

PREFACE

THE WINNING TRICK COUNT- AN ACCURATE AND VERY SIMPLE EVALUATION PROCEDURE

WINNING TRICK COUNT - the Winning Trick estimate of the number of tricks which you and your partner can expect to make in a suit contract is quite simply your joint holding of honour cards (A's; K's, and Q's) added to your combined holding of trumps minus six.

No corrections, no adjustments!

That's all you need for an exceptionally accurate measure of your partnership prospects, which not only has a significantly broader scope than the Losing Trick Count, but one which also adds a completely new dimension to conventional bridge-hand evaluation, by providing precisely the same Total Trick Count as the Law of Total Tricks.

A procedure, moreover, which can readily be adapted to provide an effective and quite unusually easy bidding aid for that substantial fraction of bridge players who routinely use their point count as an initial measure of their hand strength. On a wide range of hands this enables them to make an immediate forecast of their trick-taking prospects (and in many competitive auctions, those of their opponents) as soon as a prospective trump fit has been established.

INTRODUCTION

My aim in the account, which follows, is to propose the *Winning Trick Count* as a novel, powerful and unique bridge-hand evaluation procedure.

- *Novel*, because it offers the choice of basing the evaluation quite simply on the joint holding of honour cards and trumps as defined in the Preface above; or even more simply when playing the hand at the bridge table, on the partnership combined point count and the expected quality of the trump fit.

- *Powerful*, despite its simplicity and its accuracy, because it has a significantly broader scope than conventional procedures such as the *Losing Trick Count*.

- *Unique*, because it adds a completely new dimension to conventional bridge-hand evaluation, by providing precisely the same *Total Trick Count* as the *Law of Total Tricks*.

The detailed account of these far-reaching claims, which are supported by an extensive analysis of several hundred real deals, is broken down into three distinct sections, as outlined below:

On the other hand, those readers who are not particularly interested in such a detailed commentary on bridge-evaluation, but who would nevertheless welcome an effective and quite unusually simple bidding aid, should just go directly to the description of the *Point-Count Balance* variant of the *Winning Trick Count* in Chapter 5.

In which case, they will see that the modified and somewhat unorthodox evaluation procedure which is described there is just as precise and broad ranging as the basic *Winning Trick Count*. They will also see that it is particularly suited to that substantial fraction of bridge players who routinely use their point count as an initial measure of their hand strength since, on any deal where they are able to identify a prospective trump fit, it provides them with an immediate forecast of their partnership trick-taking prospects (and in many competitive auctions, those of their opponents too!).

PART 1 - THE WINNING TRICK COUNT (WTC).

This section, which covers Chapters 1 - 6, describes the main features of the *Winning Trick Count*, but it does so without any detailed consideration of the technicalities of such hand assessment.

Instead, it is intended to show how the honour-card and point-count variants of this unusually simple measure of partnership strength can provide bridge players with an accurate forecast, both of their own trick-taking prospects and those of their opponents, on a wide variety of deals.

The standard version of the *Winning Trick Count*, which is based on the partnership holding of honour cards and trumps, is characterised by the ease and speed with which an evaluation can be made for both pairs of hands on any exposed deal by just glancing at the card distribution. In turn, this means that it is extremely simple to check the accuracy of the estimates against the results of real boards, or to compare such *Winning Trick* forecasts with those of more conventional procedures.

However, the point-count versions, which are then described, have the important advantage that they are very much easier to use at the bridge table, where of course, you don't enjoy the luxury of such an

overview of the entire deal. They are equally precise and broad ranging and - as noted above - it is judged that the *Point-Count Balance* variant which is proposed in Chapter 5 will provide a very simple and effective bidding aid for those players who routinely use their point count as an initial measure of hand strength.

PART 2 - THE ACCURACY AND SCOPE OF THE WINNING TRICK COUNT.

Insofar as the *Winning Trick Count* is based on a quite positive assessment of hand quality, it is clearly irreconcilable with Dudley Courtney's assertion, in the first English Edition of his *Losing Trick Count* in 1935, that: '*There is only one single method of measurement by which a hand can be truly pictured. That is when you count its losing tricks.*'

But of course, the reality is that there is no *single certain method of measurement*. Instead there is a range of bridge-hand assessment methods that are currently in use. Moreover, they all have considerable merit and they all provide a correct estimation of the trick-taking potential on a significant fraction of deals. If they did not they would not have survived.

And by the same token, my own claim is not that the *Winning Trick Count* is infallible - indeed I shall describe its limitations at some length. But rather, as I shall seek to demonstrate, that, it is significantly more precise and much more widely applicable than the more conventional evaluation procedures on a broad range of hands.

To that end, this section, which covers Chapters 7 -9, is much more concerned with the technicalities of bridge-hand assessment than *PART 1*. It includes a comparison of the accuracy of both the *Honour Card* and the *Point Count* versions of the *Winning Trick Count* with that of the *Losing Trick Count* for over 500 suit contracts. As can be seen from the summary of the results in the table below, this extensive exercise showed that the *Winning Trick* forecasts were within one trick of the right result over 90% of the time, whereas the *Losing Trick* score - although still impressive - was nearer to 80%.

EVALUATION PROCEDURE	NUMBER OF CONTRACTS	ESTIMATE CORRECT		ESTIMATE CORRECT WITHIN +/- ONE TRICK	
		No.	%	No.	%
<i>Winning Trick Count (Honours)</i>	545	273	50	488	90
<i>Winning Trick Count (Points)</i>	545	288	53	502	92
<i>Losing Trick Count</i>	430	173	40	359	83

Although this *Winning Trick* performance is excellent by any standards, the analysis also shows that it was, nevertheless, incorrect by one trick on almost half of the contracts and that it was out by two tricks or more on around 10%.

In the light of this observation, the section then goes on to a detailed consideration of the prospects of improving the score for those hands where the evaluation procedure fails to provide an accurate forecast of the trick-taking prospects

This exercise provides a measure of the extent to which the laws of probability and the randomness of card distribution establish an inevitable and quite significant limit to the accuracy of such hand assessment.

In addition, however, it then points to a much more cautious view about the merit of seeking to use structured corrections and adjustments to improve the success of such hand evaluation than that of most other commentaries on the subject.

PART 3 - CONCLUSIONS.

This section provides a résumé of the main features of the *Winning Trick* evaluation procedure, with some final comments and conclusions.

Chapter 1

THE WINNING TRICK COUNT (WTC) - THE BASIC HONOUR-CARD VERSION

The Winning Trick estimate of the number of tricks which you and your partner can expect to make in a suit contract is quite simply your joint holding of honour cards (A's; K's, and Q's) added to your combined holding of trumps minus six.

No corrections, no adjustments - that's it!¹

Similarly, the Winning Trick Count for each of the two hands which make up the partnership total is quite simply their individual holding of honour cards (A's; K's, and Q's) added to their individual holding of trumps minus three.

The basic version of the *Winning Trick Count*, which is defined above results from the very simple conclusion that on a large fraction of auctions there is really no requirement for the conventional evaluation procedures such as the *Losing Trick Count* which are regularly used, since the trick-taking prospects can be forecast much more easily and usually more accurately by considering just two features of the partnership hands. Namely

Their combined strength, as measured by their joint holding of honour cards (or, as we shall see below, their High Card Point Count).

Their trumping opportunities, as measured by the trumps, which are left over after taking three rounds to establish the suit (hence, the combined holding of trumps minus six).

Despite the fact that this seemingly rudimentary approach to hand evaluation takes no account of the quality of the honour-cards; nor of the evident fact that on some deals tricks may also be made by virtue of a second long suit, or by extra trumping opportunities such as may be created by voids, or singletons, it nevertheless provides it provides an unusually accurate assessment of the strength of an outstandingly broad range of partnership bridge hands.

Moreover, given the ease and the speed with which such basic *Winning Trick Count* evaluations can be made for both pairs of hands on any exposed deal, simply by glancing at the card distribution and counting the trumps and honour cards, it is extremely simple to check their accuracy and to compare them with those of more conventional assessment procedures.

But, of course, the reality of playing bridge is that the scope for such assessment is much more restricted. The only cards that you can see are those in your own hand and any further judgements that you make about your trick-taking prospects, and those of the opposition must then be based on such additional information as does emerge during the auction.

¹ We will return to this extremely important issue in Chapter 9; but at this stage, **we will steer clear of any corrections or adjustments whatsoever**. And, despite this quite unorthodox approach to hand assessment, we will see that, this simple version of the *Winning Trick Count* is still consistently more accurate than conventional evaluation procedures.

This will regularly be incomplete and imprecise. Nevertheless, if you wish to compete, you do have to make an assessment and it is this requirement, which presents the real challenge for the *Winning Trick Count*, just as it does for any other evaluation procedure that you may wish to use.

On the other hand, as we shall see in the detailed account of the *Winning Trick Count* which follows, it has two distinctive features which significantly ease this task and which enable you to make an assessment on a much wider range of deals than would otherwise have been possible:

-The first, that it can be used just as effectively in the wide range of auctions where it is easier to make an estimate of your combined point count rather than your honour card strength (see Chapters 4 & 5).

-The second, that it frequently enables you to exploit such information as the bidding of the opposition may provide on their point-count or honour-card strength to allow you to make an assessment of your own trick-taking prospects.

We will go on to consider the merits of this quite unusually simple assessment procedure at some length but if we begin, for example by considering the N/S hands on the deal below, we can see that they have the balance of strength - 24 points - and an excellent prospect of making game with their nine-card heart suit. And on the basis of their *Winning Trick Count*, as defined above, we also see that their total of seven *honour-card tricks* (made up in this case of 3A's; 2K's, and 2Q's); plus their three *trump tricks* (a nine-card suit minus six) provides us with the correct estimate of ten tricks.

North dealer - N/S Vulnerable.

	NORTH	
	S J63	
	H AJ95	
	D AK2	
	C A104	
WEST		EAST
S K754		S AQ982
H 1072		H 3
D 743		D J865
C J875		C KQ9
	SOUTH	
	S 10	
	H KQ864	
	D Q109	
	C 632	

And similarly on the following deal where E/W now have the balance of strength - 23 points - and the likelihood of making game with their nine-card heart suit, we see that their *Winning Trick Count* of seven *honour-card tricks* (made up in this case of 2A's; 2K's and 3Q's); plus three *trump tricks* (a nine-card suit minus six) provides us with the correct estimate of ten tricks.

North dealer - E/W Vulnerable

	NORTH	
	S A1095	
	H K64	
	D 643	
	C J108	
WEST		EAST
S KQ7		S J843H
H AQ109		J8732
D AQ2		D J8
C K72		C 43
	SOUTH	
	S 62	
	H 5	
	D K10975	
	C AQ965	

It really is straightforward. Just add the *honour-card tricks* (the number of A's; K's, and Q's in the two hands) to the *trump tricks* (the total number of trumps minus six).

As a measure of its applicability to a very much wider range of deals than the two simple examples above, we will move on, in due course, to an extensive comparison of its performance with that of the *Losing Trick Count*. We will see that this detailed consideration of over 500 contracts showed that the *Winning Trick* forecast was within one trick of the right result around 90% of the time, whereas the *Losing Trick* score - although still impressive - was nearer to 80%.

But, in the meanwhile if you feel doubtful about the simplicity and accuracy of the evaluation procedure, just try it out yourself with a few ordinary deals. In which case, you should also find that the very basic *Winning Trick Count*, will regularly be within one trick of the right result.

