Combine Your Chances

Level: Basic to Intermediate



Simple ways you can improve planning your play and make the most of your contracts.

Cincinnati Bridge Association

Learning Points

Steve Moese Mike Purcell



Odds and Probability



1 in 4 **red** 3 to 1 **black** 25% red 75% black

Counting
Random – Unbiased
No Information



Flipping an honest coin 50% Heads 50% Tails Each flip is **INDEPENDENT**. Flipping 8 tails in a row is unlikely:

½ x ½ x ½ x ½ x ½ x ½ x ½ x ½ x % = 0.39%

Joe flips a coin 8 times and gets 8 tails.

What's the likelihood Joe gets tails on the 9th coin flip?

LHO Preempts 3♥, Assume they hold 7♥s.

Vacant Spaces says odds are 13 to 6 that a key honor is w/RHO. LHO has 6 and RHO has 13 vacant Spaces (adjust for your ♥ s)

INSANITY: Repeat the same mistake & expect a better result.

Joe picks 4 cards from a normal deck of 52 cards and they are all ♠s. What's the chance Joe will pick a ♠ on the 5th card?



Odds can **DEPEND** on what has happened so far... If the deck is random, then the odds are 9/48 or 18.75% that the next card is a spade and 81.25% that the next card is another suit.



Common Bridge Odds

Suit Splits A, K, Q Drop:

# Cards Missing	Split 0	1	2	3	4	Honor H	Нх	Нхх
2	48	52	Remember			52	48	1
3	22	78	Symmetry			26	52	22
4	10	50	40			12	41	37
5	4	28	68			6	27	41
6	1.5	14.5	48	36		2.4	16	36
7	0.5	7	30.5	62		1	9	27
8	0.2	2.8	17	47	33	0.4	4	18

1) Facts 2) Inferences 3) ODDS... NOT guesses. If I wanted to gamble I'd play Poker.

There are 2ⁿ ways to distribute "n" cards between opponents.

Even split ODDLY Odd splits EVENLY

© 2012 Steve Moese. All Rights Reserved

4

Suit Combinations

A432 A5432 A32 KQJ2 KJ83 AJ1032 Q1056 Q1098 Q10954 543 A54 54

J82 AQ543 AQ943 KQ1032 J92 K32 Κ7 A963 456

J972 J7652 54

Suits they should lead 1st

AJ10 K32 Q7 K32 Q65 J32

For more see the Official ACBL Encyclopedia of Bridge, 7th Ed., pp. 507-556

Best play depends on:

- 1) The Entire Hand and
- **# Tricks Needed**

GOOD LUCK: When the Prepared face Opportunity.

Moese. All Rights Reserved

Nothing improves declarer play like

playing best odds

(except overbidding)!

Card Combinations

- ACBL Bridge Encyclopedia 50 pages on card combinations.
- Best play depends on the # tricks needed.
- **Know MISSING CARDS & suit** split odds.
- Know what split to manage

KQJ2 543

Missing A109876 Any A onside or 3-3 Lead 3 times to KQJ 3 Tricks Max. Ace onside/any 3-3.

KJ83

A54

Missing Q109762 Cash A . If no Q then cash K & lead to J8. Win Q/Qx offside & any Q onside or 3-3. 4 tricks only if 109762 - Q

AJ10542

3

Missing KQ9876

Total possible cases: 2⁶=64 3-3, 5-1, 6-0 not matter

Must manage 4-2

6 Tricks: Impossible

5 Tricks: Must have KQ doubleton

4 Tricks: Must have Hx (or any 3-3)

K987-Q6 Q987-K6 KQ98-76 KQ87-96 K986-Q7 Q986-K7 KQ97-86 KQ86-97 K976-Q8 Q976-K8 KQ96-87 KQ76-98

K876-Q9 Q876-K9

16 Cases 12 Cases

(Plus 2 cases: 9876-KQ)

Playing for Hx wins 18 cases/30

Playing for HHxx onside wins 6 cases/30

Lead to A then play small

© 2012 Steve Moese. All Rights Reserved

Planning the Play

Goal: Make your contract

- Stop Look Listen
 - Bidding & opening lead Honors & Distribution
 - Count Winners and Losers (Fast & Slow)
 - Count Entries & Control Cards (Stoppers in their suits
 - Danger Hand & Avoidance
 - Discovery: Honors, Shape, # Tricks Needed in a suit
- List Trick Sources (ALL OF THEM)
- Sequence your play to keep all your chances alive
- Avoid unnecessary risks. Choose the more likely option
- Best play for the hand is more important than best play in any 1 suit. (REPEAT THIS)





♠ A7 **Y** 432 ♦ KQ1032 **♣** KJ8 N W Ε

S

- **★** K32
- **♥** Q76
- ♦ A7
- ♣ A10953

You declare 3N.

West leads ♥2 to East's ♥K.

Opponents take 4♥s then switch to ♠s.

