

WINNING SUIT CONTRACT LEADS

AN HONORS eBOOK FROM MASTER POINT PRESS

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Introduction

The opponents' bidding is 1 ♠ -3 ♠ -4 ♠, let's say, and you have to choose an opening lead from: ♠ J 4 2 ♥ A 2 ♦ K 9 ♣ 10 9 8 6 4 2. How do you make your decision? Do you rely on your 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 guide you to the best leads in future. Most players rely on general guidelines, such as 'Don't lead from a king', 'Don't lead a doubleton honor', 'When in doubt lead a trump', 'Lead partner's suit'. On many deals, such pieces of inherited wisdom are far from a winning strategy.

In our book *Winning Notrump Leads*, we used computer simulations to analyze the best opening leads against notrump contracts. Encouraged by the success of that book, we now offer an investigation into the best leads against a variety of suit contract auctions.

For each chosen West hand we generate 5000 deals that match the given North-South bidding. We then play the deals automatically, using computer software, and see which leads work best — at both IMPs and match-point pairs. By analyzing the results we are able to draw some conclusions on the types of lead that work best.

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

	Beats Contract (IMPs)	Avg. tricks (MPs)
^ 2	18.0%	2.69
٧A	30.4%	2.99
♦ K	23.8%	2.67
4 10	20.8%	2.79

The \checkmark A is a clear winner at both IMPs and match-points. The \clubsuit 10, doubtless the choice of many players, has less chance of beating the contract than the \checkmark K!

By the time you come to the end of the book, you will have accumulated more knowledge about suit contract opening leads than would be possible in a lifetime spent entirely at the bridge card table. We think that some of the results will surprise you!

David Bird and Taf Anthias

Chapter 1

Leading against a one-suit auction to 4♠

We will launch the book by considering the best lead from several hands against a spade game that has been bid without mention of another suit. It makes no difference whether the opponents play 1♣−3♣ as a full-blown limit bid, or use a convention such as Bergen Raises. All that matters is the strength that they have shown between the hands and the fact that they have not advertised a threatening side suit.

By the time we reach the end of the chapter, we will have a fair idea of the types of leads that work best. Are much despised doubleton leads less awful than many players think? How likely is a trump lead to work well? Is it is better on such auctions to make a passive lead from such as •8-7-4 or to lead aggressively from •K-Q-9-3? Let the investigation begin!

Which leads work well against 1 - 3 - 4?

We will look first at the situation where the opponents have bid spades all the way, with responder showing a limit bid. As we said above, it makes no difference whether they have used some conventional route (such as a Bergen Raise of 3.4 or 3.4) in the process.

Hand 1

The opponents bid $1 \triangleq -3 \triangleq -4 \triangleq$. What would you lead from: $\triangleq 94 \quad \checkmark 95 \quad \triangleq 49762 \quad \triangleq 49754?$

First thoughts You may have heard people say 'Only beginners lead from a jack'. No doubt you have been warned against leading from suits headed by the ace without the king. Doubleton leads are not generally rated very favorably, so perhaps it's a case of 'When in doubt, lead a trump'.

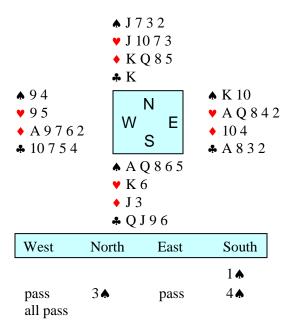
We no longer have to rely on such folklore, handed down by our ancestors! Let's run a simulation where this West hand remains fixed and we

generate millions of random deals, keeping only the first 5000 that conform to a 1 - 3 - 4 bidding sequence. These are the results:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
4	12.7%	2.42
y 9	17.6%	2.55
♦ A	16.3%	2.61
. 4	14.7%	2.53

The doubleton heart is best at IMPs. A trump lead is worst at both forms of the game. So much for the guideline 'When in doubt, lead a trump'! Leading the ◆A is better than expected, partly because a sight of the dummy will help you to judge what to do next. We note also that the ◆A lead fares best at match-points.

Let's take a 'lucky dip' into the simulation and pick out a deal where the doubleton heart lead does well:



West starts with the •9 and East wins with the ace. He returns a heart to South's king. With three aces out, declarer needs to reach dummy for a spade finesse. When he tries a club, East wins with the ace and plays a third heart, promoting a trump trick for the defense. That's one down. On any other lead, declarer can take advantage of the favorable trump position.

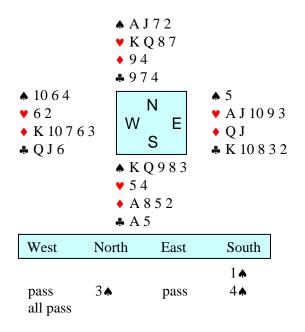
Hand 2

The opponents bid
$$1 - 3 - 4$$
. What would you lead from: $\bullet 10.64 \lor 62 \lor K 10.763 \bullet QJ6$?

First thoughts Leading from the \bullet K is risky. If declarer scores the queen and ace early on, your diamond trick is unlikely to come back. The present authors are no great supporters of trump leads and would have chosen the \bullet O. Let's take a look:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	8.3%	2.25
y 6	10.2%	2.31
♦ 6	7.4%	2.20
♣ Q	9.8%	2.25

Well, that's a surprise. The doubleton heart wins again. Let's surrender to temptation and pick another deal from the simulation:



West leads the ♥6, East taking dummy's king with the ace. After winning the heart return, declarer needs to ruff two diamonds in dummy. However he plays, he cannot do this without suffering the promotion of West's ♠10. East

will return a third round of hearts when he gains the lead in diamonds. On any other lead, declarer can make the contract with best play.

Hand 3

The opponents bid 1 - 3 - 4. What would you lead from: • 105 • Q 9 6 2 • A Q 2 • K 8 6 5 ?

First thoughts The three side-suit leads (from honors) are unattractive and may well concede a trick. Perhaps a trump lead is best. What do you think?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	11.7%	2.40
v 2	13.1%	2.39
♦ A	8.3%	2.30
4 5	11.7%	2.32

At IMPs a low heart is best. At match-points a trump is just as good. Although leading unsupported aces can work well, you should not consider it when the queen or jack is alongside the ace.

The opponents bid 1 - 2 - 4

When the spade game is bid via a single raise, rather than a sound double raise, you will have more chance of beating it. You may wonder why, since the opener will then require a stronger hand to bid 4. The reason is that the opener is much less likely to have strength to spare.

Opposite a double raise, the opener will raise to game when his values approximate to 14-19 HCP. When the opener is in the top half of that range he will have strength to spare. Opposite a single raise, he will hold more like 17-19 HCP and may have no spare strength even when at the top of the range.

That said, we do not expect the choice of lead to be affected much by the different sequence. It is only the general level of the Beats and Average Tricks figures that will be a bit higher.

Hand 4

8

The opponents bid 1 - 2 - 4. What would you lead from: • K 9 4 \checkmark J 9 7 4 2 • J • J 10 8 3 ? **First thoughts** Side-suit singletons are often attractive leads. Is your finger on the $\bullet J$ or the $\bullet J$?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	21.9%	2.87
v 4	42.1%	3.26
♦ J	51.1%	3.49
♣ J	43.4%	3.29

It's an easy win for the singleton lead. The fact that you may gain the lead with the AK increases the chance that you will score a diamond ruff at some time. There is little to choose between a club and a heart lead.

Hand 5

First thoughts There is no particular reason to lead a trump, it seems. Do you favor an attacking lead in one of the red suits or a passive club?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 6	10.3%	2.22
♥ Q	13.6%	2.37
♦ 4	11.7%	2.31
\$ 9/6	14.0%	2.42

There is little constructive purpose in leading a club, unless partner happens to be void in the suit. It is still best, though, because the red-suit leads are too risky.

Should I lead aggressively or passively?

We will investigate in a later chapter whether it is a good idea to choose an aggressive opening lead when the dummy is known to hold a longish side suit that may provide discards. For the moment, we must try to decide whether it is a good idea to lead aggressively against a one-suit auction to a major-suit game.

Hand 6

First thoughts A heart lead may fare well if partner holds the ♥A or the ♥Q. Does that make it worth the risk? If the red-suit leads are too aggressive, which black suit do you prefer?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	18.3%	2.65
v 7	10.8%	2.43
♦ 10	14.7%	2.50
. 2	16.2%	2.57

A heart lead is too macho. A profile of the simulation showed that East holds an average of 10.0 HCP, the ♥A 35.1% of the time and the ♥Q 45.3% of the time. When declarer and/or the dummy hold the ace and queen, a heart lead may well cost. Even when partner holds one of the honors, an opening heart lead may not have been necessary. Our table shows that such a lead is well against the odds. (This is a disappointment to one of the authors, who spent much of his life favoring leads from K-J-x-x. It just shows how difficult it is to evaluate which leads work well from experience at the table!)

What of the other leads? A diamond is less expensive than a heart and, for the first time, a trump lead rises to the top of the table.

Hand 7

The opponents bid
$$1 - 2 - 4$$
. What would you lead from:
• 3 • A 10 8 7 4 • Q 7 6 • 10 8 6 5 ?

First thoughts Leading a singleton trump is not usually a good idea because you may pick up partner's Q-x-x or J-x-x-x. Should you make an aggressive red-suit lead or fall back on a passive club? What do you think?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	33.8%	3.06
٧A	33.0%	3.09
♦ 6	33.7%	3.05
\$ 5	37.6%	3.17

The passive club lead wins, at both IMPs and match-points. Leading from a side-suit headed by a single honor is an unrewarding pastime. The singleton trump limps into second place, although we must acknowledge that our double-dummy simulations somewhat negate a real-life disadvantage of such a lead (that it may save declarer a guess in the suit).

Leading when you have good trumps

When you hold four trumps to a high honor, there is a possibility of a forcing defense. In other words, by leading a powerful side suit you may be able to shorten declarer's trumps, causing him to lose trump control. In this section we will investigate how strong your best side suit needs to be to make it a worthwhile lead in the search of a forcing defense.

Hand 8

The opponents bid $1 \triangleq -2 \triangleq -4 \triangleq$. What would you lead from: $\triangleq A 9 8 3 \quad \forall K J 9 7 2 \quad \bullet 9 4 \quad \clubsuit 10 8 ?$

First thoughts You hold four trumps to the ace, a promising holding for a forcing defense. Should you therefore lead a heart, hoping that partner will produce the ♥A or ♥Q and you can attack declarer's trumps? Let's see.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	48.2%	3.44
♥ 7	47.6%	3.41
♦ 9	53.4%	3.56
4 10	52.8%	3.55

A heart lead is a losing action in the long run. You should pick one of the minor-suit doubletons, just as you would if the trumps were nothing special.