On the other hand you may find that you are somewhat less successful if you base your analyses on very strong hands or more especially on the latest examples in your newspaper. Since these are usually singled out because they are interesting rather than ordinary they are more likely to be an illustration of the fact that a significant fraction of bridge hands are idiosyncratic and hence less amenable to such a simple evaluation procedure

But, of course, the reality of bridge is that it is precisely this element of idiosyncrasy, which makes it such an interesting game to play. And which also ensures - given that the *Winning Trick Count* is just as subject to the vagaries of such real card distributions as all of the other assessment procedures - that the estimates will be incorrect by more than one trick on around one deal in ten.

Indeed, it is this quite inevitable measure of uncertainty (and at times quirkiness), which establishes the most significant boundary to the accuracy, and - in the final analysis - the value and the scope of such bridge hand evaluation. Yet, it is usually accorded only cursory attention in much of the literature on this subject.

I shall return to the issue of uncertainty in *PART 2*.

However, since my aim at this stage is to demonstrate that the *Winning Trick Count* does, in fact, provide a singularly effective evaluation procedure for the majority of the more typical hands that you are likely to encounter when you play bridge, let me move on to Chapter 2, which describes its second distinctive attribute - its unusually broad scope.

Chapter 2

THE BROAD SCOPE OF THE WINNING TRICK COUNT

As well as providing a simple and accurate means of hand assessment the *Winning Trick Count* also has a significantly broader scope than the more traditional evaluation procedures.

In particular, as I shall show below:

-It can be used to assess the possible merits of contention for the weaker pairs of hands in competitive bidding situations

-It can be used when one of the hands has less than three cards in the proposed trump suit.

THE WINNING TRICK COUNT - AND WEAK HANDS

The Winning Trick Count has the advantage that it will provide an accurate estimate of the trick-taking prospects for both pairs of hands in competitive bidding situations.

Thus, if we look again at the first deal:

North dealer - N/S Vulnerable

	NORTH	
	S J63	
	H AJ95	
	D AK2	
	C A104	
WEST		EAST
S K754		S AQ982
H 1072		H 3
D 743		D J865
C J875		C KQ9
	SOUTH	
	S 10	
	H KQ864	
	D Q109	
	C 632	

E/W only have a total count of 16 points, but since this is combined with a nine-card spade fit it means that they still have an expectation of making 8 tricks - made up in this case of their five honour cards (1A; 2K's and 2Q's) and three *trump tricks* (a nine-card suit minus six). In this case their *Winning Trick Count* points to the prospect of a worthwhile 4S sacrifice if N/S should bid up to 4H

On the other hand when we look again at the second board we see that N/S, the weaker pair, have a total count of 17 rather than 16 points, but that this is now combined with only an 8-card club fit. This means that they have an expectation of making only 7 tricks - their five honour cards (2A's; 2K's and 1Q) and two trump tricks (an eight-card suit minus six) - and in this case the *Winning Trick Count* indicates a more cautious measure of contention against their strong vulnerable opposition.

North dealer - E/W Vulnerable

	NORTH	
	S A1095	
	H K64	
	D 643	
	C J108	
WEST		EAST
S KQ7		S J843
H AQ109		H J8732
D AQ2		D J8
C K72		C 43
	SOUTH	
	S 62	
	H 5	
	D K10975	
	C AQ965	

When this board was played a total of eight times in the Semi-Finals of the 1991 World Championships the outcome supported the *Winning Trick* evaluations for both pairs of hands.

Despite their weakness N/S competed on seven of the eight deals. At one table they were four down doubled in an ill-judged 5-club sacrifice - as forecast by their *WTC* of 7 tricks. In two other instances, however, the N/S interference was much more successful. At one table it resulted in E/W playing, and failing to make, 3 NT and at the other in a missed-game contract of 3 hearts making 4. In contrast, in the other five auctions, E/W successfully bid and made 4 hearts as forecast by the *WTC*.

And as we shall see in Chapter 8, when we examine the success of the *Winning Trick Count* in evaluating the trick-taking prospects for a large number of World Bridge deals, the estimates for the low-point contracts (those where the side which won the auction and actually played the hand, had a total of nineteen points or less) were similarly quite comparable in accuracy with those for the stronger pairs of hands

THE WINNING TRICK COUNT - AND THE QUALITY OF THE TRUMP FIT

Conventional evaluation procedures such as the *Losing Trick Count* have difficulty in coping with deals where one of the hands has less than three cards in the proposed trump suit, as may happen, for example if partner has made a pre-emptive bid.

In contrast, the *Winning Trick Count* estimate of the partnership trump trick prospects - the combined holding of trumps minus six - can still be used with such adverse distributions.

Moreover, in such situations both players can simply continue to base their own *Winning Trick* estimates on their respective holding of trumps minus three. In which case the player with the shortage just has to deduct one trick from his total with a doubleton trump support (since two minus three equals minus one); or two with a singleton (one minus three equals minus two).

The first board of the 1991 World Bridge Finals provides an instructive example of such a deal:

North dealer - Love All

	NORTH	
	S 4	
	H AQ105432	
	D 874	
	C 94	
WEST		EAST
S K1082		S J9653
H 87		H K9
D J52		D AQ93
C KQJ5		C A7
	SOUTH	
	S AQ7	
	H J6	
	D K106	
	C 108632	


Despite the 7/2-trump fit the *Winning Trick Count* correctly forecasts that N/S can make 8 tricks in hearts - made up of five honour cards (2A's; 1K and 2Q's) and three *trump tricks* (a nine-card suit minus six).

Similarly, if we consider the two hands separately we see that we reach the same total of 8 tricks. Thus, South's *WTC* estimate of 2 tricks is obtained by **deducting** one *trump trick* (two trumps minus three) from his holding of three honour cards, while North's *WTC* estimate of 6 tricks corresponds to his holding of two honour cards added to his four prospective *trump tricks* (his seven-card heart suit minus three).

In fact, the board was played twice in hearts by N/S and the outcome - four hearts minus two at one table and three hearts doubled minus one at the other - supported the *Winning Trick* forecast of eight tricks in hearts.

Then, just two boards later in the same World Final, N/S encountered an even worse trump fit on the following hand, where South had a good one heart opening bid but then had the problem of coping with his partner's understandable preference for his own seven-card spade suit.

South dealer - E/W Vulnerable

	NORTH	
	S AQ107632	
	H 94	
	D J95	
	C 5	
WEST		EAST
S 954		S KJ
H A532		H J10
D AQ3		D 74
C 1043		C KJ9862
	SOUTH	
	S 8	
	H KQ876	
	D K10862	
	C AQ	

The outcome - the failure to make game at the two tables where North finished up in the final contract of four spades - once again supported the simple *Winning Trick* estimate of nine tricks made up of two *trump tricks* (an eight-card spade suit minus six) and seven honour cards (2A's; 2K's; and 3Q's).

Chapter 3

THE WINNING TRICK COUNT AND THE TOTAL TRICK COUNT

As we have seen above the *Winning Trick Count* provides us with a powerful means of estimating our own partnership trick-taking prospects at the bridge table.

What is equally significant, however, is that this same procedure also allows us to use our own *Winning Trick Count* estimate as the basis for **an assessment of our opponents' trick-taking prospects** in any competitive auction where we are able to judge the quality of their prospective trump holding.

This quite unique extension of the boundaries of conventional hand evaluation simply reflects the fact that the *Winning Trick Count* of the opposition is similarly the sum of their trump holding minus six, and their holding of honour cards - which you can also estimate as shown below:

-The Honour-Card Linkage. There are always twelve prospective *Honour Card Tricks* (the sum of the A's; K's, and Q's) in the two pairs of hands on every deal.

It follows that on those deals where you have a measure of your own honour-card holding you simply need to subtract this estimate from twelve to assess your opponent's strength

<i>Our expected Honour-Card Tricks</i>	<i>Our Opponents' expected Honour- Card Tricks</i>
9	3
8	4
7	5
6	6
5	7
4	8
3	9

Following which you simply need to add your estimate of their honour-card holding to your estimate of their trump holding minus six and ***you know how many tricks they are likely to make!***

And similarly, of course, you can use such information, as their bidding will regularly provide on their strength and distribution to assist you with your own *Winning Trick Count* estimation.

We will come back to this singularly important feature of the linkages between the two pairs of hands but first let us see how they go on to provide us with a rather unexpected bond with the *Law of Total Tricks* and an even easier means of estimating the opposition prospects.

3.1 THE WINNING TRICK COUNT- AND THE TOTAL TRICK COUNT

Jean-René Vernes' *Law of Total Tricks*- one of the most recent arrivals on the evaluation scene - is achieving widespread acceptance as an effective and low-risk assessment strategy. It states that:

'The number of total tricks in a hand is approximately equal to the number of trumps held by both sides, each in its respective suit'.

A recent commentary in *BRIDGE WORLD* notes that: *'The Law of Total Tricks is currently the most widely used guideline in competitive bidding ... recent research, spurred by the availability of cheap computing power, has shown that the Law is remarkably accurate'.*

However, while it is increasingly evident that this remarkably simple estimate of the overall trick-taking prospects provides an effective and low-risk bidding strategy for competitive auctions, its weakness is that it tells us nothing at all about how the total will be divided. In addition the proponents of the '*LAW*' offer no plausible explanation for this seemingly improbable link between the total number of tricks and the total number of trumps.

In contrast, we find that we can obtain an insight into both of these questions by just adding together the *Winning Trick* estimates for both sides each in its respective suit.

The resulting *Winning Trick Total Count* on any deal is made up of:

-The sum of the trump holdings minus six for each side - but this is simply the sum of their combined trump holdings minus twelve.

Plus

-The sum of the honour-card holdings for each side - but as we saw above this must always be twelve

And when we add these together we see that:

-The sum of the two Winning Trick estimates - the total number of tricks, which would be available if each side, was to play in their best contract - is simply the sum of their combined trump holdings.

-The result - the Winning Trick Total Count - is precisely the same as the Law of Total Tricks!

From which it follows that it must similarly share the same *remarkable accuracy* but with the important distinction that it also provides us with an even easier means of assessing our opponents' prospects on those competitive auctions where we can make such an estimate of the total number of trumps. In which case:

-We simply need to subtract our Winning Trick Count from our estimate of the total number of trumps to obtain the Winning Trick Count for the opposition!

3.2 THE WINNING TRICK COUNT- AND THE SUIT-LENGTH LINKAGE

In the account above we have seen how the simple and quite inevitable linkage between your honour-card or point strength and that of the opposition allows you to estimate their *Winning Trick Count* in any competitive auction where you are also able to judge the quality of their prospective trump fit.

What is especially fortunate, moreover, is that, even on those deals where we seemingly have an indication of the strength of only one of the two trump holdings, we can often exploit the correlations between the card distributions in the two pairs of hands to make an estimate of the total trump count.

While the somewhat belated recognition that these linkages are quite well defined has made no significant impact in respect of conventional bridge-hand evaluation procedures, it has proved to be particularly instrumental in extending the scope and accuracy of Vernes' *Law of Total Tricks*.

This emerges very clearly, for example, in Dick Payne and Joe Amesbury's book *TNT and COMPETITIVE BIDDING*, where they question Vernes' own conclusion that: '*it is very difficult in practice to determine the total number of trumps*' - and go on to show how their concept of '*total distribution*' can be used to assist such estimations.

They note that bridge players are primarily concerned with the patterns of single hands - '*these are after all the raw material of the uncontested auction*'. But they go on to stress that, when it comes to competitive bidding, it is: '*the total pattern of twenty-six cards that you and your partner hold* which is of vital importance.

They illustrate the value of this approach to the estimation of the *total-trick count* (or, as they designate it, the *TNT* - the total number of tricks) with a helpful listing of the most common hand patterns.