Winners: 7 Losers: 6 (4♥s, 1♦, 1♣)



Trick Sources:

- 1) ♦s split 3-3 (36%), ♦ J falls in 1 (2.4%) or 2 (16%)
- 2) •J onside and split 4-2 or 3-3 (42%)
- 3) ♣Q onside (50%)

If you choose only one play, the & finesse is best. But why not **combine chances** and improve your odds?

Adding 36% to 50% = 86% overestimates your chances!!

Cash top ♦s. If no ♦J falls then finesse the opponent with the most open spaces for the &Q.

Your likelihood of success is 54% + 50% (46%) = 77%

Total Likelihood

Likelihood Play 1 Wins

 P_1

Likelihood Play 2 Wins

Likelihood Play 1 Loses

 P_{T}

X

 $(1 - P_1)$

© 2012 Steve Moese. All Rights Reserved

Hand 2

Eddie Kantar, Take All Your Chances Hand #19

- ♠ AJ654
- ♥ AQ
- **♦** 32
- **♣** J832

N W E

- **★** K32
- **9** 8
- ♦ A95
- ♣ AKQ1095

Contract: 6♣ Opening Lead: ♦Q

Winners: 10 Losers: 3

If either the ♠ Finesse or the ♥ finesse loses you are down. Which one do you take first?

Trick Question: Choosing between two finesses is WORSE than combining your chances.

Cash ♠AK then take the ♥ finesse, planning to pitch your ♠ loser on the ♥A. Ruff out ♠s and pitch your ♦ loser.

27% + 50% (73%) = 63.5%

EK's Combining Rule:

When missing the K in one suit and the Q in the other, cash the AK in the suit missing the Q an plan to finesse the K if the Q does not fall.

8 One **BOTTOM** costs 2 TOPS

Hand 3



Contract 4♥ West Leads ♠4

Winners: 6 Losers: $5(2 \checkmark, 2 \checkmark, 1 \clubsuit)$

Danger: ◆ Switch – 1 Control Card

their game and not your personality.

Be pleasant. Let partner focus on



- ♥ Finesse (J or K)?
- ♣ Finesse

Finessing the ♥J has 2 ways to lose: J or K

Finessing the ♥K loses only to the K.

To avoid ♦ switch before you test ♣ s, finesse ♥Q. and play ♥A.

Test ♣s and pitch losing ♦ on ♣ J if ♣Q loses to ♣K.

If you win the ♠ in hand and finesse ♣'s immediately, how will you feel if West ruffs a ♠ continuation?

© 2012 Steve Moese. All Rights Reserved

Hand 4



♥ KJ63

♦ 863 **♣** A6

N W Ε

- **◆** 9532
- **♥** A7
- ♦ AQ4

♣ KJ104

Contract: 4♠ Opening Lead ♠10

East wins $\triangle A$ and switches to $\lozenge 9$.

Winners: 6 Losers: 5-6

4 Finesses: ♠A, ♥Q, ♦K, ♣Q



If opponents want to hear your side of the story they will invite you to dinner.

Plan:

Ruff 2♥s in hand, and try ruffing finesse in ♣s.

Finesses Taken: ♠A, ♦K

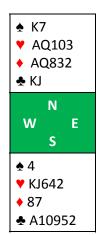
Finesses not taken: ♠J, ♥Q ← PRACTICE FINESSES

West covers ♣J on ruffing finesse attempt.

Low ♦ to ♦A allows ♦ Pitch on ♣10, making 5 for top board.

10

Hand 5



THINK!

Partner's

watching

Contract 6♥. Opening Lead ♥5.

Trumps are 2-2.

Winners: 8 Losers: 3 (1 ♠, 1♠, 1♣)

3 Finesses in 3 suits. Odds all 3 work: 12.5%

Odds 2 of 3 work: 50%

Trick Sources:

- 1) •K onside and •s 3-3 (18%) +2 2) •Q onside and •s 3-3 (18%) +2
- 3) ♣Q falls Q, Qx, Qxx (53%) +2
- 4) ♣Q falls Qxxx (32%) +1
- 5) ◆K onside and ◆s 4-2 (42%) +1
- 6) ♠A onside (50%) +1

Combine Chances:

- 1) ★4 to ★K. If wins, ruff out ♣s and ♦s (Drop ♦ on ♠)
- If Loses to LHO, pitch ◆8 on ◆K and ruff out minors.
- 3) If loses RHO, take ♦ finesse and ruff out minors.

Finessing a minor first is weak strategy – if it loses, you are down. Finessing ♠s allows later ♦ finesse.

2 Finesses Work:

50% ♣Q Onside x 50% ♦K Onside

= 25%

Finesse + ♣Qxx:

53% ♣ Q (Qxx) x

50% ◆K Onside

= 27%

Likelihood CC:

50% **A** Onside x

84% **\s** 4-2 x

84% **\$**s 4-2 +

50% **♠**K loses x

50% ◆K onside

= <mark>60+%</mark>

"AND" chances multiply fractions & REDUCE chances. "OR" chances ADD to our odds.

Practice Finesses add RISK and don't add to our odds. ♣ & finesses are PRACTICE If ♠ works.