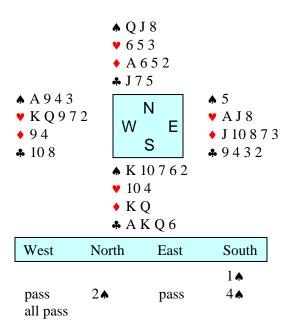
♦ A 9 8 3 **♥** K O 9 7 2 **♦** 9 4 **♣** 10 8

For a heart lead to be best, the suit quality must be improved to:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	48.3%	3.44
٧K	56.3%	3.66
♦ 9	53.5%	3.56
\$ 2	52.8%	3.56

Someone or other will be ruffing the third round of hearts, so you are happy to lead a suit headed by the K-Q.

Let's look for a deal from the simulation where a heart lead does result in a successful forcing defense:



West leads the VK and the defenders persist with hearts, declarer ruffing the third round. When declarer plays a trump to the queen, followed by the jack of trumps, West must refuse to win either of the first two rounds (since a heart continuation could then be ruffed in the dummy). If declarer plays a third trump, he will be forced again and lose control. His only alternative, to play minor-suit winners, will allow West to ruff with the \$\delta 9\$. One down.

In fact there were not so many deals in the simulation where a forcing defense was the reason why the contract went down. The ♥K lead can work well merely by setting up a heart trick before declarer can arrange any heart discards.

Hand 9

The opponents bid
$$1 \triangleq -2 \triangleq -4 \triangleq$$
. What would you lead from: $\triangleq A 6 4 3 \quad \forall A J 6 \quad \Rightarrow J 4 \quad \triangleq Q 10 8 2 ?$

First thoughts With 12 points in your own hand, you cannot expect partner to hold very much. The ◆J is a candidate, certainly, but perhaps you are tempted by a lead in one of the black suits?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΛA	60.7%	3.78
\$ 3	61.4%	3.80
٧A	46.3%	3.48
♦ J	55.3%	3.64
. 2	55.5%	3.66

The \bullet J lead is less attractive than normal when partner is weak and less likely to hold diamond honors: \bullet A (22.0%), \bullet K (27.4%), \bullet Q (34.6%). A trump lead is best and you should lead a low trump rather than the ace, just in case partner has a singleton \bullet K (a 3.0% chance).

CONCLUSIONS - Leading against 4

- Side-suit singletons are excellent leads and should nearly always be chosen. (See Chapter 5 on singleton leads.)
- Side-suit doubletons are better leads than most players realize. In particularly, a lead from two spot-cards may represent a better chance than an aggressive lead from three or four cards headed by an honor. (See Chapter 6 on doubleton leads.)
- Against one-suit auctions (such as 1 2 4 and 1 3 4), it is often better to lead passively from x-x-x or x-x-x rather than from a suit headed by one or two honors. (See Chapter 4 on comparing leads from different holdings.)
- Consider leading a trump only when the side-suit leads are unattractive. (See Chapter 11 on trump leads.)
- Leading an unsupported ace, from such as A-6–4 or A-9-8–3 is not such a bad lead as many players think. It will sometimes give a trick away, but a sight of the dummy (and partner's signal) may guide you to a promising switch or continuation.

Pick a Winner! Leading against 4.

The opponents bid to a spade game and 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 better at match-points. The simulation results are given on the next page.

(Auction is: 1 - 2 - 4)

1. • 872

♥ Q 8 6

♦ A 9 6

♣ QJ76

2. • 10 8 4

v 7 6

◆ AJ 1075

4 4 3 2

★ 6 4

♥ J 10 7 6

♦ Q J 5

♣ K Q 9 2

4. AK654

♥ Q 10 8 7

♦ J 7

♣ Q 10 2

5. **♠** 7 6

A J

◆ K 4 2 ♣ A 10 9 8 5 2

6. • 83

♥ QJ1087

♦ K Q

♣ J 10 9 2

(Auction is: 1 - 3 - 4)

7. **A** J 5 2

♥ K 7 3

◆ A 9 8 4 2

♣ A 7

8. • A 10

♥ J 8 7 6 4 3

♦ J 10 9 8

♣ A

9. • 63

♥ A 9 7 3

♦ Q J 7

♣ KJ86

10. • 2

∨ K 10 9 8

◆ AJ93

***** 8652

11. ♠ K 8

v 10 9 8 7 5

9864

♣ Q J

12. **♦** 9 8 5

v 10 8

◆ K 8 7 5

♣ A 10 5 4

Answers

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

			IMPs	MPs
(Auction is: $1 - 2 - 4$)				
1. ♠872 ♥Q86 ♦ A96 ♣QJ76	1st	^ 2	22.6%	2.83
	2nd	♣ Q	20.1%	2.76
2. • 1084 • 76 • AJ1075 • 432	1st	v 7	28.0%	2.88
	2nd	. 2	23.8%	2.81
3. ♠ 64 ♥ J 10 7 6 ♦ Q J 5 ♣ K Q 9 2	1st	^ 4	18.8%	2.72
	2nd	♦ Q	17.0%	2.60
4. ♠ K 6 5 4 ♥ Q 10 8 7 ♦ J 7 ♣ Q 10 2	1st	♦ J	25.0%	2.92
	2nd	4	23.2%	2.91
5. ♠ 76 ♥ A J ♦ K 4 2 ♣ A 10 9 8 5 2	1st	♣A	53.1%	3.64
	2nd	∀ A	50.2%	3.54
6. ♠83 ♥QJ1087 ♦ KQ ♣J1092	1st	♦K	18.0%	2.65
	2nd	♥ Q	16.4%	2.64
(Auction is: $1 - 3 - 4$)				
7. $\blacktriangle J52 \lor K73 $	1st			
	2nd	♦ A	33.0%	3.15
8. ♠ A 10 ♥ J 8 7 6 4 3 ♦ J 10 9 8 ♣ A	1st	♣A	57.5%	3.61
	2nd	♠A	43.7%	3.28
9. ♠63 ♥A973 ♦ QJ7 ♣ KJ86	1st(I)	♦ Q	15.8%	2.50
	1st(M)	A 3	14.6%	2.54
10. ♠ 2 ♥ K 10 9 8 ♦ A J 9 3 ♣ 8 6 5 2	1st	♣ 6/2	24.5%	2.76
	2nd	^ 2	22.8%	2.71
11. ♦ K 8 ♥ 10 9 8 7 5 ♦ 9 8 6 4 ♣ Q J	1st	♣ Q	15.6%	2.46
	2nd	v 10	12.3%	2.38
12. ♠ 9 8 5 ♥ 10 8 ♦ K 8 7 5 ♣ A 10 5 4	1st	v 10	20.2%	2.69
	2nd	\$ 5	18.5%	2.66

Chapter 2

Leading against a part-score

In the opening chapter we took a look at the best leads against a spade game. Now we must see if anything changes when the contract is a humble partscore. We will start by looking at the auction 1 - 2, where neither you nor your partner has seen fit to contest the auction. The dummy will usually contain only three trumps, the way players bid nowadays. Does this mean that a trump lead is more likely to be effective? The defenders will also hold more points between them than when defending a game or a slam. Perhaps this means that an attacking lead from a suit containing an honor or two becomes a better bet. We will soon find out!

Comparing leads against 2 and 4

To discover if there are any differences in lead strategy when leading against 1 - 2 rather than 1 - 2 - 4, we will run simulations of the same West hands against these two contracts.

Hand 1

```
The bidding is 1 \triangleq -2 \triangleq. What would you lead from: \triangleq 94 \implies 9842 \implies KQ1053 \implies K4?
```

First thoughts A club lead looks risky and you would expect a top diamond honor to be best. Let's see.

Beats Contract (IMPs)	Avg. Tricks (MPs)
11.0%	4.11
14.3%	4.23
13.9%	4.31
14.2%	4.15
	11.0% 14.3% 13.9%

It's a close result. At IMPs, the ◆K is edged out of the first two places. Six tricks are needed to beat the contract and you will not score many from the diamond suit. At match-points a diamond lead wins easily.

Now we will see if the situation changes against a game contract.

(1 ♠ −2 ♠ − 4♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	19.1%	2.66
♥ 8/2	21.6%	2.73
♦ K	23.0%	2.81
♣K	17.2%	2.44

The aggressive and risky club lead sinks below a trump lead into 4th place. It also trails by a big margin at match-points. Why the difference, compared with the 2 auction? It's because your partner's hand is stronger when defending the lower contract. There is more chance that he will hold a matching club honor or perhaps a high trump, allowing him to give you a club ruff. We will run our profile program to discover more about the makeup of the East hands in the two simulations.

	defending 2♠	defending 4♠
East's average HCP	11.4	8.6
East holds ♣A	42.0%	26.4%
East holds ♣Q	42.5%	39.5%

You can see why a club lead fares better against the lower contract.

Hand 2

The bidding is 1 - 2. What would you lead from:

First thoughts There is no apparent reason to lead a major suit. Do you prefer the K or the singleton A? Would your choice be affected if the contract was A instead of A?

$(1 \spadesuit - 2 \spadesuit)$	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	14.6%	4.46
v 6	25.2%	4.74
♦ A	33.4%	5.01
♣K	29.0%	4.88

The \bullet A wins well against the club sequence. Not a surprise, really, since singleton leads fare well throughout the book. Let's rerun the hand against the auction to $4 \spadesuit$:

$(1 \wedge -2 \wedge -4 \wedge)$	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	45.3%	3.41
v 6	46.0%	3.47
♦ A	62.1%	3.85
♣ K	56.8%	3.73

The ranking order of the four leads is the same but the gaps between the numbers have changed quite a bit. A heart lead is worse than it was, ending barely ahead of a trump lead.

Hand 3

The bidding is 1 - 2. What would you lead from:

First thoughts The side-suit leads are unattractive, with a club lead likely to be worst. Is this the time to lead a trump? If so, will you lead the $\triangle A$ or the $\triangle 2$? Would your choice be affected if the contract was $4 \triangle A$ instead of $2 \triangle A$?

$(1 \land -2 \land)$	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	17.3%	4.60
^ 2	20.2%	4.68
v 3	18.5%	4.67
♦ A	14.3%	4.55
♦ 6	15.1%	4.52
. 7	15.7%	4.53

A trump lead is best, but only if you lead a low trump. This is quite a bit better than starting with the A. If we look next at the side-suit leads, it is no surprise to see that leading from the queen is best, and the figures would be higher if the heart honor were the jack or the suit contained only spot-cards.

A diamond lead comes last, below a club from the king. You may need to score two or three diamond tricks to beat the lowly contract of $2 \spadesuit$ and cannot afford to waste the potential of the $\spadesuit 10$.

