

## BRIDGE SOFTWARE TO ANALYSE SITUATIONS PART I

by David Stern

When I learned bridge some (ahem) 40 years ago, it was widely taught that you needed 26 points to bid and make 3NT and 4♥/4♠ and 29 points for 5♣/5♦. But over the years a few things have happened to lower these benchmarks. The most important is that the quality of declarer play has improved dramatically, so why therefore hasn't defence equally improved?

I would love to be able to answer these questions and I certainly invite written submissions on the subject.

However, in the meantime and to test the theory, I used a piece of software called Bridge Browser, which was written by Stephen Pickett of Canada. What this allows one to do is to call up all of the results of millions upon millions of hands played on OKbridge when the software was first developed and more recently on BBO and to statistically analyse them. Further you can analyse by excluding players who do not have a particular rating. (<http://www.microtopia.net/bridge>)

So I called up ten thousand hands played over a period of time in 3NT at IMP scoring (this took the computer some twenty hours) including doubled contracts, regardless of vulnerability, where the declaring side had exactly 24 HCPs and found that the average number of tricks made when holding a combined 24 HCPs was 8.65. I can report that the standard deviation of the number of tricks was a mere 0.01 indicating that the variances from this 8.65 tricks was exceptionally low.

Some may say that bidding 3NT with a combined 24 count is therefore questionable. HOWEVER the average gain by doing this at IMPs was 1 IMP, making it a very solid action indeed and if you don't bid it then you will likely be a long-term loser. This might seem like a small difference from the 26 points which we were taught. However, your side is now holding 60% of the points rather than 65% or 8% less.

As a further check I also ran three thousand hands with a combined 23 HCPs to see if there was a significant difference and there was. The average number of tricks was 8.25, but interestingly, even doing this gained 0.44 IMPs per board on average. I don't, however, recommend this as a long term strategy unless you are an excellent declarer player.

So just in case you haven't been told today – bid'em up!!!!

## ANALYSE THIS PART 2

by David Stern

I recall some years ago having discussions with Tim Seres about an auction where opener opens 1NT, responder transfers and then bids 3NT offering the opener the option of 3NT, or four of his major. A further discussion involved whether to play four of a major every time we were known to have a 4-4 major fit. On this theme Ron Klinger and I have been engaged in a similar dialogue for some months now.

In these situations I like to refer back to my random hand generator and Deep Finesse to provide me with some clues, which I would like to share with you. I ran 5000 hands, which is a sizeable sample, but one should bear in mind that the analysis assumes perfect defence and perfect declarer play and some may argue about the ability to defend better against no trumps than suit contracts.

North 15-17 1NT opening with 4-(3-3-3)	4♠ makes 84% of the time
South Game Values with 4-(4-3-2)	3NT makes 87% of the time

Note: where bridge writers write 4-(3-3-3) it means exactly four spades and the other cards in any combination of the cards in bracket. So 4-(4-3-2) means 4 spades and the remaining suits in any form of 4-3-2

North 15-17 1NT opening with 3-(4-3-3)	4♠ makes 61% of the time
South Game Values with 5-(3-3-2)	3NT makes 75% of the time

So going back to the opening discussion, this analysis suggests that one should not convert 3NT to four of a major when partner transfers and then offers a choice of contracts and you hold a 4-3-3-3 with three card support for partner.

Moving to perhaps the more obvious analytical conclusions:

North 15-17 1NT opening with 4-(4-3-2)	4♠ makes 89% of the time
South Game Values with 4-(4-3-2)	3NT makes 82% of the time

North 15-17 1NT opening with 3-(5-3-2)	4♠ makes 82% of the time
South Game Values with 5-(3-3-2)	3NT makes 75% of the time

So the summary is that whenever there is a possibility of a doubleton opposite a doubleton, four of the major is a clear winner but very flat opposite an invite suggests a pass of 3NT to be best.

I guess that I could analyse the holding in the doubletons to make the analysis more meaningful but I'll leave that one for another day.