

Case study number 1 for

META_quant

SUMMARY :

.....

-conditions
-goal
-operating

-process
-basic reminder
-theories
-inequations

-step 1: homogeneity of the order book
-step 2: the hole or the path of least resistance
-step 3: liquidity taking algorithms enter the dance
-step 4: aggressive predatory algorithms added to the OFFER
-step 5: transition to hardcore and detailed exposure
-step 6: from brutal market making to market manipulation
-step 7: from financial data to behavioral finance
-stage 8 : from the ascent of the Himalayas to death on the summit
-stage 9 : Alpinists caught in the avalanche
-Step 10: Back down the valley: 50 ticks below

-conclusions :

-notes :
-contact :

Case Study Conditions:

market: crypto

Instruments: ETH/USDT

Exchange: binance

date : 12/12/2022

time : 12h12 ...

tool : meta_quant

refresh rate : 1 ms

heatmap style : degraded thin

style : 3D/4D

speed : 75%

scale bar : 1/10

scale sphere : 1/10

time and sales : hidden

price graph : hidden

trading module : hidden

3D/4D scene : full screen

Camera : 3D front mode & 2D style.

2D/3D and 3D/4D view of the order book with different AR / VR interactions with META_quant!

Functioning and specificities of META_quant tool :

---> running under web browser like GOOGLE chrome or FIREFOX

---> connection in WEB3 under METAMASK wallet

---> flow and data received in real time by integrated websocket

---> 3D technology WEBGL / THREEJS / JAVASCRIPT

.....
The objective of this case study will be to be able to read the flow of market orders that arrive in the order book, and to be able to anticipate the price action that will occur on a market, and this in a short-termist perspective.

To do this, I recorded a VIDEO of about 15 minutes from the META_quant tool which was connected to the ETH/USDT asset from Binance, and which I will use as a support, to deconstruct everything I see, and which seems important to me to note!

The video in question will of course be attached to this document, and available on the private server at this address: <https://metaquantuniverse.com/videos/replay>

I will use it to illustrate my remarks through various key screenshots that I recorded from this video.

.....
We will proceed, step by step, with comments at each step, in order to have a very fluid reading of what happens in an order book, and at the level of the market order flow.

We will also remind you, for the "basics" that we will mainly focus on these 4 elements of data:

---> **price** (and price action)

---> **time** (and duration)

---> the incoming/outgoing **volume** (which represents the DEMAND)

---> the **liquidity** available in the order book (which represents the OFFER)

We will see that the complexity lies in the fact that traders can buy or sell, but in 2 possible ways. At the market, or at the order book!

From this point on, we will of course distinguish :

Trades at the market (with a market order):

---> the **volume buy**, du **volume sell** (**buy market orders** and **sell market orders**)

Trade to the book (with a limit order):

---> the **liquidity for buy** (set on the **BID**) from the **liquidity for sell** (set on the **OFFER** or called the **ASK**)

.....

It should also be remembered that by nature :

---> A buy market order will be matched by a sell limit order placed at the **OFFER** of the book.

and

---> A sell market order will be matched by a buy limit order placed at the **BID** of the book

So on the one hand we have :

---> **CONSUMERS** who buy, and/or sell "at the market"! That is to say that they **TAKE LIQUIDITY**.
And this, with market orders.

and on the other side :

---> **SUPPLIERS** who also buy and/or sell; but who do so by providing the order book with buy (at the **BID**) and sell (at the **OFFER**) via their limit orders.

.....

So on the one hand we have an order book full of limit orders, waiting to be executed, on each of the price levels, at the **BID and the **OFFER**; and which will represent the **LIQUIDITY**!**

That is to say in reality: the **OFFER!**

And on the other side, we have the market orders, buyers, and sellers, which will scroll in the **PARK**, and which will represent the executed **VOLUME** (the realized transaction).

That is to say in reality: the **DEMAND!**

.....
A request that has therefore been "served"; since each "transaction" of volume will by nature be over (finished).

We conclude from all this, a simple inequation, but frighteningly effective:

----> **PRICE ACTION = VOLUME > LIQUIDITY.**

.....

This means in good English :

----> As soon as the quantity of volume demanded exceeds the quantity of liquidity offered, the price will move!

We can specify, and decline the inequation as follows:

----> **buy VOLUME > Sell LIQUIDITY = PRICE GOES UP**

----> **sell VOLUME > Buy LIQUIDITY = PRICE GOES DOWN**

This means in good English :

----> As soon as the quantity of volume requested exceeds the quantity of liquidity offered to the OFFER of the book, the price will necessarily rise.

The converse is also true:

---> As soon as the amount of volume requested exceeds the amount of liquidity offered to the BID in the book, the price will necessarily fall.

That's about it for the "precepts" necessary for the good understanding of what you will see next with the META_quant !

.....

Just before we get to the heart of the matter, we will also make some reminders about the order book, its function, and its very nature!

You have to keep in mind that most people will use the order book most of the time as an execution tool! And indeed, this is what it is, and this is what it is used for in the first place!

That is to say that it is used to place orders on the market!

Let's say, **its primary function!** TO ALLOW THE PASSING OF ORDERS on a market.

Its second function, which is perhaps of less interest to people, because it is difficult to grasp, is to provide a whole lot of data, which we can collect, process, analyze and even visualize.

And when we know to what extent the "actions" and "events" of liquidity that occur in the order book will have an immediate impact on the price action then; we understand quite quickly that this information provided by the order book will literally represent information:

---> keys,

---> privileged,

---> rich, and

---> transparent!

.....

The difficulty, however, with the order book remains and remains double!

At the same time, there is the problem of the "ephemeral" side of the order book; in the sense that most of the data that comes from the book is, most of the time, never stored, nor processed; therefore not analyzed.

There is therefore a TECHNICAL issue here, even a TECHNOLOGICAL one.

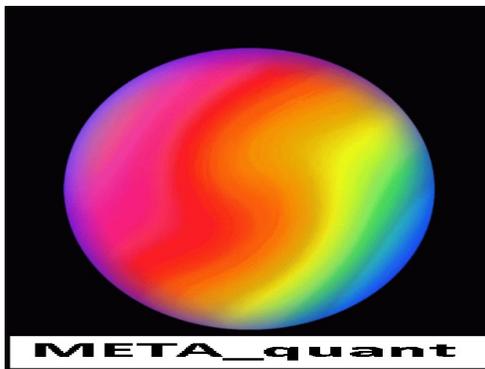
The 2nd problem lies in the fact that the order book remains the paradise of market making algorithms, which will act at very high frequency and very high speed.

From there, there is a difficulty of access and collection of this data, whose time stamp is often done at the millisecond, even at the nanosecond!

So there is also a very TECHNICAL issue here! Almost a TECHNOLOGICAL CHALLENGE!

In short, even in 2022, apart from tools like BOOKMAP or QUANTMAP which are already great; we remain roughly "incapable", as humans, of exploiting the data of an order book in an interactive way; because we do not know how to treat them well technologically; and thus, the few graphic representations or graphic visualizations of these data, often, leave much to be desired!

.....
This is where the META_quant comes in!



