Another perspective on the Interblock experiment results
## By Mr. S

First off, I want to make it clear that I agree with Mike that the results of the final experiment do not rise to the level of "proof" that there is anything irregular going on.

However, there is a way to view the data where I believe a conclusion can be drawn that the possibility is very real that Interblock is actively steering the outcome away from late section bets.

A common technique for analyzing Roulette data is to smooth the data so that the graphs represent the performance of sections; not just individual numbers.

For example, here are the 299 original experiment results shown as a graph of the individual offsets. 0 represents the center of the bet. +1 = 1 pocket forward, -1 = 1 pocket back, etc.

Rather than a scatter graph of data counts, each line represents a standard deviation, either + or -. There is a line for every pocket on the wheel, with 0 being the chosen "random" number to be bet. +1 = the next number physically on the wheel, and so forth.


Bet vs. Outcome (299 Spins - Arc Size 1)
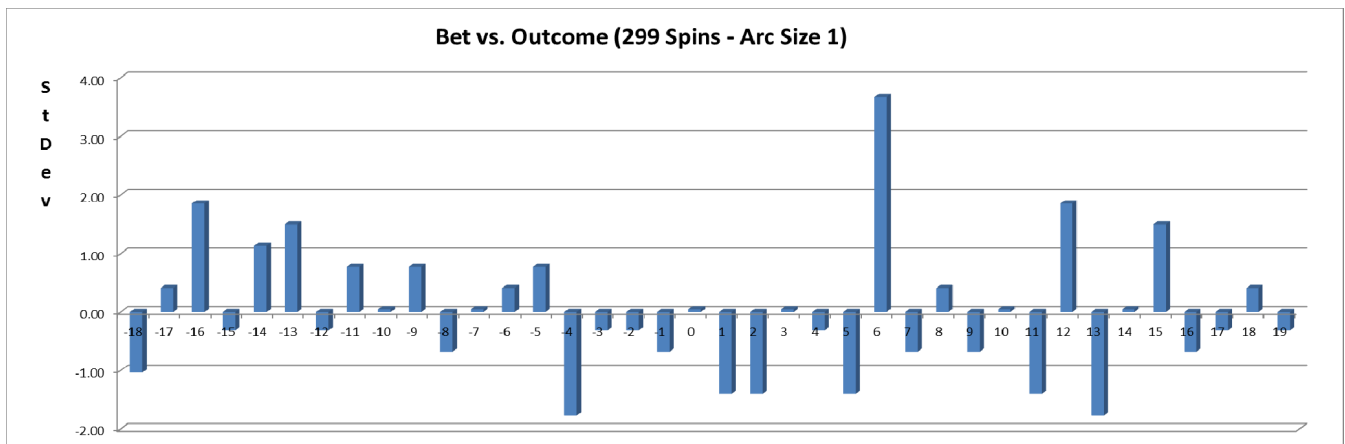
Looks fairly random, doesn't it? Now, let's look at the same data smoothed to a 7 number arc. In this graph, each line represents the standard deviation of a 7 number contiguous bet. The line at 0 represents the hypothesis bet; or the 7 number bet centered on the random number chosen by the experiment.

Bet vs. Outcome (299 Spins - Arc Size 7)
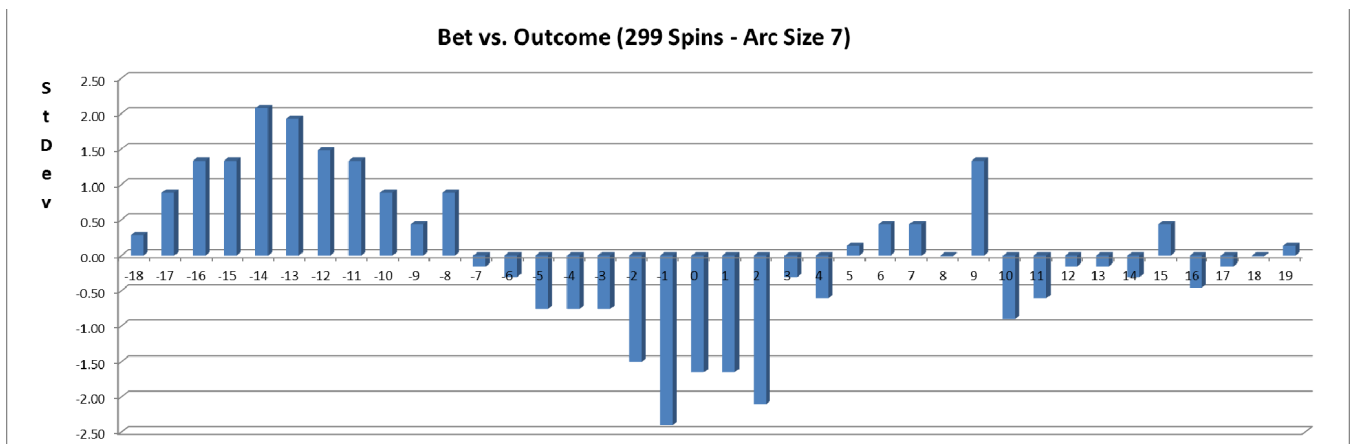
By smoothing the data, it is easier to visualize exactly what is going on. It's kind of a way to separate the signal from the noise.