In the first instance their table provides useful guidance on the likelihood that you and your partner will have a worthwhile suit fit. But, more importantly, it then goes on to demonstrate the extent to which your partnership trump holding will also be very strongly linked to that of your opponents on a wide range of deals. And Larry Cohen provides a somewhat analogous chart of such correlations in his book *Following the LAW*

.Some of the more important linkages, which result from these and related considerations of hand distribution, are listed below:

Your best suit fit	Your opponents corresponding suit fit
You and your partner will have just a 7-card fit on only 16% of all deals	In which case your opponents will have, at best, an 8-card fit
You and your partner will have precisely an 8-card fit on 46% of all deals	In which case your opponents will have at least an 8-card fit on almost 90% of these deals.
You and your partner will have precisely a 9-card fit on over a quarter of all deals	In which case your opponents will have at least a 9-card fit on almost 60% of these deals
You and your partner will have precisely a 10-card fit on around 9% of all deals	In which case your opponents will have at least a 9-card fit on almost 80% of these deals.
You and your partner will have an 11-card or better fit on less than 2% of all deals	In which case your opponents will have at least a 9-card fit on over 90% of these deals.

Although these correlations between the suit lengths in the two pairs of hands are not as precise as the honour-card linkage described above, they are robust and they are especially useful on those competitive deals where it becomes clear from the bidding that one of the two pairs has a good suit fit since, as the table shows:

- **The better the trump fit of one side, the more assured their opponents can be that they too will have a good fit in one of the other suits.**

They clearly help to explain the increasing acceptance of the *Law of Total Tricks* as an effective and low-risk assessment strategy.

What is more important, however, in this consideration of the *Winning Trick Count* is that they enable us to make an estimate of the total number of trumps on a wide range of deals. Following which, as we saw in the previous section:

- **We simply need to subtract our *Winning Trick Count* from our estimate of the total number of trumps to obtain the *Winning Trick Count* for the opposition!**

Chapter 4

THE WINNING TRICK COUNT - THE POINT-COUNT VERSION

The most important attribute of the basic *Honour-Card* version of the *Winning Trick Count* described in the previous chapters is its simplicity. It merely requires an estimate of the combined number of honour cards and the length of the trump suit in order to provide an accurate evaluation of the partnership trick-taking prospects

However, as I noted earlier, the problem, which you face when you are actually aiming to make such an evaluation at the bridge table is that the only cards that you can see are those in your own hand and any further judgements that you then make about the strength and shape of your partner's hand must be based upon such additional information as may emerge from the bidding.

Notwithstanding this constraint, players do of course, have to make an assessment and - as the very extensive and successful use of the *Losing Trick Count* has shown - they are assisted in this task by the detailed listings of guidance on the *Loser* expectancy for a wide range of possible bids and responses which are provided in accounts of the evaluation procedure.

And in precisely the same way, it would be relatively easy to provide similar listings of *Winning Trick* guidance for a wide range of possible bids and responses. For example, an opening bid by partner will normally correspond to at least five *winners* (or six, if the bid is 1H or 1S and you are playing a five-card major system) in that suit. If you judge that you have a fit you simply need to add your *Winning Trick Count* (your holding of honour cards added to your holding of trumps minus three) for an immediate assessment of your partnership trick-taking prospects.

On the other hand, as we shall see below, it is much easier at the bridge table to use the *Point-Count* version of the *Winning Trick Count*.

The *High Card (or Milton Work) Point Count*, which is very widely used, is based on the holding of honour cards, where:

Ace= 4
King= 3
Queen = 2
Knave = 1

Its success and its popularity undoubtedly rest on the fact that it is easy to use *and it works*.

Thus, even before the auction begins, it provides those players that use it with a simple and reliable measure of the strength and the potential of their own hands. Then, with the aid of their bidding system, it regularly helps them to establish their partnership *High Card Point* total, often with a high degree of precision, and at an early stage of the auction. *For some important categories of deals this will suffice as a strikingly accurate pointer to their trick-taking prospects. This is especially the case for no-trump contracts and for strong game or slam hands.*

Conversely, the basic *High Card Point Count* also has the serious weakness that it consistently underestimates the trick-taking prospects of the substantial and important fraction of hands, which are weaker, but shapelier.

This shortcoming - which means that it has only a restricted value in a wide range of competitive bidding situations - is broadly recognised and the proposed solution, which is given detailed attention at an early stage in most accounts of bridge bidding systems, is to extend the basic point-count estimation by making some additional allowance for the quality and the distribution of the cards.

However, the problem, which this poses, is that these correction procedures inevitably complicate the evaluation and it is unfortunate, moreover, that this consensus about the nature of the problem is not mirrored by any corresponding agreement regarding its resolution. Thus, while the broad range of proposals for revision of the *High Card Point Count* all look sensible and balanced, when considered in isolation they have the drawback that they are all quite limited in scope and when they are compared it can be seen that their recommendations are often inconsistent.

The *Point-Count* version of the *Winning Trick Count*, which is defined below corrects this situation.

It is based on the well-established evaluation presumption that three points correspond on average to one *honour-card trick* (*A's, K's and Q's*) and it is distinguished by the fact that, as soon as a prospective trump fit has been established it provides the players with an immediate and unusually accurate assessment of their prospects (and in many cases those of their opponents) on a wide range of deals:

The Winning Trick Point-Count estimate of the number of tricks which you and your partner can expect to make in a suit contract is quite simply your joint holding of point-count tricks added to your combined holding of trumps minus six.

The only proviso is that before assessing the prospects in this way we first deduct two points from the partnership total, to allow for our probable average holding of two knaves, which we do not wish to include in our estimation of *winners*.

For example, if we have a partnership count of twenty points (half of the total of forty) this would correspond to a corrected count of eighteen and hence a holding of six *point-count tricks*. And similarly, of course, these twenty points would correspond, on average, to a holding of six honour cards (half of the total of twelve *A's, K's and Q's*).

Or, more generally - and as we can see from the table below - if we have a typical combined holding somewhere in the range of 10 - 30 points, the number of *point-count tricks* that we can expect to make if we play in a suit contract is:

<i>Total Point Count</i>	<i>Expected Point-Count Tricks</i>
28 29 30	9
25 26 27	8
22 23 24	7
19 20 21	6
16 17 18	5
13 14 15	4
10 11 12	3

Just remember that twenty points are likely to correspond to a holding of six *point-count tricks* and we find that it really is easy to estimate our prospects in a wide variety of bidding situations.

For example, with a partnership total of around twenty three points combined with a nine-card fit in one of the major suits, we can judge that that we have a good chance of making game - ten tricks, made up of our estimated seven *point-count tricks* plus three *trump tricks* (a nine-card suit minus six).

And similarly with a ten-card major fit we should consider the prospect of a possible game, even if we only have a combined count of around twenty points.

But, what is equally important is that this quite uncomplicated point-count evaluation procedure applies just as accurately to those deals where our opponents clearly have the balance of strength. Thus with only around seventeen points, but again with a nine-card suit, we can see that we are still likely to make eight tricks if we should compete and win the auction (five *point-count tricks* plus three *trump tricks*).

This is illustrated in the table, which shows the application of this estimation of the trick-taking prospects to a substantial fraction of typical bridge hands (those with a total point count in the range 10 - 30 combined with a trump fit of 8, 9 or 10 cards).

<i>Total Point Count</i>	Expected Point-Count <i>Tricks</i>	<u><i>WINNING TRICK COUNT</i></u> <i>Expected Point-Count Tricks plus Trump Tricks</i>		
		<i>8 Card trump fit= 2 Trump Tricks</i>	<i>9 Card trump fit = 3 Trump Tricks</i>	<i>10 card trump fit = 4 Trump Tricks</i>
28 29 30	9	11	12	13
25 26 27	8	10	11	12
22 23 24	7	9	10	11
19 20 21	6	8	9	10
16 17 18	5	7	8	9
13 14 15	4	6	7	8
10 11 12	3	5	6	7

Thus, if we apply this table to the deal below we see that N/S with 24 points and a 9-card trump fit have a *Winning Trick* estimate of 10 tricks; while E/W with a point count of 16 combined with a 9-card trump fit have an estimate of 8 tricks.

North dealer - N/S vulnerable.

	NORTH	
	S 9	
	H KQ843	
	D Q72	
	C 1065	
WEST		EAST
S K632		S AQ1084
H 652		H 9
D 943		D J105
C J74		C KQ98
	SOUTH	
	S J75	
	H AJ107	
	D AK86	
	C A32	

We see that these forecasts for N/S and E/W are exactly the same as those we would have obtained if we had used the more basic honour-card assessment procedure.

And similarly, if we compare the two versions of the *Winning Trick Count* for a much larger range of hands we will see that in most cases they provide precisely the same forecast of the trick-taking prospects.

The analysis of a large number of real bridge contracts, which is described in PART 2, confirms the validity of this seemingly elementary approach to hand evaluation. It shows that in most bidding situations - and especially in competitive auctions - the *Point-Count Winning Trick* table above provides a simple and accurate forecast of the partnership trick-taking prospects.

But, in addition, as we shall see in the next chapter we can redefine the *Point-Count Winning Trick* procedure to provide us with a bidding tool which is just as precise but which is even easier to use at the bridge table.

Chapter 5

THE POINT-COUNT BALANCE BRIDGE-HAND EVALUATION PROCEDURE

An exceptionally simple bidding aid for use at the bridge table

Although the *Winning Trick Point Count* described in the previous chapter provides a singularly easy evaluation procedure there are undoubtedly many players who would welcome an even simpler bidding aid which they can use at the bridge table to help them form a judgement on their partnership trick-taking prospects.

The somewhat unconventional *Point-Count Balance* variant of the *Winning Trick Count*, which is defined below, is intended to meet that need:

The Point-Count Balance estimate of the number of tricks which you and your partner can expect to make in a suit contract is quite simply your combined holding of trumps added to your expected balance of point-count tricks (as defined below).

That's it! That's all we need for a forecast of our prospects, which not only avoids the point-count adjustment described in the previous Chapter, but which also avoids the need to subtract six from the combined trump holding! A forecast, moreover, which matches precisely that of *Winning Trick Point-Count* on every hand.

The key feature, which distinguishes this novel and unusually simple *Point-Count Balance* from more traditional bridge-hand evaluation procedures, is that it is based on the **relative strength, or weakness**, of our partnership point count.

Or, more precisely, on our combined point holding above, or below, the average of twenty.

For example, if we conclude from the bidding that we have the balance of strength with a joint holding of, say, twenty-six points we just regard this as a **positive balance** of six points.

Following which, if we continue to use well-established evaluation presumption that three points correspond on average to one honour-card trick, we can judge that this corresponds to a **positive balance of two point-count tricks**.

Although this notion of the *Point-Count Balance* may seem somewhat unusual, it is, in fact, a logical and convenient measure of our competitiveness and one, which can be used quickly and effectively at the bridge table in a wide variety of bidding situations.

Thus, as we saw above, with a joint holding of around twenty-six points we simply regard this as a **positive balance** of two *point-count tricks*.

On the other hand if we have, say, only seventeen points the opposition will be stronger, and we will now have a **negative balance** of one *point-count trick*.

Or, more generally with a typical combined holding somewhere in the range of 10 - 30 points, our balance of such *point count tricks* will be:

<i>Our Total Point Count</i>	<i>Our expected balance of Point-Count Tricks</i>
28 29 30	3
25 26 27	2
22 23 24	1
19 20 21	0
16 17 18	-1
13 14 15	-2
10 11 12	-3

We then simply need to add this *balance of point count tricks* to our estimate of our **combined holding of trumps** to complete this exceptionally easy assessment of the number of tricks we can expect to make.

