Optimal Hand Evaluation an "Overview"

Provided by Neil H. Timm

In duplicate bridge for partnerships to reach their best suit contract, independent of the natural or artificial system they play (e.g., 2/1, Acol or a strong club), players need a methodology to evaluate and re-evaluate the trick-taking potential of their hands as information is shared about their hands during the auction.

To reach a successful contract and to correctly evaluate the trick-taking potential of two hands, the process of assigning values to Honors (H), Suit Length (L), Distribution (D) and Fit (F) is affected by the exchange of information.

The information shared in the bidding process is affected by the conventions played and the bids made since values assigned for H, L, D, and F are dynamic and not static.

No matter how good a system one may use to evaluate a hand, it will be wrong if the information exchanged is faulty even for the Optimal Hand Evaluation Method (OHEM).

The OHEM differs from the 4321 HCP method when counting Honors:

- A = 4 ½ H pts NOT 4HCP, K=3 but a 3Ks=+1 and 4Ks=+2
- Q =2 and J=1 if that are associated with honors isolated: Qxx=1½, Jxx= ½, 10xx=0
- Values of 10s vary: 10A= 0, 10K=½, 10Q=1, 10J=1, 10Jx=2
- For an opening hand deduct 1 point each for No A/K/Q; max=2
- For responder hands detect one for no K/Q; max=2
- Singleton Honor -1 Doubleton Honors (AK/AQ/AJ/KQ/KJ/QJ) =-1 Qx=1 and Jx=0 and 10x=0
- Suit Quality: 3 of 4 top Honors in 5-card suit=1 and in 6-card suit=2

The Opening bidder considers HLD points and Responder's only HL points where L≤2. However, Responder must next consider F, Semi-Fit, Distribution-Fit or shortness with trump Fit, Misfit points, and Wasted Honors values!

HONOR POINTS (H)

Ace: 4½ pts   K: 3pts   Q w/A, K, J: 2 pts   Qxx: 1½ pts   Qx=1pt

                                  J w/A, K, Q: 1pt   Jxx: ½ pts   Jx=0 pts

Value of **10s** vary: 10K=½, 10A=0, 10Q=1, 10J=1, 10Jx=2

No Aces = -1 pt (Only Opener) No Q =-1 No K=-1 (all hands) with Max=-2

3Ks = +1 pt, 4Ks = +2pts, 4Qs = +1pt

Singleton honor = -1pt   Honor doubletons = -1 pt for 2 honor doubletons

3+ Honors in 6-card suit = +2 pts or in a 5-card suit= +1 pt

These above rules apply to all suit and NT contracts.

LENGTH POINTS (L)
5-card suit with at least a QJ/K = 1pt
6-card suit with at least QJ/K= 2 pts w/o a QJ/K= 1pt
7-card suit=2pts for each card for 7th on (even without an honor)

DISTRIBUTION POINTS (D*)
VOID = 4pts   Singleton= 2 points **ONE** doubleton= 0 pts **TWO** doubletons = 1pt
4333 = -1pt
Singleton in NT contract = -1pt

*The values defined for HLD apply to Opener's hands NT and suits. Responder hands are counted for HL pts only & no more than 2Lpts. D points are applied only when a suit fit is found. These points are "STARTING POINTS".

We cannot address Fit (F) Points, Distribution-Fit Points (S), Misfit Points and Wasted Honor Points until the auction begins.

A fit is defined as a known 8-card suit fit in all suits for both Suit and NT contracts.

SUIT FIT POINTS (F)
8/9/10 card fit= +1/2/3 pts (all suits)

SEMI-FIT (F)
Add +1 if you hold an honor doubleton Kx/Qx/J10/Jx doubleton (other than the Ace) in partners long suit (5+cards). Both the opener and the responder make the +1 point adjustment with 2-card suit support.