These are the results for this hand against the auction to $4 \clubsuit$.

(1♠-2♠-4♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	56.5%	3.66
^ 2	55.8%	3.65
v 3	53.7%	3.62
◆ A	51.4%	3.58
♦ 6	48.0%	3.48
. 7	46.3%	3.45

A trump lead is still best, but the advantage of leading low has vanished. This may be because there is more advantage in keeping control of the defense against the higher contract — making a key switch early in the play.

Look now at the two minor-suit leads. The lead from a king, has resumed its customary position in last place. When you hold 13 points and the opponents are in game, partner will not hold very much. You cannot risk losing your club trick by leading from the suit.

Hand 4

First thoughts How do you rank the three side-suit leads?

$(1 \land -2 \land)$	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	8.9%	3.96
v 6	17.2%	4.50
♦ 2	18.1%	4.55
. 3	19.0%	4.59

A gentle difference between the three side-suit leads, with the more passive leads giving the best results.

These are the numbers for this hand against the auction to 4 .

$(1 \wedge -2 \wedge -4 \wedge)$	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΑA	13.5%	2.52
v 6	38.9%	3.29
♦ 2	42.2%	3.36
. 3	43.3%	3.40

The gap between the heart lead and the two more passive leads widens a bit. This is further evidence that leading from kings and queens is less attractive against a game contract than against a part-score.

Hand 5

The bidding is 1 - 2. What would you lead from:

↑765 **♥**J3 **♦** K10 **♣** KJ8732?

First thoughts It will be surprising if a club lead does well. Which of the other three leads would you choose?

$(1 \land -2 \land)$	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	13.9%	4.32
♥ J	17.1%	4.38
♦ K	17.0%	4.30
. 7	12.9%	4.26

At IMPs, the doubleton leads come out on top, with the •K surprisingly close in second place. You may need to 'apply the dynamite' to score six tricks against a two-level contract when the opponents have a trump fit. Let's rerun the same West hand against the contract of 4.

$(1 \wedge -2 \wedge -4 \wedge)$	Beats Contract (IMPs)	Avg. Tricks (MPs)
4 5	24.2%	2.85
∀ J	23.3%	2.79
♦ K	21.4%	2.64
. 7	21.0%	2.74

The passive trump lead moves to the top of the list. Meanwhile, the \bigstar K moves downwards. Against a lowly $2 \bigstar$, the chance of finding East with the \bigstar A is a massive 47.3%. When the contract is $4 \bigstar$, this drops to 31.3%. The trump lead moves to the fore largely because the leads from side-suit honors are less attractive when partner holds fewer points.

Hand 6

The bidding is 1 - 2. What would you lead from:

A A K 9 **♥** Q 7 5 4 **♦** 6 3 2 **♣** K 8 2 ?

First thoughts It is hard to move your fingers away from the A-K combination. Lead a top trump and you will have the chance to draw two further rounds of trumps, if that seems a good idea when the dummy appears. You will also avoid having to commit yourself to one of the risky side-suit leads (in hearts or clubs). A neutral lead in diamonds could achieve the same effect. Let's run the simulation:

$(1 \land -2 \land)$	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΛA	20.8%	4.71
v 4	24.0%	4.78
♦ 2	24.1%	4.80
. 2	21.0%	4.66

Incredible! All three side-suit leads finish ahead of a top trump. How can that be? The profile of the simulation tells us that East will hold the $\triangle Q$ on 15.7% of the deals (and the $\triangle J$ on 16.5%). So a trump lead risks blowing a trump trick, particularly if you intend to persist with two more rounds.

The trump suit may lie like this:

Keep off the trump suit and you will score three trump tricks. The same is true if you swap the $\blacktriangle J$ and $\blacktriangle 10$.

Let's see if the situation changes when the contract is 4.

(1 ♠ -2 ♠ -4 ♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	54.7%	3.62
v 4	53.7%	3.63
♦ 6/3/2	55.4%	3.67
. 2	46.9%	3.46

The trump lead moves from 4th place to 2nd. That's because your partner now has less chance of holding a trump honor ($\clubsuit Q$: 6.4%, $\clubsuit J$: 12.5%, $\clubsuit 10$: 13.5%). A top trump is less likely to cost a trick. Also leads from the $\blacktriangledown Q$ or $\clubsuit K$ are less likely to hit a useful matching honor in partner's hand.

Comparing leads against 3♠ and 4♠

Next we will look at the situation where the responder has shown a sound raise to 3, by the partnership's chosen method. The opener has declined to bid game. Typically the opener will hold around 11-13 points and a 5-card trump suit; the responder will hold around 9-11 points and 4-card support.

We will show the auction as 1 - 3, where 3 is a sound game-try raise. Those pairs who use 3 as a pre-emptive raise would have bid differently – perhaps 1 - 3, where 3, where 3 is a Bergen raise of the spades.

To discover if there are any differences in lead strategy when leading against 1 - 3 rather than 1 - 3 - 4, we will run simulations of the same West hands against these two contracts.

Hand 7

The bidding is 1 - 3 (sound raise). What would you lead from:

A A 9 6 4 **V** K 7 5 3 **♦** 6 4 **A** J 7 4 ?

First thoughts Leading from the ♥K would be a wild shot. Which other lead do you fancy?

(1♠-3♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	18.9%	3.83
v 3	14.9%	3.68
♦ 6	25.0%	3.94
. 4	18.3%	3.79

It's an easy win for the diamond doubleton. Doubleton leads have been faring well, much to the surprise of many. Here you have the bonus of a high trump, which will give you a second chance of obtaining a diamond ruff.

Now we rerun the simulation with the auction to $4 \triangle$:

(1 \(-3 \) \(-4 \)	Beats Contract (IMPs)	Avg. Tricks (MPs)
4 4	22.9%	2.86
v 3	16.9%	2.67
♦ 6	24.1%	2.87
. 4	19.4%	2.77

The doubleton lead still wins, but the margins are much less than when defending against $3 \clubsuit$. A diamond was 6.1% ahead of a trump lead before; now it is only 1.2% ahead. Partner is less likely to hold diamond honors when South has the extra strength to bid $4 \clubsuit$.

Hand 8

The bidding is 1 - 3 (sound raise). What would you lead from: 485 A1098 A73 J52?

First thoughts None of the three side-suit leads look appealing. Perhaps this is the moment for a trump lead. What do you think?

(1♠-3♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
♦ 8/5	15.1%	3.65
♥A	17.7%	3.76
♦ A	19.0%	3.78
. 2	19.8%	3.73

Not for the first time, we see a trump lead performing poorly — bottom of the pile here. It's a safe lead, because declarer is expected to have a 5–4 fit and would doubtless guess the trump position anyway if East holds $ext{$\triangle Q$-x.}$ With four trumps in the dummy, however, it is unlikely to have any constructive ruff-preventing effect.

Let's see if the results differ when the contract is $4 \triangle$:

(1 ♠ -3 ♠ -4 ♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	20.3%	2.79
♥ A	24.3%	2.96
♦ A	25.2%	2.97
. 2	22.5%	2.83

The trump lead is still last but the two ace leads overtake the more passive club lead.

We noted in our previous book, *Winning Notrump Leads*, that ace leads may be slightly over-rated by our double-dummy methodology. That's because they allow the defender to hold the lead and make the best switch or continuation, one that may not be so easy to find for a real-life defender. The presence of the ♥10-9 makes the ♥A slightly less attractive than the ◆A. (Hold off the heart lead and your side might score an extra heart trick.)

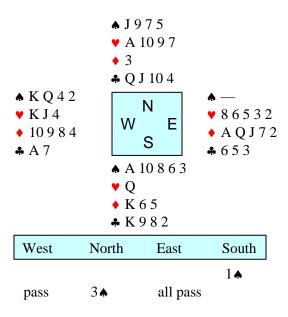
Hand 9

The bidding is
$$1 \triangleq -3 \triangleq$$
 (sound raise). What would you lead from: $\triangleq K Q 4 2 \vee K J 4 \triangleq 10984 \triangleq A 7$?

First thoughts Which minor-suit lead catches your eye?

(1♠-3♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	17.8%	3.71
v 4	21.0%	3.77
♦ 10	23.3%	3.91
♣A	31.4%	4.05

It's an easy win for the doubleton ace, at both forms of the game. The chance of a ruff is enhanced by the holding in trumps, which may give you a double chance. That's what happens on this deal from the simulation:



You play ace and another club. When you gain the lead in trumps, you will cross to partner's ace of diamonds for a club ruff. Declarer loses two trumps, two minor-suit aces and a club ruff.

Let's see if the assessment changes when the contract is 4.

(1 ♠ -3 ♠ -4 ♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	28.9%	3.10
v 4	31.5%	3.17
♦ 10	38.8%	3.33
♣A	43.2%	3.46

The gap between the diamond and the club lead closes from 8.1% to 4.4%, despite the prospects of beating the contract being so much higher. There is less urgency to seek a club ruff because the three likely black-suit tricks will beat the contract if you also score a heart trick.

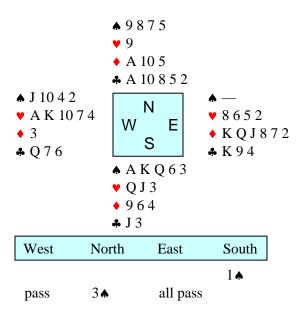
Hand 10

First thoughts This time you have two gold-plated leads: an ace-king combination and a singleton. How do you compare them?

(1♠–3♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠J	33.9%	4.13
♥A/K	50.5%	4.52
♦ 3	55.6%	4.61
. 6	40.8%	4.30

The singleton wins. Why is that? We will take a look into the simulation and look for some deals where the singleton lead will beat the contract and a top heart will not. There are some deals where partner has the ◆A and you can take one diamond ruff, return to the ♥Q and score another ruff or a trump promotion. This may look like a double-dummy defense but our profile reveals that partner has a 46.6% chance of holding the ♥Q. He has a 40.6% chance of holding the ♣A. Suppose he wins the first trick with the ◆A and returns a suit-preference diamond that does not clearly suggest a club entry. Your best chance of beating the contract may then be to underlead the heart honors.

Here is an entertaining deal where a diamond lead gains in a different way:



If you lead the \bullet 3, declarer is sunk. With two diamond tricks established against him, he cannot escape the loss of one trump, one heart, two diamonds and a club.

Now see what happens if West leads the $\bigvee K$ instead, switching to a diamond. Declarer wins with the $\bigvee A$, crosses to the trump ace and leads the $\bigvee Q$, covered and ruffed. A trump to the king allows him to discard a diamond from dummy on the established $\bigvee J$. When he leads a diamond to the bare 10, West cannot gain by ruffing a loser from his $\bigwedge J$ -10. He discards a heart and East wins the trick.

