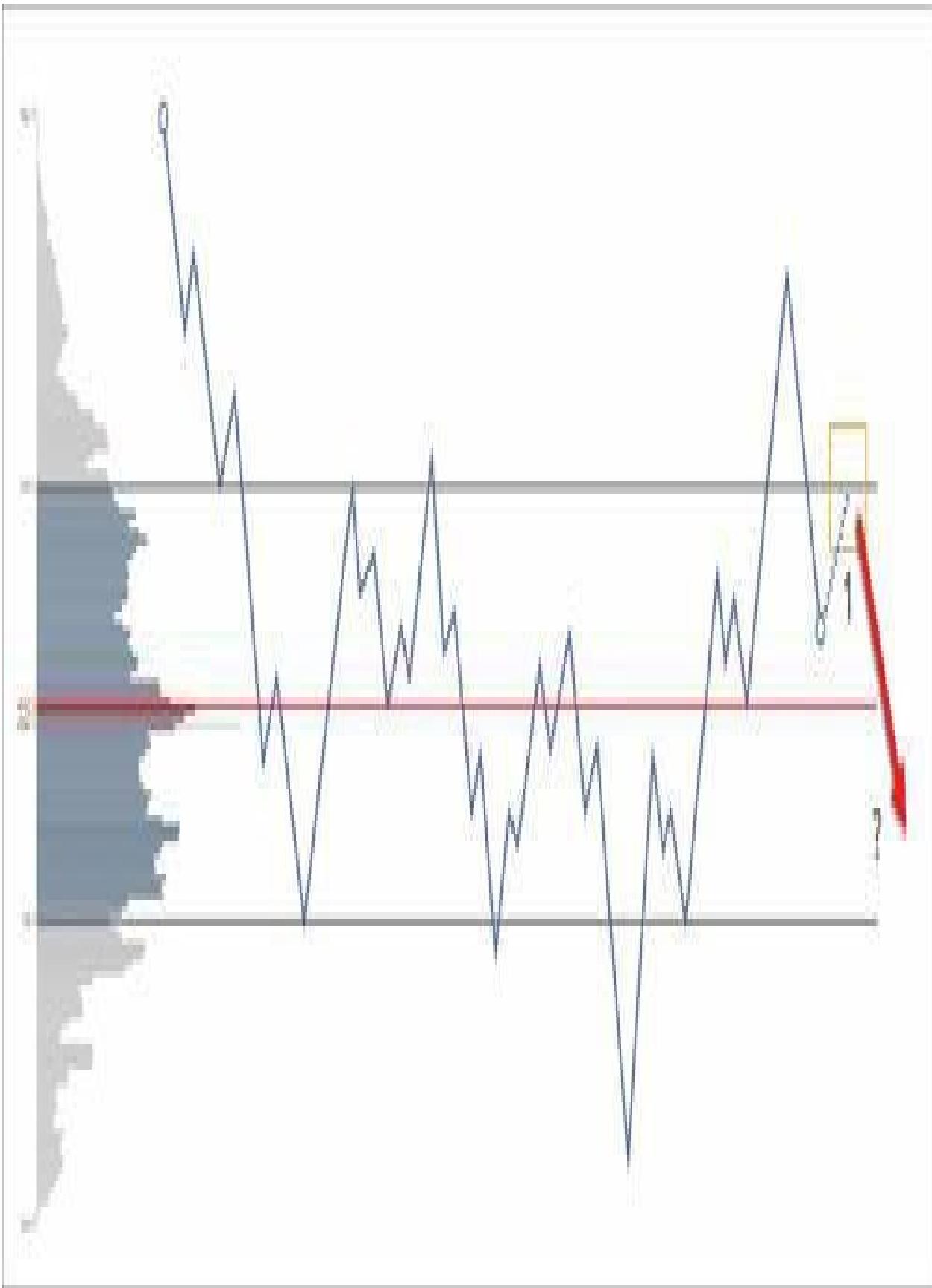
The best way to approach this process of scenario planning is through a continuous validation protocol. It is about reacting actively to what the market does (If X, then maybe Y). This means that "If the price does this, then we will wait for that". This is an optimal approach to know at all times what to expect the price to do and be prepared to act with the speed required.

"If the price breakout the Creek, then I will wait for a test to look for buys. If on the other hand there is a failed breakout, then I will wait for a test in the opposite direction to go short"

The key here is to value all possible options that the market can develop and, even if we are initially biased towards one side, we should always consider also

an alternative scenario in the opposite direction that allows us to make a quick change of bias if necessary.

An example is when the market faces the top of a structure. We are in the operating zone, in a situation of potential breakout or Upthrust. It may be that due to the context we are biased towards the breakout and that we are therefore looking to buy on the test; but when the time comes, what we observe is that the price re-enters the range, strongly refusing to rise and leaving what appears to be an Upthrust. At that point we should have enough capacity to read this in real time and change the scenario approach to look for the short.



7.4 Position Management

Although the most important element of this combination is undoubtedly everything that the Wyckoff methodology offers us, we have already seen that both the Volume Profile and the Order Flow can certainly be useful when it comes to improving our scenarios and operations.

Thanks to the principles of the Wyckoff methodology, we will be in a position to propose scenarios; thanks to the identification of the zones and operational levels by Volume Profile, we will be able to refine with greater precision where the price is most likely to go; and thanks to the precision of the Order Flow, it will allow us to confirm and calibrate the input trigger even more.

7.4.1 Entry

Regardless of the operating context, the market entry trigger will always be an action that denotes intent on the part of the large operator in favor of our direction.

By pure price action analysis we will continue to work with the significant candlesticks:

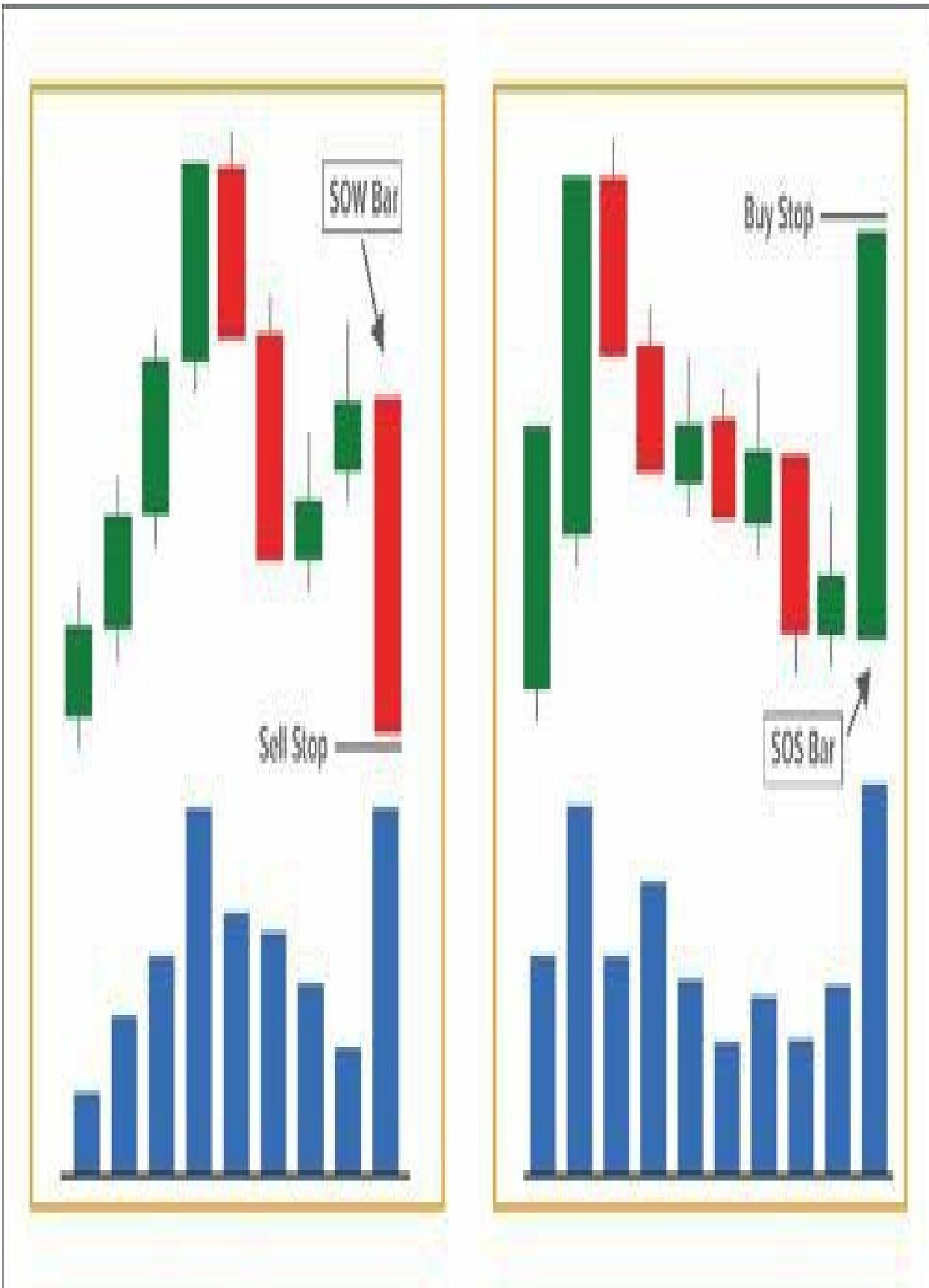
Sign of Strength bar (SOSbar). A wide range bullish candlestick with closing in the upper third and relatively high volume.

Sign of Weakness bar (SOWbar). A wide range falling candlestick with closure in the lower third and relatively high volume.

For those who want to observe the Order Flow I would recommend only working with the concepts already explained:

Rotation pattern: absorptions and initiatives.

Continuation pattern: controls and test.



In essence what we would look for in the rotation pattern would be to confirm that the SOS/SOWbar has initiative; and in case of losing the initial trigger we could look for a re-entry in the continuation pattern.

Entry order

As we saw in the section on order types, participants can enter the market in different ways, basically with Market, Stop or Limit orders.

In our case we are going to use Stop orders. Remember that these are placed above the current price if you want to buy; and below the current price if you want to sell.

With the development of the significant candlestick we have an evident sign of interest, but it is interesting to use the Stop orders as a definitive filter that suggests a certain continuity in the movement initiated with the trigger candlestick.