Let's compare the 299 sample to the 1,204 spin second experimental sample using the 7 number graph:

Bet vs. Outcome (1204 Spins - Arc Size 7)
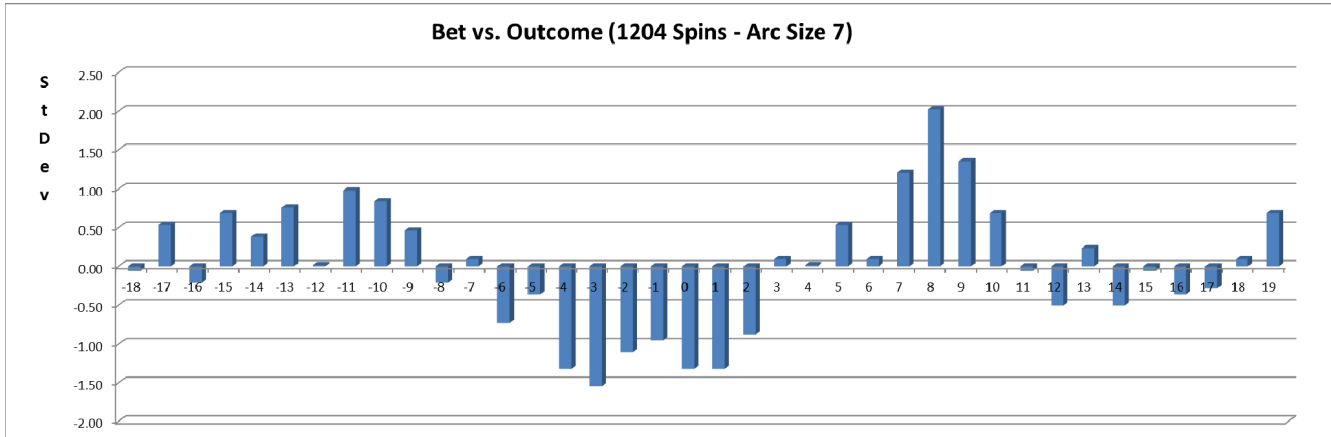
In both instances, the supposedly "random" bet was near the center of the absolute worst possible section one could place a bet.

The correlation between these two data graphs is significant: **64%**

Here is the raw data for the two graphs. You can cut/paste in to Excel and use the CORREL function to verify.

Offset	299	1204
-10	0.8833	0.8334
-9	0.4358	0.4617
-8	0.8833	-0.2074
-7	-0.1610	0.0900
-6	-0.3101	-0.7278
-5	-0.7577	-0.3561
-4	-0.7577	-1.3225
-3	-0.7577	-1.5456
-2	-1.5036	-1.0995
-1	-2.3987	-0.9508
0	-1.6528	-1.3225
1	-1.6528	-1.3225
2	-2.1003	-0.8765
3	-0.3101	0.0900
4	-0.6085	0.0157
5	0.1374	0.5361
6	0.4358	0.0900
7	0.4358	1.2051
8	-0.0118	2.0229
9	1.3309	1.3538
10	-0.9069	0.6847
11	-0.6085	-0.0587
12	-0.1610	-0.5048
13	-0.1610	0.2387
14	-0.3101	-0.5048
15	0.4358	-0.0587
16	-0.4593	-0.3561
17	-0.1610	-0.2817

| 18 | -0.0118 | 0.0900 |
| 19 | 0.1374 | 0.6847 |

It is my contention that the shape, and correlation of the graphs is significant.

