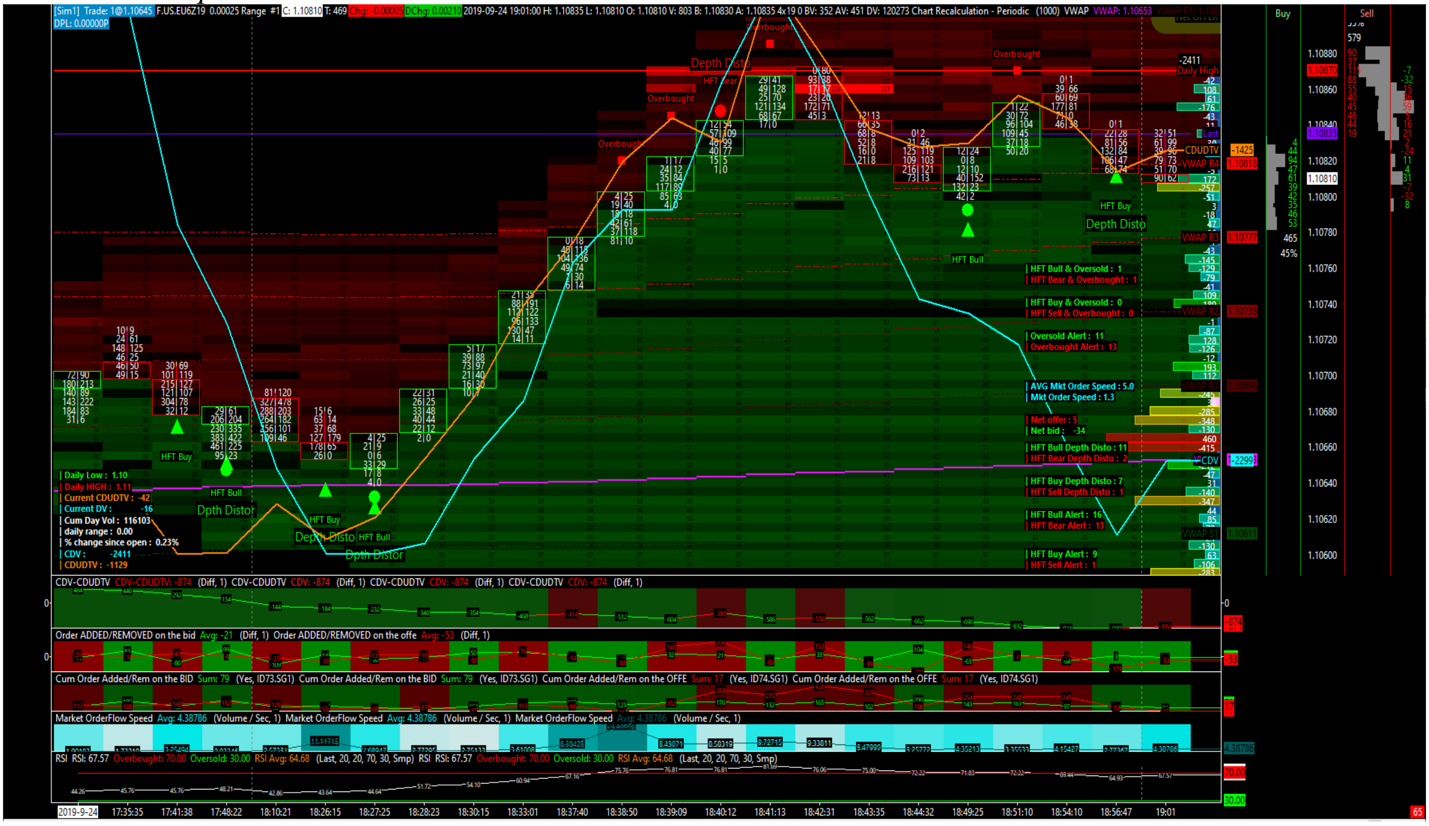
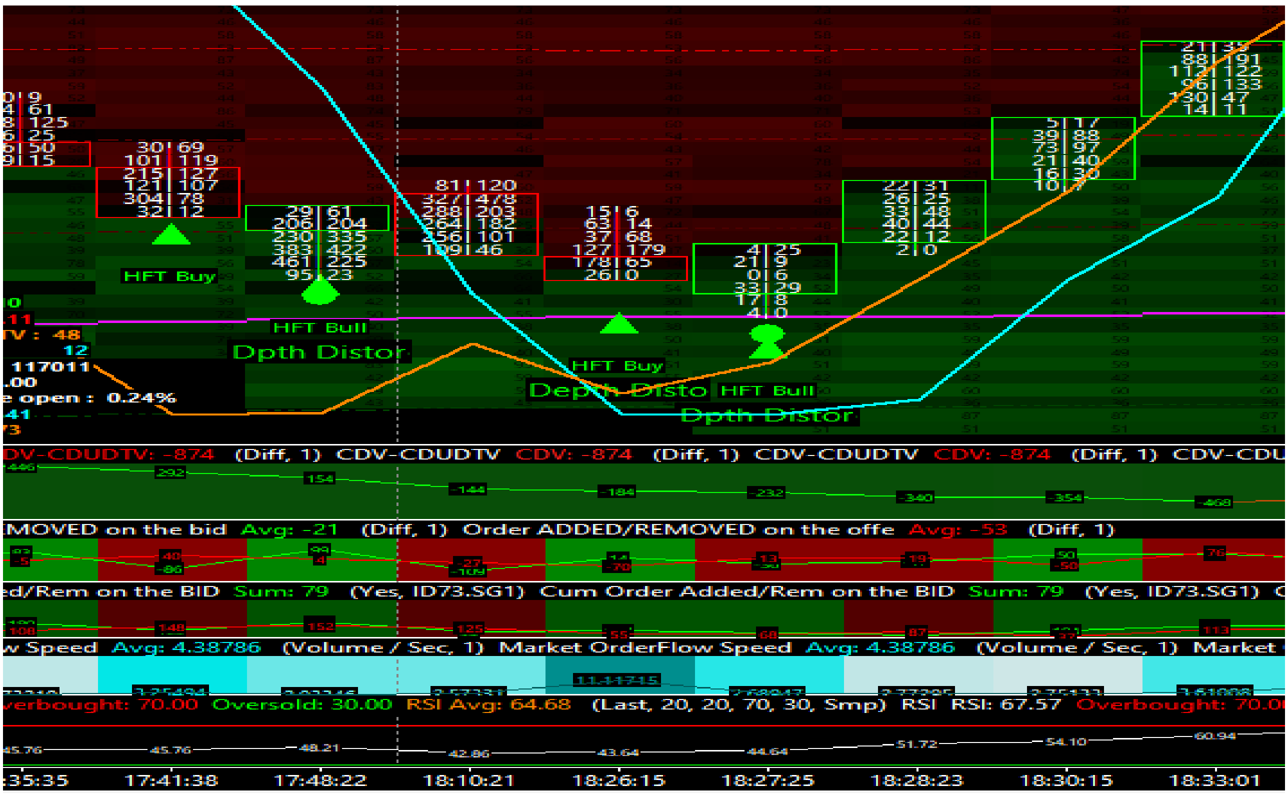
Understand the Market Making Manipulation process