East may now try a spectacular play, a Deschapelles Coup, leading the *K. If declarer makes the mistake of winning with dummy's *A, West will win the next club with the *Q and remove dummy's last trump before declarer can ruff his diamond loser. Declarer foils this bright defense by ducking the first round of clubs. He can then win the next club with the ace and reach his hand with a club ruff to lead the •7, ruffing with the *9 if West opts not to ruff from his natural trump trick. (If West chose to discard a club on the second diamond, the *10 will be good on the third round and declarer can discard his last diamond.)

Back to business. Let's see if the opening lead situation changes when the contract is $4 \spadesuit$.

(1 ♠ -3 ♠ -4 ♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
۸J	32.3%	3.01
♥A/K	47.8%	3.44
• 3	51.0%	3.49
* 6	40.9%	3.22

No, it's just the same. The singleton diamond is best, ahead of the feted ace-king combination.

Hand 11

The bidding is 1 - 3 (sound raise). What would you lead from:

♦853 ♥J1098543 ◆2 **♣**AQ?

First thoughts You have a sequence in hearts but this may well be a false beacon. There is a big chance that declarer or the dummy will be very short in hearts. We would lead the singleton ◆2. Is that your choice?

(1♠-3♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	18.6%	3.68
∀ J	29.3%	3.97
♦ 2	42.4%	4.25
♣ A	46.8%	4.35

This is a shock result with a worthwhile advantage for the \$A lead! How can that be? A profile of this simulation showed that East would hold the \$K with the amazingly high frequency of 49.5%. A club lead might well then assist the defenders in scoring three club tricks. If East's clubs were headed by the K-J, he might be able to overtake your \$Q\$ and cash another club, allowing you to discard your singleton diamond. A diamond ruff would follow.

Why is East so likely to hold the **&**K? He will hold an average of 11.7 points and is known to hold at most one spade. The opponents will therefore hold most of the spade points and correspondingly fewer points in each of the side suits. North holds the **&**K on 24.0% of the deals and a club lead may work well then, too.

Let's rerun the simulation against 4:

(1 ♠ -3 ♠ -4 ♠)	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	17.0%	2.64
∀ J	22.4%	2.81
♦ 2	34.5%	3.03
♣ A	30.1%	2.94

There is a net 8.8% shift between the minor-suit leads, bringing the singleton diamond into its expected first place. The East hand will be weaker against this higher contract and less likely to contain the *K.

	defending 3♠	defending 4♠
East's average HCP	11.7	9.5
East holds ♣ K	49.5%	36.9%
South holds ♣K	26.5%	38.3%

This explains why the A lead becomes less effective against 4.

CONCLUSIONS - Leading against a part-score

- Consider leading from a queen against a part-score. It is less attractive against a sound auction to a game contract.
- A trump lead is often the worst of the four possible leads.
- Side-suit singleton leads are a gift from above and should nearly always be chosen. This may be true even when you hold an A-K combination in a different suit.
- Doubleton spot-card leads such as 8-3 work well, much better than most people think.
- Consider leading from A-x and Q-x against a part-score. Such leads are less attractive against sound auctions to game.

Pick a Winner! Leading against a part-score

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 overleaf.

(Auction is: 1 - 2)

- 1. 652
 - **9** 9 3 2
 - ◆ A Q J 10 2
 - ♣ Q J
- 2. **A** J 5 3
 - A J 6 5 3
 - ◆ K Q 10 7
 - **.** 7

- 3. 943
 - ♥ Q72
 - ♦ K 10 5
 - ♣ AJ64

- 4. A J 6 2
 - **v** 10 7
 - ♦ A 5 2
 - ♣ J 8 6 2
- 5. **♠** 3 2
 - ▼ K Q 7 4
 - ♦ K Q 9 4
 - **♣** J 7 6
- 6. 10 7 5
 - ▼ KJ83
 - ♦ K 10 7 5
 - ***** 83

(Auction is: 1 - 3, where the response shows a sound raise)

- 7. K 10
 - **v** 10 3
 - ◆ J 10 6 5 4
 - ♣ A Q 8 3
- 8. 10 6
 - **∨** A 5
 - 985432
 - ♣ A Q 7
- 9. ♠ Q 8
 - ♥ A 8 7 6 2
 - A 10 4
 - **4** 9 5 3

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

Answers

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

				IMPs	MPs
(Au	ction is: $1 - 2 $				
1.	♦ 652 ♥ 932 ♦ A Q J 102 ♣ Q J	1st	♣ Q	14.2%	4.21
		2nd	^ 2	12.8%	4.10
2.	♦ J 5 3 ♥ A J 6 5 3 ♦ K Q 10 7 ♣ 7	1st	. 7	35.5%	5.06
		2nd	♦ K	28.3%	4.88
3.	♦ 943 ♥ Q72 ♦ K105 ♣ AJ64	1st	A 3	16.6%	4.44
		2nd	v 2	14.1%	4.33
4.	♦ AJ62 ♥ 107 ♦ A52 ♣ J862	1st	v 10	46.5%	5.39
		2nd	. 2	40.0%	5.25
5.	♦ 32 ♥ KQ74 ♦ KQ94 ♣ J76	1st	A 3	9.9%	4.13
		2nd	♦ K	7.7%	4.09
6.	♦ 1075 ♥ KJ83 ♦ K1075 ♣ 83	1st	. 8	22.0%	4.58
		2nd	♦ 5	18.2%	4.47
•	ection is: $1 - 3 $, where the response show			*	
7.	♦ K 10 ♥ 10 3 ♦ J 10 6 5 4 ♣ A Q 8 3	1st		18.3%	
		2nd	♦ J	15.8%	
8.	♦ 106 ♥ A5 ♦ 985432 ♣ AQ7	1st		30.2%	
		2nd		24.3%	
9.	♦ Q 8 ♥ A 8 7 6 2 ♦ A 10 4 ♣ 9 5 3	1st		12.4%	
		2nd	♣ 5/3	10.3%	3.32
10.	♦ A 8 2 ♥ J 10 6 2 ♦ K Q 10 2 ♣ 10 2	1st	♣ 10	13.7%	3.61
		2nd	♦ K	10.9%	3.59
11.	♦ J ♥ J 8 4 3 ♦ K 2 ♣ A 8 7 5 4 2	1st	♣A	26.3%	3.89
		2nd	♦ K	23.1%	3.66
12.	♦ 3 ♥ K 10 5 ♦ A 6 4 3 2 ♣ J 10 6 2	1st	♣ J	19.7%	3.76
		2nd	♦ A	19.4%	3.72

Chapter 3

Leading after a competitive part-score auction

Auctions can unwind in many splendid ways and in this book we will look at those that arise most frequently. In this particular chapter we will consider the situation where both sides have found a fit and the bidding comes to rest in a part-score. On lead, you will have various options – to lead the partnership's suit, a trump or one of the unbid suits. Let's see what types of leads work best.

Auction is
$$1 \spadesuit - (2 \checkmark) - 2 \spadesuit - (3 \checkmark) - 3 \spadesuit$$

Your right-hand opponent opens 1 . You overcall in hearts and push them to 3\(\text{\text{\$\lambda\$}}\), which is doubtless one trick higher than they would like to be. That's because South's 3 is not a game-try; he would make a competitive double to invite game. You can expect the dummy to hold three trumps more often than four.

Hand 1

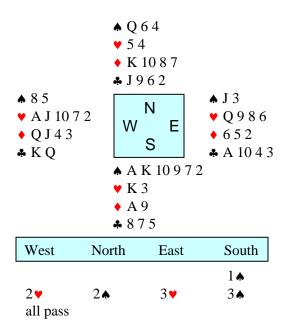
The bidding is
$$1 - (2 \lor) - 2 - (3 \lor) - 3 \spadesuit$$
. What would you lead from: $4 \times 5 \lor A \cup 1072 \lor Q \cup 43 \lor K \cup 9$?

First thoughts Partner has raised the hearts but does that make the ♥A a good lead? The *K could well be right. Alternatively a trump might cut down ruffs, since you are expecting dummy to hold only three trumps.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	20.9%	3.75
٧A	16.7%	3.69
♦ Q	19.6%	3.69
♣ K	24.4%	3.84

So, it is not a good idea to lead the ace of your bid suit, just because partner has given you a single raise. A profile of the simulation shows that opposite this West hand East will hold the \checkmark K only 36% of the time. Even when he does hold that card, there is no reason to expect that a heart lead will be needed. As you see, it is the worst of all the leads, with the \clubsuit K well to the fore.

Here, freshly plucked from the simulation, is a difficult defense that requires the *K lead:



West leads the &K, winning the first trick, and continues with the &Q. Now East has to play well. The first step is to realize that the contract is not likely to go down unless West is leading from a doubleton. Declarer is surely marked with the A, so the defense will probably need two hearts, two club tricks and a club ruff.

East must therefore overtake the \$\times Q\$ with the \$\times A\$. Giving partner an immediate club ruff is no good; West cannot play hearts from his side and declarer will have a discard on the \$\times J\$. Instead East leads the \$\vec{v}\$9. If declarer plays low, East will deliver the club ruff. If declarer covers, which is more likely, West will win with the \$\vec{v}\$A and cross to the \$\vec{v}\$Q to receive his club ruff. A defense worthy of a few emails to your bridge friends!

Hand 2

First thoughts A diamond lead is a non-starter, but it is possible that any of the other three leads might work OK. What do you think?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	28.7%	4.01
٧A	38.6%	4.26
♦ 4	32.8%	4.10
. 9	43.7%	4.33

In fact it is the trump lead that fares worst. Perhaps the presence of the 10 gives you a chance of a second trump trick. A club lead comes top — no surprise, since doubleton leads have been doing well throughout the book. As for the ♥A, leading an unsupported ace from a 6-card suit is less likely to prove expensive than leading one from a 5-card suit.

Hand 3

First thoughts Uninspiring leads in all four suits. Which will you choose?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠J	35.9%	4.17
♥A	29.4%	4.08
♦ 2	40.2%	4.26
♣ A	35.4%	4.18

Once again, the lead of the suit that has been bid and raised is the worst available. North-South will hold many more points than East and the chance of East holding the **V**K is only 35.8%.

The diamond lead is the best. There is no need to fear leading away from a jack. The dangers of doing so are exaggerated; leads from unsupported kings and queens are far more likely to give away a trick.