Now, let's look at the combined experiment results:

Bet vs. Outcome (1503 Spins - Arc Size 7)
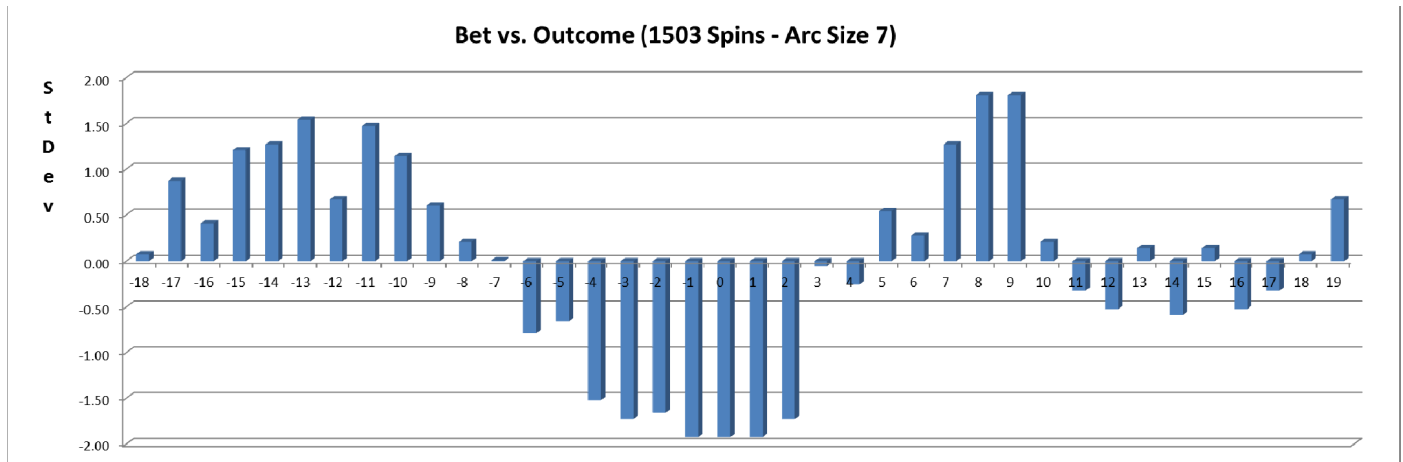
Yes, the significance of the data is less than 2.0 standard deviations. But, the visual evidence is strong that something is going on; What are the chances that someone betting 1,503 spins would end up betting into the absolute worst possible section, with a fairly nice bell shaped curve?

Could this occur simply by bad luck? Of course. But, if you have played roulette seriously for any amount of time, you know that bad luck really doesn't look like this.

This experiment was initiated because of data I took to prove the hypothesis to myself. Almost 2,500 bets with each bet greater than or equal to $20, and spread over six different wheels in Las Vegas. Here were my results:

Bet vs. Outcome (2446 Spins - Arc Size 7)
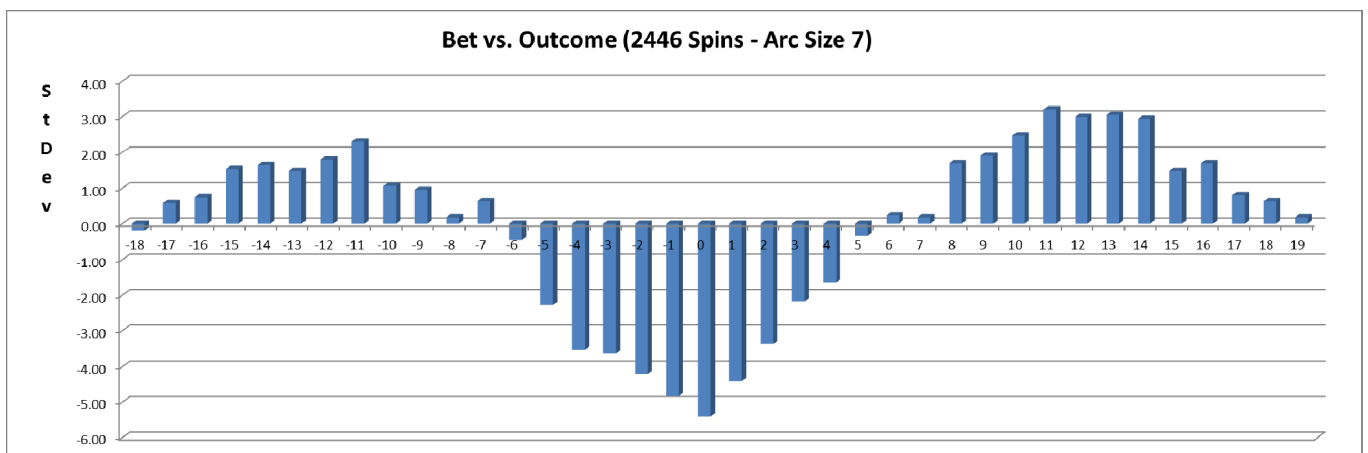
This is data that Mike cannot vouch for, but it was the hypothesis for conducting the experiment. I took all of this data personally (circa June, 2016). You can choose to believe me or not. I'd like to think I'm a reputable AP and there are other reputable people who will vouch for the data. But, the bottom line is that Mike did not witness the taking of this data as he did with the experimental data.