As well for the passage of orders via the SPOT or the MARGIN TRADING with the trading module of BINANCE for example;

But above all, in the visualization and accessibility of the order book data! Which, thanks to the META_quant tool, will allow you to anticipate market price movements on a short-term basis.

We will now deconstruct these 15 minutes of pre-recorded VIDEOS on the ETHUSDT of BINANCE, and see, step by step; what we can draw from a tool like the META_quant, in its trading analysis!

.....

STEP 1: homogeneity of the order book :



In this first step (at 1.29 min of the video) we can see that we have a relatively "homogeneous" order book.

By homogeneity, I mean that the liquidity seems to be distributed in a completely artificial way:

"ordered".

- The sizes of the limit orders are about the same at the BID as at the OFFER.
- At the LEVEL1 level of the order book, there are no particularly large quantities printed.
- There is no imbalance in terms of available size at the BID compared to the OFFER.
- We don't have any particularly notable "holes" inside the booklet.
- We don't have any particularly large volumes in size with no large printed sphere.

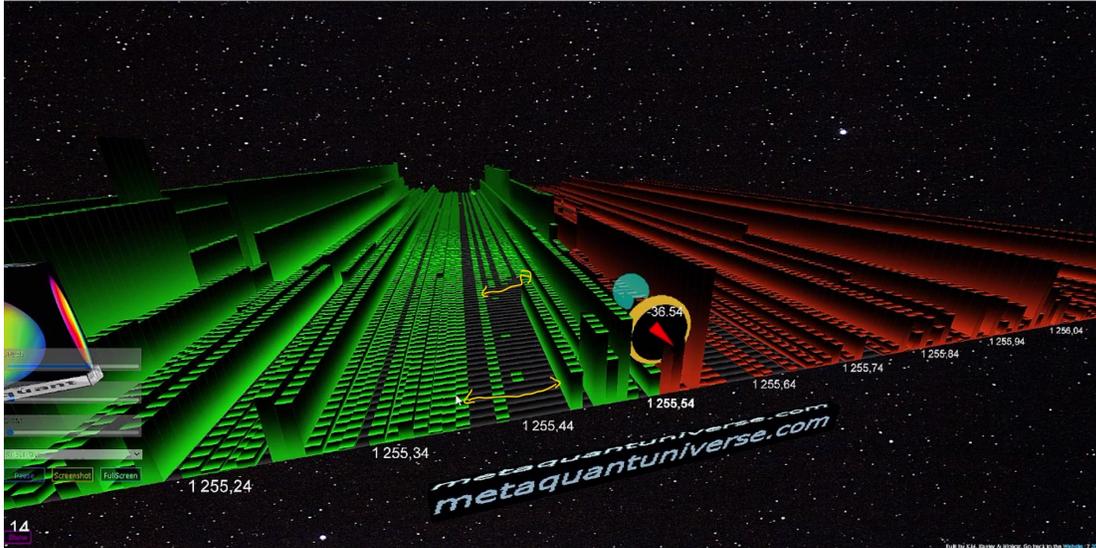
In short, we'll call this a "normal" order book situation. We are quoting here \$1255.54 at BID with a tick that is equal to 0.01 here on the ETHUSDT from binance.

The only notable thing that can be noted here in this first stage is that the market making is rather bearish (short).

With a value of -36.54. You can see it with the central compass whose arrow pointing down is red!

.....

STEP 2: the hole! or ... the path of least resistance!



In this 2nd step, (which occurs just 10 Seconds later) we will notice that a "hole" is being created in the order book, and more precisely, in the BID side of the order book! (at 1 min 39 of the video)

A hole in the BID! That is, on the buy side! By hole, I mean; an absence of liquidity, or an absence of quotation.

That is to say that it is a place of price, which will extend on one or more ticks, and which will be "not provided"; or devoid of limit orders.

It is therefore a place where there is no liquidity! And as you may have guessed, this will create a kind of imbalance in the structure of the book, which will go from a rather homogeneous stage to a more "heterogeneous" stage.

What is particularly important to understand here; is that this hole of liquidity (whether it is for manipulation purposes or not); will represent a real RIFLE in the buying structure of the order book (at the BID).

And what happens when there is an apparent flaw?

well, it tends to attract "vultures"! and it tends to generate, motivations, and desires, to ENTER into the fault!

This also gives an indication of the importance : which is to know that: "with this hole" of liquidity at the BID, it should therefore cost "less" to push the price down, than up.

What will generally happen next (and what we will see in step 3) is that there are operators (human or not) who will DIVE into the fault, in order to move the prices "cheaply" to a zone that is potentially more "favorable" for them!

This will create a kind of suction phenomenon! Towards the hole!

In short, when I see this kind of hole in the notebook located at the BID; I therefore expect that, in the very short term, the prices will drop! By "technical" phenomenon of aspiration.

Note also that in most order books available on crypto exchanges, these holes will not necessarily be apparent, even when they occur, since traditional crypto order books are generally made so that all limit orders follow each other, regardless of their spacing within the order book.

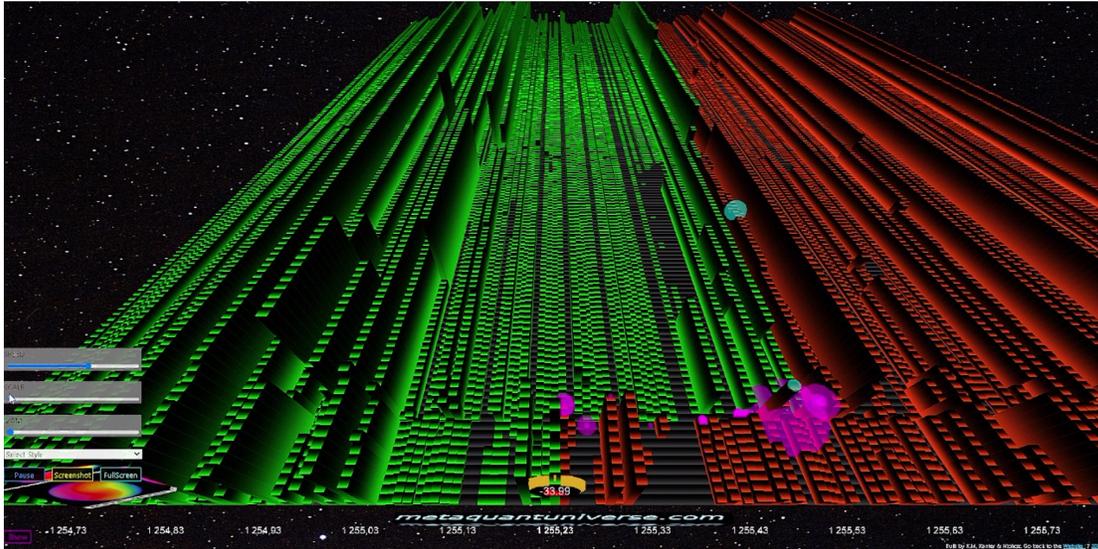
So... you won't see these holes in any order book, even if they are real! Be aware of this.

Most of the order books will not make them visible to you (probably to simplify the visualization and/or the data processing); which is a pity from a user's point of view, because it is an important information.

.....

STEP 3: LIQUIDITY TAKING algorithms

enter the dance:



In this 3rd step, we can see a "flow" of market orders, represented here by the purple spheres, which makes the price go down.

