

# Bridge Theory for the Practitioners

Amit Chakrabarti

## 14. Loser Count Math: Part I

In my last column I talked about defensive agreements, so the *principle of variety* demands that this week's general topic be bidding. Much of modern expert bidding technique is based on the so-called "Loser Count" methods. I need to introduce this technique to you before we can have any serious discussion on bidding.

### Counting Expected Losers in a Suit:

The first approximation one makes in this counting method is that suit breaks perfectly. Thus, a suit holding of AKQJ has zero losers and so also a suit holding of AKQ2 or AKQ32.

In addition, if a suit has xxxx holding, it will have 3 losers and so also a suit of holding xxxxx. Thus the 4<sup>th</sup> card of a suit is a winner and any card beyond the 4<sup>th</sup> card is also a winner. Based on this approximation, the **maximum** number of losers in any suit holding is 3.

The loser count of a suit cannot be more than the number of cards in it. Thus a suit of 32 holding has only two losers and a suit of 432 holding has only three losers.

It will be immediately apparent to you that this counting technique can only work in suit contracts and not in notrump contracts.

In summary, this is what we need to know to calculate the number of losers in a suit:

- A cannot be a loser.
- K cannot be a loser, unless stiff.
- Q cannot be a loser unless stiff, or Qx type presence (where the x can be anything including an Ace).
- 4<sup>th</sup> card in suit is always a winner and any card beyond the 4<sup>th</sup> card is always a winner.

Let's look at some examples of how to count losers in a suit:

- Axx2            A is a winner and the 4<sup>th</sup> card is a winner (perfect suit breaking approximation). So this suit has 2 losers.
- Ax2            A is the only winner. So this suit has 2 losers.

- AKx            A, K are winners; one loser.
- AKx2            A,K, and 2 are winners; one loser
- AQx            A is a winner; Q is a winner (not stiff, not Qx holding); one loser
- AQ            A is a winner, Q is not; one loser.
- AQ92            A is a winner, Q is a winner, 2 is a winner; one loser.
- AQ952            A is a winner; Q is a winner; 5 is a winner (4<sup>th</sup> card), 2 is a winner (beyond 4<sup>th</sup> card)

### Example Hands with Loser Counts

Consider two typical 1S opening with hands like

a) AK765            Q75            KQ82            9

and,

b) AK765            Q75            K98            Q8

Both hands have 14 points but anyone who has played Bridge for more than two weeks knows that the hand a) is more valuable. Does loser count math agree with this known fact? Let's check.

How many losers do these hands have?

a)  $1 + 2 + 1 + 1 = 5$

b)  $1 + 2 + 2 + 2 = 7$

Obviously, hand one is way more valuable as it has less number of losers.

A typical minimum opening hand has 7 losers; they tend to have 12-14 counts but not necessarily. 4333 shape hands are notorious to have a lot of points and no tricks in suit contracts. Loser count math reveals that too.

For example, a hand like

AK87      KT6      QJ7      KJ4

has 17 points yet 7 losers. These types of hands are often not productive in suit contracts. So are hands with 5332 shape and with honors in short suits:

AJ874      KJ6      QJ7      KJ --- 16 count yet 7 losers.

We open these types of hands 1N instead of 1S. More on this in later columns.

### **The Principle of Loser Count:**

**Expected Number of Tricks in a SUIT contract with a fit = 24 - (number of losers in your hand + number of losers in partner's hand)**

(The reason it is 24 and not 26 is that some losers are double counted when the hand is played out and must be discounted properly)

Thus, if you have a minimum opening hand with 7 losers and responder has a below opening hand with 8 losers, the principle of loser count will predict that you will make

$24 - (7+8) = 9$  tricks i.e., you should not be in game in a suit contract.

That's a pretty cool thing to base your bidding on. In my next column on bidding, I will go over the principle of loser count in great detail with lots of examples.

### **References**

- 1. Ron Klinger, "The Modern Losing Trick Count".**