#6E (#EURUSD future contract) from #CME (CQG data feed) registered on the #US #Session on the 24th september 2019.

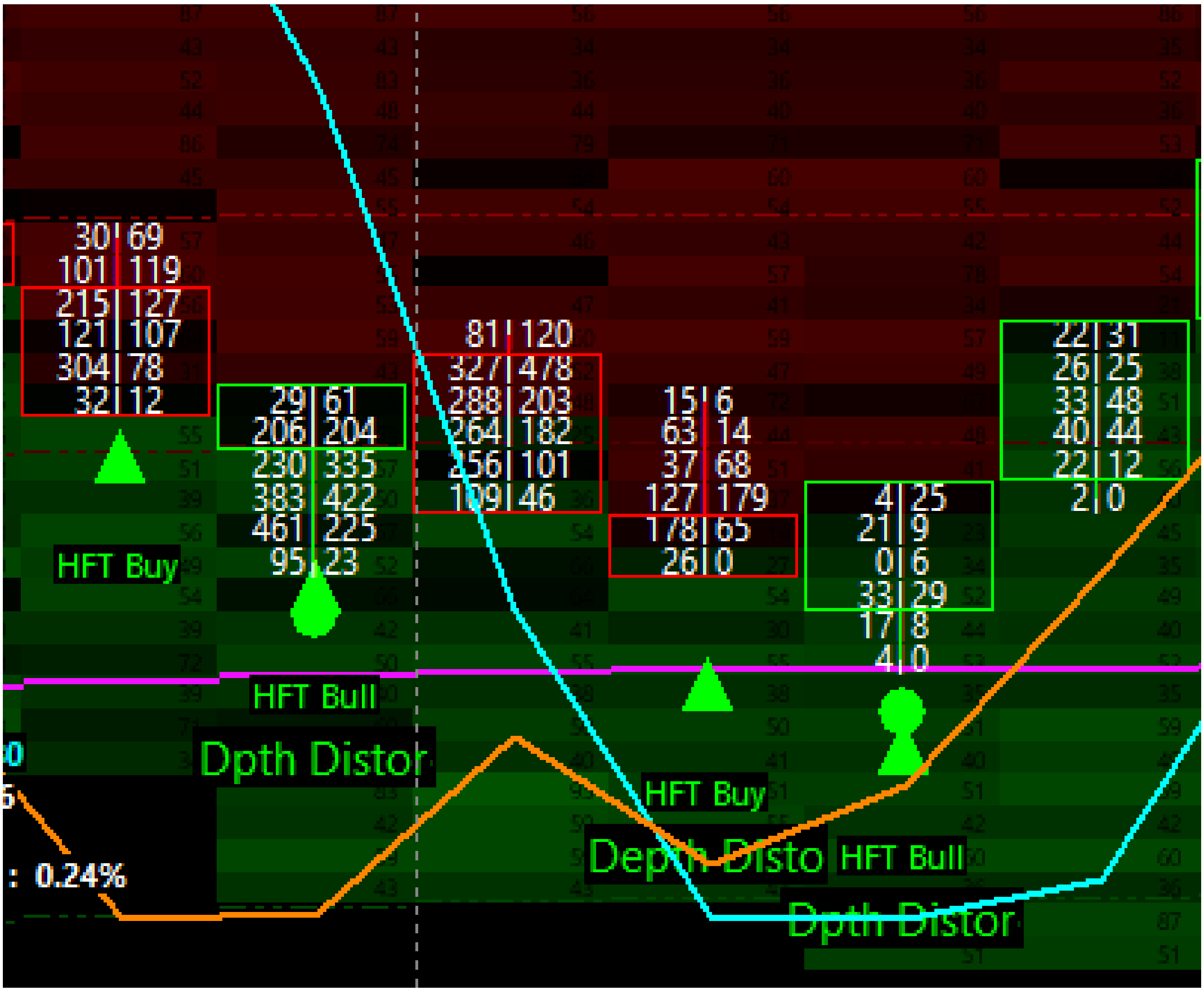


We have here a particular #HFT #alert cluster which is triggered on the 6E, and that, only few tick above the #VWAP area, and on the #VWAP area for the last price bar. Here it is 5 consecutives price bars where you have an HFT signals which is triggered on the buy side on 4 price bars.

Let's have a look on it, with a zoom in :



If we zoom in a little bit more :



<u>**Here we have our typical buy setup :**</u>

---> price is still going down
---> price is reaching the #VWAP area (fair value)
---> 4 HFT signals triggered on 5 consecutives price bar (clusterring)
---> 3 double/triple combinaison of signals (HFT Buy/bull + Depth Distortion)
---> a CDV line which is mooving down then stopping on the 5th price bar.
---> a CDUDTV line which is mooving up, then spiking on the 6th price bar.
---> a cross between the CDV which is down, and the CDUDTV which is up on the 4th price bar.