We find ourselves on a new price, at \$1255.23, almost 30 ticks below the previous price (\$1255.54).

So here we have a set of volumes entering and/or exiting the market by selling and pushing the price down; and this, even if the hole at the BID, began to fill gradually.

This "loophole" at the BID was therefore well exploited, and the expected shift is done.

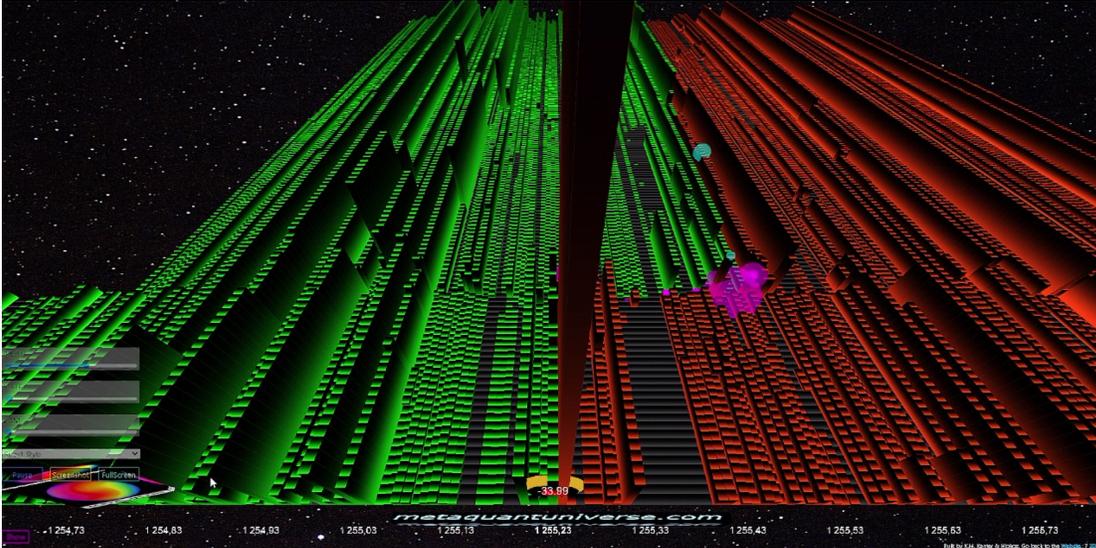
We can speak here of liquidity taking algorithms! (given the speed at which it happened: see video). That is, algorithms that are there to "consume" liquidity on the BID side of the book.

Liquidity taking algorithms, which will have as function either to execute stop losses (positions that go out and take their losses); or to execute entries of sell positions (at the market); or to "manipulate" the prices, by paying "what is necessary" to make them move downwards, at the "desired" price point.

From this point on, I expect prices to rebound a bit! Especially since the market making is a little less negative than in the previous stage! Except if.... the algo or other algo want to push the nail.

.....

STEP 4: "Aggressive" predatory algorithms added to the OFFER!



This 4th step is quite crucial (around 1min 50)!

Indeed... the price has already fallen, and as seen above, we tend at this moment, to wait for a small short-term rebound; if only to "put some order" in the structure. (famous concept of "tidying up" the "single print").

If however (as here on this screenshot 4), you see a huge limit order which comes to add to the LEVEL 1 of the offer; then you know, that the price will very probably continue to go down!

Why ? because we are here on a particularly increased aggressiveness:

---> first of all, the price has already been lowered... so the fact that it continues to offer liquidity to the downside book (even more strongly) is quite unexpected and "sudden".

---> Then, we can talk about aggressiveness, especially with regard to the SIZE of this limit order that is suddenly added! The size is just huge and the 3D/4D visualization allows to appreciate perfectly the proportions of the limit orders sizes in the book (the ones in relation to the others).

---> Then we can also talk about aggressiveness, because this limit order, not only in addition to being big, and sudden, will also be placed ultra aggressively in the book! ie at the closest to the quote price! at the best price of the offer! what we call the BEST OFFER!

We therefore have an aggressiveness that is characterized here in terms of :

---> timing / sudden appearance / "abnormal" appearance

---> size (huge quantity)

---> placement (position in the book: i.e. at the BEST OFFER)

The element that we will try to determine next will be very simple!

---> is this BIG predatory limit order placed at the BEST OFFER of the order book TRUE or not?

To know it we will be able to detect very easily thanks to META_quant, several indices which will help us to determine it easily, and quickly:

- 1) does this big limit order stay in place for a long time (timing)
- 2) does it move in position on the price scale? (moved up? or down?)
- 3) does the quantity displayed for this large limit order stay the same? (increased in size? decreased?)
- 4) is this large limit order "tested"? (hit by a long market order?)
- 5) is the order reloaded after a market order hit? (reload or reduce after the hit?)
- 6) does the order generate an "impact" on the structure of the BID side of the book? (reduce or add liquidity to the BID)
- 7) does the order generate a "flow" of market orders, which, as a "follow-up", will start hitting the BID? (basically: does it generate market orders that hit the BID side of the book?)

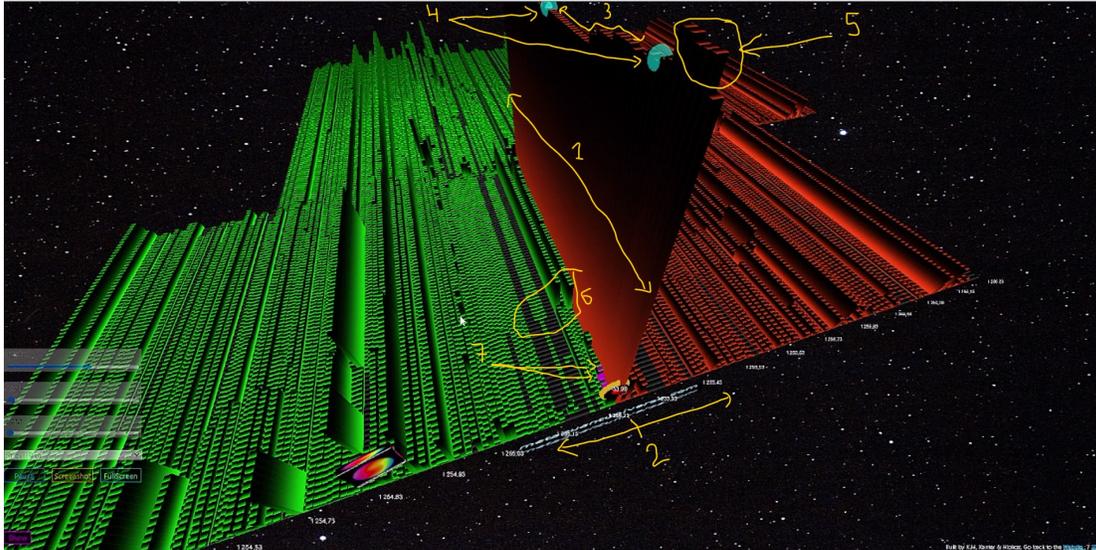
According to these 7 elements, you will be able to judge the "veracity" of this big limit order placed at the BEST OFFER of the book, and thus its potential impact on the further course of the price action!