A singularly important feature of this simple *Point-Count Balance* evaluation procedure is the strikingly clear measure of the importance of trump strength, which it provides.

For example, with a partnership total of around twenty three points combined with a nine-card fit in one of the major suits, we can judge that that we have a good chance of making game. In this case, nine *trump tricks* plus our **positive balance** of one *point count trick*.

And by the same token, with a ten-card major fit we should consider the prospect of a possible game, even if we only have a total combined count of around twenty points

What is equally important, however, is that this quite uncomplicated method of hand evaluation applies just as effectively in competitive auctions where our opponents clearly have the balance of strength. Thus with only around seventeen points, but again with a nine-card suit, we can judge that we are still likely to make eight tricks if we should compete and win the auction (nine *trump tricks* minus our **negative balance** of one *point count trick*).

In fact on any deal where we can see have an indication of our combined point strength and our prospective trump holding this really is a forecast, which can be made easily and very quickly.

This is illustrated in the table below, which shows the application of this *Point-Count Balance* estimation to a substantial fraction of typical bidding situations (those where we have a total point count somewhere in the range 10 - 30 combined with a trump fit of 8, 9 or 10 cards).

<i>Total Point Count</i>	Balance of Point-Count <i>Tricks</i>	<i>POINT-COUNT BALANCE EVALUATION</i>		
		<i>Balance of Point-Count Tricks plus Trump Tricks</i>		
		<i>8 Card trump suit</i>	<i>9 Card trump suit</i>	<i>10 Card trump suit</i>
28 29 30	3	11	12	13
25 26 27	2	10	11	12
22 23 24	1	9	10	11
19 20 21	0	8	9	10
16 17 18	-1	7	8	9
13 14 15	-2	6	7	8
10 11 12	-3	5	6	7

Since, as was noted above the *Point-Count Balance* always matches that of *Winning Trick Point-Count* it follows that the analysis of an unusually large number of real bridge contracts which was undertaken for the assessment of the *Winning Trick Count* and which is described below also provides confirmation of the validity and accuracy of this quite unusually simple approach to hand assessment. It also shows that the *Point-Count Balance* shares the broad scope of the other two versions of the *Winning Trick Count*. Thus:

I. It provides the weaker pairs of hands in competitive auctions with a clear indication of the possible merits of contention.

II. Whereas conventional procedures such as the *Losing Trick Count* have difficulty in coping with deals where one of the hands has less than three cards in the proposed trump suit - as may happen, for example, if the partner has made a pre-emptive bid - the *Point-Count Balance* can be based quite simply on the estimated combined holding of trumps.

III. The *Point-Count Balance* makes it particularly easy to **estimate your opponents' trick-taking prospects** in any competitive auction where we are able to judge the quality of their prospective trump fit.

This results from the simple fact that if we have more than the average number of points and hence a **positive** point-count balance, our opponents must have an **identical negative** point-count balance; and vice versa. Or more generally:

<i>Our Total Point Count</i>	<i>Our balance of Point-Count Tricks</i>	<i>Our Opponents balance of Point- Count Tricks</i>	<i>Our Opponents Total Point Count</i>
28 29 30	3	-3	12 11 10
25 26 27	2	-2	15 14 13
22 23 24	1	-1	18 17 16
19 20 21	0	0	21 20 19
16 17 18	-1	1	24 23 22
13 14 15	-2	2	27 26 25
10 11 12	-3	3	30 29 28

It follows that we simply need to add their **balance of *point-count tricks*** to our estimate of the length of their trump suit and we know how many tricks they are likely to make.

And by the same token, we can, of course, easily form a view of our own **balance of *point-count tricks*** in those auctions where the opposition bidding enables us to make an estimate of their point strength.

Chapter 6

THE WINNING TRICK COUNT AT THE BRIDGE TABLE

There have been some significant developments following Maurice Harrison-Gray's enthusiastic endorsement of the *Losing Trick Count* around 1959 when he noted:

'Experts sometimes claim that they bid on inspection, but the less gifted of our clan prefer some form of ready reckoner. Judging from my correspondence, the Losing Trick Count alleviates many of their former headaches.'

These include a number of detailed proposals for corrections and adjustments both to the *Losing Trick Count* itself and to the various *High Card Point Count* assessment procedures, which are also widely used, while the more recent *Law of Total Tricks* has provided a powerful additional guideline to the trick-taking prospects in competitive bidding situations.

Despite this, the evaluation challenge really hasn't changed very much. The problem, which we continue to face on most boards, is that our aim of reaching our par contract is dependant solely on the view that we take about the value of the cards that we can see in our own hand, along with such limited - and often imprecise - information as may emerge during the auction. The situation is not helped by the fact that we need to form a judgement without undue hesitation.

It seems clear, however that many players - regardless of which evaluation method they may eventually use - usually begin by attempting to make an estimate of their partnership strength (as measured by their combined point count) and by seeking to establish if they have a prospective trump fit.

But, as we have already seen, for a large number of deals, this is precisely the information which the two *point-count* versions of the *Winning Trick Count* described above in Chapters 4 & 5 require in order to provide an accurate forecast of their partnership trick-taking prospects at an early stage of the auction.

Moreover, I judge that both evaluation procedures are so easy to use at the bridge table that such players are more likely to be convinced of their merits by simply testing them themselves with some typical hands rather than by a more extensive consideration of selected deals.

In addition, however, as we can see in the two examples below, the *Winning Trick Count* can be used just as effectively by those players who are more accustomed to make their evaluation of their partnership prospects by considering the hands separately rather than jointly.

Board 1 -

North dealer - N/S vulnerable.

	NORTH	
	S 9	
	H KQ843	
	D Q72	
	C 1065	
WEST		EAST
S K632		S AQ1084
H 652		H 9
D 943		D J105
C J74		C KQ98
	SOUTH	
	S J75	
	H AJ107	
	D AK86	
	C A32	

When I considered this deal, earlier, in Chapter 4, I noted that N/S with 24 points and a nine-card heart suit had an excellent prospect of making game, while E/W who have a similar nine-card spade fit but only 16 points, would probably only succeed in making eight tricks.

I went on to point out that both the honour-card and the point-count versions of the *Winning Trick Count* provide the correct evaluation for each pair of hands:

- N/S 10 tricks - Made up seven honour cards (3A's; 2K's, and 2Q's) - or seven *point-count tricks* (24 points) - plus three *trump tricks* (a nine-card suit minus six).

- E/W 8 tricks - Made up of the remaining five honour cards - or five *point-count tricks* (16 points) - plus three *trump tricks* (a nine-card suit minus six).

However, if we now consider the deal from the very much more restricted viewpoint of the E/W players at the bridge table who do not have the luxury of such an overview of the full deal, we see that East is likely to open the auction with a perfectly reasonable one spade bid.

Following which, West is **immediately** able to use the consideration of the honour-card and the trump-fit linkages described above to provide him with a *Winning Trick Count* insight into the overall trick-taking prospects for both sides.

One moreover, which - despite his quite uninspiring flat hand with its meagre 4 points - already allows him to begin to formulate a very positive strategy for the impending auction.

If he begins by estimating his partner's strength - using, for example, the *honour-card* version of the *Winning Trick Count* - and he assumes that he has made a normal opening bid of perhaps 12-13 points, he can judge that this will correspond to a holding of around four *honour-card tricks*

In addition, if - like many partnerships - they are playing a five card-major system he knows that his partner has at least five spades¹

In which case he can go on to judge that his partner will probably have a *Winning Trick Count* in spades of at least six - made up of his four *honour-card tricks* and two *trump tricks* (five trumps minus three).

Thus - and notwithstanding his own very modest estimate of only two *Winning Tricks* (made up of his sole honour card and his fourth trump) - West already knows that his partnership has a *WTC* expectation of making at least eight tricks.

While this points to the prospect of a reasonably safe two-spade contract, he can also see that a game in spades is only likely to succeed if his partner has an unusually strong opening hand.

Furthermore, in the light of the hand-strength and suit-length linkages described earlier, West can already see that if his partner does, in fact, have a normal opening it follows that N/S will almost certainly contend the auction.

Clearly, they must have the seven or so outstanding honour cards. Moreover, as we have seen above, a simple consideration of the probable card distribution for both pairs of hands shows that they must also have a prospective trump fit of at least eight - and very probably more - in one of the other suits.

Since this assures them a *Winning Trick Count* of at least nine tricks (made up of seven *honour-card* and two *trump tricks*), and quite possibly ten or more, West can go on to judge that he should be prepared to contend up to 3 spades - either as a worthwhile sacrifice; or perhaps even making if partner has a good opening.

Moreover - **and still before South has even made a bid!** - West can already envisage the prospect of a making an E/W sacrifice in four spades in the event that N/S should identify a heart fit and bid confidently to game. In which case, his overall *Winning Trick Count* evaluation correctly indicates that the resulting score of two, or possibly even three, down doubled would have a high probability of providing a good result.

Board 2 -

In some auctions - for example, those with an opening pre-emptive bid, which offer the prospect of a large total trump count - we find that we can often apply the evaluation linkages described earlier with even more assurance.

Thus, on the deal below, where it seems likely that North may be given the opportunity to make a pre-emptive 3H opening, we see that the *Total Trick Count* - the sum of the combined trump holdings - is twenty (10H for N/S and 10S for E/W).

But even if they are not, he should still be aware - as Peter Hall shows very clearly in his book 'Competitive Bidding at Pairs' - that it is a very reasonable working assumption that a conventional opening bid of one spade, has a high probability of corresponding to a holding of at least five cards in the suit.

South dealer - E/W vulnerable.

	NORTH	
	S 106	
	H AQ109652	
	D 32	
	C J4	
WEST		EAST
S K97543		S AJ82
H K		H 73
D 85		D AKJ
C K1065		C Q873
	SOUTH	
	S Q	
	H J84	
	D Q109764	
	C A92	

We also see that that both the honour-card and the point-count versions of the *Winning Trick Count* correctly break this total down to the number of tricks which each side is likely to make if they were allowed to play the contract³

- N/S 9 tricks in hearts - Made up of five honour cards (2A's, and 3Q's)- or five *point-count tricks* (16 points) - plus four *trump tricks* (a ten-card suit minus six).

- E/W 11 tricks in spades - Made up of the remaining seven honour cards (2A's; 4K's, and 1Q) - or seven *point-count tricks* (24 points) - plus four *trump tricks* (also a ten-card suit minus six).

However, if we now consider the deal from South's much more restricted viewpoint at the bridge table, we see that as soon as his partner makes his non-vulnerable pre-emptive opening bid he can already envisage a partnership *Winning Trick Count* of at least nine tricks in hearts.

Thus, in addition to his own three *honour-card tricks* (1A and 2Q's) and his valuable three-card trump support, he can reasonably assume that North's pre-empt, probably made up of at least a seven card suit (and hence at least four prospective *trump tricks*) and perhaps two honour cards should also provide six tricks.

Moreover, South should also be aware that his opponents who have the remaining seven honour cards also have a high probability of at least a nine-card suit and that if - as seems probable - this is in spades they are likely to be able to make a vulnerable game.

In which case, **and again even before East has bid**, South can see that a sacrificial bid of 5 hearts over 4 spades will almost certainly be worthwhile.

³ And – as a simple check will show - the Point-Count Balance Procedure provides precisely the same estimate for both pairs of hands on each deal as the Point-Count Winning Trick Count.

Sadly, however, when this board was played in the Semi-Finals of the 1991 World Championships and North did in fact make such a pre-emptive bid at one table, South then failed to match this *Winning Trick Count* insight into the partnership prospects.