Hand 4

First thoughts How would you rank the three side-suit leads? In particular, is it better to lead from the heart sequence or to reach for the singleton diamond?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	11.1%	3.54
♥ Q	26.3%	3.87
♦ J	34.3%	4.11
\$ 8/4/3	27.3%	3.87

Side-suit singleton leads have been red-hot in every chapter and do not lose any temperature here. The heart sequence may look pretty but partner has at least three hearts and there is a fair chance that declarer will hold a singleton in one hand or the other. Even a club lead edges in front of the heart sequence.

Hand 5

The bidding is
$$1 - (2 \lor) - 2 - (3 \lor) - 3 \land$$
. What would you lead from: $\land K \ 8 \ 7 \lor A \ J \ 8 \ 7 \ 4 \ 3 \lor 6 \ 5 \lor A \ 3 \ ?$

First thoughts Will you cash the ♥A? Perhaps the prospects for a doubleton lead are enhanced by your control in the trump suit.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 7	32.4%	4.13
٧A	47.0%	4.41
♦ 6	48.0%	4.45
♣A	51.9%	4.54

The doubleton ace scoops the pool. As is often the case, the lead of an ace may allow you to back more than one horse as the eventual winner. If the omens look bad, once the dummy appears and you see your partner's signal, you will have the opportunity to switch elsewhere.

Auction is $1 \checkmark -(dble) -2 \checkmark -3 \checkmark -3 \checkmark$

Next we look at an auction where you have made a take-out double and partner's diamond response has pushed the opponents to 3. Since partner had a responsive double available, you can expect him to hold at least five diamonds. What effect will this have on the prospects for a diamond lead?

Hand 6

First thoughts Partner has responded in diamonds. Does that make the • A a good lead? A singleton trump is not normally inviting, but after your double declarer can probably guess the trump position. Finally, you have the safe lead in clubs to consider.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΛA	39.8%	4.26
v 7	38.0%	4.15
♦ A	45.3%	4.37
. 2	47.1%	4.45

It's a win for the passive club lead. The fact that partner has bid diamonds puts a diamond lead ahead of a spade lead from the same combination.

Hand 7

The bidding is
$$1 \checkmark -(dble) - 2 \checkmark -(3 \checkmark) - 3 \checkmark$$
. What would you lead from: $\bigstar K Q 7 2 \checkmark 9 \spadesuit Q 6 2 \clubsuit A Q 10 6 5 ?$

First thoughts A club lead is unattractive, but in a multi-table event you might expect leads from any of the three other suits. What is your choice?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
٨K	43.5%	4.35
y 9	47.9%	4.45
♦ 2	48.2%	4.48
♣ A	38.1%	4.24

The singleton trump lead is surprisingly competitive but the diamond lead is just ahead. It is worth remembering that leading from a KQxx combination is not such a sound proposition as it may seem. It will often give a trick away.

Hand 8

The bidding is
$$1 \checkmark -(\text{dble}) - 2 \checkmark -(3 \checkmark) - 3 \checkmark$$
. What would you lead from:
 $\bigstar \text{ K 9 6 3 } \checkmark \text{ 9 7 } \bigstar \text{ A 8 } \bigstar \text{ K O 10 5 4 } ?$

First thoughts There is no reason to lead a spade, surely. Which of the other three leads do you like best?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	25.3%	3.87
♥ 7	29.2%	4.00
♦ A	29.1%	4.03
♣K	32.6%	4.10

The club lead is best, with the two red-suit leads in joint second place. On Hand 7 the lead from a K-Q was not favored. Here the fifth card reduces the risk of giving away a trick, as does the presence of the \$10.

Hand 9

The bidding is
$$1 \checkmark -(\text{dble}) - 2 \checkmark -(3 \checkmark) - 3 \checkmark$$
. What would you lead from: $\bigstar \text{ K Q 8 4} \checkmark \text{ 8 2} \checkmark \text{ K Q 5} \bigstar \text{ K Q 8 4} ?$

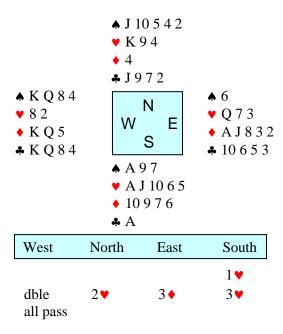
First thoughts We would have led the ◆K. Is any other lead better?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
٨K	19.3%	3.74
v 2	28.9%	4.04
♦ K	27.7%	4.04
♣ K	20.4%	3.84

This time a trump lead is placed ahead of the diamond. The black-suit holdings make it unlikely that declarer will be able to ditch one or more diamond losers in the absence of a diamond lead. Meanwhile, a trump lead may prevent a ruff in a dummy that is likely to hold only three trumps. As

you see, leading from a black suit is a poor idea, despite the presence of touching honors.

Let's look in the simulation for a deal where a trump lead will work well.



Suppose you start with the \bullet K, switching to a trump. The \checkmark 9 is played from dummy and East allows this to win. Declarer plays the A, diamond ruff, club ruff, diamond ruff and a club ruff with the ♥10. He then cashes the ♠A and exits, certain to score the ♥A-J, which will bring his total to nine tricks. If instead you lead a trump, you kill one of the diamond ruffs and beat the contract.

Hand 10

The bidding is
$$1 \checkmark -(\text{dble}) - 2 \checkmark -(3 \checkmark) - 3 \checkmark$$
. What would you lead from: $\checkmark 1743 \checkmark 109 \checkmark AQJ8 \checkmark A94?$

First thoughts A club lead looks no good but we will believe it if any of the other three leads heads the table. What is your best guess?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	21.8%	3.74
v 10	16.9%	3.64
♦ A	16.8%	3.77
♣A	18.2%	3.69

Are you surprised that a low spade is the winner (at IMPs, anyway)? We have noted elsewhere that leading from a king is more dangerous than leading from a queen. Leading from a jack is relatively safe, similar to a lead from spot-cards. You will often hear players saying how awful it is to lead from a jack, but that is not what the simulations tell us.

At match-points, as you see, the ◆A lead comes into the reckoning.

CONCLUSIONS

Leading against competitive part-score

- Do not lead from the suit that you have bid and has been raised unless it is headed by at least two touching honors. You should not assume that partner will hold a high honor because he has raised you.
- The best lead will often be the shorter of the two unbid suits.
- Singleton leads are splendid and doubleton leads are good, even if they are headed by an honor (except for the king).
- A trump lead is likely to be best only when the leads in the unbid sidesuits are from unattractive holdings.

Pick a Winner!

Leading after a competitive part-score auction

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 overleaf.

Auction is $1 - (2 \lor) - 2 - (3 \lor) - 3 \spadesuit$

- 1. ♠ Q 9 2
 - ▼ K J 10 8 7 2
 ▼ A Q J 6 4 2
 ▼ A J 8 7 4 3
 - A 7
 - **♣** K 9
- - K 2
 - **♣** 987
- 2. J 4 3. K 8 7

 - **♦** 65
 - ♣ A 3

- 4. ♠ Q

 - ◆ AJ3
 - ***** 873
- 5. ♠ A 6

 - **♦** 4 3
 - **♣** J 10 5
- 6. **♦** J
 - A 10 7 6 5 4
 - ♦ K 8 2
 - ♣ A J 5

Auction is: $1 \checkmark -(dble) - 2 \checkmark -(3 \checkmark) - 3 \checkmark$

- 7. AAJ82
 - **v** 8 2
 - A 5 2
 - **♣** Q 9 6 4
- 8. ♠ Q J 5
- ↓ Q ,♦ A 10 5
 - ♣ A 6 5 4 3
- 9. AQ954
 - **♥** A 8
 - ♦ AJ96
- **♣** O 10 6

- - **v** 7 2
 - ♦ K 9
- 10. ♠ K Q 8 2 11. ♠ J 10 7 4
 - **♥** A 2
 - **♦** 7 5
 - ***** K J 10 9 6 ***** K Q 9 7 4 ***** A 7 4
- 12. AQJ92
 - A 6
 - ♦ QJ92

Answers

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

			IMPs MPs
Auction is $1 (2) -2 (3) -3 $			
1. ♠ Q 9 2 ♥ K J 10 8 7 2 ♦ A 7 ♣ K 9	1st	♦ A	32.9% 4.14
	2nd	♥ J	29.6% 4.06
2. ♠ J 4 ♥ A Q J 6 4 2 ♦ K 2 ♣ 9 8 7	1st(I)	♦ K	16.5% 3.30
	1st(M)	. 7	15.8% 3.49
3. ♠ K 8 7 ♥ A J 8 7 4 3 ♦ 6 5 ♣ A 3	1st	♣A	51.9% 4.54
	2nd	♦ 6	48.0% 4.45
4. ♠ Q ♥ A Q 9 4 3 2 ♦ A J 3 ♣ 8 7 3	1st	4 3	36.0% 4.07
	2nd	٧A	32.6% 4.06
5. ♠ A 6 ♥ A Q J 7 6 2 ♦ 4 3 ♣ J 10 5	1st	♦ 4	27.5% 3.91
	2nd	♣ J	25.3% 3.89
6. AJ V A 10 7 6 5 4 K 8 2 AJ 5	1st	٧A	57.1% 4.67
	2nd	۸J	53.6% 4.56
Auction is: $1 \checkmark -(dble) - 2 \checkmark -(3 \checkmark) - 3 \checkmark$			
7. ♠ AJ82 ♥ 82 ♦ A52 ♣ Q964	1st	. 4	30.7% 4.04
	2nd	v 2	30.2% 4.03
8. • QJ5 • Q7 • A 105 • A 6543	1st	♣A	
	2nd	♠Q	23.8% 3.65
9. ♠ Q 9 5 4 ♥ A 8 ♦ A J 9 6 ♣ Q 10 6	1st	^ 4	33.9% 4.08
	2nd	♦A	
10. ♠ K Q 8 2 ♥ 7 2 ♦ K 9 ♣ K J 10 9 6	1st	v 2	29.5% 4.01
	2nd	♦ K	24.8% 3.85
11. ♦ J 10 7 4 ♥ A 2 ♦ 7 5 ♣ K Q 9 7 4	1st	♦ 7	21.3% 3.86
	2nd		19.3% 3.81
12. ♠ Q J 9 2 ♥ A 6 ♦ Q J 9 2 ♣ A 7 4	1st	♦ Q	47.0% 4.46
	2nd	♠Q	44.9% 4.00

Chapter 4

Comparison of different holdings

In this chapter we will look at the situation where you have a choice of leads from holdings of three cards or more. Which suit should you choose? For example, is it better to lead from a king, a queen or a jack? How do leads from the K-Q, K-J and K-10 compare? Is it right to choose a passive lead from low cards (or, much the same, from a jack)? Perhaps it is better to be more aggressive, risking a lead from a king or queen? These are the sort of questions that we will seek to answer.

