4th EUROPEAN OPEN BRIDGE CHAMPIONSHIPS Sanremo, Italy

BRIDGE SOFTWARE TO ANALYSE SITUATIONS PART 1

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 HCP**s 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 per board**, 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 HCP**s 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, of 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 ♠ and the other cards in any combination of the cards in bracket.
So 4-(4-3-2) means 4 ♠ 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.

ANALYSE THIS, PART 3

by David Stern

You know the hand. Partner makes a 20-22 HCP balanced 2NT opening and you are looking at this miserable collection:

♠ 9 7 6 5 2 ♥ 8 3 ♦ 9 6 5 ♣ 6 4 2

What should you do? This question was asked of me some time ago and I analysed it in detail by running 5,000 hands through a random hand generator and Deep Finesse. Of course, I mentioned this in the Bulletin Office and it sparked some discussion.
I was sure that I would be able to find my original work as I have every data file going back to 1988 on my computer but of course I couldn't find it so I ran the analysis again. My computer slaved away for many many hours as I increased the data set to 10,000 hands.
The constraints for opener's hand were 20-21 with any 4-4-3-2, 4-3-3-3 or 5-3-3-2 or any 22 without a five-card suit.

Tricks	**No Trumps**	**Spades**
0-6	76% (7600)	14% (1389)
7	24% (1654)	86% (3253)
8	**7% (665)**	54% (3545)
9	1% (76)	**18% (1543)**
10	0% (5)	3% (260)
11	0% (9)	0% (9)
12	0% (1)	0% (1)
13	0% (0)	0% (0)
Total Tricks Available	58,350	75,837
Average Tricks per Hand	5.84	7.58
Av. N. of Undertricks	**2NT — 2.16**	**3♠ - 1.42**

Percentages are Cumulative

Clearly transferring is a long term winner. There are of course occasions where partner will

super-accept but even then you can make 4♠ or more 2.7% of the time, adding a nice bonus when you do get to game.
The obvious caveats apply:

- Deep Finesse's analysis is double dummy so finding every honour card and picking all singleton honours offside;
- Deep Finesse always finds the optimal lead against every contract no matter how obscure it may be;

It would be interesting to have people's views on whether leads against no-trumps tend to be more accurate than against suits, which would again skew the results. More analyses coming in the next few days. If you have any suggestions for analysis, please leave a note in the Daily Bulletin Office.

THE LAST WORD —3NT OR FOUR OF A MAJOR ANALYSIS

by David Stern

Those who know me well may believe that I generally like the last word (And the first and the second…Ed). And so it may be with the discussion of **what to do with any 4-3-3-3** and game values **opposite a 15-17 1NT** opening.
An unsigned article in the Bulletin suggested that the analysis may in fact be skewed by the possibility of the 1NT opener holding a five-card major and that he would always bid the hand according to time-honoured principles of Stayman etc.
I set my computer, and now perhaps people may understand why I bring a second one to bridge tournaments, on the slavish task of analysing North holds any 4-3-3-3 with game values with South holding a 5-3-3-2 with the major being the five-card suit and here are the conclusions.

	No-Trumps		Spades	
<7		26		2
7	99.5%	189	100.0%	19
8	95.7%	665	99.6%	204
9	**82.4%**	1488	95.5%	1109
10	52.6%	1573	**73.3%**	2190
11	21.2%	879	29.5%	1292
12	3.6%	179	3.7%	183
13	0.0%	1	0.0%	1
Total N.of Tricks	47,745		50,078	
Average Tricks Hand	9.55		10.01	

I must thank Herman De Wael, who has pointed out two significant issues with my earlier analysis. Firstly, the analysis is generally skewed towards teams and this is certainly correct.
However, more important, he directed me to analyse how many hands declarer

can make 3NT and NOT make 4♠ and vice versa,
how many times 4♠ will make and 3NT will fail.

The software that I use has in fact got a module for this analysis built into it. In the analysis above there you will:

- **Make 3NT** **793** times on hands where you do not make 4♠; and
- **Make 4♠ only** **339** times on hands where you fail in 3NT.

So with any 4-3-3-3 it seems best to simply bid 3NT than Stayman for four or five card majors and hope to play a team with our anonymous contributor at the other table.