



*David Bird &
Taf Anthias*

**WINNING
NOTRUMP
LEADS**

AN HONORS eBook FROM MASTER POINT PRESS

Text © 2011 David Bird & Taf Anthias

All rights reserved.

Honors eBooks is an imprint of Master Point Press. All contents, editing and design (excluding cover design) are the sole responsibility of the authors.

Master Point Press
331 Douglas Ave.
Toronto, Ontario, Canada
M5M 1H2
(416) 781-0351

Email: info@masterpointpress.com
Websites: www.masterpointpress.com
www.bridgeblogging.com
www.teachbridge.com
www.ebooksbridge.com

ISBN: 978-1-55494-518-4

Layout and Editing: David Bird & Taf Anthias
Cover Design: Olena S. Sullivan/New Mediatrix

TABLE OF CONTENTS

Introduction		4
Chapter 1	<u>Should I lead a major or a minor?</u>	7
Chapter 2	<u>Should I lead from my longest suit?</u>	21
Chapter 3	<u>Which card is best from this holding?</u>	42
Chapter 4	<u>Leading from a weak hand</u>	63
Chapter 5	<u>Leading after a Stayman sequence</u>	73
Chapter 6	<u>Leading after a transfer sequence</u>	92
Chapter 7	<u>Leading when they have bid two suits</u>	103
Chapter 8	<u>Leading against 1NT</u>	115
Chapter 9	<u>Leading when they have bid one suit</u>	127
Chapter 10	<u>Leading when partner has opened</u>	140
Chapter 11	<u>Leading after a limit raise</u>	152
Chapter 12	<u>Leading into a 2NT opening</u>	173
Chapter 13	<u>Leading against 6NT</u>	184
Chapter 14	<u>Methodology</u>	195

INTRODUCTION

The opponents' bidding is 1NT - 3NT, let's say, and you look down at this hand: ♠ A Q J 8 ♥ 9 6 ♦ J 9 7 6 4 ♣ A 2. How do you decide what to lead? Do you rely on past experience of leading from similar hands? Even if you play several sessions of bridge a week and somehow record in your memory what happens to each opening lead, you will have nowhere near enough data to assist you on future occasions. Many players rely on general guidelines, such as 'lead the fourth-best of your longest and strongest suit', but this is often far from a winning strategy.

In this book we will look at various opening lead situations against contracts in notrump. To discover which opening lead is best for a given West hand, we will use computer software to create 5000 deals that match the given North-South bidding. (The West hand will remain the same and the other three hands will be chosen randomly.) The software will then play the deals automatically, seeing which of the 13 possible opening leads works out best — at both IMPs and match-point pairs. By analyzing the results we will be able to draw some conclusions as to which types of lead are the most successful.

The results for the particular West hand above are shown as:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	36.7%	4.37
♠Q	33.6%	4.29
♥9	32.1%	3.66
♦6	33.6%	3.78
♣A	27.5%	3.55

When you play an IMPs match, rubber bridge or Chicago, the main aim is to beat the contract. The first column ('Beats contract') tells you how often the various possible leads will allow you to do this. You can see that the ♠A is the best opening lead at IMPs, beating 3NT 36.7% of the time.

When you play match-point pairs, your aim is to do better than the other players holding the same cards as you and your partner, whether or not the contract can be beaten. Preventing an overtrick may be worth an enormous

amount, allowing you to beat all the defenders who let declarer make a trick more. We will assess the various opening leads at match-points by calculating the average number of tricks that the defenders can then make. On this West hand, the ♠A lead is best at match-points too. It will allow the defenders to score an average of 4.37 tricks per deal. As you see, a fourth-best diamond lead is nowhere near as good, trailing the top-spade lead by a massive 0.6 tricks per deal.

The chapters in this book will look at 1NT, 2NT, 3NT and 6NT contracts. They address the difference that it makes when the opponents bid one or more suits on their way to a notrump contract, also how your best lead is affected if they used Stayman or a transfer bid. Special criteria apply when your hand is particularly weak, or particularly strong. You need to think differently when the opponents have used a limit bid of 2NT, either stopping there or advancing to 3NT. We will also address auctions where your partner opens the bidding and the opponents end up in a notrump contract. Should you always lead partner's suit or perhaps try some suit of your own?

By the time you reach the end of the book, you will have accumulated more knowledge about notrump opening leads than would be possible in a lifetime spent at the bridge table. Make the opening leads advocated by our computer simulations (the automated play of 5000 deals containing the chosen West hand), and you will improve your results at both IMPs and match-point pairs. We think that some of the recommended opening leads will surprise you!

David Bird and Taf Anthias

Many thanks to Bill Daly for checking the proof of this book.

Chapter 1

Should I lead a major or a minor?

The auction 1NT-3NT gives you valuable information about the responder's hand. He does not hold a 5-card major or he would have started with a transfer bid. He is also unlikely to hold a 4-card major, since he did not use Stayman. Some players raise directly to 3NT when they have a 4-card major and 4-3-3-3 shape. The majority of your opponents bid Stayman with this shape (we are assured by North American bridge colleagues) and that is the assumption that we will make.

What about the opener's hand? We assume the most popular style around the world: a strong 1NT of 15-17 points. We will see later that there was hardly any difference in our results and recommended opening leads when we assumed a 12-14 1NT instead. It is standard practice to open a strong 1NT on 5-3-3-2 hands containing a 5-card major, otherwise you can run into rebid problems. The opener will hold a 5-card major roughly 10% of the time. Nevertheless, declarer and the dummy, between them, are likely to hold fewer cards in the major suits than in the minor suits.

		♠ 2.44	
		♥ 2.44	
		♦ 4.06	
		♣ 4.06	
♠ 3.59		Average	♠ 3.59
♥ 3.59		Suit Lengths	♥ 3.59
♦ 2.91			♦ 2.91
♣ 2.91			♣ 2.91
		♠ 3.38	
		♥ 3.38	
		♦ 3.12	
		♣ 3.12	
West	North	East	South
pass	3NT	all pass	1NT

Our computer software created 100,000 deals conforming to a 1NT - 3NT auction. The resultant average suit lengths are shown in the diagram above. Between them, declarer and the dummy hold an average of 5.82 cards in each major, while East/West hold 7.18. The flipside of this is that East/West hold an average of 5.82 cards in each minor against North/South's 7.18.

This has a huge implication: after an auction of 1NT-3NT, it is usually better to lead a major suit than a minor suit. In the present chapter we will look more closely at this situation, seeing the effect of the major-suit bias. For the first four chapters, you should assume that South deals and opens 1NT, raised to 3NT by North. There is no further bidding and West has to choose an opening lead.

(If North/South would not use Stayman on 4-3-3-3 shape, their average length in each major increases from 5.82 to 5.94. This marginally reduces the major-suit lead bias, as we will see.)

The major-minor bias

Hand 1

What would you lead from: ♠ Q J 10 3 ♥ K 9 7 2 ♦ Q J 10 3 ♣ 5 ?

First thoughts This West hand will allow us to assess the major-suit bias, by comparing the results for the spade and diamond leads.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	31.5%	3.80
♥2	24.0%	3.43
♦Q	26.9%	3.63
♣5	24.9%	3.52

At IMPs, rubber bridge or Chicago, the ♠Q lead beats 3NT 4.6% more often than the ♦Q. A profile of the deals in the simulation tells us that, opposite this particular West hand, East will hold an average of 3.3 spades and only 2.7 diamonds. The chance of East holding a top spade is ♠A (13.4%), ♠K (21.2%). In diamonds the prospects are not so good: ♦A (11.0%), ♦K (16.7%).

Leading from four cards to the king is rarely a good lead. You can see from the table that the humble ♣5 is a better bet than a heart, despite being in a minor suit.

We mentioned in the introduction that we would assume a 15-17 point 1NT throughout this book. However, all the results and lead recommendations apply equally well when the opponents are playing a weak 1NT of 12-14 points. For example, when we ran a simulation on the same West hand, with North-South playing a weak 1NT that would not include a 5-card major, these were the results:

(12-14 1NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	30.5%	3.84
♥2	23.2%	3.48
♦Q	25.8%	3.65
♣5	24.2%	3.55

The ranking order of the four leads is the same. There is no appreciable difference to the major-minor bias, because in the strong 1NT case South would rarely hold five spades when West holds four. The fact that South will hold around three points fewer and the dummy three points more may slightly improve declarer's communications (reducing the 'Beats Contract' numbers by a small amount) but it will not affect the recommended opening leads.

To complete the picture, we will revert to a 15-17 1NT and set the simulations to include all 4-3-3-3 hands in the auction 1NT - 3NT, even when the 4-card suit is a major. We will then be able to see how the major-suit bias is affected when you play against opponents who do not use a Stayman enquiry on 4-3-3-3 shape. Here are the results:

(No 4-3-3-3 Stayman)	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	29.5%	3.75
♥2	22.8%	3.39
♦Q	26.2%	3.61
♣5	23.1%	3.47

There is a dip in the major-suit bias, as one would expect, but the overall effect is minimal.

Hand 2

What would you lead from: ♠ 5 2 ♥ A J 10 7 ♦ Q J 9 4 ♣ J 9 2 ?

First thoughts The broken sequence in diamonds catches the eye but will the major-suit bias deprive it of victory? Let's see:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5	25.1%	3.47
♥J	22.6%	3.48
♦Q	23.2%	3.37
♣2	22.7%	3.37

The Q-J-9-x holding (a 'broken sequence') is normally rated as an attractive lead, but the major-suit bias lifts the spade doubleton to first place.

Hand 3

What would you lead from: ♠ J 8 6 ♥ 9 5 ♦ K Q 7 2 ♣ K J 7 2 ?

First thoughts Leading from an honor combination often costs a trick and the compensating rewards are limited when you hold only a 4-card suit. Perhaps the major-suit bias means you should choose one of the short suits?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	21.3%	3.43
♥9	20.6%	3.41
♦K	13.2%	3.16
♦2	14.1%	3.16
♣2	15.7%	3.25

The ♠6 lead is 7% better than the ♦2, with little to choose between the major-suit leads. So that we can judge the bias in favor of major-suit leads, we will swap the majors and minors on this hand. What would you lead here:

♠ K Q 7 2 ♥ K J 7 2 ♦ J 8 6 ♣ 9 5 ?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	16.8%	3.19
♠2	12.7%	2.83
♥2	12.0%	2.85
♦6	11.9%	2.90
♣9	12.3%	2.92

A lead from ♠K Q 7 2 is now best, provided you lead the king rather than the 2. In other words a 7% deficit has been changed into a 5% advantage. A swing of 12% due to the switching of the major suits to the minor suits!

You can see that the major-suit bias has a huge effect on choosing the best opening lead. That's why we have placed this chapter at the start of the book.

The table contains other points of interest. It is better to lead the ♠K than the ♠2. However, when the combination was in diamonds (a minor suit) it was marginally better to lead the ♦2. How can that be? One of the main benefits of leading the king is that you may be able to drop a doubleton jack from declarer or the dummy. This is more likely to happen in a major suit because declarer holds fewer major-suit cards than minor-suit cards.

The final point to note is that leads from a 4-card suit headed by one or two honors are not particularly effective. You can see from the second table how closely the passive short-suit leads compete, despite being in a minor suit.

Hand 4

What would you lead from: ♠ A Q 7 ♥ A J 3 ♦ 10 8 5 2 ♣ 10 9 6 ?

First thoughts A-Q-x and A-J-x are not normally rated as good leads. When in a major suit, and up against nothing special in the minors, they may well come out on top. Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	30.5%	4.00
♥A	29.5%	3.91
♥7	21.8%	3.63
♦2	26.7%	3.83
♣10	26.0%	3.80

The two ace leads head the table. Let's remind ourselves why the lead of an ace can work so much better than expected. One reason is that you will

have a chance to switch elsewhere if partner discourages the first suit. Here is a deal from the simulation, where the ♠A lead succeeds in this fashion.

	♠ K						
	♥ 10 6						
	♦ K J 9 5 4 3						
	♣ K J 4 3						
♠ A Q 4 ♥ A J 3 ♦ 10 8 6 2 ♣ 10 9 6	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="padding: 5px;">N</td></tr> <tr><td style="padding: 5px;">W E</td></tr> <tr><td style="padding: 5px;">S</td></tr> </table>	N	W E	S	♠ 9 8 7 3 2 ♥ K 9 8 5 4 ♦ 7 ♣ 7 2		
N							
W E							
S							
	♠ J 10 6 5						
	♥ Q 7 2						
	♦ A Q						
	♣ A Q 8 5						
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; padding: 2px 10px;">West</td> <td style="width: 25%; padding: 2px 10px;">North</td> <td style="width: 25%; padding: 2px 10px;">East</td> <td style="width: 25%; padding: 2px 10px;">South</td> </tr> </table>				West	North	East	South
West	North	East	South				
			INT				
pass	3NT	all pass					

You lead the ♠A and are pleased to see dummy go down with a singleton ♠K (what a brilliant player you are!) On this trick East plays a discouraging ♠2. You can beat the contract now by switching to the ♥3, provided partner returns a heart and not a spade. (He will expect you to be quite short in spades because you led an ace not accompanied by a king.)

Hand 5

What would you lead from: ♠ Q 9 6 5 ♥ 10 4 ♦ K 8 2 ♣ Q J 10 2 ?

First thoughts Is the major-suit bias enough to close the gap between the sequence in clubs and the queen-high spades? Will the major-suit doubleton fare well again? Here are the numbers:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5	23.1%	3.32
♥10	25.0%	3.31
♦2	19.3%	3.15
♣Q	23.2%	3.41

It's a close race! The heart doubleton is best at IMPs, but the club sequence has the advantage at match-points. The closeness of the black-suit leads at IMPs is a further indication of the major-suit bias, since the club holding with its honor sequence is much stronger.

Should I lead a 4-card major or a 5-card minor?

Hand 6

What would you lead from: ♠ Q J 10 4 ♥ 8 3 ♦ A 10 8 5 3 ♣ J 6 ?

First thoughts Which lead would you choose — the ♠Q or the ♦5? The holding in the diamond suit has more potential for establishing the five defensive tricks needed to beat 3NT, perhaps. Against that, the queen-high honor sequence is in a major. Let's see the results:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	24.3%	3.57
♥8	18.8%	3.15
♦5	18.7%	3.10
♣J	13.6%	3.00

The spade sequence wins easily, with the fourth-best diamond no better than the doubleton heart. This hand is linked to the next one, where we switch the spade and diamond holdings. We will see how much difference that makes.

Hand 7

What would you lead from: ♠ A 10 8 5 3 ♥ 8 3 ♦ Q J 10 4 ♣ J 6 ?

First thoughts On the previous hand, the Q-J-10-4 holding (then in spades) finished 5% ahead of the A-10-8-5-3 holding (then in diamonds). We will see whether that lead is diminished or completely lost when the suits are changed.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5	28.7%	3.44
♥8	21.8%	3.38
♦Q	23.2%	3.53
♣J	17.3%	3.19

Yes, the 5% lead becomes a 5.5% deficit — all due to the expectation of suit length in your partner's hand. The safer diamond lead remains the best shot at match-points.

Hand 8

What would you lead from: ♠ K 4 ♥ Q 8 6 3 ♦ K 8 ♣ J 9 7 4 2 ?

First thoughts It is particularly unattractive to lead from a doubleton king. How will the two longer holdings compare?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	15.1%	2.82
♥3	17.3%	3.14
♦K	6.9%	2.45
♣4	17.7%	3.13

The heart and club leads are evenly matched. We see that, in rough terms, a 4-card major-suit lead is equivalent to a 5-card minor-suit lead.

Should I lead a short major or a 5-card minor?

Hand 9

What would you lead from: ♠ 4 3 ♥ 5 4 ♦ 9 6 4 2 ♣ K Q 8 3 2 ?

First thoughts The guideline 'fourth best of the longest and strongest' would leave you in no doubt what to lead. Does it give you the right answer when the suit is a minor?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	10.2%	2.68
♥5	10.3%	2.67
♦6/4/2	6.3%	2.57
♣K	10.1%	2.58
♣3	6.6%	2.37

A triple tie at IMPs, with the minuscule major-suit doubletons the equal of the 5-card club holding. At match-points you should lead one of the major-suit doubletons. The difference of 0.1 in the Average Tricks column (between a spade and the ♣K) is more of an advantage than you might think. An extra trick can be worth as much as half a top (if, for example, all the scores on the sheet are either 630 or 600). So, an extra trick on every tenth board would certainly carry you to a better finishing position.

Hand 10

What would you lead from: ♠ Q 6 ♥ K 5 ♦ 10 8 7 3 ♣ J 10 4 3 2 ?

First thoughts Spurred on by the results from the previous hand, we will see how doubleton honor leads fare in the major suits. Not the type of lead that you see very often, but perhaps they work well.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	14.3%	2.90
♥K	14.6%	2.76
♦3	11.0%	2.88
♣3	11.7%	2.85

The ♥K edges it at IMPs, giving you a marginally better chance of setting up a long suit in partner's hand. The ♠Q is better at match-points.

What is the effect when East is the dealer?

On our results so far, South opened 1NT as the dealer. Perhaps you are wondering what effect it would have if East was the dealer and had passed in front of the 1NT opening.

Since East could not then hold a weak-two opening in either major (nor a 1♥ or 1♠ opening), it would presumably make the doubleton leads in the major suits less effective. Well, there is no need to guess on the matter. We will rerun the Hand 10 simulation with East as the dealer. Our software will then exclude deals where East would have opened with a weak two-bid (or any other opening bid). These are the new results:

(East dealer)	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	11.6%	2.74
♥K	11.3%	2.52
♦3	9.1%	2.78
♣3	9.5%	2.75

Compare these results with those on the previous page. The major-suit doubletons retain their advantage, although it is reduced. All the numbers are slightly lower because the East hand is now more likely to be balanced; declarer will therefore benefit from better breaks in his suits.

Hand 11

What would you lead from: ♠ A 7 ♥ 8 5 ♦ K J 9 6 3 ♣ A 10 7 2 ?

First thoughts Now the 5-card minor is stronger and there are two side entries. Can we forget about major-suit bias, holding this hand?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	23.9%	3.78
♥8	23.9%	3.77
♦6	31.6%	3.96
♣2	19.2%	3.67

Yes, of course, the diamond lead wins. You have a great chance of scoring three or four diamond tricks to go with your two outside aces.

Hand 12

What would you lead from: ♠ K 10 5 ♥ A 5 ♦ 10 8 6 5 3 2 ♣ 8 4 ?

CONCLUSIONS - Should I lead a major or a minor?

- On average, after an auction of 1NT - 3NT, the defenders hold 7.2 cards between them in each major-suit. Declarer and the dummy hold only 5.8. This creates a significant bias towards major-suit opening leads.
- When you have similar holdings in a major and a minor, you should lead the major suit. It goes further than that. Even when a minor-suit holding is better, it may well be right to lead a major suit.
- A passive lead from a short major suit is better than leading from four cards to an honor in a minor suit.
- In rough terms, a lead from a 4-card major is equivalent to a lead from a 5-card minor.
- We assume a 15-17 point 1NT in this book, but the results and recommended opening leads apply equally well when the opponents are playing a 12-14 point 1NT (or any other range).
- We assume that the responder will, rightly or wrongly, bid Stayman with 4-3-3-3 shape including a 4-card major. If your opponents would instead raise directly to 3NT, this slightly reduces the bias towards major-suit leads. The overall effect is minimal.
- When your partner has failed to open the bidding, the prospect for short-suit leads is reduced — particularly in a major suit.

Pick a Winner!

Should I lead a major or a minor?

You are invited to judge which is the best available lead from the twelve West hands below. Note also if you think that a different lead would be best at match-points. The simulation results are given on the next page.

Auction is 1NT - 3NT

- | | | |
|--|---|--|
| 1. ♠ A 7
♥ J 8 7 6 3
♦ Q J 5 4
♣ 9 3 | 2. ♠ J 6 4
♥ Q J
♦ A 10 8 2
♣ K 9 7 3 | 3. ♠ Q J 10 7
♥ 8 6 4 2
♦ K Q J 7
♣ 5 |
| 4. ♠ Q J 8 5
♥ 6 3
♦ K 5 4
♣ Q 10 6 2 | 5. ♠ 9 8
♥ 6
♦ K Q 7 6 2
♣ K J 8 5 3 | 6. ♠ 10 7
♥ Q 10 9
♦ J 9 6 4
♣ Q J 10 4 |
| 7. ♠ Q 8 7 6 3
♥ 7
♦ J 7 5
♣ Q J 9 4 | 8. ♠ A 8
♥ K Q 8 2
♦ K Q 8 2
♣ 7 4 3 | 9. ♠ 6 4
♥ K J 8 4
♦ J 10 7
♣ 10 7 6 5 |
| 10. ♠ 9 2
♥ 8 5 3
♦ A 9 6 2
♣ K 9 6 2 | 11. ♠ 9 6
♥ J 7 6 5 2
♦ K 2
♣ Q J 10 2 | 12. ♠ Q 8 6 5
♥ Q J 3
♦ K 10 8 5 2
♣ 9 |

Answers

Here are the best leads from the West hands on the previous page, as calculated from 5000-deal simulations. The annotations (I) and (M) indicate that the best lead is different when playing Matchpoints rather than IMPs.

Auction is 1NT - 3NT		IMPs	MPs
1.	♠ A 7 ♥ J 8 7 6 3 ♦ Q J 5 4 ♣ 9 3	1st ♠A 21.4%	3.24
		2nd ♥6 17.2%	3.21
2.	♠ J 6 4 ♥ Q J ♦ A 10 8 2 ♣ K 9 7 3	1st ♥Q 16.8%	3.32
		2nd ♠4 15.0%	3.25
3.	♠ Q J 10 7 ♥ 8 6 4 2 ♦ K Q J 7 ♣ 5	1st(I) ♠Q 23.2%	3.35
		1st(M) ♦K 22.0%	3.49
4.	♠ Q J 8 5 ♥ 6 3 ♦ K 5 4 ♣ Q 10 6 2	1st ♠Q 22.0%	3.28
		2nd ♥6 21.2%	3.10
5.	♠ 9 8 ♥ 6 ♦ K Q 7 6 2 ♣ K J 8 5 3	1st ♠9 14.7%	3.24
		2nd ♥6 13.2%	3.21
6.	♠ 10 7 ♥ Q 10 9 ♦ J 9 6 4 ♣ Q J 10 4	1st ♠10 23.9%	3.46
		2nd ♥10 22.2%	3.36
7.	♠ Q 8 7 6 3 ♥ 7 ♦ J 7 5 ♣ Q J 9 4	1st ♠6 12.9%	2.79
		2nd ♥7 10.8%	2.77
8.	♠ A 8 ♥ K Q 8 2 ♦ K Q 8 2 ♣ 7 4 3	1st ♥K 24.3%	3.89
		2nd ♣7/3 17.3%	3.56
9.	♠ 6 4 ♥ K J 8 4 ♦ J 10 7 ♣ 10 7 6 5	1st ♠6 19.9%	3.08
		2nd ♥4 15.1%	3.02
10.	♠ 9 2 ♥ 8 5 3 ♦ A 9 6 2 ♣ K 9 6 2	1st ♥8/3 18.4%	3.28
		2nd ♠9 16.6%	3.21
11.	♠ 9 6 ♥ J 7 6 5 2 ♦ K 2 ♣ Q J 10 2	1st ♥5 21.0%	3.16
		2nd ♠9 19.8%	3.10
12.	♠ Q 8 6 5 ♥ Q J 3 ♦ K 10 8 5 2 ♣ 9	1st ♥Q 25.0%	3.43
		2nd ♦5 20.5%	3.16

Chapter 2

Should I lead from my longest suit?

In this chapter we will look at the general guideline ‘Lead from your longest and strongest suit against 3NT’, noting further situations where it is better to lead from one of your shorter suits. Some of the results surprised us and may surprise you, too!

When you lead from a short suit, your aim is to find partner with a long holding opposite. Your expectation of suit length in partner’s hand depends on whether the suit is a major or a minor. Look at this table, which applies to a 1NT - 3NT auction:

West suit length	1	2	3	4	5	6
Expected East length (♥/♠)	5.4	4.7	4.0	3.3	2.6	2.0
Expected East length (♦/♣)	3.8	3.3	2.9	2.4	2.0	1.6

As you see, the more cards you hold yourself, the greater is the expectation of combined suit length. When you hold a shortage, the expectation from partner’s hand is very much more in a major suit.

One of the best ways to defeat 3NT is to establish and enjoy a suit where either you or your partner holds a 5-card suit. Major-suit leads from a 5-card suit are excellent prospects, with partner holding an average 2.6 cards opposite. You can see from the table why major-suit doubleton leads fare surprisingly well. Partner will hold an average of 4.7 cards opposite and is an odds-on favorite to hold five cards or more.

When you lead from a 4-card minor, the combined expectation of cards in that suit (between you and your partner) is only 6.4, exactly the same as when you lead a major-suit singleton!

Hand 1

What would you lead from: ♠ K 10 8 6 3 ♥ K 2 ♦ A 8 3 ♣ 9 7 3 ?

First thoughts If we told you that a spade lead was no good, you would rightly demand a full refund. Let's see the figures:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	32.4%	3.63
♥K	15.2%	3.11
♦3	19.0%	3.40
♣7/3	21.1%	3.49

Leading away from the ♠K may well cost you a trick initially (leading from an ace, king or queen costs around half a trick, on average). It is usually worth this investment when you lead from a 5-card suit, because there is a fair chance that you can establish several long cards in exchange.

A spade lead is also best at match-point pairs.

Hand 2

What would you lead from: ♠ 8 5 ♥ K J 9 6 2 ♦ A 4 ♣ K J 7 2 ?

First thoughts A lead in either hearts or clubs may well cost you a trick initially. The 'longest and strongest' guideline points you towards the heart lead because you have the chance of establishing an extra long card, compared with a club lead. These are the simulation results:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠8	24.1%	3.49
♥6	35.3%	3.60
♦A	18.6%	3.31
♣2	18.6%	3.36

There is a huge difference between a heart and a club lead. A heart lead gives you almost twice the chance of beating the contract.

The 0.24 tricks-per-deal difference between the two long-suit leads at match-points is quite a margin. If you make one trick more than a rival pair on 2 deals in every 10, you will finish well ahead of them.

Hand 3

What would you lead from: ♠ K J 7 2 ♥ 10 9 4 ♦ Q J 3 ♣ 7 4 2 ?

First thoughts Is it better to lead from a strong 4-card suit, following the guideline, or a safer 3-card suit? Should you pay the up-front cost of leading from an honor?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠2	18.0%	3.12
♥10	20.5%	3.21
♦Q	14.0%	2.75
♣7/4/2	17.4%	3.11

A passive heart lead is better than a spade lead. We saw in the first chapter that major-suit leads work better than minor-suit leads. When you compare the two minor-suit leads here, you may be surprised that the club lead is a better prospect. That is because there is a price to pay when you lead away from an honor holding, even a seemingly attractive combination with two touching honors. A profile of this simulation showed that East held an average of only 2.88 diamonds — including the ♦A (12.5%), the ♦K (17.3%) and the ♦10 (32.2%). So, there is a reasonable chance of finding ♦A-10-x-x or ♦K-10-x-x in the dummy, with declarer holding the other top honor. A diamond lead would then allow him to score four tricks in the suit.

You hold four cards in your second-longest suit

Hand 4

What would you lead from: ♠ 10 2 ♥ K Q J 8 ♦ A 10 6 4 3 2 ♣ 8 ?

First thoughts Every book on opening leads places the K-Q-J sequence close to the summit of its recommended list. Let's see how it compares with leading from a 6-card alternative suit, headed by the ace.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	24.8%	3.37
♥K	41.6%	4.20
♦A	28.7%	3.49
♦4	24.5%	3.38
♣8	19.9%	3.29

The ♥K is a very clear winner, at both IMPs and match-point pairs. There is a good reason why you may get disappointing results when you lead from a 6-card minor suit after a 1NT-3NT auction. The opponents hold no great length in the majors, or the responder would have looked for an 8-card fit. They are therefore very likely to hold six cards between them in your long minor suit, leaving your partner with only a singleton. This gives you little chance of establishing your 6-card suit.

An interesting result from the table is that the ♦A lead gives you a better chance of beating 3NT than the ♦4. This is because you will have a second opportunity to attack hearts (which is what you should have done in the first place!) Let's see a deal from the simulation where this is the case:

	♠ J 7 3											
	♥ 6 4 2											
	♦ 8											
	♣ A Q J 10 5 4											
♠ 10 2	<table style="border-collapse: collapse; margin: auto;"> <tr><td></td><td style="text-align: center;">N</td><td></td></tr> <tr><td style="text-align: center;">W</td><td></td><td style="text-align: center;">E</td></tr> <tr><td></td><td style="text-align: center;">S</td><td></td></tr> </table>		N		W		E		S		♠ 9 8 6 5	
	N											
W		E										
	S											
♥ K Q J 8		♥ A 10 7 5										
♦ A 10 6 4 3 2		♦ Q J 5										
♣ 8		♣ 6 2										
	♠ A K Q 4											
	♥ 9 3											
	♦ K 9 7											
	♣ K 9 7 3											
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">West</td> <td style="width: 25%; text-align: center;">North</td> <td style="width: 25%; text-align: center;">East</td> <td style="width: 25%; text-align: center;">South</td> </tr> <tr> <td style="text-align: center;">pass</td> <td style="text-align: center;">3NT</td> <td style="text-align: center;">all pass</td> <td style="text-align: center;">1NT</td> </tr> </table>				West	North	East	South	pass	3NT	all pass	1NT	
West	North	East	South									
pass	3NT	all pass	1NT									

A low diamond lead would allow declarer to run eleven tricks. If you happened to lead the ♦A, you might well think again (when East signaled with the ♦Q and dummy's clubs were so threatening) and switch to the ♥K. So, it is not recommended to lead an ace from a 6-card suit. If the suit is worth leading in its own right, it will generally be right to lead fourth-best.

Hand 5

What would you lead from: ♠ 10 ♥ Q J 9 2 ♦ A 9 6 5 4 ♣ 6 5 3 ?

First thoughts A broken sequence in a 4-card major jousts with ace-fifth in a minor. Would you choose a heart or a diamond?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	12.3%	2.95
♥Q	18.8%	3.36
♦A	12.8%	2.89
♦5	14.0%	2.94
♣6/5/3	11.7%	2.92

The ♥Q lead is better than a low diamond at IMPs. It has an even more significant edge at match-points, topping the list by a giant 0.4 tricks per deal.

Looking at the possible leads in the diamond suit, we note that the edge for the ace lead (in Hand 4) has vanished. That's because the ability to switch to the excellent ♥K-Q-J sequence is not there. As we mentioned, if you are going to lead from a long suit headed by the ace, it is generally right to lead a low card.

Hand 6

What would you lead from: ♠ A Q J 8 ♥ 9 6 ♦ J 9 7 6 4 ♣ A 2 ?

First thoughts Next we compare a chunky 4-card major with a much weaker 5-card minor. Would you lead a spade or a diamond?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	36.7%	4.37
♠Q	33.6%	4.29
♥9	32.1%	3.66
♦6	33.6%	3.78
♣A	27.5%	3.55

This is more a test of memory than bridge judgment, since it was the West hand we featured in the Introduction! A spade lead is best, with the ♠A being the right honor to choose. A spade lead will succeed immediately when partner holds the ♠K. It will work well also when it sets up three spade tricks and partner has an early winner in one of the red suits.

Hand 7

What would you lead from: ♠ 10 8 5 ♥ Q 10 9 4 3 ♦ A K J 3 ♣ 6 ?

First thoughts This time the 4-card suit is iron-clad and the 5-card suit is stronger too. Which red suit would you choose?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5	30.2%	3.59
♥10	29.7%	3.59
♦A/K	36.4%	4.08
♦3	14.8%	3.26
♣6	27.2%	3.51

Why does the ♦A lead give you a better chance than a heart lead? It is partly because it will give you a double chance. You can persevere with diamonds if that seems a good idea; you can also switch to hearts without having surrendered the lead. Look at this deal from the simulation:

	♠ 9 4										
	♥ A										
	♦ 9 7 5 4										
	♣ Q J 9 8 3 2										
♠ 10 8 5 ♥ Q 10 9 4 3 ♦ A K J 3 ♣ 6	<div style="border: 1px solid black; padding: 10px; display: inline-block;"> <table style="width: 100%; text-align: center;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table> </div>		N		W		E		S		♠ Q 7 2 ♥ J 6 5 2 ♦ 8 2 ♣ A 7 5 4
	N										
W		E									
	S										
	♠ A K J 6 3										
	♥ K 8 7										
	♦ Q 10 6										
	♣ K 10										

West	North	East	South
pass	3NT	all pass	INT

You lead the ♦A and dummy goes down with a threatening club suit. Having retained the lead, you can switch to a heart, removing the side entry to dummy. Declarer may take advantage of being in the dummy by finessing the

♠J to pick up five tricks in the suit. East will subsequently hold up the ♣A for one round, however. Five spades, two hearts and one club will bring declarer's total to eight and he will have no way to score a ninth trick.

As you see, a heart lead was really best on this deal. By leading the ♦A, you 'ride on the back' of the heart lead — obtaining the same benefits.

Hand 8

What would you lead from: ♠ 10 3 ♥ K 8 5 2 ♦ 9 8 ♣ Q 10 7 6 2 ?

First thoughts How would many players rank the leads here? Club best, then a heart, then the spade doubleton (because it is a major) and last the diamond doubleton? Many would guess that way. Let's see if they would be right.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	17.7%	3.10
♥2	15.7%	3.08
♦9	14.1%	3.01
♣6	17.5%	3.04

The spade doubleton is marginally ahead of the lead from club length. Perhaps you are surprised that a spade lead is rated ahead of a heart. Leading from four cards to a high honor is not an attractive lead. Such a lead may give away a trick initially and limited compensation comes your way in terms of setting up long cards.

Major-suit doubleton leads are showing well in our simulations so far. It is not so surprising when you think that partner is likely to hold five cards opposite; he would probably have chosen to lead the suit, had he been on lead.

Hand 9

What would you lead from: ♠ J 9 8 6 2 ♥ K Q 5 4 ♦ 2 ♣ 6 4 2 ?

First thoughts It seems to be a close decision between the majors. The spade holding will need quite a bit of assistance from partner before it can be established. You need to get five tricks from somewhere, however, and it may represent the best chance. Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	19.4%	2.96
♥K	18.4%	3.24
♥4	16.5%	2.97
♦2	13.1%	2.79
♣6/4/2	15.7%	2.86

You will have noticed that on almost all the West hands so far, the best lead at IMPs is also the best lead at match-points. This hand-type is one of the few exceptions. The moderate 5-card spade suit gives you slightly more chance of beating the contract. At match-points, the ♥K is better by 0.3 tricks per deal, a substantial margin. Look at the two possible leads in hearts. Again we see that it is usually right to lead an honor from two touching honors, whatever the third-best card may be. This will sometimes save declarer a guess, it is true, and we will discuss this in Chapter 3.

Comparing 4-card and 3-card leads

Next we will look at some 4-card combinations, seeing whether a 3-card lead in some other suit is preferable.

Hand 10

What would you lead from: ♠ Q 7 5 3 ♥ K 8 3 ♦ 9 7 6 4 ♣ 10 3 ?

First thoughts No doubt the major-suit leads will come out on top. Traditional thinking suggests that a spade is better than a heart.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠3	15.0%	3.01
♥3	18.2%	3.05
♦7/6/4	13.7%	2.93
♣10	12.1%	2.86

The heart lead is ahead! How can that be? It's because the best chance of beating 3NT is to make tricks in a 5-card suit held by one of the defenders.

On our 5000-deal simulation with this West hand, East held five or more spades on 8.8% of the deals and five or more hearts on 27.6%. East's average point-count was 8.5, so there was a fair chance that he would have a side entry when it was possible to establish the heart suit.

Hand 11

What would you lead from: ♠ A J 8 7 ♥ Q J 7 ♦ 10 7 5 ♣ Q 10 9 ?