So you are literally one step ahead of the PRICE ACTION! De facto.

We are going to answer each of these questions, to explain the reasoning to weave, with the example of screenshot 5!

.....

STEP 5 : Go into hardcore and detailed nudity... market porn mode activated !



We are now in the hard! At 2.02 minutes of the video, we can see that this famous big order limit aggressive predator, arranged at the BEST OFFER of the order book, seems to want to maintain itself, and remained in place!

It is about 15 to 20 seconds that it is now visible, to the eyes, and to the sight of "all".

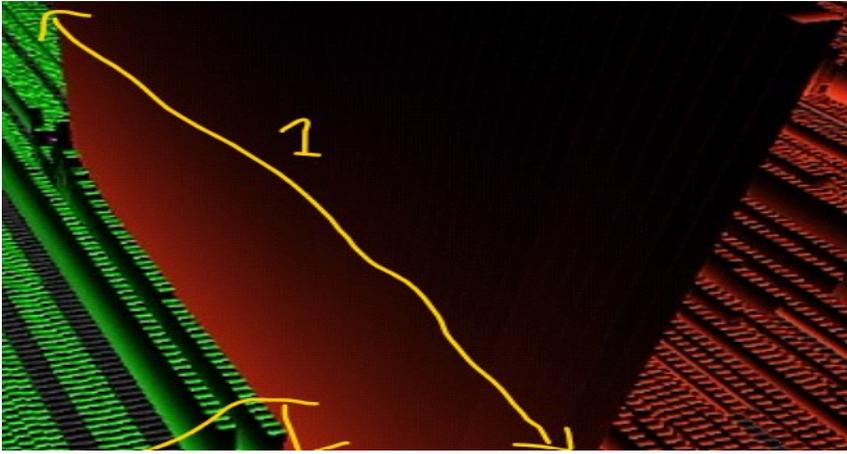
Then ... to see a big order in the book, it is well well to say to me! But what do we do next?

What do we get out of seeing it?

To know it, we are going to answer each of the 7 questions asked above, and which will allow us to qualify very precisely, the underlying behavior, which there is behind this famous big predatory limit aggressive order, arranged at the BEST OFFER of the order book!

Let's go ! And let us take again our listing of 7 points to check (classified according to an order, which seems to me relatively "chronological"):

1) does this big limit order stay in place for a LONG time?



To find out, just look in META_quant, on the Y axis (the axis of the passing time); and see that the large order in question, remains in place!

Indeed, it is quite possible that this large order is only "flashed" a quarter of a second, or a millisecond; in which case, most of the order book operators will miss it! for the simple reason that it will be de facto invisible to the naked eye.

However, even if it is only flashed for a millisecond, its **impact** on the price action can be real and indeed considerable!

In our present case, we can notice, this time, that this big predatory limit order remains in place! And therefore lasts in time!

It is thus a first "good" point validated; which will indicate to us that this big predatory limit order is indeed "real"; and that thus we can hope for a fall of the prices to come. (in the same direction as this big predatory limit order).

2) does it move in positioning on the price scale (up? or down?)



Indeed, a big limit order like this one can move!

and that besides whatever its size!

That is, it is possible that the limit order in question could be moved above, or below, its initial price!

In reality, in this case, it would technically be "cancelled", then "added" on a higher or lower price level. We can observe this kind of "displacement" of large limit orders by looking at the X axis.

Here in this case, we can see that the order remains in place! It does not stumble (in terms of price); it has not moved! It remains on its initial price : 1255.23

This is rather a "good sign" in terms of "**veracity**" and will indicate a continuation of the price action downwards!

If however, on the other hand, the big order had "retreated"; and it had been moved to a higher price; then we could have considered a certain "defensive" state of it! Defensive yes, because it offers to the sale, at a price "finally more expensive" than recently.

Here we see that this is not the case! It does not move. It stays in place and therefore remains in this basic aggressive state!

We could also have had a move of this large order limit predator at a lower price!

That is to say even lower (thus at a cheaper price)! At this moment; that would have added aggressiveness; and one would have considered that the big order limit predator passed to an offensive state! Offensive yes, because it offers to sell, at a price "even cheaper" than before!

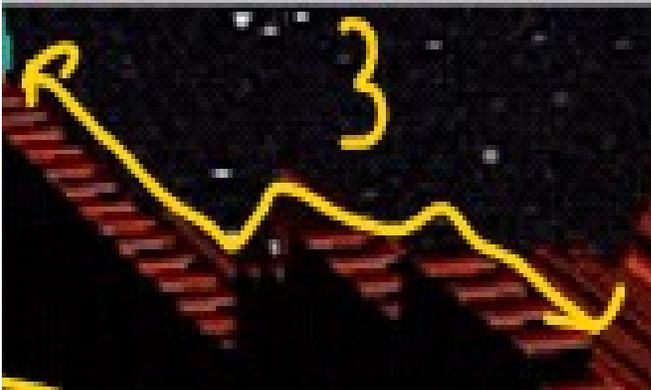
We will thus consider 3 possible states for a large predatory limit order, when it is a question of qualifying its "placement" (in term of price) within the order book:

0 = it doesn't move = it remains aggressive (basic state)

+1 = it moves at a "better" price = it advances the counter = it becomes offensive

-1 = it moves at a "worse" price = it moves back = it becomes defensive

3) does the quantity displayed, for this large limit order, remain the same? (does the size increase? does it decrease?)



Here too, it will be an important point to check!

Now that we have succeeded in qualifying in point 1 the duration (of life) of the order, and in point 2 its state (defensive/aggressive/offensive); we will be able, in this point 3, to qualify the evolution of the SIZE (the quantity) which is proposed in this big order limit predator!

The goal here in this phase 3, will be to see if the size of the order increases, or if it decreases! That is to say, if liquidity is added to this large order, or if on the contrary, liquidity is removed from this large order.

We will try here to measure the **evolution of the SIZE** (size) of the said large order limit predator!

And what we can say, and what we can see on this screenshot 3, thanks to META_quant, is that the size of this predator limit order (which is already BIG) seems to increase ! The 3D/4D is just perfect to visualize this, and much more efficient than the shades of colors of a 2D heatmap !

Here again, regarding the SIZE of the predator limit order; 3 different states are possible, to qualify this SIZE :

0: size does not change; nothing is added; nothing is removed; it remains in an aggressive state.

+1 : size changes, and increases ; it adds limit order to it ; it becomes offensive.

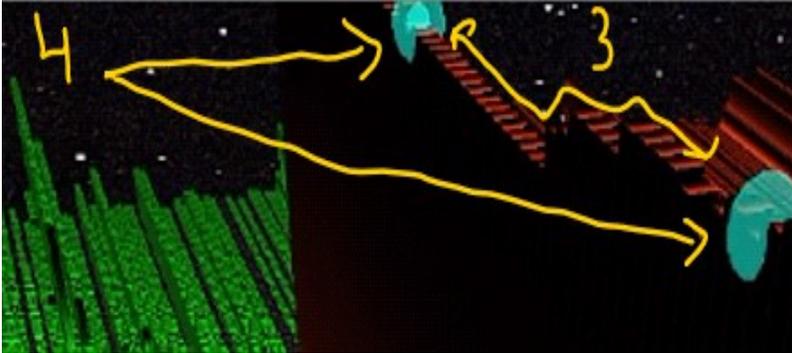
-1 : the size changes, and decreases ; it removes limit order ; it becomes defensive.

