

Law of Total Tricks

You may have heard of the Law of Total Tricks (LOTT); its been around for a while. Many people think they know it, but most are only aware of the adjunct. What those 'most' people know is only half the law which is stated along the lines of: *A partnership can win the same number of tricks as the number of Trump in both (e.g. Dummy+Declarer) hands.* The actual Law states that the total number of tricks available on any hand is equivalent to the total number of Trump held by both sides. In this form the Law is seen to only be operative in a competitive¹ bidding situation where N-S has a certain number of Trump in one suit and E-W also hold a number of Trump in a different suit and each side is competing to win the contract in *their* suit. It is in this situation that the Law was designed for. This, however, does not void the adjunct; which is still a valuable tool. To properly understand the Law an example might be best. At the table a player would not be able to see all the hands but an understanding is best gained by looking at all four hands.

♠KQ3

| | | |
|------|-------|--------|
| | ♥KQJ2 | |
| | ♦A973 | |
| | ♣95 | |
| ♠865 | | ♠9742 |
| ♥85 | | ♥643 |
| ♦JT6 | | ♦KQ2 |
| ♣KQ7 | | ♣AJT43 |
| | ♠ AJT | |
| | ♥AT97 | |
| | ♦854 | |
| | ♣862 | |

In this deal N-S, unmolested, would likely play in a ♥ contract and can take 9 tricks losing 2 each in the Minors. If E-W owned the contract they would likely play it in ♣'s and could take 7 tricks; 5 in ♣'s and 2 in ♦'s. Based on this analysis the 'Law' says there are 16 Total Tricks Available (9 for N-S + 7 for E-W). You might note that there is also 16 Total Trump (N-S has 8♥ and E-W has 8♣ for a total of 16). Huh! Is it a coincidence that the Total Tricks = Total Trump. It turns out that it is not a coincidence; an analysis of many, many hands show that this is the general case and (as a side note) validates the adjunct.

The key is then: if, in a competitive situation, one could determine the number of Trump held by both sides, the total number of tricks available is known. One generally knows how many Trump his side holds. For example if the bidding on your side goes 1♠ – 2♠ you probably have 8 Trump. If the bidding starts on your left 1♠ – 2♦ – 2♠, before you bid you look at your hand and you have 4♦; presto, you know a lot. They probably have 8 Trump in ♠, your side has 9 Trump in ♦; and for this hand there are likely 17 total Trump. The Law tells us that there are 17 Total Tricks available. **The question** then comes down to how are those 17 tricks divided between the two sides, but more important, how do the scores compare when we divide the number of tricks available according to possible outcomes.

The following chart, borrowed from Larry Cohen's book² on the subject, helps with the analysis. We will investigate **the question** for a specific case, a competitive bidding situation where one is confronted with the decision of using the advantage of holding ♠'s over the opponents ♥'s to out bid them at the 3-level; knowing that there are only 16 Total Tricks. We know there are 16 Total tricks because bidding, with you as Dealer, went: 1♦ – 1♥ – X – 2♥; 2♠ – 3♥ – P – ?

¹ In a non-competitive situation there is no legitimate reason to bid to a higher level than that indicated by the first two bids by your side.

² *To Bid or Not to Bid: The Law of Total Tricks*, Larry Cohen 1992, ISBN:1-879582-03-1, Platinum Press

Based on the bidding the Opponents most assuredly have 8 and only 8 ♥'s. Your partner's X promised only 4♠'s, you have 4♠'s as well, for an 8 Trump count for your side. We are almost assuredly in a 16 Total Trick (Trump) situation. We will use a chart to help us make the decision to: either bid 3♠, Double (X) or Pass.

| 16 Total Trick Chart (Both Vulnerable) | | | |
|--|-----------|----------------------|---------------|
| If We Play 3♠ | | If They Play 3♥ | |
| # of Tricks for Us | Our Score | # of Tricks for Them | Our Score |
| 10 (make +1) | +170 | 6*(down 3) | +300** |
| 9 (make) | +140 | 7 (down 2) | +200 |
| 8 (down 1) | -100 | 8 (down 1) | +100 |
| 7 (down 2) | -200 | 9 (make) | -140 |

* This value comes from subtracting our tricks won from 16.