First thoughts Which major-suit holding do you prefer? A low spade lead seems all too likely to surrender a trick. Let's see the results:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠7	21.0%	3.45
♥Q	30.1%	3.72
♦5	22.9%	3.51
♣10	14.2%	3.10

That's a big advantage for the ♥Q, at both forms of the game. It works better than a lead from ♦Q-J-3 on Hand 3 because here the suit is a major. A profile of the simulation puts East with an average of 4.0 hearts, including the ♥A (11.2%), the ♥K (19.4%) and the ♥10 (46.5%). There is relatively little chance that the ♥Q lead will give away a trick.

How do leads from low cards compare?

Hand 12

What would you lead from: ♠ 10 4 ♥ 10 7 4 ♦ Q J 7 5 ♣ A 10 8 3 ?

First thoughts Is it better to lead from two low or three low? The major-suit leads will doubtless end on top, but which one is better?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	25.2%	3.54
♥7/4	26.8%	3.59
♦Q	18.7%	3.31
♦5	20.7%	3.41
♣3	18.9%	3.38

The passive leads in the majors do indeed head the table, with a slight advantage to the tripleton. We thought the spade lead might edge to the front, but no doubt it will be hard work to establish partner's spade suit.

Hand 13

What would you lead from: ♠ 9 8 3 ♥ 9 8 6 2 ♦ A 10 8 ♣ A J 4 ?

First thoughts Is it better to lead from three low or four low? Again we expect the major-suit leads to come out on top, but which will win?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠9/8	29.9%	3.84
♥9/8	30.9%	3.89
♦A	22.1%	3.58
♣A	19.8%	3.51

The two spot-card leads are neck-and-neck. We were rather expecting the spade lead to be better, because there is a greater expectation of length opposite. Three heart tricks plus the two aces would beat the game, however, so three or four useful hearts in the East hand may be enough.

When should I lead from a 3-card suit?

Hand 14

What would you lead from: ♠ A K 3 ♥ 8 6 2 ♦ K 9 6 5 3 2 ♣ 8 ?

First thoughts Some players would lead the ♦5, hoping to set up this suit, using the ♠A-K as entries. Perhaps it is better to lead the ♠A, allowing you to

look at the dummy. If it goes down with something like ♠Q-J-x-x, you will have the chance to switch elsewhere, perhaps guided by a suit-preference signal from your partner. Let's see the results:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	37.6%	4.10
♥6/2	21.2%	3.41
♦5	19.6%	3.32
♣8	17.9%	3.30

Not much doubt there. The ♠A is a huge winner at both forms of the game. When you hold A-K-x in a major suit (and the opponents have not looked for a major-suit fit), the odds are good that partner holds at least four cards there. Give him the queen of the suit and you are well on your way to beating the contract.

Lead a diamond instead and the prospects are nowhere near as promising. Your partner is likely to hold a singleton diamond and it will be difficult to establish the suit. Declarer may run for home when you had the contract beaten in your A-K-x suit.

Hand 15

What would you lead from: ♠ Q 10 8 7 6 4 ♥ K Q 5 ♦ 9 ♣ Q 7 5 ?

First thoughts We have just seen that A-K-x is a strong lead. How about its younger brother, K-Q-x? When the holding is in a major suit, there is a fair chance that partner will hold some length opposite. You may then be off to a strong start in establishing the five tricks that you need. Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠7	18.0%	3.03
♥K	23.0%	3.29
♦9	14.3%	2.97
♣5	12.2%	2.73

At both forms of the game, the strong tripleton is a better lead than the respectable 6-card suit.

Hand 16

What would you lead from: ♠ Q J 5 ♥ 8 5 3 ♦ J 9 5 3 2 ♣ 10 4 ?

First thoughts We move one notch lower now and look at leading from a Q-J-x combination. Would that be your choice here?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	15.9%	2.97
♥8/5/3	11.9%	2.69
♦3	9.9%	2.60
♣10	7.4%	2.49

The lead from the strong tripleton is best, once again. The margin is particularly impressive when playing match-points.

Hand 17

What would you lead from: ♠ Q J 7 5 4 2 ♥ K 8 5 ♦ 9 8 3 2 ♣ — ?

First thoughts Next we will look at a few tripletons containing only one honor. How would you compare the two major-suit leads from this hand?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	19.9%	3.11
♠5	19.7%	3.02
♥5	19.0%	3.06
♦8/3/2	15.0%	2.95

It's amazing that the heart lead competes so well against a spade lead from a 6-card suit headed by two touching honors. As we have seen on other hands, leads from a 6-card suit are overrated.

Perhaps you are surprised that leading a spade honor is slightly better than leading fourth-best. Let's pluck a deal from the simulation that shows how this can be possible:

	♠ 10 6						
	♥ J 10 6						
	♦ A 10 5						
	♣ A 10 9 8 6						
♠ Q J 7 5 4 2 ♥ K 8 5 ♦ 9 8 3 2 ♣ —	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="padding: 5px;">N</td></tr> <tr><td style="padding: 5px;">W E</td></tr> <tr><td style="padding: 5px;">S</td></tr> </table>	N	W E	S	♠ 8 3 ♥ A Q 2 ♦ 8 5 ♣ K J 7 5 3 2		
N							
W E							
S							
	♠ A K 9						
	♥ 9 7 4 3						
	♦ K Q J 6						
	♣ Q 4						
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; padding: 5px;">West</td> <td style="width: 25%; padding: 5px;">North</td> <td style="width: 25%; padding: 5px;">East</td> <td style="width: 25%; padding: 5px;">South</td> </tr> </table>				West	North	East	South
West	North	East	South				
pass	3NT	all pass	1NT				

Suppose you lead the ♠5. This will give declarer three spade tricks and a total of eight quick tricks. He can then set up a ninth by leading towards the ♣Q or developing a heart trick. If instead you lead the ♠Q, declarer has only two spade tricks. He cannot set up a heart trick because East will clear the spade suit when he wins the first round of hearts. Nor can declarer establish the clubs without the defenders scoring three hearts and two clubs.

When should I lead from a doubleton honor?

The most promising doubletons, so far as opening leads are concerned, are those with two touching honors: A-K, K-Q or Q-J. Perhaps these represent a better lead than a moderate suit of five cards or so? We will see.

Hand 18

What would you lead from: ♠ 10 8 6 ♥ K Q ♦ 10 9 8 5 2 ♣ 9 8 4 ?

First thoughts Setting up the diamonds will be an arduous task. Perhaps it is better to lead the ♥K and hope to score further heart tricks in partner's hand. He is likely to have an entry or two to assist this process.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠8	8.0%	2.60
♥K	18.3%	3.09
♦10	6.2%	2.54
♣9/8	5.1%	2.50

Just look how hopeless a diamond lead is! You can bet that many players would choose a diamond lead, not even considering a heart. The ♥K gives you almost three times the chance of beating 3NT and is hugely better at Pairs too. That's one to remember.

In Chapter 1 we considered the effect of East being the dealer rather than South. What difference would it have made if East were the dealer on this particular hand and had launched the auction with an initial Pass? It would mean that East could not hold a weak 2♥ opening. In effect, it would remove from the scene a large number of East hands that would benefit from a heart opening lead.

There is no need to guess how the results would change. Once again, we can simply rerun the simulation with East as the dealer. The software will then exclude deals on which East would have made any opening bid. These are the new results:

(East dealer)	Beats contract (IMPs)	Avg. tricks (MPs)
♠8	5.2%	2.53
♥K	10.4%	2.77
♦10	4.9%	2.51
♣9/8	3.8%	2.47

The recommended lead and the ranking order of the four leads remain the same. The probability that the ♥K lead will beat the contract takes an 8% dive. Indeed, all the numbers have gone down. One reason is that East cannot now hold an opening one-bid. Another is that once all East's weak-two bids are excluded, the declarer will benefit from more favorable breaks.

Hand 19

What would you lead from: ♠ Q 10 7 6 4 2 ♥ Q J ♦ J 3 2 ♣ 9 2 ?

First thoughts Most players would surely choose a spade from that West hand, but perhaps the ♥Q-J is a stronger lead than is generally appreciated. Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	7.7%	2.40
♥Q	13.5%	2.71
♦2	5.2%	2.29
♣9	5.2%	2.34

That's another big margin in favor of the strong doubleton lead. Let's scan through the simulation output, looking for a typical deal where a heart lead beats the contract.

	♠ J 9 3		
	♥ 10 2		
	♦ A 10 9 7		
	♣ A 10 5 3		
♠ Q 10 7 6 4 2	N W E S	♠ K 8	
♥ Q J		♥ A 9 8 6 4	
♦ J 5 3		♦ 8 2	
♣ 9 2		♣ K 7 6 4	
	♠ A 5		
	♥ K 7 5 3		
	♦ K Q 6 4		
	♣ Q J 8		
West	North	East	South
			1NT
pass	3NT	all pass	

West leads the ♥Q and declarer wins with the ♥K. When he runs the ♣Q, East wins and lays down the ♥A, trusting West to unblock the jack if he has led from ♥Q-J-x. The contract duly goes one down.

Even though East had some help in spades, a spade lead would be ineffective. A lead from a 6-card suit is all the more likely to be disappointing when your hand is weak and contains few side entries.

Hand 20

What would you lead from: ♠ Q J 8 ♥ Q J ♦ 10 8 7 2 ♣ J 9 7 6 ?

First thoughts How does a strong doubleton lead compare with a strong tripleton (also headed by two honors)? You would perhaps expect Q-J-x to work better than Q-J, but when you hold only two cards in a suit partner is more likely to hold five cards opposite. The table will reveal all:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	13.0%	2.96
♥Q	14.1%	2.97
♦2	8.4%	2.77
♣6	6.9%	2.67

There is a slight edge for the doubleton Q-J. Opposite this particular West hand, East will hold an average of 4.7 hearts and only 3.9 spades. East will hold exactly five hearts 38% of the time and five spades only 22% of the time. We can begin to see why the doubleton lead works unexpectedly well.

Hand 21

What would you lead from: ♠ K Q ♥ K Q 7 ♦ 10 7 6 4 3 ♣ 9 5 2 ?

First thoughts We will do a similar comparison with two K-Q combinations, to see if the doubleton fares better again.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	10.1%	2.98
♥K	13.0%	3.03
♦4	6.2%	2.83
♣9/5/2	5.8%	2.80

This time the tripleton lead is slightly ahead. Why is that? There is more chance of a blockage hindering the defense when you lead from K-Q doubleton. When you lead from Q-J, a partner with K-10-x-x-x has the chance to overtake on the second round. When you lead from K-Q, he cannot overtake from J-10-x-x-x.

Hand 22

What would you lead from: ♠ Q 4 ♥ J 9 7 6 ♦ Q 8 ♣ Q 8 7 4 3 ?

First thoughts How good is that doubleton spade holding? In particular, is it a better lead than a club from five cards to an honor?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	10.5%	2.44
♥6	6.8%	2.44
♦Q	4.5%	2.23
♣4	7.4%	2.39

The ♠Q is best. This is not a particular surprise, since establishing one of the longer suits will not be easy and the hand contains little by way of entries. Partner is marked with spade length and the best (albeit rather small) chance of beating 3NT is to score some spade tricks in his hand.

Maybe the situation would alter if the ♦Q were changed to the ♦A, providing a definite entry. There's no need to guess on the matter. With no expense spared, we will run another simulation...

Hand 23

What would you lead from: ♠ Q 4 ♥ J 9 7 6 ♦ A 8 ♣ Q 8 7 4 3 ?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	14.4%	2.93
♥6	14.8%	3.05
♦A	10.4%	2.79
♣4	19.3%	3.06

The ♠Q loses her 3% advantage over a club and is now 5% behind — a swing of 8% due solely to the presence of the ♦A. Why is this? A side entry increases the chance of establishing and enjoying the club suit. It also reduces the average strength of the East hand, lessening the prospects of scoring spade tricks there.

This instructive example reminds us that choosing a good opening lead is not just a matter of remembering some splendid table headed by A-K-Q. You may have to use your brain!

When should I lead a singleton?

We end the chapter with a brief look at the type of deal where a singleton lead gives you the best chance, at both forms of the game.

Hand 24

What would you lead from: ♠ 10 ♥ 9 7 6 5 ♦ 10 9 8 ♣ Q 9 8 5 3 ?

First thoughts Suppose you surveyed a group of players at your local club. You might expect support for a club, diamond or heart lead, but surely not for a spade lead. Let's see the figures.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠ 10	13.1%	2.81
♥ 7/6/5	8.1%	2.69
♦ 10	6.1%	2.53
♣ 5	8.2%	2.52

If you are aghast to find a singleton lead at the top of the rankings, look at the expectation of spade and heart length in partner's hand, opposite this particular West hand. A profile of this simulation revealed that East holds an average of 5.4 spades and at least five spades 83% of the time. He holds an average of 3.2 hearts and at least five hearts only 6% of the time. That's not the end of it. With an average of 10.8 HCPs, East is likely to have a side entry or two.

Opposite this West hand, East will hold an average of 8.6 cards in the major suits and only 4.4 in the minor suits. That is why the minor-suit leads perform so disappointingly.

Hand 25

What would you lead from: ♠ 10 9 7 4 ♥ Q ♦ J 9 7 6 4 ♣ J 5 3 ?

First thoughts Is it any different when the singleton is an honor card? Does the ♥Q deserve to catch your eye here?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	5.6%	2.47
♥Q	9.5%	2.60
♦6	4.6%	2.31
♣3	3.2%	2.22

Indeed it should. The chance of breaking 3NT on any lead is low, with your hand being so weak, but the ♥Q lead gives you the best chance.

CONCLUSIONS - Should I lead from my longest suit?

- After an auction of 1NT - 3NT, leads from a 4-card suit headed by one or two honors are over-rated. You give away around half a trick by leading from an ace, king or queen and stand to gain little in return by way of established tricks.
- When comparing two major-suit leads (or minor-suit leads), it is usually better to lead from two low or three low, rather than four cards headed by one or two honors. Leads from a major-suit doubleton fare surprisingly well, because partner is likely to hold at least five cards opposite.
- When comparing two major-suit leads (or minor-suit leads), there is little to choose between a lead from four cards or three cards — for example, ♠K-8-5-2 and ♥K-7-6. The 3-card lead is just as likely to beat the contract, unless your hand is strong and contains most of the side entries.
- When you have four cards in one major and a singleton in the other, it is often better to lead the singleton.

Pick a Winner!

Should I lead from my longest suit?

You are invited to judge which is the best lead from the twelve West hands below. Note down if you think the best lead would differ between IMPs and match-points. The simulation results are given overleaf.

Auction is 1NT - 3NT

- | | | |
|---|--|---|
| 1. ♠ 10 9 8 5 3 2
♥ Q J 10 2
♦ A
♣ 10 2 | 2. ♠ K Q 8
♥ 8 3
♦ 10 9 3 2
♣ 8 6 5 2 | 3. ♠ Q 7 4 2
♥ A K 4
♦ 10 7 5
♣ J 10 5 |
| 4. ♠ J 9 7 5
♥ J 5 3
♦ K 9
♣ 8 7 3 2 | 5. ♠ Q 8 6 2
♥ K Q J
♦ 10 6
♣ 10 9 8 4 | 6. ♠ K Q 8 3
♥ K 10 8 3 2
♦ J 5
♣ 10 2 |
| 7. ♠ Q J 7
♥ K 10 7 6 4 3
♦ J 10 4
♣ 4 | 8. ♠ A 10 8 7 4
♥ K Q 5
♦ 10 6 2
♣ 9 4 | 9. ♠ A
♥ 9 7 6 2
♦ J 10 7 6 4 2
♣ 10 4 |
| 10. ♠ K Q 10 8
♥ Q 10 9 7 2
♦ 10 9 8
♣ Q | 11. ♠ Q J
♥ Q 10 4 2
♦ 10 7 2
♣ Q J 8 3 | 12. ♠ J 10 4
♥ K Q
♦ 9 8 6 3
♣ J 7 4 2 |

Answers

Here are the best leads from the twelve West hands on the previous page, as calculated from 5000-deal simulations.

Auction is 1NT - 3NT		IMPs	MPs
1.	♠ 10 9 8 5 3 2 ♥ Q J 10 2 ♦ A ♣ 10 2	1st ♥Q 28.4%	3.75
		2nd ♠10 25.2%	3.42
2.	♠ K Q 8 ♥ 8 3 ♦ 10 9 3 2 ♣ 8 6 5 2	1st ♠K 19.9%	3.21
		2nd ♥8 13.6%	2.80
3.	♠ Q 7 4 2 ♥ A K 4 ♦ 10 7 5 ♣ J 10 5	1st ♥A 32.5%	3.88
		2nd ♠2 14.5%	3.14
4.	♠ J 9 7 5 ♥ J 5 3 ♦ K 9 ♣ 8 7 3 2	1st ♥3 17.2%	2.98
		2nd ♠5 15.0%	2.93
5.	♠ Q 8 6 2 ♥ K Q J ♦ 10 6 ♣ 10 9 8 4	1st ♥K 22.3%	3.48
		2nd ♠2 11.2%	2.87
6.	♠ K Q 8 3 ♥ K 10 8 3 2 ♦ J 5 ♣ 10 2	1st(I) ♥3 22.4%	3.11
		1st(M) ♠K 21.7%	3.42
7.	♠ Q J 7 ♥ K 10 7 6 4 3 ♦ J 10 4 ♣ 4	1st ♠Q 22.2%	3.27
		2nd ♥6 18.4%	3.03
8.	♠ A 10 8 7 4 ♥ K Q 5 ♦ 10 6 2 ♣ 9 4	1st(I) ♠A 29.2%	3.52
		1st(M) ♥K 28.2%	3.77
9.	♠ A ♥ 9 7 6 2 ♦ J 10 7 6 4 2 ♣ 10 4	1st ♠A 10.2%	2.79
		2nd ♦J 7.6%	2.62
10.	♠ K Q 10 8 ♥ Q 10 9 7 2 ♦ 10 9 8 ♣ Q	1st ♠K 19.4%	3.32
		2nd ♥10 16.9%	2.82
11.	♠ Q J ♥ Q 10 4 2 ♦ 10 7 2 ♣ Q J 8 3	1st ♠Q 17.7%	3.16
		2nd ♥2 11.9%	2.95
12.	♠ J 10 4 ♥ K Q ♦ 9 8 6 3 ♣ J 7 4 2	1st ♥K 13.9%	2.92
		2nd ♠J 7.7%	2.65

Chapter 3

Which card is best from this holding?

In this chapter we will look at some suit combinations and see which card represents the best lead — both at IMPs and match-points.

When leading against notrump contracts, conventional thinking is that you should lead the king from K-Q-J-x(-x) or K-Q-10-x(-x) but usually lead fourth-best from K-Q-x-x(-x). Similarly you lead the 10 from an interior sequence such as K-10-9-x(-x) but a low card from K-10-x-x(-x). We will check whether these general guidelines hold water when tested against a large number of 3NT deals. As in previous chapters, assume that South deals and opens 1NT, raised to 3NT.

Should I lead an honor or a low card from a long suit?

Hand 1

What would you lead from: ♠ J 7 6 ♥ 8 2 ♦ Q J 6 ♣ A K 10 7 2 ?

First thoughts The text-books recommend leading the ace from a suit headed by the A-K-Q or A-K-J. What if you hold the A-K accompanied by spot-cards? An ace lead here might allow you to drop Q-x in declarer's hand or the dummy, possibly then finding partner with the jack. A low lead could improve your communications with partner. Let's see what the figures are:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	23.8%	3.71
♥8	23.2%	3.71
♦Q	12.7%	3.03
♣A	39.2%	4.08
♣7	32.4%	3.70

In the long run, leading the ace will give you much better results than leading a low club — at both forms of the game.

Hand 2

What would you lead from: ♠ 9 2 ♥ 7 4 ♦ A K 7 5 4 2 ♣ 9 6 4 ?

First thoughts Now your A-K combination is accompanied by low spot-cards. A fourth-best lead is likely to gain when partner holds ♦Q-x, also when he has a low doubleton and declarer has to surrender the lead during the play. Let's look at the figures:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠9	11.1%	3.04
♥7	10.8%	3.04
♦A/K	17.0%	3.48
♦5	20.3%	2.93
♣6/4	7.2%	2.90

At IMPs, a low diamond lead is better than an honor. You may be surprised that this will beat the contract only 20.3% of the time. Opposite this West hand, partner will hold an average of only 1.6 diamonds. Even if nine tricks cannot be run without partner winning the lead, he may have no diamond to return.

This is a key factor when choosing the best opening lead at match-points. If you lead a low diamond, your side may never score a diamond trick! At this form of the game, the ace lead gives you an advantage of 0.55 tricks per deal.

Hand 3

What would you lead from: ♠ K Q 9 6 3 ♥ 8 7 4 ♦ 9 2 ♣ A 10 2 ?

First thoughts Everyone leads a top honor from K-Q-J and K-Q-10 combinations. (In some systems, the queen is led rather than the king.) Is an honor lead still right when the next card is the nine?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K/Q	40.0%	4.08
♠6	32.5%	3.52
♥8/7	27.2%	3.51
♦9	22.3%	3.36
♣A	18.7%	3.18
♣2	15.8%	3.13

The top honor lead is a big winner from a K-Q-9 combination. One deal proves nothing but here is a typical layout from our simulation, reminding us how a king lead may be necessary to beat the contract:

	♠ A 8 4										
	♥ 10 9 6										
	♦ A 6										
	♣ J 9 7 6 3										
♠ K Q 9 6 2	<table border="1"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ 10 7 5
		N									
W			E								
		S									
♥ 8 7 4	♥ K Q J 5										
♦ 9 2	♦ J 10 7 3										
♣ A 10 2	♣ 8 4										
	♠ J 2										
	♥ A 3 2										
	♦ K Q 8 5 4										
	♣ K Q 5										
West	North	East	South								
pass	3NT	all pass	1NT								

If you lead the ♠K, the defenders will claim four spades and the ♣A. On the lead of the ♠6, declarer scores his ♠J and has time to establish the clubs.

Hand 4

What would you lead from: ♠ K Q 6 5 2 ♥ 8 7 4 ♦ 9 2 ♣ A 10 2 ?

First thoughts The third-best card is a lowly six-spot. Many players would lead a low card now, since a lead of the king might result in a blockage if partner held ♠A-x or ♠J-x. Let's see the result of the simulation:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	33.7%	3.87
♠5	30.5%	3.47
♥8/7	26.0%	3.47
♦9	20.9%	3.32
♣A	18.8%	3.17
♣2	16.0%	3.12

Although the advantage has narrowed, the top honor lead is still best. Leading a top honor is particularly important at match-points. You will avoid giving a cheap trick to ♠J-x, whether or not the contract can be beaten.

How often does an honor lead save declarer a guess?

Our double-dummy simulations have implied that it is profitable to lead from touching honors more often than traditional text-books imply. Occasionally the lead of a king from such as ♠K-Q-6-5-2 will save declarer a guess. Look at this single-suit position, for example:

	♠ J 9 4	
♠ K Q 6 5 2		♠ 10 8
	♠ A 7 3	

If you lead low against a real-life declarer, he may play dummy's ♠9, which will create a second trick for him when your spades are headed by the K-10 or the Q-10. When the cards lie as shown, the defenders can then establish four tricks in the suit. (A low lead would not succeed at double-dummy because the all-seeing computer declarer would rise with dummy's jack.)

If instead you lead the king, declarer can place you with the K-Q and will score two tricks in the suit. This sort of position may throw doubt on the validity of using double-dummy simulation, so we have taken some trouble to evaluate how often these 'save declarer a guess' positions arise.

We have written software that analyzes the frequency of the various honor positions for North/South on one of our 5000-deal simulations. Look back at Hand 4, where the ♠K lead was rated best from ♠K-Q-6-5-2. How

often would such a lead have saved declarer a guess in the suit? These are the figures from our profile:

North	South	Probability
A J 9	x x (+)	0.36%
A J x	9 x (+)	0.54%
J 9 x	A x (+)	1.44%
J x x	A 9 (+)	1.20%

Leading the king will save declarer a guess in the suit on 3.54% of the deals. Does this wipe out the 3.2% advantage awarded to the ♠K lead in our table for on Hand 4, above? No, because on many of the deals the contract would still be made, however declarer plays the spades (or would go down whatever the spade play). Also, on some deals declarer cannot afford to lose a spade trick because he fears a switch elsewhere; he might then play dummy's jack even after a low lead. Note, finally, that the massive 0.4 tricks match-point difference would scarcely be dented by this effect.

So, we have 'come clean' on this aspect of double-dummy simulation. There is a similar effect when you lead a top card from A-K-x-x-x. This may save declarer a guess when dummy has Q-10-x, or the Q-x-x in dummy with the 10 in declarer's hand. When you lead an honor from Q-J-x-x-x, you may find dummy with K-10-x and declarer with A-8-x. Whenever our simulation results recommend an honor lead from touching honors, you can mentally subtract a percentage point or two from the double-dummy ratings, to allow for the effects against a living, breathing declarer.

Hand 5

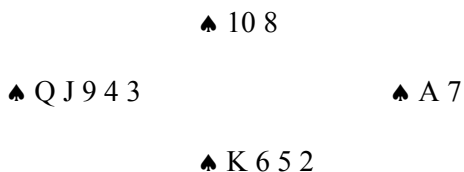
What would you lead from: ♠ Q J 9 4 3 ♥ J 7 4 ♦ A 9 ♣ 8 7 4 ?

First thoughts Next we look at combinations headed by the Q-J. The standard lead from Q-J-9 is a top honor. Let's check that this is right:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	27.4%	3.43
♠4	27.1%	3.29
♥4	18.1%	3.10
♦A	11.7%	2.82
♣8/7	13.7 %	2.93

When your broken sequence is queen-high, the technical advantage of a top-honor lead is less.

Leading a low card comes into the reckoning at IMPs because you may avoid a blockage when partner has a doubleton honor. Look at this single-suit diagram:



Lead the ♠4 and all is easy. Partner wins with the ♠A and returns the suit. If instead you make the ‘standard lead’ of the ♠Q, East’s doubleton honor will cause a problem. East will doubtless play the ♠A on the first trick and return the ♠7. You win with the ♠J, but South’s ♠6 now gives him a second stopper in the suit.

Against that, a low spade lead may give declarer an extra trick. Opposite this West hand East will hold the ♠A (13.5% of the time), the ♠K (18.8%) and the ♠10 (39.6%). Whenever he holds none of the three missing honors, declarer may score an undeserved trick with the ♠10:



Situations such as these largely cancel each other out at IMPs (as the ‘Beats Contract’ figures in our table show). In the long run it may be better to lead the ♠Q, if only because it paints a clearer picture for your partner.

Should I lead low or an honor from a 4-card suit?

When you hold only four cards in the suit that you lead, you are hoping partner can assist you there. There may still be advantage in leading an honor from two touching cards — even when your third-best card is not a useful one.

Hand 6

What would you lead from: ♠ A K 5 4 ♥ 8 7 6 5 2 ♦ 10 4 ♣ A 9 ?

First thoughts Would you lead a heart or a spade? If your choice is a spade, should you lead a top honor or the fourth-best card? Make up your mind and then look at the results:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A/K	47.1%	4.63
♠4	34.1%	4.17
♥7/2	39.4%	4.22
♦10	34.0%	4.03
♣A	39.1%	4.24

All the opening leads fare very well. That is because declarer is unlikely to be able to run nine tricks immediately. You will probably have a second chance to grab four spade tricks (if they're available), even if you start with a heart and find partner with nothing special there.

Look next at the two spade leads. It is easily better to start with a top spade, rather than the fourth-best card. This will allow you to drop a doubleton ♠Q from declarer or the dummy. There is no need to worry about partner holding such as ♠9-8-4 when declarer's cards break 3-3, because you have the ♣A as a quick entry.

Perhaps you noted that leading the ♠4 might work well when dummy has ♠Q-10-4 and your partner holds the ♠J (also when the ♠Q is in dummy and declarer has the ♠10). Yes, but a profile of this simulation showed that such situations arose on only 2.75% of the deals.

Hand 7

What would you lead from: ♠ K Q 5 2 ♥ J 9 5 ♦ A 10 7 4 ♣ 8 7 ?

First thoughts Will you lead a spade. If so, which spade? Let's take a look at the results from the simulation.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K/Q	27.0%	3.72
♠2	21.8%	3.34
♥5	23.1%	3.39
♦4	16.0%	3.20
♣8	20.0%	3.32

Again we see the perhaps surprising result that you should lead an honor from two touching honors, regardless of the top accompanying card. This carries a particularly strong advantage, compared with leading fourth-best, when playing match-points. Let's see a deal from the simulation that illustrates why this is so:

	♠ A 7 6											
	♥ 8 7											
	♦ 6 2											
	♣ A K J 6 4 2											
♠ K Q 5 2	<table> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ 10 8 4 3	
	N											
W		E										
	S											
♥ J 9 5		♥ Q 4 3 2										
♦ A 10 7 4		♦ J 8 5										
♣ 8 7		♣ 10 5										
	♠ J 9											
	♥ A K 10 6											
	♦ K Q 9 3											
	♣ Q 9 3											
West	North	East	South									
			1NT									
pass	3NT	all pass										

The contract cannot be beaten, but at match-points declarer would dearly like to make at least one overtrick. If you lead the ♠K, you have the chance to continue with the ♠Q when declarer ducks the trick. Admittedly, this may depend on your preferred signaling style. Declarer is then held to nine tricks.

If instead you lead the ♠2, declarer wins with the ♠J and has ten top tricks. Not only that, he has the tempo to set up an eleventh trick in diamonds.

The discussion about 'saving declarer a guess', after Hand 4, will still be fresh in your minds. On our present deal West holds only four cards headed by the K-Q. This leaves slightly more room for declarer and the dummy to

hold a combination where the opening lead may spare declarer a losing option. Let's look at the figures from the profile:

North	South	Probability
A J 9	x x (+)	0.24%
A J x	9 x (+)	0.52%
J 9 x	A x (+)	2.02%
J x x	A 9 (+)	2.02%

Declarer will be rescued from a guess on 4.8% of the deals. On many of these the contract would be secure anyway, whatever the chosen play in spades (or would go down anyway). So, leading a top honor is still best from ♠K-Q-5-2 even if you mentally shave off 3% or so from the margin shown in the table.

Hand 8

What would you lead from: ♠ Q J 9 6 ♥ K 8 7 4 ♦ A 6 ♣ J 9 3 ?

First thoughts The text-books advocate the lead of the queen, rather than the ♠6, from this broken sequence. As well as checking whether this is good advice, we will be able to see how much better a lead from a broken sequence is, compared with a heart lead from four cards to an unaccompanied honor.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	24.2%	3.60
♠6	18.5%	3.34
♥4	17.3%	3.23
♦A	14.7%	3.11
♣3	16.7%	3.19

There are no surprises this time and the queen is the best card to lead, by a fair margin.

Hand 9

What would you lead from: ♠ A 9 ♥ Q J 6 4 ♦ 9 6 2 ♣ A 8 5 4 ?

Hand 10

What would you lead from: ♠ J 10 6 5 ♥ J 7 5 4 ♦ Q 8 6 ♣ A 6 ?

First thoughts We will end this section by looking at a 4-card suit headed by the J-10. Is the jack lead best and how much better is a spade lead than a heart lead?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠J	19.5%	3.31
♠5	19.1%	3.22
♥4	19.1%	3.22
♦6	14.0%	2.91
♣A	15.4%	3.05

All very close but we have yet another hand where it is right to lead one of touching honors, regardless of the size of the next-best card. Add it to the portfolio.

Which lead is best from an interior sequence?

Conventional wisdom is to lead the top of an interior sequence — for example, the jack from K-J-10-5-4. We will check if this is good advice.

Hand 11

What would you lead from: ♠ 8 7 2 ♥ A Q J 4 2 ♦ 7 6 3 ♣ 8 2 ?

First thoughts This lead problem was posed by Hugh Kelsey and John Matheson in their 1991 book *Improve Your Opening Leads*. It seems right to lead a heart but would you choose the ♥Q or the ♥4?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠8/7	26.4%	3.35
♥Q	31.5%	3.27
♥4	32.1%	3.21
♦7/6	23.7%	3.25
♣8	22.5%	3.20

The authors analyzed that a low heart lead would gain (a) when partner held ♥K-x and declarer or the dummy held four cards, (b) when partner held ♥x-x and declarer or the dummy held ♥K-x, and (c) when partner held ♥10-x and declarer chose to win from ♥K-x-x-x. Leading the queen would gain when dummy held ♥K-10-x (or ♥K-x-x with declarer holding ♥10-x). They concluded: ‘It appears that the lead of a small heart has a definite edge.’

It is not a very big edge, as it happens, but the Scottish aces were right to award their top mark to a low heart, as far as IMPs are concerned. When declarer holds such as ♥K-10-8, it will probably not cost to let him win cheaply at Trick 1. If your partner gains the lead and returns a heart, you will score four heart tricks anyway.

As you see, a passive spade lead will give you the best long-term returns at match-points.

Hand 12

What would you lead from: ♠ K J 10 6 4 ♥ K J 10 5 ♦ 8 7 4 ♣ 9 ?

First thoughts It will surely be better to lead a spade than a heart. What will the balance be between leading the jack or a low card?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠J	30.2%	3.31
♠6	29.1%	3.25
♥J	22.8%	3.29
♥5	19.6%	3.17
♦8/7/4	23.5%	3.28
♣9	22.1%	3.22

There is a slight advantage in leading the jack, top of an internal sequence, rather than fourth-best. This is more apparent from the 4-card heart holding. That’s because declarer is likely to hold longer hearts than spades and a low heart lead might then allow him to score a cheap extra trick.

The passive spot-card leads in the minors compete surprisingly well and another simulation showed that they overtook both the long-suit leads when the majors and minors were swapped.

Hand 13

What would you lead from: ♠ K 2 ♥ 8 5 ♦ Q 10 9 2 ♣ A 10 9 6 2 ?

First thoughts Most players would lead the ♣10. The club holding is clearly ‘longest and strongest’ and the 10 is the top of the interior sequence. Let’s check the figures.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	19.6%	3.39
♥8	27.8%	3.75
♦10	21.8%	3.51
♦2	22.6%	3.53
♣10	25.8%	3.63
♣6	26.6%	3.66

The heart doubleton edges ahead of the club sequence. In both of the minor suits there is no advantage at all in leading top of the interior sequence. Well, that’s interesting. The lower the honor at the top of your interior sequence, the less worthwhile it is to lead the honor rather than fourth-best.

Here’s a club lay-out from the simulation where leading the ♣6 fares best.

♣ 8 7 4 3	
♣ A 10 9 6 2	♣ Q J
♣ K 5	

Lead the ♣6 to the ♣J and ♣K and you can overtake partner’s ♣Q later. Lead a traditional ♣10, South winning with the ♣K, and you cannot overtake partner’s ♣Q without promoting dummy’s clubs into a second stopper. The effect is the same if declarer plays low at Trick 1.

Hand 14

What would you lead from: ♠ Q 9 8 2 ♥ K 9 8 4 ♦ 7 ♣ J 9 8 2 ?

First thoughts When you hold the 9-8 under your honor, this is not normally considered an interior sequence. Should you lead the 9?

the suit refuses to break. He then crosses to dummy with a club and runs the ♥10. If West wins, he can cash only one spade and the contract will be made. If West holds up the ♥K, declarer will repeat the heart finesse. Again nine tricks will come his way.

As you see, a lead of the ♠9 will beat the contract; West will be able to cross to the East hand subsequently by leading the ♠2.

Which lead is best from three or four low cards?

What do you lead from a holding such as ♣9-7-5-2? In the United Kingdom many players lead the second-best card, the ♣7. They tell partner that they are leading from a weak suit, while at the same time preserving the top card. In the USA it is popular to lead the ♣5 from four-low (showing count) and the lowest card from three-low. Elsewhere, you will still find some players leading a top-of-nothing ♣9. In this section we will see if it makes much difference, in a technical sense, which card you like to lead.

Hand 15

What would you lead from: ♠ 10 7 4 ♥ 9 6 4 ♦ A 9 7 ♣ 9 7 5 2 ?