What difference does the second-highest card make?

Hand 1

First thoughts Of the side-suit leads, the one from the K-Q combination looks safest. Maybe it is better to avoid them all and lead the singleton trump? What do you think?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 9	40.8%	3.29
♥ K	38.7%	3.25
v 2	32.8%	3.05
♦ 5	30.6%	3.01
. 2	35.9%	3.16

The table gives us some useful results. The ♥K, from touching honors, is the best of the three leads from a king. Also, it is much better to lead from K-x-x-x than from K-J-x-x. Why should this be? It is because you

are leading away from the jack as well as from the king. This introduces a second risk to the lead. Look at these two positions:

Lead the \bullet 5 in (1) and declarer scores three diamond tricks. Lead it in (2) and declarer scores a diamond trick that he could not make under his own steam. In both cases it costs you to lead away from the \bullet J.

Hand 2

The bidding is
$$1 - (dble) - 2 - (pass) - 4$$
. What would you lead from:

First thoughts Here is another triple comparison. Note that it is best to compare holdings within the compass of a single West hand, against a given sample of 5000 deals. If instead you freeze three suits and compare the results of three simulations where you vary the fourth suit, you will be using three different samples. Also, the contents of the samples will vary because of the differing cards in the suit being altered. (For example, if you replace a queen with a king in the West hand, the average point-count of the 5000 East hands will be around one point less.)

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 6	52.9%	3.64
∀ J	43.7%	3.38
♦ 5	43.6%	3.38
4 4	45.5%	3.43

The trump lead is best but that is not the purpose of this run. When we combine these results with those from the previous hand we see that the ranking order is:

Similar runs to test queen-high combinations showed:

Comparison of different holdings

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The differences between the leads are relatively small, as you see from our tables. The best second card to have is a touching card; the worst is the card two ranks below.

What difference does the third-highest card make?

It is fairly obvious that a K-Q-J combination represents a stronger lead than one from K-Q-10. We will take a quick look at how much better it is.

Hand 3

The bidding is
$$1 - (dble) - 2 - (pass) - 4$$
. What would you lead from: $7 \vee KQJ4 \wedge KQ106 \wedge KQ75$?

First thoughts If you led a diamond or a club, when you had that heart suit available, the opponents might give you a strange look afterwards. Yes, but what are the numbers?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 7	35.4%	3.22
٧K	34.4%	3.17
♦ K	31.1%	3.09
♣ K	26.8%	2.96

We see the expected drop in three side-suit 'Beats' figures as the third card is weakened.

Normally we would be suspicious of a high rating for a singleton trump, because the double-dummy nature of our simulations disguises the fact that a non-trump lead might allow a real-life declarer to misguess in trumps. After West's take-out double, however, there is a good chance that declarer would guess well when missing a trump honor or two.

Comparing different honor holdings

Next we will compare the leads from suits headed by a different honor. For example, is it better to lead from Q-x-x-x or J-x-x-x?

Hand 4

The bidding is
$$1 - 2 - 4$$
. What would you lead from:
 $4 \times A \times 72 \times K732 \times Q \times 65$?

First thoughts Whether or not you think that a trump lead would be best, how do you compare the three side-suit leads?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	37.3%	3.20
♥A	37.3%	3.21
v 2	33.7%	3.12
♦ 2	35.6%	3.17
4 5	38.8%	3.26

It is better to lead from a queen than a king, because there is less risk of conceding the game-going trick. Leading the ♥A does at least allow you to retain the lead and perhaps make an effective continuation when you have seen the dummy.

Hand 5

The bidding is
$$1 - 2 - 4$$
. What would you lead from:

↑7 **∨** K974 **♦** Q983 **♣**J862?

First thoughts Again, we have three side-suit leads to compare. What results are you expecting?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 7	29.4%	2.96
v 4	27.0%	2.89
♦ 3	29.1%	2.95
. 2	29.7%	2.97

Again we see that it is worst to lead from a king. Leading from a queen is slightly worse than the table shows because it may save declarer a two-way guess when he holds the ace, king, jack and 10. The lead from the jack is best.

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Hand 6

The bidding is
$$1 - 2 - 4$$
. What would you lead from:
• 6 • K J 7 4 • Q 10 7 6 • J 9 6 3 ?

First thoughts Here we have a comparison where you hold the card two away from the top honor. If the lead from K-J does not come last, we will have to go back to see what went wrong!

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 6	35.8%	3.15
v 4	29.6%	2.99
♦ 6	33.9%	3.10
. 3	34.7%	3.13

The two minor suit leads are rated together. The diamond lead is more constructive but this is cancelled out by it being more risky.

We repeated the last three simulations, giving West four trumps and reducing the side suits to three cards in length. The results were very similar. Leading from a king was worst; leading from a jack was better than leading from a queen.

Comparing leads from honors and spot-cards

Next we will see whether it is better to lead from a holding headed by one or more honors or to lead passively from three or four spot-cards.

Hand 7

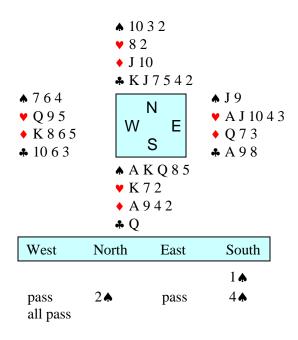
The bidding is
$$1 - 2 - 4$$
. What would you lead from: $4742 \cdot Q95 \cdot K865 \cdot 1063$?

First thoughts The red-suit leads are unattractive. You will often give away a trick when you lead from a king or queen. Either black-suit lead could be the winner and we will be interested to see how much better they are than the risky leads from an honor.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	13.7%	2.50
v 5	11.6%	2.40
♦ 5	11.9%	2.42
. 3	12.9%	2.47

The margins are not that big but a trump lead is best. If you are allergic to trump leads, as some players are, a passive club lead is better than one from a king or queen.

It's time for a brief entertainment break. Here is a deal from the simulation where only a trump lead allows the contract to be defeated,



West leads the approved trump, drawing East's 9 and declarer's ace. How should East react when South plays the \$Q, West showing count with the \$3?

The trump position is fairly clear to East. If he takes his \$A, declarer will have the chance to draw trumps with the king and 10, subsequently enjoying the remainder of the club suit. If East wins the first club and switches to a red-suit, declarer can succeed also by playing for a red-suit ruff; this will be followed by two discards on the \$K-J. The winning defense is for East to duck the \$Q. Declarer cannot then make the contract.

Comparison of different holdings

Hand 8

The bidding is
$$1 \triangleq -2 \triangleq -4 \triangleq$$
. What would you lead from:
 $4 \times 1764 \times KQ4 + Q16 \approx 763$?

First thoughts Is it better to lead from a 3-card suit headed by touching honors or from three-low? No idea, sorry! We will have to rely on a simulation:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	22.9%	2.86
♥K	30.1%	3.03
♦ Q	31.1%	3.04
♣ 7/6/3	31.6%	3.08

A passive club lead is marginally better than leading from a 3-card touching honor combination.

Hand 9

The bidding is
$$1 \triangleq -2 \triangleq -4 \triangleq$$
. What would you lead from:
 $\triangleq A \ 8 \quad \forall A \ 9 \ 4 \ 3 \quad \Rightarrow J \ 8 \ 7 \ 3 \quad \implies 8 \ 5 \ 2 \ ?$

First thoughts How do you compare the three possible side-suit leads? Many players despise leading from a jack, but it seems from our simulations that it counts almost as a passive lead and will rarely give a trick away.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	41.8%	3.37
٧A	46.2%	3.47
♦ 3	47.1%	3.49
. 2	46.6%	3.49

Leading from jack-fourth is at least as good as leading from three-low. This confirms that general fears about leading from a jack are misconceived. Pushing out the •A will occasionally result in a heart ruff for partner. A trump lead is some way behind.

Comparing leads from different suit lengths

We will end the chapter by seeing whether it is better to lead from a longer or a shorter holding, particularly when you are making a dangerous lead from an honor.

Hand 10

First thoughts No-one likes to lead away from a K-10 combination. Here you have a gun at your head and will have to choose one of three. Which one?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
v 8	16.2%	2.46
♦ 6	18.8%	2.57
\$ 5	20.4%	2.64

The longer the suit, the less is the risk that you will give away a trick. When you lead from a 6-card suit, there is a fair chance that either declarer or the dummy will hold a singleton there.

We ran a simulation for:

With no direct risk attached to a lead from the 10, the side-suit ratings were almost identical.

Hand 11

The bidding is 1 - 2 - 4. What would you lead from: • K J • K Q 3 2 • 7 6 3 2 • 9 7 6 ?

First thoughts Which card will you extract from this hand, a heart honor or a minor-suit spot-card?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠J	8.3%	1.95
♥K	24.4%	2.92
♦ 6/2	23.4%	2.83
4 6	23.3%	2.82

When the K-Q combination lies in a 4-card suit, it is a slightly better lead than one from spot-cards. Let's see what happens when we shorten the heart holding.

The bidding is
$$1 - 2 - 4$$
. What would you lead from: $4 \times 97 \times 10^{-4}$ K Q $3 \cdot 7632 \cdot 976?$

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 7	19.3%	2.65
♥K	23.6%	2.88
♦ 6/2	24.5%	2.85
4 6	24.1%	2.83

There is now slightly more chance that the $\forall K$ lead will concede a trick to the $\forall J$ in dummy. A heart lead drops below the safe spot-card leads.

CONCLUSIONS

Comparison of leads from different holdings

- Risky leads from honor holdings become less dangerous when made from a long suit.
- Leading from J-x-x or J-x-x-x is not as bad as everyone seems to think. It is almost as safe as leading from spot-cards. It is slightly better than leading from a queen. Leading from a queen is better than leading from a king.
- Leading from K-Q-x or Q-J-x is almost as good as leading from spot-cards, and much better than leading from K-x-x or Q-x-x.
- When you are leading from four cards headed by the K-Q, the presence of the 10 (or, of course, the jack) makes a big difference to your prospects.
- Leads from a suit headed by the K-J or K-J-10 are the very worst of the leads from a king-high suit.

Pick a Winner!

Comparison of leads from different holdings

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 overleaf.

Auction is: 1 - 2 - 4 or 1 - (dble) - 2 - (pass) - 4

- 1. 6
 - **♥** KJ74
 - ◆ AJ76
 - ♣ A 9 7 3
- 2. 83
 - ♥ Q 10 2
 - A 8 4 3
 - ♣ J 8 3 2
- 3. **♠** Q J 6
 - ♥ J 5 2
 - ♦ K 8 5 2
 - ***** 875

- 4. 83
 - ♥ QJ62
 - ♦ K82
 - **♣** K Q 6 5
- *5*. **♠** 7 6
 - ♥ J 7 6 2
 - ◆ Q 6 3 2
 - ♣ K 9 8
- 6. **★** 10 7
 - **♥** K Q 9
 - ◆ 10 9 8 4
 - ♣ Q 7 6 5

Auction is: 1 - 3 - 4, or 1 - (dble) - 2NT - (pass) - 4.