** The bold signifies that it is a better score of 2 columns.

| 16 Total Trick Chart (Nobody Vulnerable) | | | |
|--|-------------|---------------------------|-------------|
| If We Play 3♠ | | If They Play 3♥ (Doubled) | |
| # of Tricks for Us | Our Score | # of Tricks for Them | Our Score |
| 10 (make +1) | +170 | 6*(down 3) | +500 |
| 9 (make) | +140 | 7 (down 2) | +300 |
| 8 (down 1) | -50 | 8 (down 1) | +100 |
| 7 (down 2) | -100 | 9 (make) | -530 |

These charts emphatically show that when there are only 16 Tricks available we get a better score if we allow them to play at the 3-level doubled in all but 1 extreme case (us down 2). A case that violates the adjunct in the extreme; in that case the opponents make a contract that the adjunct denies and ultimately confirms/validates the Law. The conclusion is that you should not compete, **should never compete** at the 3-level if there are only 16 Total Tricks Available. This is a conclusion for both sides. The opponents should not have bid at the 3-level either – that's why you doubled!

We might want to compare this conclusion to the adjunct. In this particular case the subsidiary would have given us the same advise: our 8 tricks can only support a 2-level contract – don't compete to the 3-level. It is here where the law really shines: What if the 16 Total Tricks had been arrived at because we had 9 Trump and they had 7 Trump? The charts we are looking at tell the story – even if we think we have an advantage regarding trick taking (we'll take one more than trick, just as the adjunct suggests, because we have 9 trump); the score results still favors having them play the contract (looking at the first line, we get 170 for playing the hand compared to +300 for defending it). We are better off Doubling their 3♥ rather than making the 3♠ contract.

Rather than showing many more examples based on charts, we'll tell you that such charts tell the same thing for 4-level and 5-level contracts, as well. At the table one does not have to mentally chart each hand; we can, here, extract three rules from the analysis of all the charts:

1. Never Outbid the opponents on the 3-level when there is only 16 total tricks;
2. Always outbid the opponents at the 3-level when there is 18 total tricks.
3. Try hard not to let opponents play in a contract the Law says they can make.

We know the magic number for 2-level contracts: 16! For 4-level contracts the magic number is 18 and for 5-level, 19. If the total number of Trump is 19 we don't want to compete above the 5-level.

Over the course of many hands you will find that the Law seems to occasionally fail, it will have been off by a trick. Analysis of many hands have shown such failures can be attributed to 'soft' holdings such as QJx or KT_x. These types of holdings are 'good' when held by the offense but often cost a trick if held by the defense. We are all familiar with finesse's so suppose that on defense the Trump holding is

$$\begin{array}{ccc} & & \text{XX} \\ & & \text{Axxx} \quad \text{QJxx} \\ & & \text{KT}_x \end{array}$$

If the finesse works the offense gains a trick. Thus when one has 'soft' holding the tendency should be to lower the actual Total Trick count by one. Thus when you hold or suspect that partner has a 'soft' holding in opponent's suit you should be more inclined to defend. Let us look back in detail on our three rules.

The first rule is the one that leads us to the adjunct. The rule says in a competitive bidding situation don't overbid. One way of achieving this is to get to the proper level as quickly as possible by bidding to the level dictated by the Law's adjunct – hence Bergen Raises. An example: you are holding ♠xxxxx ♥xx ♦xx ♣Kxx; Three HCP and partner opens with 1♠. The Law says with 10 Trump the partnership should be at the 4-level. An immediate jump to 4♠ on your part might seem a bit outrageous but in most situations will turn out to be the proper bid. You may go down, but at the other tables the opposite direction could very well be in game in ♥'s. If the opponents hold 8♥'s the Total Trick count is 18 which means that if you do go down 2 (you only took 8 tricks), there are 10 tricks available for the opponents; game ♥'s. Down 2 Doubled (-100 or **-500**) vs Them making (-420 or **-620**). where the bold indicates the score when vulnerable. Thus the only time you are at a disadvantage is when you are vulnerable and they are not.