The bidding went as follows: After passes by South and West, North opened with a pre-emptive bid of 3 hearts; East then doubled; South raised to 4 hearts but did not compete again over 4 spades from West. In consequence E/W was allowed to make the winning score of a vulnerable game in spades.

Chapter 7

BRIDGE EVALUATION PROCEDURES - HOW GOOD ARE THEY?

*When they are good
They are very, very good
But when they are bad they are horrid.
(with apologies to Longfellow)*

How good, how useful and when? -I am conscious that it may seem somewhat bizarre - in an account which not only champions the cause of bridge evaluation systems but which also seeks to add to their number- to query their value.

It is apparent that a significant fraction of bridge players do in fact see a need for some means of hand assessment, which will help them and their partners reach their par contract.

To that end most usually begin by considering their hand shape and their simple total of *High-Card Points*. Some then go on to make adjustments to this basic count for suit length or quality, while others may undertake an assessment of their *Losing Trick Count*. And increasingly - and especially in competitive auctions - some will resort to the *Law of Total Tricks*.

The result is that there is already a substantial body of literature on hand evaluation and new books and articles - often with proposals for improved procedures- appear regularly. Furthermore, the proponents of the various systems are usually in no doubt about their relevance and their respective merits.

The problem which these claims pose, is that they face the average player with the difficulty of knowing how to choose between the various systems and just when to use them. Moreover, when they are taken together, they expose a significant and largely unexplained measure of incompatibility and they raise a fundamental question.

Why, if the respective hand-evaluation systems along with their adjustments and corrections are each good as is claimed, have they failed to gain universal acceptance by the bridge community? And why, too, do new 'improved' versions continue to appear?

Nor is the situation helped by the way in which (with one or two notable exceptions) such claims tend to be largely unquantified.

In the light of this, my aim in respect of my own claims regarding the merits of the *Winning Trick Count* is to seek to fill this gap by providing, in the sections, which follow, a detailed consideration of its accuracy and of the possible use of corrections and adjustments to improve its performance.

So how can we evaluate the evaluation procedures? - To even begin to answer the question we need a convincing and qualitative means of assessing and comparing the accuracy of the various systems. The problem, however, is that this quite fundamental and seemingly simple requirement turns out to be surprisingly challenging and difficult to satisfy.

So much so that it has led me to resort to two quite distinct procedures to enable me to gauge the accuracy of the respective trick-taking forecasts. Each has its limitations but, as we shall see, when they are applied jointly to a sufficiently large number of hands, they provide a convincing and powerful measure of performance:

- *The first method*, which is simple and familiar to all bridge players, is to examine a board, which has been played and where the result is known; and to then compare the evaluation forecasts with the contract, which was reached, and the number of tricks, which were actually made.

On the other hand even a cursory inspection of the score sheets of most match-pointed events will usually show a range of outcomes on some of the boards. In turn - and insofar as it may then be difficult to assign a *correct* contract to such deals - it is apparent that this may somewhat limit the scope of this assessment procedure.

In practice, however, it transpired that this did not prove to be an unduly serious constraint and I found that I was able to apply the procedure quite systematically to over three quarters of the 255 boards, which were played in the Semi-Finals and the Finals of the Bermuda Bowl and the Venice Cup of the 1991 World Bridge Championships. This had the advantage that it combined a wide selection of randomly dealt hands with the reasonable presumption that the results reflected a consistently high standard of bidding and play.

The analysis also benefited from the fact that the same deals were used for both competitions which meant that they had all been played at least twice and some as many as eight times. Moreover, the highly competitive bidding meant that a significant fraction of the boards, which were considered, had resulted in both N/S and E/W contracts and hence provided a total of over 260 results for the evaluation exercise.

- *The second method*, which is also simple, is to examine just one of the two pairs of partnership hands of any randomly-dealt deal and to then estimate the number of tricks, which they could expect to make if they played in their best suit fit and if their opponents' cards were concealed.

This assessment, which for convenience I shall refer to as the *Estimated Trick Count (ETC)* of a pair of hands, can then be compared with the respective forecasts of the evaluation systems for the same pair of hands.

Although this method sometimes involves a measure of judgement it is usually quite easy to apply on most deals and it is well established as a means of bridge-hand assessment.

Thus, Ron Klinger describes it as the '*Partnership Playing Strength*' in his book *The Modern Losing Trick Count*, and he defines it aptly as '*the number of tricks you can expect to win if suits break normally and half of your finesses work. In other words the number of tricks that will be won most of the time*'

In order to obtain a measure of the validity and the accuracy of the *Estimated Trick Count* I applied it to the World Bridge Championships boards described above. A more detailed account of this, and the various other evaluation analyses will be provided in the following chapter, but at this stage I will simply note that the outcome was surprisingly reassuring.

In fact, and despite my presumption that such an elementary assessment would at best be a rough approximation of the way in which experts would play such hands, it transpired that on almost every

contract where it was possible to make an *Estimated Trick* forecast this turned out to be within one trick of the number of tricks which were actually made when the hands were played in the World Championship

In addition - and in contrast with the first procedure outlined above which can only be applied to contracts that have been bid and played - the *Estimated Trick Count* has the singular advantage that it can be used to compare the trick-taking prospects with the evaluation forecasts for ***both pairs of hands on any board.***

It thus provides a powerful means of assessing and comparing the accuracy of evaluation systems for weak as well as strong hands and hence can be applied to a very much wider range of bidding situations. Because of this broad scope it has been used for a substantial fraction of the evaluation comparisons and analyses, which follow.

And as we will see later it can also be used very effectively to assess the merits and the shortcomings of the wide variety of evaluation adjustments and corrections, which have been proposed.

Chapter 8

THE ACCURACY AND SCOPE OF THE WINNING TRICK COUNT

To measure is to know

(*'Messen ist wissen' - Werner v Siemens*)

In the previous chapter I described the two procedures, which I have used to assess the effectiveness of bridge-hand evaluation systems.

As we shall see below, they were applied systematically to an unusually detailed analysis of several hundred documented bridge deals with the aim of assessing the evaluation performance of the *Winning Trick Count* and comparing it with that of the long-established and broadly accepted *Losing Trick Count*.

The first stage of this exercise - the identification of the *Winning Trick* prospects for every one of these deals - involved an initial appraisal of the card distribution, the point count and the honour-card strength for each of their four hands. Following which the information was used to identify the best prospective trump fit and the total point and honour-card counts for both the N/S and the E/W pairs of hands.

In all over 600 contracts were individually assessed in the study. They were taken from two quite distinct sets of randomly dealt hands:

The first - Over 180 of the grand total of 255 boards that were played in the 1991 World Bridge Championships. These provided 264 of the contracts and they were assessed by directly comparing the *Winning Trick* forecasts with the number of tricks that were actually made - the first procedure described in the previous chapter.

The second - 240 deals of eight consecutive BBL (British Bridge League) Open Competitions. These provided 346 of the contracts and in this case the *Estimated Trick Value* - the second procedure described in the previous chapter - was used to assess the accuracy of the *Winning Trick* forecasts.

The results of these two complementary exercises are described later, but before moving on to these somewhat detailed commentaries the broad conclusions of the overall study and the related comparison of the accuracy of the *Winning Trick Count* and the *Losing Trick Count* are outlined below.

8.1 AN OVERVIEW OF THE EVALUATION STUDY.

The table below provides a summary of the outcome of the assessment of the accuracy of the *Winning Trick* estimates for all 610 contracts. In order to provide a very simple, but meaningful measure of the success of the evaluation procedure the results are broken down in terms of the number of forecasts, which were correct, or within one trick of the right result.

Although, as we shall see later I judge that that bridge-hand evaluation procedures are broadly irrelevant to the majority of no-trump hands, I have nevertheless included such deals in this consideration in order to assess the validity and accuracy of the *Winning Trick* concept over a significantly wider range of boards than would otherwise have been possible.

To that end, I have simply assessed the *Winning Trick* prospects for such no-trump hands as being made up of honour-card or point-count tricks as defined previously, but with suit-length tricks in place of trump tricks ⁵.

EVALUATION PROCEDURE	NUMBER OF CONTRACTS	ESTIMATE CORRECT		ESTIMATE CORRECT WITHIN +/- ONE TRICK	
		No.	%	No.	%
<i>Winning Trick Count (Honours)</i>	610	336	55	553	91
<i>Winning Trick Count (Points)</i>	610	352	58	567	93

This extensive exercise showed that the *Winning Trick Count* regularly provided an accurate forecast of the trick-taking prospects of a wide range of hands. In fact, it was within one trick of the right result over 90% of the time and it predicted the correct outcome for over 50% of the 610 contracts, which were assessed.

This study showed clearly that the basic Winning Trick evaluation procedure - the partnership joint holding of honour cards (A's; K's and Q's) added to their combined holding of trumps minus six - was very easy to use.

It also confirmed that the *Winning Trick Count* had the singular advantage that its estimate of the trick-taking prospects for any pair of hands can be based on the combined point count just as well as on their honour-card strength.

Indeed, as can also be seen from the table, it transpired that the performance of the point-count procedure fully matched that of the basic *honour-card* version. This observation - which was consistently backed up in the subsequent comparative studies- was particularly encouraging in the light of the wide range of auctions where the bidding makes it easier to estimate your combined point count, rather than your honour-card strength.

Thus a point count of around 26 will still correspond to eight point-count tricks, while a count of around 23 will similarly correspond to seven tricks. The suit-length tricks – usually at least one- which then need to be added to the honour-card or point-count tricks which arise because the side playing the contract normally has sufficient control to be able to establish an additional winner with an eight- card suit. And sometimes two or more if they have a suitable fit with an even longer suit. In the analyses which follow later, it is this very simple variant of the Winning Trick Count which has been extensively use for no-trump hands. It was found to be a reliable evaluation procedure and it also proved to be useful in assessments involving deals where there was the possibility of playing, either in no trumps, or in a suit contract.

8.2 THE EVALUATION STUDY AND THE LOSING TRICK COUNT.

The next stage of the exercise was a comparison of the accuracy of the *Winning Trick Count* and the *Losing Trick Count*. In contrast, however, with the overview above the no-trump contracts were excluded from this *Winning Trick* consideration in order to ensure that the comparative study of the two evaluation procedures was based on similar deals.

A similarly detailed appraisal of the *Losing Trick Count* prospects for every deal was then undertaken. In this case it was found that the more limited scope of this traditional evaluation procedure with hands characterised by an adverse trump fit, meant that the number of contracts, which were considered, was somewhat smaller. The results of the ensuing comparison are set out in the table below.

<i>EVALUATION PROCEDURE</i>	<i>NUMBER OF CONTRACTS</i>	<i>ESTIMATE CORRECT</i>		<i>ESTIMATE CORRECT WITHIN +/- ONE TRICK</i>	
		No.	%	No.	%
<i>Winning Trick Count (Honours)</i>	545	273	50	488	90
<i>Winning Trick Count (Points)</i>	545	288	53	502	92
<i>Losing Trick Count</i>	430	173	40	359	83

Although the exercise provided confirmation of the expectation that the Losing Trick Count would be successful in predicting the outcome of a sizeable fraction of the contracts it also showed that this widely-used evaluation procedure failed to match the performance of the two versions of the Winning Trick Count. A conclusion, moreover, which was consistently confirmed in all of the subsequent comparative studies that were undertaken.

8.3 THE EVALUATION STUDY AND THE 1991 WORLD CHAMPIONSHIPS

As noted above one of the primary aims of the evaluation study was to undertake a direct appraisal of the accuracy of the *Winning Trick Count* by comparing the forecasts for a wide range of World Championship deals with the number of tricks which were actually made when the hands were played.