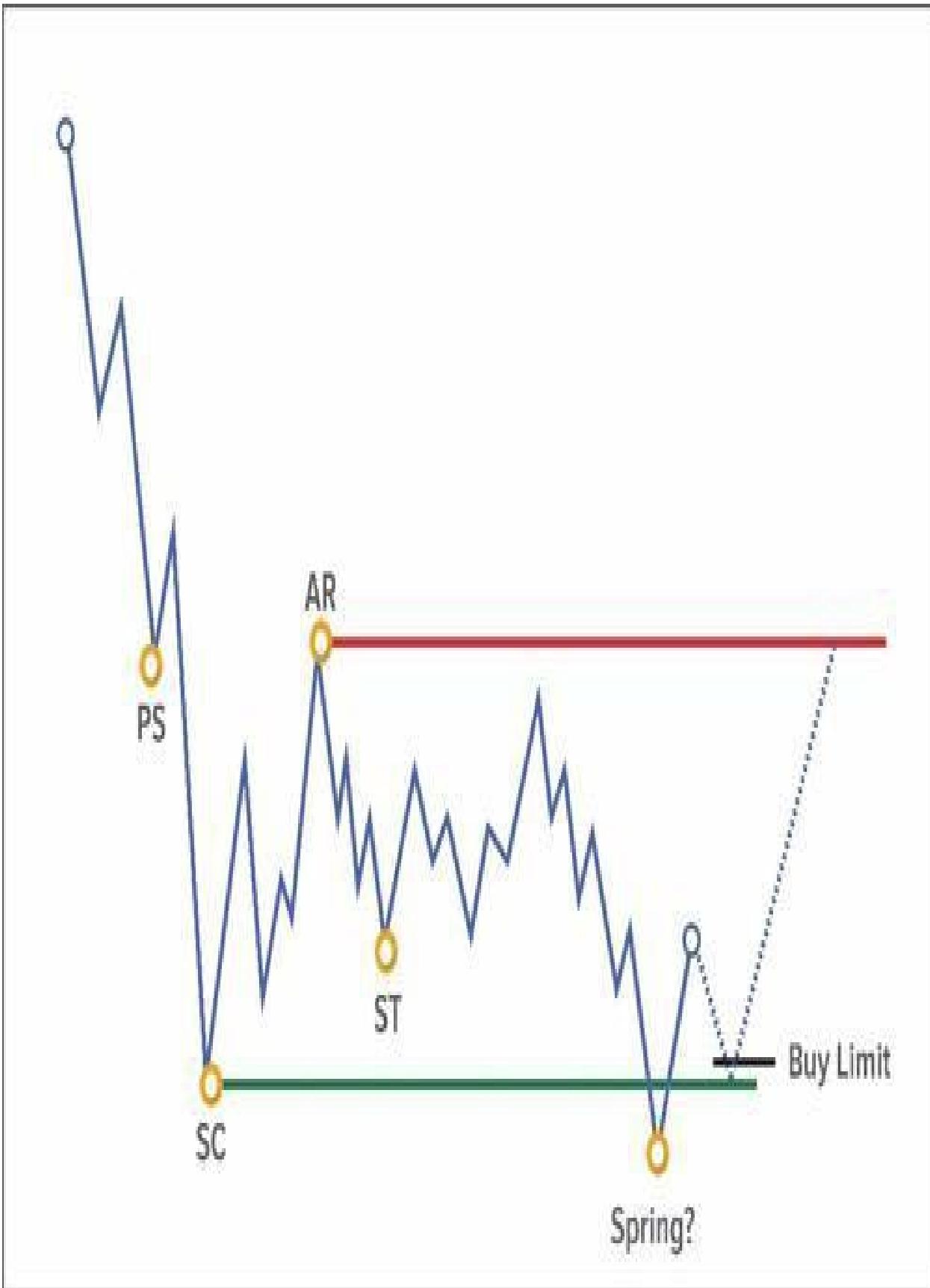
Sometimes we will see the development of what initially looks like a candlestick of intent and just after it closes the price reverses sharply in the opposite direction. What has happened is that internally a process of absorption has taken place at all those price levels and operators with greater capacity were positioning themselves on the opposite side. By using this type of order, although it is true that we are not saved from this potential situation, on many occasions where this is happening it will prevent us from entering the market.

If we are really facing an unbalanced movement, it will have a strong

momentum where we will continue to press in that direction. With this type of limited order we will be entering in favor of the momentum, of the imbalance.

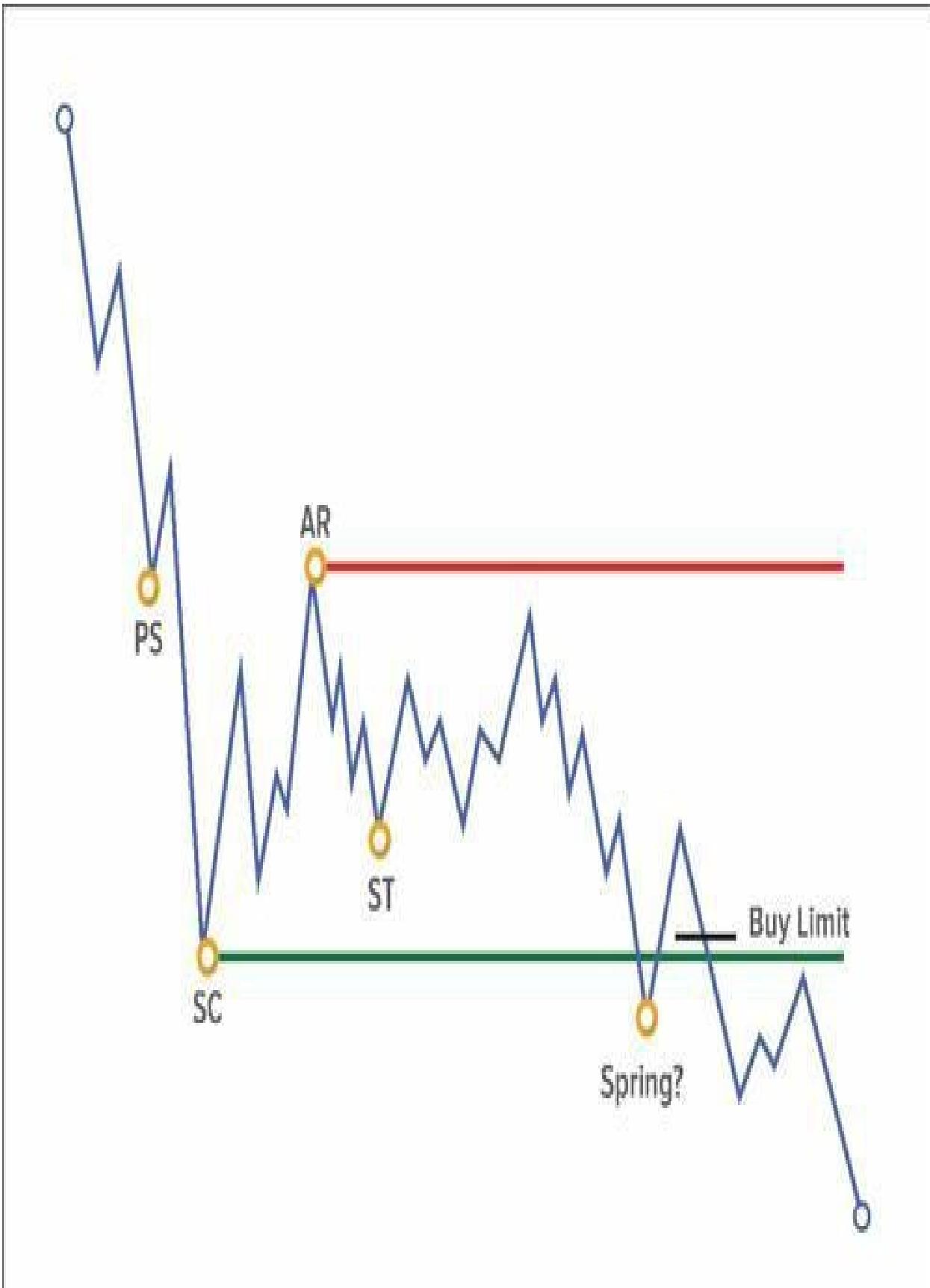
In any case this section should be evaluated more in depth by the operator. You may prefer to enter with a market order after the trigger candlestick has closed, after seeing an aggression in the footprint without waiting for the candlestick to close, or even use a limited order to enter a possible reversal. Either option could be valid.

Why you shouldn't enter with limit orders



Simply because you would be betting that the movement you are waiting for is going to happen, and if you remember, we are dealing with an environment of total uncertainty so we don't know what is going to happen.

For example, you may see a chart in a potential Spring situation. If the analysis is correct, we know that the route map offered by the methodology involves the search for at least the upper part of the structure; so you may think that it is a good option to place a Buy Limit entry order waiting for the Spring test to be developed.



But such a test may never happen and instead the price will keep falling confirming that our analysis was not correct, which would add up to a loss. The problem is not in assuming that loss, since it is part of the business, but in that the basic approach was not the most solid one.

At the point where you see the potential Spring and place the Buy Limit you are betting that the price will develop two movements: the bearish one to generate the test and the bullish one that will take the price to the high part of the range. And the key is that we can only propose the development of one move.

In this case, we could initially propose the downward movement as a test since we are in a position of Potential Spring; and once the price reaches the area where it "should" be turned, we have to analyze again the price action and the volume to see if that imbalance that generates the upward turn occurs and then we can propose the next upward movement to the Creek.

The basic idea is that we must continuously analyze the interaction between buyers and sellers; and even if we are biased towards one side based on the context, we must confirm at the time that the approach is solid and that the market itself confirms it.

If in a position of potential Spring testing we see aggressive buyers appearing and pushing the price up, this is the footprint we would need to see to confirm that our analysis seems correct and in that case it would offer us an operational opportunity. We must also remember that seeing our trigger on the proposed zone has nothing to do with whether the trade will be profitable or not. As we have seen, new information is constantly entering the market and this could change the perception of value by participants at any time.

7.4.2 Stop Loss

From a pure Wyckoff methodology point of view we will continue to recommend the location of the stop loss on the other side of the significant candlesticksticks (SOS/SOW bar) and structures. The logic is that if the big operators have actively entered into these developments they will defend their position in case the price goes against them.

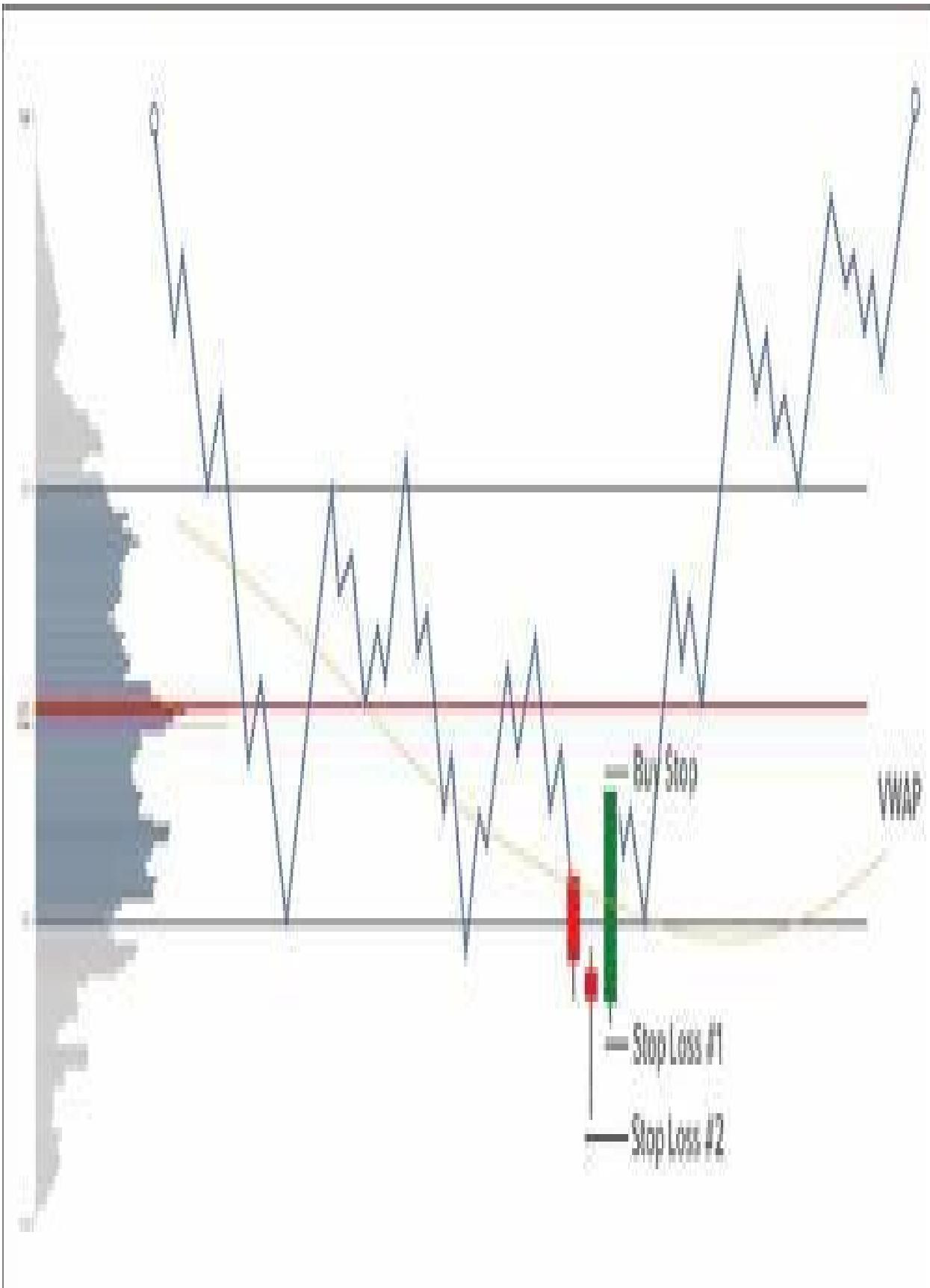
Additionally, we will always want to place the stop loss on the other side of the more levels and operating zones the better.

