

STATISTICS DON'T LIE

I started generating deals for the Bridge Center in late 2012 on my trusty Dell Laptop. I became sensitive to complaints about many of the hands at the same time. I heard constant complaints about the hands before that time but I ignored them. My concerns grew as soon as I got involved. If I generated the deals then I had responsibility. I tossed and turned all night.

The complaints seem to focus on things like:

North/South gets all the points. (Usually made by those playing East/West.)

East/West gets all the points. (Usually made by those playing North/South.)

There are too many bad trump breaks. (Usually said shortly after going down.)

There are too many 7,8,9 Card suits.

I've never seen so many voids.

I use a popular dealing program, Dealmaster Pro Version 6, to generate the deals in a form compatible with our dealing machine. The program claims these are random deals. I do not set any switches during the generation to produce anything other than random deals nor do I know of any such options. I do not review the deals to select hands in any way.

I was interested in investigating further so I recently generated statistics for all deals in Series AA, BB, CC, ...,MM. Each of these 13 series consists of 36 sessions; each session has 36 deals. That is $13 \times 36 \times 36 = 16,848$ bridge deals or $4 \times 16,848 = 67,392$ bridge hands.

First I counted high card points, (actually I had my laptop do the counting) The average HCP for each direction:

North	10.011
East	10.029
South	9.947
West	10.013

Obviously very close to the expected average of 10 HCP per hand.

Then I counted the number of voids occurring. We would expect a void to occur on about 1 hand in 19 or on 3,547 hands in our dataset. I counted 3,418 voids in the dataset.

I also counted 7, 8 and 9 card suits. We expect a 7 card suit to occur about once in every 28 hands or on 2,407 hands. I counted 2,405 in our dataset. An 8 card suit should occur about once in every 213 hands or 316. I counted 279 in the dataset. A 9 card suit occurs about once in every 2703 hands or 25 in the dataset. I counted 23. There were no 10 card or higher suits.

I see no justification for concern with our deals. Studies have shown that riffle shuffling is far from perfect. Randomness requires in excess of 7 good riffle shuffles, more than I usually do (I'm lacking in both quality and quantity.) Based on this admittedly cursory investigation, it appears the hands are random. Complaints remain part of the game so if it makes you feel better then go on complaining. I will sleep peacefully.