First thoughts We can expect the major-suit leads to come out on top. Meanwhile we can take note of whether it makes any difference which spot cards you might choose.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	17.2%	3.18
♠7/4	17.8%	3.22
♥9	17.8%	3.19
♥6/4	18.2%	3.22
♦7	10.1%	2.90
♣9	12.5%	3.00
♣7/5/2	13.2%	3.04

The major-suit tripletons are better than a club lead by around 5% and the advantage of leading low rather than top-of-nothing (which some players

favor) is relatively small. Leading the 9 from 9-7-5-2 will cost you occasionally, as one would expect.

Hand 16

What would you lead from: ♠ 10 8 5 2 ♥ 10 9 6 3 ♦ A 5 ♣ K J 7 ?

First thoughts Now we look at four cards headed by the 10. Presumably it will cost a bit to lead ‘top of nothing’ from that spade holding. It is anyone’s guess whether you should lead ten or low from the heart holding.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	27.5%	3.66
♠2	29.2%	3.73
♥10	29.4%	3.75
♥3	29.2%	3.74
♦A	23.7%	3.50
♣7	18.2%	3.36

It is better to lead low from the spade holding, as expected. In hearts, the card you choose will make little difference.

Unusual leads from a suit headed by the ace

We have seen that it is usually right to lead high from a suit headed by the ace-king, even if the third-best card is a spot-card. In this section, we will look at a couple of West hands where it works well to lead an ace that is not accompanied by the king.

Hand 17

What would you lead from: ♠ A Q 10 8 3 ♥ A 6 ♦ 9 8 4 ♣ J 6 5 ?

First thoughts There is some merit in leading the ♠A in this situation. A sight of the dummy will often let you know which card to play next. With the ♥A alongside, you don’t need to worry about conserving your ♠A as an entry. What does the simulation tell us?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	38.7%	4.06
♠8	32.7%	3.76
♥A	30.5%	3.92
♦9	21.9%	3.59
♣5	20.7%	3.52

The ace is right from this spade holding, at both forms of the game. Let's see a deal from the simulation, to remind us why the ace lead may work well.

	♠ K 9 7										
	♥ 8 2										
	♦ 7 3 2										
	♣ A K 9 7 4										
♠ A Q 10 8 3	<div style="display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="margin-bottom: 5px;">N</div> <div style="margin-bottom: 5px;">W E</div> <div style="margin-top: 5px;">S</div> </div>	♠ 6 4 2									
♥ A 6		♥ 9 7 5 3									
♦ 9 8 4		♦ J 10 6 5									
♣ J 6 5		♣ Q 3									
	♠ J 5										
	♥ K Q J 10 4										
	♦ A K Q										
	♣ 10 8 2										
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%; padding: 2px 10px;">West</th> <th style="width: 25%; padding: 2px 10px;">North</th> <th style="width: 25%; padding: 2px 10px;">East</th> <th style="width: 25%; padding: 2px 10px;">South</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;">pass</td> <td style="text-align: center; padding: 5px;">3NT</td> <td style="text-align: center; padding: 5px;">all pass</td> <td style="text-align: center; padding: 5px;">1NT</td> </tr> </tbody> </table>				West	North	East	South	pass	3NT	all pass	1NT
West	North	East	South								
pass	3NT	all pass	1NT								

Look first at how poorly a low spade lead fares. Declarer can win with the ♠J and set up the hearts while dummy's ♠K remains as a second guard in the suit. If you lead the ♠A, you have the chance to continue with the ♠Q, pinning South's ♠J and setting up five winners for the defense.

It is this sort of situation that most players think of when leading the ace from such a combination. A look through our simulation shows that the high rating for the ♠A lead is mainly due to something quite different. It allows you (in theory) to switch to a heart when partner has a strong holding headed by the K-Q. Of course, finding such a switch is all too easy at double-dummy — as in our simulations. It can be more difficult when defending at the table. Suppose that East holds ♥K-Q-10-7-5-3 on this deal. You will have little chance of diagnosing this in the West seat and a spade continuation may well

allow declarer to make the contract. The ♠A lead is still best, no doubt, but not by as much as our table suggests.

Hand 18

What would you lead from: ♠ A Q 8 2 ♥ A Q 9 6 ♦ 9 7 3 ♣ J 10 ?

First thoughts Should you lead from one of the major suits, even though you may give declarer an undeserved trick with his king? If you like the idea of a major-suit lead, which card will you lead?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	31.9%	3.88
♠2	22.1%	3.61
♥A	32.0%	3.86
♥6	21.6%	3.56
♦7/3	22.1%	3.69
♣J	21.5%	3.68

Few players would think of leading an ace but it is easily best, at both IMPs and match-points. You avoid committing to a particular major and can take a look at the dummy. Here's a deal where an ace lead might pay off:

	♠ 9											
	♥ K 10 5											
	♦ Q J 8 4 2											
	♣ Q 9 7 4											
♠ A Q 8 2	<table border="0" style="width: 100%; text-align: center;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ K 10 7 4	
	N											
W		E										
	S											
♥ A Q 9 6		♥ 8 7 3										
♦ 9 7 3		♦ 10 5										
♣ J 10		♣ 8 6 3 2										
	♠ J 6 5 3											
	♥ J 4 2											
	♦ A K 6											
	♣ A K 5											
<table border="0" style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">West</td> <td style="width: 25%;">North</td> <td style="width: 25%;">East</td> <td style="width: 25%;">South</td> </tr> <tr> <td>pass</td> <td>3NT</td> <td>all pass</td> <td>1NT</td> </tr> </table>				West	North	East	South	pass	3NT	all pass	1NT	
West	North	East	South									
pass	3NT	all pass	1NT									

With South's values packed in the minors, North would have struck gold by looking for a minor-suit game. Unlucky! Meanwhile, you lead the ♥A against South's 3NT contract. East plays a discouraging ♥3 and you decide that your best chance of beating the same is to score four spade tricks. When you switch to the ♠2, East wins with the ♠K and returns the ♠10, putting the game one down.

Deals will arise where you cannot judge the best play at Trick 2. However, you have a huge 10% advantage to play with and an ace lead is easily best.

CONCLUSIONS - Which card is best from this holding?

- When your suit is headed by touching honors, it is usually best to lead a top card — even from such as K-Q-7-5-2, where your third-best card gives you nowhere near a 'broken sequence'.
- The advantage of leading a top card is greatest from suits headed by the A-K or K-Q, progressively less so from Q-J, J-10 or 10-9.
- Although an honor lead from K-Q-6-2 or Q-J-7-4 will occasionally save declarer a guess, this reduces only marginally the benefit of such leads.
- There is some advantage in leading 'top of an interior sequence' from a suit headed by the K-J-10, particularly when the suit contains only four cards. The advantage is less when your interior sequence is the 10-9.
- From holdings such as K-9-8-3, Q-9-8-6 or J-9-8-2, there is little advantage in leading the 9, treating the 9-8 as an interior sequence. Leading fourth-best is the clearest lead for your partner to read.

Pick a Winner!

Which card is best from this holding?

You are invited to judge the best available lead from the twelve West hands below, noting if you think that a different lead would be preferable at match-points. The simulation results are given on the next page.

Auction is 1NT - 3NT

- | | | |
|--|---|--|
| 1. ♠ A 4
♥ 8 7 5
♦ 10 6
♣ A J 10 8 6 5 | 2. ♠ Q J 8 6 2
♥ J 7 4
♦ A 9
♣ 8 7 4 | 3. ♠ J 10 8 6 2
♥ Q 10 3
♦ K 7 5
♣ K 10 |
| 4. ♠ A Q 10
♥ J 7 6
♦ A K 3 2
♣ J 7 5 | 5. ♠ K Q 9 8 2
♥ K 9 8 5
♦ 3
♣ 6 5 2 | 6. ♠ Q 9 7
♥ 10 9 4
♦ A K 7 5 2
♣ 10 9 |
| 7. ♠ 7 6 3
♥ 8 2
♦ 8 7 2
♣ A Q J 4 2 | 8. ♠ J 10 9 3
♥ K Q 6 5 3
♦ A 2
♣ 7 5 | 9. ♠ A 7 4
♥ 10 9 5
♦ K Q 8 6 3 2
♣ 7 |
| 10. ♠ 10 8 7 2
♥ 10 9 6 3
♦ A Q 4
♣ K 8 | 11. ♠ 7 4
♥ A Q J 9 4
♦ 8 7 4 2
♣ A 10 | 12. ♠ Q 10 8
♥ J 3
♦ 9 4
♣ A J 10 7 6 2 |

Answers

Here are the best leads from the twelve West hands on the previous page, as calculated from 5000-deal simulations.

Auction is 1NT - 3NT		IMPs	MPs
1. ♠ A 4 ♥ 8 7 5 ♦ 10 6 ♣ A J 10 8 6 5	1st(I) ♣A	28.6%	3.87
	1st(M) ♠A	27.3%	3.89
2. ♠ Q J 8 6 2 ♥ J 7 4 ♦ A 9 ♣ 8 7 4	1st ♠6	28.0%	3.42
	2nd ♥4	17.4%	3.07
3. ♠ J 10 8 6 2 ♥ Q 10 3 ♦ K J 5 ♣ K 10	1st ♠J	27.3%	3.48
	2nd ♥10	19.9%	3.18
4. ♠ A Q 10 ♥ J 7 6 ♦ A K 3 2 ♣ J 7 5	1st ♦A	20.7%	4.08
	2nd ♠A	19.1%	3.82
5. ♠ K Q 9 8 2 ♥ K 9 8 5 ♦ 3 ♣ 6 5 2	1st ♠K	33.5%	3.59
	2nd ♥9	18.8%	3.06
6. ♠ Q 9 7 ♥ 10 9 4 ♦ A K 7 5 2 ♣ 10 9	1st ♦A	33.1%	3.87
	2nd ♥10	20.4%	3.48
7. ♠ 7 6 3 ♥ 8 2 ♦ 8 7 2 ♣ A Q J 4 2	1st(I) ♣4	21.7%	2.92
	1st(M) ♠7/3	20.0%	3.23
8. ♠ J 10 9 3 ♥ K Q 6 5 3 ♦ A 2 ♣ 7 5	1st ♥K	35.0%	3.91
	2nd ♠J	26.2%	3.57
9. ♠ A 7 4 ♥ 10 9 5 ♦ K Q 8 6 3 2 ♣ 7	1st ♦K	25.7%	3.71
	2nd ♠A	21.1%	3.32
10. ♠ 10 8 7 2 ♥ 10 9 6 3 ♦ A Q 4 ♣ K 8	1st ♠8	32.0%	3.79
	2nd ♥10	31.3%	3.78
11. ♠ 7 4 ♥ A Q J 9 4 ♦ 8 7 4 2 ♣ A 10	1st ♥A	69.6%	4.87
	2nd ♥Q	67.6%	4.78
12. ♠ Q 10 8 ♥ J 3 ♦ 9 4 ♣ A J 10 7 6 2	1st ♣J	23.4%	3.48
	2nd ♠10	19.3%	3.30

Chapter 4

Leading from a weak hand

What should your general thoughts be when choosing an opening lead from a weak hand against 3NT? It is less likely than normal that a lead from a 5-card suit will work well. Even if you manage to establish the suit at some stage, you may not have an entry to enjoy the long cards.

When you have fewer than 5 points in your hand, partner is likely to hold the stoppers in declarer's suits. It is usually more profitable to lead from a short suit, hoping to set up the best suit in partner's hand.

In this chapter we will look at several weak hands, evaluating the prospects for the various opening leads. Even if you are a hardened bridge veteran, some of the answers may cause you to raise an eyebrow! (As before, assume that the bidding has been 1NT - 3NT.)

Looking for partner's suit

Hand 1

What would you lead from: ♠ 10 8 7 5 2 ♥ J 9 ♦ 10 4 ♣ J 10 9 7 ?

First thoughts Many players would assess the problem as a choice between the black suits. Spades is a major and you have five of them. Against that, the sequence in clubs offers some safety. These are the simulation results:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5	14.4%	3.02
♥J	19.5%	3.12
♦10	11.1%	2.87
♣J	12.4%	3.00

The strong major-suit bias has its effect. Because the hand is weak it is better to lead the shorter major, aiming to set up partner's suit.

Hand 2

What would you lead from: ♠ 10 8 4 ♥ 9 ♦ 10 7 6 5 2 ♣ 10 8 3 2 ?

First thoughts Two short holdings in the majors, two longer ones in the minors. The ♦ 5 would be a popular choice in a club game, but after Hand 1 we cannot expect that to be the winner.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	9.3%	2.64
♥9	13.5%	2.79
♦5	6.0%	2.46
♣2	4.7%	2.40

The singleton heart is the best lead at both IMPs and match-points! The ♠4 from the 3-card holding comes in second, with the longer minor-suit leads well to the rear.

Suppose you were playing IMPs and led a heart, beating the contract when you found partner with a great suit. Can you imagine the look that some opponents would give you? And yet the heart is the best lead in the long run, as shown by our 5000-deal simulation.

Hand 3

What would you lead from: ♠ 9 5 3 2 ♥ J 4 2 ♦ 10 7 ♣ J 6 5 3 ?

First thoughts The major-suit bias will take effect but is it better to lead from a 4-card or a 3-card suit?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5/2	8.5%	2.63
♥2	11.0%	2.71
♦10	6.4%	2.46
♣3	6.2%	2.50

It is best at both forms of the game to lead from your 3-card hearts. Leading from your shorter major will give you more chance of hitting partner with a 5-card suit; he will then hold the side entries to benefit from this.

Hand 4

What would you lead from: ♠ A 3 ♥ 9 6 5 ♦ 10 6 4 3 2 ♣ 7 6 5 ?

First thoughts You would need enormous diamonds from partner for a lead in that suit to beat the contract. Perhaps a lead from one of the shorter suits is better.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	20.5%	3.16
♥6/5	12.8%	2.95
♦3	10.2%	2.80
♣7/6/5	8.3%	2.73

The ♠A wins by a respectable margin. Partner is likely to hold five spades and your best chance of beating 3NT is to set up his spade suit and hope that he then has a quick entry to enjoy the winners.

This is a typical deal from our simulation:

	♠ K 8 7										
	♥ A 10 4										
	♦ K J 8 7										
	♣ Q J 9										
♠ A 3	<table border="0" style="margin: 0 auto;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ Q 9 6 5 4
	N										
W		E									
	S										
♥ 9 6 5		♥ 8 7 3 2									
♦ 10 5 4 3 2		♦ —									
♣ 7 6 5		♣ A 10 8 3									
	♠ J 10 2										
	♥ K Q J										
	♦ A Q 9 6										
	♣ K 4 2										

West	North	East	South
pass	3NT	all pass	1NT

Ace and another spade sets up East's suit and declarer has only eight tricks to take. When he eventually plays a club, East will win with the ace and cash his remaining spades.

'You led from ace doubleton?!' cries South. You can mention quietly to him that the ace lead from such a hand is absolutely automatic nowadays.

Hand 5

What would you lead from: ♠ 7 6 5 3 ♥ Q 7 ♦ Q 10 9 7 5 4 3 ♣ — ?

First thoughts Prospects of beating 3NT are not good here, with your hand being so weak, but which lead will give you the best chance? Will you hope that partner can help you in diamonds, or lead one of the shorter suits?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠ 7/6/3	11.8%	2.72
♥ Q	17.3%	2.82
♦ 10	11.0%	2.60

The ♥ Q lead, looking for partner's good suit, is the best shot. The opponents did not look for a major-suit fit, so you can expect partner to hold length in your shorter major. What's more, you are contributing a queen towards setting up the suit.

Hand 6

What would you lead from: ♠ 8 2 ♥ J 2 ♦ 10 9 8 4 3 ♣ J 10 9 5 ?

First thoughts Next we compare major-suit doubletons against two minor-suit sequences headed by a low honor card.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠ 8	17.4%	3.12
♥ J	18.0%	3.06
♦ 10	11.0%	2.94
♣ J	9.3%	2.85

The major-suit doubletons win it. Once again, partner will hold length in the majors along with some entries to enjoy any cards that may be established.

Hand 7

What would you lead from: ♠ 9 ♥ Q J 9 2 ♦ 9 3 ♣ 9 8 6 4 3 2 ?

First thoughts This time you have a broken sequence in hearts. A club lead does not look promising, with your dearth of entries. Will you lead the ♥Q or possibly one of your short suits?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠9	13.2%	2.70
♥Q	11.2%	2.87
♦9	6.1%	2.40
♣4	8.5%	2.56

The ♥Q lead is ahead of a club lead but... can that be right? At IMPs a spade lead is even better! You are unlikely to find partner with more than four hearts. Even if he has an honor and you can set up three heart tricks by leading the suit, you will still need two quick tricks to add to the pile. Partner is marked with long spades. Leading your spade singleton and finding him with a good suit is the best chance of beating the contract. (A heart is better at match-points).

The above simulation assumes that South dealt and opened 1NT, raised to 3NT. Suppose instead that East was the dealer and passed in front of South. This would have a huge effect on the lead from this particular West hand. Since East could not open 1♠ or a weak 2♠, there would be much less chance that a singleton spade lead would strike gold. Let's rerun the simulation with East as the dealer. These are the new results:

(East dealer)	Beats contract (IMPs)	Avg. tricks (MPs)
♠9	1.2%	1.88
♥Q	4.2%	2.44
♦9	1.3%	1.87
♣4	2.8%	2.01

A gloomy situation! With 3 points facing a passed hand, there is little chance of beating 3NT. The ♥Q lead is now best at both forms of the game.

To cheer us up, let's see a typical deal from the simulation with South as dealer where the singleton spade lead works well:

<p>♠ 9</p> <p>♥ Q J 9 2</p> <p>♦ 9 3</p> <p>♣ 9 8 6 4 3 2</p>	<div style="border: 1px solid black; width: 100px; height: 100px; margin: 0 auto; display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="margin-bottom: 5px;">N</div> <div style="margin-bottom: 5px;">W</div> <div style="margin-bottom: 5px;">E</div> <div style="margin-bottom: 5px;">S</div> </div>	<p>♠ J 10 8</p> <p>♥ K 7 3</p> <p>♦ Q J 7 5</p> <p>♣ K J 10</p>	<p>♠ A K 7 5 4 2</p> <p>♥ 8 6</p> <p>♦ 10 8 6 4</p> <p>♣ A</p>				
	<p>♠ Q 6 3</p> <p>♥ A 10 5 4</p> <p>♦ A K 2</p> <p>♣ Q 7 5</p>						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">West</td> <td style="width: 25%;">North</td> <td style="width: 25%;">East</td> <td style="width: 25%;">South</td> </tr> </table>	West	North	East	South			1NT
West	North	East	South				
pass	3NT	all pass					

East would have opened the bidding, given the chance, but is shut out by North's raise to the notrump game. Having checked that he is not dreaming, East wins your spade lead and clears the suit. Declarer has only eight top tricks and at some stage has to play a club. When the ♣A lies with the long spades, he is two down.

'Let me get this right,' says the declarer. 'You led a singleton spade?'

You shrug your shoulders. 'Lead the shorter major from a weak hand. It's fairly standard nowadays.'

Should I ever lead a minor suit?

On the hands we have seen until now, the best policy has been a simple 'When you have a weak hand, lead your shorter major.' We will end the chapter by looking for a deal or two where it may be right to lead a minor suit.

From a very weak hand, we have seen that short-suit leads can work well. However, it is hard to find a West hand where a short minor-suit lead does better than any sort of major-suit lead.

Hand 8

What would you lead from: ♠ 9 7 6 5 2 ♥ 10 8 6 4 3 ♦ A 3 ♣ 8 ?

First thoughts There is not much chance of establishing and enjoying either of those majors, you might think. Perhaps the best chance is to lead the ♦A and hope to find partner with a 5-card diamond suit that can be established, plus an entry. Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5	19.1%	3.28
♥4	20.4%	3.30
♦A	18.1%	3.23
♣8	13.6%	3.07

No, the majors win again. It's true that the ♦A is not far behind.

Hand 9

What would you lead from: ♠ 9 6 5 4 ♥ J 8 5 2 ♦ Q J 10 8 3 ♣ — ?

First thoughts If you held a major-suit shortage, it would doubtless be the best lead. Can these spindly 4-card majors hold off the handsome sequence in diamonds?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6/4	17.2%	3.07
♥2	16.6%	3.08
♦Q	21.9%	3.28

Success at last! The diamond lead is best, mainly because the major-suit holdings offer so little hope.

CONCLUSIONS - Leading from a weak hand

- When you have a very weak hand it is usually a waste of time leading from a long suit, particularly when it is a minor.
- A 1NT-3NT auction creates a strong bias towards major-suit leads. From a weak hand it is generally right to lead your shorter major, whether or not it contains an honor. Your aim is to find partner's good suit.
- Sometimes even a major-suit singleton will be the best lead. Your partner will hold an entry or two and the main chance of beating 3NT is to hit his long suit.
- If your partner passed in first or second seat, declining to open with a one-bid or a weak-two, the prospects for a short-suit lead in a major are very much reduced.
- Leading from three cards is better than leading from four cards. It does not make much difference whether your tripleton contains an honor. It is more important that the suit is a major rather than a minor.

Pick a Winner!

Leading from a weak hand

You are invited to judge which is the best available lead from the twelve West hands below. The answers are given on the next page.

Auction is 1NT - 3NT

- | | | |
|--|---|---|
| 1. ♠ 4
♥ 10 9 6 2
♦ K 10 8 7 5
♣ 9 6 3 | 2. ♠ J 10 7 5 4 3 2
♥ 7 3
♦ 9 2
♣ 10 5 | 3. ♠ Q J 5
♥ 8 5 3
♦ J 9 5 3 2
♣ 10 4 |
| 4. ♠ J 10 7
♥ 10 8 7 6 3
♦ —
♣ 10 8 7 4 2 | 5. ♠ 7 3
♥ J 10 2
♦ 10 9
♣ K 8 6 5 4 3 | 6. ♠ J
♥ J 9 7 5 2
♦ Q 10 6 5
♣ 7 6 2 |
| 7. ♠ 10 6 4
♥ 7
♦ 9 8 4
♣ Q 9 8 6 4 2 | 8. ♠ K 9 8 7 6 3
♥ 8 6
♦ 10 9 7
♣ 8 3 | 9. ♠ 5 4 2
♥ J 9
♦ 9 8 7
♣ J 10 8 5 3 |
| 10. ♠ 9 8 4
♥ 5 4
♦ Q J 8 6 5
♣ J 10 9 | 11. ♠ Q 9
♥ J 9 8 7 6 3
♦ 9 8 5 2
♣ 5 | 12. ♠ 10 9 8 5
♥ 7 4
♦ Q 5
♣ Q 9 8 7 3 |

Answers

Here are the best leads from the twelve West hands on the previous page, as calculated from 5000-deal simulations.

Auction is 1NT - 3NT			IMPs	MPs
1. ♠ 4 ♥ 10 9 6 2 ♦ K 10 8 7 5 ♣ 9 6 3	1st	♠4	15.2%	3.03
	2nd	♥10	13.2%	3.02
2. ♠ J 10 7 5 4 3 2 ♥ 7 3 ♦ 9 2 ♣ 10 5	1st	♥7	12.5%	2.69
	2nd	♠J	7.1%	2.47
3. ♠ Q J 5 ♥ 8 5 3 ♦ J 9 5 3 2 ♣ 10 4	1st	♠Q	15.2%	2.98
	2nd	♥5/3	10.7%	2.67
4. ♠ J 10 7 ♥ 10 8 7 4 2 ♦ — ♣ 10 8 7 4 2	1st	♠J	22.4%	3.30
	2nd	♥4	17.9%	3.06
5. ♠ 7 3 ♥ J 10 2 ♦ 10 9 ♣ K 8 6 5 4 3	1st	♥J	13.6%	2.85
	2nd	♠7	12.4%	2.75
6. ♠ J ♥ J 9 7 5 2 ♦ Q 10 6 5 ♣ 7 6 2	1st	♠J	12.0%	2.74
	2nd	♥5	10.6%	2.67
7. ♠ 10 6 4 ♥ 7 ♦ 9 8 4 ♣ Q 9 8 6 4 2	1st	♥7	10.4%	2.51
	2nd	♠4	6.9%	2.41
8. ♠ K 9 8 7 6 3 ♥ 8 6 ♦ 10 9 7 ♣ 8 3	1st	♥8	14.5%	2.87
	2nd	♠7	13.9%	2.78
9. ♠ 5 4 2 ♥ J 9 ♦ 9 8 7 ♣ J 10 8 5 3	1st	♥J	12.5%	2.64
	2nd	♠5/2	9.0%	2.59
10. ♠ 9 8 4 ♥ 5 4 ♦ Q J 8 6 5 ♣ J 10 9	1st	♥5	10.1%	2.64
	2nd	♠9	9.2%	2.63
11. ♠ Q 9 ♥ J 9 8 7 6 3 ♦ 9 8 5 2 ♣ 5	1st	♠Q	18.4%	2.84
	2nd	♥7	13.5%	2.68
12. ♠ 10 9 8 5 ♥ 7 4 ♦ Q 5 ♣ Q 9 8 7 3	1st	♥7	11.0%	2.59
	2nd	♠10	9.0%	2.58

Chapter 5

Leading after a Stayman sequence

We saw that after an auction of 1NT - 3NT, there is a considerable bias towards major-suit opening leads. How does the situation change when the opposition bidding has been 1NT - 2♣ - 2♦ - 3NT (which we will call a ‘failed Stayman’ auction)? The responder holds at least one 4-card major, yes, but the opener has denied one. How does this affect the overall situation? We will see in a moment.

In this chapter we will consider also the auctions 1NT - 2♣ - 2♥ - 3NT and 1NT - 2♣ - 2♠ - 3NT. In both these cases, you know that the opener has one 4-card major and responder holds the other one. How should your choice of opening lead be affected then?

What should I lead after a 1NT-2♣-2♦-3NT auction?

A failed Stayman auction indicates that North has at least one 4-card major and South is limited to three cards in each major. A profile of 100,000 deals matching this bidding gave the average suit lengths shown on the right.

In summary, North/South will hold 6.09 cards in each major, 6.91 in each minor. We can expect a bias towards major-suit leads. (The slight difference between the East and West numbers is caused by excluding deals where one of the defenders would overcall or East would double the Stayman bid.)

	♠ 3.35		
	♥ 3.35		
	♦ 3.15		
	♣ 3.15		
♠ 3.44	Average	♠ 3.47	
♥ 3.44	Suit Lengths	♥ 3.47	
♦ 3.06		♦ 3.03	
♣ 3.06		♣ 3.03	
	♠ 2.74		
	♥ 2.74		
	♦ 3.76		
	♣ 3.76		
West	North	East	South
			1NT
pass	2♣	pass	2♦
pass	3NT	all pass	

Hand 1

After an auction of 1NT-2♣-2♦-3NT, what would you lead from:

♠ 8 7 2 ♥ A Q J 4 2 ♦ 7 6 3 ♣ 8 2 ?

First thoughts Do you remember this hand? In Chapter 3, with a 1NT - 3NT auction, we found that a heart lead was best, with the ♥4 slightly preferable to the ♥Q. Should the fact that North has used Stayman deflect us from a heart lead? Let's see.

(Stayman)	Beats contract (IMPs)	Avg. tricks (MPs)
♠8/7	21.1%	3.24
♥Q	26.6%	3.19
♥4	29.5%	3.15
♦7	21.0%	3.19
♣8	20.1%	3.17

The match-point figures are incredibly close but a low heart is the best lead at IMPs. The fact that we hold three spades and five hearts suggests that North is more likely to hold four spades rather than four hearts, so there is no reason to be deterred from a heart lead. Choosing a low card will work well when East holds ♥K-x, also when declarer or the dummy holds ♥K-x with four cards in the opposite hand.

Let's recall the results from Chapter 3, where the auction was 1NT - 3NT:

(No Stayman)	Beats contract (IMPs)	Avg. tricks (MPs)
♠8/7	26.4%	3.35
♥Q	31.5%	3.27
♥4	32.1%	3.21
♦7	23.7%	3.25
♣8	22.5%	3.20

The ranking order of our five possible leads was exactly the same but the overall prospects of beating the contract were greater. That's because North is very unlikely to hold four hearts when he declines to use Stayman.

Hand 2

After an auction of 1NT-2♣-2♦-3NT, what would you lead from:

♠10 ♥K J 10 3 ♦J 7 6 2 ♣K 10 7 3 ?

First thoughts North's major is again likely to be spades and partner will hold at least five of that suit. Leading from a 4-card suit headed by the king is not particularly inviting, so it's a difficult choice. Here are the results:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	28.8%	3.75
♥J	25.0%	3.67
♦2	26.7%	3.67
♣3	21.9%	3.49

An ugly bunch of leads, yes, but the spade singleton is the least unattractive. North will hold four spades 84.9% of the time and four hearts with frequency 44.4%. Your partner will have either five spades (71.7%) or six spades (28.3%). We assume that he will always find a bid of some sort when he holds a 7-card spade suit. It is not particularly likely that your partner will score several spade tricks, but by leading a spade you will avoid giving away a trick in one of the other suits.

Hand 3

After an auction of 1NT-2♣-2♦-3NT, what would you lead from:

♠ K Q 3 ♥ K 8 6 ♦ Q 9 7 5 4 3 ♣ 7 ?

First thoughts Partner will not have much but with the possible re-entry cards in the majors, a diamond lead might still work out well. Given North's use of Stayman, the heart lead looks precarious while the spade lead may be over-aggressive. These are the results:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	17.2%	3.24
♥6	10.6%	2.97
♦5	12.0%	3.06
♣7	12.8%	3.13

The ♠K wins handsomely and the diamond lead is a disappointment. This is a reminder that North's unproductive use of Stayman should not be a deterrent from leading a major suit. We can place South with 5 or 6 major-suit cards and therefore 7 or 8 minor-suit cards. It is the minor-suit length in declarer's hand that is the key factor. It introduces a considerable bias towards major-suit leads.

Let's look at a typical deal from the simulation to illustrate this:

♠ J 7 5 4											
♥ Q 2											
♦ 8 6											
♣ A J 10 8 5											
♠ K Q 3	<table border="1" style="border-collapse: collapse; width: 60px; height: 60px; margin: auto;"> <tr><td></td><td style="text-align: center;">N</td><td></td></tr> <tr><td style="text-align: center;">W</td><td></td><td style="text-align: center;">E</td></tr> <tr><td></td><td style="text-align: center;">S</td><td></td></tr> </table>		N		W		E		S		♠ 10 6 2
	N										
W		E									
	S										
♥ K 8 6		♥ A J 7 5 4									
♦ Q 9 7 5 4 3		♦ 10									
♣ 7		♣ 9 6 4 2									
♠ A 9 8											
♥ 10 9 3											
♦ A K J 2											
♣ K Q 3											

West	North	East	South
pass	2♣	pass	1NT
pass	3NT	all pass	2♦

A diamond lead gives declarer his ninth trick. This may seem a little unlucky, but East will hold an average of only 1.8 diamonds opposite this West hand. It is hardly surprising that a diamond lead would not achieve much.

A heart lead works well, as it happens, hitting partner's suit. What would happen on the recommended spade lead? South could try ducking the spade, hoping for a continuation. With the heart suit bare, and East signaling discouragement, declarer is more likely to win and rely on the diamond finesse. If he cashes the ♦A before running the clubs, he will discover the location of the ♦Q in time and settle for one down.

Hand 4

The opponents bid 1NT - 2♣ - 2♦ - 3NT. What would you lead from:

♠ 9 7 ♥ Q 8 6 5 2 ♦ 10 9 8 5 ♣ K Q ?

First thoughts Should you lead a heart, even though you know that North holds at least one 4-card major? Your own discrepancy in the major-suit lengths suggests that North will hold four spades rather than four hearts. Maybe you prefer the diamond sequence?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠9	7.9%	2.79
♥5	14.8%	2.96
♦10	7.7%	2.83
♣K	8.3%	2.81

The heart lead is best. A profile of the deals in our simulation showed that North held four spades 78.9% of the time, four hearts 33.5% of the time. There is no reason for North's Stayman bid to deter a heart lead. Your partner will hold at least three hearts nearly half the time and the best chance of beating 3NT is to score several heart tricks.

Hand 5

The opponents bid 1NT - 2♣ - 2♦ - 3NT. What would you lead from:

♠ 8 7 ♥ Q 9 5 3 ♦ 8 2 ♣ J 6 5 3 2 ?

First thoughts The hand is similar to the last one but contains only four hearts this time. Will a heart lead still be best?

(Stayman)	Beats contract (IMPs)	Avg. tricks (MPs)
♠8	6.4%	2.52
♥3	6.8%	2.58
♦8	4.9%	2.45
♣3	7.2%	2.51

The spade lead closes the gap but (rather surprisingly, considering the weakness of the hand) does not overtake the heart and club leads. Let's run the same West hand against a 1NT - 3NT auction:

(No Stayman)	Beats contract (IMPs)	Avg. tricks (MPs)
♠8	13.6%	2.72
♥3	9.5%	2.69
♦8	6.8%	2.48
♣3	9.6%	2.57

Can you imagine why the spade lead is so much more successful when North raises directly to 3NT?

In the Stayman auction, the fact that East did not overcall 2♠ over 2♣ reduces the chance of finding him with a good spade suit. When the bidding is 1NT - 3NT, East may well have been shut out of the auction when holding 11 points or so and a good spade suit.

Hand 6

The opponents bid 1NT - 2♣ - 2♦ - 3NT. What would you lead from:

♠ J 10 7 ♥ 9 6 ♦ K J 9 4 ♣ 9 7 5 4 ?

First thoughts Does the ‘longest and strongest’ ♦K-J-9-4 catch your eye? Maybe the major-suit holdings will fare better.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠J	19.9%	3.36
♥9	18.5%	3.31
♦4	9.9%	2.98
♣7/4	17.9%	3.30

A diamond lead is the worst available, by a wide margin. You can bet your life that many players would choose it, perhaps also thinking ‘I can’t lead a major after they’ve bid Stayman.’ We have already seen, however, that a failed Stayman auction should incline you towards leading a major suit rather than a minor suit. Don’t worry that North holds at least one 4-card major. Worry instead that South does not hold a 4-card major and is likely to be well stocked in the minors.

Hand 7

The opponents bid 1NT - 2♣ - 2♦ - 3NT. What would you lead from:

♠ J 5 ♥ J 10 7 5 ♦ Q J 10 9 3 ♣ K 8 ?

First thoughts Until now, nearly all our best leads have been drawn from the major suits. Here the diamond suit puts up an impressive candidate — five cards headed by an honor sequence. Will that be enough to head the table?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠J	17.3%	3.13
♥5	18.0%	3.25
♦Q	28.4%	3.54
♣K	7.5%	2.56

Yes, we have a worthy minor-suit winner and can cast aside any accusations of discrimination. That’s a relief.

Hand 8

The opponents bid 1NT - 2♣ - 2♦ - 3NT. What would you lead from:

♠ K 10 9 3 ♥ K Q ♦ 10 7 5 2 ♣ 7 6 2 ?

First thoughts We found earlier that touching-honor doubletons often made good leads. Does that apply when you expect North to hold four cards in the suit?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	9.0%	2.88
♥K	12.4%	3.11
♦2	8.5%	2.97
♣7/6/2	8.9%	2.97

The ♥K does not let us down, heading the ranking at both IMPs and match-points. Here’s a deal from the simulation where the ♥K lead fares well:

♠ K 10 9 3	♠ Q J 8 7	
♥ K Q	♥ A 5 2	
♦ 10 7 5 2	♦ K 8 6	
♣ 7 6 2	♣ 9 5 3	
	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> N W E S </div>	
	♠ A 6 5	♠ 4 2
	♥ 10 7 4	♥ J 9 8 6 3
	♦ Q 4	♦ A J 9 3
	♣ A K Q J 8	♣ 10 4

West	North	East	South
			1NT
pass	2♣	pass	2♦
pass	3NT	all pass	

West wins the first two tricks with the ♥K-Q. Even without a suit preference signal from East on the second round of hearts, West may switch to a diamond now. He needs fewer points from East to score diamond tricks than to score club tricks.