<u>**What does this setup mean ?**</u>

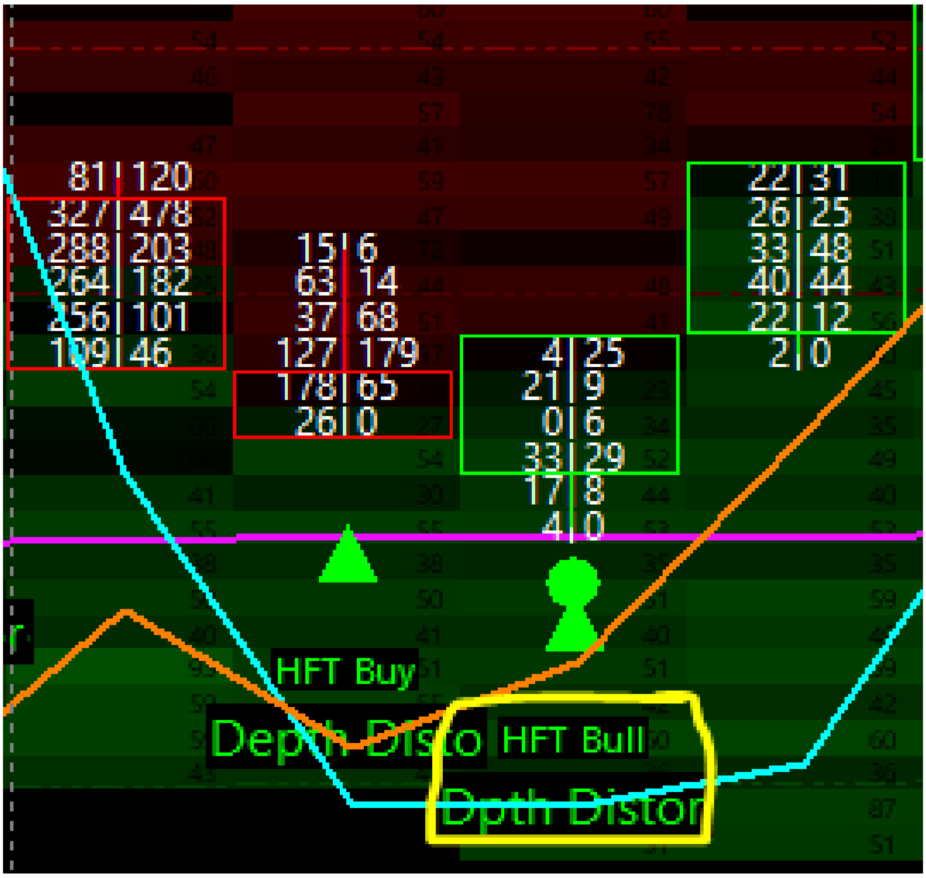
It means that we have here :

---> a down price trend visible which is joining the #VWAP area
---> a market orders flow nature which is more SELLER (there are more sell market orders transacted than buy market orders transacted on these 5 consecutive price bars)
---> a market making execution which shows to us that the market maker is manipulating the price action on the up side.

We will now enter in details on this important point.

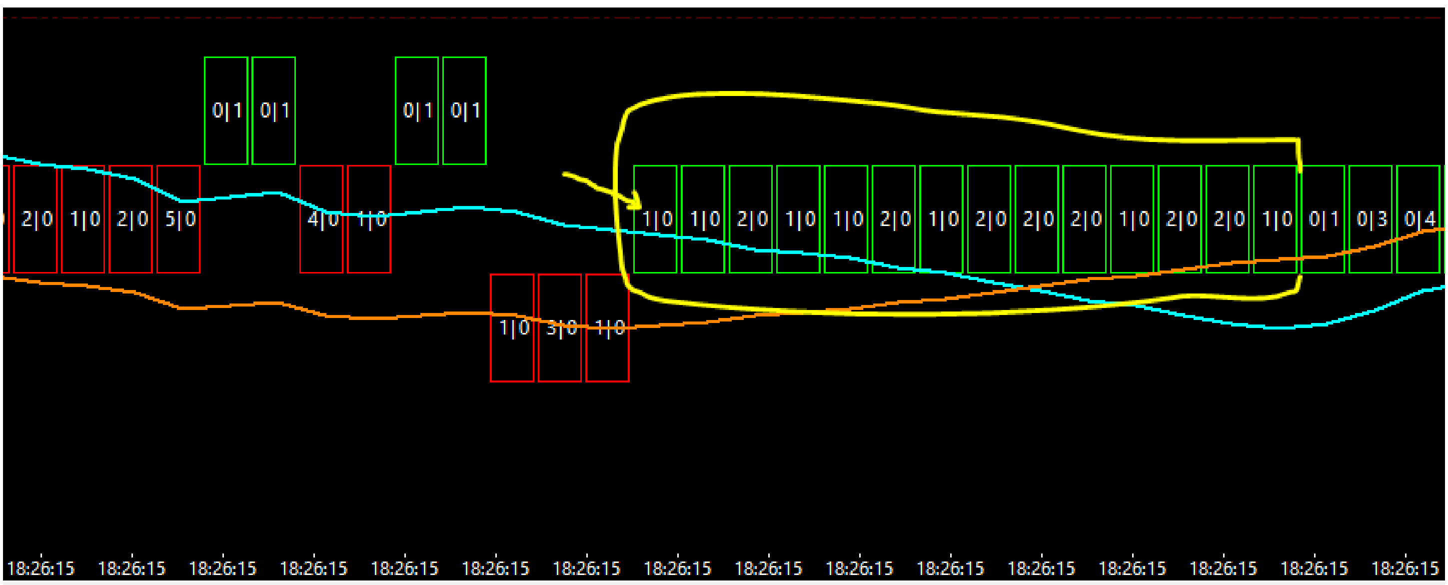
The most interesting price bar on this screen shot is this one : (the 5^{th} price bar) :