DISTRIBUTION-FIT POINTS "SHORTNESS" (S)

Number of trumps	4	3	2
Void	4pts	3pts	2pts
Singleton	3pts	2pts	1pts
Doubleton	2pts	1pts	0pts

MISFIT POINTS
Opposite a long suit in Partners Hand -3/-2/-1 for void /singleton/doubleton

WASTED HONOR ADJUSTMENTS where S=Singleton and V=Void
K/Q/J Honors opposite a S/V -2/-3 Non-Honors opposite S/V +2/+3
Ace opposite Singleton= +1

Using the OHEM one opens a hand at the 1-level in a suit with 12+ HLD points and 15-17 HLDF points for 1NT. For game or slam contracts the "optimal" number of total points needed between the two hands are: 26 points for a NT game, 27 for a Major suit game, 30 points for a Minor suit game, 33 points for a small slam in a suit, 34 points for a small NT slam and 36/37 points for a grand slam.

The standard 4321 method **counts only High Card Points (HCP)** where the honors A=4, K=3, Q=2, and J=1. Note that the value of an A≠4½ pts and that no deduction is for a hand without a single Ace or for 4333 shaped hands.

If you were to add value for Suit Length (L*) to HCP, for them 5/6/7-card suits with at least a K/QJ (3HCP), it is usually: +1 for a 5-card, +2 for a 6-card and +3 for a 7-card. These are HCPL* points not HL points. HL points are defined by H where an Ace=4½ pts and L is defined using the OHEM rules used above.

Why do I mention this? Because players that use Bergen's Adjust-3 method use L* length values and not L values as defined above for the Optimal Point Count (OPC) method. Distribution points are also defined differently, it is not 4 2 1 for void, doubleton, or singleton.

For example, the hand ♠ AKJxxxxxx ♥x♦x ♣x has 21½HLD pts (A=4.5, K=3, J=1, 2 pts for 3honors in 6-card suit, +11L points for 10-card suit, +6D pts for 3 singletons).

The hand has only 8HCP points or adding the two longest suits (10+1=11) +8HCP = 19HCP and would not be opened using the Rule of 20 or Rule of 22. This demonstrates the inaccuracy of "traditional" methods and why the New ACBL Open and Open+ Convention Charts uses the Rule of 19 for a strong hand, which agrees with the Optimal, Point Count (OPC) method. The hand would be opened 1♥ not 2♥ with 8HCP.

Let's look at one more hand

O: ♠KQ876 ♥KJ1054 ♦- ♣932

O Has 8HCP using the 4321system since one does not count the Void or subtract for no ace)

 Foe OPC, O has 15HLDpts (KQ=5, KJ=4, J10=1, D=4, two 5-card suit=2, -1=No ACE)

O will open 1♠ with **12-14HLD pts,** yes with only 8HCP.

Examples are now needed to show the dynamics of the OHEM. The **Optima**l point count method also adds Distribution (D) points to an opening hand and is denoted by HLD pts. This is only the beginning of the hand evaluation process since one must also consider Fit (F) points (these include known suit fit points, semi-fit points, distribution-fit shortage

points, misfit points and adjusted points for wasted honor as information becomes available during the auction.

Returning to hand O, lets suppose a responder R had the hand and his partner opened 1♠. How would the hand be evaluated with a 5-5-card spade fit? Responder must re-evaluate his hand for Fit (F).

As Responder you do not now deduct for the Ace, and have 12HL pts + 4 for the shortness or "Distribution-Fit" the Void (4D) +3F for the10-card heart fit or 19HLDF pts. What then is your bid?

Some may bid Jacoby 2NT* to show good spades support usually 4-spades, but you have five and a 5-card heart suit. Similarly, a direct splinter bid shows a good hand with 4-card support not 5-card. While both bids communicate information to the opener, with Jacoby he knows between that you have 9+hearts while the splinter provides the same information with the added value that you have a singleton or void in diamonds.

But a 2/1 bid of 2♥ over 1♠ is best since it shows at least 4-spades and a 5-card heart suit. A 2/1 bid followed by a splinter bid is recommended.

Recall that splinter bids in suits where partner has honor values and length (natural tricks) are wasted facing shortness. For value it is best if shortness is opposite shortness. When making a 4-level splinter bid you must have at least 15HLFD points not 13/14 if the S/V is opposite wasted honor values in partner's a 26 pt game may be at risk.

These comments stress the critical nature and dynamics of the hand evaluation as bidding progresses in the auction.

We now consider several examples in some detail to show this and assume, for now, that we are playing the Two-Over-One (2/1) bidding System.

