In this lecture we are going to study an aspect of frequency lines, and by extension, of supply and demand zones that work in a similar way to classic support and resistance lines. This particular feature I'm referring to is the idea of switching qualities, meaning when a line or zone switches from support to resistance or vice versa. For example, a demand zone that is violated can act as a supply zone, and a supply zone that is violated can act as a demand zone. The same thing happens with frequency lines, both inward and outward types. An inward frequency line that was supposed to work in a demand zone can work as a resistance line if it is violated. In any case, this simple idea of switching the quality from support to resistance is the common denominator. The news here is that you can use that with frequency lines and zones as well, not just with classic support and resistance lines.

In this image we can see a major flow developing to the upside in what appears to be an established running flow. Price just closed above the last major high rendering the last low as a solid price structure. If we go back a little bit, we will see that the origin of this solid low is at a level where there is an outward frequency line. It's an outward line from the transition between an up to a down vector, so it is supposed to work as resistance for price. However, since price violated the line to the upside, the quality of the outward line switched to support. When price comes back to it a bit later, it creates an immediate response with a strong fractal candle and some buying pressure on its lower tail.

Let me call your attention to an even subtler detail that even the traders who understand how these lines work will probably gloss over most of the time. Back when the outward frequency line was still acting as resistance, observe that it was able to create a bump to the downside. Nothing dramatic since the upward momentum is a lot stronger in that point, but nonetheless, we can see a bump. Notice that a few bars after the bump, price comes back up and violates the outward frequency line by closing above it. The interesting detail is that the very next bar touches the outward frequency line and closes above it, so it is now treating it as support. Depending on the surrounding context, this can be a last resort to enter in a long position so you don't miss the rest of the upward movement.

This little switching dynamic works as some sort of prelude to the more obvious fractal bar that happens later. Coming back to the more recent price action, we see now that buyers are exhausting their energy that was purely potential at the solid low. A subtle detail in this last upward vector is the appearance of a minor flow structure. Look how price is creating a higher high and a higher low, but in a lower fractal dimension. To put things in perspective, this is a higher high that is happening in a place that is already an exhaustion point for the major buyers if we consider that this is a running flow of course. The caveat here is that if this isn't a running flow anymore, this can continue going up indefinitely as well. Let's advanced price a little bit to get more information.

#### IMAGE 2

In this picture we have an interesting situation. The minor flow is throwing an expanding pivot formation, which favors the player of the second leg of the formation. In other words, buyers in the minor flow created a higher high, but immediately after, the sellers created a lower low. Since we appear to be in a moment where buyers exhausted most of their energy, it's relatively easier for sellers to create an expanding pivot formation like that because they have been accumulating energy on the way up. This is especially true in a running flow as I said earlier.

The expanding pivot also creates the possibility of an interesting line work. Using the minor solid low as a real anchor point, and the new lower low as an abstract anchor point, we can draw a down sloping line. Using that angle, we can draw a simple line extrapolation

using an abstract anchoring for the extrapolated line. Observe how the simple line extrapolation correlates with the supply zone created in the minor flow by catching the frequency of those two bars. There is also the creation of an inside bar to add more confirmation to the possibility that this is a point where sellers are going to enter the arena to exhaust their energy. If they do enter the market, the next point we should pay attention to is the major inward frequency at the major solid low. That's the next major barrier that sellers will have to encounter at this point. If we placed a short trade in here, the stop could be above the highest high in the chart because that is a solid high due to the expanding pivot formation.

If price begins to down from here and it reaches the inward frequency line near the major solid low, we have to face the question of which market player is the strongest. Let's what happens next.

#### IMAGE 3

In this next picture we can see that sellers simply annihilated the buyers that were at the inward frequency line. Those buyers weren't even capable of producing a bump to the upside. As a parenthesis, this is why it's a good idea to wait for a reaction before trading inward lines blindly. The solid major low was also completely violated with no problem. Remember also that if we are dealing with a running flow, sellers will start to lose some momentum at this point after burning a lot of energy on the way down, and the market will have to correct at some point because one market player cannot keep going forever for obvious reasons.

Similarly to other areas in the chart, once price violates the inward line by closing below it, the very next bar touches the line treating it as resistance, and then proceeds to go down. That's a confirmation that this line is still valid, but it is working with the opposite quality. We also have the outward frequency line being violated here, and that's where things can become tricky. Price violates the outward line and tests it in the same way that it did with the inward line. Notice that there is even a minor flow developing in the last three bars. Would we be able to use this minor structure to continue going down? Or are we facing the exact situation that happened at the top of the chart where the movement was too stretched out to continue?

Those are really tough questions to answer objectively, and they enter the real of pure speculation because the reality here is that we never truly know. The best we can do is to play safe and act wisely. Let's advance price a little bit more.

# IMAGE 4

Just so you can see how this game can get complicated very quickly, consider the peculiar situation at the current moment. First, price is coming back and testing the outward frequency line from the major solid low that was disproved by the sellers. The interesting thing here is that price doesn't seem to be respecting that outward line because it is closing a few pips above it, not below it. However, price is indeed at a minor supply zone, and there is not much that could prevent the market from starting a new down vector from this point. The only evidence against the short trade here would be the fact that the major down vector is already too stretched out.

We can confirm that using the blue pitchfork as a more objective layer of interpretation because the sellers just touched the lower line of the fork. On another note, notice how the current bar is showing buying pressure at the latest inward frequency line. Let's see what price does next.

# IMAGE 5

In this picture you'll be able to understand how price, with just a couple of new bars solves all of the questions about the current situation. I erased some of the lines that appeared to be irrelevant at this point to make the chart a bit clearer. The current bar is what we would call a focal point or a point were the narrative of the market and the techniques all correlate with great potential for a high-quality trade opportunity. There are four levels of interpretation in this bar.