The first zone we will be looking for will be a low volume node (LVN). As we have already commented, by its very nature this low trading zone may act as a rejection and that is exactly what we are looking for: that in case the price reaches this zone a V-turn is provoked and that this rejection protects our position.

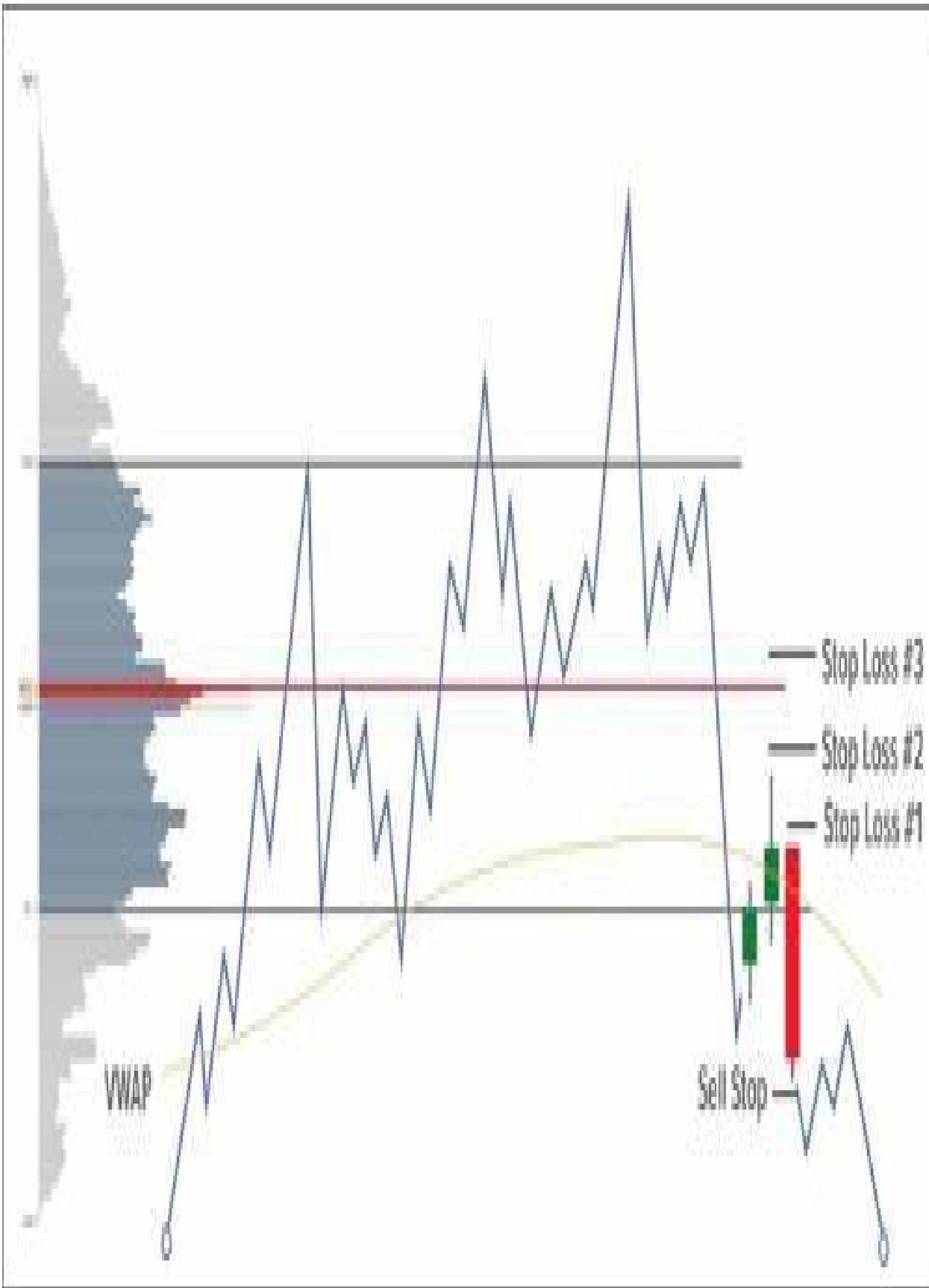
It should be noted that the other form of representation of rejection is that the price quickly crosses these price levels. If this were the case, it would surely reach and execute our protection stop. As we do not know what could happen, we must compulsorily use this type of zone with the initial premise that the type of rejection it represents in a possible future visit is the V-turn.

The logic of using the rest of the operating levels to protect the position basically lies in the fact that a high amount of volume will be negotiated over them and could also act as levers to cause a turn in the price. Some might think that if these levels act as magnets due to the liquidity placed on them, why use them to

protect the position? If we are bought and we have them underneath, based on the principle that they act as magnets, wouldn't it be logical to think that the price will go for them? The logic here is that at the moment of entry we are working towards a price imbalance by seeking its continuity. And therefore it is the moment when the price will move away from such levels that in general represent balance and acceptance by all. If at the moment of truth the imbalance is not such, we still have the possibility of saving the position if at such levels participants that turn the market around enter again.



If we are in a situation of potential Spring and we see the appearance of a SOSbar, we would be in a position to enter the market with a Buy Stop order at the break above the candlestick leaving the location of the Stop Loss either below the trigger candlestick itself (#1) or below the whole structure (#2).



At either of these two points the Stop Loss would be protected first by the imbalances generated in the trigger candlestick; by any VWAP that has been generated, and by the Value Area Low of the profile of the structure that in essence is the Low Volume Node.

In this bearish example, if the SOWbar appears that offers us the short entry trigger, we would place the Sell Stop order below its minimum and we would also have several locations for the Stop Loss: just above its maximum (#1), at the highest maximum generated in the turn (#2) and on the other side of the VPOC of the profile (#3).

We would be protected by the candlestick itself, by some VWAP and by the profile's Value Area Low that besides being a Low Volume Node in this case coincides as the ICE (support) of the structure.

A point should be made regarding the VPOC profile. In this example we have it a bit further away but it is still a relevant level to take into account. The operator should analyze if placing the Stop at that level would still have an acceptable Risk:Reward ratio.

This is one of the peculiarities of discretionary approaches and is that we must adapt to market behavior. Sometimes all the levels will converge in a very narrow trading range giving us more confidence; while others will certainly be separated and we will have to evaluate which location is more optimal and if the risk is worth it.

7.4.3 Take Profit

In my first book "The Wyckoff Methodology in Depth" I already listed the possible actions we could use to take benefits. Mostly we talked about:

Evidence of climatic bar. Especially useful when we don't have any reference on the left side of the chart.

After the development of Phase A of stopping the previous trend movement.

In areas of liquidity generated by relevant price turns (previous highs and lows).

Thanks to the incorporation of the Volume Profile we can add a new objective way even more useful when we have price negotiation in the direction where we want to take profits.

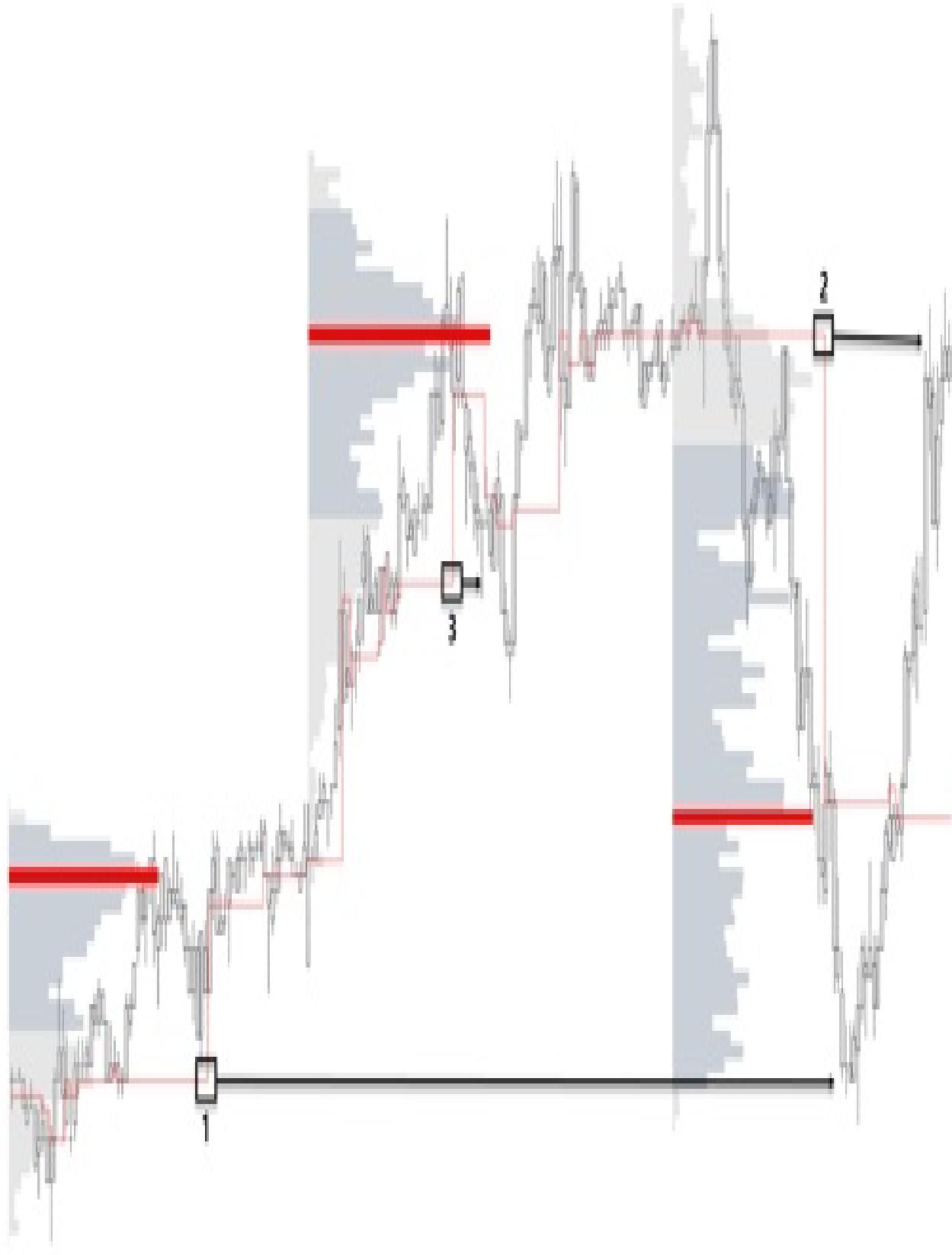
4. In areas of high previous negotiation.