We will zoom in this price bar a little bit more :



here on this price bar of 6 tick (5 tick range bar standard) we can see that we have 4 price levels where there is more sell market orders, than buy market orders, among these 6 price levels transacted.

<u>Now, i'm going to show to you the real manipulation</u>, in deep details, and to do that, we will turn the chart into 1 trades per bar on this exact hour : 18,27,25 (6.27.25 PM CET) :



Here it is an illustration in 1 trade per bar on this same quant spread tracker chart on the 6E, where you can see the execution, of each trades which are coming from the tape ! The famous market orders flow nature that i have refered just before.

The buy market orders are set on the right side of the price bar, and the sell market orders are set on the left side of the price bar (as usual).

What can we see here ? (we have 1 seconds of time zoomed in at 6.26.15 PM CET.)

1) The first thirtheen price bar show a normal trade execution. By normal trade execution i mean that we can see here :

---> each buy market orders here are upticking the price or are executed on the last previous traded price.

---> each sell market orders here are downticking the price, or are executed on the last previous traded price.

It's a normal auction market theory, which is here measured on the market data reality.

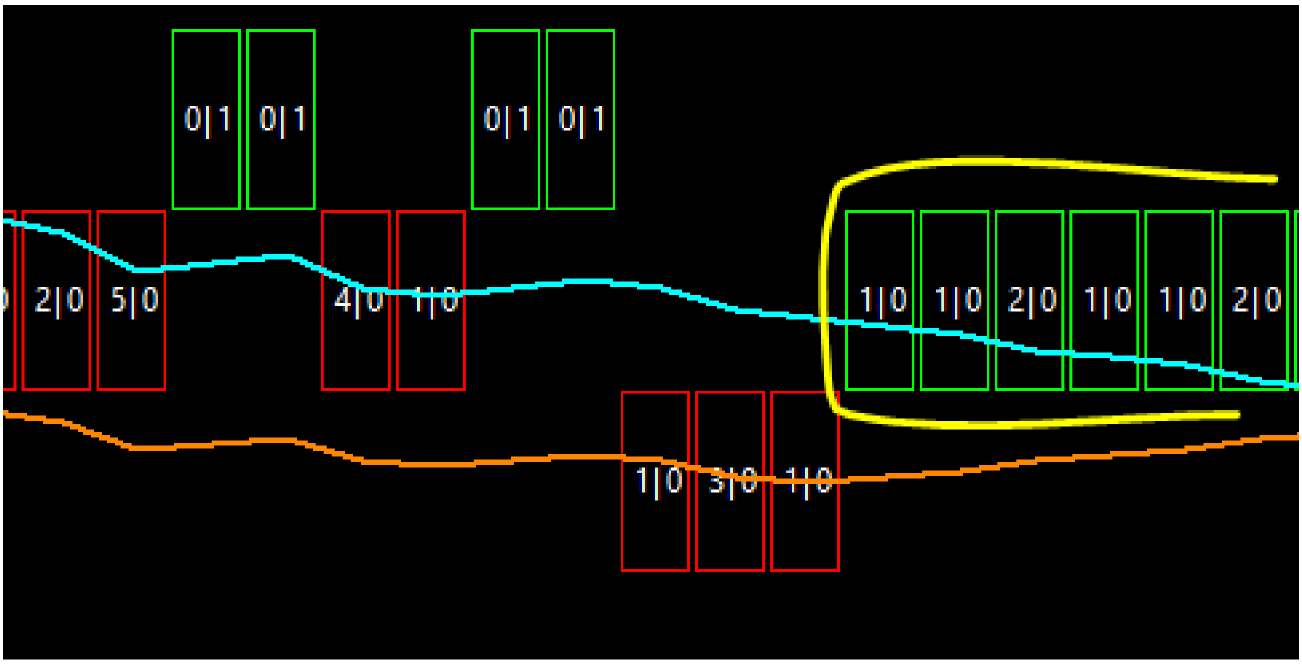
2) On the other price bar (circled in yellow), you can see here an anormal (or paranormal) execution :

By paranormal execution, i would like to say with irony, that 's a real market making price manipulation.