There have been a number of common bidding conventions that were either derived from the Law or that take advantage of the principals that underscore the Law. They are: (1) Bergen Raises, (2) Pre-emptive Raises in Competition, (3) Jump Response to Jacoby Transfer, (4) Pre-empting, (5) D.O.N.T., (6) Support Doubles, (7) Unusual 1NT, (8) Drury. We have separate sections in our notes for most of these are widely used Conventions because they can be discussed outside the context of the Law. There are three that we will treat here.

Unusual 1NT

Most of us are familiar with the Take-Out Double; the opponents bid one or two suits, you hold at least 1 honor in the unbid suits and opening points. You convey that information to your partner by doubling(X). What if you have 10 or 11 HCP and two decent suits say, ♠xx ♥KQxx ♦AQxx ♣xx and the bidding, starting with your LHO, goes like this: 1♣ – P – 1♠ – ?. Do you have a bid. Normally the answer is No, but what if partner is holding ♠Ax ♥JTxx ♦KJx ♣xxx. Partner couldn't open or overcall (no 5 card suit), you can't overcall for the same reason. Your side has half the points and can't get into the bidding using standard methods. Using standard a 1NT overcall indicates 15-17 HCP, you must Pass or take a shot-in-the-dark (you don't know Partner has 9 HCP and your side has half the HCP). There is a conventional bid for this situation called the **Sandwich NoTrump**. It indicates 10-11 HCP and 4-4 in the unbid suits. If you were 5-5 your might bid 2NT – the Unusual NT.

Consider a second situation you are the dealer holding the same hand. You start with a Pass and hear (P) – 1♣ – P – 1♠. It is, in effect, the same situation. This is where Unusual 1NT comes into play. The convention changes the meaning of 1NT to be effectively a take-out without opening points. It tells Partner that you have at least 4-4 in the unbid suits and sufficient points to bid competitively at the 1-level (same as a standard overcall). The bid is, in either case of course, **alert-able**. We can now reserve the Unusual 2NT for those better 5-5 hands with some HCP.

Jump Response to Jacoby Transfer

The Normal response to a partner's Jacoby Transfer is a 2-level bid; holding 2 or 3-cards in the transfer suit you normally do as you are told, however if you happen to be holding 4-cards in the suit "the Law" says you should be at the 3-level. Normally jumping to the 3-level indicates 3 and 17 HCP, and it is called super-accepting. Whats the difference? Isn't holding an extra Trump equivalent to holding 2 additional HCPs. Using the Jump response to show 4 trump says Yes it is, I'm using LOTT to justify it!

Pre-emptive Raises in Competition

We've already seen an example of this tool when suggesting the jump to game with 3 HCP and 5-Card support of Partners opening Major suit. In the example there wasn't any competitive bidding suggested but with 3HCP one might imagine that opponents could become competitive if you had passed or simply , 'stretching' your hand to show a minimum raise, bid 2♠. This type of pre-emptive raise may be far more important when Partner opens in a minor which is probably the strongest support that can be given to the use of the 'short club' opening.

Everything up to this point has been directed toward making or aiding a decision to bid and play offense or play defense. There is another consideration – the third rule. We just gave you some methods of 'living up to' rules 1 and 2; there are also tools to help in rule 3. If the opponents have an 8-Card fit and are at the 2-level then the adjunct indicates they will have little trouble making their bid. So the question is: can we 'force' the opponents to bid higher with minimum impunity? We will provide five bidding methods that help you to do that.