The idea is to use the High Volume Nodes that we have in the direction of the operation. We already know the magnetic nature of such areas and it is therefore that they give us some confidence to use them as targets.

Supported by the auction market theory, after an imbalance the market will seek to find operators with the opposite bias who are willing to trade again. That is why the price will move to those areas where there was previously a high negotiation since it is expected that the same thing will happen again.

It is very important to remember the short term mentality of the market where the last areas of negotiation will have a greater relevance in terms of price attraction than the older areas.

The concept of High Volume Node when setting the target could be somewhat ambiguous. The HVN is a zone, and the order to take profit is a specific price level, where exactly should it be placed? For this purpose it is very interesting to consider the VPOC of that particular value zone. The HVN helps us identify the likely price zone and its VPOC for the exact location of the target.



1000

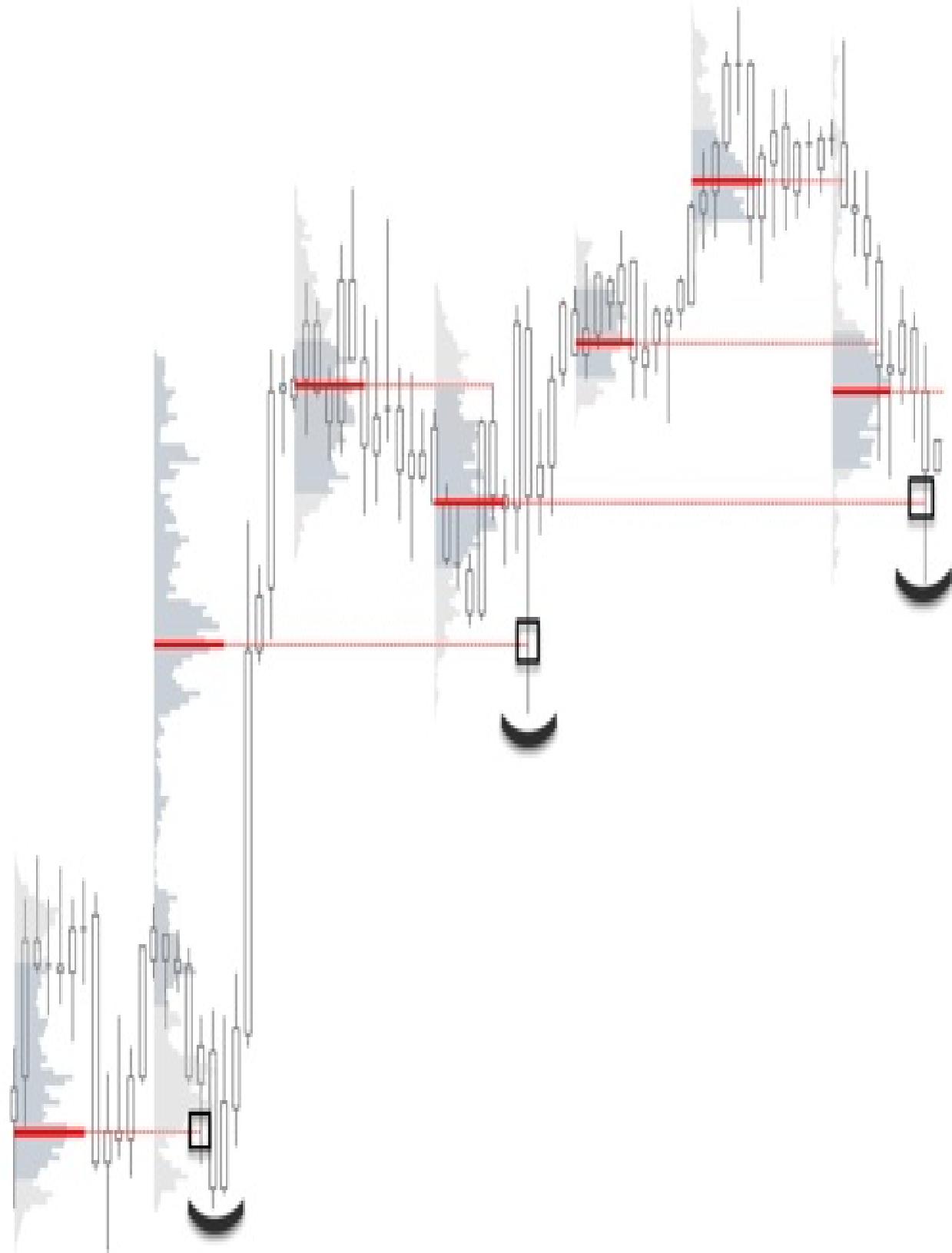
For a more intraday operation it can be tremendously useful to have identified the Developing Volume Point of Control (DVPOC). These are price levels that were at one time the VPOC of a session, whether or not they were the final VPOC of that session. As we know, session VPOC changes based on negotiations, and this level represents that change footprint. In short, it is a level of high negotiation and therefore likely to have some magnetic behavior.

In this example we see how the price is distributed in that profile in the form of P and the downward development is going to look for an old DVPOC from below (1) and from there to turn again in the form of V to go to test again another DVPOC of the current session from above (2).

It should be noted that we only take into account those DVPOCs which have not been tested. In this example we see other VWCPs that have already been tested and therefore would not be valid for target setting, as it would be the case 3.

The same would be true for naked VPOC. We haven't talked about this level before because its usefulness is focused almost exclusively as a possible target level. Naked VPOC are VPOC from previous sessions that have not been tested. Unlike DVPOC, naked VPOC was the ultimate session VPOC. Statistics show that naked VPOCs from previous sessions are tested in the following days with a high probability. That is why they are very interesting to keep in mind.

In the following example we see the magnetism that these levels exert attracting the price and even generating a later turn.



In both chartics different configurations have been used to display one or another level specifically (DVPOC and nakedVPOC). It is recommended to use both as by their very nature both represent previous high trading areas.

7.4.4 What to do when the price leaves without us?

Sometimes we will have to see how, even if we have made a good scenario planning, the price starts the movement we were looking for without having had the possibility to enter the market.

If there is something that is not recommended is to enter by momentum guided by some type of negative feeling having lost the movement. Entering in desperation is usually not a good strategy in the long run. If the price goes away without us absolutely nothing happens, it is part of the game as well as stop loss hits. If the background idea has not changed we can continue looking for the incorporation in new operative zones.

It is much more interesting to make another type of constructive reading in this situation, as you have made a good analysis.

Although it is true that we approach the market with the ultimate aim of obtaining profitability from its movements, the fact of being right in the analysis should already be a reason to be certainly satisfied.

The reading is that your analysis of who was in control of the market and what the most likely movement was has been good and this is tremendously important as an example that ultimately the knowledge is internalized and that following that line is just a matter of time before the results appear.

The only thing that has failed is either the exact visit to the area where you were

expecting the price; or that the price has not left a genuine trigger to generate the sending of the orders. In any case it is necessary to remember that we have absolutely no control over the market and that our task is to raise scenarios with the highest possible probability, knowing that these situations will occur.

In addition, we must also take into account that, having as one of the main rules the conservation of capital, you may not have taken advantage of the movement you expected but at least you were not positioned on the wrong side of the market and therefore you do not add any loss.

Part 8. Case studies

In this last part we are going to see in detail some real examples where the theoretical concepts presented previously are put into practice.

As I always say, what is really interesting about this type of examples is to observe how the market tends to present the same schemes but in different ways depending on the moment. This is what we mean when we say that we must give "flexibility" to the market in the development of structures.

This is something that, at this point, you should have already internalized. The Wyckoff methodology is not about labeling almost every movement as a robot. It doesn't make any sense, and we've already explained why. It's about analyzing the market's actions (both what it does and what it doesn't do) as objectively as possible in order to give greater control to buyers or sellers.

In addition, this section will be useful to see how the reading of the Volume Profile and the Order Flow is incorporated into the trading plan.