© 2012 Steve Moese. All Rights Reserved

Forget each

hand when

the 13th card

is played.

Hand 6



East South West North **2**♦¹ 2♠ 3 **4** • 2 $4N^3$ Pass 4 Pass 5**♣**4 **5**\sqrt{5} **Pass Pass** Pass **5**♠⁶ Pass All Pass

1 = Weak 2 - 5-11 HCP

- 2 = GF w/ Support or Slam Invite
- 3 = Roman Keycard Blackwood
- 4= 0 or 3 Key Cards
- 5= Do you have ♠Q? 6=No.

Contract 6♠. West Leads ♦2.

Winner: 7 Losers: 4 (1♠, 2♥, 1♣) Dummy Entries: 3 - ♠K & 2 ♦ ruffs.

Trick Sources:

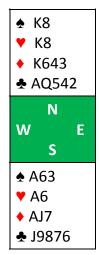
- 3♠, 1♥, 1♠ & 2♠ Ruffs, 4♠s & ♠ Ruff → Requires 4-4♠s
- 2♠, 2♥, 1♠ & 2♠ Ruff, 3♠s & 2♠ Ruff → Needs ♥ end play.
- ♠'s 2-2 and ♥K on side. (0.4 x 0.5 or ~20% Chance).

Win ◆ A. Ruff ◆ then ruff ♣. Play ♠ A then ruff ◆. Then ♠ K assuming East follows once.

Run ♣'s pitching ♥s. Hope who holds the high trump can't ruff the 4th♣. If so all your ♥ losers disappear. If not, then hope South holds trump & ♥K and is endplayed.

12

Hand 7



Contract 6♣. West Leads ♠5. Winners: 7 Losers: 2

Save the postmortem for AFTER THE SESSION ... save time for the next hand.

Trick Sources:

- A) Eliminate Majors, Cash Top ◆s, and Finesse ♣s . (◆Qx)19% + ♣K 50% (64%) + 26%(16%) (Stiff ♣K and ◆xx East)= 55%.
- B) Cash \triangle A then finesse \blacklozenge . 26% + 50%(100-26%) = 63%
- C) 1 of 2 Minor Suit finesses work. 50*% + 48%(50%) = 74%
- D) Eliminate Major suits then play ♣A small ♣. 26% (Singleton ♣K) + 26% (Doubleton ♣K with South) + 50% ♦Q onside (100-52%) = 76%

See the Spring CBA Alert for more details on this hand.

© 2012 Steve Moese. All Rights Reserved

Tips to Combine Chances

Eddie Kantar, Take All Your Chances

When you can afford to give up the lead, take the chance that adds to or keeps the rest of your chances.

When you can't afford to give up the lead:

Missing a Q (6 cards) and a J (7 cards) — cash the AK of the Q suit and finesse the J. Missing 2 Q's, Cash the AK of the longer suit and finesse the Q of the shorter suit. Missing a Q and a K, Cash the AK of the Q suit and finesse the K.

Missing 2 Kings – play the ace of the LONGER SUIT and finesse the shorter suit.

Be the partner you want to win with.

When bids say a defender holds a key card, play that s/he holds it, even if it goes against the odds Missing 6 cards, a 4-2 split happens 33% more often than a 3-3 split. Plan for 4-2.

Duck a trick to establish the suit only if you can afford to lose control.

Holding fragile side suits, strip the hand before playing the suit. Better still get opponents to play it.

Take the 1st finesse into the NON DANGER hand. REPEAT. Take the 1st finesse into the NON DANGER hand.

When you don't have time for 2 chances, take the one that is more likely to succeed.

Count who holds more cards in the suit and finesse that player for the Q.

Delay 2-way choices and fragile suits plays as late as possible.

Get rid of slow losers early, before they become fast losers.

With enough controls cards, give up sure losers early.

Take care of entries. This bears repeating. Take care of entries.

14

^{*}Missing ♣K103, Leading ♣J from South caters to 3-0 split onside.

A Few Thoughts for Today...

- Odd suits split evenly, even suits splits oddly.
- Split Honors are 3x more likely than HHxx onside missing 6.
- Use entries wisely & AVOID the Danger Hand
- Take only the finesses you need. Combine chances. AVOID practice finesses. Partner
- Think: Can I ruff out an Honor?
- Let opponents play for you...
- Count Vacant Spaces or known

count can point the way for better odds when finessing.

Don't do complex analysis at the table. ZZzzzzzzz. Think in concepts and combine chances.

© 2012 Steve Moese. All Rights Reserved

16

Easy

deserves

more than half the credit

and none of the blame.

Good Books

Take All Your Chances **Eddie Kantar**

Take All Your Chances II

Take All Your Tricks

Eric Rodwell The Rodwell Files: Secrets of a

Bridge Champion

Hugh Kelsey Bridge Odds for Practical Players

Michael Glauert

Jeff Rubens

Expert Bridge Simplified



At the Flying Pig Regional Cincinnati, Ohio



Not So

© 2012 Steve Moese. All Rights Reserved