OBAR BIDS

The acronym, attributed to Marty Bergen, stands for **O**pponents **B**id **A**nd **R**aise **B**alance **I**n **D**irect **S**eat. We all should be familiar with Balancing in the following situation:

P – 1♥ – P – 2♥ Opponents have Opened and Responded with a simple raise
 P – P – ? Opener Passes indicating a minimum Opener. You are in the balancing seat and we know you should try to find a bid (with either a 5-Card suit, NoTrump or a Balancing Double.)

Is there any difference between this and the following?

1♥ – P – 2♥ – ?

The question mark is now in the Direct seat rather than the Pass-Out seat. If this position Passes there is a good chance, if point count is even, that opponents will 'escape' with a cheap partial score. If points are not 'close to even' chances are that opponents are not going to double you into game. If they do how bad can it be? Let's see

| Vulnerability | Score for them making 4♥ | Score for 2♠ down 2 - doubled |
|---------------|-----------------------------|----------------------------------|
| Favorable | -620 | -300 |
| Nobody | -420 | -300 |
| Both | -620 | -500 |
| Unfavorable | -420 | -500 |

We can see the payoff for bidding 2♠ in this situation; there is only once case where the score does not recommend Balancing in the Direct seat. So the lesson is: be cautious when Vulnerability is unfavorable otherwise consider the huge advantage available if, in the Direct seat you are holding a hand that you would normally Balance with in the Pass-Out seat. With as little as ♠KQJTx ♥xx ♦xxx

♣xxx the results may be to your liking. Here are a list of reasons for taking the risk:

1. Your dying for a ♠ lead, how would you feel if they went on to a 4♥ contract and Partner leads a ♣?
2. It is right to Balance, why pass it around to Partner, who is not very likely to Balance in ♠'s, but instead balances with a 3♣ bid.
3. If Partnership agreement includes OBAR BIDS, Partner isn't going to fault you.

What's the downside: If the O's have the power to set you by more than two what are the chances they are going to let your bid hold? If they don't have the power then this chart shows

| Vulnerability | Score for them making 2♥ | Score for 2♠ down 2 |
|---------------|-----------------------------|------------------------|
| Favorable | -110 | -100 |
| Nobody | -110 | -100 |
| Both | -110 | -200 |
| Unfavorable | -110 | -200 |

You should still Balance in the Direct Seat if you are not Vulnerable. In the other cases you still might consider pre-Balancing if you have a decent suit or use a Balancing Double if you have the right shape, some like ♠KJT_x ♥x ♦QJT_x ♣Kxxx, with 4-4-4-1 the chances of Partner picking a 8-Card fit is 100%, and if he has a stack in their suit he can leave the Double in and have fun.

There are several other situations where one should consider an OBAR BIDS; these might be considered Balance in either seat circumstances:

1. When Stayman bidder signs off in a Minor: 1NT – P – 2♣ – P; 2♦ – P – 3♣ – ?
2. A sign-off in a Drury bid: P – P – 1♥ – P; 2♣ – P – 2♥ – ?
3. Responder transfers to a Minor and signs off: 1NT – P – 2♠ – P; 3♣ – P(?) – P – ?
4. Opponents make a Non-Forcing weak Response : 1♣ – P – 2♥ – ?

Forcing 2NT's

Scrambling 2NT

If you play OBAR BIDS one finds that after a Balancing Double, and it often arises that the Partner of the Doubler doesn't have a preferred suit (perhaps he's has that 4-4-4-1 hand and prefers the Doubler to select the suit) . For cases where this happens the team must have an escape bid. The escape bid is 2NT, called a **Scrambling 2NT**. Here's an example:

1♥ – P – 2♥ – P; P – X³ – P – 2NT⁴

The 2NT bidder might be holding ♠Axx ♥xxxx ♦Qxx ♣Kxx and wants Partner to chose the suit. Not the best situation but better that choosing a 3-Card suit in which Partner also holds 3-Cards. Another case: ♠Axx ♥xx ♦Qxxx ♣Kxxx. Why choose a minor and find out you found your partner's 3-Card minor. With you bidding 2NT partner is going to choose his cheapest 4-Card suit and we avoid playing in a 3-3 fit.