Opener (1)   ♠A7 ♥KQ2 ♦A9875 ♣KQ2

2 Aces=9 KQ=5 KQ=5 and 5-card suit=1 or 20HLD pts since D=0 for doubleton

Opening bid 1♣ HLD points (hoping to reverse or jump-shift)

Partner (Responder)   ♠103 ♥AJ43 ♦Q6432 ♣A5

 Partner only considers HL points & L≤2

2 Aces=9 Q=1.5 J=1 and -1 NO Kings 10.5 HL

After the bid of 1♣* forcing, partner responds 1NT=8-10 (some may bid 2♦=11-12)

Opener knows they have between 28-30 combined points but has yet to find a fit so next bids 2NT= 18-19/19-20 and balanced. Responder bids 3♣* as a transfer to diamonds to show 5+ diamonds. Opener now knows they have diamond fit and adds 3-points for a 10-card fit. The total now is between 31-33 and next bids 4♣ as 1430 RKC Gerber. With 2 Keycards and the Q, partner bids 4NT and opener bids 6NT.

What happens if partner bids 2♦? Partner will still bid 2NT; however playing XYZ the bid forces 3NT. No problem opener will still bid 4♣. Not playing XYZ or transfers, 2NT is check back and responder will bid 3♥ with a 4-card major. Again partner will bid 4♣.

What happens if the opener bids 1♦?

After the bid of 1♦, partner now knows they have an 8-card diamond and adds 1 point for 5-diamonds and 1point for the Q so responder has 10.5+2=12.5 since the doubleton spades has no value since two doubleton's are needed. Responder would now bid 2♦ inverted with 11+ points and the bidding would go as above.

However, playing 2/1 with criss-cross, the bid would be 3♣* to show a limit raise in diamonds. Now bidding Gerber/Expert Gerber the 6NT contract is again reached.

Would you reach 6NT using the 4321-point count methods with 30HL points?

Opener (2)   ♠A3 ♥AK987 ♦A432 ♣76

3 Aces=13.5 K=3 L=1 1D-point for two doubletons, -1 for no Qs = 17.5 HLD pts

Partner/Responder counting only HL points ♠K98 ♥Q4 ♦J105 ♣KJ1032

6 points in clubs (K=3, J=1, J10=1, 5-cards=1), Qx=1, 2 points in diamonds (J10 and J), K=3 or 12HDL points (do not deduct 1 for no Aces).

Opener opens 1♥

Responder now adds +1 Semi-Fit point to his hand having the ♥Q in partners bid suit and 13HLF pts and bids 2♣ to show a good hand with 5+ clubs. Opener now know that they have a heart or NT game since 17.5+12=29.5 but no slam and bids 2♦. What is Partners' next bid? 2♥ to show a preference for hearts over diamonds or 2NT?

If he bids 2♥, partner may pass so he bids 2NT and opener bids 3NT.

Example (3) is from Danny Kleinman (2004, p26), "The No Trump Zone". An example also reviewed by Patrick Darricades (2019, p. 80), "Optimal Hand Evaluation". Master Point Press.

Opener (3)   ♠AJ10 ♥K6 ♦AQ107 ♣K1032

Partner/Responder ♠92 ♥A72 ♦KJ ♣QJ8654

Using the 4321 method Opener has 17HCP and 3-2-4-4 distributions, a balanced hand.

Partner has 11HCP+1Length points or 12HLD points and bids 3NT since 17+12=29!

Simple contract but not correct. Why?

Using OHEM, Opener has 6.5 in spades (A=4.5+J10=2), K=3, 7.5 in diamonds (AQ=4.5+2 and Q10=1), and 3.5 in clubs (K=3+K10=0.5) =20.5HLD pts.

So Opener bids 1♣ NOT 1NT with the intention of reversing. Using OHEM, partner has A=4.5 QJ=3 and +2 for a 6-card club suit, KJ=4-1=3 or 12.5HL pts.

Over 1♣, partner now knows opener has at least 3-clubs must re-evaluate his hand by adding 1D for two doubletons, 9-card club suit =2 and semi-fit=+1for (QJ in suit) for 16.5 HLDF points and bid 2♣*=13+ (criss-cross inverted bid). Adding 20.5+13=33.5 combined points; opener next bids 4♣ as Gerber or Expert Gerber to arriving at the 6♣-contract.