8.1 Euro/Dollar Cross Currency (\$6E)

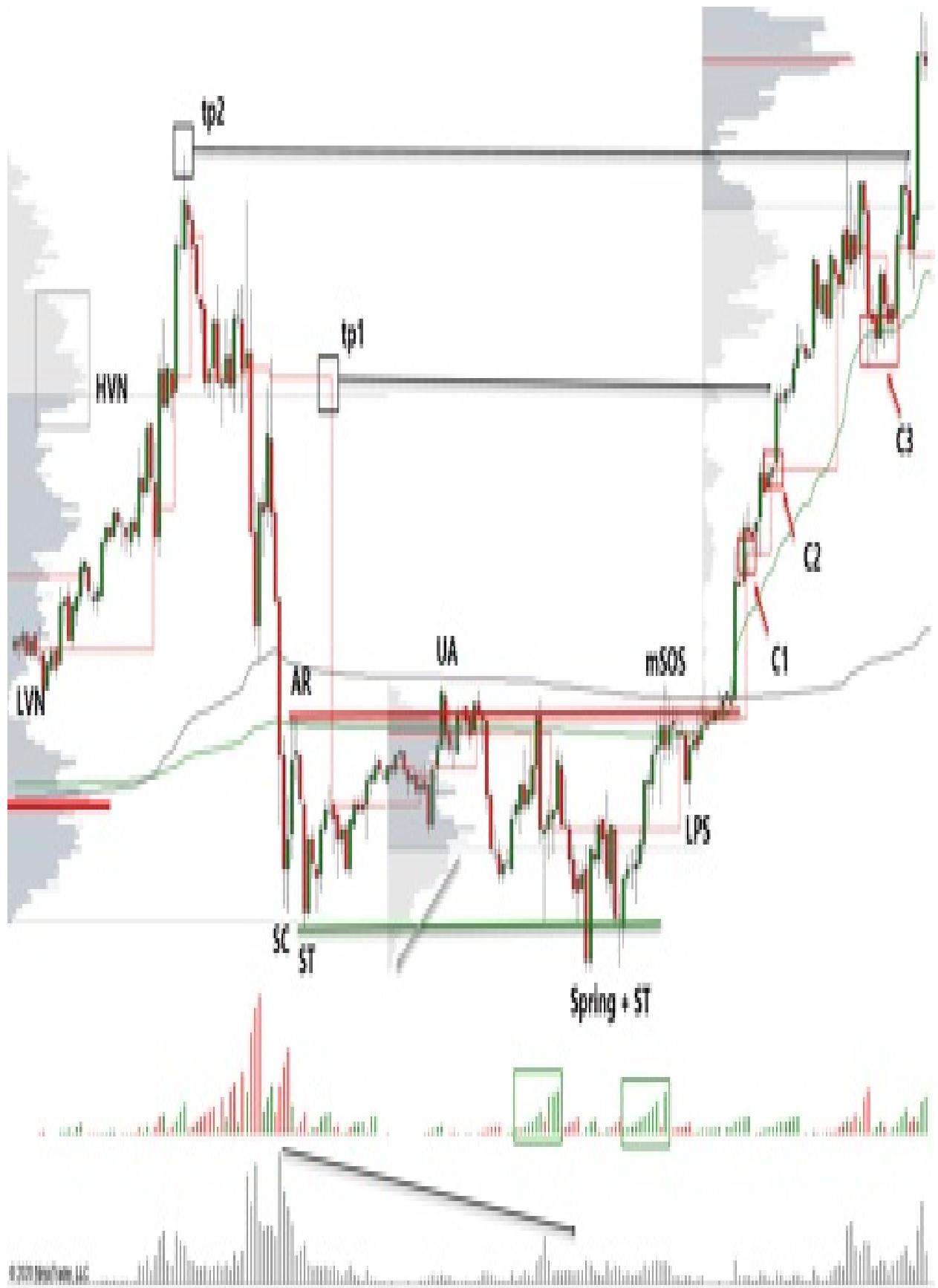
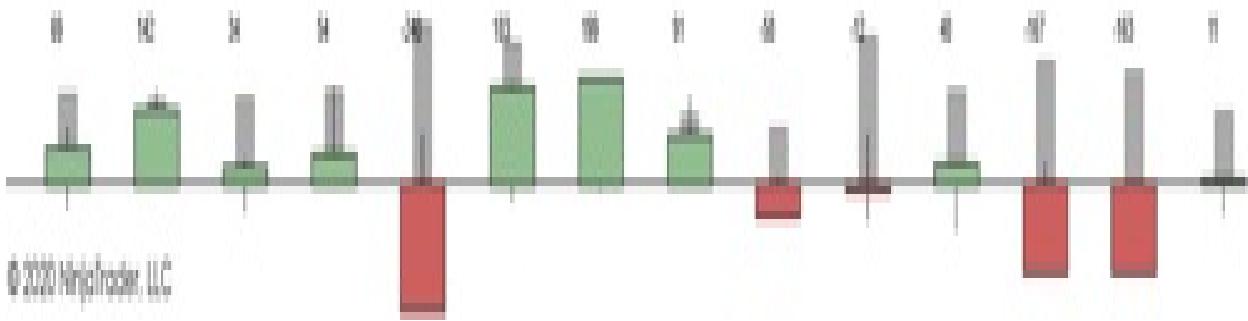
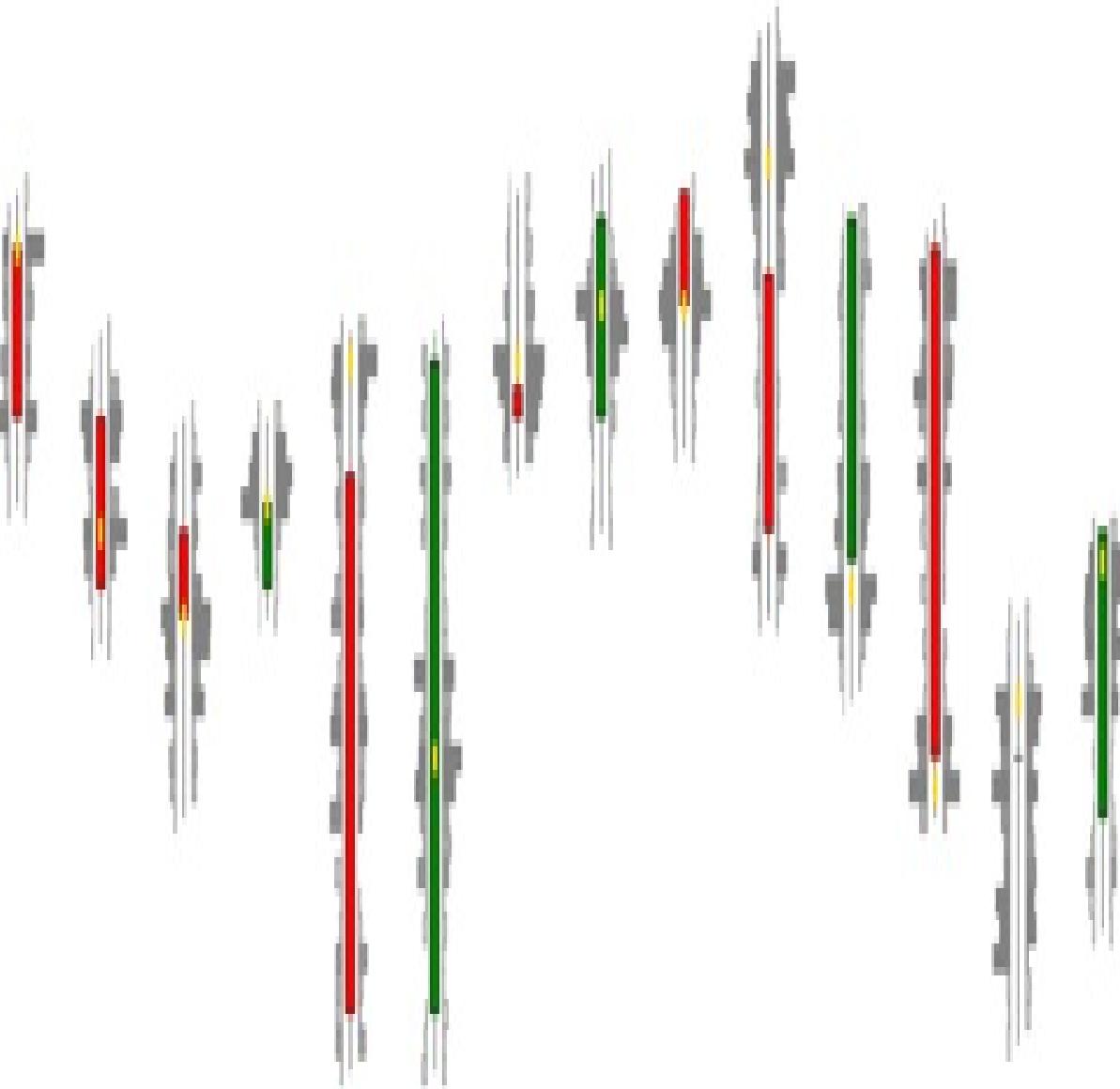


Chart 2,3 and 6 July 2020. Context of trading range, operative in extreme; more context of tendency, operative far from the zone of value.

This example is very representative of almost everything studied as it is full of interesting details.



First we see the stop of the downward movement (SC, AR, ST) starting from there a new context of lateralization or balance. The UA already suggests us in Phase B buying intentionality when achieving a test to maximums of the structure. Maximums of the structure whose nature is an LVN (Low Volume Node) as reflected in the profile of the first day. LVN that acts repeatedly as a rejection zone causing the price turns until it finally crosses it with speed. The Spring plus its test give start to the bullish imbalance moving the market upwards with relative ease.

By placing the magnifying glass over that Potential Spring action in the footprint chart we see how the rotation pattern in favor of buyers is represented by the rotation in the Delta (-240 to +183). In this first action it is necessary to emphasize that in the bearish candlestick there is not a clear process of possible absorption, as we suggest to look for; but this is the reality of the market. We will not always see the theoretical patterns represented in the same way and the case is perfect to exemplify the need to give flexibility to the market and be prepared for anything.

Beyond not having seen this process of potential absorption, the objective is that after a wide range downward and high volume candlestick the price has no continuity and it turns with the same upward aggressiveness (effort/result divergence).

Very clear the following action presented as a continuation pattern with the creation of the control plus the test. The control would be reflected by the maximum trading area within the rising sail. We see how the price will develop the test just to that area and from there continue the upward imbalance.

In addition to the price dynamics mentioned inside the trading range, we can also observe other signals in the volume such as the decrease during its entire development, the appearance of a greater presence of buyer Weis; as well as the

finished auction reading that we can do from the profile of day 3. The fact that the volume represents a potential finished auction in confluence with a potential Spring is a very interesting signal to assume as a lack of interest to continue falling.

Another very interesting point is the continuity that occurs once the price is out of the value zone and in an upward trend context. Here the concept of VPOC migration appears to support possible entries. We see how after the migrations the price continues its upward development (C1 and C2) almost immediately. This is a very useful input for this type of context. In the third continuation (C3) the market will visit one of the most important operational levels, the weekly VWAP, to develop from there a new bullish impulse.

With respect to the objectives, the first (tp1) to consider would be that old high trading zone (High Volume Node) that also left a DevelopingVPOC. And without further volume references on the left, subsequent objectives would be to identify liquidity zones as relevant previous maximums (tp2).

8.2 Pound/Dollar Cross Currency (\$6B)

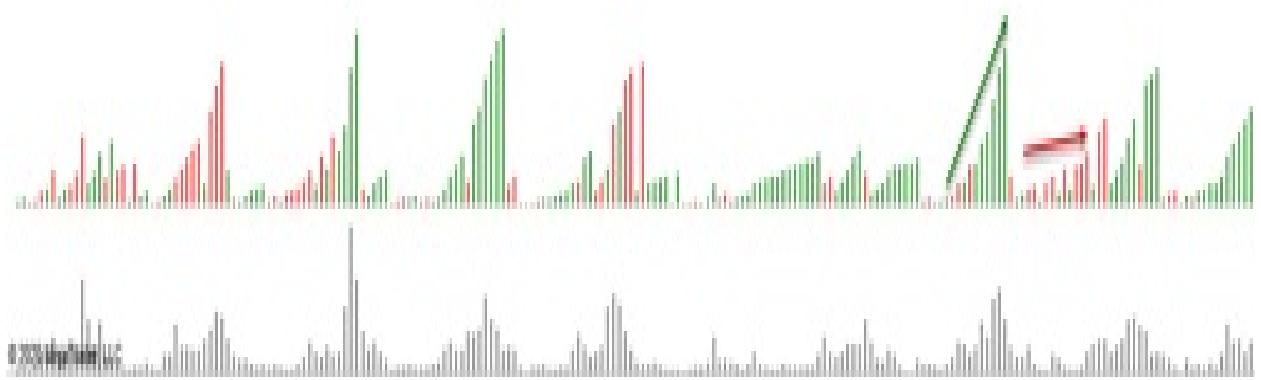


Chart of the operating profile week 29 June to 3 July 2020. Trading range context, operating in the interior; more trend context, operating interacting with the value zone.

In this case, the operating profile used is the one configured by the volume traded during the previous week. As mentioned above, there is no better profile than another and it is therefore the trader's choice which trading style to develop. The important thing is that the profile you decide to work with is completed to avoid confusion when modifying the current levels.

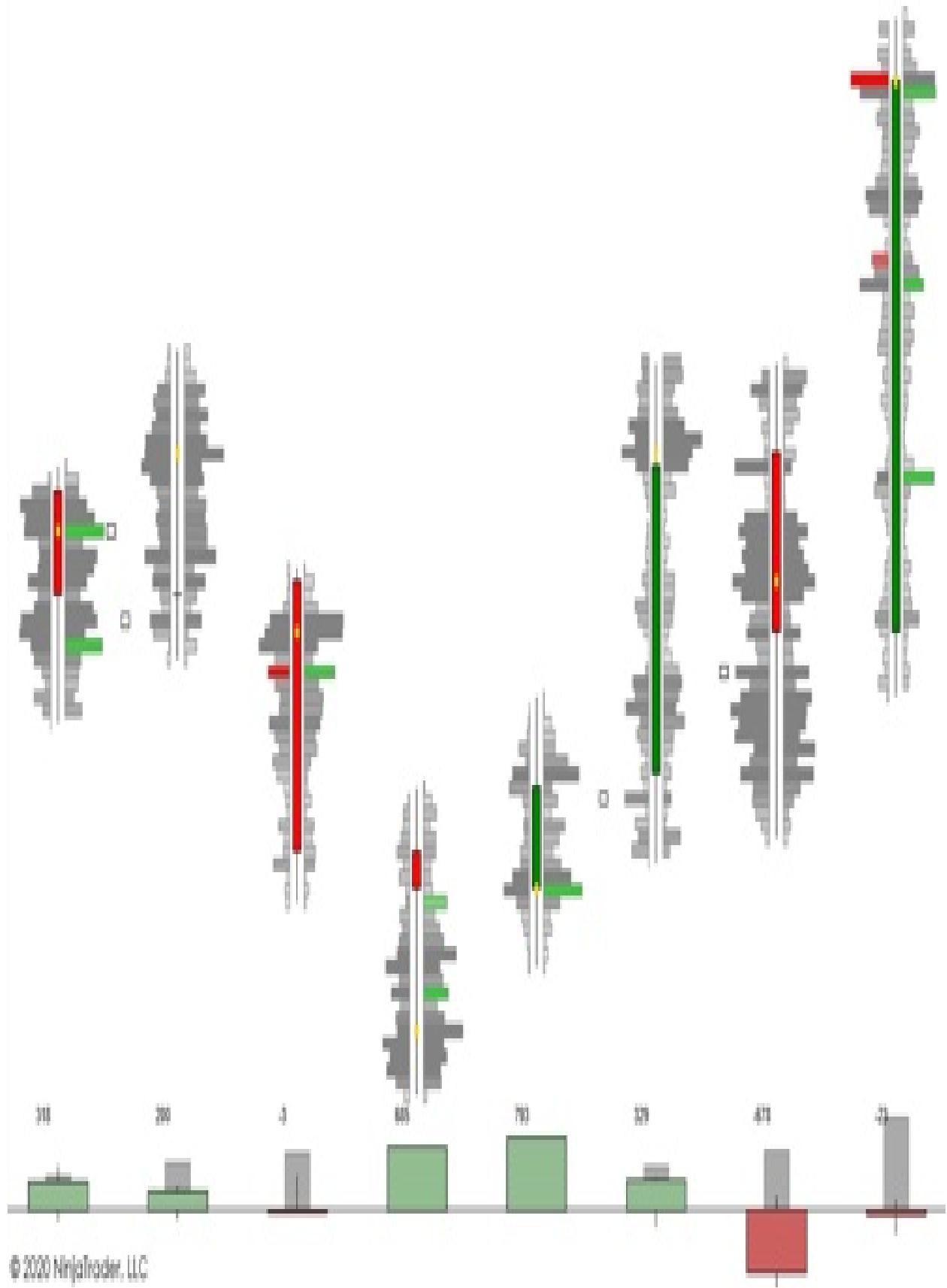
In the first red box we would be in operative position waiting for our entry trigger. We are inside the value area but interacting just above the VPOC of the profile, so our bias at that point, being above that VPOC, should be in favor of the continuation of the upward trend.