Indeed we can see here :

---> some sell market orders transacted (printed on the left side of each price bar)

---> and that, transacted with an uptick !



If we read these different market orders as on a tape windows (time and sales windows) :

3) We will see a kind of tape like this :

→ 2 contract SOLD	at X price	at moment (t 0)
→ 5 contract SOLD	at X price	at moment (t+1)
→ 1 contract BOUGHT	at X+1 price	at moment (t+2)
→ 1 contract BOUGHT	at X+1 price	at moment (t+3)
→ 4 contract SOLD	at X price	at moment (t+4)
→ 1 contract SOLD	at X price	at moment (t+5)
→ 1 contract BOUGHT	at X+1 price	at moment (t+6)
→ 1 contract BOUGHT	at X+1 price	at moment (t+7)
→ 1 contract SOLD	at X-1 price	at moment (t+8)
→ 3 contract SOLD	at X-1 price	at moment (t+9)
→ 1 contract SOLD	at X-1 price	at moment (t+10)
→ 1 contract SOLD	at X price	at moment (t+11)
→ 1 contract SOLD	at X price	at moment (t+12)
→ 2 contract SOLD	at X price	at moment (t+13)
→ 1 contract SOLD	at X price	at moment (t+14)
→ 1 contract SOLD	at X price	at moment (t+15)
→ 2 contract SOLD	at X price	at moment (t+16)

What has happened between the moment (t+10) and the moment (t+11) ?

→ we have a sell market orders flow continuation
→ but we have the sell market orders at the moment (t+11) which has been filled higher (at the X price).

How it's possible ? It's possible because the market maker has the abilitie to receive the market orders flow data (intentions) before the market orders flow execution (few milli second before the execution).

So the market maker will use these sub second time space to :

→ analyse the current market orders flow, and the coming market orders flow
→ exploit and identify eventually the toxic market orders flow, or the fool/retails/natural market orders flow
→ react about these market data collected before the execution, by changing his market depth structure/state on the orderbook.

In this example, the dom state change is simple :

→ removing the current best offer size on the X+1 price
→ adding a new best bid size on this same X+1 price
→ in order that the new best bid size is now set on X+1 price and the new best offer size is now set on X+2.

So the new spread here is on X+1 and X+2 price ; instead of X and X+1 price.
We have now a new bid/ask spread price which has been set exactly on the same second.

So it means that, at this moment.... even if you have a sell market orders which is coming... it will push the price higher ! Because the market maker can ! And because the market maker want !

It will push the price higher ! Just because the old existing best offer size has been cancelled, and replaced by a new fresh bid added on this same price ! It's a pure market making manipulation probably made by some HFT algo. It's not human. As human, we can not create/build this kind of event on the orderbook.

If you have understood correctly this manipulation process, you have understood correctly, one of the main criteria used to build an HFT buy/sell alert or an HFT bull/bear alert !

It's the illustration of a real market making manipulation process made by the HFT algo who are acting as official and un official market maker (liquidity provider). It's not a bug, it's a not a standard anomaly ! It's not a fantasm ! It's just a price manipulation that occur always on a very relevant key price level. The price levels where the big money is acting.

The most crazy stuff here, when we think about it a little bit much more is that :

→ we have finnally a market maker (HFT market maker) who is able to react to a market orders flow event, BEFORE than this market orders flow event is really transacted.

→ it's not a time a travel, but it's a finest concept which is very very important to understand.

→ it's just the real and main basis of the price manipulation process which occurs all day long all the time on any futures market.

This kind of manipulation are usualy done only for few purposes :

→ push the price into an interesting/relevant price area (according to a market making view)
→ pay to moove the price in the opposit direction of the market orders flow
→ start an artificial price moove, and wish for a real market orders flow follow to continue the process, and to transform the manipulation attempt, by a real price moove which will be more powerfull.

It is usually like this, that each price trend are starting ! It's here a crucial concept detailed. Extremmely important to understand correctly.