What have we learned so far? The best contract may only be reached if the bidding provides useful information for hand evaluation. To illustrate consider the following example.

Opener (4)

♠A107 ♥A6 ♦107 ♣AK10432

Partner/Responder

♠K92 ♥972 ♦6543 ♣Q98

Using the 4321 method the bidding may go:

1♣	1♦
2NT	Pass
Pass	

or

1NT	Pass
Pass	

6

Did they miss game? Yes, and using the OHEM, opener has Aces=13.5, K=3, 10K=0.5, 6-card suit=2 or 18.5HLD pts. And responder has 3.5 pts (4.5-1 for 4333) = 3.5. The bidding did not reveal the 9-card club fit between the two hands.

Bidding sequences that do not provide information about fit must be avoided so some bids must be re-defined or re-defined.

Bids that provide no information about fit include for example 1NT-2NT, 1NT-4NT; and 4-level splinter bids may find "wasted honor values" in partner's hand.

How may this be fixed? Allow the bid of 1♣* to have an ambiguous broad range of 12-18 with clubs or artificial 18+HLD.

How does this fix the above example?

The bidding would go:

1♣*	1♦* (waiting)
3♣ (16-19HLD)	3♥ (western Cue)
3NT	Pass

Let's look at yet another example

Opener (6)

♠543 ♥AKQ987 ♦A32 ♣7

2 Aces=9.0 Q=2 K=3 6-card suit=2 singleton=2 AKQ in a 6-card suit=2 or 20HLD pts

Partner/Responder

♠A98 ♥54 ♦KQJ98 ♣543

A=4.5 K=3 Q=2 J=1 5-card suit=1 HQJ in 5-card suit=1 D=0 = 12.5HLD

Clearly 1♥ would be incorrect and the Rule of 44 (4 quick tricks and 4 or less losers) does not apply. What if partner had the hand: ♠x ♥xx ♦KJ10xx ♣xxxxx; he would pass and the 4♥ contract missed.

The opening must bid 1♣* and the bidding would be similar to (1)

1♣* 16-18HLD with clubs/18+HLD	2NT=10-12HL
3♣* transfer	3♦ 5+ diamonds
4♣ 1430 RKC Gerber	4NT keycards with diamond Q
6♥	Pass

All weak 2-level bids using HLD pts need about 12-14HLD and not 6-10H points so as not to over-bid weak hands. If you use the rule of 19/20/22, some may open a major suit hand with 11HL points.

Opener (7): Which of these hands would you open 2♠ or both?

a) ♠QJ10876 ♥K7 ♦874 ♣Q4   b) ♠K102 ♥AQ10543 ♦J10 ♣87

Using 4321 methods (both hands are opened at he 2-level (e.g. 2♠ and 2♥)

Hand (a) has 8HCP pts

Hand (b) has 10HCP pts

Using HLD pts

Hand (a) Has 10HLD pts (spades: Q=2, J=1, J10=1 6-card suit=2 Kx=3 Qx=1, two doubletons =1 pt, -1 for no aces or 10HLD pts.

Hand (b) has 15HLD (K=3, K10=0.5 or 3.5, A=4.5, Q=2, Q10=1, 6-card suit=2, or 9.5, J10=2, but -1 for J10 honor doubleton, 1D for 2 doubletons)

Using HLD points do not open hand (a) but open hand (b) 1♥ NOT 2♥

<u>SUMMARY</u>

What have may we infer from these examples?

With correct bidding, the OPC helps to provide optimal information for hand evaluation.

1) Counting 4.5 points for and Ace, deducting 0.5 points for an isolated Q/J, count 1 point for 10s when accompanied by with a Q/J, deducting 1 point for a from opener's hand with out either an A/K/Q and -1point for 4333 hands which apply to all suit and NT contracts. Opening bids depend on HLD points and responder hands depend on HL where L≤2.

2) Counting Length points the same whether in NT or Suit contracts.

3) Counting Distribution and wasted honor points correctly depending on a Suit or NT contract.

4) Account for Fit, Semi-Fit, Misfit, and Wasted Honor Points for both Suit and NT contracts.