- 7. 4
 - **∨** K Q 9 4
 - ♦ A 9 8 4
 - ♣ Q 7 6 3
 - **₩ Q** / 0 .
- 8. 10 5 4 2
 - **♥** KJ7
 - ♦ Q 10 6
 - **♣** J 9 5
- 9. 62
 - ♥ A J 5 3
 - ◆ 10 8 7
 - ♣ K Q 10 8

- 10. 4
 - ♥ A J 6 5 4
 - ◆ Q 8 4 2
 - ♣ Q 10 9
- 11. AK5
 - **v** 10 7 6 4
 - ♦ A 10 6 3
 - ♣ Q J 3
- 12. AKQ4
 - **v** 10 9 8 4
 - ♦ K Q 5
 - ♣ Q J 7

Answers

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

			IMPs	MPs
Auction is: $1 - 2 - 4$ or $1 - (dble) - 2 - (pa)$	ass) –4 ♠			
1. ♠6 ♥ KJ74 ♦ AJ76 ♣ A973	1st(I)	♠ 6	66.2%	3.99
	1st(M)	♣A	65.8%	4.05
2. • 83 • Q 10 2 • A 8 4 3 • J 8 3 2	1st	. 2	27.4%	2.95
	2nd	A 3	26.7%	2.92
3. ♠ Q J 6 ♥ J 5 2 ♦ K 8 5 2 ♣ 8 7 5	1st	. 5	24.1%	2.91
	2nd	v 2	24.0%	2.89
4. ♠83 ♥QJ62 ♦ K82 ♣ KQ65	1st	A 3	26.1%	2.89
	2nd	♣K	22.6%	2.80
5. ♠ 76 ♥J 762 ♦ Q 632 ♣ K 98	1st=		19.5%	2.68
		♦ 2		
6. ♠ 107 ♥ K Q 9 ♦ 10984 ♣ Q 765	1st		22.7%	
	2nd	♠ 10	22.0%	2.73
Auction is: 1 \(-3 \) \(-4 \)				
7. $\blacktriangle 4 \lor KQ94 \lor A984 \clubsuit Q763$	1st	♥ K		
	2nd	♦ A	10.9%	
8. ♠ 10 5 4 2 ♥ K J 7 ♦ Q 10 6 ♣ J 9 5	1st	^ 2	16.0%	
	2nd	4 5	13.3%	
9. ♠ 62 ♥ A J 5 3 ♦ 10 8 7 ♣ K Q 10 8	1st	♣K	16.6%	
	2nd	♦ 7	13.0%	
10. ★ 4 ♥ A J 6 5 4 ◆ Q 8 4 2 ♣ Q 10 9	1st	♦ 2	13.6%	
	2nd	\$ 10	12.9%	
11 ♠ K 5 ♥ 10 7 6 4 ♦ A 10 6 3 ♣ Q J 3	1st	♣ Q	21.5%	
	2nd	v 4	20.1%	
12. ♠ K Q 4 ♥ 10 9 8 4 ♦ K Q 5 ♣ Q J 7	1st	♦ K	16.1%	
	2nd	♣ Q	10.9%	2.44

Chapter 5

Leading a singleton

Singletons make great opening leads, as we all know, but there are still several topics to be addressed here. We will compare singleton leads with other attractive leads such as an honor sequence in a different suit. We will see if singleton leads become less attractive when the singleton is an honor. We will discover whether singleton leads in the suit bid by dummy are effective. Finally we will check whether the success rate of a singleton lead is affected by the trump holding that accompanies it.

Comparing a singleton with a lead from honors

We will start by looking at a few deals where there is at least a case for spurning the singleton lead.

Hand 1

The bidding is
$$1 - 2 - 4$$
. What would you lead from:
 $A 9 8 4 \lor K Q 9 3 \lor 5 A Q 10 6 3 ?$

First thoughts Holding four trumps to the ace, you might think of playing a forcing defense (leading a strong side suit, with the aim of shortening declarer's trumps). Should that dissuade you from the seemingly obvious singleton lead on this hand? These are the results:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	64.1%	3.88
♥K	68.8%	4.00
♦ 5	73.0%	4.13
. 3	61.9%	3.84

There is a big advantage for the diamond singleton, as we rather suspected. You may be surprised that all the numbers are so high. This is

Leading a singleton

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because all four suits will break badly for the declarer, who (on this auction) is unlikely to have any values to spare.

Hand 2

The bidding is 1 - 2 - 4. What would you lead from: $4975 \lor 0J854 \lor AK72 & 6$?

First thoughts We now place the singleton alongside that Holy Grail of opening leads, an A-K combination. Where will you put your money?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	32.3%	3.09
♥ Q	33.8%	3.16
♦ A/K	46.7%	3.52
4 6	46.8%	3.45

It looks very close at IMPs but the 46.7% for the top-diamond lead assumes the best continuation at Trick 2 (double-dummy). Since this may not be so easy to find for a flesh-and-blood bridge player the advantage for the club lead will be a little more than is shown.

Hand 3

The bidding is $1 \triangleq -2 \triangleq -4 \triangleq$. What would you lead from: $4 \pmod{7} \pmod{9} \pmod{4} \pmod{4} \pmod{10} \pmod{5}$

First thoughts We can expect the singleton heart to fare better than the jack-high club sequence. Perhaps, though, a lead of the ◆A will find partner with ruffing potential. What is your choice?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 7	27.7%	2.94
y 9	47.6%	3.48
♦ A	43.0%	3.41
♣ J	38.7%	3.27

The four possible leads are very well spaced, with the singleton \checkmark 9 at the top and the alarmingly unambitious trump lead at the bottom.

Hand 4

The bidding is
$$1 - 2 - 4$$
. What would you lead from:
 $106 \times KQJ652 \cdot 3 \cdot 9874?$

First thoughts The two black horses will be several lengths behind, no doubt. Which of the fine red beauties catches your eye?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 10	11.5%	2.32
♥K	21.1%	2.67
♦ 3	30.6%	2.83
\$ 9/8	18.8%	2.55

It's a big win for the ◆3. The heart lead flatters to deceive — a pretty sequence, yes, but declarer is likely to be short in hearts (void 10.5%, singleton 43.3%, doubleton 35.8%. Dummy may be short too (singleton 2.9%, doubleton 31.4%). A heart lead will then achieve very little.

Should I lead a singleton honor?

Is it less attractive to lead a singleton queen or jack than a spot-card singleton? Maybe, but there is no need to guess. Let's find out by running a few simulations.

Hand 5

First thoughts Swap the \$\mathbb{A}\$J into something like the \$\mathbb{A}\$5 and the card would already be on the table. Is there any reason to shy away from the singleton honor lead?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 8	40.4%	3.29
♥ J	49.6%	3.51
♦ 3	46.9%	3.44
♣ J	57.0%	3.80

The singleton lead wins by a huge margin, at both forms of the game. When we replaced the \$\ddots J\$ with the \$\ddots 5\$, the results were virtually identical.

We would like to compare all four of the picture-card singleton leads (J/Q/K/A). We can do this by fixing the other three suits and replacing the *J with a different club honor. It will not then be a simple matter of seeing whether the 'Beats Contract' figure for the club lead goes up or down. When we give the West hand a higher honor, the Beats figures for all the leads will doubtless go up. We will measure the quality of the singleton club lead by comparing its numbers with those for the rival heart lead.

Hand 6

The bidding is $1 \triangleq -2 \triangleq -4 \triangleq$. What would you lead from: $\triangleq A 9 8 \quad \forall J 10 9 5 2 \quad \blacklozenge Q 8 6 3 \quad \clubsuit Q?$

First thoughts We have swapped the ♣J for the ♣Q, leaving the other suits as they were. What difference will that make?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
∧ 8	31.7%	3.07
y J	39.3%	3.23
♦ 3	37.4%	3.18
♣ Q	46.9%	3.50

Wow, the figures have gone down instead of up! How can that be? When we add a largely unproductive point to the West hand (changing the *J to the *Q), this tends to remove a possibly productive point from the East hand. We can check this by looking at the profile for the two simulations:

	when West holds &J	when West holds ♣Q
East's point-count	9.6	8.6
East holds ♥A	32.3%	29.6%
East holds ◆A	35.5%	30.8%
East holds ♣A	29.1%	29.0%

This explains why you have less chance of beating the contract when you hold the slightly stronger hand containing the AQ instead of the AJ. Normally a stronger hand will give you a better chance. For an auction such as 1A-2A-4A the combined HCP of declarer and the dummy is in a fairly

narrow band, centered on declarer holding 16 points and North holding 7. When you give West an extra point, this tends to subtract a point from East.

Hand 7

The bidding is 1 - 2 - 4. What would you lead from:

♦ A 9 8 ♥ J 10 9 5 2 ♦ Q 8 6 3 ♣ K?

First thoughts Will the effect be the same with a singleton ♣K?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
∧ 8	30.1%	3.00
♥ J	37.0%	3.16
♦ 3	33.9%	3.09
♣ K	43.9%	3.40

The results are similar to those for the *Q but caution is called for here. Our simulations run at double-dummy, remember. The assessment for the three non-club leads do not reflect the benefit that you may end up making the *K if you refrain from leading it. A real-life declarer would not know that the *K was singleton over his *A-Q.

Hand 8

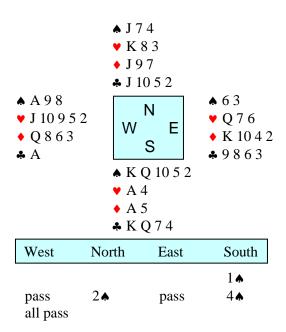
The bidding is 1 - 2 - 4. What would you lead from:

♦ A 9 8 ♥ J 10 9 5 2 ♦ Q 8 6 3 ♣ A?

First thoughts The figures will surely leap skywards when the singleton lead under consideration is the ♣A.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 8	60.2%	3.75
♥ J	54.5%	3.74
♦ 3	50.5%	3.66
♣A	71.8%	4.07

They sure do! Leading the singleton A gives you a Beats figure of 71.8% compared with 43.9% for the K. Let's see a simulation deal that illustrates the prospects of reaching partner's hand for a club ruff.