The price develops a minor structure and in position of potential Spring coincides with a test at the operational level. From there, a first upward imbalance is generated, causing the profile to break at the top. Very visual how the rising Weis stands out pointing out that high participation in the breaking movement; and how the following action denotes lack of interest in the movement.

Right at that precise moment, at the end of the breakout movement, the operator who handles the tools proposed in this methodology should necessarily be favoring the continuation of the upward movement. Basically because we have just observed a minor structure of accumulation that has managed to break up the rise, suggesting to us that control is apparently on the side of the buyers.

As suggested in the operational checklist, we already have the first point

resolved which is: what do we want to do, whether to buy or sell. In this case and as we have just argued, we want to favor buys. Now we would need to answer point number two in the checklist, which is: where we want to buy. We need to identify the level where we are going to be waiting for the price. In this example we have a very important confluence zone: the Value Area High of the broken weekly profile, the weekly VWAP (green line) and the top of the previous accumulation structure (Creek).



The identification of the second point of the checklist immediately leads us to the third point which is the setting of the scenario. In this case, since we are already in favor of the operational level, we would be waiting for a single movement to position the price in our operational área.

Once the price is there, we would finally have to wait for the development of our entry trigger, which is part of step number four of the checklist. In this example we have used the Footprint to visualize the order flow and it has allowed us to see the entry of aggressive buyers represented on those two candlesticks with positive delta of 685 and 793 that have also left imbalances in the ASK column. We would have our checklist completed and therefore ready to send the orders to enter the market.

The recommended position management would be to place a buy stop order at the break of the bullish candlestickstick, with the stop loss above the minimum of the bearish candlestickstick. Going back to the previous chart we would need to identify some interesting operative level over which to take profits or in its absence some previous maximum that establishes a clear liquidity zone. In this case, further to the left we would have identified an old untested VPOC (nakedVPOC).

8.3 S&P500 Index (\$ES)

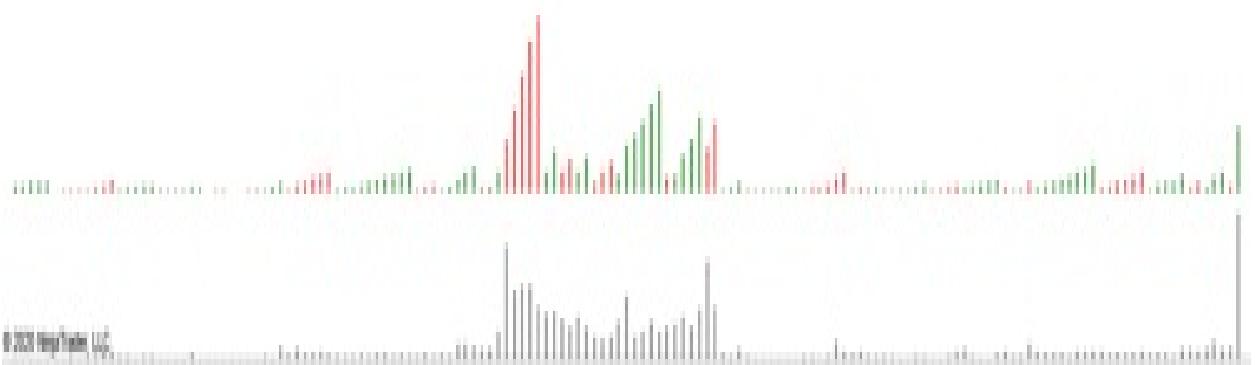


Chart of July 17, 2020. Context of trading range, operative in the interior.
Principle of bullish reversal.

In this first 15 minutes chart we have the output of the price below the previous day's value area to start developing a new range in that area.

Initially and favoring the operating principle of bearish continuity, unless a longer term context would have biased us differently we should have been willing to favor the entry in short in a potential test to the Value Area Low of the previous session's profile.

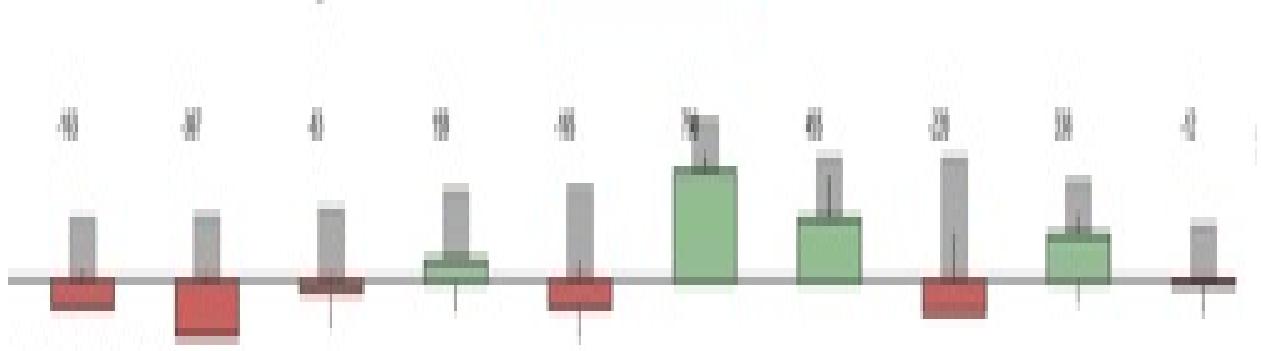
Instead, what we see is that the price manages to re-enter that value area and does so preceded by a shake to lows that causes the upward movement. This reflects the importance of handling different scenarios depending on how the price behaves and of making a continuous evaluation of the movements.

If we look closely at the chart, after the re-entry into the Value Area the price drops to test in the area where the VWAPs converge. Maybe that test, because it was slightly below the VAL would not have given us all the confidence to operate it in buy; but the opportunity appears below when the price returns to the VA and now it does leave a test inside.

In the following chart of less temporality (5 minutes) we see with more detail this action. Here the structure under Wyckoff methodology is more recognizable. Although the stop of the downward movement is not very genuine, we see some lateralization and the Spring more test that cause the upward break. Again, the visualization of the Weis wave indicator is very useful, suggesting the institutional support of the movement. After the breakout, the price does not re-enter the trading range by accepting those levels.

When the time comes that we are in a situation of potential BUEC to provoke the upward imbalance we are already waiting for the appearance of our entry trigger that will allow us to launch the orders to buy.





It is therefore time to, if anything, start visualizing the Footprint chart in search of that turning pattern that alerts us to the imbalance in favor of the speculators that are opening positions in buying.

That is exactly what we see represented in the box below. Beyond the fact that the potential absorption is visual, the imbalance reflected in this rising candlestick, with a volume relatively higher than the average and with a very positive delta in comparison, is more relevant. After seeing this, it would undoubtedly be the moment to send the buy order.

As a goal we would first have the opposite end of the value area, in this case the Value Area High, level that also converges as seen in the second chart with an old VPOC zone.

8.4 US dollar/Canadian dollar Cross Currency (\$6C)



Chart of July 22nd, 2020. Trading range context, operating in extremes.

The price starts the next day within the value area of the previous day, where it starts to lateralize suggesting a total balance between buyers and sellers. The valuations of the agents operating at that moment are very similar, which causes a continuous rotation around the central area.