5) Allow the bid of 1♣* to have an ambiguous broad range 16-18 HLD points with clubs or artificial 18+HLD and replace responder's direct 4-level splinter bid with ambiguous 3-level splinter bids with 13+HLD points. With this exception open all suit bids at the 1-levelwith 12-17HLD points and 1NT contracts with 15-17 HLD points (deducting 1 pt for 4333 shape and -1 pt for a Singleton A/K/Q.

6) Define the range for weak 2-level preempts to be12-14HLD and not 6-10HL points so as not to over-bid weak opening hands.

7) Fit point adjustments are made for both Suit and NT contracts.

For many more examples and recommendations, I refer you to Darricades (2020).

For example using the 4321 system and a 4-card major most use 8HCP when opening 1NT=15-17HCP to use Stayman, he shows why partner must use 8HLD points so as to avoid the bid 1NT-2NT which does not allow for the evaluation of "Fit" points and (2) to avoid the quantitative bid 1NT-4NT for the same reason, and (3) if you use splinter bids with a fit to show a S/V your needs 15HLDF pts using a 4-level bid unless it shows a Void since now it allows for "adjustment for wasted honor points". Finally, he shows why the OHEM is better than the "Law of total Tricks".

COMPETITIVE BIDDING OVERVIEW

Before the auction begins, all players evaluate their hands using HLD points. Why? If all pass you become the opening bidder. However, if your partner opens, you as responder evaluate your hand using HL points and only add D points once a fit is found, the exception is that the 1 point deduction for 4333 distribution always apply to both opener and responder for all contracts, suits and NT. Responders only add additional D points when a suit fit is found.

Using the 4321 system an overcall in an un-bid suit is natural, denoting length and strength in the suit bid. The common requirements are:

- A good five-card or any longer suit where suit qualify a suit as 'good' as 2 of the top or 3 of the top 5 honors
- 8-15/16+HCP for an overcall at the one-level.
- 10-16+ HCP for an overcall at the two-level.
- A higher-level overcall (e.g., after a preempt) requires at least opening-hand strength.

The common rule of thumb is that the weaker a hand is in high card points, the better the bid suit should be (i.e., longer or with stronger honors). However, the risks of the overcall bidder are greater than that of the opening bidder.

What about "Optimal" points? We now review both suit and NT overcalls.

SUIT OVERCALLS

After opener makes a suit bid at the 1-level, natural overalls are usually made at the 1-level, 2-level, or 3-level, or 4+-level.

To make and over-call bid in the Direct Seat is a 2-step process. First assume you are in the first seat and evaluate your using HLD rules as if you were the opener (without a fit) and then follow this with the following adjustments.

Suit length and shortness in your suit has value, but length in their suit does not.

Length in their suit:

- 2-cards = 0 (No adjustment)
- 3-cards = -1
- 4-cards = -2
- 5-cards = -3

Shortness in their suit:

- Singleton = +1 (increase D for D=2 to D=3)
- Void = +1 (increase D =4 to D=5)

Honors A/K/Q/J in the opponent's suit:

The adjustments are few: deduct 1 point for a lone King and a lone J is worth nothing. The only exception is to deduct 1 point from KQ located before the opponent's suit and add 1 if after.

One must also consider **ODR** since concentrated honors in long suits yield **Offensive** value to a hand as do short suits in unbalanced hands; however, honors distributed over 2/3 card suit provide **Defensive** value to a hand. Hence, if you overcall hand has offensive value you want to compete, but with defensive value you want to defend.

To estimate offensive value where you want to evaluate the offensive strength is the suits not bid by the opponent. Hence, adjustments for honors in the 3/4 suits not bid by the opponent are critical in the evaluation of ODR. Why only 3/4 card suits? Because the HLD process already evaluated the strength or weakness of 5-card suits and doubletons.

The additional adjustments are simple Kings alone are worth 2 (2Kxx=3-1=2) and J's alone are worthless (Jx= 0.5-0.5=0) called **Adjusted Optimal Counts (AOC).**

1-level overcall requires 13-18 AOC pts, 2-level overcalls require 15-18AOC points, and 3/4-level overcalls require 19+AOC points.