Declarer wins East's ♦J with the ♦Q and may seek his ninth trick straight away by leading a low spade towards the dummy. (If East holds the ♠K, the contract is safe because dummy's ♦K-8 will stop the suit). West can then sink the contract by rising with the ♠K and continuing to play diamonds.

Hand 9

The opponents bid 1NT - 2♣ - 2♦ - 3NT. What would you lead from:

♠ K 6 ♥ K 8 6 5 ♦ Q 8 7 5 3 ♣ A 6 ?

First thoughts If a black-suit doubleton does well, we will need to look into it. Meanwhile, which of the red combinations do you prefer?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	5.9%	2.77
♥5	12.4%	3.21
♦5	12.6%	3.18
♣A	8.2%	3.12

Again we note a major-suit bias, despite North's use of Stayman. The moderate 4-card major matches the 5-card minor.

Hand 10

The opponents bid 1NT - 2♣ - 2♦ - 3NT. What would you lead from:

♠ Q ♥ 9 5 ♦ K J 9 3 ♣ K J 9 8 7 4 ?

First thoughts Previously, leads from a 6-card suit have not fared well. Here the other potential leads do not look very special, so it will be interesting to see the figures:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	21.5%	3.67
♥9	20.4%	3.63
♦3	10.1%	3.23
♣8	16.2%	3.37

That's a big advantage for the short-suit leads in the majors. A profile of the simulation tells us that East held the ♣A 3.4% of the time and the ♣Q 8.9%. East's average suit lengths are: ♠ 5.4, ♥ 4.5, ♦ 1.8 and ♣ 1.3. This explains why the returns from a club lead are likely to be disappointing.

Hand 11

The opponents bid 1NT - 2♣ - 2♦ - 3NT. What would you lead from:

♠ A J 8 3 ♥ 10 ♦ A J 8 3 ♣ Q J 7 5 ?

First thoughts The 'failed Stayman' auction introduces a major-suit bias (did we mention that before?) and we expect a spade lead to be better than a diamond. The club combination is usually rated a superior lead to A-J-x-x. Can this be a rare win for the club suit?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠3	33.3%	4.08
♥10	36.4%	4.16
♦3	26.2%	3.91
♣Q	29.1%	3.97

No, we have another win for a major-suit singleton! With 13 points in this hand, a heart lead is not going to find a great heart suit opposite. It is top of the list because the other leads are too likely to give away a trick. Let's see a deal from the simulation where the heart lead displays its charms:

	♠ Q 7 5 4	
	♥ Q 5 2	
	♦ K 10 6	
	♣ K 10 2	
♠ A J 8 3		♠ 10 6 2
♥ 10		♥ 9 8 7 6 4 3
♦ A J 8 3		♦ Q 9 2
♣ Q J 7 5		♣ 4
	♠ K 9	
	♥ A K J	
	♦ 7 5 4	
	♣ A 9 8 6 3	

West	North	East	South
			1NT
pass	2♣	pass	2♦
pass	3NT	all pass	

On a particular deal, any or all of the leads from a 4-card suit may give away a trick. On this lay-out a spade or club lead will give the contract away, while a diamond lead happens to be safe. The recommended ♥10 lead means that you do not have to guess which 4-card suit lead will be safe.

Declarer wins in his hand and sees that he needs four clubs, three hearts, a spade and a diamond to make his game. He leads a club towards dummy and West does best to insert an honor. When declarer clears the club suit, West switches to diamonds, setting up three tricks in that suit before declarer has time to make a spade trick.

What should I lead after a 1NT-2♣-2♥-3NT auction?

On this auction, we have very specific information about the major suits. South has four (or possibly five) hearts and North has a maximum of three. North holds four spades, to justify his use of Stayman; South does not hold four spades as well, or he would have corrected 3NT to 4♠.

A profile of 100,000 deals conforming to the auction 1NT - 2♣ - 2♥ - 3NT showed that North/South held an average of 6.62 spades and 6.47 hearts — both close to the average of 6.5.

Does this suggest that there will be hardly any major-minor bias after this auction? Not at all! North will always hold four spades and South will always hold

at least four hearts. (When North/South hold only six cards in one of the majors, they will never break 3-3). Leading a major suit is therefore unattractive; there is a significant bias towards leading a minor.

	♠ 4.00		
	♥ 2.17		
	♦ 3.42		
	♣ 3.41		
♠ 3.24			♠ 3.13
♥ 3.29	Average		♥ 3.24
♦ 3.21	Suit lengths		♦ 3.33
♣ 3.26			♣ 3.30
	♠ 2.62		
	♥ 4.30		
	♦ 3.04		
	♣ 3.04		
West	North	East	South
			1NT
pass	2♣	pass	2♥
pass	3NT	all pass	

Hand 12

The opponents bid 1NT - 2♣ - 2♥ - 3NT. What would you lead from:

♠ Q J 10 6 3 2 ♥ 6 ♦ J 8 3 ♣ A 5 4 ?

First thoughts North holds four spades. Should that deter us from leading from this impressive spade holding?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	5.4%	2.83
♥6	6.7%	2.84
♦3	9.1%	2.91
♣4	10.1%	2.92

A spade lead is worst. Dummy holds four spades and declarer holds two or three. This leaves partner with a singleton spade (68.2%) or a void spade (31.8%). It is barely possible that you will enjoy the spade suit, even if partner holds a singleton ♠K or ♠A. Your partner holds at least five hearts but there is no future in the singleton heart lead because declarer holds four hearts sitting over him. You should therefore lead one of the minor suits.

Hand 13

The opponents bid 1NT - 2♣ - 2♥ - 3NT. What would you lead from:

♠ J 6 3 ♥ A Q 10 7 4 2 ♦ 7 2 ♣ 5 2 ?

First thoughts Is this splendid heart suit worth leading, despite the fact that declarer holds length there?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠3	19.9%	3.54
♥7	14.5%	3.13
♦7	21.3%	3.60
♣5	21.1%	3.59

A lead from the long suit is worst, echoing the result from the previous hand. Declarer holds four (or five) hearts, leaving your partner with an average of 1.5 hearts. Of the occasions when partner does have two or three hearts, he will hold the ♥K only 9% of the time. So, prospects of a ‘quick kill’ in the heart suit are not high. You should flip a mental coin and choose one of the minor-suit doubletons.

Hand 14

The opponents bid 1NT - 2♣ - 2♥ - 3NT. What would you lead from:

♠ 9 8 5 2 ♥ A K 9 8 4 ♦ 10 4 3 ♣ 5 ?

First thoughts South holds four (or possibly five) hearts. If you still intend to lead a heart, which card will you choose?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠2	16.6%	3.36
♥A	21.3%	3.57
♥8	19.4%	3.22
♦3	17.8%	3.40
♣5	15.2%	3.31

The presence of the ♥9 just tips the balance in favor of a heart lead. Leading the fourth-best heart will sometimes allow you to bring in the heart suit. Leading a top heart will let you inspect the dummy and perhaps make a profitable switch before declarer has scored any heart tricks.

Hand 15

The opponents bid 1NT - 2♣ - 2♥ - 3NT. What would you lead from:

♠ K Q 10 5 ♥ 10 8 4 ♦ 8 6 5 3 ♣ 4 2 ?

First thoughts We will end this section with two West hands where the longest available suit is of only four cards. What is your choice from this collection?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	6.8%	2.91
♠5	6.3%	2.54
♥4	8.4%	2.80
♦6/3	11.8%	2.95
♣4	9.6%	2.87

Dummy has four spades over you and a spade lead is the worst choice at IMPs. There is a minor-suit bias on this sort of Stayman auction and leading from four-low is slightly better than from two-low.

Hand 16

The opponents bid 1NT - 2♣ - 2♥ - 3NT. What would you lead from:

♠ Q 6 3 2 ♥ J 10 3 2 ♦ A Q 4 ♣ 8 2 ?

First thoughts With the bias from the auction downgrading major-suit leads, nothing looks attractive here. What is your choice?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠2	13.0%	3.07
♥2	12.8%	3.08
♦A	18.3%	3.23
♣8	15.1%	3.17

The ♦A gives you the best chance, at IMPs and at match-points. Leading from a 4-card major is unattractive when South has responded positively to a Stayman enquiry.

What should I lead after a 1NT-2♣-2♠-3NT auction?

This auction is entirely symmetrical to the one where South responds 2♥ to the Stayman enquiry. North will hold four hearts and South will hold four (or five) spades. The conclusions of the previous section apply to this auction too and we will give only three further hands here.

A profile of 100,000 deals conforming to this auction revealed the average suit lengths shown in the diagram on the right. Again there will be a bias towards minor-suit leads, because of the known major-suit holdings of North and South.

		♠ 2.16	
		♥ 4.00	
		♦ 3.42	
		♣ 3.42	
♠ 3.31		Average	♠ 3.23
♥ 3.19		suit lengths	♥ 3.18
♦ 3.25			♦ 3.30
♣ 3.25			♣ 3.30
		♠ 4.30	
		♥ 2.63	
		♦ 3.04	
		♣ 3.03	
West	North	East	South
pass	2♣	pass	1NT
pass	3NT	all pass	2♠

Hand 17

The opponents bid: 1NT-2♣-2♠-3NT. What would you lead from:

♠ K Q 5 2 ♥ Q 6 5 ♦ 5 4 ♣ K Q 4 2 ?

First thoughts Should you lead from one of the moderate 4-card suits or perhaps choose a passive diamond lead? Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	8.8%	2.92
♠2	8.2%	2.90
♥5	10.2%	2.99
♦5	14.9%	3.28
♣K	15.2%	3.30
♣2	12.5%	3.13

The minor-suit bias is in operation and the ♣K is well ahead of the ♠K at IMPs. It gives you a huge 0.4 tricks per deal advantage at match-points too. The passive diamond lead comes second and the spade 4-carder brings up the rear.

Hand 18

The opponents bid: 1NT-2♣-2♠-3NT. What would you lead from:

♠ 8 7 2 ♥ A Q J 4 2 ♦ 7 6 3 ♣ 8 2 ?

First thoughts Hand 1 returns for further duty, against yet another auction. Dummy is known to hold four hearts. How will that affect the results?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠8	10.0%	2.99
♥A	2.3%	2.53
♥Q	0.7%	2.51
♥4	13.8%	2.65
♦7/6/3	11.3%	3.07
♣8	10.6%	3.02

Can you believe that? The chance that the ♥Q lead will beat 3NT has dropped from 26.6% (in the failed Stayman auction) to 0.7%. A heart lead is still best at IMPs but you have to lead the ♥4 rather than the ♥Q. The fourth-best lead will work well not only when partner holds the ♥K-x, but also when declarer has ♥K-x opposite the known four cards in the dummy and East has a quick entry.

To complete the picture, we will run this West hand against the auction 1NT - 2♣ - 2♥ - 3NT, where declarer holds four (or five) hearts:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠8	22.2%	3.51
♥A	10.5%	2.90
♥Q	10.0%	2.91
♥4	18.2%	3.12
♦7/6/2	22.7%	3.54
♣8	21.3%	3.50

With the hearts on your right, a lead of that suit slips from first to last place. If you cannot bear to lead some different suit... you must at least choose the ♥4.

Hand 19

Finally, we will compare leads in the two majors, to see whether it is better to lead dummy's suit or declarer's suit. (Most of the time it is best to lead neither, as we have seen.)

The opponents bid: 1NT-2♣-2♠-3NT. What would you lead from:

♠ K Q 7 3 ♥ K Q 7 3 ♦ 10 6 ♣ 9 8 3 ?

First thoughts The major suit combinations do not make attractive leads. Dummy holds four hearts over you, and declarer will hold four (or five) spades. Which major-suit lead is the least damaging?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	10.8%	3.22
♠3	8.8%	3.09
♥K	9.0%	3.11
♥3	9.6%	3.10
♦10	14.4%	3.37
♣9	17.2%	3.45

The minor-suit leads are best, which is no surprise, and it is better to lead from three cards than two. There is little to choose between the major-suit leads.

CONCLUSIONS – Leading after a Stayman sequence

- When the bidding is 1NT - 2♣ - 2♦ - 3NT, your first thought should be ‘South has the minors’ rather than ‘North has a major’. You should prefer to lead a major suit rather than a minor suit.
- Your own holdings in the majors may suggest which major North was looking for. Suppose you hold one or two spades and four hearts, for example. Spades is likely to be North’s major, yes, but partner will hold length there and a spade could still be the best lead. Consider leading this suit, even from a singleton, in preference to a minor-suit.
- When the bidding is 1NT - 2♣ - 2♥ (or 2♠) - 3NT, you know that South holds one major and North holds the other. This makes it inadvisable to lead either major suit.
- When you decide to lead a powerful 5-card major (such as A-Q-J-x-x or K-Q-J-x-x) despite knowing that an opponent has four cards there, a spot-card lead may be best.

Pick a Winner!

Leading after a Stayman sequence

As usual, you should choose which lead will work best, noting if you think the answer would be different at match-points.

Auction is 1NT - 2♣ - 2♦ - 3NT

- | | | |
|--|---|---|
| 1. ♠ A J 9 6 2
♥ 5 2
♦ 10 7 3
♣ K J 4 | 2. ♠ A Q
♥ J 10 6
♦ 10 7 2
♣ Q 8 7 4 2 | 3. ♠ Q 10 3
♥ 10 9 4
♦ K 8 6 4 2
♣ 9 4 |
| 4. ♠ 7 6 5
♥ 8 6
♦ A Q 10 7 3
♣ K 5 3 | 5. ♠ K 2
♥ J 8
♦ J 8 7 6 3
♣ J 9 6 2 | 6. ♠ —
♥ J 10 5 4 3
♦ K 9 8
♣ A 10 9 6 3 |

Auction is 1NT - 2♣ - 2♥ - 3NT

- | | | |
|---|--|--|
| 7. ♠ K 3 2
♥ K Q 8 6
♦ K 3
♣ 7 6 4 3 | 8. ♠ K 7
♥ K 10 6 5 3
♦ 8 6 3
♣ J 8 7 | 9. ♠ Q 10 7 6 5 2
♥ K J 7 5
♦ 7
♣ 5 2 |
|---|--|--|

Auction is 1NT - 2♣ - 2♠ - 3NT

- | | | |
|---|---|--|
| 10. ♠ 10 9 5 4
♥ K 10 7 5 2
♦ 6
♣ 10 9 3 | 11. ♠ 10 8 5
♥ K Q J 6 3
♦ J 7 4
♣ A 8 | 12. ♠ J 10 4 2
♥ Q J 9 8
♦ 8 2
♣ 10 7 6 |
|---|---|--|

Answers

Here are the best leads from the twelve West hands. As always, (I) and (M) indicate that different leads are recommended for IMPs and for match-points.

Auction is 1NT - 2♣ - 2♦ - 3NT			IMPs	MPs
1. ♠ A J 9 6 2 ♥ 5 2 ♦ 10 7 3 ♣ K J 4	1st	♠6	31.1%	3.66
	2nd	♥5	23.1%	3.61
2. ♠ A Q ♥ J 10 6 ♦ 10 7 2 ♣ Q 8 7 4 2	1st	♥J	11.8%	3.13
	2nd	♣4	10.6%	3.00
3. ♠ Q 10 3 ♥ 10 9 4 ♦ K 8 6 4 2 ♣ 9 4	1st	♥10	12.9%	3.04
	2nd	♠10	12.6%	2.88
4. ♠ 7 6 5 ♥ 8 6 ♦ A Q 10 7 3 ♣ K 5 3	1st	♠7/5	34.2%	3.96
	2nd	♥8	33.5%	3.90
5. ♠ K 2 ♥ J 8 ♦ J 8 7 6 3 ♣ J 9 6 2	1st(I)	♠K	12.2%	2.89
	1st(M)	♥J	11.6%	3.07
6. ♠ — ♥ J 10 5 4 3 ♦ K 9 8 ♣ A 10 9 6 3	1st	♥4	33.8%	3.90
	2nd	♣6	26.0%	3.61

Auction is 1NT - 2♣ - 2♥ - 3NT			IMPs	MPs
7. ♠ K 3 2 ♥ K Q 8 6 ♦ K 3 ♣ 7 6 4 3	1st	♣3	19.5%	3.43
	2nd	♥K	14.6%	3.34
8. ♠ K 7 ♥ K 10 6 5 3 ♦ 8 6 3 ♣ J 8 7	1st	♦8/3	16.5%	3.34
	2nd	♣7	15.2%	3.28
9. ♠ Q 10 7 6 5 2 ♥ K J 7 5 ♦ 7 ♣ 5 2	1st	♣5	13.3%	3.05
	2nd	♦7	12.0%	3.00

Auction is 1NT - 2♣ - 2♠ - 3NT			IMPs	MPs
10. ♠ 10 9 5 4 ♥ K 10 7 5 2 ♦ 6 ♣ 10 9 3	1st	♣10	12.3%	2.94
	2nd	♠4	7.9%	2.80
11. ♠ 10 8 5 ♥ K Q J 6 3 ♦ J 7 4 ♣ A 8	1st(I)	♥6	16.3%	2.72
	1st(M)	♥K	9.3%	3.55
12. ♠ J 10 4 2 ♥ Q J 9 8 ♦ 8 2 ♣ 10 7 6	1st	♣6	12.2%	3.03
	2nd	♦8	11.9%	3.01

Chapter 6

Leading after a transfer sequence

We will now look at transfer auctions to see how the choice of opening lead is affected. Suppose North bids 2♦, showing hearts. South completes the transfer and North bids 3NT, offering a choice of games. South passes and we will assume that this shows two hearts. Sometimes players pass 3NT on 4-3-3-3 shape, but this is not common practice. North must have a doubleton somewhere, possibly even a singleton, and this may leave one of the suits under-protected in 3NT.

A profile of 100,000 deals conforming to this auction yielded the average suit lengths shown on the right. North's major has been flagged as a strong point. We can assume that North does not hold four spades. Otherwise he would seek a 4-4 fit there. This introduces a bias towards leading the 'other major'.

Note that our software excludes deals where either defender would overcall, or where East would double 2♦ to show diamonds.

				♠ 2.24					
				♥ 5.00					
				♦ 2.88					
				♣ 2.88					
♠ 3.52					Average	♠ 3.52			
♥ 3.00					Suit Lengths	♥ 3.00			
♦ 3.24						♦ 3.24			
♣ 3.24						♣ 3.24			
				♠ 3.72					
				♥ 2.00					
				♦ 3.64					
				♣ 3.64					
West	North	East	South						
			1NT						
pass	2♦	pass	2♥						
pass	3NT	all pass							

Dummy transferred to hearts

Hand 1

The bidding is 1NT - 2♦ - 2♥ - 3NT. What would you lead from:

♠ Q 10 5 2 ♥ 10 5 ♦ Q 10 5 2 ♣ A 9 4 ?

First thoughts North holds five hearts, so that suit seems unattractive. North might hold four diamonds, but will not hold four spades. This suggests that a spade lead will be better than a diamond. Let's look at the results.

	Beats contract (IMPs)	Avg. tricks (IMPs)
♠2	27.8%	3.68
♥10	28.1%	3.65
♦2	26.1%	3.62
♣4	25.4%	3.56

The spade lead is indeed slightly ahead of the same combination in diamonds. More of a surprise is the fact that the heart doubleton fares so well. East will hold four hearts, it is true, but the doubleton's success is more of a reflection on the moderate nature of the other three leads. They are too likely to give a trick away.

Hand 2

The bidding is 1NT - 2♦ - 2♥ - 3NT. What would you lead from:

♠ 7 5 4 ♥ K 10 7 ♦ Q J ♣ 10 9 7 6 5 ?

First thoughts The ♥K-10-7 is not a favorable omen, sitting under North's suit. It suggests that you should try to set up five tricks as quickly as possible.

	Beats contract (IMPs)	Avg. tricks (IMPs)
♠7/5/4	6.4%	2.38
♥7	1.9%	1.96
♦Q	8.0%	2.48
♣10	6.0%	2.35

The low figures show how grim the situation is. The ♦Q is rated the best chance to beat declarer to the tape. You hope that partner will hold five reasonable diamonds accompanied by a side entry.

Hand 3

The bidding is 1NT - 2♦ - 2♥ - 3NT. What would you lead from:

♠ A J 6 4 ♥ 8 ♦ 10 3 2 ♣ K Q 7 6 3 ?

First thoughts This hand is much stronger than the previous one and there must be a better chance of beating the contract. Is there any reason to lead a spade rather than a club? If you lead a club, which card will it be?

	Beats contract (IMPs)	Avg. tricks (IMPs)
♠4	17.8%	3.51
♥8	25.5%	3.73
♦2	24.9%	3.71
♣K	34.0%	3.97
♣7	24.5%	3.51

A spade lead is worst at both forms of the game, trailing ignominiously behind the singleton heart lead. A club lead is best and, as we have noted more than once, you do best to lead a top card.

On this deal from the simulation, declarer can take advantage of a low club lead:

	♠ 8 7 3										
	♥ A J 6 5 2										
	♦ A 6 5 4										
	♣ 10										
♠ A J 6 4	<table border="0" style="margin: auto;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ 10 2
	N										
W		E									
	S										
♥ 8		♥ K 10 7 4 3									
♦ 10 3 2		♦ J 8									
♣ K Q 7 6 3		♣ 9 8 5 4									
	♠ K Q 9 5										
	♥ Q 9										
	♦ K Q 9 7										
	♣ A J 2										

West	North	East	South
			1NT
pass	2♦	pass	2♥
pass	3NT	all pass	

West, whose collection of *Master Point Press* books does not include the present volume, leads the ♣6. Declarer wins with dummy's ♣10 and plays a low heart. East is caught in a Morton's Fork. If he rises with the ♥K to clear the clubs, declarer will have three heart tricks — enough for the contract.

Suppose instead that East plays low. Declarer will pocket a trick with the ♥Q, test the diamond suit and then lead a spade to the king. Nine tricks and the game are his.

Hand 4

The bidding is 1NT - 2♦ - 2♥ - 3NT. What would you lead from:

♠ J 10 5 ♥ K 8 3 2 ♦ 10 9 8 6 ♣ 5 2 ?

First thoughts Again, you must pick one of the non-heart suits. Is there any reason to expect a particular suit to be the winner?

	Beats contract (IMPs)	Avg. tricks (IMPs)
♠J	8.8%	2.76
♥2	2.9%	2.39
♦10	6.0%	2.64
♣5	5.9%	2.55

This is a weak hand, so you should seek to find partner's good suit. Spades is the best shot, in the hope of finding partner with five cards there.

Hand 5

The bidding is 1NT - 2♦ - 2♥ - 3NT. What would you lead from:

♠ J 10 8 ♥ 5 ♦ Q J 6 ♣ K 10 8 7 5 4 ?

First thoughts Previous simulations have shown that leads from a 6-card suit fare disappointingly, with every chance that partner will hold a singleton. Which tripleton do you prefer?

	Beats contract (IMPs)	Avg. tricks (IMPs)
♠J	15.5%	3.34
♥5	13.9%	3.26
♦Q	11.7%	3.05
♣7	12.1%	3.08

Since the bias towards the ‘other major’ (spades here) is generally quite limited, it is perhaps surprising that the ♠J is ranked well ahead of the ♦Q. Let’s take a look at the profile for this simulation.

Opposite this West hand, East will hold an average of 3.6 spades and only 2.9 diamonds. We have seen elsewhere that a lead from Q-J-x is much more likely to give away a trick when partner will be relatively short in the suit.

Hand 6

The bidding is 1NT - 2♦ - 2♥ - 3NT. What would you lead from:

♠ A J 9 5 2 ♥ 6 3 ♦ K 7 ♣ Q J 10 2 ?

First thoughts If the doubleton king lead does not come last, we will refund whatever you paid for this learned work. Meanwhile, which black suit catches your eye?

	Beats contract (IMPs)	Avg. tricks (IMPs)
♠5	29.5%	3.64
♥6	24.6%	3.68
♦K	12.8%	3.01
♣Q	34.3%	3.98

The club lead wins, because there is a fair chance of scoring three clubs and two outside winners, or two clubs and three outside winners. At match-points, a club lead is best by a long way.

Hand 7

The bidding is 1NT - 2♦ - 2♥ - 3NT. What would you lead from:

♠ 10 7 5 ♥ — ♦ K 10 8 7 3 2 ♣ A Q 7 5 ?

First thoughts You expect partner to hold six hearts, leaving him short in the other suits. Do you prefer a spade or a diamond?

	Beats contract (IMPs)	Avg. tricks (IMPs)
♠5	21.7%	3.63
♦7	20.2%	3.51
♣5	15.3%	3.46

With hearts breaking so badly, declarer may struggle for tricks. A spade is unlikely to find partner with a strong holding, but he may be able to win and switch to one of the minors successfully, through the strong hand.

Is it ever right to lead dummy's long major?

We saw on Hand 1 that it can be right to lead a doubleton in dummy's long major, but only when you have unpromising holdings elsewhere. What are the prospects when you hold an honor sequence in dummy's long suit?

Hand 8

The bidding is 1NT - 2♦ - 2♥ - 3NT. What would you lead from:

♠ A 6 ♥ Q J 10 9 3 ♦ 8 7 3 ♣ K 8 4 ?

First thoughts When you hold five cards in dummy's long suit, you expect partner to hold a singleton. Even if it is a low card, you may still be able to score two hearts, two black-suit winners and a trick in partner's hand.

	Beats contract (IMPs)	Avg. tricks (IMPs)
♠A	9.2%	3.16
♥Q	22.7%	3.76
♦8/7/3	15.1%	3.37
♣4	13.1%	3.18

From the four-deep sequence the ♥Q lead does well. Suppose instead that your heart sequence is only three-deep:

♠ A 6 ♥ Q J 10 6 3 ♦ 8 7 3 ♣ K 8 4

Here are the new results:

	Beats contract (IMPs)	Avg. tricks (IMPs)
♠A	9.8%	3.17
♥Q	10.0%	3.37
♥6	9.6%	3.02
♦8/7/3	14.1%	3.36
♣4	13.2%	3.18

The figures take a dip because you have less chance of establishing heart tricks your way. In particular, the ♥Q lead falls from 22.7% to 10.0%. It also loses its previous big advantage at match-points.

Dummy transferred into spades

When the bidding goes 1NT - 2♥ - 2♠ - 3NT, the situation is exactly symmetrical to that after a 2♦ transfer. Holding one or two cards in dummy's spades, you may occasionally venture a lead in that suit, hoping that partner holds something good there. Generally, you will look elsewhere, bearing in a mind a slight bias towards the other major suit.

A profile of 100,000 deals conforming to this transfer auction yielded the average expected suit lengths shown on the right. North's major has been flagged as the opponents' strong point. Although we know less about the other major, we can assume that North does not hold four cards there.

		♠ 5.00	
		♥ 2.26	
		♦ 2.87	
		♣ 2.87	
♠ 3.00			♠ 3.00
♥ 3.51	Average		♥ 3.51
♦ 3.25	Suit Lengths		♦ 3.24
♣ 3.24			♣ 3.25
		♠ 2.00	
		♥ 3.72	
		♦ 3.64	
		♣ 3.64	
West	North	East	South
			1NT
pass	2♥	pass	2♠
pass	3NT	all pass	

Hand 9

The bidding is 1NT - 2♥ - 2♠ - 3NT. What would you lead from:

♠ J 3 2 ♥ A 2 ♦ 10 4 3 2 ♣ 10 8 4 2 ?

First thoughts Dummy's long spades are breaking favorably for declarer and you may need to gather some tricks quickly before he gets the spades going. Any ideas? These are the simulation results:

Hand 10

The bidding is 1NT - 2♥ - 2♠ - 3NT. What would you lead from:

♠ Q J 10 7 6 ♥ K 4 2 ♦ 9 8 6 ♣ 7 4 ?

First thoughts With only three touching honors in dummy's suit, a spade lead is unattractive. How do you rank the other three suits?

	Beats contract (IMPs)	Avg. tricks (IMPs)
♠Q	7.0%	2.94
♠7	4.5%	2.55
♥2	11.4%	2.99
♦9	9.9%	3.05
♣7	9.5%	3.01

A spade lead is worst and should be avoided. A heart lead gives you the best, albeit limited, chance of beating the contract. On average, your partner will hold longer hearts than diamonds (because dummy will not hold four hearts and may hold four diamonds).

CONCLUSIONS – Leading after a transfer sequence

- It is rarely right to lead the 5-card suit that is sitting over you. Do so when you have a 4-deep sequence (♠Q-J-10-9-5), but not with a 3-deep sequence (♠K-Q-J-6-2).
- When choosing one of the other three suits, there is a slight bias in favor of the other major, because the dummy will not hold four cards there.
- When you can tell that dummy's major lies well for declarer, it is more likely that an aggressive lead is required.

Pick a Winner!

Leading from a transfer sequence

You know the routine by now. Choose the best available lead at IMPs, noting if you think that a different lead will be best at match-points.

Auction is 1NT - 2♦ - 2♥ - 3NT

- | | | |
|---|--|---|
| 1. ♠ K J 5 4
♥ 10 9
♦ Q 9 8 5
♣ 9 4 2 | 2. ♠ A 10
♥ 8 6
♦ 9 6 5 3 2
♣ J 8 7 6 | 3. ♠ A 10 9 2
♥ Q
♦ A Q 9 4 3
♣ 10 9 7 |
| 4. ♠ J 10 8
♥ 5
♦ Q J 6
♣ K 10 8 7 5 4 | 5. ♠ A J 7 6 4
♥ 7 5 4
♦ 8
♣ Q J 10 2 | 6. ♠ A
♥ A Q J 8
♦ A 8 7
♣ 10 8 6 3 2 |

Auction is 1NT - 2♥ - 2♠ - 3NT

- | | | |
|--|---|---|
| 7. ♠ 8 5 4
♥ J 10 9 4
♦ K Q 10 6 3
♣ 10 | 8. ♠ K 8 7 3
♥ 7 2
♦ 10 8
♣ K 10 5 4 2 | 9. ♠ J 10 9 4
♥ 10 8 7 5
♦ 9 6 2
♣ A 5 |
| 10. ♠ 3 2
♥ 10
♦ K 8 7 6 4 3
♣ K 10 5 4 | 11. ♠ Q 3
♥ 10 4 3 2
♦ 9 7 6
♣ K Q 8 4 | 12. ♠ J 10 7 3
♥ 8 4
♦ A J 6 4
♣ J 9 2 |

Answers

Here are the best leads from the West hands on the previous page.

Auction is 1NT - 2♦ - 2♥ - 3NT

			IMPs	MPs
1.	♠ K J 5 4 ♥ 10 9 ♦ Q 9 8 5 ♣ 9 4 2	1st ♣2	20.5%	3.27
		2nd ♥10	20.1%	3.26
2.	♠ A 10 ♥ 8 6 ♦ 9 6 5 3 2 ♣ J 8 7 6	1st ♠A	12.2%	2.97
		2nd ♦3	10.4%	3.00
3.	♠ A 10 9 2 ♥ Q ♦ A Q 9 4 3 ♣ 10 9 7	1st(I) ♦4	28.9%	3.85
		1st(M) ♥Q	28.0%	3.92
4.	♠ J 10 8 ♥ 5 ♦ Q J 6 ♣ K 10 8 7 5 4	1st ♠J	16.7%	3.40
		2nd ♥5	14.1%	3.40
5.	♠ A J 7 6 4 ♥ 7 5 4 ♦ 8 ♣ Q J 10 2	1st(I) ♠6	22.9%	3.01
		1st(M) ♣Q	21.0%	3.29
6.	♠ A ♥ A Q J 8 ♦ A 8 7 ♣ 10 8 6 3 2	1st ♣3	62.4%	4.64
		2nd ♥A	60.6%	4.61

Auction is 1NT - 2♥ - 2♠ - 3NT

7.	♠ 8 5 4 ♥ J 10 9 4 ♦ K Q 10 6 3 ♣ 10	1st ♦K	22.0%	3.22
		2nd ♥J	13.9%	2.81
8.	♠ K 8 7 3 ♥ 7 2 ♦ 10 8 ♣ K 10 5 4 2	1st ♣4	14.0%	2.85
		2nd ♥7	10.7%	2.87
9.	♠ J 10 9 4 ♥ 10 8 7 5 ♦ 9 6 2 ♣ A 5	1st(I) ♣A	14.8%	3.07
		1st(M) ♥3	12.7%	3.17
10.	♠ 3 2 ♥ 10 ♦ K 8 7 6 4 3 ♣ K 10 5 4	1st ♠3	12.1%	3.17
		2nd ♥10	11.6%	3.15
11.	♠ Q 3 ♥ 10 4 3 2 ♦ 9 7 6 ♣ K Q 8 4	1st ♥2	14.2%	3.08
		2nd ♦6	12.7%	3.03
12.	♠ J 10 7 3 ♥ 8 4 ♦ A J 6 4 ♣ J 9 2	1st ♥8	16.8%	3.22
		2nd ♣2	15.1%	3.18

Chapter 7

LEADING WHEN THEY HAVE BID TWO SUITS

In this chapter we will look at the best lead after a typical auction where the opponents have shown two suits on the way to a notrump game: 1♦ - 1♠ - 1NT - 3NT. The opener will hold at least four diamonds. (He cannot hold only three diamonds and 4-4-3-2 shape or he would have raised partner's spades.) We will assume that the responder holds only four spades, since with five spades most players would use a check-back bid to investigate a 5-3 spade fit.

The responder cannot hold four hearts, or he would have responded 1♥. He may hold four clubs, however, and this introduces a bias towards leading the unbid major. A profile of

100,000 deals conforming to the auction shown gave the suit lengths shown in the diagram. East/West hold an average of 7.37 hearts between them and only 6.60 clubs.

In general, you should be very reluctant to lead one of the suits that the opponents have bid. There are exceptions and that will be one of our tasks in this chapter — to identify when you should lead one of their bid suits.

				♠ 4.00				
				♥ 2.50				
				♦ 3.11				
				♣ 3.39				
		♠ 3.17			Average			♠ 3.22
		♥ 3.69			Suit Lengths			♥ 3.68
		♦ 2.83						
		♣ 3.31						
				♠ 2.61				
				♥ 3.13				
				♦ 4.25				
				♣ 3.01				
West	North	East			South			
					1♦			
pass	1♠	pass			1NT			
pass	3NT	all pass						

Which of the unbid suits should I lead?

Hand 1

The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ K Q 5 ♥ 10 7 5 ♦ J 10 6 4 ♣ 10 9 4 ?

First thoughts There is no apparent reason to lead a spade or a diamond. The 10-9-4 combination looks slightly better than 10-7-5 but perhaps the major-suit bias will affect matters. Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	18.5%	3.50
♥5	26.4%	3.74
♦J	16.0%	3.42
♣10	24.6%	3.70

There is a slight advantage to a heart lead, despite the combination being inferior. Let's look into a profile of this simulation to see why that might be. Ah, East holds an average of 4.15 hearts and only 3.34 clubs opposite this West hand. This is an example of the bias towards leading the unbid major.

Hand 2

The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ A 8 5 3 ♥ J 8 3 ♦ 10 6 ♣ J 8 5 2 ?

First thoughts This type of hand will occur frequently. Do you prefer the 3-card hearts or the 4-card clubs?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	9.9%	2.98
♥3	17.7%	3.39
♦10	10.1%	3.05
♣2	13.9%	3.27

A heart lead is preferable. You need to find partner with several tricks and the best chance is that he has a useful 5-card heart suit. Opposite this West

hand, East holds five or more hearts 36% of the time, but five or more clubs with a frequency of only 6%.

Hand 3

The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ 10 9 2 ♥ K 2 ♦ Q J 4 2 ♣ 8 6 4 2 ?

First thoughts You would have to search far and wide to find a deal where it is right to lead from K-x against an uncontested auction to 3NT. Perhaps this is the moment, with the club alternative lead so uninspiring.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	12.4%	3.28
♥K	19.4%	3.22
♦2	8.2%	3.00
♣6/4/2	14.7%	3.35

The ♥K is best at IMPs. Opposite this West hand, East will hold five or six hearts 70% of the time. The best chance of beating 3NT is to score several heart tricks in partner’s hand. Although the probability of East holding five or more clubs is only 2%, a passive club lead is best at match-points.