The exercise, which was based on the published proceedings of the Semi-Finals and Finals of the 1991 World Bridge Championships for the Bermuda Bowl and Venice Cup, was undertaken only for those deals where it was possible to make an unambiguous judgement about the eventual outcome.

This meant that a number of boards were excluded from the consideration because of the variation in the contracts, which were reached, or in the number of tricks that were made at different tables.

In practice, however, this restriction did not prove to be a significant constraint and in fact, 186 of the total of 255 boards that were played in the two events were fully analysed.

Moreover, since a number of these boards were played by both N/S and E/W they provided a total of 264 contracts for consideration.

The availability of such a large database of real hands had three important advantages:

-The first, that it combined a wide selection of randomly-dealt deals with the reasonable presumption that the results reflected a consistently high standard of play and hence that they provided an accurate basis on which to judge the evaluation forecasts. Moreover, the use of the same hands for both competitions provided an additional check on the outcome of many of the contracts. In fact, the 95 Semi-Final boards were all played eight times, while most of the 160 Final boards were played four times.

-The second that the highly competitive nature of the competition meant that a number of boards were played in contracts by both sides. The availability of these results meant that the assessment of the evaluation procedures was not only able to cover a wide range of weak, as well as strong pairs of hands, but that they also enabled the study to be extended to a consideration of the link between the *Winning Trick Count* and the *Law of Total tricks*.

-The third, as we shall see below, that the broad range of real deals and results also provided the basis for a detailed appraisal of the validity and accuracy of the *Estimated Trick Value* concept for the evaluation of bridge hands.

The results of this detailed study of these World Bridge deals are summarised below

<i>EVALUATION PROCEDURE</i>	<i>NUMBER OF CONTRACTS</i>	<i>ESTIMATE CORRECT</i>		<i>ESTIMATE CORRECT WITHIN +/- ONE TRICK</i>	
		<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
<i>Basic Winning Trick Count (Honours)</i>	264	138	52	232	88
<i>Winning Trick Count (Points)</i>	264	159	60	238	90

It can be seen that the exercise provided a convincing demonstration of the strength and relevance of the *Winning Trick Count* for the evaluation of real bridge contracts.

In particular, the basic *honour-card* version of the *WTC* was again within one trick of the right result around 90% of the time and it predicted the correct outcome for over 50% of the contracts. And, as before, the *point-count* version scored equally well.

Moreover, the outcome was broadly the same when the Semi-Final and Final deals which made up this total were assessed separately and also when the appraisals were based on the shape and competitiveness of the hands. In view of this we will consider just one more feature of this detailed comparative analysis.

This was aimed at comparing the success of the *Winning Trick Count* in evaluating the trick-taking prospects of both the weak and the strong pairs of hands in competitive auctions. To that end, the 264 World Championship contracts were divided into those with a point count of at least twenty, and those (over 27%) where the side, which won the auction and actually played the hand, had a total of nineteen points or less.

The results of this particular study of the World Bridge hands, which are summarised in the two Tables below, show clearly that the estimates for such low-point contracts are quite comparable in accuracy with those for the stronger pairs of hands

EVALUATION OF WORLD CHAMPIONSHIP BOARDS WHERE THE SIDE PLAYING THE CONTRACT HAD AT LEAST TWENTY POINTS

<i>EVALUATION PROCEDURE</i>	<i>NUMBER OF CONTRACTS</i>	<i>ESTIMATE CORRECT</i>		<i>ESTIMATE CORRECT WITHIN +/- ONE TRICK</i>	
		<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
<i>Basic Winning Trick Count (Honours)</i>	192	97	51	169	88
<i>Winning Trick Count (Points)</i>	192	114	59	175	91

EVALUATION OF WORLD CHAMPIONSHIP BOARDS WHERE THE SIDE PLAYING THE CONTRACT HAD NINETEEN POINT OR MORE

<i>EVALUATION PROCEDURE</i>	<i>NUMBER OF CONTRACTS</i>	<i>ESTIMATE CORRECT</i>		<i>ESTIMATE CORRECT WITHIN +/- ONE TRICK</i>	
		<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
<i>Basic Winning Trick Count (Honours)</i>	72	41	57	63	88
<i>Winning Trick Count (Points)</i>	72	45	62	63	88

8.4 THE EVALUATION STUDY AND THE LAW OF TOTAL TRICKS

The World Championship results described above also provided a convenient database for a consideration of the link between Jean-René Vernes' *Law of Total Tricks* and the *Winning Trick Count*, which I described in Chapter 4 above. This correlation arises from the fact that:

On the one hand, we have the *LAW* which maintains that '*The number of total tricks in a hand is approximately equal to the number of trumps held by both sides*'

On the other, if we add together the two *Winning Trick* estimates for any deal we find similarly that - *the total number of tricks, which would be available if each side were to play in their best contract, is simply the sum of the combined trump holdings.*

When I tested this link with the broad selection of 1991 World Championship boards above I found that 69 (almost 30% of the total) had been played in contracts by both North-South and East-West.

As expected the sum of the two *Winning Trick* estimates corresponded in every case with the total number of trumps. In addition, however, the exercise also showed that for around half of these deals this sum of the two *Winning Trick* estimates was exactly the same as the number of tricks which actually made and that it was within one trick of the correct result on over 85%.

This further measure of the accuracy of the *Winning Trick* evaluation procedure compared well with Vernes' extensive study of World Championship deals, which provided the basis for his *LAW*, where he found that the *total trick count* was exactly the same as the total number of trumps on one third of the deals and that it was within one trick on 80% of them.

8.5 THE EVALUATION STUDY AND THE ESTIMATED TRICK COUNT

Although the comparison above of the *Winning Trick Count* forecasts with the actual World Championship results provide a valuable pointer to the scope and accuracy of the evaluation procedure they only meet one of the aims of this study.

This is because the primary role of such hand evaluation is to help us to make a judgement **at the bridge table** about the number of tricks we are likely to make if we contend the auction.

As we saw in the earlier chapters we can clearly make such *Winning Trick* forecasts - and often at an early stage of the contest. What we usually lack, however, is a measure of the accuracy of these estimates for that substantial fraction of deals where we may make such an assessment of our prospects but where the opponents subsequently win the auction.

It is here that the *Estimated Trick Value*, which I described in Chapter 7, proved invaluable.

This alternative procedure is simply to examine our partnership hands for such a deal and to then estimate the number of tricks, which we could have expected to make if we had in fact played in our best suit fit. The resulting *Estimated Trick Value* can then be compared with the evaluation forecasts for the same pair of hands

This *Estimated Trick* procedure is well established as a means of bridge-hand assessment and it has the advantage that it can be used to assess the trick-taking prospects for almost any bidding situation.

Thus, as I noted in the previous chapter, Ron Klinger describes it as the 'Partnership Playing Strength' and he defines it aptly as 'the number of tricks you can expect to win if suits break normally and half of your finesses work'

On the other hand, given that the reality of bridge is that seemingly reasonable contracts do sometimes fail because of bad suit breaks, or finesses that don't work, or opponents who conspire to make more tricks than you expected, we clearly need a measure of the accuracy of the procedure.

What was fortunate, therefore, from the viewpoint of this exercise, was that I was able to use the large number of World Bridge results described above to make such an appraisal by simply comparing the *Estimated Trick Count* for each contract with the number of tricks that were actually made.

Although the estimation of the Partnership Playing Strength sometimes involved an element of judgement it was relatively easy to apply and I found that I was able to use the procedure for 240 of the 266 World Bridge contracts considered above.

What the consideration highlighted, however, was the fact that a large number of the contracts (around 40%) were characterised by an odd number of finesses, and hence by two equally plausible estimates differing by one trick of the possible outcome. And as we shall below this quite neglected, phenomenon constitutes a significant and quite fundamental limitation to the accuracy of bridge-hand evaluation procedures

However, in the case of this particular appraisal, I was able to avoid this quite significant odd-trick uncertainty by simply restricting the analysis to that substantial fraction of contracts where the estimate of the Partnership Playing Strength was in fact based on an even number of finesses. The results of the subsequent comparison of the Estimated Trick Count with the number of tricks, which were actually made for these 151 World Bridge contracts, are set out in the table below.

COMPARISON OF THE ESTIMATED TRICK COUNT WITH THE NUMBER OF TRICKS ACTUALLY MADE FOR 151 WORLD CHAMPIONSHIP CONTRACTS

<i>EVALUATION PROCEDURE</i>	<i>NUMBER OF CONTRACTS WITH AN EVEN NUMBER OF FINESSES</i>	<i>ESTIMATE CORRECT No. %</i>		<i>ESTIMATE CORRECT WITHIN +/- ONE TRICK No. %</i>	
<i>Estimated Trick Count</i>	151	129	85	150	99

As can be seen the *Estimated Trick Count* correctly predicted the number of tricks, which were actually made for 85% of the contracts, and it was within one trick of the result, on all but one of the remainder. This reassuring measure of the accuracy of the procedure meant that I could move on with confidence to use the concept for the much broader range of contracts described below.

8.6 THE APPLICATION OF THE ESTIMATED TRICK COUNT TO A MUCH BROADER RANGE OF CONTRACTS

As I noted earlier the primary role of an evaluation procedure is to provide us with an estimate of our partnership trick-taking prospects - and if possible those of our opponents - while we are bidding a particular hand.

As we saw above the singular advantage of the *Estimated Trick Count* is that it provides us with an accurate measure of the merits of such evaluations for both pairs of hands on a very wide range of bridge deals.

In turn this enabled me to extend my consideration of the scope and accuracy of the *Winning Trick Count* to an additional 240 boards which had been randomly dealt with the aim of comparing the *Estimated Trick Count* estimates with the evaluation forecasts for as many of the pairs of hands as possible.

In fact, it transpired that the estimation procedure was relatively straightforward and I was able to make such a comparison for 346 out of the 480 pairs of hands.

As before I found that a significant fraction of the *Estimated Trick Count* results involved an odd number of finesses and hence two equally plausible estimates - again differing by one trick - of the possible outcome. In this case, however, I judged that this uncertainty simply reflects the real situation when you are playing such a hand and I included these contracts in the analysis by assuming that the odd finesse would only succeed half the time and adjusting the score accordingly.

The results are summarised below:

COMPARISON OF THE ESTIMATED TRICK COUNT WITH THE EVALUATION FORECASTS FOR 346
PAIRS OF HANDS

<i>EVALUATION PROCEDURE</i>	<i>NUMBER OF CONTRACTS</i>	<i>ESTIMATE CORRECT</i>		<i>ESTIMATE CORRECT WITHIN +/- ONE TRICK</i>	
		<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
<i>Basic Winning Trick Count (Honours)</i>	346	198	57	321	93
<i>Winning Trick Count (Points)</i>	346	193	56	329	95

And, as can be seen from this table the extensive exercise provided another convincing demonstration of the strength and relevance of the Winning Trick Count. In particular, the *honour-card* version of the *WTC* was once more within one trick of the right result around 90% of the time and it predicted the correct outcome for over 50% of the contracts. And, as before, the *point-count* version scored equally well.

However, the particular significance of this *Estimated Trick Count* consideration - which covered a much broader range of bidding situations than the earlier World Championship study - was the confirmation that the *Winning Trick Count* will provide you with an accurate forecast of your trick-taking prospects in any auction as soon as you are able to make a judgement about your partnership honour-card or point strength and trump fit.

