

# Bridge Theory for Practitioners

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## 33. Simulations of Opening Leads, Part II

In a previous column on defense (column #16, to be precise) I wrote about computer simulations carried out by David Bird and Taf Anthias on opening leads in NT contracts. Bird and Anthias have recently published another book on opening leads --- this time on suit contracts. They simulated 5000 deals for each problem with all deals being consistent with the bidding. They fix one hand in their simulations (and sample other 3 hands) and this is the hand that is given to the reader to work on. Finally they computed percentages of success in IMPs and number of tricks in matchpoint from these 5000 trials. Errors estimated by the authors to be less than 1% for any figures given in their tables. I translate that comment in the following way. When they write 20% chance of beating a contract, this means the actual chance tends to lie between 19.8% and 20.2%. Similarly, when they say this particular defense creates 3 tricks in matchpoint, the actual number tends to lie between 2.97 and 3.03.

Why do we care about these computer simulations? Let me first go about the alternative. In a typical alternative learning situation, we contact a local *expert* after misplaying or misdefending a hand and ask for his or her expert comments. Experts are however limited by their own experience and / or by their analysis skills. So one does not know how much weight to put to *expert* comments like “I am looking for a partner who does not lead away from the Jack”, or “only beginners lead from a worthless doubleton”, etc. Computer simulations, on the other hand, provide us with unbiased data after sampling a very large number of hands. I must note that data from computer simulations do have their own problems and peculiarities as often the analysis is done on a double dummy basis.

Without further ado (by the way, avoid *eggcorn* here and don't use adieu instead of ado; ado is fuss, adieu is goodbye), let's work on some examples from Bird and Anthias' book.

### Example 1.

The opponents bid 1♠ – 3♠ – 4♠. What do you lead from:

♠ 9 4   ♥ 9 5   ♦ A 9 7 6 2   ♣ J 7 5 4

Here are the results from 5000 sampling of similar hands:

	Chance of beating the contract (IMP)	Creates number of Tricks for the Defense (MP)
♠ 4	12.7 % of the time	2.42
♥ 9	17.6 % of the time	2.55
♦ A	16.3 % of the time	2.61
♣ 4	14.7 % of the time	2.53

The doubleton ♥ is best in IMPs. In matchpoint, however, the lead of the ♦ A is the best. So counter intuitive! An ace lead from an A-empty fifth holding? Any local expert will have a heart attack! Why does the Ace lead work so much better in MP? Because, it allows you to keep the lead, take a look at the dummy, and decide what to do next in an informative fashion.

### Example 2.

This time we have a competitive auction:

1♠    2♥    2♠    3♥  
3♠    all pass.

What do you lead from:    ♠ J    ♥ A Q T 7 2    ♦ J 6 3 2    ♣ A 4 3

What a hand to lead from! Every choice looks bad. Here are the results, however:

	Chance of beating the contract (IMP)	Creates number of Tricks for the Defense (MP)
♠ J	35.9 % of the time	4.17
♥ A	29.4 % of the time	4.08
♦ 2 (or 3 if you play 3 <sup>rd</sup> -5 <sup>th</sup> )	40.2 % of the time	4.26
♣ A	35.4 % of the time	4.18

Note that Ace lead from the suit that has been bid and raised is the *worst* available. Note also that the diamond lead is the best. There is no need to fear leading away from a jack. In hand after hand, Bird and Anthias' simulations show that the dangers of leading away from the Jack as planted by local experts on our minds are exaggerated; leads from unsupported kings and queens are far more likely to give away a trick.

**References: David Bird and Taf Anthias: *Winning Suit Contract Leads*, Masterpoint Press (2012).**