In our case here on ethereum, we can see that it tends to remain stable ! or to go up slightly ; which means that the size doesn't move, or almost doesn't ; or goes up slightly as we can see on screenshot 3 !

It means that we stay on an **AGRESSIVE to OFFENSIVE** state in term of size !

It is therefore rather "good sign" for the continuation of the fall in the price action.

4) is this large limit order "tested"? (hit by a long market order?)



To be sure that this super WALL, represented by this order limit predator is not actually that of flank!

We'll want to check if it's tested!

By tested, I mean:

---> did people (traders, LT algo's) tap on it with buy market orders?

If this is the case, and the big predatory order does not disappear then we can consider that it is real liquidity!

If on the other hand, as soon as it is tapped on with market orders, we realize that the wall disappears or is seriously reduced; then be careful! In this case, we will consider that it is phantom liquidity!

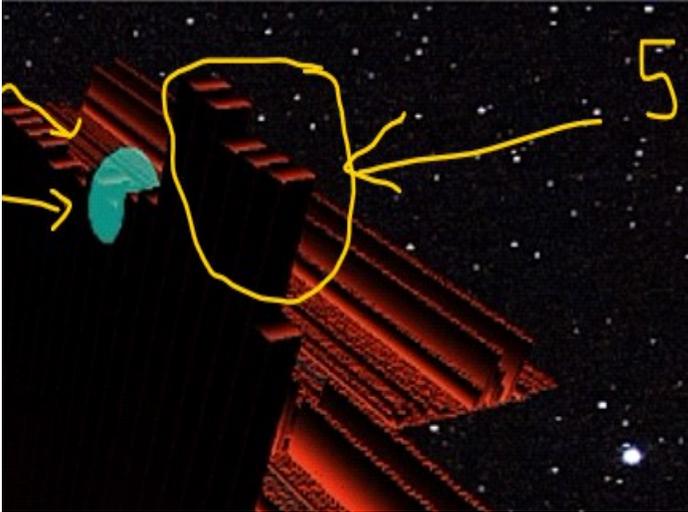
When we are on a wall fed by real liquidity; it is that the predatory limit order, is probably true and real! In this case, we expect a continuation of the decline in price action!

When it is fed by "phantom liquidity"; in this case; it means that the price can go up very easily (very quickly) and for cheap!

In our case, we see that the wall remains perfectly in place, and this after two market strikes that come to buy this wall, and start to nibble it, with market orders buyers!

It is therefore a continuation of the decline in price action that remains expected!

5) is the order reloaded after a market order strike (reload or reduction after the strike?)



It is in this kind of moment that it becomes the most crispy to my taste... !

And for good reason ! It is here that we are going to have a real "proof" of the power of this predatory limit order! Power, which was at the beginning only "pre supposed" and simply "displayed"!

We are now a little more "sure" of the force, and the power of this predatory limit order when we see that :

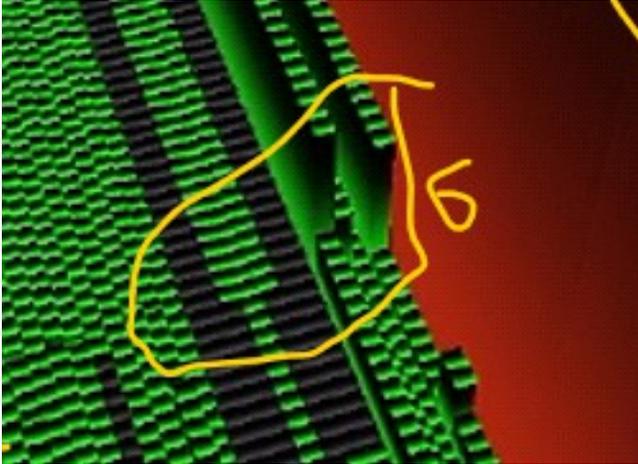
----> despite the market strike at the time of purchase that hit it,

----> it continues to grow in size!

You can also see it perfectly well in 3D/4D in the meta_quant, with this screenshot 5 which illustrates us the increase of the size of the predator limit order, and this in a very precise and interactive way!

When it happens like this, it's the price action that we are waiting for!

6) does the order generate an "impact" on the structure of the BID side of the book (reducing or adding liquidity to the BID)



And yes... when something so "big" is printed in the order book! What's more, at the BEST OFFER (i.e. at level 1 of the order book); we expect that, on the other side, it will panic a little!

So when such a big limit order like this one is printed in the book, we will look if, at the level of the BID of the book (the BID side; i.e. the buy side of the book) ;

we have a **liquidity weakness** that is taking hold! (basically, holes that are created, or limit order sizes at the bid that are decreased).

And this is exactly what happens in this screenshot 6! We can see that the two limit orders of average size at the BID, are considerably reduced to more than 80%! at sight!

And we also see that two prices are no longer quoted!

That is to say that there is no more liquidity on it! (it is perforated)!

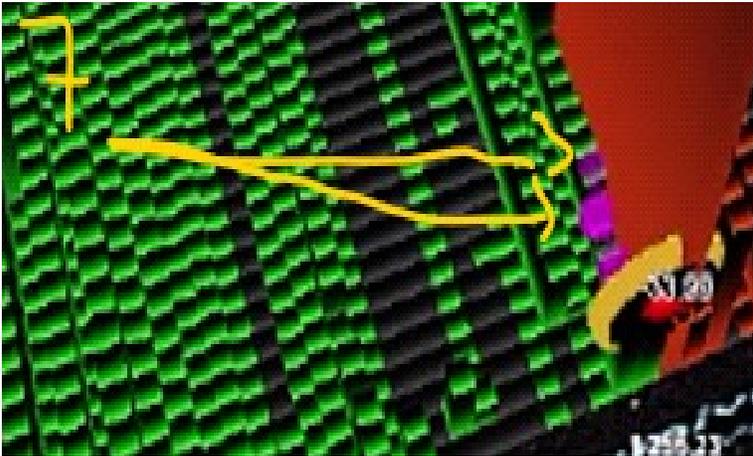
That stirs up the weakness on the buy side of the book!

Indeed, on one side... we have a hammer hitting us on the head (the big predatory order at the BEST OFFER). and which wants, apparently, to make the price go down and

on the other side, we have the ground which slips under our feet... with this structure of the BID side of the book, which seems to weaken in a worrying way!

This is the kind of cocktail that will generally be unappealing in terms of the price action that will follow! And that's the price drop we're still expecting here!

7) does the order generate "flow" of market orders, which, as a "follow-up", will start hitting the BID? (basically: does it generate market orders that hit the BID side of the book to follow the power of the sell wall?)



Here as we can see on screenshot 7, and even if this flow of market orders remains quite measured in terms of size (volume); we see that the follow-up, is done on the SELLER side! That is to say that we can see with the META_quant, that it hits market, on the seller side!

Indeed, we can see the small purple spheres, which begin to tap on the BID side of the order book!

This makes the "pressure" here double!