Hand 4

The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ J 10 ♥ Q J 5 ♦ 5 3 2 ♣ K 10 9 5 3 ?

First thoughts Which is the better bet, do you think, a heart or a club?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠J	15.9%	3.38
♥Q	22.6%	3.52
♦5/3/2	14.6%	3.34
♣10	15.9%	3.16

We saw in an earlier chapter that the prospects for a lead from Q-J-x vary according to how many cards you expect partner to hold in the suit. Here there is a bias towards hearts. A profile of the simulation for this West hand tells us

that East will hold an average of 4.1 hearts, which will include the ♥A (21.5%), ♥K (26.6%) and ♥10 (47.3%). That's why the heart lead is top of our list.

Hand 5

The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ Q 10 9 7 ♥ 8 7 6 ♦ 9 7 ♣ K J 10 6 ?

First thoughts Again there is no reason to consider a lead in one of their suits. Do you prefer hearts or clubs?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	22.2%	3.42
♥8/7/6	29.0%	3.68
♦9	24.9%	3.55
♣J	20.5%	3.49

A passive heart lead is better than a club from the K-J-10-6. A club lead is all too likely to surrender a trick and the compensating returns will be moderate. Even a diamond lead into declarer's bid suit is a better than a club.

Hand 6

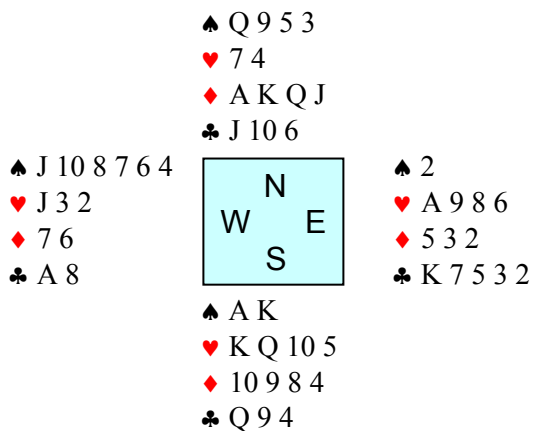
The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ J 10 8 7 6 4 ♥ J 3 2 ♦ 7 6 ♣ A 8 ?

First thoughts A spade lead looks uninviting, with the suit bid on your left. Do you prefer a heart or a club lead?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠J	7.9%	2.91
♥2	16.9%	3.36
♦7	11.1%	3.10
♣A	20.9%	3.31

Are you surprised that the club lead competes so well? It's not the first time that a lead from A-x has caught the eye. Let's pluck a deal from the simulation to understand why a club lead might work better than a heart:



West	North	East	South
pass	1♠	pass	1♦
pass	3NT	all pass	1NT

You lead the ♣A and continue the suit when East encourages. He clears the clubs and declarer has only eight tricks without playing on hearts. East grabs his ♥A at the first opportunity and cashes the clubs for one down.

You may be thinking: ‘So what? East might have held five hearts instead.’ Opposite this West hand, the chance of East holding five hearts is 29.8%, the chance of five clubs is 35.3%. (Although there is a bias towards hearts, West holds one card fewer in clubs.) That is not the end of it, however. Your ♣A plays an important role in setting up four club tricks. Give the dummy ♣K-x-x and even ♣Q-x-x-x-x with partner would have been enough.

Suppose that East had held five hearts. Since your only honor is the jack, you would need him to hold quite a strong suit to allow four heart tricks to be established.

When should I lead the opener’s suit?

There must be some occasions when it is right to lead the opener’s suit and in this section we will search for them. Suppose you hold six or seven cards in the suit bid on your right. You partner may well be void in the suit. Leading such a suit is usually a hopeless proposition. The odds are slightly better when

you have a useful 5-card suit and hope that partner can assist with a doubleton honor in his hand. Let's check out a few examples.

Hand 7

The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ A 9 2 ♥ 10 2 ♦ A J 7 5 2 ♣ J 9 7 ?

First thoughts Five cards to the ace-jack in diamonds. Should your fingers move in that direction? Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠9	10.6%	3.38
♥10	15.8%	3.56
♦5	11.5%	3.43
♣9	15.5%	3.57

A diamond lead cannot match the passive leads in the unbid suits. Leading the ♣7 (14.9%) instead of the ♣9 would occasionally result in a blockage. In a weird exhibition of symmetry the ♠9 is the best lead in the spade suit, beating the ♠2 (10.2%). As we have mentioned elsewhere, the best lead technically may not be the best practically. Partner may find a lead of the nine difficult to read and you will not go far wrong by leading the tradition bottom card from three.

Hand 8

The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ 9 4 ♥ J 7 6 ♦ A K J 3 2 ♣ 10 7 6 ?

First thoughts We have strengthened the diamond suit. Is that enough to tilt the odds in favor of a diamond lead?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠9	21.6%	3.86
♥6	21.2%	3.87
♦A	18.0%	3.84
♦3	19.8%	3.47
♣6	21.4%	3.87

The three non-diamond leads are very close at both forms of the game. Leading a low diamond is hopelessly worst at match-points.

Hand 9

The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ 9 8 2 ♥ 10 7 2 ♦ K Q J 6 4 ♣ A 5 ?

First thoughts What do you make of this particular holding in declarer's bid suit? If you lead a diamond, which card will you choose?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠9	13.0%	3.61
♥2	17.5%	3.65
♦K	13.5%	3.79
♦6	15.8%	3.07
♣A	9.3%	3.42

A heart lead is best at IMPs. If you insist on a diamond, you should lead fourth-best at IMPs — working well when you find partner with the ♦A or ♦10. Such a lead is disastrously worst at match-points, where it is essential to lead the ♦K.

When should I lead dummy's suit?

It is rarely right to lead the suit bid by dummy, as we have seen. It may become appropriate when your own holding is particularly strong, also when you are short in the suit and hope that partner holds good cards there.

Hand 10

The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ 10 9 ♥ K 10 7 6 ♦ K J 8 ♣ K 5 4 3 ?

First thoughts If you led a diamond, the men in white coats would be after you. Are you going to choose one of the moderate 4-card holdings in the unbid suits, or perhaps push out the ♠10?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	30.9%	3.87
♥6	27.7%	3.81
♦8	15.0%	3.33
♣3	28.6%	3.80

A spade lead has two factors in its favor. Firstly, you may find partner with good spades sitting over the dummy. Opposite this West hand, East will hold either four spades (73.5%) or five (26.5%). Secondly, leading a spade saves you from a blind guess whether to lead a heart or a club.

Here is a deal from the simulation that illustrates this advantage:

	♠ A K 7 2					
	♥ A 5 3					
	♦ 7 5 2					
	♣ 10 8 7					
♠ 10 9 ♥ K 10 7 6 ♦ K J 8 ♣ K 5 4 3	<table style="margin: auto; border-collapse: collapse;"> <tr><td style="padding: 5px;">N</td></tr> <tr><td style="padding: 5px;">W E</td></tr> <tr><td style="padding: 5px;">S</td></tr> </table>	N	W E	S	♠ J 8 6 5 ♥ J 8 4 2 ♦ Q 10 4 ♣ J 2	
N						
W E						
S						
	♠ Q 4 3					
	♥ Q 9					
	♦ A 9 6 3					
	♣ A Q 9 6					

West	North	East	South
pass	1♠	pass	1♦
pass	3NT	all pass	1NT

Suppose West guesses to lead the ♥6. Declarer wins with the ♥Q, crosses to the ♠K and plays the ♣8, intending to run the card. Three tricks in each black suit, plus three top winners in the red suits (after the heart lead) will bring the total to nine.

If West leads the ♠10 instead, he keeps his powder dry elsewhere. Provided East inserts the ♦10 on the first round of diamonds (ensuring an entry for a heart switch through the queen before declarer can set up the 13th diamond), the defenders will score five tricks.

Hand 11

The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ K Q 10 9 3 ♥ 10 8 6 3 ♦ K 7 ♣ 10 9 ?

First thoughts Now you have a strong holding in dummy's suit. Should you lead a spade, or make a passive lead and hope that the bad spade break will prevent declarer from scoring nine tricks?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	27.5%	3.68
♠10	15.3%	3.09
♥3	25.3%	3.71
♦K	7.9%	3.02
♣10	22.4%	3.63

The spades pass the test at IMPs, provided you start with the ♠K. This works well when declarer holds ♠J-x or ♠A-J. Indeed, such occasions represent most of your chance of beating the contract. It also picks up the case where partner has a singleton ♠J, which declarer would otherwise allow to win the first trick.

Hand 12

The bidding is 1♦ - 1♠ - 1NT - 3NT. What would you lead from:

♠ K Q J 9 ♥ A 7 ♦ 10 9 7 2 ♣ 9 8 4 ?

First thoughts The spades demand your attention but North has shown four cards in the suit. Will you lead a spade, nevertheless?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	25.7%	4.03
♥A	18.6%	3.49
♦2	19.8%	3.60
♣9	21.7%	3.60

The ♠K is the best idea at both forms of the game.

CONCLUSIONS - Leading when they have bid two suits

- It is rarely right to lead a suit that an opponent has bid.
- When choosing between the two unbid suits, there is bias towards the unbid major (because dummy will not hold four cards there).
- A 4-card suit headed by one or two honors is rarely a good lead. Prefer to lead from a shorter holding in the other unbid suit.
- When you are weak, tend towards leading the shorter unbid suit. Your intention is to score tricks in partner's hand.

Pick a Winner!

The opponents bid two suits

Once again you have the chance to judge which is the best available lead at IMPs, noting if you think that a different lead should be made at match-points.

Auction is 1♦ - 1♠ - 1NT - 3NT

1. ♠ 10 9 8 3
♥ A 3
♦ A 8 5 2
♣ 10 9 3

2. ♠ 8 4
♥ A Q 10 3
♦ K 7 4
♣ 9 7 6 3

3. ♠ J 10 3
♥ K Q
♦ 9 6 2
♣ K 8 7 5 2

4. ♠ A 10 5
♥ Q 5
♦ K Q J 6
♣ 8 6 4 3

5. ♠ 10 9 3
♥ 5 4 2
♦ K 9 8
♣ K J 7 6

6. ♠ A 8
♥ 10 8 7 4 3
♦ 7 2
♣ K Q 9 6

7. ♠ 6
♥ K 9 7 4
♦ A Q 5 2
♣ K 9 7 4

8. ♠ Q 10 8 6 3
♥ J 10 7
♦ 9 4
♣ K Q 6

9. ♠ Q J 10 5
♥ 10 5 4
♦ A 9 2
♣ Q J 7

10. ♠ 10 9 8 7 5
♥ A 10 9 2
♦ 10
♣ 10 6 3

11. ♠ 10 8 6 2
♥ A 9
♦ Q 6 5 4
♣ J 10 9

12. ♠ 8
♥ K 9 6 4
♦ A J 9 7 6 2
♣ Q 5

Answers

Here are the best leads from the twelve West hands on the previous page, as calculated from 5000-deal simulations.

Auction is 1♦ - 1♠ - 1NT - 3NT		IMPs	MPs
1. ♠ 10 9 8 3 ♥ A 3 ♦ A 8 5 2 ♣ 10 9 3	1st ♥A	18.7%	3.53
	2nd ♣10	17.1%	3.54
2. ♠ 8 4 ♥ A Q 10 3 ♦ K 7 4 ♣ 9 7 6 3	1st ♣7/3	38.2%	3.96
	2nd ♠8	36.6%	3.89
3. ♠ J 10 5 ♥ K Q ♦ 9 6 2 ♣ K 8 7 5 2	1st ♥K	9.8%	2.95
	2nd ♣5	7.9%	2.67
4. ♠ A 10 5 ♥ Q 5 ♦ K Q J 6 ♣ 8 6 4 3	1st(I) ♣6/3	19.3%	3.69
	1st(M) ♦K	16.9%	3.82
5. ♠ 10 9 3 ♥ 5 4 2 ♦ K 9 8 ♣ K J 7 6	1st ♥5/2	22.4%	3.49
	2nd ♠10	16.2%	3.34
6. ♠ A 8 ♥ 10 8 7 4 3 ♦ 7 2 ♣ K Q 9 6	1st(I) ♥4	27.5%	3.62
	1st(M) ♣K	21.9%	3.70
7. ♠ 6 ♥ K 9 7 4 ♦ A Q 5 2 ♣ K 9 7 4	1st ♠6	29.6%	3.95
	2nd ♥4	27.9%	3.95
8. ♠ Q 10 8 6 3 ♥ J 10 7 ♦ 9 4 ♣ K Q 6	1st(I) ♣K	17.9%	3.28
	1st(M) ♥J	17.3%	3.32
9. ♠ Q J 10 5 ♥ 10 5 4 ♦ A 9 2 ♣ Q J 7	1st(I) ♥4	19.0%	3.54
	1st(M) ♠Q	18.6%	3.62
10. ♠ 10 9 8 7 5 ♥ A 10 9 2 ♦ 10 ♣ 10 6 3	1st(I) ♣3	23.6%	3.44
	1st(M) ♥10	21.7%	3.58
11. ♠ 10 8 6 2 ♥ A 9 ♦ Q 6 5 4 ♣ J 10 9	1st ♥A	20.8%	3.34
	2nd ♣J	14.5%	3.33
12. ♠ 8 ♥ K 9 6 4 ♦ A J 9 7 6 2 ♣ Q 5	1st ♠8	18.2%	3.64
	2nd ♥4	17.5%	3.62

Chapter 8

Leading against 1NT

What do you know about the unseen hands when your right-hand opponent's opening bid of 1NT is passed out?

The opener's hand will contain 15-17 HCP and may include a 5-card major. You know that the responder is not strong enough to make a game-try. Nor does he hold a 5-card major or he would have responded with a transfer bid. You know also that your partner does not hold a hand that would merit an overcall or a double.

A profile of 100,000 deals on which South's 1NT opening would be passed out gave the average suit lengths shown on the right.

As you see, East/West hold an average of 6.66 cards in each major suit and 6.34 cards in each minor. Consequently there will be a slight bias towards major-suit leads but not such a strong one as against 1NT - 3NT.

	♠ 3.07		
	♥ 3.07		
	♦ 3.43		
	♣ 3.43		
♠ 3.33	Average	Suit Lengths	♠ 3.33
♥ 3.33			♥ 3.33
♦ 3.17			♦ 3.17
♣ 3.17			♣ 3.17
	♠ 3.28		
	♥ 3.28		
	♦ 3.22		
	♣ 3.22		
West	North	East	South
pass	pass	pass	1NT

Should I lead a major or a minor?

Hand 1

The bidding is 1NT passed out. What would you lead from:

♠ Q 10 7 2 ♥ K 10 7 2 ♦ Q 10 7 2 ♣ A ?

First thoughts Our main interest here will be to compare the numbers for the spade and diamond leads, to assess the major-suit bias.

(Contract 1NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠2	48.9%	6.53
♥2	46.4%	6.46
♦2	47.9%	6.52
♣A	45.7%	6.51

Expecting a small margin, we ran a double-length simulation to enhance the accuracy of the results. As you see, the spade lead is just 1% ahead of the diamond lead at IMPs, with a negligible advantage at match-points. Opposite this West hand, East will hold an average of 2.97 spades and 2.87 diamonds — not much of a difference.

We reran the same West hand against an auction of 1NT - 3NT and these were the results:

(Contract 3NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠2	29.3%	3.72
♥2	26.6%	3.61
♦2	26.7%	3.63
♣A	27.3%	3.69

The bias towards the major suit is greater, as both columns indicate.

Hand 2

The bidding is 1NT passed out. What would you lead from:

♠ J 8 6 ♥ 9 5 ♦ K Q 7 2 ♣ K J 7 2 ?

First thoughts When leading against 3NT, the passive major-suit leads were rated ahead of the aggressive minor-suit leads. Perhaps the situation is different when the contract is a humble 1NT. Let's see:

(Contract 1NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	33.3%	6.02
♥9	32.2%	6.00
♦K	34.2%	5.98
♣2	35.1%	6.02

The various leads against 1NT are pretty close - a blanket finish. Much to our surprise, the aggressive leads from 4-card suits are slightly more likely to beat the contract! This result is in marked contrast to the one against 3NT, where the passive major-suit leads carried a big advantage. These were the results against 1NT - 3NT:

(Contract 3NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	21.3%	3.43
♥9	20.6%	3.41
♦K	13.2%	3.16
♣2	15.7%	3.25

The ♠6 was 9% ahead of the ♦K, but against 1NT it fell 1% behind. What can have caused this? The answer is two-fold. North (the dummy) will hold more major-suit cards, on average, when he passes 1NT than when he raises to 3NT without using Stayman. An analysis of our '1NT passed out' simulation for this particular West hand (with three spades and two hearts) showed that North held four spades 41.6% of the time and four hearts 50.5% of the time. When North raises 1NT directly to 3NT, spurning Stayman, he is unlikely to hold a 4-card major and this causes a greater major-suit bias.

There is a second reason why leading from a suit such as K-J-x-x may be more successful against 1NT than against 3NT. Since the points are more evenly divided between the two sides, you are more likely to find partner with a matching honor in your suit.

Should I make an aggressive lead or a passive lead?

The results on Hand 2 suggest that leading from 4-card combinations such as K-J-x-x or Q-10-x-x may be more effective against 1NT. In the current section we will investigate whether this is true.

Hand 3

The bidding is 1NT passed out. What would you lead from:

♠ K J 10 4 ♥ 8 6 5 2 ♦ A J 10 8 ♣ 8 ?

First thoughts How will the aggressive leads in spades and diamonds compare with the passive heart lead from four low cards? Will there be a

marked difference when leading from this hand against 1NT, compared with 3NT? The simulation results will reveal all:

(Contract 1NT) Beats contract (IMPs) Avg. tricks (MPs)

♠J	52.7%	6.60
♥6/5/2	45.8%	6.45
♦J	48.9%	6.44
♣8	41.5%	6.31

(Contract 3NT) Beats contract (IMPs) Avg. tricks (MPs)

♠J	35.7%	3.88
♥6/5/2	37.6%	3.89
♦J	26.8%	3.62
♣8	33.4%	3.76

The two tables give us a wealth of information. Aggressive leads are favored against 1NT and passive leads are favored against 3NT. Against 3NT the passive heart lead from four low cards is top of the rankings. Against 1NT it is third, lagging behind both ♠K-J-10-4 and ♦A-J-10-8.

Look also at the two minor-suit leads. Against 1NT, the aggressive lead from ♦A-J-10-8 is 7.4% ahead of the passive singleton ♣8. Against 3NT, it is 6.6% behind. A huge swing! As we noted on the previous hand, the points are more evenly divided in a 1NT contract. When you make an aggressive lead, you are more likely to find partner with a matching honor.

Hand 4

The bidding is 1NT passed out. What would you lead from:

♠ 10 8 ♥ K Q 5 2 ♦ K J 5 3 ♣ 8 5 4 ?

First thoughts How will the active red-suit leads compare with the passive club lead? What lead would you have chosen?

(Contract 1NT) Beats contract (IMPs) Avg. tricks (MPs)

♠10	28.7%	5.82
♥K	33.8%	5.90
♥2	32.8%	5.84
♦3	33.8%	5.91
♣8/5/3	29.4%	5.85

The two aggressive red-suit leads head the listing. The ♥K lead is 5.1% ahead of the passive lead in the other major. The ♦3 is 4.4% ahead of the passive lead in the other minor. Let's see the difference against 1NT - 3NT:

(Contract 3NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	17.2%	3.12
♥K	18.8%	3.33
♥2	14.9%	3.03
♦3	11.3%	2.92
♣8/5/3	16.5%	3.13

The bigger major-suit bias pushes the ♥K to the fore, but its lead over the passive ♠10 has shrunk. Look at the two minor-suit leads! Against 1NT, the active diamond lead held a 4.4% advantage; against 3NT it is 5.2% behind. It has slipped from 1st= to last place. This is further evidence that active leads from a 4-card suit work better against 1NT than against 3NT.

When should I lead the second-longest suit?

Against 3NT, we found some situations where it was best to lead the second-longest suit. We will now see if the situation is the same against 1NT.

Hand 5

The bidding is 1NT passed out. What would you lead from:

♠ A 10 8 6 2 ♥ Q J 10 7 ♦ 9 ♣ 8 7 3 ?

First thoughts A handsome sequence in hearts but the spades are longer. Which suit would catch your eye against a 1NT contract?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	33.5%	6.04
♥Q	40.3%	6.34
♦9	28.6%	5.84
♣8/7/3	31.4%	5.95

The heart sequence has a good advantage.

Hand 6

The bidding is 1NT passed out. What would you lead from:

♠ K J 8 7 3 ♥ J 10 9 4 ♦ A 5 ♣ 7 4 ?

First thoughts A spade lead may work well if you find partner with the ace or queen. This time you have the ♦ A as a side entry too.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠7	41.3%	6.23
♥J	46.5%	6.46
♦A	35.2%	6.06
♣7	39.6%	6.18

Turn a blind eye to the spades. The ♥J is a clear winner at both forms of the game.

Hand 7

The bidding is 1NT passed out. What would you lead from:

♠ A Q 10 9 2 ♥ K 9 7 3 ♦ J 5 ♣ 10 7 ?

First thoughts Now the spades are even stronger and the 4-card hearts are not headed by a sequence. Surely the spade lead will be the winner.

(Contract 1NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	47.0%	6.40
♠10	46.6%	6.37
♥3	52.8%	6.70
♦J	46.5%	6.51
♣10	46.2%	6.48

Well, that's amazing, isn't it? The heart lead is seriously ahead of the spade lead. Before analyzing why this should be so, we are going to run the same West hand against a 1NT - 3NT simulation:

(Contract 3NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	36.4%	3.72
♠10	36.9%	3.61
♥3	27.6%	3.63
♦J	24.6%	3.51
♣10	26.1%	3.58

The ♥3 lead changes from a 6% winner into a 9% loser! Why is that? It's because you may need to rush to get your five tricks against 3NT. Even if declarer wins the first round of spades, you may still beat the contract by scoring four spades and one outside winner. Against 1NT, there is no hurry to lead a spade immediately. If you fail to lead a spade and it turns out that partner has some help there, you may be able to take your spade tricks later. Also, you may need a full five spade tricks to beat 1NT, whereas four spade tricks will suffice against 3NT.

This is a typical deal from the 1NT simulation for this West hand:

	♠ 7 5 4											
	♥ A 4											
	♦ Q 10 9 4											
	♣ 9 8 6 5											
♠ A Q 10 9 2	<table border="0" style="width: 100%; text-align: center;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ J 8 3	
	N											
W		E										
	S											
♥ K 9 7 3		♥ 10 8 6										
♦ J 5		♦ K 8 2										
♣ 10 7		♣ K Q 4 2										
	♠ K 6											
	♥ Q J 5 2											
	♦ A 7 6 3											
	♣ A J 3											
<table border="0" style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">West</td> <td style="width: 25%;">North</td> <td style="width: 25%;">East</td> <td style="width: 25%;">South</td> </tr> <tr> <td>pass</td> <td>pass</td> <td>pass</td> <td>1NT</td> </tr> </table>				West	North	East	South	pass	pass	pass	1NT	
West	North	East	South									
pass	pass	pass	1NT									

If West starts with the ♠10, or ace and another spade, declarer will have one spade trick in his pocket. He will quickly add three diamonds, two hearts and the ♣A, making the contract. The recommended heart lead does not strike gold in partner's hand but it keeps alive the prospect of scoring five spade tricks. Declarer wins in his hand and plays ace and another diamond, clearing

the diamond suit. On lead with the $\spadesuit K$, East can switch to spades. The defenders score five spade tricks and declarer has to go one down.

One particular deal proves nothing, you are right, but the simulation shows that a heart lead beats 1NT 6% more often than a spade lead.

Should I lead a strong doubleton against 1NT?

We have noted elsewhere in the book how well strong doubleton leads (such as $\spadesuit K-Q$) work. Let's take a quick look at them against a 1NT contract.

Hand 8

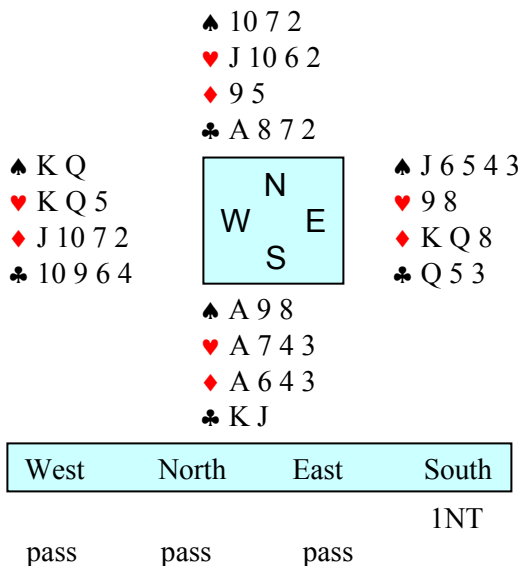
The bidding is 1NT passed out. What would you lead from:

$\spadesuit K Q \quad \heartsuit K Q 5 \quad \diamondsuit J 10 7 2 \quad \clubsuit 10 9 6 4 ?$

First thoughts Do you like the look of that $\spadesuit K-Q$? When rated against 3NT it lagged behind $\heartsuit K-Q-x$ and we noted that the defenders might suffer from the spade blockage.

	Beats contract (IMPs)	Avg. tricks (MPs)
$\spadesuit K$	40.1%	6.26
$\heartsuit K$	32.4%	5.96
$\diamondsuit 2$	34.8%	6.03
$\clubsuit 4$	35.3%	6.08

Well, that's a surprise. There is a substantial advantage for $\spadesuit K-Q$, at both forms of the game. Not only does it beat $\heartsuit K-Q-x$ by a respectable margin, it is also ahead of the 4-card leads in the minor suits. Let's dip into the simulation and look for a typical deal where a spade lead does well.



A spade is the only lead to defeat 1NT against best play by declarer. Suppose he wins the first spade, hoping to create a blockage one way or the other, and leads a low heart. West wins, unblocks the ♠Q and (aided by a ♠6 suit preference card from East) switches to diamonds. If instead declarer holds up the ♠A for two rounds, a diamond switch will give the defenders an eventual two spades, three diamonds and two hearts.

You may say that this is just because East happens to hold five spades, along with a diamond entry that can overcome declarer's play of holding up the ♠A for two rounds. Yes indeed, but that is the whole point! When you hold only two spades, there is a good chance that partner will hold five or more spades (32% on the present simulation, against a 14% chance of five or more hearts). Since the contract is 1NT, rather than 3NT, there is also a healthy prospect of East holding a side entry to resolve any spade blockage. That is why the ♠K-Q lead fares better against 1NT than against 3NT.

Which card should I lead?

In Chapter 3 we considered (in the context of defending 3NT) which card was the best lead from various combinations. For the purposes of the current chapter, we ran simulations for the same set of West hands against a '1NT

passed-out' auction. We discovered that there was no significant difference in the results.

To recall, it is hugely best to lead the king (rather than a fourth-best card) from a suit headed by K-Q-10 or K-Q-9. It is worthwhile even from a holding such as K-Q-6-5-2. So, lead the king whether the contract is 3NT or 1NT.

From holdings headed by Q-J-9, the queen is only narrowly better than fourth-best. From such as Q-J-7-6-2, it makes no difference whether you lead the queen or fourth-best. The same is true with suits headed by the J-10.

CONCLUSIONS - Leading against 1NT

- There is relatively little bias in favor of major-suit leads when 1NT is passed out. That's because responder may hold one or more 4-card majors. This is particularly likely when you are fairly short in the major suits yourself.
- Active leads from 4-card suits such as ♠K-Q-8-3 or ♦Q-10-7-4 are more attractive against 1NT than against 3NT. The points are more equally divided than they would be against a 3NT contract; you are therefore more likely to find partner with a matching honor in the suit.
- Leads from 5-card suits (such as ♠A-Q-9-7-2) are less attractive against 1NT than against 3NT. You may need a full five tricks from the suit to beat 1NT. There is also a better prospect of partner gaining the lead to play the suit through declarer.

Pick a Winner!

Leading against 1NT

You are invited to judge which is the best available lead from the twelve West hands below. If you would choose a different lead when playing pairs rather than IMPs, note that down. The simulation results are shown on the next page.

Auction is: 1NT passed out

- | | | |
|---|--|--|
| 1. ♠ A 10 8 5 3
♥ 8 3
♦ Q J 10 4
♣ J 6 | 2. ♠ Q 6
♥ K 5
♦ 10 8 7 3
♣ J 10 4 3 2 | 3. ♠ 4 3
♥ 5 4
♦ 9 6 4 2
♣ K Q 8 3 2 |
| 4. ♠ A Q 7
♥ A J 7
♦ A 10 4
♣ 9 7 6 2 | 5. ♠ 10 9 8 4
♥ A J 8 6 2
♦ 9
♣ K 7 3 | 6. ♠ A Q 10
♥ K J 4
♦ 7 6 3 2
♣ K Q 9 |
| 7. ♠ 2
♥ A Q J 7
♦ Q 8 7 4 2
♣ Q 9 2 | 8. ♠ A J 9 4
♥ J 9 7 4
♦ K 9
♣ 8 7 4 | 9. ♠ K Q 7
♥ 8 7 5 4 2
♦ Q 6 2
♣ 5 4 |
| 10. ♠ J 7 2
♥ Q 8 3
♦ K 7 5
♣ A 9 7 2 | 11. ♠ Q 10 5 2
♥ 10 5
♦ K J 5 2
♣ A 9 4 | 12. ♠ 9 7 6 4
♥ A Q 8 5
♦ 9 8 5
♣ 8 5 |

Answers

Here are the best leads from the twelve West hands on the previous page, as calculated from 5000-deal simulations.

Auction is: 1NT passed out			IMPs	MPs
1.	♠ A 10 8 5 3 ♥ 8 3 ♦ Q J 10 4 ♣ J 6	1st	♦ Q	34.7% 6.19
		2nd	♠ 5	28.0% 5.93
2.	♠ Q 6 ♥ K 5 ♦ 10 8 7 3 ♣ J 10 4 3 2	1st	♣ 3	26.2% 5.73
		2nd	♦ 3	22.1% 5.62
3.	♠ 4 3 ♥ 5 4 ♦ 9 6 4 2 ♣ K Q 8 3 2	1st (I)	♣ 3	19.6% 5.14
		1st(M)	♦ 6/2	19.2% 5.41
4.	♠ A Q 7 ♥ A J 7 ♦ A 10 4 ♣ 9 7 6 2	1st	♣ 7/2	63.1% 7.03
		2nd	♠ A	57.7% 6.85
5.	♠ 10 9 8 4 ♥ A J 8 6 2 ♦ 9 ♣ K 7 3	1st	♠ 10	47.9% 6.56
		2nd	♥ 6	47.3% 6.40
6.	♠ A Q 10 ♥ K J 4 ♦ 7 6 3 2 ♣ K Q 9	1st	♦ 6/2	61.8% 6.93
		2nd	♣ K	54.7% 6.68
7.	♠ 2 ♥ A Q J 7 ♦ Q 8 7 4 2 ♣ Q 9 2	1st	♦ 4	42.2% 6.36
		2nd	♠ 2	36.0% 6.11
8.	♠ A J 9 4 ♥ J 9 7 4 ♦ K 9 ♣ 8 7 4	1st	♥ 4	42.0% 6.26
		2nd	♣ 8/7	36.8% 6.15
9.	♠ K Q 7 ♥ 8 7 5 4 2 ♦ Q 6 2 ♣ 5 4	1st	♥ 4	25.9% 5.72
		2nd	♠ K	24.7% 5.55
10.	♠ J 7 2 ♥ Q 8 3 ♦ K 7 5 ♣ A 9 7 2	1st	♠ 2	37.9% 6.13
		2nd	♣ 2	35.2% 6.07
11.	♠ Q 10 5 2 ♥ 10 5 ♦ K J 5 2 ♣ A 9 4	1st	♠ 2	49.6% 6.50
		2nd	♦ 2	44.6% 6.33
12.	♠ 9 7 6 4 ♥ A Q 8 5 ♦ 9 8 5 ♣ 8 5	1st	♠ 7/4	25.8% 5.70
		2nd	♦ 9	24.3% 5.61

Chapter 9

Leading when they have bid one suit

In this chapter we will look at the best lead after the opponents have bid 1♠ - 1NT, allowing the auction to stop there. The opening bid shows at least five spades, as in Standard American and most European systems. The types of hand that the responder may hold for a 1NT response vary slightly from one system to another. For example, if a two-level response would be game-forcing, 1NT might be bid on 11 points.

There are also different views of what action the opener should take after such a start. For example, some players think it right to rebid 2♣ on a 4-card suit,

even though there is no guarantee of a fit. Some players always rebid 2♠ with six spades, even on a weak suit such as ♠Q-9-7-6-3-2. After a 1♠-1NT start, the chance that the responder holds two spades is only 52% (1 spade 38%, 0 spades 10%). With a weak 6-card suit, 1NT is likely to play better than 2♠ in the long run. You might well have four trump losers, playing in spades.

Well, we have had to make some assumptions in order to generate the deals for the simulations. We set the range for a 1NT response at 6-10 points. We decided also that the opener would not rebid a 4-card minor suit, preferring to pass 1NT unless he was strong enough to see a chance of game. He would, however, rebid a 4-card heart suit because a heart fit might allow a game to be bid in that suit. With a 6-card spade suit, containing only one (or none) of the four top honors, the opener will pass 1NT unless he can visualize a possible game. On the basis of these settings, the expectation of suit lengths

	♠ 5.09		
	♥ 2.23		
	♦ 2.84		
	♣ 2.84		
♠ 3.19	Average	♠ 3.19	
♥ 3.38	Suit lengths	♥ 3.38	
♦ 3.22		♦ 3.22	
♣ 3.22		♣ 3.22	
	♠ 1.53		
	♥ 4.01		
	♦ 3.74		
	♣ 3.72		
West	North	East	South
	1♠	pass	1NT
all pass			

for each player is as shown in the diagram. They imply a very small bias towards hearts compared with the minors.

Which unbid suit should I lead?

We will look in a moment at some situations where you may be tempted to lead dummy's spade suit. First we will consider the choice of lead from the other three suits.

Hand 1

North opens 1♠ and South's 1NT is passed out. What would you lead from:

♠ 10 9 8 5 ♥ A J 9 7 ♦ 4 ♣ Q 8 4 2 ?

First thoughts You can find a good excuse not to lead any of these combinations. Time is ticking by and you have to lead something. What will it be?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	30.9%	5.71
♥7	30.7%	5.70
♦4	27.7%	5.60
♣2	39.2%	6.00

The club lead is easily best, at both forms of the game. That's interesting. A spade lead will assist declarer in setting up dummy's suit and a heart lead is all too likely to give away a trick. An imaginative singleton diamond lead is hugely worse than a club, reminding us that you have to know what you're doing when you choose to lead a singleton at notrump.

Hand 2

North opens 1♠ and South's 1NT is passed out. What would you lead from:

♠ 9 4 3 ♥ K 10 7 6 5 ♦ 10 6 3 ♣ 8 2 ?

First thoughts With such a weak hand, it may not be a good idea to lead the long suit. What do you think? Is a stab in the dark, in one of the minors, a better idea?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠3	8.8%	4.68
♥6	12.9%	4.95
♦3	7.6%	4.66
♣8	6.8%	4.57

The simulation reveals that a heart is best. You will need East to hold 11 points or so, to have a chance of beating 3NT, and he did not venture an overcall. You cannot therefore expect him to hold very good diamonds or clubs.

Hand 3

North opens 1♠ and South's 1NT is passed out. What would you lead from:

♠ 9 3 ♥ 9 7 6 5 3 2 ♦ A 3 ♣ J 7 3 ?

First thoughts Previously, we have seen plenty of examples where a lead from a 6-card suit fared poorly. Also, this hand contains only 5 points. Is it the time to lead from one of the short holdings in the minors, looking for partner's good suit?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠9	14.6%	5.14
♥5	22.7%	5.39
♦A	11.7%	4.85
♣3	12.7%	4.93

The heart lead wins comfortably. The best chance of beating the contract is to find East with something useful in hearts — to set up the suit at the start and then to use the ♦A as an entry to the established cards.