Let's review a few examples:

Opponents open 1♥

1) ♠KQJ87 ♥97 ♦AJ4 ♣Qxx   The 4321 Method = 12HCP where A=4 not 4.5

KQJ=6H +1(5-cards) +1 (honors in 5-card suit), AJ=5.5 Q=1.5 =15HLD D=0 and xx in♥ NO adjustment so AOC=15 so bid 1♠

2) ♠QJ8 ♥K97 ♦KQ9876 ♣7   The 4321 Method = 12HCP

 QJ=3, K=3, KQ=5, 6-card suit =2, D=2, No Ace=-1 14HLD Adjustments -1 for 3♥

 (Kxx in Hearts) or AOC=13 do not overcall 2♦

3) ♠7 ♥987 ♦AQJ765 ♣KJ3 The 4321 Method 11HCP

The spade singleton = 2 + for Diamonds (7.5 +2(AQJ) + 2L) +4 in clubs = 17.5HLD – 1 for 3Hearts or AOC=16.5 so do not pass overcall 2♦.

The Opponents open 1♦

4) ♠K9874 ♥7 ♦J1054 ♣AK3   The 4321 Method =11HCP

K and 5-card suit =4, Sig=2, J=1 10J=1 AK=7.5= 15.5 -1 No Queen HLD=14.5HLD

-2 for 4-cards in diamonds -1 for alone spade King AOC=11.5 Do not overcall 1♠ since you have low ODR.

NT OVERCALLS (15-17 AOC)

We again use a two-step process. First calculate you HLD points where D=-1 for 4333 hands and singletons A/K/Q=-1.

When on has length in the opponents suit and deciding on whether or not to overcall in NT, the point deductions in length are 1 point less that what they were for suit contracts. For Honors they are the same as for suit contracts. Recall that you must deduct 1 point for an alone K in any 3/4-card suit and 0.5 for an alone J.

A strong NT overcall requires 15-17 AOC points.

 Opponents open 1♠

1) ♠AJ7 ♥KQ97 ♦A4 ♣QJ10x   The 4321 Method = 17HCP where A=4 not 4.5

AJ=5.5, JQ=5, A=4.5, Q=2 J=1, J10=1 or 19HLD points. The hand is too strong for 1NT overcall so you must double and you have 4 Hearts.

2) ♠A74 ♥K975 ♦A4 ♣QJ10x   The 4321 Method =14HCP

A=4.5, K=3, A=4.5, Q=2, J=1, J10=1 or 16HLD deduct -1 for lone King or AOC=15 so bid 1NT.

JUMP SUIT OVERCALLS using Δ

The general guidelines depend on the difference between the length of your Longest suit and the length of your Shortest suit=(0/1/2) being 5+ called the DELTA (Δ) value. So D=4/2/0 and with two doubletons D=1 to bid make a 2-level bid. So with a 5-card suit you need a V (D=4), with a 6-card suit/5-5 you need a S/V (D=2/4), with a 7-card suit a S/V or doubleton (D=2/4/1). For a 3-level bid you need Δ=6+ and for a 4-level bid Δ=7+.

However, if your shortness is in their bid suit S=+3D and V=+5D.

A Jump Overcall at the 2-level requires 16+HD pts and at the 3-level 18+HD points meeting the Δ criterion recommended by J-R Vernes.

Example: The opponent's open 1♥ and you have the following hand:

♠AQ10876 ♥7 ♦874 ♣KJ4

AQ=6.5, Q10=1,1 6-card suit=2, Sig=2, KJ=4 or HLD=15.5 HLD and add 1 for singleton in opponents suit or 16.5 HLD. L-S=Δ of 5 with a singleton bid 2♠, a 2-level overcall.

I hope that this brief overview of the OHEM demonstrates the author's methodology accurately.

To apply the OPC method if you play 2/1 the only real adjustment you must make is to re-define the bid of 1♣*. It must be alerted to show a club suit or a strong hand. With this simple change, hand evaluation will be more accurate.

Since as the creator of the method, Patrick Darricades states:

"All hand evaluation methods are **not** *created equal", that " in* **Precision** *we trust" and* **pledge** *to deliver a hand evaluation point count that* **accurately** *assesses the value of* **combined** *hands of the same side, enabling better bidding leading to much improved results*

Patrick Darricades (2019, p104), "Optimal Hand Evaluation", Master Point Press.

Patrick Darricades (2020), "Optimal Hand Evaluation in Competitive Bidding, Master Point Press.