Indeed, not only do we have this wall placed at the OFFER! At the best OFFER! which is imposing in terms of size, and which starts to last in terms of timing! and which does not flinch in terms of price! but in addition! we have the flow of market orders which start to sell also, and to dismantle the BID side of the order book...

In short ... what happens?

---> **it wants to sell FORT to the book**

---> **it sells at the market**

All this against a backdrop of market making sales.

PRICE at that time: \$1255.23

At this stage, among the 7 points to check, they are all validated! And we are waiting for the price drop...!

You will see in the following video that the work was not without ruckus... but the drop finally arrived; a few minutes later, and the big wall resisted! We'll watch the rest in step 6 and switch directly to 12:31, a step that I hope will be a little softer!

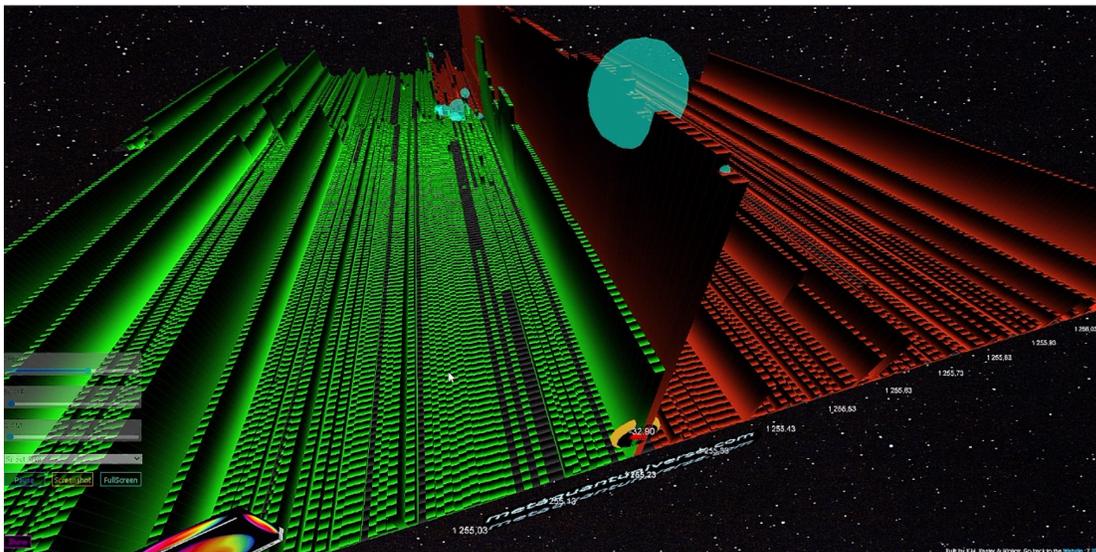
STEP 6: From brutal market making to market manipulation!

In this 6th step, we will study how our big predatory limit order behaves, when it is attacked by the market!

i.e. by the flow of market orders, which comes to tap on this huge limit order placed at the best price of the OFFER of the order book!

Let's look at what happens in terms of book structure, and in terms of price action; when "things get tough" in a market!

Let's fast forward the video, and go to 12.22 minutes! (screenshot 6 below):



As you can see here, the price has risen to the level of the big predatory limit order placed at the OFFER, still on the same price of 1255.23!

And this time, it is accompanied by a medium pressure at the BEST BID with a rather large limit order facing this predatory limit order at the BEST OFFER!

It is quite possible that this average limit order at the BEST BID belongs to the same person as the big predatory order at the BEST OFFER!

From this moment on, we will only look at one thing!

---> It's: Who gets stoned first!

To know and visualize it :

we will use the same concepts studied in the 7 previous points of step 5!

In this case, on this screenshot 6, we can first of all see quite clearly that :

- the size of the predator limit order at the best OFFER is about 3 times bigger than the size of the average limit order placed at the best BID!

- We can also see that a big hit is made on this predatory limit order placed at the best OFFER, with a big market order coming to hit!

- However, the quantity is **reloaded** in the predatory limit order!

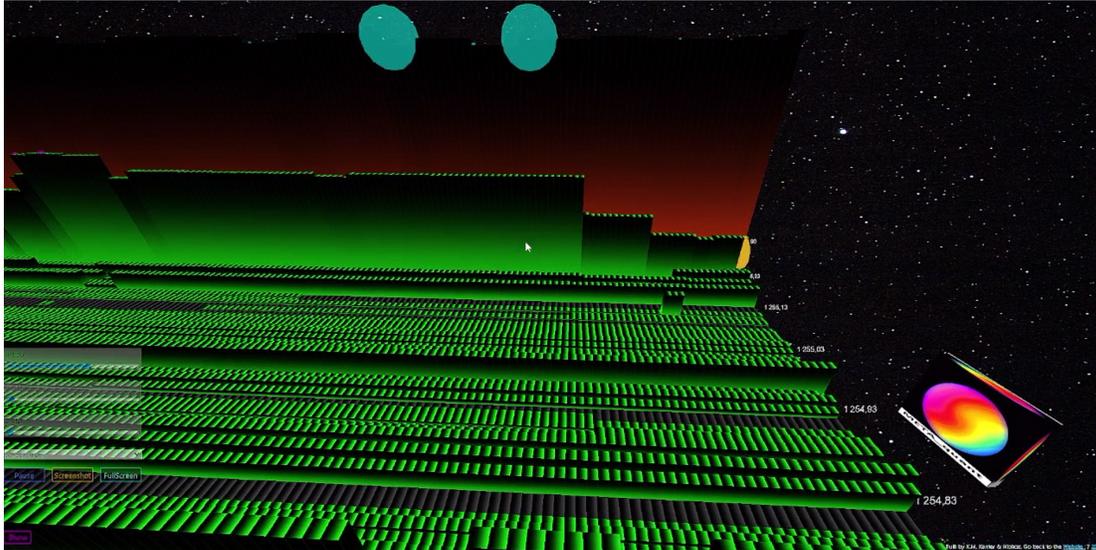
So there is always, well and truly, a will to "maintain" the size of the wall in place!

A bit like the front of an army, which, after one of the soldiers is killed by a bullet, would be automatically replaced by his soldier, to build the front again identically! and thus reinforce the structure of this predatory order at best OFFER!

Let's look at the continuation, always more crazy, with this following screenshot : 12 min 31 :

.....

STEP 7: From financial data to behavioral finance!



10 seconds later, and after having moved the camera of the META_quant thanks to its AR/VR functions; we can appreciate, very faithfully, at which point the structure of the order book is evolving!

And that, in favor of the big predatory orders arranged at the best offer of the book!

Indeed here we notice immediately that :

---> a new market strike is coming, with a big market order (blue sphere) that hits the wall (red)!

It's a big size! **As big as the previous strike...**

---> yet the wall holds, and it is once again perfectly reloaded!

It looks like **humanoid ICEBERG accumulation**; probably made by a human and/or algorithm assisted.

---> We can even see that the wall represented by the predator limit order at the best OFFER is being significantly increased!

We can see that its size is swelling! Little by little

---> and this even though the average limit order placed at the best BID is decreasing, and melting like snow in the sun !!!!

Do you see the trap closing here for buyers?