Super Unusual 2NT

The Unusual NT usually indicates the lowest 2 suits, however OBAR bidders can have an agreement that after a OBAR, 2NT can mean any 2 suits. If you held ♠x ♥Kxxxx ♦Qx ♣Axxxx. After a sequence

3 Pick a suit Partner

4 No, I'd rather you choose the suit

like 1♠ – P – 2♠ – ?, you really would hesitate to execute a Balancing Double, because Mr. Murphy (the other guy who has Laws) will make sure your Partner bids ♦. Your Super Unusual 2NT, after OBAR, indicates any two suits.

Good-Bad 2NT

Consider this situation, your holding ♠xx ♥AKJxx ♦x ♣KQxxx and open 1♥; the bidding goes 1♥ – P – 1NT – 2♣. You'd love to bid 3♣, but that shows 17+ HCP (remember high level reverses?). You know the opponents likely have at least 8-Card fit; partners 1NT denied having 4♠'s. To keep Opponents off 2♣ you bid 2NT. How does Partner interpret your bid? A Natural 2NT would show a bigger than 13 HCP, perhaps invitational to 3NT, and promises stoppers in Opponents suit. It takes a Partnership agreement like this: *In a competitive bidding situation when the RHO makes a 2-level bid, our 2NT bid is not natural; it should be interpreted to mean a desire to compete on the 3-level and requests partner to bid 3♣.* If ♦ happened to be the 2NT bidders suit he can convert to it. If your ♥ suit had been ♥AKJxxxx you might have bid 3♥ directly but that might be misunderstood to show a stronger than a minimum hand. Bidding 2NT and rebidding 3♥ after Partner bids 3♣ sends the right message.

The Law and No Trump

The Law works best if the competition is between two suit contracts. But... If a NoTrump contract is in the offing either yours or the opponents you might ask: 'How can I count the number of [No]Trump to ascertain the a 'safe' contract level. Without providing the analysis to back it up we tell you that the simple formula is add 7 to the Trump count from the the side bidding a suit contract. Thus if one side has 9 Trump and the other is in NT the total number of tricks available is 16.

Law Maxims

Bridge is full of maxims, 'Cover an honor with an honor'; *Eight ever, nine never* that live on because we continue to follow them, and we continue because they work; they work because they are backed by sound principles. We will give you four maxims that come from the Law.

- The 5-level belongs to the opponents;
- When in doubt bid 4♠ over 4♥;
- When you encounter a freak deal, bid one more;
- Consider a penalty double if you hold 4 Trump.

5-level

To be competitively bidding at the 5-level requires 22 Total Tricks; rather you are contracting to take 11 tricks, this means if both sides are contemplating the 5-level and have a chance to make it, there does have to be close to that number of Total Tricks. We are not suggesting that 22 tricks are necessary. There are times when you might want to compete. The two times you might want to violate this maxim are (1) a good sacrifice, and (2) you can make a higher score for making than for defeating. These situations are very dependent on vulnerability and potential of getting Doubled.

4♠ over 4♥

The primary reason this is a good bid is both sides are vying for a game contract with its bonus. For example if there are only 18 Trump counted and the opponents have bid 4♥ you may be thinking of bidding 4♠. The following chart shows the three most likely outcomes and points out that 2 of the 3 favor bidding 4♠ so long as we hold eight Trump. If you chart the other scenarios both varying vulnerability and considering doubling you will find that no more than 8 Trump are necessary to secure good outcomes.

| 18 Total Trick Chart (Nobody Vulnerable) | | | |
|--|-----------------|----------------------|----------------|
| If We Play 4♠ | | If They Play 4♥ | |
| # of Tricks for Us | Our Score | # of Tricks for Them | Our Score |
| 10 (make) | +420 | 8(down 2) | +100/300 |
| 9 (down 1) | -50/100 | 9 (down 1) | +50/100 |
| 8 (down 2) | -100/300 | 10 (make) | -420 |

As Meatloaf said a long time ago: 2 Out of 3 Ain't Bad