Following which, as we saw in Chapter 3, the Winning Trick Count then extends the boundaries of such conventional hand evaluation by enabling you to use your forecast to assess your opponents' prospects in any competitive auction where you are able to judge their prospective trump fit. And similarly, to use such information, as their bidding will regularly provide on their point count and distribution to assist you with your own estimation.

8.7 THE WINNING TRICK COUNT AND THE VAGARIES OF CARD DISTRIBUTION

One quite basic problem which often limits the scope and value of bridge-hand evaluation procedures is that, is that you have only a limited idea of the strength and card distribution of your partner's hand on a significant fraction of deals.

Another arises from the random element of card distributions. While this factor undoubtedly help to make bridge such an interesting game to play, it also establishes an inherent and significant limitation on the accuracy of such hand assessment. It has two such features which merit particular attention:

The first, is that your estimate of your partnership trick-taking prospects must be based on the premise that the opponents hands will have the most probable distribution - the rare exception will be in competitive auctions where their bidding may point to a meaningfully different card holding.

However, the problem with this assumption is that the other less probable (and usually less desirable) holdings, which may upset your forecast, will also occur with quite predictable regularity. Thus, if you have an 8-card trump suit you can be confident of a 3-2 distribution of the outstanding cards two thirds of the time. But, if the cards have been randomly dealt, you can be equally certain that you will be faced with a 4-1 distribution on over one quarter of the deals and indeed with the much more adverse 5-0 distribution 4% of the time.

The second, is the significantly more consequential - but surprisingly neglected - forecasting discrepancy, which relates to the observation in the previous chapter that a large fraction of contracts (around 40%) are characterised by an odd number of finesses, and hence by two equally plausible estimates differing by one trick of the possible outcome.

In turn, since this means that the ultimate accuracy of any evaluation procedure **will be subject to an unavoidable one-trick error on around 20% of their forecasts**, it follows that the scope for possible improvement is consequently reduced. (It is worth noting, however, that this conclusion does not always apply to the *Law of Total Tricks* where such an error for one side, may result in a compensating gain for the other with the result that the *Total Trick Count* is still correct).

We can see this more clearly if we consider an extended version of the exercise described in previous section which compared the *Estimated Trick Count* with the evaluation forecasts for a total of 346 contracts.

This is illustrated in the table below which contrasts the overall accuracy of the *Winning Trick* forecasts for all 346 contracts, with that obtained by breaking down the total into those contracts which are characterised by being based on an odd, or an even, number of finesses respectively:

EVALUATION PROCEDURE <i>Basic Winning Trick Count)</i>	NUMBER OF CONTRACTS	ESTIMATE CORRECT		ESTIMATE CORRECT WITHIN +/- ONE TRICK	
		No.	%	No.	%
<i>All 346 contracts</i>	346	198	57	321	93
<i>Contracts with an odd number of finesses</i>	154	67	44	141	92
<i>Contracts with an even number of finesses</i>	192	131	68	180	94

The first row of the table simply confirms the previous observation that the basic Winning Trick estimate was consistently within one trick of the correct result for over nine out of ten of the 346 contracts.

However, and as can be seen from the second row of the table this success rate of the Winning Trick Count evaluation procedure falls to below 50% when the analysis is restricted to those contracts- over 40% of the total - which involved an odd number of finesses.

And, not surprisingly, a quite similar result was obtained when the exercise was subsequently extended to the 264 World Bridge contracts described earlier.

Although this somewhat neglected loss of evaluation accuracy is simply a measure of the unpredictable outcome of a finesse it clearly affects the outcome of a large number of contracts, and hence, as I noted above, the scope for adjustments and corrections.

And, while such an inherent one-trick uncertainty may not be too important for some auctions, the deal below shows how such an error can have serious consequences:

Dealer West. Game All

	<i>NORTH</i>	
	<i>S 1042</i>	
	<i>H K93</i>	
	<i>D 107</i>	
	<i>C KJ973</i>	
<i>WEST</i>		<i>EAST</i>
<i>S 87</i>		<i>S KQ96</i>
<i>H A8764</i>		<i>H QJ1052</i>
<i>D K8</i>		<i>D Q3</i>
<i>C A865</i>		<i>C Q4</i>
	<i>SOUTH</i>	
	<i>S AJ53</i>	
	<i>H -</i>	
	<i>D AJ96542</i>	
	<i>C 102</i>	

When this board was played in the 1991 World Bridge Semi-finals, seven of the eight E/W pairs made what seemed to be a reasonable evaluation of their 23 points and 10 card heart suit and they bid to 4 hearts.

Unfortunately, however, they were wrong. The contract cannot make and it was defeated by one trick at three of the seven tables.

The other four E/W pairs were much more fortunate because their opponents, who also presumably mistakenly judged that 4 hearts would succeed, went on to bid a phantom sacrifice of 5 diamonds in which they were one down doubled.

Seemingly not a good deal for the *Winning Trick Count*, since as well as forecasting an easy game in hearts for E/W, it also predicts that N/S are only likely to make around 7 or 8 tricks in diamonds.

However, now see what would have happened if the E/W hands had been switched. This would not have affected the forecasts but it would have resulted in an important change in the trick-taking prospects and a better outcome for the evaluation procedure.

Thus, those E/W pairs who played in 4 hearts would now have found that their trump finesse succeeded and they would have made their predicted vulnerable game contract. Meanwhile those N/S pairs who chose to sacrifice in 5 diamonds would have paid a higher price.

And as can be seen from the two examples below which are also taken from the 1991 World Bridge finals this random element of hand distribution can result in even larger errors in the accuracy of evaluation forecasts:

1 - East dealer - N/S Vulnerable

	<i>NORTH</i>	
	<i>S 52</i>	
	<i>H Q98742</i>	
	<i>D 102</i>	
	<i>C AQ8</i>	
<i>WEST</i>		<i>EAST</i>
<i>S A864</i>		<i>S Q10</i>
<i>H AJ63</i>		<i>H K105</i>
<i>D J5</i>		<i>D 964</i>
<i>C K97</i>		<i>C J5432</i>
	<i>SOUTH</i>	
	<i>S KJ973</i>	
	<i>H -</i>	
	<i>D AKQ873</i>	
	<i>C 106</i>	

The *Winning Trick Count* forecasts that N/S will only make nine tricks (7 honour cards and 2 trump tricks) in diamonds.

In fact, when the board was played in the World Championship finals one pair succeeded in bidding and making three no-trumps, whereas the other three pairs seemingly made the mistake of taking the same limited view of the prospects as the *Winning Trick Count* and they played in three diamonds. In consequence, they all - as the commentary notes - ***endured the ignominy of chalking up three overtricks.***

On the other hand we can also see that if the E/W hands had been switched a bid of five diamonds would have failed and the *Winning Trick* estimate would have been vindicated.

2 - North dealer - Game all

	NORTH	
	S AQ952	
	H AQ873	
	D 62	
	C K	
WEST		EAST
S 1074		S K86
H 1092		H KJ6
D AKQ10843		D -
C -		C AJ109742
	SOUTH	
	S J3	
	H 54	
	D J975	
	C Q8653	

In the light of my assertion that the *Winning Trick Count* has the advantage that it can be used on deals with an adverse trump distribution it should be possible, at least in principle, to apply it to the seven-nil diamond misfit on the board above. In which case it forecasts that E/W should make only seven tricks in diamonds - made up of six *honour-card tricks* plus *one trump trick* (a seven card suit minus six).

In fact when the board was played in the World Championship finals one E/W pair succeeded in winning the auction with a bid of three diamonds. Moreover, they finished up making ten tricks - three more than the *Winning Trick* forecast!

But, in this case too, if the N/S hands had simply been switched, the defence would have been able to take the first six tricks and the *Winning Trick Count* would have been correct.

To conclude this consideration of the vagaries of hand distribution on a more positive note, however, it should be noted that the exercise described above also highlighted another important feature of the accuracy of the *Winning Trick Count*.

This arises because the considerations in the previous chapters concerning the scope and merits of the *Winning Trick Count* have consistently been based on analyses of an unusually large number of typical bridge deals.

Since these include the large fraction of odd-finesse contracts considered above it follows that this will have a significant effect on the overall success rate.

This is acceptable, however, since it ensures that the score which is achieved - in this case that shown in the top row of the table above - will provide us with a real measure of the probable accuracy of the *Winning Trick Count* when we use it to provide an assessment of our trick-taking prospects at the bridge table.

On the other hand, as can be seen from the final row of the table, there was a marked rise in the success rate of the evaluation procedure when the consideration was restricted to those contracts, which involved an even number of finesses.

Insofar as these results eliminate the odd-finesse uncertainty, they provide a more fundamental measure of the real accuracy of the *Winning Trick Count* as well as a more reliable basis for the assessment of the merits of the various evaluation corrections and adjustments. What is particularly striking, is that they show, in fact, that the uncorrected *Winning Trick Count* provided the correct estimate almost 70% of the time.

Chapter 9

.CORRECTIONS AND ADJUSTMENTS

.A little inaccuracy sometimes saves tons of explanation' (Saki)

I have so far steered clear of any consideration of corrections or adjustments to the *Winning Trick Count*.

Instead, my aim has been to demonstrate that this unconventional, but very simple, bridge-hand assessment procedure is significantly more accurate than the *Losing Trick Count* and that it will meet the evaluation needs on a substantial fraction of deals without any modification whatsoever.

In fact, as we have seen above it turns out, that the basic *Winning Trick Count* regularly provides an accurate forecast of the trick-taking prospects of a wide range of boards. It was within one trick of the right result around nine times out of ten and it predicted the correct outcome for over half of the 610 contracts, which were assessed. A score, which I shall examine in more detail below, but one, which I judge to be excellent by any standards.

Nevertheless, the analysis also shows that the estimates were, in fact, incorrect by one trick on almost half of the contracts and that they were out by two tricks or more on around 10%.

This poses the question: what - if anything - should we do about it?

The conventional answer is very simple. It is to recommend a range of carefully defined adjustments to take account of particular features of the quality and distribution of the hands.

And, of course, I similarly see the need to ensure that the *Winning Trick Count* provides the best possible evaluation on the widest possible range of hands. To that end, the account below of this important factor begins with a consideration both of the merits and of the significant limitations of such correction procedures.

In turn, this leads me to some rather unconventional conclusions about the applicability and the effective scope of the *Winning Trick* evaluation procedure.

9.1 THE MERITS AND LIMITATIONS OF EVALUATION CORRECTION PROCEDURES

The perceived need for a range of carefully defined corrections and adjustments to the various conventional bridge-hand evaluation procedures constitutes an important feature of the extensive literature on this subject.

On balance, the various improvements that are recommended usually appear eminently reasonable and they are routinely supported by convincing illustrations of contracts, which clearly demonstrate their successful application.

On other hand, as a more detailed consideration of such *Losing Trick* and *Point Count* evaluations will show, there is a rather disconcerting lack of consent among the proponents of such corrections in regard to the scale and the nature of some of the recommended adjustments.

Moreover, it is also the case that these various claims often lack the support of any systematic analysis of their real effectiveness when they are applied to a significant number of typical bridge hands, rather than to just one or two carefully selected examples.

In the light of this inconsistent and somewhat confusing situation I decided to undertake my own appraisal of their effectiveness and I began quite simply by applying two quite conventional corrections to a large fraction of the *Losing Trick Count* evaluations, which were considered earlier.

In the first test I simply followed the widely accepted and seemingly reasonable recommendation regarding the need to make some allowance for unsupported queens and I added half a loser to the *Losing Trick Count* for each occurrence of such a Qxx distribution.