On the one hand **we accumulate on offer,**

and **we recharge at the offer!**

and on the other hand, **we take away at the BID**

This means that you get hit on the head in one direction, and the ground slips out from under your feet in the other direction

The cocktail of manipulation is served!

The rest of the scenario should be bearish! with the price action going down! If at least the situation described above continues!

Let's see what happens next!

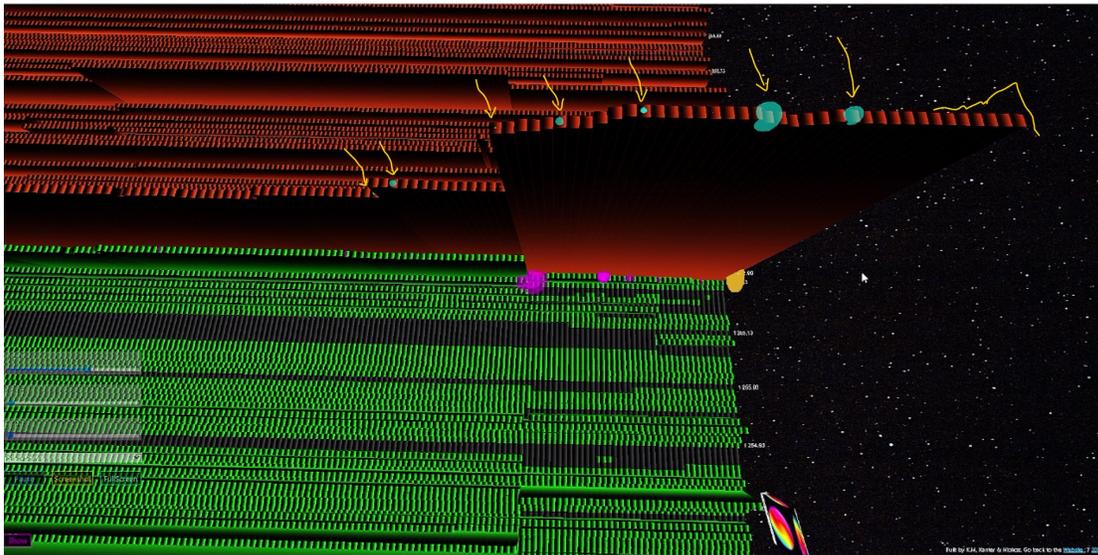
.....

STAGE 8 : from the ascent of the himalaya to the death at the top...

Here you will see perhaps the screenshot that says the most and that says a lot!

I could have called it, as an artistic painting, by a title like: "Buy market orders relentless, or ... the Mountaineers of death! " lol

Just take a look:



So there it is.... what to say ... !

The price still hasn't really flinched! (1255.24\$) ; but on the other hand in term of structure of booklet, it became just DEMENTIAL !

We are here, as you can see, on a **real demonstration of strength** at the level of the order book OFFER!

Let's take a closer look:

- 1) first of all we see that the long market orders start to hit more and more on this big predatory limit order placed at the best OFFER of the book!
- 2) by definition, this should weaken the predatory limit order at the best OFFER! but no!
- 3) because it is reloaded each time! not only, it is reloaded at the previous size level (before the market strike); but moreover, it is reloaded more, to enlarge the size of the red wall at the best OFFER!

4) it looks like a mountain which is being drawn, and which becomes higher and higher, thus more and more imposing! thus harder and harder to climb!

5) and the volumes buyers (buy market order in blue sphere) who hit this predatory limit order at the best OFFER, would be as for them, some kind of mountaineers, climbing this mountain of the himalayia... (if we want to push the analogy)

In short, you know as well as I do what happens to this kind of unprepared climbers, who want to climb the highest peak in the world! It usually ends badly for them!

And that's what's going to happen to these buyers who are probably going to get into position on this big wall at the best OFFER on 1255.24!

The BID structure of the book, as for it, is reduced as a skin of misery.... ! There is not much left! And the imbalance in the order book is now such that.... !

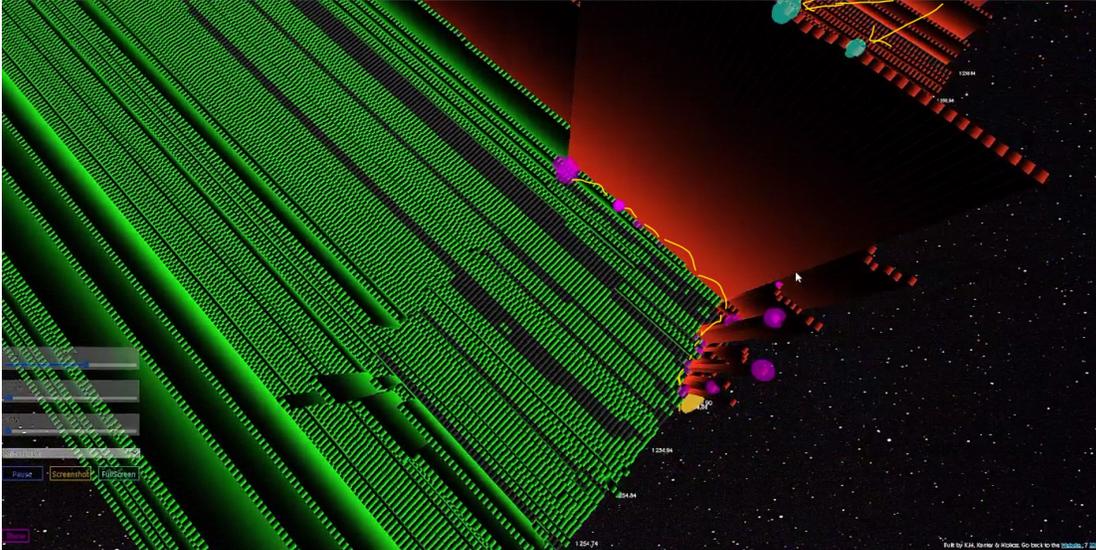
The slightest flow of market orders (a little too big) which would arrive there; would start to smash, and to skim a large level of price, below! Just to be served! In this BID side environment, made, in the end, less and less liquid!

We will see this price drop, with this next screenshot 9 :

.....

STAGE 9 : Alpinists caught in the avalanche

... !



So here you have all the ingredients, which are gathered, to make a nice slide in the price action!

We can see it here with this flow of sell orders hitting the structure of the BID side of the order book with these purple spheres accumulating lower and lower.

The slide starts! (1254.90 printed here!) that is a price action drop of about 35 tick (at 13 min 39 of the video).