Even a spade (dummy's suit) is better than leading a short minor, hoping to hit partner's length. The general message we are getting so far is that you should lead your longest non-spade suit. Nothing remarkable about that, you may think!

Hand 4

North opens 1♠ and South's 1NT is passed out. What would you lead from:

♠ K 10 8 5 ♥ 10 7 4 ♦ K 7 6 ♣ A 5 4 ?

First thoughts It would be surprising if a spade lead did well. Which of the trio of tripletons do you like?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5	26.9%	5.61
♥4	32.7%	5.81
♦6	29.7%	5.66
♣4	28.4%	5.66

Whereas it can be worthwhile leading from four cards to an honor against 1NT, it is not so good to lead from three cards to an honor. The passive heart lead has the edge over the minor-suit alternatives.

Hand 5

North opens 1♠ and South's 1NT is passed out. What would you lead from:

♠ 10 5 3 2 ♥ K Q 8 ♦ 10 6 5 2 ♣ K 6 ?

First thoughts The much-vaunted strong tripleton in hearts does battle with four diamonds headed by the ten. Where is your money?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠2	25.9%	5.53
♥K	31.2%	5.76
♦6	29.5%	5.72
♣K	22.0%	5.22

We were expecting an easy win for the heart holding, but the passive diamond lead is competitive. On the present auction, it seems that number of cards is almost as important as suit quality.

Hand 6

North opens 1♠ and South's 1NT is passed out. What would you lead from:

♠ A J 10 ♥ K 10 4 ♦ K 9 7 6 ♣ 10 9 6 ?

First thoughts This will test the 'lead your longest suit outside spades' theory. Is it better to lead from four cards to an honor (not rated very highly in general) or to lead passively from the 3-card club suit?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠J	27.9%	5.65
♥4	37.8%	6.00
♦6	40.5%	6.15
♣10	42.0%	6.21

One day we will find a hand where it is best to lead from K-x-x-x (we may need to stack three such combinations together!) but this is not the one. A passive club lead gives you the best prospects.

Hand 7

North opens 1♠ and South's 1NT is passed out. What would you lead from:

♠ J 7 5 3 ♥ K J 3 2 ♦ K Q J ♣ 8 7 ?

First thoughts There is a slight bias towards hearts but you have a very strong tripleton in diamonds. *Mesdames, messieurs, faites vos jeux.*

	Beats contract (IMPs)	Avg. tricks (MPs)
♠3	20.1%	5.22
♥2	27.1%	5.55
♦K	35.6%	5.83
♣8	21.9%	5.30

An easy win for the fabled diamond sequence. It was never in doubt.

Hand 8

North opens 1♠ and South's 1NT is passed out. What would you lead from:

♠ 6 5 4 2 ♥ A K 8 5 4 ♦ 9 7 ♣ 8 3 ?

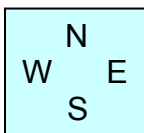
First thoughts A heart lead seems to be in order, but will you lead high or low?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6/5/2	25.8%	5.31
♥A	31.7%	5.77
♥5	27.6%	5.41
♦9	27.3%	5.39
♣8	26.5%	5.36

There are various situations when leading the ♥5 will work best — in particular, when partner holds two hearts and the opponents' cards break 3-3. The table says that the percentage lead is the ♥A, but it may not always be easy to determine the optimal defense after winning the first trick.

Here is a deal from the simulation where it is possible to beat 1NT after leading a top heart:

	♠ Q 9 8 7 3	
	♥ Q 10	
	♦ A Q 8	
	♣ A 6 4	
♠ 6 5 4 2		♠ K J 10
♥ A K 8 5 4		♥ J 9 3
♦ 9 7		♦ J 6 4 3
♣ 8 3		♣ K J 10
	♠ A	
	♥ 7 6 2	
	♦ K 10 5 2	
	♣ Q 9 7 5 2	



West	North	East	South
------	-------	------	-------

1♠ pass 1NT

All pass

You lead a top heart (whichever one your methods dictate) and East unblocks the ♥J. When you continue with the ♥K, East has to decide whether to unblock the ♥9. Since you are unlikely to hold an entry in another suit, there will not be much chance of beating the contract if he wins the third round with the ♥9. He duly unblocks this card and is rewarded when you

produce the ♥8 next, followed by two more heart winners. East discards a low diamond and the club ten. A spade switch sets up a trick for East and the contract will then go one down. As you see, a low heart lead would allow declarer to win with the ♥Q (it cannot possibly help him to play the ♥10) and then set up the clubs.

Hand 9

North opens 1♠ and South's 1NT is passed out. What would you lead from:

♠ A 10 5 4 ♥ J 10 ♦ K 10 4 ♣ K 10 8 3 ?

First thoughts It is unlikely that a spade or a diamond will work well. Do you like the 4-card clubs or the touching-honor doubleton in hearts?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	36.8%	5.86
♥J	45.9%	6.30
♦4	38.6%	6.02
♣3	42.4%	6.17

Once again, the 'king fourth' horse fails to win the race. It looks as if that holding is only worth a place-bet most of the time.

Hand 10

North opens 1♠ and South's 1NT is passed out. What would you lead from:

♠ 10 4 ♥ 6 5 2 ♦ 8 7 4 ♣ A K J 10 2 ?

First thoughts Does a passive or active lead seem right? If your eyes keep returning to the club suit, which card will you choose?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	45.4%	6.25
♥6/5/2	39.6%	6.05
♦8/7/4	39.7%	6.08
♣A/K	48.0%	6.42
♣J	29.2%	5.59

Leading the ♣J, to preserve communications, is a disaster! If you play the lead method ‘ace for attitude, king for count’, a lead of the ♣K asks partner to unblock any honor he holds, otherwise to signal count. When declarer holds the ♣Q, partner’s count signal will help you judge whether the ♣Q is about to drop, or whether you must find partner’s hand for a club return. (In North America, it is common to lead the ace to request unblock-or-count.)

The signaling method pays off in an unexpected way on this deal:

	♠ K Q 9 8 3											
	♥ 10 7 3											
	♦ A K J 3											
	♣ 9											
♠ 10 4	<table style="margin: auto; border-collapse: collapse;"> <tr><td></td><td style="text-align: center;">N</td><td></td></tr> <tr><td style="text-align: center;">W</td><td></td><td style="text-align: center;">E</td></tr> <tr><td></td><td style="text-align: center;">S</td><td></td></tr> </table>		N		W		E		S		♠ A 7 6 2	
	N											
W		E										
	S											
♥ 6 5 2		♥ K Q J 9										
♦ 8 7 4		♦ Q 10 5										
♣ A K J 10 2		♣ 8 3										
	♠ J 5											
	♥ A 8 4											
	♦ 9 6 2											
	♣ Q 7 6 5 4											
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">West</td> <td style="width: 25%; text-align: center;">North</td> <td style="width: 25%; text-align: center;">East</td> <td style="width: 25%; text-align: center;">South</td> </tr> <tr> <td></td> <td style="text-align: center;">1♠</td> <td style="text-align: center;">pass</td> <td style="text-align: center;">INT</td> </tr> </table>				West	North	East	South		1♠	pass	INT	
West	North	East	South									
	1♠	pass	INT									
All pass												

You lead the ♣A or ♣K, whichever is your agreed card to request unblock-or-count. East duly follows with the ♣8. This denies the ♣Q and shows an even number of clubs. Since East would signal with the second-best card from four-low, you know he has only two clubs. You switch to hearts at Trick 2 and the defenders then score three hearts, three clubs and the ♠A.

(If you use an ace-lead or king-lead to request unblock-or-count, you must lead a different honor to ask for attitude. Playing ‘ace for attitude, king for count’, for example, you would lead the queen from K-Q-x or K-Q-x-x.)

When should I lead the opener’s suit?

With dummy known to hold five spades (maybe six), you will rarely consider a spade lead. If you have spade length yourself, you will need something like

a 4-deep honor sequence. It is more likely that a short-suit spade lead will work, since partner will hold some spade length sitting over the dummy.

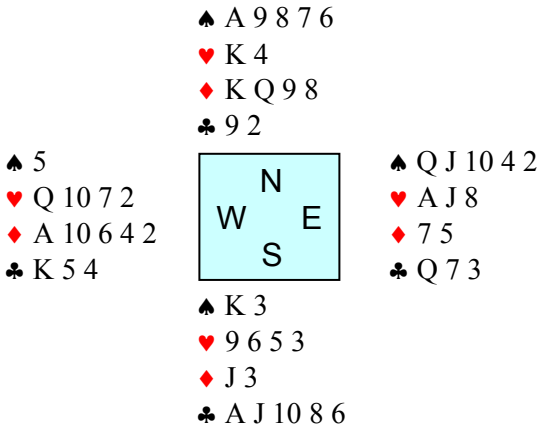
Hand 11

North opens 1♠ and South's 1NT is passed out. What would you lead from:
 ♠ 5 ♥ Q 10 7 2 ♦ A 10 6 4 2 ♣ K 5 4 ?

First thoughts Most players would see it as a choice between the red suits. Perhaps they're right. We will see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5	49.4%	6.43
♥2	48.3%	6.44
♦4	47.9%	6.41
♣4	42.6%	6.22

The singleton spade joins the red-suit leads as a serious contender. Let's see a deal from the simulation where a spade lead will do well.



West	North	East	South
all pass	1♠	pass	1NT

A spade is the only lead to give declarer no chance. Suppose he rises with the ♠A and leads a club to the jack. West wins with the king and switches to hearts, East winning with the jack (or more likely the ace if declarer plays dummy's king). The spade suit is cleared and declarer now needs to reach dummy for a second club finesse. When he leads a diamond, West rises with the ♦A and the defenders cash out in the majors for two down.

Declarer does no better to win the spade lead in his hand, playing on diamonds. It is true that East will have to find the bright play of rising with the ♣Q in second seat, to restrict declarer to one club trick.

In fact, there were very few deals in the simulation where a spade lead was the only successful one. The bulk of the 49.4% 'Beats Contract' figure was made up of deals where the spade lead gave nothing away and one or more of the other leads would also have been successful. In other words, it spared you an immediate guess between the red suits.

Hand 12

North opens 1♠ and South's 1NT is passed out. What would you lead from:

♠ K Q J 10 4 2 ♥ J 8 7 6 ♦ 5 ♣ 10 8 ?

First thoughts You hold the legendary four-deep sequence in dummy's suit. Will you lead a spade?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	5.8%	4.32
♥6	10.0%	4.55
♦5	5.9%	4.18
♣10	6.2%	4.18

Chances of beating the contract are poor, but a heart lead gives you a better chance than a spade, even at match-points. If you had a side entry in your hand, and could therefore expect to score three spade tricks, it might well be different.

(We reran the simulation, upgrading the ♦5 to the ♦A. The ♠K lead then headed the listings with 22.3% and 5.69. The ♥6 came a close second with 22.0% and 5.41.)

Hand 13

North opens 1♠ and South's 1NT is passed out. What would you lead from:
♠ K Q J ♥ K 9 8 5 ♦ J 10 8 5 ♣ 7 2 ?

First thoughts Either red-suit lead might work well, but is there any reason to lead a spade?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	26.3%	5.57
♥5	25.9%	5.56
♦J	25.6%	5.59
♣7	23.2%	5.48

It may seem strange that the spade lead edges to the front. To beat 1NT, you will surely need to score two spade tricks at some stage. You might as well establish them at the start, which allows you to delay guessing which red suit to attack subsequently. If instead you begin with a red suit and choose unluckily, declarer may get home.

CONCLUSIONS - Leading when they have bid one suit

- When an auction of 1♠ - 1NT is passed out, there is a slight bias towards leading hearts, rather than a minor.
- When you have to choose between your longest suit and a shorter but stronger suit, it is more likely than on other auctions that the longest suit will be the best lead.
- Leading a spade from length is rarely right. You would need a 4-deep honor sequence and some prospect of gaining the lead to enjoy the established spade winners.
- A singleton or doubleton spade can be best when you have unattractive holdings in the other suits.

Pick a Winner!

The opponents bid one suit

You are invited to judge which is the best available lead against 1NT at IMPs, noting if you think that a different lead is preferable at match-points. The simulation results are given on the next page.

Auction is 1♠ (North) - 1NT (South)

1. ♠ J 9 7 6 5 3
♥ 7 6
♦ A 8 7
♣ A 10

2. ♠ 8 5 3
♥ J 10 8
♦ K 7 4 3
♣ A 10 2

3. ♠ K 8 6 3
♥ J 10
♦ K 8 6 5
♣ K 3 2

4. ♠ 8
♥ J 9 6 3
♦ 9 7
♣ A Q J 8 6 4

5. ♠ 9 7
♥ J 9 8 7 6 2
♦ 9 8
♣ A K 3

6. ♠ Q 6 5
♥ K Q 2
♦ K Q 2
♣ 10 8 6 5

7. ♠ A 9 4
♥ Q J 10
♦ J 10 9 3
♣ K 10 4

8. ♠ 5 3 2
♥ A Q 10 5 2
♦ 3
♣ 10 9 8 7

9. ♠ J 10 5
♥ K 9 4 3
♦ K Q 10
♣ A 8 4

10. ♠ K 2
♥ Q J 8 6
♦ K Q 8 6
♣ 10 9 6

11. ♠ 10 9 8
♥ K Q 4
♦ K Q 6 3
♣ Q J 7

12. ♠ 8 6 5
♥ Q J
♦ A J 5 3
♣ A Q 6 2

Answers

Here are the best leads from the twelve West hands on the previous page, as calculated from 5000-deal simulations.

Auction is 1♠ (North) - 1NT (South)		IMPs	MPs
1. ♠ J 9 7 6 5 3 ♥ 7 6 ♦ A 8 7 ♣ A 10	1st	♥7	21.6% 5.26
	2nd	♣A	21.0% 5.24
2. ♠ 8 5 3 ♥ J 10 8 ♦ K 7 4 3 ♣ A 10 2	1st	♥J	34.1% 5.91
	2nd	♦3	31.5% 5.79
3. ♠ K 8 6 3 ♥ J 10 ♦ K 8 6 5 ♣ K 3 2	1st	♥J	21.8% 5.32
	2nd	♦5	20.0% 5.25
4. ♠ 8 ♥ J 9 6 3 ♦ 9 7 ♣ A Q J 8 6 4	1st	♠8	43.7% 6.20
	2nd	♥3	41.9% 6.11
5. ♠ 9 7 ♥ J 9 8 7 6 2 ♦ 9 8 ♣ A K 3	1st	♥7	42.8% 6.30
	2nd	♣A	36.5% 6.06
6. ♠ Q 6 5 ♥ K Q 2 ♦ K Q 2 ♣ 10 8 6 5	1st=	♥K	29.2% 5.65
	1st=	♦K	29.1% 5.62
7. ♠ A 9 4 ♥ Q J 10 ♦ J 10 9 3 ♣ K 10 4	1st	♥Q	46.6% 6.41
	2nd	♦J	42.5% 6.28
8. ♠ 5 3 2 ♥ A Q 10 5 2 ♦ 3 ♣ 10 9 8 7	1st	♣10	39.3% 6.03
	2nd	♠5/2	36.9% 5.86
9. ♠ J 10 5 ♥ K 9 4 3 ♦ K Q 10 ♣ A 8 4	1st	♦K	50.5% 6.43
	2nd	♥3	43.4% 6.24
10. ♠ K 2 ♥ Q J 8 6 ♦ K Q 8 6 ♣ 10 9 6	1st	♥Q	29.4% 5.73
	2nd	♦K	27.0% 5.58
11. ♠ 10 9 8 ♥ K Q 4 ♦ K Q 6 3 ♣ Q J 7	1st	♦K	29.5% 5.73
	2nd	♥K	27.1% 5.68
12. ♠ 8 6 5 ♥ Q J ♦ A J 5 3 ♣ A Q 6 2	1st	♥Q	34.1% 5.73
	2nd	♣A	29.5% 5.69

Chapter 10

Leading when partner has opened

Your partner opens 1♥, showing at least five cards. The next player overcalls 1NT and (in the first half of this chapter) your left-hand opponent raises to 3NT. What should you lead? You are unlikely to hold many points and will need a good reason for leading anything but a heart. This chapter may therefore end up being rather a brief one. Time will tell!

The table on the right gives the average suit lengths around the table. East/West hold only 5.82 cards in each minor. They hold 7.07 spades and 7.29 hearts. East will, of course, hold most of the defenders' entries alongside his heart length.

				♠ 2.49				
				♥ 2.39				
				♦ 4.06				
				♣ 4.06				
♠ 4.27				Average			♠ 2.80	
♥ 2.03				Suit Lengths			♥ 5.26	
♦ 3.35							♦ 2.47	
♣ 3.35							♣ 2.47	
				♠ 3.44				
				♥ 3.32				
				♦ 3.12				
				♣ 3.12				
West	North	East	South					
pass	3NT	1♥ pass	1NT					

Should I lead partner's suit?

Hand 1

Your partner opens 1♥ and your right-hand-opponent (RHO) overcalls 1NT, raised to 3NT. What would you lead from:

♠ Q J 6 ♥ 8 7 5 ♦ 6 4 ♣ Q 10 7 6 2 ?

First thoughts Partner holds five hearts and opening-bid values. Is there any reason not to lead a heart? Let's see the numbers.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	20.2%	3.73
♥8/7/5	35.8%	3.97
♦6	18.1%	3.57
♣6	19.8%	3.61

A heart lead is easily your best chance.

Hand 2

Your partner opens 1♥ and RHO's 1NT overcall is raised to 3NT. What would you lead from:

♠ 8 5 3 ♥ 10 ♦ Q 9 7 ♣ J 10 9 6 5 3 ?

First thoughts Does the jack-high club sequence call more loudly than the singleton in partner's suit? Which would you choose?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5/3	13.4%	3.20
♥10	15.7%	3.28
♦7	7.2%	2.86
♣J	15.5%	3.32

We will call it a tie between the heart and club lead.

Hand 3

Your partner opens 1♥ and RHO's 1NT overcall is raised to 3NT. What would you lead from:

♠ Q J 10 8 2 ♥ 6 ♦ J 10 9 4 ♣ 8 5 2 ?

First thoughts Now you hold a hefty spade sequence and only one heart. Has the moment come to ignore partner's opening bid?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	37.4%	4.14
♥6	28.8%	3.90
♦J	22.6%	3.79
♣5/2	23.9%	3.78

Even though you have no side entry, a spade attack is best. You can beat the contract not only when four or five spade tricks are available, but also when declarer is struggling for tricks and the spade lead gives nothing away.

Hand 4

Your partner opens 1♥ and RHO's 1NT overcall is raised to 3NT. What would you lead from:

♠ 7 6 2 ♥ 8 ♦ K Q 10 7 3 ♣ 10 9 7 4 ?

First thoughts Should this diamond holding deflect you from a heart lead?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠ 7/6/2	43.0%	4.33
♥ 8	45.0%	4.41
♦ K	42.1%	4.35
♣ 4	39.3%	4.26

Not only is the singleton heart lead best, the ♦ K is matched by the passive spade lead. A profile of the simulation shows that East held an average of 1.87 diamonds, which included the ♦ A only 22% of the time. So, the chance of scoring five diamond tricks is low. When partner does not hold the ♦ A, your suit is very likely to be shut out.

Hand 5

Your partner opens 1♥ and RHO's 1NT overcall is raised to 3NT. What would you lead from:

♠ J 10 9 8 3 ♥ K 3 ♦ 10 7 5 3 ♣ 9 7 ?

First thoughts A doubleton king may assist greatly in setting up partner's suit. Still, a spade lead is safer and a heart lead might bolster the value of declarer's ♥ A-J-x. Which will you choose?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠ J	34.2%	4.05
♥ K	30.6%	3.75
♦ 3	21.6%	3.69
♣ 9	19.7%	3.63

A spade lead is better than a heart, particularly at match-points. When you hold 4 points and partner has opened the bidding, you know that declarer's combined assets will be limited. There is something to be said for making a safe lead and leaving him to do his own work.

Which card should I lead in partner's suit?

Next we look briefly at which card you should lead, when holding three cards in partner's suit. Old-timers had a guideline 'lead the top of partner's suit'. Although this may occasionally clarify the situation, it is a poor idea in general and can cost you a trick.

Hand 6

Your partner opens 1♥ and RHO's 1NT overcall is raised to 3NT. What would you lead from:

♠ J 10 8 3 ♥ Q 10 3 ♦ 5 3 2 ♣ J 9 2 ?

First thoughts You are going to lead a heart, obviously, but which heart?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠J	20.2%	3.53
♥Q	32.7%	3.73
♥10	35.1%	3.85
♥3	33.1%	3.84
♦5/3/2	15.0%	3.26
♣2	13.3%	3.16

The ♥10 is best technically. It is a not a very clear card for partner to read, a low card may be better. A long trudge through the simulation revealed not a single deal where a lead of explicitly the ♥10 was needed to beat the contract. It is best overall because there are many deals where the lead of the queen or 10 is necessary as an unblock; they are also many deals where a lead of the 10 or 3 allows you to keep the ♥Q over declarer's ♥J, as here:

	♠ K 7 5					
	♥ 5 4					
	♦ Q 8 6					
	♣ A 10 8 7 3					
♠ J 10 8 3 ♥ Q 10 3 ♦ 5 3 2 ♣ J 9 2	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="padding: 5px;">N</td></tr> <tr><td style="padding: 5px;">W E</td></tr> <tr><td style="padding: 5px;">S</td></tr> </table>	N	W E	S	♠ A 6 4 ♥ K 9 8 7 6 ♦ J 7 ♣ K 5 4	
N						
W E						
S						
	♠ Q 9 2					
	♥ A J 2					
	♦ A K 10 9 4					
	♣ Q 6					

West	North	East	South
pass	3NT	1♥ all pass	1NT

Leading the ♥Q gives declarer a double stopper in the suit. For example, he can duck the lead, win the heart continuation and run the ♣Q. Hearts are cleared and a finesse of the ♣10 brings in more than enough tricks. After a lead of the ♥10 or ♥3, East playing the ♥K, declarer cannot succeed. Suppose he wins with the ♥A and runs the ♣Q. East wins the trick and the defenders claim four heart tricks, using the ♠A to unblock the hearts if declarer ducks the second round.

Hand 7

Your partner opens 1♥ and RHO's 1NT overcall is raised to 3NT. What would you lead from:

♠ 9 8 6 3 ♥ A 10 3 ♦ 10 7 2 ♣ 8 7 5 ?

First thoughts Will you lead a heart, or a passive spade with the aim of retaining your hearts over declarer?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠9/8	35.1%	4.17
♥A	28.2%	3.81
♥10	35.7%	4.05
♥3	40.4%	4.25
♦2	25.7%	3.95
♣8/7	27.5%	4.00

You should lead the ♥3 — easily best at both forms of the game.

The 1NT overcall is passed out

In the second half of this chapter we will look at the situation where partner opens 1♥, your RHO overcalls 1NT and this becomes the final contract. It is quite possible now that North holds four cards in spades, the other major. The expectation of suit lengths, shown on the right, is slightly different from that when North raises to 3NT.

East/West hold 6.16 cards in each minor instead of 5.82. They also hold slightly fewer hearts: 7.06 instead of 7.29. Add in the fact that West will hold a few more points and you see that there is not quite such an overriding pressure to lead partner's suit.

		♠ 3.11	
		♥ 2.59	
		♦ 3.65	
		♣ 3.65	
♠ 3.90			♠ 2.72
♥ 1.92	Average		♥ 5.14
♦ 3.59	Suit Lengths		♦ 2.57
♣ 3.59			♣ 2.57
		♠ 3.27	
		♥ 3.35	
		♦ 3.19	
		♣ 3.19	
West	North	East	South
pass	pass	1♥	1NT

Hand 8

Your partner opens 1♥ and the next player's 1NT overcall is passed out. What would you lead from:

♠ J 9 6 4 ♥ 6 4 ♦ A J 9 8 4 2 ♣ 6 ?

First thoughts You must consider a heart lead, obviously. How would you assess your prospects after a diamond lead? Let's see the results:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	36.9%	5.95
♥6	42.9%	6.13
♦9/8	34.8%	5.83
♣6	30.3%	5.65

Leading from a 6-card suit ends in disappointment more often than not, particularly when your hand is short of entries. You should follow the general rule of leading partner's suit when you hold two cards or more.

Hand 9

Your partner opens 1♥ and the next player's 1NT overcall is passed out. What would you lead from:

♠ A 9 7 ♥ 4 ♦ K 9 7 4 ♣ J 9 4 3 2 ?

First thoughts Leading a spade or a diamond would be a wild shot. Do you prefer the singleton heart or the fourth-best card from a straggly club suit?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠7	40.1%	6.34
♥4	48.6%	6.53
♦4	45.2%	6.43
♣3	57.0%	6.72

This time it is better, by a fair margin, to lead from the 5-card suit. Why is that? One reason is that your heart singleton is a low card. When you hold a singleton queen, jack or ten, you are making some contribution towards setting up partner's suit. Also, the fact that you hold such an honor means that declarer does not have it!

The second reason the club lead does well is that leading from four or five cards headed by the jack is not particularly likely to give away a trick. It is a less expensive initially than when you lead from a queen, king or ace.

Hand 10

Your partner opens 1♥ and the next player's 1NT overcall is passed out. What would you lead from:

♠ A Q 9 7 2 ♥ 3 ♦ Q 10 9 3 2 ♣ 6 2 ?

First thoughts There is no reason to lead a club, it seems, but any of the other three suits could work well. What would your choice be?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠7	53.8%	6.64
♥3	62.3%	6.86
♦10	68.3%	7.14
♣6	55.6%	6.68

An interesting set of figures. The spade lead comes last because it will too often give declarer an undeserved trick with the ♠K. (He has a 53% chance of holding this card.) A diamond lead is much better because you have a similar chance of establishing long cards and declarer is likely to score his ♦A (58%) or ♦K (52%) anyway.

Perhaps you think you would do better, playing a contract in one of your 5-card suits. On this simulation, partner held an average of 12.1 points, 2.3 spades and 2.4 diamonds. "You pays your money and you takes your choice!"

Hand 11

Your partner opens 1♥ and the next player's 1NT overcall is passed out. What would you lead from:

♠ 10 5 2 ♥ Q ♦ 8 7 5 ♣ A Q J 9 8 4 ?

First thoughts The ♥Q may work well but perhaps a club is better. What do you reckon?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠2	66.2%	7.03
♥Q	71.1%	7.24
♦8/7	64.2%	6.93
♣Q	52.8%	6.52

A club lead is worst by a margin, which reinforces the message from the previous deal. South is a big favorite to hold the ♣K (South 58.2%, East 32.2%) and you should be reluctant to allow him to score a trick with it.

Hand 12

Your partner opens 1♥ and the next player's 1NT overcall is passed out. What would you lead from:

♠ J 9 8 6 4 2 ♥ — ♦ Q 9 6 5 ♣ K Q 8 ?

First thoughts In other bidding situations we have seen that (a) leads from 6-card suits can be disappointing, (b) leads from four cards to an honor may work poorly, and (c) leads from strong tripletons can work well. Do any or all of these apply when there is a 1NT overcall on your right? Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠9/6	62.1%	6.97
♦5	54.1%	6.62
♣K	45.4%	6.39

There is a huge disparity between the three leads. Leads from strong tripletons, such as K-Q-x and Q-J-x, fare poorly when partner is likely to be short in the suit. Your partner's 1♥ opening means that he will be short in clubs; his expectation is only 2.86 clubs. With your minor-suit honors likely to provide an entry or two, the time is right to lead from your 6-card suit.

(On this simulation, partner held an average of 12.2 points and 2.1 spades, so playing in 2♠ your way is a viable option.)

Hand 13

Your partner opens 1♥ and the next player's 1NT overcall is passed out. What would you lead from:

♠ Q 5 4 ♥ K 2 ♦ 10 9 8 3 ♣ Q J 9 5 ?

First thoughts With only 4-card suits to be considered outside, it may seem that the ♥K lead is indicated. Possibly, but it can give away a trick if declarer has ♥A-Q-x or ♥A-J-x. Let's see what the simulation tells us:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	46.9%	6.45
♥K	52.6%	6.60
♦10	58.1%	6.74
♣Q	56.4%	6.67

Both of the minor-suit leads are preferable to giving ground in hearts. Partner will gain the lead more than once and can lead a heart through declarer at that time. A profile of the simulation revealed South's expectation of holding one or more heart honors: ♥A (61.5%), ♥Q (54.0%), ♥J (26.3%) and ♥10 (23.1%). You can see that leading the ♥K will often cost a trick.

CONCLUSIONS - Leading when partner has opened

When your partner opens one of a major and the next player overcalls 1NT, raised to 3NT:

- It is nearly always right to lead partner's suit from two cards or more.
- When you hold a singleton in partner's suit, you need a fairly strong honor sequence to justify leading something different.

When your partner opens one of a major and the next player's 1NT overcall is passed out:

- You can lead a 5-card suit of your own (rather than partner's suit) more readily than you would against 3NT. With 7 points or so, a lead from such as Q-9-7-6-3 may be better than a singleton lead in partner's suit.
- When you hold something like A-10-x or K-J-x in partner's suit, you should lead a low card to retain your honors over declarer's stopper.
- Leading from a strong tripleton in a new suit (K-Q-x and Q-J-x) is unattractive, because partner is unlikely to hold more than three cards there.

Pick a Winner!

Partner opened the bidding

You are invited to judge which is the best available lead at IMPs, noting if you think that a different lead will be best at match-points.

Auction is 1♥ (East) - 1NT (South) - 3NT (North)

- | | | |
|--|--|---|
| 1. ♠ J 10 9 5
♥ J
♦ Q 10 7 3
♣ 10 9 8 2 | 2. ♠ K Q 7 6 2
♥ 4
♦ 10 9 8 5
♣ 8 6 2 | 3. ♠ Q 10 9 8 5 2
♥ 2
♦ J 9 7 5
♣ J 10 |
| 4. ♠ K Q 10
♥ 4
♦ 10 9 8 7 5
♣ 8 5 4 3 | 5. ♠ 9 6 5 2
♥ K J 6
♦ 6 5 2
♣ 10 8 4 | 6. ♠ J 10 9 8 3
♥ K 3
♦ 10 7 5 3
♣ 9 7 |

Auction is 1♥ (East) - 1NT (South)

- | | | |
|---|---|---|
| 7. ♠ K 10 8 7 3
♥ 9 7
♦ J 7 2
♣ Q 4 2 | 8. ♠ K Q 7
♥ 6
♦ J 10 7 6 4
♣ J 10 7 4 | 9. ♠ Q 10 9 8 2
♥ 10 7
♦ Q 9 5
♣ J 7 6 |
| 10. ♠ 8 5 4
♥ J 3
♦ A Q J 5 3
♣ 10 7 2 | 11. ♠ Q 7 5 3 2
♥ 7 6
♦ 9
♣ K J 8 6 4 | 12. ♠ A 8 6 5 4
♥ 4 2
♦ A 9 6 2
♣ 8 5 |

Answers

Here are the best leads from the twelve West hands on the previous page, as calculated from 5000-deal simulations.

Auction is 1♥ (East) - 1NT (South) - 3NT (North)

			IMPs	MPs
1. ♠ J 10 9 5 ♥ J ♦ Q 10 7 3 ♣ 10 9 8 2	1st	♠J	47.3%	4.39
	2nd	♥J	46.8%	4.37
2. ♠ K Q 7 6 2 ♥ 4 ♦ 10 9 8 5 ♣ 8 6 2	1st	♥4	43.4%	4.34
	2nd	♠6	39.9%	4.23
3. ♠ Q 10 9 8 5 2 ♥ 2 ♦ J 9 7 5 ♣ J 10	1st	♠10	22.2%	3.70
	2nd	♥2	21.6%	3.68
4. ♠ K Q 10 ♥ 4 ♦ 10 9 8 7 5 ♣ 8 5 4 3	1st	♦10	51.3%	4.44
	2nd	♥4	46.0%	4.37
5. ♠ 9 6 5 2 ♥ K J 6 ♦ 6 5 2 ♣ 10 8 4	1st	♥6	39.6%	4.21
	2nd	♠6/2	33.5%	3.95
6. ♠ J 10 9 8 3 ♥ K 3 ♦ 10 7 5 3 ♣ 9 7	1st	♠J	33.2%	4.04
	2nd	♥K	30.7%	3.78

Auction is 1♥ (East) - 1NT (South)

7. ♠ K 10 8 7 3 ♥ 9 7 ♦ J 7 2 ♣ Q 4 2	1st	♥9	28.9%	5.83
	2nd	♠7	25.0%	5.66
8. ♠ K Q 7 ♥ 6 ♦ J 10 7 6 4 ♣ J 10 7 4	1st	♦6	44.8%	6.45
	2nd	♣4	39.0%	6.29
9. ♠ Q 10 9 8 2 ♥ 10 7 ♦ Q 9 5 ♣ J 7 6	1st	♠10	21.1%	5.52
	2nd	♥10	19.7%	5.49
10. ♠ 8 5 4 ♥ J 3 ♦ A Q J 5 3 ♣ 10 7 2	1st	♥J	56.1%	6.75
	2nd	♠8/4	49.2%	6.41
11. ♠ Q 7 5 3 2 ♥ 7 6 ♦ 9 ♣ K J 8 6 4	1st(I)	♠3	27.8%	5.71
	1st(M)	♥7	27.6%	5.76
12. ♠ A 8 6 5 4 ♥ 4 2 ♦ A 9 6 2 ♣ 8 5	1st	♥4	50.0%	6.43
	2nd	♠5	41.8%	6.25

Chapter 11

Leading after a limit raise

An auction of 1NT - 3NT covers a wide range of combined point-counts, from 24 to about 32. After such an auction the expectation of beating the contract is usually below 30%, even with the best lead.

In this chapter we look at auctions where North has made a limit bid of 2NT. (Some players use a direct 2NT response as a transfer and therefore use a difference sequence to invite game.) We will cover situations where South stops in 2NT, also where he bids on to game.

We assume that the opponents are adventurous, in the modern style, with the responder going straight to 3NT on a 9-count. He will try for game on 8 points, perhaps slightly fewer than that with a 5-card or good 6-card minor, and the opener will accept on 16 or more. Our simulations confirm that this is a reasonable bidding strategy.

When North has limited his hand in this way, the chance of beating the contract rises dramatically, whether the eventual contract is 2NT or 3NT.

What should I lead after a 1NT-2NT auction?

When 1NT is raised directly to 2NT we assume that the responder does not hold a 4-card major; otherwise he might have used Stayman. South will be at the minimum end of the 15-17 range, since he declined the game invitation.

Hand 1

After bidding of 1NT - 2NT, what would you lead from:

♠ 6 5 ♥ A Q J 7 3 ♦ 10 7 3 ♣ J 10 7 ?

♠Q. Even so, South has no way to make eight tricks. Sooner or later, he will have to broach the club suit and a heart switch from partner will then give you five tricks in the suit for one down. Had you started with the ♥Q, surrendering a heart trick, the contract would be made.

To complete the picture, let's see how the same leads would fare against a 1NT - 3NT auction. Was the heart lead just a bad idea anyway?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	24.6%	3.31
♥Q	31.6%	3.29
♦3	21.2%	3.17
♣J	21.1%	3.14

The heart lead is now best at IMPs and nearly best at match-point pairs. This illustrates the key point about leading against limit-bid auctions. An aggressive lead, risking giving away a trick that otherwise couldn't be made, may well be your best bet against a 1NT - 3NT auction. Against limited holdings, such a lead may give the contract to a declarer who would struggle to get there unaided.

Hand 2

After bidding of 1NT - 2NT, what would you lead from:

♠ J 8 6 4 ♥ J 7 ♦ 7 4 ♣ K J 9 7 3 ?