Since I had begun with the reasonable assumption that this would result in at least some benefit, the outcome was unexpected. It transpired that there was indeed an improvement in the case of 42 of the estimates, but what was surprising was that another 61 were in fact worse following the adjustment!

For the second test I followed Rubens' advice regarding the balance of aces and queens - *If you have more aces than queens, subtract half a loser for each extra ace; but if you have more queens than aces, add half a loser for each extra queen.*

This result in this case was even more unexpected. 56 of these corrected *Losing Trick* estimates were better, but 116 were worse!

I believe that it would be unwise to attach too much importance to a single statistical study such as this and it may be that a more rigorous and more extensive analysis would lead to a less disconcerting outcome. Nevertheless, this exercise certainly reinforced my qualms about the use of such structured adjustments and corrections and it strengthened my preference for a much more ad hoc approach to bridge-hand evaluation, as set out below.

That view was further supported by the outcome of a subsequent similar study of the effect of applying similar corrections to the *Winning Trick Count* itself.

I began by using the Rubens adjustment regarding the balance of aces and queens and I found that the outcome - 59 better, but 103 worse - was just as discouraging as that of the similar *Losing Trick* analysis above.

I then extended the *Winning Trick* exercise in line with the way in which the *Losing Trick Count* assessment is normally undertaken. To that end I corrected all of the forecasts by omitting any singleton kings or doubleton queens from the basic estimation of the *honour-card trick* total,

Once again, the result - 18 better, but 49 worse - pointed clearly to the merit of seeking to avoid, wherever possible, such structured adjustments or corrections to what is basically a simple and precise evaluation procedure.

9.2 THE APPLICABILITY AND EFFECTIVE SCOPE OF THE WINNING TRICK COUNT

My somewhat heretical conclusion above there would be little benefit in seeking to improve the accuracy of the *Winning Trick* forecasts by following the conventional practice of formulating a series of detailed corrections was reinforced when I considered the way in which this unusually simple *Winning Trick* procedure was likely to be used to best effect with the two most important categories of hands which are likely to present the player with evaluation problems at the bridge table.

In the case of the first category - **that significant fraction of boards (around one in four) where one side has a point count of around 26, or more and usually an excellent opportunity of bidding and making game** - I believe that the basic *Winning Trick Count* can often contribute by providing them with an accurate pointer to their trick-taking prospects at a very early stage of the auction.

On the other hand, for the majority of such deals, the score sheets of duplicate bridge events show that a large number of players routinely succeed in reaching the correct contract with the aid of their normal bidding systems and I see little need for the more refined evaluation procedures involving the assessment of cover cards and controls, which are sometimes proposed.

Their success often reflects the use of the broadly accepted presumption that the basic prospects for a suit contract can be defined very simply in terms of their partnership point count as follows:

- Consider bidding a game in a major with twenty-six points or more.
- Consider bidding a game in a minor with twenty-nine points or more
- Consider bidding a small slam with thirty two points or more
- Consider bidding a grand slam with thirty five points or more

Following which, they are then usually able to use their normal bidding procedures and conventions to establish that they have a sufficient measure of control to prevent the opposition using such high-card strength (typically A's and K's) as they may have to defeat the contract. This is an especially important factor in the case of the slam and the minor game hands.

In the case of the second category - **that much larger fraction of boards where the points are more evenly distributed and where the side which has the balance of strength is much more likely to face competition from their weaker opponents**, - I believe that the very simple and basic *Winning Trick Count* again has the important advantage that it can routinely provide both sides with a reasonably accurate indication of their trick-taking prospects at an early stage of the auction.

Following which, however, I then judge that the opportunity to then introduce the kind of correction and adjustments which are a feature of more traditional evaluation methods, is usually seriously restricted both by the limited bidding space and by the increasingly contentious nature of such auctions.

This view is supported too, I believe, by the way in which the *Law of Total Tricks* is increasingly gaining favour as a bidding aid for such deals. This despite the fact that, in contrast with more conventional hand-evaluation, it simply provides an indication of the combined trick count.

9.3 THE WINNING TRICK COUNT AT THE BRIDGE TABLE

My judgement above about the limited value of the kind of structured refinements which are a feature of some bridge-hand evaluation methods does not, of course, reduce the scope for players to seek to improve their forecast on deals where their own experience (or intuition) points clearly to the need to adjust the basic evaluation. My conclusion, however, is that each such case should be assessed on its merits and then corrected in a quite ad hoc way which seeks to reflect the shape and quality of that particular hand and such indications of unusual distributions as may have emerged during the auction.

For example, in a competitive bidding situation, a player can usually judge that a holding of three or four small cards in the opponents' agreed suit may merit a positive adjustment, since it means that partner probably has only a singleton, or a void.

In the same way, a holding of KJx clearly has much more value when it is held over a bid in that suit by the opposition, than when it is under such a bid.

And there is similarly a range of examples involving unusual distributions (such as deals with voids or a good fit in two suits) which I believe are best assessed and then corrected on a case-by-case basis by the players themselves on the basis of such indications of the shape and quality of the hands as may have emerged during the auction

In the light of this situation my broad and somewhat unconventional conclusion is that formal hand-evaluation procedures should be kept as simple as possible and that they should be regarded as a complement, rather than as an alternative, to the judgements and experience, which underlie the well-established bidding procedures of Contract Bridge.

To that end I believe that the *Winning Trick Count* has two important advantages over the established hand-assessment methods. The first, that it simply requires an estimate of the partnership point count and trump strength in order to provide an unusually accurate guide to the trick-taking prospects on a large number of deals. The second, that in many competitive auctions, it is capable of breaking down the *Total Trick Count* into the more valuable forecast of the prospects for each side.

Chapter 10

THE WINNING TRICK COUNT - Some Final Comments

'Winning isn't everything, but wanting to win is' (Lombardi)

In my account of the *Winning Trick Count* in the preceding chapters I have sought to provide a balanced view of its limitations as well its strengths.

For example - I have pointed to my belief that, as well as being broadly irrelevant to the majority of no trump hands, evaluation procedures such as the *Winning Trick Count* have only a very limited role to play on those deals where you have a combined point count of around 26, or more, and usually an excellent prospect of bidding and making game.

In addition - and in contrast with much of the bridge literature - I have questioned the merit of seeking to make detailed adjustments to improve the accuracy of such hand evaluation. In support of this conclusion I have sought to show that some of the corrections, which are routinely proposed, fail to match up to the claims that are made for them.

On the other hand, as I also noted, this somewhat heretical judgement about the limited value of the kind of structured refinements which are a feature of most bridge-hand evaluation methods does not, of course, reduce the scope for the players themselves to seek to improve their forecast on those deals where the bidding and their own experience (or intuition) points clearly to the need to adjust the basic evaluation.

My view, however, is that each such case should be assessed on its merits and then corrected in a quite ad hoc way which seeks to reflect the shape and quality of that particular hand and such indications of unusual distributions as may have emerged during the auction.

Notwithstanding this cautionary note about the boundaries of bridge-hand evaluation procedures, my primary aim has, of course, been to demonstrate that the *Winning Trick Count* does provide the players with an outstandingly powerful assessment capability, and to that end a concluding summary of its main strengths is provided below:

THE STRENGTHS OF THE WINNING TRICK COUNT

As I have shown earlier the *Winning Trick Count* provides you with a singularly accurate and effective measure of the your trick-taking prospects on a very wide range of hands.

For example, it has the important advantage that it can still be used when one of the partnership hands has less than three cards in the proposed trump suit.

Moreover, it has an unusually broad scope and it will provide you with an equally accurate forecast of the possible merits of competing in any auction where it is evident that your opponents hold the balance of strength.

But, in addition, it adds a completely new dimension to traditional bridge evaluation:

-Firstly, by extending the conventional estimation procedure to provide precisely the same *Total Trick Count* as the *Law of Total Tricks*.

-Secondly - and more importantly - by enabling the players to use such information as they usually have on the card distribution and respective strength of the hands to break down this *Total Trick Count* into a forecast of the number of tricks which each side is likely to make if they were to play in their best contract.

Another salient feature of the basic version of the *Winning Trick Count* (your joint holding of honour cards added to your combined holding of trumps minus six) is the ease and speed with which an evaluation can be made for both pairs of hands on any exposed deal.

For instance, as well as enabling me to demonstrate the accuracy of the evaluation procedure as measured against the results of an unusually large number of real boards it also allowed me to undertake a detailed comparison of these *Winning Trick Count* estimates with those of the *Losing Trick Count* for over 500 contracts, as shown in the table below:

<i>EVALUATION PROCEDURE</i>	<i>NUMBER OF CONTRACTS</i>	<i>ESTIMATE CORRECT</i>		<i>ESTIMATE CORRECT WITHIN +/- ONE TRICK</i>	
		<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
<i>Winning Trick Count (Honours)</i>	545	273	50	488	90
<i>Losing Trick Count</i>	430	173	40	359	83

However, given that that the scope for such evaluation is very much more restricted at the bridge table when the only cards which you can see are those in your own hand, I then went on to propose an even simpler, but equally precise, *Winning Trick Point Count* variant which avoids the need to assess the joint holding of honour cards and which is based instead on your estimation of how your partnership point count.

I noted that this version of the evaluation procedure is particularly suitable for that large number of auctions where you can judge that you have a suit fit and where your partner's bidding - or that of the opposition - allows you to make an estimate of your combined point count.

Following which, if we assume that three points correspond on average to one honour-card trick - and with the proviso that you first deduct two points to allow for the average holding of two knaves which you do not want to include in your estimation of winners - the number of *point-count tricks* that you can expect to make if you play in a suit contract with a typical combined holding somewhere in the range of 10 - 30 points is:

<i>Total Point Count</i>	<i>Expected Point-Count Tricks</i>
28 29 30	9
25 26 27	8
22 23 24	7
19 20 21	6
16 17 18	5
13 14 15	4
10 11 12	3

Given, however, that some players would undoubtedly prefer an even easier evaluation procedure when they are considering what to bid, I went on to define the *Point-Count Balance* variant which is just as precise but which is even simpler to use.

I added that the key feature, which distinguishes this very effective bidding aid procedure, is that it is based on the **relative strength, or weakness**, of the partnership point count and I went on to show that with a typical combined holding somewhere in the range of 10 - 30 points the balance of such *point count tricks* will be:

<i>Your Total Point Count</i>	<i>Your expected balance of Point-Count Tricks</i>
28 29 30	3
25 26 27	2
22 23 24	1
19 20 21	0
16 17 18	-1
13 14 15	-2
10 11 12	-3

You then simply need to add this *balance of point count tricks* to your estimate of our **combined holding of trumps** to complete this exceptionally uncomplicated assessment of the number of tricks you can expect to make.

The *Point-Count Balance* procedure also makes it easy for you to **estimate your opponents' trick-taking prospects** in any competitive auction where you are able to judge the quality of their prospective trump fit.

This results from the simple fact that if you have more than the average number of points and hence a **positive** point-count balance, your opponents must have an **identical negative** point-count balance; and vice versa

It follows that you simply need to add their **balance of point-count tricks** to your estimate of the length of their trump suit and you know how many tricks they are likely to make.

And by the same token, you can, of course, easily form a view of your own **balance of *point-count tricks*** in those auctions where the opposition bidding enables you to make an estimate of their point strength.

In conclusion, I believe that when taken together, these various strengths and advantages of the *Winning Trick Count* show clearly that it can provide bridge players with a powerful and quite outstandingly accurate evaluation capability.

A capability, moreover:

- Which will not interfere with their normal bidding procedures
- Which is singularly easy to use at the bridge table
- And one, which they will find to be particularly effective in competitive bidding situations, and often at an early stage of the auction.

QED