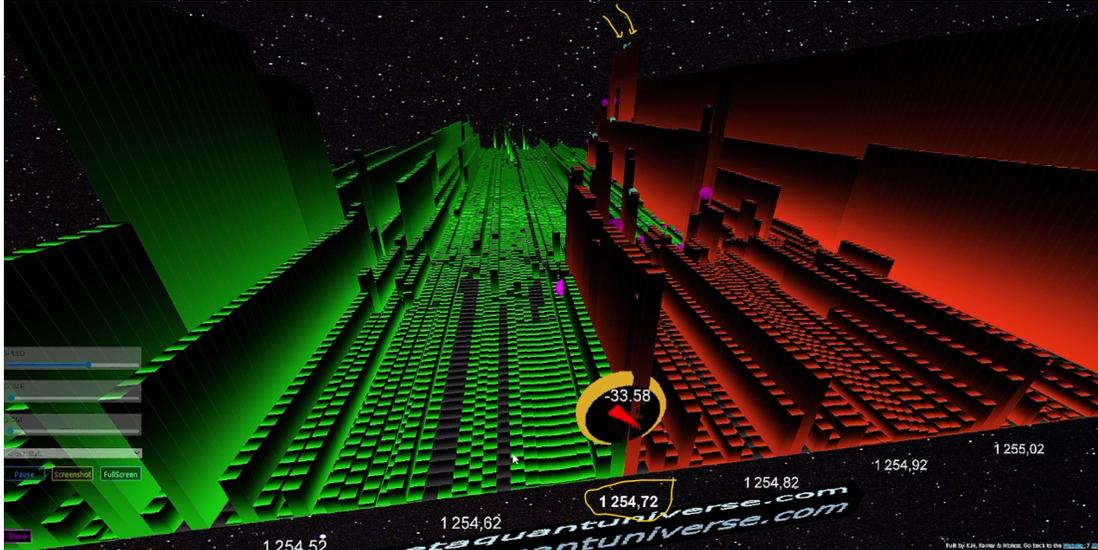
We see the last "climbers" (the buy market orders) trapped at the top of the "mountain" (the predatory best offer) while the price is turning against them!

It's just magic. The descent is rough for these people; especially for those who are in position at the time. They understand that the trap is closing on them.

The continuation is even more splendid with the screenshot 10 :

.....

STAGE 10 : Back down the valley 50 ticks down!



The price action continues to push down, and we arrive on the price of 1254.72\$!

That is finally about fifty ticks below the initial price where the famous big predatory limit order was placed at the best OFFER a few minutes before!

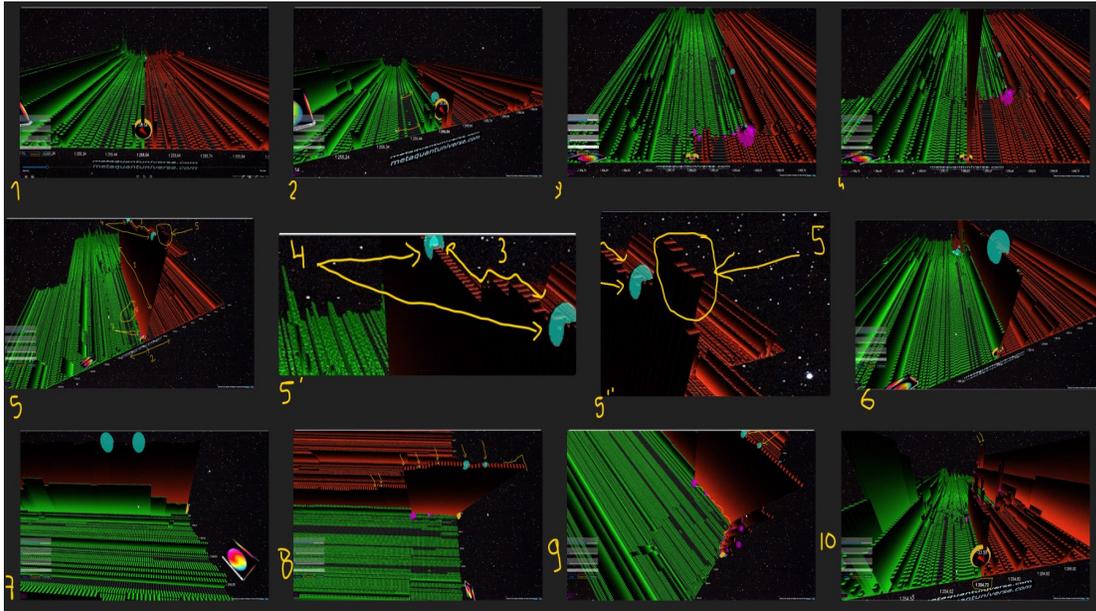
We can still see on the screenshot, in the distance, the very last "climbers" trapped like beginners, on this huge red wall that was the predatory limit order at the best OFFER on \$1255.24!

at that moment... a **few minutes later, and 50 ticks below!** These people understand that they have been (at least temporarily) locked / trapped!

Here's the beauty of market making here... and how you can use it and visualize it, to help you in your decision making!

.....

CONCLUSIONS :



In this case study I wanted to show you how important it is to read the **structure of the order book in real time** and the **market order flow** in detail!

I have shown how, when the structure of the order book was particularly unbalanced, we would have an **impact** on both the other side of the order book, but also and above all, on the market order flow, and therefore of course on the price action.

Note : To see the video in question, in its entirety, (2022-12-12 11-59-30 VIDEO SUPPORT for PDF.mkv)

don't hesitate to visit the site, it is available and hosted for free on our servers!

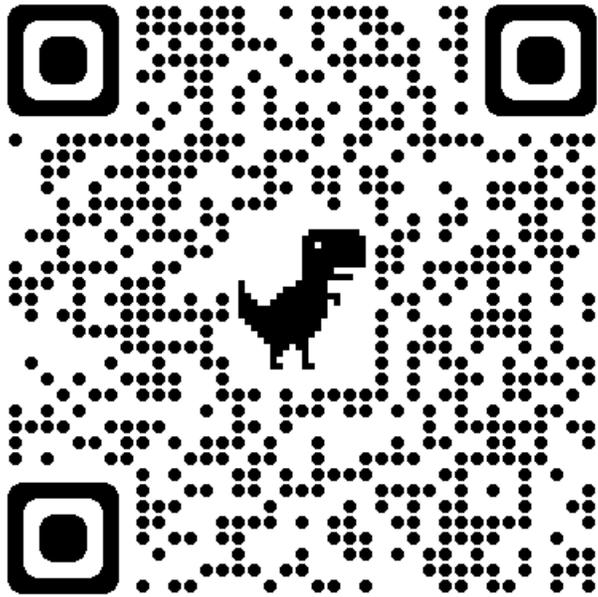
You can already find it and watch it in streaming at this address :

<https://metaquantuniverse.com/videos/replay/>

You can also download it at this address :

<https://metaquantuniverse.com/videos/replay/2022-12-12%2011-59-30%20VIDEO%20SUPPORT%20for%20PDF.mkv>

or by flashing the following QR code:



.....

For any questions, comments, suggestions, criticisms, or specific requests, do not hesitate to ask me, and to contact me directly on my networks! I will be happy to answer you as soon as possible!

.....

Contact :

- WEBSITE : <https://metaquantuniverse.com>
- TV TWITCH : <https://www.twitch.tv/quantprint>
- YOUTUBE : <https://www.youtube.com/channel/UCkwbm2Jw6q1qbb28azfO3hA>
- FACEBOOK : <https://www.facebook.com/profile.php?id=100010372865291>
- TWITTER : <https://twitter.com/NicooooooFX>
- INSTAGRAM : <https://www.instagram.com/niokoz/?hl=fr>
- TELEGRAM : <https://t.me/QuantMapChannel>
- OPENSEA : <https://opensea.io/collection/metaquant>

.....