First thoughts Do you fancy 'fourth-best of your longest and strongest' here? Find partner with the ♣A and a return through declarer's ♣Q-x-x could net you five tricks. Only one more trick would then be needed. Maybe you should not be so aggressive against a limited auction. Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	38.6%	4.95
♥J	41.3%	5.21
♦7	33.6%	5.05
♣7	28.2%	4.94

A club is the worst of all the leads! The spade is considerably better but not quite so good as the ♥J. Let's probe a little to see why.

The rosy scenario where partner wins with the ♣A and you take five quick club tricks turns out to be a bit of a mirage. The profile of our simulation shows that only 10% of deals would permit such a wonderful start to the defense. On some of those, what's more, five club tricks would not be enough to beat the contract and declarer would still come to eight tricks. On other deals where a perfect club situation existed, five tricks could be taken later, after a different lead.

Hand 3

After bidding of 1NT - 2NT, what would you lead from:

♠ 9 8 ♥ 7 6 4 3 ♦ 9 3 ♣ Q 7 6 5 3 ?

First thoughts There are two guidelines to deter a club lead. Firstly, you should be wary of giving away a trick against a limited auction. Secondly, the hand is very weak and you should therefore look for partner's suit. A major-suit lead looks best but which one?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠9	32.6%	4.96
♥6/4/3	25.9%	4.73
♦9	20.3%	4.53
♣5	23.6%	4.65

A lead from the short spade suit is best, in the hope that you hit partner's 5-card suit. The club lead fares poorly, but not as badly as we were expecting.

To see why the doubleton spade is so far ahead of the doubleton diamond, we will look at the profile for this simulation. Yes, East has an average of 4.6 spades and only 3.2 diamonds — a massive major-suit bias due to the lack of Stayman (or a transfer bid) from North. A spade lead has a much greater chance of striking something worthwhile in partner's hand.

Hand 4

After bidding of 1NT - 2NT, what would you lead from:

♠ A 8 4 ♥ J 10 5 4 ♦ K J ♣ K 10 8 4 ?

First thoughts You have honors everywhere now. Which combination offers the best lead after their limited auction?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	44.0%	5.39
♥J	50.6%	5.49
♥4	48.5%	5.43
♦K	23.9%	4.57
♣4	39.0%	5.24

Hearts is the least likely suit to give away a trick. Perhaps surprisingly, a spade lead is better than a club lead, due to the major-suit bias.

Hand 5

After bidding of 1NT - 2NT, what would you lead from:

♠ K 3 ♥ Q 6 2 ♦ J 9 4 2 ♣ 9 5 3 2 ?

First thoughts With honors in three suits, it is clear than a club lead is least likely to give away a trick. Will that be your choice?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	34.9%	5.01
♥2	34.6%	5.10
♦2	30.1%	4.98
♣2	31.4%	5.01

The aggressive major-suit leads are best at IMPs! Why is that? Again it is the effect of our old friend, the major-suit bias. A profile of this simulation tells us that East has an expected length of 2.25 cards in each minor. There can be little trick-taking potential in those suits when partner is likely to hold a doubleton honor at best. If instead you lead from ♠K-3 you will hit an average of 4.60 spades in partner's hand. When he has a reasonable 5-card holding, you hope to set up his suit and then find him with a side entry.

At match-points, leading from a doubleton king is too adventurous and a heart lead is advisable in the long run.

Hand 6

After bidding of 1NT - 2NT, what would you lead from:

♠ Q 4 ♥ 10 9 2 ♦ 10 6 ♣ K Q 9 5 3 2 ?

First thoughts Is that club suit robust enough to head the list? If you decide not, which short suit deserves your attention?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	31.5%	4.91
♥10	30.9%	4.99
♦10	23.6%	4.70
♣K	28.6%	4.87
♣5	26.3%	4.63

The short major-suit leads win again. We have noted many times that leads from a 6-carder often produce a disappointing outcome. Partner is likely to hold a singleton in the suit.

Hand 7

After bidding of 1NT - 2NT, what would you lead from:

♠ Q 9 7 3 ♥ J 5 ♦ A J 5 4 2 ♣ 10 9 ?

First thoughts A diamond lead may well give away a trick, but you have a 5-card suit as compensation; you might set up four winners in the suit. If you decide against the 'longest and strongest', where will your eye turn?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠3	39.1%	5.25
♥J	42.4%	5.29
♦4	32.8%	5.10
♣10	35.5%	5.14

This is certainly a difficult area to pick the best leads. The major-suit doubleton does well again, particularly at IMPs. It seems that it is better to lead from two cards than from four.

What should I lead after a 1NT-2♣-2♦-2NT auction?

In Chapter 5 we noted that you should favor major-suit leads after an auction of 1NT - 2♣ - 2♦ - 3NT. The same is true when the final bid is 2NT. As with the 1NT - 2NT auction, caution is recommended when leading from an honor. Be wary of giving away a trick when declarer can be expected to struggle.

A profile of 100,000 deals matching this failed Stayman auction to 2NT showed that East/West held an average of 6.88 cards in the majors and 6.12 in the minors, triggering a fair-sized bias towards major-suit leads.

(Note that our software excludes deals where East would have overcalled after North's Stayman or doubled to show good clubs.)

Hand 8

After an auction of 1NT - 2♣ - 2♦ - 2NT, what would you lead from:

♠ Q J 9 5 ♥ K 9 7 2 ♦ Q J 9 5 ♣ 8 ?

First thoughts Again we will run a major-minor bias detector. With East/West holding more spades than diamonds, on average, we expect to see a major-suit bias.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	32.6%	5.09
♥2	26.2%	4.92
♦Q	31.3%	5.09
♣8	28.5%	5.00

Opposite this West hand, East will hold an average of 3.0 spades and 2.8 diamonds — a moderate major-suit bias, which gives the ♠Q lead a small advantage.

When we swapped the Q-J-9-5 combination to a less attractive K-J-10-5 (in both spades and diamonds), the singleton club became the best lead.

Hand 9

After an auction of 1NT - 2♣ - 2♦ - 2NT, what would you lead from:

♠ 6 5 ♥ A Q J 7 3 ♦ 10 7 3 ♣ J 10 7 ?

First thoughts Dummy is likely to hold four spades with partner holding four or five spades over him. It seems that a spade lead might work well.

Leading the ♥Q is still quite likely to give away a trick, even though South has denied four hearts. Let's see what is best:

(Stayman)	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	47.5%	5.42
♥Q	28.9%	4.93
♥7	30.6%	4.90
♦3	41.8%	5.23
♣J	44.4%	5.32

Yes, a spade is best, at both IMPs and pairs. A heart lead (the choice of many players, you can be sure) limps home dismally in last place. Let's compare this table with the one for a non-Stayman 1NT - 2NT auction:

(No Stayman)	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	57.3%	5.67
♥Q	38.4%	5.19
♥7	37.6%	5.08
♦3	50.3%	5.40
♣J	50.9%	5.45

The ranking order of the leads is the same, but the chance of beating 2NT is 10% higher than when North used Stayman. The fact that North does not hold four spades increases one of the biggest risks for declarer: a 5-card spade suit with East. Our profile of the deals in the simulation confirms this. When North does not use Stayman, the chance of East holding five or more spades increases from 38% to 55%.

Hand 10

After an auction of 1NT - 2♣ - 2♦ - 2NT, what would you lead from:

♠ K 10 4 ♥ J 9 6 4 ♦ Q ♣ A Q 6 3 2 ?

First thoughts A good number of the world's West players would place their thumb on the ♣3. Is that right, after a limited auction?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	17.9%	4.54
♥4	23.6%	4.76
♦Q	19.1%	4.66
♣3	13.0%	4.58

The major-suit bias and the reluctance to surrender an early trick both point to a heart lead rather than a club. Even so, many would raise an eyebrow at the ♣3 lead ending so far adrift in last place. Leading from a jack at notrump is less likely to give away a trick than leading from a higher honor.

What should I lead after a 1NT-2♣-2♥-2NT auction?

Unless North/South are playing a direct 2NT raise as a minor-suit transfer, and we have been assuming that they do not, South holds four (or five) hearts and North holds four spades. We can assume that South does not hold four cards in both majors otherwise he would not pass 2NT. As we saw in Chapter 5, on Stayman auctions, this introduces a bias towards minor-suit leads.

Hand 11

After an auction of 1NT - 2♣ - 2♥ - 2NT, what would you lead from:

♠ J 10 9 7 ♥ Q 10 9 7 3 ♦ Q 4 ♣ 9 4 ?

First thoughts The spades are sitting over you, in the dummy, and the hearts under you. First of all, which of the two major-suit leads do you prefer? Next, is there any case for leading a minor suit, since this type of auction generally favors a minor-suit lead? Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠J	47.9%	5.45
♥10	40.0%	5.32
♦Q	33.0%	5.13
♣9	43.1%	5.34

A spade lead is easily better than a heart lead, since there is less chance of giving away a trick. Similarly, if you compare the two minor-suit leads, a club lead is a full 10% better than a diamond lead. Overall, the fact that the spade

lead may also work in a positive way, setting up some tricks, brings it into first place.

Hand 12

After an auction of 1NT - 2♣ - 2♥ - 2NT, what would you lead from:

♠ K 10 7 5 4 ♥ A K 8 ♦ J ♣ 10 8 3 2 ?

First thoughts In previous simulations we have seen that a top-card lead from A-K-x can work well, allowing you to take a look at the dummy. Does it apply here, though, when you know that your RHO holds four hearts? How do you rate a spade lead?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5	16.5%	4.70
♥A	21.4%	4.82
♦J	19.3%	4.81
♣2	26.9%	4.99

Your heart honors are performing a useful role, sitting over declarer's known suit, and you should not lead a heart. A spade lead is worst, with four spades sitting over you. Even though your clubs are unexceptional, a lead of that suit gives you the best chance of doing well at both forms of the game.

Hand 13

After an auction of 1NT - 2♣ - 2♥ - 2NT, what would you lead from:

♠ 8 7 5 2 ♥ J 10 ♦ K 8 5 2 ♣ J 8 3 ?

First thoughts There is a bias towards the minor suits, yes, but both the minor suits here contain unsupported honors. It is unattractive to lead from such holdings, particularly when the auction is limited. What lead will you choose?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠8/7/2	12.5%	4.61
♥J	19.4%	4.80
♦2	13.9%	4.65
♣3	15.0%	4.66

The heart doubleton is the undisputed winner, even though South is known to hold four hearts.

Hand 14

After an auction of 1NT - 2♣ - 2♥ - 2NT, what would you lead from:

♠ Q ♥ A J 10 2 ♦ 8 7 5 4 ♣ Q 8 6 2 ?

First thoughts It looks good for a diamond lead here, remembering the minor-suit bias and the recommended wariness of giving away a trick. Is there any reason to view this hand as an exception?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	32.1%	5.12
♥J	13.1%	4.67
♦7/5/4	29.4%	5.07
♣2	25.6%	4.96

Even though dummy holds four spades, a lead of the ♠Q sneaks to the front. Our simulation profile shows that East will hold an average of 5.2 spades on this auction, with only 2.7 cards in each minor.

What should I lead after a 1NT-2♦-2♥-2NT auction?

In Chapter 6 we looked at the transfer auction of 1NT - 2♦ - 2♥ - 3NT. It was clear to avoid leads in the advertised long major. Since the responder would not hold four cards in the other major, there was a bias towards leading that suit rather than a minor.

When the responder's rebid is 2NT, a second factor emerges. Declarer's resources are tight and you must be wary of giving him an extra trick with your opening lead.

(Note that our software removes deals where East would have overcalled North's transfer bid or doubled to show good diamonds.)

Hand 15

After an auction of 1NT - 2♦ - 2♥ - 2NT, what would you lead from:

♠ K 10 7 ♥ 10 6 3 ♦ 9 6 5 3 ♣ A J 3 ?

First thoughts The bias to the ‘other major’ suggests a spade. The reluctance to give away a trick against a limited auction suggests a diamond. Which will you choose?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠7	36.5%	5.17
♥3	28.0%	4.96
♦6/5/3	36.5%	5.16
♣3	29.2%	4.94

The spade lead matches the diamond lead, somewhat surprisingly, and we would have chosen a diamond. Opposite this West hand, partner will hold an average of 3.8 spades and 2.8 diamonds — the same combined length. Perhaps the success of the normally unattractive K-10-7 lead lies in our 3-card heart holding. With the even break in hearts, declarer may score several tricks there. This suggests that we should be more aggressive with the lead, aiming to set up some tricks in a hurry.

Hand 16

After an auction of 1NT - 2♦ - 2♥ - 2NT, what would you lead from:

♠ A Q 10 4 ♥ J 4 3 2 ♦ Q 2 ♣ 7 6 3 ?

First thoughts There is no reason to lead a heart and it could well be wrong to break the spade suit. Which minor suit do you favor?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	18.0%	4.73
♠4	12.0%	4.62
♥2	25.4%	4.80
♦Q	28.7%	5.00
♣7/6/3	27.9%	4.98

A low spade is a particularly bad shot and you should choose between the minors. Although the ♦Q is rated ahead of a club lead, remember that the simulations run at double-dummy and a real-life declarer will misguess the ♦Q on some deals. In practice, a club lead may well be better.

Hand 17

After an auction of 1NT - 2♦ - 2♥ - 2NT, what would you lead from:

♠ J 7 4 ♥ A 7 5 ♦ A 10 8 5 ♣ J 8 7 ?

First thoughts No suit cries out to be led. Which card will you reluctantly extract?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	22.3%	4.94
♥A	12.5%	4.52
♦5	17.0%	4.77
♣7	18.8%	4.83

Leading from the ♦A is more likely to give away an unnecessary trick than leading from one of the jacks. Because North will not hold four spades but might hold four clubs, your partner holds more spades on average (3.9) than clubs (3.3). This bias towards the ‘other major’ makes a spade lead best.

Hand 18

After an auction of 1NT - 2♦ - 2♥ - 2NT, what would you lead from:

♠ Q 10 3 ♥ 9 6 ♦ K Q 7 4 2 ♣ 10 7 4 ?

First thoughts Has the time come for ‘fourth-best from your longest and strongest’ or should the limited auction induce caution?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠3	30.5%	5.00
♥9	41.5%	5.22
♦K	28.7%	4.99
♦4	29.2%	4.96
♣4	39.3%	5.19

Without searching for it, we have stumbled on a West hand where a lead of dummy’s long suit is best. A diamond lead, which many would choose, comes last in the table. (Partner’s average of 2.2 diamonds will include the ♦A only 20% of the time.)

What should I lead when the opener goes to 3NT?

When a limit bid of 2NT is raised to 3NT by the opener, prospects of beating the final contract may again be substantial. The opener has a point or two more than a minimum, it's true, but you now need only five tricks to beat the contract.

Hand 19

After bidding of 1NT - 2NT - 3NT, what would you lead from this old friend:

♠6 5 ♥A Q J 7 3 ♦10 7 3 ♣J 10 7 ?

First thoughts We have already seen that a lead of the ♥Q was rated badly against a 2NT contract but was best after a 1NT - 3NT auction. How will it fare after 1NT - 2NT - 3NT, where the values are limited but the defenders need only five tricks to break the contract?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	56.0%	4.81
♥Q	61.8%	4.57
♦3	50.1%	4.55
♣J	50.8%	4.62

As expected, the contract is precarious and in fact all the leads do quite well. At IMPs, the aggressive heart lead emerges as the winner. It will often set up four quick tricks in the suit, putting you in a strong position. You can afford to concede a trick to the ♥K unless declarer can immediately score another eight tricks. When the contract was only 2NT, this was not the case.

A passive spade lead works well at match-point pairs, particularly when compared with a heart lead. The fact that a heart lead will often give away an unnecessary overtrick outweighs the extra times when such a lead will beat the contract. To confirm this message, let's use our alternative measure for match-point scoring, where all 13 cards are regarded as players in a 5000-deal pairs event and hold the same West hand throughout:

MP scores: ♠6 58.0% ♥Q 47.3% ♦3 52.8% ♣J 54.3%

The ♥Q does even worse at match-point scoring than its average-tricks-per-deal would suggest. That's because it may gain several tricks whenever it

beats the contract (bumping up the average), whereas the match-point gains that result from not leading a heart are often the saving of just one trick.

Hand 20

After an auction of 1NT - 2NT - 3NT, what would you lead from:

♠ Q 10 4 ♥ K J 7 5 ♦ 9 6 ♣ K Q 7 2 ?

First thoughts Partner cannot hold more than 4 points or so. What is the best chance of beating the contract? Should we strike out in a 4-card suit or lead a passive diamond, hoping that declarer eventually runs out of steam?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	46.5%	4.27
♥5	46.5%	4.44
♦9	54.8%	4.57
♣K	44.3%	4.32

The passive diamond lead is best. A lead from one of the 4-card suits may work well, but by leading the ♦9 you avoid having to guess which other suit to attack. Let's look at a deal from the simulation, so we can understand this:

	♠ 6 3 2											
	♥ A 10 8											
	♦ K 10 7 4 2											
	♣ 8 3											
♠ Q 10 4 ♥ K J 7 5 ♦ 9 6 ♣ K Q 7 2	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <table style="border-collapse: collapse; text-align: center;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table> </div>		N		W		E		S		♠ 9 8 7 5 ♥ 6 2 ♦ 8 3 ♣ A J 6 5 4	
	N											
W		E										
	S											
	♠ A K J											
	♥ Q 9 4 3											
	♦ A Q J 5											
	♣ 10 9											

West	North	East	South
			1NT
pass	2NT	pass	3NT
all pass			

On this particular lay-out, a club lead will strike gold and a heart or a spade lead will give declarer a ninth trick, allowing him to run for home. A diamond lead is completely passive, as it happens. It does not surrender a ninth trick and when declarer develops the hearts, or finesses in spades, the defenders will have a chance to claim their five club tricks. In other words, West can delay the decision of which suit to attack.

Hand 21

After an auction of 1NT - 2NT - 3NT, what would you lead from:

♠K 10 8 4 ♥J 5 4 ♦ Q 6 2 ♣ 10 9 3 ?

First thoughts It is unattractive to lead from an honor after a limit auction but the safe 10-9-3 is in a minor, with the major-suit bias against it.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	49.6%	4.48
♥4	56.7%	4.61
♦2	41.9%	4.25
♣10	52.2%	4.51

As you see, the safe nature of the ♣10-9-3 combination puts it 10% ahead of ♦Q-6-2. However, the major-suit bias is sufficient to put the heart lead top of the list, despite the slightly less safe ♥J-5-4 combination. The profile for this simulation tells us that East will hold an average of 3.93 hearts but only 2.95 clubs, clear evidence of the major-suit bias.

Hand 22

After an auction of 1NT - 2NT - 3NT, what would you lead from:

♠A 7 6 4 ♥ Q J 10 ♦ 7 4 ♣ Q 10 7 5 ?

First thoughts A heart lead offers the combination of safety (it will not give away a trick), plus a reasonable chance of setting up extra heart tricks in partner's hand. Perhaps it is time for a simulation that will reassure us that at least some of the traditional ideas on opening leads make good sense.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	47.1%	4.42
♥Q	62.5%	4.79
♦7	47.5%	4.41
♣5	46.9%	4.41

To loud applause, the heart lead wins by several lengths.

Hand 23

After an auction of 1NT - 2NT - 3NT, what would you lead from:

♠8 5 ♥ Q 7 6 4 2 ♦ A 5 3 2 ♣ Q 3 ?

First thoughts Does the guideline not to lead from an honor after a limit auction apply when you hold a 5-card major? Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠8	30.3%	3.96
♥4	37.7%	4.10
♦2	22.0%	3.73
♣Q	20.7%	3.65

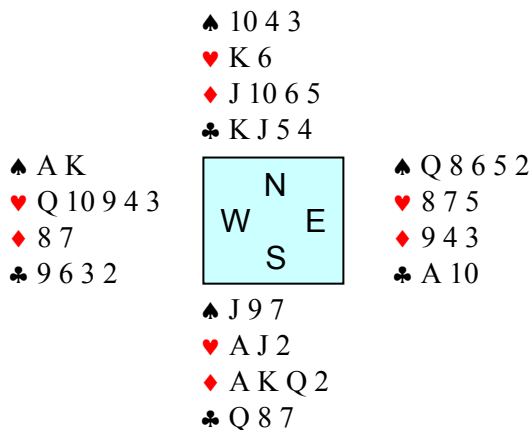
No, the fact that you may set up four heart tricks to go with the ♦A outweighs the risk of giving declarer an extra trick initially.

Hand 24

We will end with a lead problem that arose in the 2007 Bermuda Bowl. After an auction of 1NT - 2♣ - 2♦ - 2NT - 3NT, what would you lead from:

♠ A K ♥ Q 10 9 4 3 ♦ 8 7 ♣ 9 6 3 2 ?

When you have made up your mind, take a look at the whole deal:



West	North	East	South
<i>Helness</i>	<i>Jacobs</i>	<i>Helgemo</i>	<i>Katz</i>
			1NT
pass	2♣	pass	2♦
pass	2NT	pass	3NT
all pass			

Norway's Tor Helness led the ♥3, giving declarer a third heart trick. The USA's Ralph Katz could then knock out the ♣A and, with the spades blocked, come to nine tricks. If West had started with a top spade, East would have encouraged and West would play the other top spade. East could then score three further spade winners when he won with the ♣A.

Was the heart lead unlucky or against the odds? Let's see the results of a 5000-deal simulation on this West hand:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	38.2%	4.35
♥10	25.8%	3.96
♥4/3	25.3%	3.95
♦8	19.4%	3.74
♣6	20.7%	3.78

The spade lead is rated best. With the aid of partner's signal, you hope to make the right switch-or-continue move at Trick 2.

Tor Helness had the last laugh, beating the USA in the 2007 Bermuda Bowl final to become a world champion!

Conclusions - Leading after a limit raise

- When the bidding is 1NT - 2NT, or 1NT - 2NT - 3NT, a strong major-suit bias is in effect because the responder chose not to use Stayman or a transfer bid.
- Auctions to 2NT that involve Stayman or a transfer bid invoke the same major-minor bias as when responder jumps to 3NT at his second turn.
- After a limit-bid auction declarer may be struggling for tricks. Be wary of assisting him by leading from 4-card suits headed by one or two honors. Prefer a passive lead elsewhere, which will allow you to delay your decision on where to look for your tricks.
- Short-suit leads from honor sequences (such as K-Q-J, Q-J-10) avoid giving away a trick and will allow you to learn more about the deal.
- Leading from 5-card suits such as A-Q-J-x-x may work well against 3NT, because four tricks from that suit, plus one outside trick, will beat the contract. They are less strong against 2NT, where you need a trick more to defeat the contract and may not be able to afford the unnecessary loss of a trick.

Pick a Winner!

Leading after limit raise

You are invited to judge which is the best available lead at IMPs, noting if you think that a different lead will be best at match-points.

Auction is 1NT - 2NT

- | | | |
|-------------|-------------|----------------|
| 1. ♠ 10 7 3 | 2. ♠ 7 5 | 3. ♠ A 9 8 6 3 |
| ♥ 10 9 5 | ♥ K Q | ♥ 9 3 |
| ♦ K Q 8 2 | ♦ A 9 8 3 | ♦ 7 5 3 2 |
| ♣ 7 6 3 | ♣ A 9 4 3 2 | ♣ 3 2 |

Auction is 1NT - 2♣ - 2♦ - 2NT

- | | | |
|-------------|------------|------------|
| 4. ♠ 5 3 | 5. ♠ Q 7 5 | 6. ♠ 9 6 |
| ♥ Q 8 6 | ♥ J 9 5 | ♥ J 7 3 |
| ♦ K J 5 3 2 | ♦ Q 6 5 | ♦ K Q 10 7 |
| ♣ A 6 3 | ♣ A Q 6 3 | ♣ Q J 10 5 |

Auction is 1NT - 2♣ - 2♥ - 2NT

- | | | |
|------------|-------------|-----------------|
| 7. ♠ Q 9 3 | 8. ♠ A 7 5 | 9. ♠ K J 10 7 5 |
| ♥ A J 9 2 | ♥ Q 9 6 4 2 | ♥ 8 3 |
| ♦ K J 7 | ♦ J 5 | ♦ A 10 8 7 |
| ♣ 10 8 5 | ♣ Q 8 3 | ♣ 10 6 |

Auction is 1NT - 2NT - 3NT

- | | | |
|---------------|------------|-------------|
| 10. ♠ J 9 5 3 | 11. ♠ A 10 | 12. ♠ 9 5 4 |
| ♥ 5 3 | ♥ K 10 8 2 | ♥ K Q 8 6 |
| ♦ 10 8 7 | ♦ 6 4 2 | ♦ J 9 6 5 |
| ♣ Q 7 5 2 | ♣ K J 8 7 | ♣ 6 3 |

Answers

Here are the best leads from the twelve West hands on the previous page.

Auction is 1NT - 2NT

			1st	2nd	IMPs	MPs
1.	♠ 10 7 3	♥ 10 9 5	♦ K Q 8 2	♣ 7 6 3	♥ 10	39.5% 5.26
				♠ 3	37.4%	5.19
2.	♠ 7 5	♥ K Q	♦ A 9 8 3	♣ A 9 4 3 2	♥ K	17.6% 4.59
				♣ 3	16.3%	4.58
3.	♠ A 9 8 6 3	♥ 9 3	♦ 7 5 3 2	♣ 3 2	♥ 9	43.1% 5.29
				♠ 6	34.4%	5.05

Auction is 1NT - 2♣ - 2♦ - 2NT

4.	♠ 5 3	♥ Q 8 6	♦ K J 5 3 2	♣ A 6 3	♠ 5	34.6% 5.07
				♥ 6	29.7%	4.92
5.	♠ Q 7 5	♥ J 9 5	♦ Q 6 5	♣ A Q 6 3	♥ 5	23.0% 4.87
				♠ 5	19.4%	4.74
6.	♠ 9 6	♥ J 7 3	♦ K Q 10 7	♣ Q J 10 5	♠ 9	58.1% 5.68
				♣ Q	57.4%	5.66

Auction is 1NT - 2♣ - 2♥ - 2NT

7.	♠ Q 9 3	♥ A J 9 2	♦ K J 7	♣ 10 8 5	♣ 8	48.0% 5.49
				♦ 7	36.6%	5.23
8.	♠ A 7 5	♥ Q 9 6 4 2	♦ J 5	♣ Q 8 3	♦ J	27.2% 4.94
				♥ 4	24.4%	4.85
9.	♠ K J 10 7 5	♥ 8 3	♦ A 10 8 7	♣ 10 6	♣ 10	41.9% 5.33
				♥ 8	39.5%	5.27

Auction is 1NT - 2NT - 3NT

10.	♠ J 9 5 3	♥ 5 3	♦ 10 8 7	♣ Q 7 5 2	♥ 5	43.6% 4.29
				♠ 3	37.3%	4.19
11.	♠ A 10	♥ K 10 8 2	♦ 6 4 2	♣ K J 8 7	♦ 6/2	62.6% 4.77
				♥ 2	56.6%	4.68
12.	♠ 9 5 4	♥ K Q 8 6	♦ J 9 6 5	♣ 6 3	♠ 4	50.3% 4.38
				♦ 5	44.8%	4.27

Chapter 12

LEADING INTO A 2NT OPENING

What is your reaction when your right-hand opponent opens 2NT and this is passed out? Such contracts are notoriously unsuccessful. With 21 points opposite 1, for example, declarer will have hardly any communications with the dummy and may have to play from his own hand throughout. A well known Indian player considered it right to double 2NT in the pass-out seat, whatever he held! He followed this plan during his career, claiming that the contract went down 80% of the time. There is an obvious flaw to this tactic if opponents come to hear of it — they can pass partner's 2NT opening when holding 6 or 7 points, planning to shock you with a redouble.

What assumptions can the defenders make about the opponents' hands? The 2NT opener will hold 20-22 points that may include five cards in a major or a minor. The responder will hold 0-3 points and would have made a transfer response if he held a 5-card major; this would allow the opener to jump to game when he held 4-card support and an upper-range hand.

Since the responder will not hold a 5-card major but may hold one or more 4-card majors, the major-suit bias will be the same as in Chapter 7, where 1NT was passed out.

Leading when the 2NT opening is passed out

Hand 1

The bidding is 2NT passed out. What would you lead from:

♠ Q J 4 ♥ K 7 5 2 ♦ 4 2 ♣ A 8 6 2 ?

First thoughts There is no reason to expect a heart or club lead to fare well. The choice seems to be between the ♠Q and a diamond from the doubleton. Let's see the figures:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠Q	62.1%	5.80
♥2	49.2%	5.51
♦4	49.0%	5.50
♣2	51.6%	5.54

The ♠Q climbs to the top of the list, because there is a reasonable chance — with East/West holding nearly half the points in the pack — that East will hold a matching spade honor (♠A 17.5%, ♠K 29.0%, ♠10 36.6%). Even when East does not hold a spade honor, it is almost certain that the ♠A-K will lie with the 2NT opener and the lead will not give away a trick.

East will hold four spades 32.0% of the time and five spades with frequency 12.0%, so there is also some chance of setting up a few spade tricks.

Hand 2

The bidding is 2NT passed out. What would you lead from:

♠ A Q 9 6 3 ♥ 10 ♦ J 10 9 7 ♣ Q 7 5 ?

First thoughts You have a fine 5-card spade suit. Is it worth the possible sacrifice of an early trick, aiming to set up several long cards?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	79.5%	6.24
♥10	85.7%	6.46
♦J	91.3%	6.69
♣5	75.7%	6.26

Have you ever seen such high ‘Beats contract’ figures? You may remember the results from similar West hands in previous chapters. We found that it was generally right to lead a spade against 3NT, because four spade tricks plus one outside winner would beat the contract. Against 1NT, you often needed a full five spade tricks to beat the contract and it was better to make a passive lead.

We see here that an auction of 2NT passed out is closer to defending a contract of 1NT, since the points are again equally divided. Any lead, even a club, will give you a fine chance of beating the contract. The ♦J is best, however, and will give you a particularly healthy advantage at match-points.

Look again at the average tricks per deal column. Six tricks are sufficient to beat 2NT, so an average of 6.69 means that the contract will often go two down. It is an indication of how hard declarer may have to struggle after this particular auction.

Let's see a deal from the simulation where a diamond lead shows its merits:

	♠ 4		
	♥ 9 8 6 2		
	♦ 8 6 3 2		
	♣ J 10 9 2		
♠ A Q 9 6 3 ♥ 10 ♦ J 10 9 7 ♣ Q 7 5	<div style="border: 1px solid black; padding: 5px; width: 60px; margin: 0 auto;"> N W E S </div>	♠ J 10 8 7 ♥ J 5 3 ♦ K Q 4 ♣ K 8 4	
	♠ K 5 2		
	♥ A K Q 7 4		
	♦ A 5		
	♣ A 6 3		
West	North	East	South
pass	pass	pass	2NT

Declarer starts with seven top tricks and a spade lead would give him an eighth. So would a club, since declarer could then establish a second club trick without allowing East on lead. A diamond lead (or, in fact, the singleton heart) gives nothing away. East will gain the lead in diamonds and switch to spades, giving the defenders six tricks.

Yes, you're right, 4♥ is cold!

Hand 3

The bidding is 2NT passed out. What would you lead from:

♠ A Q 9 ♥ 5 ♦ K J 8 5 4 ♣ 10 8 7 2 ?

First thoughts You have a useful diamond suit and prospects of a couple of entries in spades. Should you lead from your 'longest and strongest' suit?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	70.3%	6.01
♥5	71.7%	6.12
♦J	72.2%	6.20
♣2	78.4%	6.36

A club lead is best at both forms of the game. By choosing the passive lead, you leave declarer to struggle on his own.

Hand 4

The bidding is 2NT passed out. What would you lead from:

♠ K Q 8 4 ♥ J ♦ K 10 5 4 ♣ Q 9 6 3 ?

First thoughts Are you willing to lead one of the 4-card suits? Perhaps it is the right moment to lead a singleton jack? Time to make up your mind!

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	63.7%	5.92
♥J	72.6%	6.09
♦4	67.3%	5.95
♣3	68.5%	5.98

The spade holding is the most expensive, with regard to giving away a trick. A club or a diamond is a better prospect but the singleton ♥J is even better. The objective is not to find some mouth-watering heart holding with partner but to avoid giving declarer an extra trick.

Hand 5

The bidding is 2NT passed out. What would you lead from:

♠ J 10 5 2 ♥ A J ♦ K 10 8 5 4 3 ♣ 6 ?

First thoughts Is this another deal where the singleton lead is right? Perhaps there is too good a chance that you will hit the jackpot with a diamond lead. Let's see:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠J	69.3%	6.13
♥A	58.7%	5.83
♦5	68.5%	6.17
♣6	60.7%	5.89

The long-suit holdings are not as unattractive as on Hand 4. A spade lead from J-10-x-x is not very likely to give away a trick. Meanwhile, a diamond lead may set up an avalanche of tricks if you happen to strike lucky in the partner's hand. East will hold at least two diamonds 62% of the time, including the ♦A (14.7%), the ♦Q (30.4%) and the ♦J (31.9%).

We will call it a tie between the two long-suit leads. One is marginally better at IMPs; the other inches ahead at match-points.

Hand 6

The bidding is 2NT passed out. What would you lead from:

♠ K Q 9 5 4 ♥ Q J 7 6 ♦ 2 ♣ Q J 4 ?

First thoughts This seems to be a difficult auction on which to forecast the best lead. The spade suit catches the eye, of course. Is there any reason not to lead it? Let the simulation speak!

	Beats contract (IMPs)	Avg. tricks (MPs)
♠K	66.7%	6.00
♠5	58.4%	5.75
♥Q	74.1%	6.08
♦2	67.1%	5.88
♣Q	75.3%	6.15

At IMPs the spade lead is worst. How can that be? The club lead is best at both forms of the game. You are leaning forward expectantly, no doubt, hoping that we can explain it all.

The first step, when puzzled by a result, is to look at a profile of the other three hands. East holds an average of 2.4 spades, including the ♠A (14.3%), the ♠J (32.6) and the ♠10 (33.0%). The ♠K lead is more than 8% better than a fourth-best spade lead, but it may result in a blockage when partner holds a doubleton ♠A or ♠J. If you opt for a non-spade lead, and partner gains the

lead subsequently, he may be able to play spades effectively from his side of the table.

Let's look at the club situation next. East holds an average of 3.3 clubs, including the ♣A (18.1%), the ♣K (30.3%) and the ♣10 (34.9%). In hearts, East holds an average of 2.9 cards, with the chance of individual honors almost exactly the same as in clubs.

Well, it just seems to be that the most important aspect of leading into a 2NT opener is to avoid giving away a trick. The heart and club leads are relatively safe in this respect and the seemingly more attractive spade lead has flaws, whether you lead the ♠K or (worse) a fourth-best card.

Leading when 2NT is raised to 3NT

Next we will look at the more common auction where 2NT is raised directly to 3NT. The responder has declined to bid Stayman, or use a transfer bid, so there will be a large major-suit bias in operation.

Our aim will be to see what difference it makes when the auction is 2NT - 3NT instead of 1NT - 3NT. With this in mind, we will run each West hand against both of these auctions, to see if there are any notable differences.

Hand 7

The bidding is 2NT - 3NT. What would you lead from:

♠ 6 4 3 2 ♥ J 5 ♦ J 10 5 ♣ A Q 10 3 ?

First thoughts A club lead is unattractive and, with the strong hand on the right, very likely to give away a trick. As for the more passive leads, the major-suit bias may determine matters. Let's see:

(2NT - 3NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠4/2	17.6%	3.18
♥J	15.0%	3.02
♦J	14.7%	3.09
♣3	7.6%	2.89

No surprises there. The 4-card spades are placed ahead of the doubleton heart. Let's see if there is any difference when we run the same hand against an auction of 1NT - 3NT:

(1NT - 3NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠4/2	23.3%	3.42
♥J	21.8%	3.28
♦J	19.5%	3.28
♣3	13.4%	3.17

The ranking order of the four leads is exactly the same. The figures are slightly higher because in the 1NT-3NT auction declarer has an average of 25.9 HCP (high-card points) at his disposal. When the bidding is 2NT-3NT he has 26.9 points.