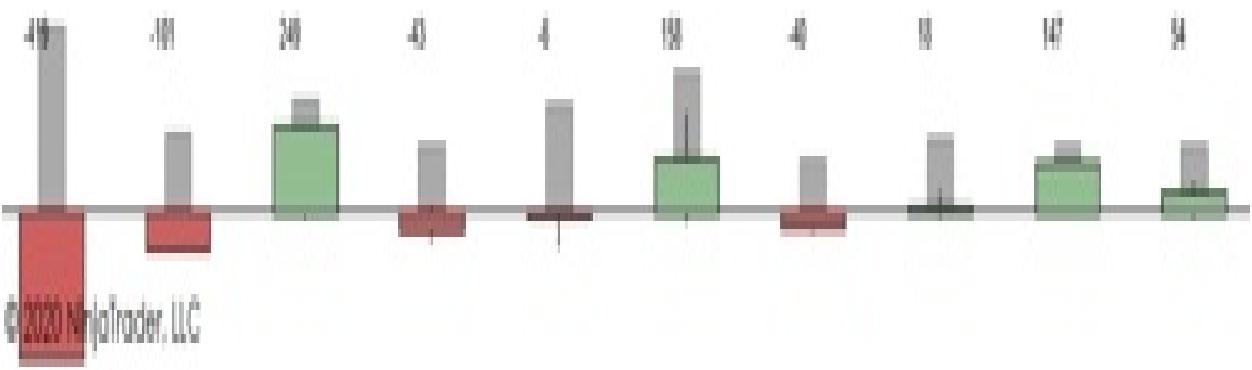
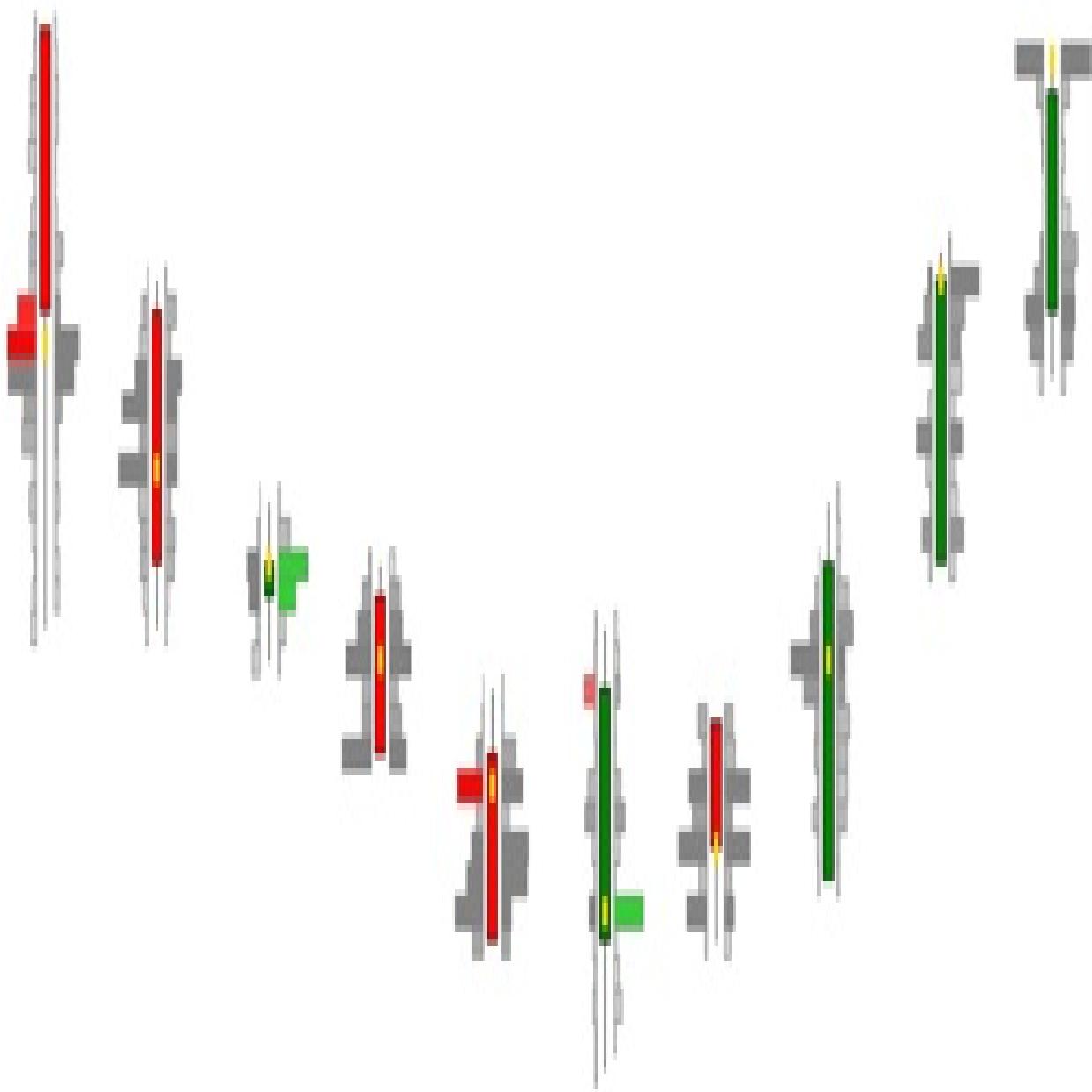
With this basic context; and under the hypothesis that the market continues in this state of equilibrium, that no new information arrives that makes the participants change their valuations, the operating principle to work on is to look for the reversal in the extremes; that is, to look for buys when the price interacts with the low part of the value (Value Area Low) and sells on the high part (Value Area High).

Therefore, we are already in a position to propose the scenarios. We know what we want to do (buy or sell) and we know the exact location where we will wait for the price to look for the trigger. This means having a plan and not following the price in a reactive way and by momentum.

As shown in the chart, the price will finally visit the bottom of the value zone. It performs a very precise test and from there it launches itself to the opposite end. We could label this movement within the events of the Wyckoff methodology as a potential Spring since it would find itself shaking the minima of that small structure that has been generated during the two days.

At that precise moment it may be useful to visualize the order flow chart to confirm or not our trigger to buy. We are in the right location and; since we know that the price could expand a little more before turning around, or even

continue with the bearish development, we need to see the aggressive buy entry over that area to determine the possible start of the upward imbalance.



And just in the location of the potential Spring we see the appearance of that imbalance on the column of the ASK, which could suggest the entry of speculators in buy. This would be the signal we are looking for before proceeding to send the orders.

As we can see, the price is then launched towards the opposite end, crossing the entire value area. This is an example of operating under the principle of 80% Market Profile. This principle suggests that in the event that the price tries to break out of a value zone and fails, re-entering it again, the price has an 80% chance of reaching the opposite end of that value zone. Although this strategy was originated for Market Profile, the same principle can be used working with Volume Profile thanks to the similarities of their theories.

The profit taking would therefore be very clear in this case: by testing the Value Area High of the operating profile. In case the price reaches such a point, the situation would be very interesting because we would come from Potential Spring; which as we all know, is the event that unbalances the control of the structure upwards. Therefore, if we are right in our analysis, we would still have to develop at least one more upward movement.

That would be the road map we would be handling, but undoubtedly that test to the VAH is our first management zone. Here you could decide to close the whole position or leave some contract, but what we should do yes or yes at least is to protect the position; that is, to move the stop loss to the entry level (what is known as Breakeven).

8.5 Pound/Dollar Cross Currency (\$6B)



Day 03 of August of 2020. Trend context, operative interacting with the value zone.

Example of intraday trading favoring the context of the shortest term, in this case, using as operating profile that of the previous session.

The fact that we use profiles from previous sessions as a framework on which to base our operations does not mean that the principles of the Wyckoff methodology are being ignored. As we see, it is essentially the same thing, the only difference being in the temporality used.

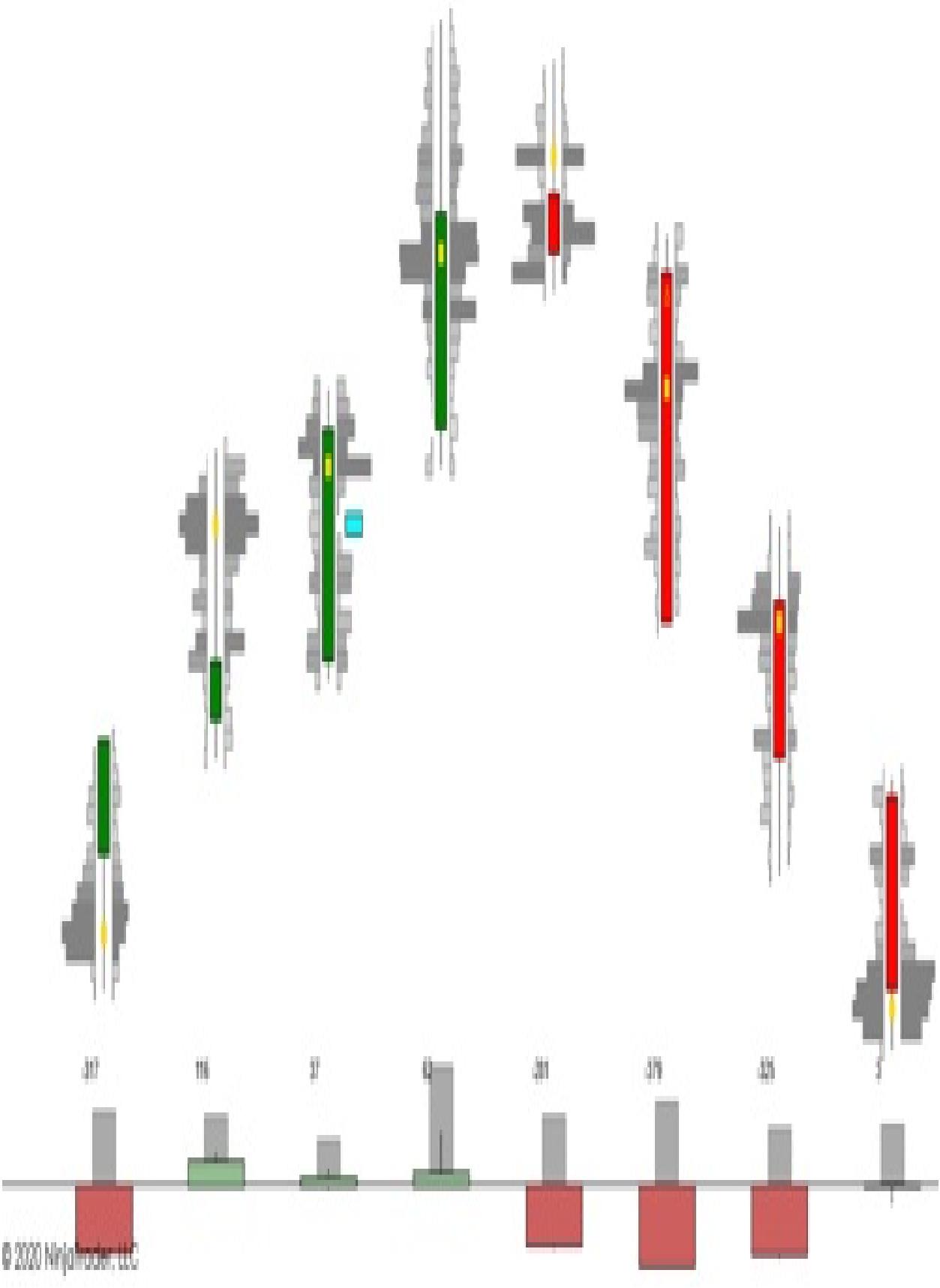
Any Wyckoff operator with some experience could identify a structure and label all the events that the methodology teaches us within that profile. Moreover, by the time it is pointed out as the area where to look for the trigger, the most astute analysts will have already been able to identify a new structure. This is the important thing, the context, what you are going to favor (buy or sell) based on what the price does.

In this example, after seeing that we come from a distributive structure, we will initially be favoring the incorporation in short films. The next step would be to identify at what point we are going to wait for the price to proceed with the search for the trigger. Here, the first interesting area is in the Value Area Low of the profile.

During the current day the market begins to lateralize creating new value in that area. This is a sign of acceptance of the previous distribution, so we can add one more input in favor of our bearish scenario.

Once the price is found in the proposed operating zone, we have an important confluence of events since on the one hand we would be developing a test to the old broken value zone; and on the other hand such movement could be part of a shake of that new structure that would be forming.

It would be the ideal time to go and analyze the Order Flow chart and see what is happening inside the candlesticksticks and if in the shortest time our trigger is confirmed.



And right at that location what we see is this. A bearish turn with a lot of selling aggressiveness. Already in the last bullish candlestick we can suggest some absorption of buys evidenced by the high volume, the large number of executions that take place in the column of the ASK and the non-continuity bullish reflected in the upper wick.

Following this, a large participation in sells, evidenced mainly by the large negative delta, suggests a selling initiative and the possible start of a downward imbalance. The following bearish candlestick would serve as a definitive confirmation of the seller's control: wide range candlestick, with good volume and closing at minimums, which we know from Wyckoff methodology as SOWbar (Sign of Weakness Bar).

These examples are very instructive to see the infinite ways in which the same action, as in this case is the downward turn, can appear on the chart. Sometimes it will be very clear both the absorption and the initiative process; and other times it will not be so. Given that we are in a particular operating zone and that we have the support of the context, it would be more interesting to prioritize the appearance of the initiative in favor of the direction we expect the market to move in, rather than visualizing whether or not the previous process of absorption is taking place, since as we see it does not always appear in the most genuine form.

Unlike the process of absorption, the initiative would indeed be an indispensable action (for those traders who decide to analyze the flow of orders), since ultimately we are waiting for those speculators to appear in order to definitively unbalance the control.

Finally, in this operation a possible Take Profit would be located at that old level which was VPOC and which by its very nature represents a high trading area

even if it is in the shortest term.

8.6 Euro/Dollar Cross Currency (\$6E)



August 31st, 2020. Context of trading range, operative in the interior. Failed reversal principle.

This type of operation usually presents greater problems of confidence because initially we come from prioritizing the reversal scenario and then change bias.