The correlation between the combined experiment results, and my original data is **73%**. Which is quite significant when you think about it.

Here is the graph for all data combined (my original data + the experimental data). Remember, these just aren't observations – this data was derived from very real and very significant actual bets:
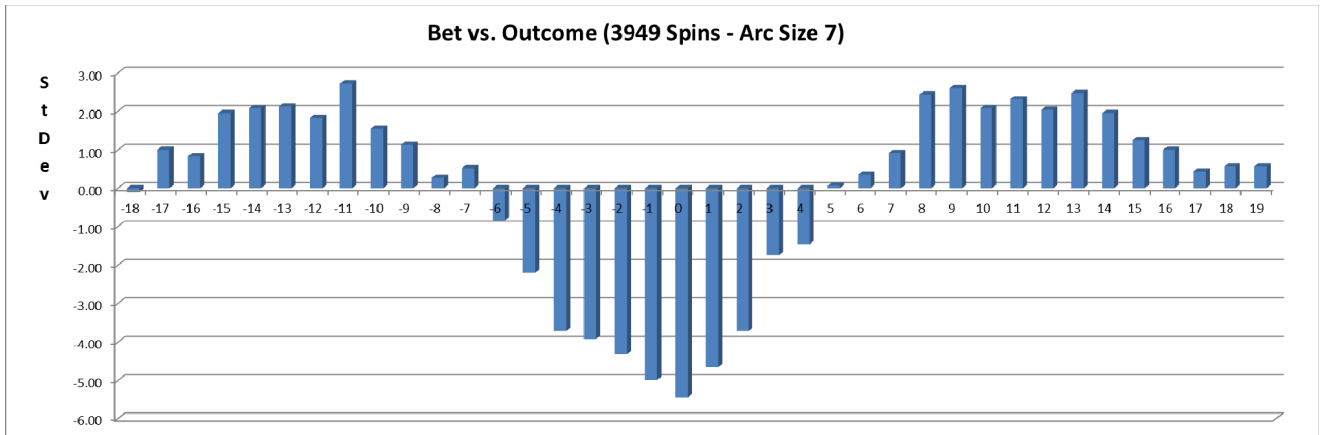
Was Interblock actively steering the outcome away from my bets? I claim yes. Over almost 4,000 actual bets, my bet was EXACTLY CENTERED on the absolute WORST possible section to bet, to a significance of over 5.0 standard deviations.

So, what would explain the relatively "weak" results of the experiment?

Here is my theory. And, remember – that's just what it is: A theory.

My original data was taken, for the most part, on older generation Interblock machines. My experience on these machines is that once the machine felt "threatened" by an advantage player that it went into an extreme counter measure mode that appeared to steer the outcome away from the bet on virtually every spin. As a result, the significance of the effect manifested over a relatively small sample size (2,446 spins).

Our experiment was performed on newer Interblock models and there is evidence (at least to me) that Interblock may have been aware of the extreme nature of these counter measures, and has since dialed them back. From visual observation it appears (to me) that when threatened the machines no longer counter every spin, but only about one spin in three. Just enough to counter the late bets and make it look like bad luck. But, not enough to manifest significantly in a small data set.

I would encourage the reader to view the data under the lens of the smoothed 7 number arc, and consider the correlation of the data sets. Combine this analysis with Mike's.

Then, draw your own conclusion.