Hand 8

The bidding is 2NT - 3NT. What would you lead from:

♠ 9 7 4 3 2 ♥ J 10 6 ♦ 8 ♣ A 9 5 4 ?

First thoughts The minor suit leads are unattractive, particularly with the bias against them. The 5-card spade lead would sometimes be productive but maybe the J-10-x combination is a better shot.

(2NT - 3NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠4/2	11.4%	2.78
♥J	11.9%	2.88
♦8	6.8%	2.57
♣4	7.3%	2.66

A slight advantage for the heart lead. East will hold at least four hearts 68.7% of the time and these will include the ♥A (17.2%), the ♥K (25.1%) and the ♥Q (33.7%). So, the lead combines safety with some aggressive potential.

Let's see the results against the other auction:

(1NT - 3NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠4/2	20.4%	3.28
♥J	23.2%	3.44
♦8	14.0%	3.05
♣4	16.3%	3.11

As on the previous hand, the ranking order of the four leads remains the same. This time declarer holds 27.3 points on the 2NT auction and 26.3 on the 1NT auction. Perhaps surprisingly, the fact that most of the points lie in one hand is not hindering his prospects when he has opened 2NT.

Hand 9

The bidding is 2NT - 3NT. What would you lead from:

♠ 10 9 ♥ K J 7 4 3 ♦ 9 8 7 2 ♣ J 5 ?

First thoughts Is it worth leading from the 5-card heart suit when you have no prayer of an entry outside?

(2NT - 3NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	10.5%	2.51
♥4	15.3%	2.46
♦9/8	8.4%	2.46
♣J	7.2%	2.32

Your best, albeit limited, chance of beating the contract is to find partner with some assistance in hearts. The safer spade lead is marginally preferable at match-points.

We will not hold our breath as we look for some big difference in the 1NT-3NT auction:

(1NT - 3NT)	Beats contract (IMPs)	Avg. tricks (MPs)
♠10	17.2%	2.96
♥4	21.7%	2.92
♦9/8	11.9%	2.82
♣J	10.4%	2.66

The heart lead gives you the best chance at IMPs and the safe spade lead is marginally better at match-points. Where have you heard that before?

Well, that seems to conclude the analysis of leading against a 2NT-3NT auction. You should make the same leads as you would when the bidding is 1NT-3NT. Earlier in the book we noted that it made no difference whether the 1NT opening showed 15-17 points or 12-14. Somewhat surprisingly, you may think, it also makes no difference when the opening bid shows 20-22.

CONCLUSIONS – Leading into a 2NT opening

When a 2NT opening is passed out:

- Do not lead from 5-card suits such as A-Q-x-x-x, K-Q-x-x-x and K-J-x-x-x. You don't want to give a trick away when declarer will be struggling.
- Be wary of leading from four cards headed by one or two honors. Prefer a passive lead from spot cards, even from a singleton.

When 2NT is raised to 3NT:

- You should make the same opening lead as you would against an auction of 1NT-3NT.
- There is a strong bias towards major-suit leads, since the responder did not use Stayman or a transfer bid.

Pick a Winner! Which card is best?

You are invited to judge which is the best available lead at IMPs, noting if you think that a different lead will be best at match-points.

Auction is: 2NT passed out

- | | | |
|---|--|--|
| 1. ♠ K Q 10 7 6
♥ J 10 2
♦ K J 8 7
♣ 9 | 2. ♠ 6 4 2
♥ A 10 7 6
♦ K Q 4 3
♣ J 9 | 3. ♠ A Q 10 9 8
♥ Q 9 7
♦ 9 8 3
♣ 6 2 |
| 4. ♠ 8
♥ J 8 6
♦ A J 7 5 2
♣ 6 5 4 2 | 5. ♠ J 9 6 5
♥ J 10
♦ A 9 8 6 4
♣ J 8 | 6. ♠ 10 9 6
♥ A Q 7 6 4
♦ 8 7 2
♣ J 6 |

Auction is: 2NT - 3NT

- | | | |
|---|--|--|
| 7. ♠ Q J 2
♥ Q 5 3 2
♦ K 4 3
♣ J 9 5 | 8. ♠ 10 5 2
♥ 5 3
♦ A 10 4 2
♣ J 5 4 2 | 9. ♠ Q J 6 5
♥ A 10 4 3
♦ J 10
♣ J 6 3 |
| 10. ♠ Q 10 3
♥ 7 5
♦ 6 2
♣ K 9 7 6 3 2 | 11. ♠ A 10 9 7 5
♥ 8 5 3
♦ 2
♣ Q J 10 9 | 12. ♠ Q 9 4 3
♥ J 10
♦ K 10 7 4
♣ J 5 3 |

Answers

Here are the best leads from the twelve West hands on the previous page.

Auction is: 2NT passed out

			IMPs	MPs	
1.	♠ K Q 10 7 6	♥ J 10 2	♦ K J 8 7	♣ 9	1st ♠K 74.3% 6.37
					2nd ♥J 73.8% 6.18
2.	♠ 6 4 2	♥ A 10 7 6	♦ K Q 4 3	♣ J 9	1st ♣J 56.9% 5.67
					2nd ♠6/2 55.2% 5.63
3.	♠ A Q 10 9 8	♥ Q 9 7	♦ 9 8 3	♣ 6 2	1st ♦9 79.7% 6.41
					2nd ♣6 78.0% 6.31
4.	♠ 8	♥ J 8 6	♦ A J 7 5 2	♣ 6 5 4 2	1st ♥6 56.9% 5.65
					2nd ♠8 55.4% 5.62
5.	♠ J 9 6 5	♥ J 10	♦ A 9 8 6 4	♣ J 8	1st ♥J 54.9% 5.61
					2nd ♠5 50.6% 5.49
6.	♠ 10 9 6	♥ A Q 7 6 4	♦ 8 7 2	♣ J 6	1st ♠10 60.4% 5.71
					2nd ♣J 59.5% 5.70

Auction is: 2NT - 3NT

7.	♠ Q J 2	♥ Q 5 3 2	♦ K 4 3	♣ J 9 5	1st ♠Q 15.6% 3.00
					2nd ♥2 11.2% 2.80
8.	♠ 10 5 2	♥ 5 3	♦ A 10 4 2	♣ J 5 4 2	1st= ♠2 11.2% 2.87
					1st= ♥5 11.2% 2.84
9.	♠ Q J 6 5	♥ A 10 4 3	♦ J 10	♣ J 6 3	1st ♠Q 11.6% 2.97
					2nd ♥3 10.7% 2.79
10.	♠ Q 10 3	♥ 7 5	♦ 6 2	♣ K 9 7 6 3 2	1st(I) ♠10 9.2% 2.46
					1st(M) ♥7 8.8% 2.61
11.	♠ A 10 9 7 5	♥ 8 5 3	♦ 2	♣ Q J 10 9	1st(I) ♠10 24.3% 3.25
					1st(M) ♣Q 19.9% 3.45
12.	♠ Q 9 4 3	♥ J 10	♦ K 10 7 4	♣ J 5 3	1st ♥J 15.2% 3.03
					2nd ♠3 13.1% 2.94

Chapter 13

LEADING AGAINST 6NT

How do you think ‘Lead the fourth-best of your longest and strongest’ rates as a guideline when leading against 6NT? It is the worst advice possible! After an auction such as 1NT - 6NT, you should look for a safe lead. It will nearly always be wrong to lead from a suit headed by one or two honors.

No doubt you know that aggressive leads tend to pay off against a slam in a suit. That’s right, yes, but the opposite is the case when you lead against 6NT. Why is that? It’s because suit slams are frequently bid on distribution, rather than high-card points; if you make an aggressive lead from something like \spadesuit K-10-x-x you have a fair chance of finding partner with the \heartsuit Q. Your intention is to set up a second trick, ready to cash if either of you gains the lead subsequently.

Slams in notrump are more often bid on high-card points, usually at least 33 of them. There is much less chance of finding partner with a matching honor in the suit that you lead. There is correspondingly more chance that a lead from an honor will give away a vital trick — perhaps declarer’s twelfth trick.

In this chapter we will look at several West hands, as usual, analyzing how well the various leads fare against 6NT. It makes no difference to the recommended opening leads whether the bidding has gone 1NT - 6NT, or 1NT - 4NT - 6NT. We will assume that the total point-count is between 33 and 36 points (or a point fewer if dummy holds a 5-card minor) and that the responder does not hold a hand on which most players would investigate a suit fit.

Hand 1

After an auction of 1NT - 6NT, what would you lead from:

\spadesuit J 7 4 \heartsuit 10 6 5 \diamondsuit 9 2 \clubsuit Q 10 8 6 2 ?

First thoughts Clubs are the strongest suit but it could easily cost a trick to lead away from a queen. Let's see the results:

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5	9.1%	0.69
♥5	9.4%	0.71
♦9	9.7%	0.72
♣6	3.9%	0.57

If the idea of leading passively against 6NT is new to you, perhaps you are surprised to see a club lead propping up the table with a hopeless 3.9%. This is a reflection of the number of times that such a lead will give declarer his twelfth trick on a plate. There is nothing much to choose between the other leads. In particular, leading away from a jack is not as costly as leading away from a queen. (If declarer has the ♠A-K-Q and three cards in each hand, he will make three tricks anyway. If he has four cards opposite three, the suit will break 3-3 anyway.)

Although it's fairly obvious how leading away from a queen can cost a trick, let's look at a deal from the simulation anyway:

	♠ K 10 2		
	♥ A J 8		
	♦ A Q J 10		
	♣ A 5 3		
♠ J 7 4			♠ 9 8 6 3
♥ 10 6 5			♥ 9 7 3 2
♦ 9 2			♦ K 6 5 3
♣ Q 10 8 6 2			♣ 4
	♠ A Q 5		
	♥ K Q 4		
	♦ 8 7 4		
	♣ K J 9 7		

West	North	East	South
pass	6NT	all pass	1NT

Declarer will have eleven tricks, once he has given up a diamond. Lead a club and you bump this to twelve tricks. After any other lead, 6NT will go one down.

Look at it another way. Suppose you lead a club and strike gold, finding partner with the ♣A or ♣K. He is unlikely to hold anything else in his hand, apart from an odd jack, so declarer will almost certainly be able to run for home. The best chance to beat the slam is to score one high card in partner's hand, plus your ♣Q. You must sit back passively and hope that this happens.

Hand 2

After an auction of 1NT - 6NT, what would you lead from:

♠ 9 7 6 5 ♥ K J 8 2 ♦ 8 4 ♣ K 7 3 ?

First thoughts What is your best chance of scoring two tricks against 6NT? Is it to lead the ♥2, find partner with the ♥Q and then gain the lead with the ♣K? We will see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠7/6/5	14.1%	0.86
♥2	2.4%	0.58
♦8	13.8%	0.86
♣3	5.3%	0.64

A heart lead is easily worst. Partner cannot hold the ♥Q unless 6NT has been bid on 31 points, perhaps with a long minor in the dummy. Even then, the chances are tiny that East has that particular card. Meanwhile, a heart lead will often give away a trick. We have seen already, from the first two deals, that all you need to remember is not to lead away from an honor.

Hand 3

After an auction of 1NT - 6NT, what would you lead from:

♠ 4 2 ♥ 9 7 ♦ K Q 9 5 ♣ 10 9 8 7 3 ?

First thoughts We are looking now for an exception to choosing a safe lead. Should you lead the ♦K here, in the hope that partner will win the lead subsequently in some other suit?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠4	16.1%	0.91
♥9	15.5%	0.90
♦K	12.0%	0.89
♦5	6.1%	0.51
♣10	16.3%	0.91

The ♦K lead fails to overtake the passive leads in the other three suits. Again we see that it makes little difference which passive lead you choose. The ♣10 is rated no more highly than the ♠4. Remember, though, that our simulations are run at double-dummy. In practice a major-suit lead might help declarer to find a jack (or possibly a queen) in partner's hand, which makes a club lead preferable. Look at this deal from the simulation:

	♠ Q J 9											
	♥ K Q 4											
	♦ A 7 2											
	♣ A Q 5 4											
♠ 4 2	<table> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ 10 8 7 5 3	
	N											
W		E										
	S											
♥ 9 7		♥ J 8 6 3										
♦ K Q 9 5		♦ 10 6 3										
♣ 10 9 8 7 3		♣ 6										
	♠ A K 6											
	♥ A 10 5 2											
	♦ J 8 4											
	♣ K J 2											
West	North	East	South									
			1NT									
pass	6NT	all pass										

The double-dummy analysis says that a lead of the ♦9 or ♦5 will allow declarer to score an overtrick. On all other leads twelve tricks will be made. On that basis (and on similar evidence from the other 4999 deals of the simulation), the spade, heart and club leads are assessed to be of equal value, near enough. However, we can see on this deal that a club lead is safest because a heart lead will give away the position of the ♥J; declarer will then have his twelfth trick without having to guess the lie of the heart suit. On other deals from the simulation, a spade lead might save declarer a guess.

When you have more than one passive option, lead from the longest suit. The longer your holding is, the shorter partner's holding is likely to be; there will be less chance that he holds a jack or queen that might be picked off. Declarer's holdings will also be shorter, so the position of a missing jack may be irrelevant. Imagine you are defending 6NT and partner holds \spadesuit J-8-4-3. If you lead from \spadesuit 7-2, the suit may lie like this:

\spadesuit A Q 10 5	
\spadesuit 7 2	\spadesuit J 8 4 3
\spadesuit K 9 6	

Declarer holds seven diamonds between the hands and you have saved him a guess on the position of the \spadesuit J.

If instead you lead from \spadesuit 7-5-2, the suit will sometimes lie like this:

\spadesuit A Q 10	
\spadesuit 7 5 2	\spadesuit J 8 4 3
\spadesuit K 9 6	

With three certain diamond tricks, declarer has no guess to make and the diamond lead is safe. If you were leading from \spadesuit 7-6-5-2, it would be even less likely that a diamond lead would save declarer a guess.

Hand 4

After an auction of 1NT - 6NT, what would you lead from:

\spadesuit 6 2 \heartsuit K Q 10 6 2 \diamond 10 8 \clubsuit 9 7 3 2 ?

First thoughts We are searching for an honor combination that represents a better prospect than a normal safe lead against 6NT, Here there is just room for partner to hold a king (or a queen) elsewhere, which may allow him to gain the lead. Also the presence of the \heartsuit 10 adds some safety to a heart lead. Let's see.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠6	8.1%	0.58
♥K	12.2%	0.63
♦10	7.7%	0.57
♣7/2	8.2%	0.58

The attacking ♥K lead sees off the passive leads at both forms of the game. Here is a deal from the simulation where such a lead will beat the slam:

	♠ K J 10										
	♥ 8 5										
	♦ A K 7 4 3										
	♣ A K 5										
♠ 6 2	<table style="border-collapse: collapse; width: 100px; height: 100px; text-align: center; font-size: 2em;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ 9 8 7 5 4 3
	N										
W		E									
	S										
♥ K Q 10 6 2		♥ 9 4 3									
♦ 10 8		♦ Q 9 2									
♣ 9 7 3 2		♣ 10									
	♠ A Q										
	♥ A J 7										
	♦ J 6 5										
	♣ Q J 8 6 4										
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">West</th> <th style="width: 25%;">North</th> <th style="width: 25%;">East</th> <th style="width: 25%;">South</th> </tr> </thead> <tbody> <tr> <td>pass</td> <td>6NT</td> <td>all pass</td> <td>1NT</td> </tr> </tbody> </table>				West	North	East	South	pass	6NT	all pass	1NT
West	North	East	South								
pass	6NT	all pass	1NT								

You lead the ♥K and declarer can count only eleven top tricks. His best line is to allow your king to win. Declarer wins your diamond switch and cashes the spade winners, followed by the clubs. He will make the slam if the ♦Q drops in two rounds or if you hold three diamonds alongside the ♥Q and are squeezed by the last club. He will go down as the cards lie.

As you see, on any passive lead he would have been able to set up the diamond suit. The ♥10 played a role, in a way. If declarer or dummy had held that card, declarer would have been able to set up a twelfth trick in hearts.

Hand 5

After an auction of 1NT - 6NT, what would you lead from:

♠ Q 9 8 7 2 ♥ J 9 6 5 3 ♦ K 8 7 ♣ — ?

First thoughts Here you are forced to lead from an honor, so you should seek the lead that is likely to do the least damage. Presumably this will be a heart, since a jack is closer to being a spot-card than a king or queen.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠7	6.9%	0.75
♥5	10.9%	0.82
♦7	6.5%	0.62

If you have to lead from an honor, choose the lowest honor.

Hand 6

After an auction of 1NT - 6NT, what would you lead from:

♠ J 9 7 5 ♥ J 8 7 6 2 ♦ J 10 6 5 ♣ — ?

First thoughts You are forced to lead away from one of your jacks. How do you compare the leads in the three suits?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠5	13.7%	0.84
♥6	15.5%	0.91
♦J	12.0%	0.84
♦5	11.6%	0.83

A heart is a bit safer than a spade because you have five cards in the suit. It is therefore less likely that declarer has four cards in one hand or other and that the lead from the jack will give him a trick with the 10.

You might think that a diamond lead would be best because the second honor (the ♦10) offers a margin of safety. The numbers in the table show that the 10 provides negligible assistance; it is outweighed by the major-suit bias.

Should I lead an ace against 6NT?

We have seen that leading from a king or a queen is a fairly hopeless proposition against 6NT. Leading away from a jack is not so expensive but is still less advisable than leading from a collection of spot-cards. What is the

situation when you have an ace in your hand? Should you lead it, hoping that partner holds the matching king? When playing match-points, should you cash the ace to make sure that declarer does not score an overtrick?

Hand 7

After a match-point auction of 1NT - 6NT, what would you lead from:

♠ A Q 8 2 ♥ 9 7 4 ♦ J 7 3 ♣ 8 4 2 ?

First thoughts It is barely possible that leading the ♠A will assist you in beating 6NT at IMPs. Perhaps it is a good idea at match-point pairs, however? Let's take a look.

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	1.9%	1.02
♠2	1.8%	0.27
♥9/7/4	14.8%	0.80
♦3	14.4%	0.79
♣8/4/2	15.3%	0.80

Well, that's a first! The spade lead (cashing the ♠A) is hugely worst at IMPs but best by a fair margin at match-point pairs. By cashing the ace you do at least ensure that you make one trick at pairs; your expectation thereafter is a paltry one fiftieth of a trick.

If you fail to take your ace, declarer may cash 13 tricks elsewhere. The presence of the queen alongside your ace means that declarer is likely to hold the ace-king-queen in each of the other suits, maybe the missing jacks too.

You may think it unlikely that declarer can pick up the 5+4+4 (or 5+5+3) tricks to add up to 13, without scoring any spade tricks. The 0.80 figures in the match-point column tell a different story! On a non-spade lead, the defenders will score 80 tricks on every 100 deals. Since they will score at least two tricks on the 15% of deals where they beat 6NT (a total of at least 30 tricks), they will score exactly one trick on at most 50% of the deals. On at least 35% of the deals the failure to cash the ♠A will let through an overtrick!

Let's use our alternative pairs scoring method, where we assume that all 13 West cards are contestants in a 5000-deal match-point event, holding the same West hand throughout. This is the result:

♠A 67.7% ♥4 56.0% ♦3 55.2% ♣8 56.0%

The ♠A wins the tournament with the fine match-point score of 67.7%. The ♠A is easily the best lead at match-points, despite the fact that you give up almost all hope of beating the contract. (The reason all four scores are above 50% is because the other three spade leads fare so appallingly.)

Hand 8

After a match-point auction of 1NT - 6NT, what would you lead from:

♠ 10 7 2 ♥ A J 8 3 ♦ 9 2 ♣ J 8 6 5 ?

First thoughts You hold 6 points instead of 7, so there is slightly more room for your partner to hold a queen. Should you still lead the ace?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠2	11.0%	0.95
♥A	5.0%	1.04
♦9	10.9%	0.95
♣5	10.1%	0.93

The margin is smaller but the ace is still the right lead at match-points.

Hand 9

After a match-point auction of 1NT - 6NT, what would you lead from:

♠ Q 10 5 2 ♥ 9 7 6 2 ♦ 8 7 ♣ A 9 8 ?

First thoughts This time your ace lies in a 3-card holding, unaccompanied by a second honor. Should you lead the ace now?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠2	4.6%	1.02
♥7/6/2	11.9%	1.10
♦8	12.2%	1.10
♣A	8.3%	1.08
♣8	8.3%	0.96

The two red-suit leads hit the tape together, at IMPs and at match-points. The ♣A is not far behind at match-points but there is no reason to lead it.

Hand 10

After an auction of 1NT - 6NT, what would you lead from:

♠ A 8 ♥ 9 7 4 3 2 ♦ 8 7 3 2 ♣ 8 7 ?

First thoughts Your partner has room for 3 or 4 points and may even hold the ♠K. How do you like the idea of leading the ♠A?

	Beats contract (IMPs)	Avg. tricks (MPs)
♠A	14.9%	1.20
♥3	14.8%	1.07
♦8/7/3/2	14.0%	1.05
♣8	13.8%	1.04

We found an ace lead winning at both IMPs and match-points! Would you like to know how often East holds the ♠K? Your wish is our command...

In the 5000-deal simulation for this West hand, East held the ♠K on 7.0% of the deals, the ♠Q on 19.3%, the ♠J on 33.5% and the ♠10 on 51.5%. Out of the 5000 deals, East held the ♠K 351 times, which is slightly less than half the occasions on which the ♠A lead would beat the slam.

CONCLUSIONS - Leading against 6NT

- You should seek a passive lead against 6NT. Do not lead away from a king or a queen. Prefer to lead from spot-cards.
- When you have to lead from an honor, prefer to lead from a 10 or a jack, rather than a queen or a king.
- When a suit is headed by two adjacent honors (K-Q-x-x, or Q-J-x-x), this still represents a very risky lead against 6NT.
- When you have a choice of suits containing only spot-cards, lead the longest one.
- At match-point pairs it is often right to cash an ace against 6NT, to prevent an overtrick. This is particularly true when you hold an A-Q and declarer will then hold nearly all the other picture cards.

Pick a Winner!

Leading against 6NT

You are invited to judge which is the best available lead from the twelve West hands below. If you would prefer a different lead when playing pairs rather than IMPs, note that down. The results are given on the next page.

Auction is 1NT - 6NT (or 1NT - 4NT - 6NT)

- | | | |
|---|--|---|
| 1. ♠ 6 2
♥ K 10 8
♦ J 10 9 7
♣ J 9 8 3 | 2. ♠ Q 9 6 4
♥ Q 8 6 5 2
♦ 9 7 6
♣ 8 | 3. ♠ 6 3 2
♥ 4 2
♦ A 9 6 4 3
♣ Q 4 3 |
| 4. ♠ J 9 8 6 5
♥ Q 10 3
♦ K 10 9 7
♣ 6 | 5. ♠ A Q 9 7 3 2
♥ 10 9 6
♦ 2
♣ 9 8 2 | 6. ♠ Q 10 7 2
♥ J 9 7 6
♦ K 9 8 3
♣ 2 |
| 7. ♠ 8 5
♥ 10 6 4 3
♦ K Q 2
♣ 9 6 4 3 | 8. ♠ Q J 10 6
♥ J 10 6 2
♦ 10 7 5
♣ 9 3 | 9. ♠ 9 2
♥ Q J 9 5 2
♦ J 10 8 4 3
♣ 7 |
| 10. ♠ A 2
♥ J 8 6 4 3 2
♦ 10 8 4
♣ 5 2 | 11. ♠ K Q 10
♥ 9 7 6 2
♦ 7
♣ 10 8 6 5 2 | 12. ♠ 8 4 2
♥ J 10 8 4 2
♦ Q J 9 4
♣ 9 |

Answers

Here are the best leads from the twelve West hands on the previous page, as calculated from 5000-deal simulations.

Auction is 1NT - 6NT (or 1NT - 4NT - 6NT)			IMPs	MPs
1.	♠ 6 2 ♥ K 10 8 ♦ J 10 9 7 ♣ J 9 8 3	1st ♠6	17.1%	0.89
		2nd ♦J	16.3%	0.87
2.	♠ Q 9 6 4 ♥ Q 8 6 5 2 ♦ 9 7 6 ♣ 8	1st = ♦6	8.5%	0.66
		1st = ♣8	8.4%	0.66
3.	♠ 6 3 2 ♥ 4 2 ♦ A 9 6 4 3 ♣ Q 4 3	1st(I) ♠6/2	7.9%	0.92
		1st(M) ♦A	7.1%	1.07
4.	♠ J 9 8 6 5 ♥ Q 10 3 ♦ K 10 9 7 ♣ 6	1st ♣6	20.7%	1.06
		2nd ♠6	19.8%	1.03
5.	♠ A Q 9 7 3 2 ♥ 10 9 6 ♦ 2 ♣ 9 8 2	1st(I) ♣9	21.3%	0.97
		1st(M) ♠A	5.8%	1.06
6.	♠ Q 10 7 2 ♥ J 9 7 6 ♦ K 9 8 3 ♣ 2	1st ♣2	13.4%	0.89
		2nd ♥6	12.4%	0.84
7.	♠ 8 5 ♥ 10 6 4 3 ♦ K Q 2 ♣ 9 6 4 3	1st = ♣6/3	12.4%	0.87
		1st = ♠8	12.4%	0.86
8.	♠ Q J 10 6 ♥ J 10 6 2 ♦ 10 7 5 ♣ 9 3	1st ♠Q	8.7%	0.74
		2nd ♣9	8.3%	0.70
9.	♠ 9 2 ♥ Q J 9 5 2 ♦ J 10 8 4 3 ♣ 7	1st = ♥Q	8.1%	0.68
		1st = ♣7	8.0%	0.68
10.	♠ A 2 ♥ J 8 6 4 3 2 ♦ 10 8 4 ♣ 5 2	1st(I) ♣5/2	8.1%	0.99
		1st(M) ♠A	8.0%	1.10
11.	♠ K Q 10 ♥ 9 7 6 2 ♦ 7 ♣ 10 8 6 5 2	1st ♠K	23.7%	0.93
		2nd ♥7/2	19.3%	0.87
12.	♠ 8 7 2 ♥ J 10 8 4 2 ♦ Q J 9 4 ♣ 9	1st ♠8/2	14.0%	0.83
		2nd ♣9	13.6%	0.83

Chapter 14

Methodology

In this final chapter of the book, we will discuss the methodology used for our simulations. We will justify using double-dummy simulation to evaluate the leads and explain why we rejected some possible alternative approaches.

Background

One of the ways in which you can improve your performance at any game is to learn from experience. With bridge, this is not so easy. The best play, bid or opening lead is far from guaranteed to give the best result for the particular lie of the cards confronting you. Even if you are a bridge enthusiast, playing many times a week, you can never hope to accumulate enough information to judge the best opening leads in various situations.

Consequently, players are forced to rely on expert opinion that has been passed down through the ages. If you had to rely on one simple guideline for opening leads at notrump, leading your longest suit is as good as anything. However, we have seen in the preceding chapters that there are many situations where this advice is unproductive. Our aim in this project was to use the impressive number-crunching power of modern computers to analyze which opening leads work best.

Which methodology is best?

In some way we needed to take a particular auction with a given West hand and then evaluate the possible opening leads. To see which lead works best, a large number of deals must be played and the results analyzed. To cover the scenarios in this book, even though restricted to notrump contracts, millions of deals need to be played to get any degree of confidence in the results.

Indeed that is precisely what we have done. Not by playing the hands ourselves, over the hundreds of years that it would take, but by using computer software.

How can computer software assist in such a task? There are three possible approaches and at various points we have deployed all three:

1. For a given West hand, generate thousands of random deals that match the bidding. Play the hands at double-dummy and aggregate the results.
2. As for (1) but use single-dummy software that tries more faithfully to emulate a human's play. In other words, the deals are played and defended without knowledge of the cards in the hidden hands.
3. Look at real-life deals that have been played over the decades and analyze which opening leads worked well.

Whilst none of these is perfect, we found that the first method was easily best. Single-dummy software was far too slow to analyze sufficient deals. Even though hand-playing software has improved tremendously over the years, it was not an accurate enough representation of a real player. Nevertheless, we did use single-dummy software (in our case WBridge5, which won the World Bridge Computer Championships in 2005/7/8) to compare its results with those given by our double-dummy methodology. We saw nothing to make us question the approach we have taken.

How about analyzing deals from real play? We did look at tens of thousands of deals played at both club and tournament level, including the world bridge championships from 1955 to 2009. This was still hopelessly inadequate to get a realistic assessment of any particular lead situation, such as 1♦-1♠-1NT-3NT. Each deal was played only a few times, often just twice.

Our analysis of tournament results showed us how important the opening lead is. Even in world championship play, an average of 0.22 tricks are lost by the opening lead (when compared with the result after the best opening lead on that complete deal). This may not sound a lot but our analysis shows that it is a bigger difference than the entire defensive performance between a top and an average player.

Our double-dummy methodology

How were the numbers in this book obtained and how reliable are they?

We took a particular bidding sequence, such as 1NT-2♣-2♦-3NT, and used computer software to randomly generate several thousand deals, where all four hands conform to this sequence. South was always the declarer and an opening bid of 1NT showed 15-17 points. In the main we used SAYC (Standard American Yellow Card) bidding methods, but we reran some simulations against ACOL with a 12-14 point 1NT, obtaining very similar results. To match the Stayman bidding sequence above, for example, North must hold at least one 4-card major and South must hold none. North will have at least 9 points to go to 3NT but not enough for a slam try. North must not be so distributional that he would continue to look for a fit in a suit. The West hand would not bid over 1NT and East would not make an overcall over 2♣ or a lead-directing double.

Our first action, for a new bidding sequence, would be a fishing expedition. Typically, we might ask the software to create 100 West hands, for each of which it would generate 1,000 complete deals conforming to the chosen auction. This would give us 100,000 deals. To achieve this, we might actually have to try tens of millions of deals, rejecting those that did not fit the bidding. We then ran 13 double-dummy analyses for each deal, considering the lead of all 13 cards in the West hand. Having obtained the number of tricks that the defenders could score, we averaged the results, to see which lead worked best at IMPs (it would give you the highest percentage chance of beating the contract) and which was best at match-points (it yielded the highest average-tricks-per-deal).

The fishing expedition would throw up several interesting West hands, with perhaps unexpected results. We would rerun these, this time increasing the accuracy by asking for 5000 deals to be created for each West hand. We would also construct some West hands manually, to investigate (for example) whether short-suit or long-suit leads worked best from a certain type of hand.

Although we mainly use two metrics in the preceding chapters – Beats Contract Frequency and Average Tricks – we obtained some additional metrics. For example, we simulated a 13-pair tournament, where each West player held the same hand throughout and had to lead the card assigned to them on 5000 different deals. Suppose the match-point scoring revealed that the player leading the ♥10 had won the tournament, with the player leading the ♠Q second. These would then be rated the two best leads at match-point scoring. Eventually, we felt that presenting the ‘average tricks per deal’ was a clearer way of displaying the potency of each opening lead at pairs scoring.

Reliability of the data

To be happy with our chosen double-dummy methodology, we needed to answer these two questions:

1. Do our simulations have sufficient deals for the results to be trusted?
2. How representative is double-dummy analysis in evaluating the best leads in real play?

It would be inappropriate to discuss statistical sampling here, but with our chosen ‘5000 deals per West hand’ sample size, it is unlikely that any particular figure in our tables will be incorrect by more than 1%.

Whether it is valid to use double-dummy analysis needed more research. Would the play of a deal when the declarer and defenders can see all four hands be a meaningful representation of real play? Many commentators claim that the advantages for declarer and the defenders of playing at double-dummy more or less cancel each other out. We needed to verify this.

We analyzed deals from Nikos Sarantakos’ *VuGraph Project*, which captures hands from world championships and other top-class tournaments. We also analyzed data from club nights over two years at a local bridge club. All in all, we ran the double-dummy analysis on over 100,000 plays of the hand and compared the actual results with our double-dummy predictions.

The results surprised us. The top-class results corresponded exactly to the double-dummy prediction 62% of the time! On a further 30% of the plays, there was a one-trick variation (either one trick more or one fewer). Such variations are not because the double-dummy predictions are off target; the actual results themselves varied with each other. Indeed, if you look at the results from any board in a duplicate pairs, you will see a similar spread of tricks made — for example, a mixture of +630s, +600s and -100s.

At club level, we saw a somewhat bigger spread, with 50% of the table results corresponding exactly to the double-dummy prediction and a further 38% with a one-trick variation. This reflects the broader range of abilities at a typical bridge club.

These results encouraged us to persist with the double-dummy approach. Suppose, in an imaginary world, that we had lined up competent bridge players to play each West hand 65,000 times (13 different leads, for each of the 5000 deals for a particular West hand). Would that have given us a better basis for evaluating the best leads? It is unlikely.

Suppose that on a particular deal double-dummy play results in dropping a singleton king offside instead of finessing. This is not a cause for concern. It

would occur on only a small fraction of the 5000 deals for that West hand. More importantly, such a deviation from normal play is likely to affect whatever opening lead is chosen. In this book we assess the relative merits of the possible leads from a given West hand, rather than attempt to get an accurate assessment of each lead.

When it was clear that an opening lead, such as the ♥K from ♥K-Q-6-2 might save a real-life declarer from a guess (if dummy had ♥A-J-9 and East held the ♥10, for example), we used a profile of the simulation to estimate what was the percentage chance of such holdings. In this way, we could offset one of the side effects of double-dummy simulation.

Acknowledgements

Although we had to produce additional custom software to generate our results, we were fortunate to be able to rely on pioneering work in bridge software that preceded this project. Portable Bridge Notation (PBN) gave us a way of representing bridge deals in a standard way, which could be processed by existing bridge software as well as our own. See <http://www.tistis.nl/pbn>.

We were able to use Bo Haglund's Double Dummy Solver (DDS) as a double-dummy engine. We could invoke this from our own software to get the double-dummy results for the 13 possible leads at a reasonably fast level of execution. This same DDS engine is used by several commercially available bridge programs. See <http://privat.bahnhof.se/wb758135>

For dealing the hands, we made good use of Thomas Andrews's Deal 3.1 program. See <http://bridge.thomasoandrews.com/deal>. This gave us a lot of useful functions to generate the specific hands we needed.

The *VuGraph Project* and *Bridge Base Online* have captured a vast number of hand records. We used this data to verify our methodology.

WBridge5 is a free bridge-playing program that has won the World Computer Bridge Championship a number of times. We were able to automate the playing of hundreds of hands at a time, with the help of its creators. This allowed us to compare results with the double-dummy executions. See <http://www.wbridge5.com>.

We evaluated various commercial software packages to see if we could use them effectively on our project. The Bridge Analyser program (<http://myweb.tiscali.co.uk/lorne.anderson/Bridge>) has an attractive user interface and Dealmaster Pro (<http://www.dealmaster.com>) has a comprehensive set of dealing functions. Although in the end we found it more suitable to write custom software, both these products are worthy of attention.

COMPUTER ANALYSIS OF OPENING LEADS

To discover which opening lead is best from a given West hand against a particular auction, the authors use computer software to generate 5000 deals that match the North-South bidding. (The West hand remains the same and the other three hands are chosen randomly.) The software then plays these deals automatically, seeing which of the 13 possible opening leads works best at both IMPs (rubber bridge/Chicago) and match-point pairs. By analysing the results, the authors pass on to the reader the secrets of finding the best lead against notrump contracts on a wide range of different auctions.

Suppose the bidding goes 1NT - 3NT and you have to find an opening lead from

♠ J 8 6 ♥ 9 5 ♦ K Q 7 2 ♣ K J 7 2

You may be surprised to hear that the ♠6 is the best lead at both forms of the game and the ♥9 is the second-best lead!



DAVID BIRD (top) and **TAF ANTHIAS** were contemporaries at Cambridge University, both reading mathematics. They carried out research and development on software systems for over 30 years at IBM's UK Laboratories. In the 1970s they formed a successful bridge partnership, winning a number of national events.

David is now one of the world's top bridge writers with 110 books to his name. Taf moved on to the USA, where he became a vice president of Cisco Systems. They have joined forces on this ground-breaking book.

