How do you overcome a tremendous reach advantage?

Competitors come to the octagon with all sorts of advantages. Yoel Romero is a freak athlete, Rhonda Rousie had elite judo, Askren has his wrestling, Gary Tonnan has his jiu jitsu, and Israel Adesanya has his elite striking. This weekend we will see Jon Jones vs. Dominick Reyes, and there are a lot of questions to be asked. Does Reyes have the experience? How will Reyes handle the pressure of the big stage? But most of all how will Reyes deal with Jon Jones and his huge reach advantage?

The bout will certainly be chaotic, and hopefully it will last longer than last month's main event. To tackle the math of who will win and how it will happen is difficult to say the least. The current vegas odds are significantly in the Champs corner with the odds being around -450 on most of the major gambling websites. Those odds reflect Jones record, will to win, his nearly perfect record, the long list of high level opponents he has taken down, and his notorious reach, one of the longest in the sport. So we must ask ourselves, what should Dominick Reyes do to overcome Jones’ 7.5” reach advantage?

Let’s look back at the stats to see what athletes have done to overcome this disadvantage. The three strategies that you’ll hear the most to overcome a reach disadvantage are:

* More combinations
* Take down your opponent
* Leg kicks

With **more combinations** the idea is simple, if you can’t reach your opponent as well you need to throw combinations so the first strike or two will set up the following strikes that land. If this is the case we’d expect to see a higher total strike count for fighters with a shorter reach.

W\_tot\_str graph

As you can see, winners with a reach disadvantage do not throw more strikes. In fact they throw fewer strikes. In the average bout the winner throws 115 strikes; when the winner has a significant reach disadvantage that number drops by 21 fewer strikes, the winners only throw 94 strikes on average. So clearly more combinations is not the strategy to go with.

The **take down** idea is that from the ground strikes are not as effective, and shorter limbed athletes have their own advantages. Obviously in this case we’d expect to see more takedowns and more ground strikes. This simply is not the case. Whether a fighter has a reach disadvantage or not the average number of takedowns is three. From the ground the difference is three attacks per bout. When the winner has a significant strike disadvantage on average they throw only three fewer strikes. So with the same number of takedowns and nearly the same amount of strikes we can rule out taking the fight to the ground.

Lastly with **leg kicks** the idea is that you take away your opponents mobility so that later in the fight the short armed fighter can easily create angels to land the required strikes. In this case we’d expect a higher volume of leg strikes. Very similarly to the take down, when the winner has a significant reach disadvantage, the number of leg attacks is nearly identical. So clearly, leg attacks are not the secret sauce either.

So what is the strategy? On striking stat after striking stat the numbers indicate a more cautious fight by the winner with a reach disadvantage. As you can see below, the biggest difference is how they win the fight.

Bar chart

When the winner has a significant strike disadvantage the biggest takeaway is that the most likely means of winning reverses from the average fight and it’s a significant reversal. When the fighter has a significant reach disadvantage they may not strike as much, but they make the strikes that land count.

The 7.5” reach advantage that Jones possesses for Saturday night is not the greatest reach advantage, but it is an outlier. The average reach advantage for a winner in a UFC bout according to our stats is a quarter of an inch. 64% of fights see a winner with between a 3” disadvantage and a 3.6” advantage. 2% of fights see a winner overcome between a 6.3” and 9.6” reach disadvantage . So Mr. Reyes when you get in the cage this weekend with Jon Jones, fight carefully, pick your punches, and make them count. Just like pettis did to Wonderboy and just like you have done many times before aim precisely at the button and make the shot count when you get the chin.