The first level is that it is a clear hybrid bar with fractal and selling pressure qualities. The selling pressure is especially prominent in this case as we can see by the large upper wick in the bar. The second level is the fact that the tip of the upper wick touched the simple line extrapolation that was discovered a while ago. The precision adds to the contextual frame we have so far. The third level is that fact that the upper wick pierced and closed below the major inward frequency line that is now acting as resistance. It's interesting to notice how much the bar rejects the inward line by the size of upper wick.

The fourth level, and perhaps the most difficult to see, is that the bar is washing out the minor solid high marked by the short horizontal black line by piercing it and closing below it. The combination of all these four layers in one single bar is a much stronger signal than anything else in this chart. Here we can open a short trade position at the open of the next bar because we have an element of narrative and the intersection of techniques pointing to the exact same outcome. In terms of narrative, sellers disproved the major buyers from that solid low.

After stretching out the down vector and retracing a little bit to gain some energy, sellers are once again using the same level to probably create a next leg down. The level that acts as an axis here is the inward frequency line that comes out of the major solid low. Buyers were expected to show up there, but they didn't. So, when price comes back to the same level to test it on the other side, we can expect that the dominant player will make some sort of move. This is exactly what's happening in here. Notice also that we are very far away from the standard supply zone of the major solid high in the chart.

If you don't read price carefully, you will miss these details, and you would probably wait for price to retrace back near the highest high in the chart to make a short trade. However, if that happened, the buyers could have gained control of the market again, and the short trade out of the major solid high would fail. That would probably be very confusing, and it would make you question the validity of these techniques. The problem however, is not the validity of the techniques, but how deep you read price with the techniques in mind. This is a very subtle game that can easily mislead you, so it's important that you trust the techniques before really trading with them. I say that because all techniques fail once in a while, so you have to keep that in mind. Let's see what price does next.

# **IMAGE 6**

In this image we can see the final outcome of the short trade in question. One attractive observation here is that on the way down of this new price vector, we have a perfectly smooth action. Every single bar on that price vector down creates a lower high and a lower low, and that relates to another technique called dynamic frequency breakout. This technique is not only used for entry points, but it can also be used to pinpoint a moment where the dominant market player is running out of steam. However, that tends to work a lot better when we have a smooth price vector like this one. That's why I brought this up at this point in the analysis.

One of the ways to determine a target, or in this case, a point of exhaustion of the current price vector, is to observe the moment where the inward frequency gets broker again,

which is exactly what's happening in the current candle. This is the first bullish candle in the vector, the first time a higher high is produced, and the first time a higher low is produced, so we have a triple confirmation in this dynamic frequency breakout. This is a nice point to get out of this trade even though the risk reward ratio is less than 3, but still higher than 2.

We must not forget also that when we have a smooth dynamic frequency breakout like this, we can play for the opposite side. The narrative element that would support this is once again the fact that sellers have exhausted a lot of energy on those two vectors down, so it's not unlikely that buyers pick up the market from here. You will notice that this type of situation is not unusual in a running flow like we have in this market. If we enter a long trade position in here, the stop would have to be placed below the extreme of the down vector, and the buyers would have room to breath at least until the inward line from the last short trade. If price breaks up from that level, the next barrier would be the larger supply zone in the highest high of the chart.

Even if price stops at the first barrier, we would have the possibility of a 1 to 2 risk reward ratio trade, and if price goes to the second barrier, the potential rises to a 1 to 4.5 risk reward ratio. Either way we have a valid trade. Let's see how the market responds.

#### IMAGE 7

In this final picture we can see how price reverses at the smooth transition of the dynamic frequency breakout. Notice that sellers make a shy attempt to break the dynamic frequency to the downside again, but buyers respond quickly by creating a hybrid bar with the outside and fractal qualities. A clear indication of who has the control of the market for the next vector. This is also a very clean vector as most bars are creating higher highs and higher lows. The first barrier for price, which is the inward frequency line from the last short trade, is able to create a bump down and some noise in the up vector, but it's not enough to break the dynamic frequency. Buyers respond once again with a hybrid bar up with fractal and pressure qualities.

This last vector represents the importance of paying attention to both sides of the market simultaneously, and to always wait for price to create some sort of reaction when it reaches an important level so you can make better and safer decisions. Even though this interpretation of smoothness in the price vectors is not as easy and solid as lines for example, there is tremendous potential from it. This is always a type of trade to keep in mind. Let me try to increased the level of detail in here a little bit more just so you can see how there are many opportunities to go long in this last vector.

All you have to do to see these opportunities is to observe the Hausdorff dimension implied in the up vector. In other words, the tiny flow that is implied behind the roughness of those bars. In the tiny flow, you'll see that price comes back to the standard demand zone many times, and just keeps going up until the major barriers where the presence of more powerful sellers will disturb the tiny flow a little bit. Notice how in the first barrier, the tiny flow forms an expanding pivot implied in the candles, but at the same time, in the individual bar level we can see a hybrid bar pointing for a continuation of the up vector.

You have to think about these things at the same time you think about the inward frequency line that could generate another short trade. If you wish to remove the subjectivity of paying attention to both sides, you can always play both sides and take advantage of the Parrondo's paradox in game theory where a combination of losing games can be turned into a winning strategy. In other words, by playing both sides with good risk reward ratios at a market edge, one of the trades will usually succeed, and even with a 50%-win ratio in the

situation, you will g ambiguity.	get out of it with a	profit, and with a dr	ramatically reduced	perception of