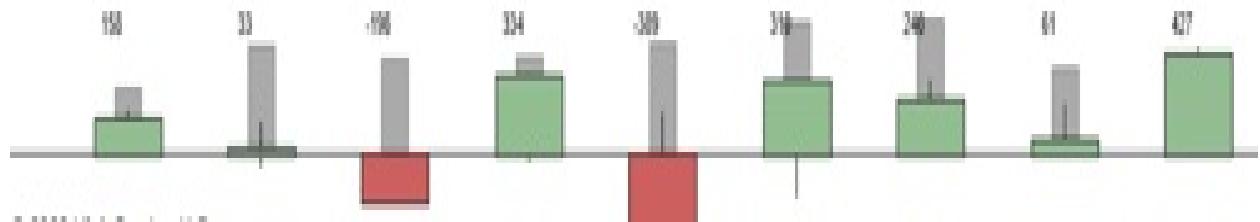
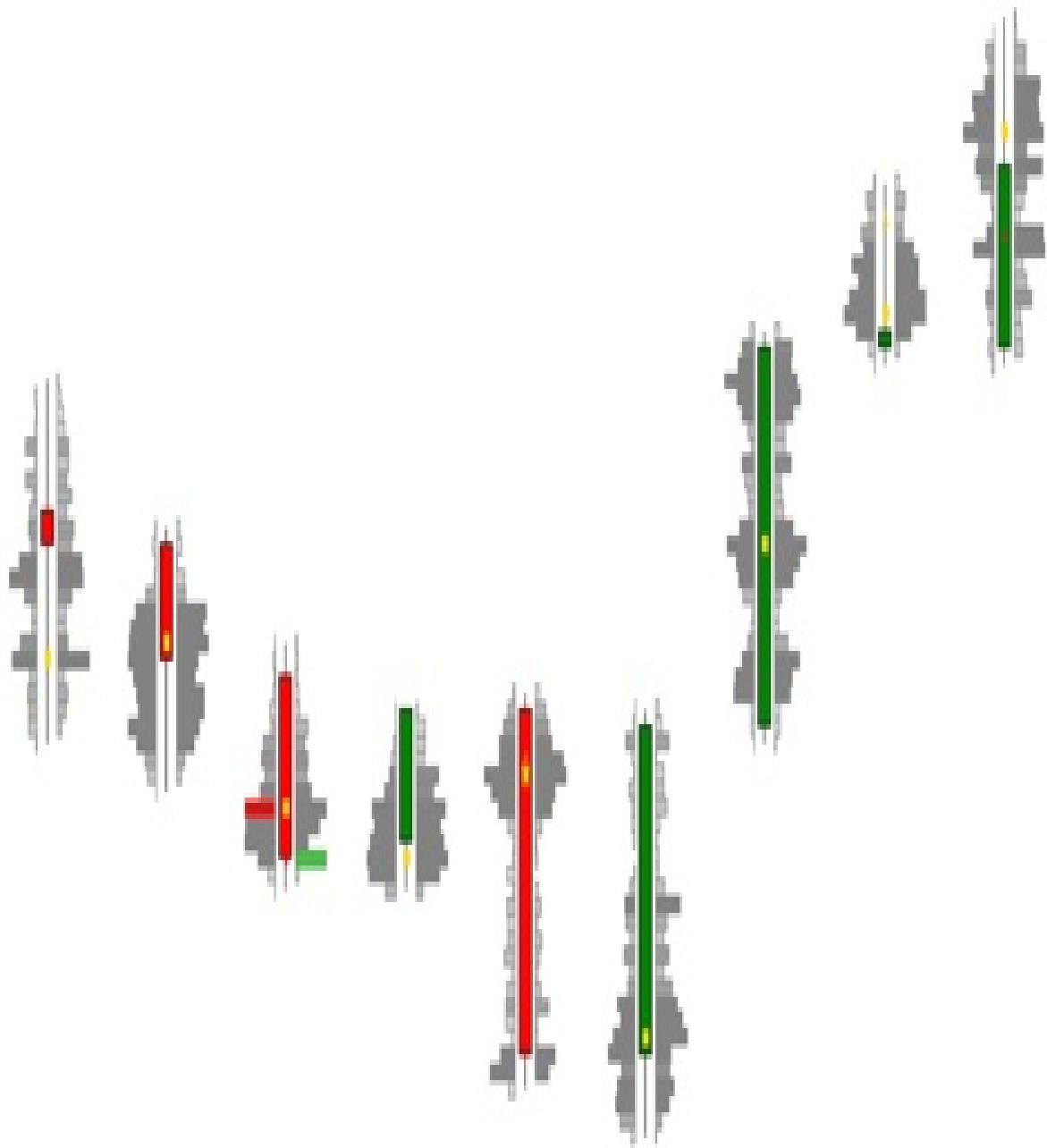
Also using the profile of the previous day as an operational basis, we see that on the last day the price tries to leave the value zone at the top, causing a rejection and re-entering the range. At that point we begin to look for the incorporation in short favoring the principle of reversion.

Failed reversal is a perfect example of why operating levels should be used to manage the position as the price interacts with them. They are decisive areas and we do not know what will happen, therefore the only thing that is under our control is to minimize the risk of our operation.

If just over the identified operating zone we see a reversal like the one shown in the footprint chart, at least two decisions could be made in time. First, if we are positioned short, we may want to close the position and avoid touching the Stop Loss even if it is already in the Breakeven position. This type of active management, in moments like this is very important since it will allow us to reduce the risk even more, being able to scratch a few more points to the market. On the other hand, if the longer term context accompanies, you may want to enter into a buy favoring this principle of failed reversal.

In case you propose a buy, there is an interesting detail to take into account. As the entry trigger is below the weekly VWAP, it could be a good option to make such a trade with less leverage, for example, in a CFD market. This is a perfect

example to evaluate the possibility of trading the same asset in different markets depending on the confidence that the trade in question gives us. If we find ourselves in a situation like this in which we observe such elements against the proposed scenario, the best thing to do would be not to make the trade in a leveraged market such as the futures market; and on the contrary, go to a market that offers us a less leveraged type of trade such as CFDs.



Going deeper into this concept of working with different brokers and markets, it is important to remember that you do not necessarily have to pigeonhole yourself in any particular type of operation. You may want to make shorter term speculative trades by trading the asset in question on the futures market; and this is not incompatible with proposing scenarios that cover a longer time frame and making such medium term trades using the CFDs already discussed; and also being able to make longer term trades with spot stocks or exchange traded funds (ETFs), for example.

This is one of the benefits of the methodology, its universality. Its reading, being based on the real market engine, the continuous interaction between buyers and sellers, is equally valid regardless of the asset and temporality; with a single basic requirement that the particular asset has sufficient liquidity.

Bibliografy

Aldridge, I. (2010). High-Frequency Trading: A Practical Guide to Algorithmic Strategies and Trading Systems. John Wiley & Sons Ltd.

Alexander Trading, LLC. (2008). Practical Trading Applications of Market Profile.

Brooks, A. (2012). Trading Price Action Trends. Wiley Trading.

Daniels Trading. (2018). Types of Futures Trades: Basis, Spread, Hedging. Obtained from <https://www.danielstrading.com/2018/02/06/types-futures-trades-basis-spread-hedgingç>

Delgado-Bonal, A. (2019). Quantifying the randomness of the stock markets. Obtained from Scientific Reports: <https://doi.org/10.1038/s41598-019-49320-9>

Diaman Partners Ltd. (2017). Are financial markets Random or Deterministic? Obtained from <http://blog.diamanpartners.com/are-financial-markets-random-or-deterministic>

Edwin Oswaldo Gil Mateus, H. D. (2016). Mercados financieros, eficiencia y adaptación. Obtained from <http://dx.doi.org/10.19052/ed.3735>

Hawkins, P. S. (2003). Steidlmayer on Markets: Trading with Market Profile. John Wiley & Sons.

Healthy Markets Association. (2015). The dark side of the pools: What investors should learn from regulators' actions.

James F. Dalton, E. T. (1993). Mind over markets.

Jones, D. L. (1993). Value-Based Power Trading – Using the overlay demand curve to pinpoint trends & predict market turns. Probus Publishing Company.

Jones, D. L. (2002). Auction Market Theory. Cisco Futures.

Keppler, J. (2011). Profit With the Market Profile: Identifying Market Value in Real Time. Marketplace Books Inc.

Koy, P. S. (1986). Market & Markets Logics. The Porcupine Press.

Lewis, M. (2018). Flash Boys. Norton & Company.

Lloret, V. M. (2016). La guía the Tradingway.

Lo, A. W. (2017). Adaptive Markets: Financial Evolution at the Speed of

Thought. Princeton University Press.

Nasdaq. (2019). Total markets. A blueprint for a better tomorrow.

Patterson, S. (2013). DARK POOLS: The Rise of the Machine Traders and the Rigging of the U.S. Stock Market. Random House LCC US.

Peter Gomber, B. A. (2011). High-Frequency Trading.

Piras, A. F. (2018). Non-random behavior in financial markets. Obtained from https://www.researchgate.net/publication/322820666_Non_Random_Patterns_in_

SEC. (2011). Pub. No. 141 (3/11) Trading Basics. understanding the Different Ways to Buy and sell stock.

SIFMA Insights. (2019). Electronic Trading Market Structure Primer.

Tapiero, P. d. (2014). Is there light in dark trading? A GARCH analysis of transactions in dark pools.

Valtos, M. (2015). Trading Order Flow - Understanding & Profiting From Market Generated Information As It Occurs.

Verniman. (2020). Futures Trading. Obtained from
<https://verniman.blogspot.com/>

Warner, J. (2019). High-frequency trading explained: why has it decreased? Obtained from <https://www.ig.com/au/trading-strategies/high-frequency-trading-explained--why-has-it-decreased--181010>

Wedow, M. P. (2017). Dark pools in European equity.

Wikipedia. (2021). Algorithmic trading. Obtained from
https://en.wikipedia.org/wiki/Algorithmic_trading

Acknowledgements

I sincerely hope that the study of this book has brought you value and allows you to reach higher levels in your performance as a trader or investor.

The content is dense and full of nuances. It is very complicated to acquire all the knowledge with a simple reading, so I recommend you to make a new study as well as personal notes for a better understanding.

I would love to know your opinion about the book so I invite you to leave a rating in the Amazon reviews.

As you know, I am continuously doing research and sharing more information so do not hesitate to write me at info@tradingwyckoff.com so you can receive new updated content for free.

See you on the networks!

[Twitter](#)

[Youtube](#)

[Instagram](#)

Rubén Villahermosa Chaves has been an independent analyst and trader in the financial markets since 2016.

He has extensive knowledge of technical analysis as well as developing trading strategies based on quantitative analysis.

His passion for the world of investment has led him to devour a great deal of training on this subject which he tries to spread from principles of honesty, transparency and responsibility.

Books of this author

[The Wyckoff Methodology in Depth](#)

The Wyckoff methodology is a technical analysis approach to operating in the financial markets based on the study of the relationship between supply and demand forces.

The approach is simple: When large traders want to buy or sell they carry out processes that leave their mark and can be seen in the charts through price and volume.

Wyckoff's methodology is based on identifying that professional intervention to try to elucidate who is in control of the market in order to trade with them.

What will you learn?

- How markets move. The market is formed by movements in waves that develop trends and cycles.

- The 3 fundamental laws. The only discretionary method that has an underlying logic behind it:

The law of Supply and Demand.

The law of Cause and Effect.

The law of Effort and Result.

- The processes of accumulation and distribution. The development of structures that identify the actions of great professionals.
- The events and phases of the Wyckoff Methodology. The key actions of the market that will allow us to make judicious analyses.
- Operation. We combine context, structures and operational areas to position ourselves on the side of the large operators.