You lead the A and dummy goes down. Now you must work out how to reach partner's hand. In hearts, you will need partner to hold the ace. In diamonds, there are several chances. He could hold the A or K-10-x(-x), which would allow you to reach his hand on the second round. He might also hold a doubleton A and two trumps, allowing you to reach his hand with a third-round ruff.

Since possession of the trump ace will give you a double chance, you should switch to the $\bigstar 3$ rather than a heart. Declarer calls for dummy's $\bigstar 9$ and partner covers with the $\bigstar 10$. Declarer wins with the $\bigstar A$ and leads a low trump towards dummy.

There are two good reasons for you not to play your A immediately. Firstly, East might hold a singleton K. Secondly, you do not yet know whether to play a heart next or a diamond. Dummy's J wins and declarer plays a second trump to the king. You win with the A and must decide how to reach partner's hand. How will you know what to do?

Partner should give you a suit preference signal with his two spot-cards in the trump suit. Here he will play the $\clubsuit 3$ and then the $\clubsuit 6$ — suggesting the lower of the two red suits. You duly play a diamond to his king and a club ruff defeats the contract. If East had played the $\clubsuit 6$ followed by the $\spadesuit 3$, you would have switched to a heart, hoping to find East with the $\blacktriangledown A$.

Should I lead a singleton in dummy's suit?

We look next at whether you should lead a singleton in dummy's main suit. You will sometimes pick up a ruff, yes, but you may also assist declarer in developing the suit.

Hand 9

The bidding is
$$1 - 2 - 2 - 4$$
. What would you lead from: $\bigcirc Q \ J \ 8 \ 7 \ 5 \ 3 \ \bigcirc J \ 10 \ 6 \ 4 \ 3 \ \bigcirc J \ ?$

First thoughts We have a near certain natural trump trick. Will the *J still be the best lead?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠Q	11.8%	2.51
♥ 7/3	15.8%	2.79
♦ J	19.5%	2.87
♣ J	29.1%	3.03

Did we ever doubt it? Even though we may be ruffing from a natural trump trick, the singleton tops the table by a mile. A look into the simulation shows that West will often score two ruffs (or a ruff and a trump promotion). The low point-count increases the chance of entries to the East hand.

Hand 10

The bidding is
$$1 - 2 - 2 - 4$$
. What would you lead from:
• O 5 • A J 9 5 3 • A 6 5 4 3 • 5?

First thoughts There is a suggestion or two here that the singleton club may not be best. Firstly, we hold 11 points, so partner is not particularly likely to gain the lead. Secondly, our ace-fifth suits offer some prospect of giving partner a ruff. Which lead will you choose?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠Q	28.0%	2.98
∀ A	56.5%	3.63
♦ A	46.3%	3.48
\$ 5	43.4%	3.37

Terence Reese said memorably: 'Blind leads are for deaf players'. In other words, you need to listen to the bidding to choose the most effective opening lead. The ♥A wins easily here because there is a good chance that partner is very short in hearts. In fact, a profile of this simulation put East with one heart (30.5%) and zero hearts (1.1%). The chance of East holding the ♣A, for a quick club ruff, is only 12.9%.

Does my trump holding affect leading a singleton?

Suppose you hold only low trumps and are considering the lead of a singleton. When you hold three trumps rather than two, there is more chance of receiving an eventual ruff in the suit that you lead. Even if partner cannot win the first trick, he may gain the lead with K-x of trumps and give you a ruff then. It will also be better to hold two trumps rather than one.

Suppose instead that you hold two or three trumps headed by the ace. You know for sure that declarer cannot win your singleton lead and draw trumps immediately. That will make a singleton lead even more attractive. Let's take a look at a few such situations.

Hand 11

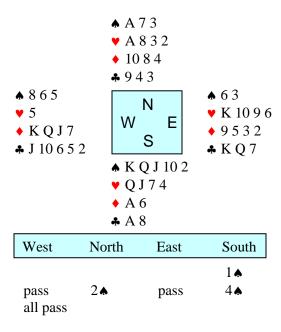
The bidding is
$$1 - 2 - 4$$
. What would you lead from:
 $865 \le 5 \le KOJ7 \le 10652$?

First thoughts It's a two-horse race between the heart singleton and the diamond sequence. Our interest will be to see what difference it makes to the result when the three low trumps are replaced (in the next hand) by three trumps to the ace.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	21.3%	2.76
v 5	37.7%	3.15
♦ K	28.5%	3.03
♣ J	24.9%	2.86

As you see, the A is not needed to bolster the prospects of the singleton heart lead. It storms to the front unaided!

Before we rerun, giving West stronger trumps, let's perform a Lucky Dip into the simulation barrel.



First we will see how declarer succeeds if the $\bigstar K$ is led. He wins with the ace and plays the king, queen and ace of trumps. Needing three tricks from the heart suit, he continues with a low heart to the queen. A heart back to dummy's ace allows him to lead a third round of hearts towards the $\blacktriangledown J$ -7.

To beat the contract West must make the recommended lead of the \checkmark 5. Declarer cannot run this or he will suffer a heart ruff and two subsequent minor-suit losers. If he rises with the \checkmark A, however, he loses one of the entries that are needed to lead towards the \checkmark Q-J-7.

Hand 12

The bidding is 1 - 2 - 4. What would you lead from: $A 7 4 \lor 5 \lor KQJ7 & J10652$?

First thoughts We will press on with our intended comparison, despite the result on Hand 11. Here we have added the ace of trumps to West's hand.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	42.0%	3.33
v 5	58.1%	3.75
♦ K	54.5%	3.61
♣ J	46.8%	3.45

All the numbers soar, with the addition of a card that represents a certain trick. Somewhat strangely, you may think, the margin between the heart and diamond leads is reduced. This must be because the addition of an ace to the West hand will cause a reduction of around 4 points to East's average strength. The chance of one or more heart ruffs is therefore reduced.

We need not concern ourselves any further with the situation. The message is loud and clear: lead the singleton even when you have a K-Q-J sequence elsewhere!

Hand 13

The bidding is $1 \triangleq -2 \triangleq -4 \triangleq$. What would you lead from: $\triangleq K Q J \implies 5 \implies K Q J 7 \implies J 10 6 5 2$?

First thoughts We will make one more change to the trump suit. With two trump tricks guaranteed here, the attraction of trying for a heart ruff or two should dry up. Let's check that.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
٨K	41.2%	3.39
v 5	37.9%	3.31
♦ K	42.2%	3.39
♣ J	37.4%	3.30

Yes, indeed. It is better to lead from one of the K-Q-J sequences, with the diamond lead slightly preferred at IMPs.

Hand 14

The bidding is 1 - (2 -) - 4. What would you lead from: $49 \times A + AJ9765 + 108543$? **First thoughts** You have only one trump now, but your singleton is an ace and leading this card will allow you to retain the lead. Will you go for it?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 9	42.6%	3.31
٧A	70.6%	4.04
♦A	61.4%	3.82
. 4	49.5%	3.55

The singleton ♥A lead is easily best. What is more, it gives you a big chance of beating the contract. This is something to bear in mind when you face the decision as to whether you should try again with 5♣ when North's 4♠ runs back to you.

CONCLUSIONS — Leading a singleton

- Side-suit singletons are excellent leads and should nearly always be chosen.
- Do not be deterred from a singleton lead because your card is an honor. Having said that, a singleton king may cost a trick in practice, particularly if you have reason to place the ace on your right.
- Side-suit singletons are usually better leads than those from honor sequences such as K-Q-J or Q-J-10.
- When your trumps represent certain tricks anyway (for example, K-Q-J), do not lead a singleton.

Pick a Winner! Leading a singleton

You are invited to judge which is the best available lead from the twelve West hands below (each containing a singleton). Note also if you think that a different lead would be best at match-points. The simulation results are given overleaf.

(Auction is: 1 - 2 - 4)

- 1. ♠ J 6
 - **y** 5
 - ◆ KQ9852
 - **♣** 7532
- 2. ♠ J 9 2
 - **∨** K 6 4 3 2
 - **•** 10
 - **♣** K Q J 8
- 4 7 5 3
 - ♥ QJ10
 - **8**
 - ♣ J 10 9 7 6 4

- 4. AK754
 - ♥ K Q J 10
 - ♦ K Q 7 5
 - **4** 4

- 5. **♦** J 9 6
 - A K 10 7 6 3
 - **•** 8
 - ♣ J 7 3
- 6. 9652
 - **♥** K Q 10 9 8
 - ◆ A 6 2
 - ♣ J

(Auction is: 1 - 2 - 2 - 4)

- 7. 853
 - **♥** A 6 4 2
 - ◆ QJ 10 8 7
 - **&** 8

- 8. Q 10 9 4
 - **∨** K 4
 - ◆ QJ10942
 - **4** 4

- 9. 84
 - **Q** 10 9 6 5 3 2
 - ♦ A 6 3
 - **.** 3

(Auction is: 1 - 2 - 2 - 4 = 0)

- 10. 5 4 3 2
 - **9**753
 - ◆ A 8 4 3
 - **♣** A

- 11. **★** K 9 8 7
 - **♥** K Q 6
 - **◆** 10 9 8 5 2
 - **\$** 5

- 12. 98752
 - **v** 7
 - ◆ AJ7632
 - **♣** J

Answers

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

	IMPs	MPs		
(Auction is: $1 - 2 - 4$)				
1. ♠J6 ♥5 ♦ KQ9852 ♣7532	1st	v 5	31.4%	2.90
	2nd	♦ K	21.8%	2.72
2. ♠J92 ♥ K6432 ♦ 10 ♣ KQJ8	1st	♦ 10	40.7%	3.39
	2nd	♣K	37.6%	3.24
3. ♠ 753 ♥ QJ10 ◆ 8 ♣ J109764	1st	♦ 8	35.6%	3.09
	2nd	♥ Q	22.9%	2.82
4. ♠ K 7 5 4 ♥ K Q J 10 ♦ K Q 7 5 ♣ 4	1st	4 4	62.3%	3.80
	2nd	♥ K	56.5%	3.73
5. ♠J96 ♥ A K 10 7 6 3 ♦ 8 ♣J7 3	1st	٧A	51.5%	3.59
	2nd	♦ 8	49.5%	3.52
6. ♦ 9 6 5 2 ♥ K Q 10 9 8 ♦ A 6 2 ♣ J	1st	♣ J	53.6%	3.64
	2nd	٧K	50.6%	3.57
(Auction is: $1 - 2 - 2 - 4$)				
7. ♠ 853 ♥ A 642 ♦ Q J 1087 ♣ 8	1st	4 8	28.2%	2.98
	2nd	♦ Q	24.5%	2.87
8. ♠ Q 10 9 4 ♥ K 4 ♦ Q J 10 9 4 2 ♣ 4	1st=	4 4	69.4%	3.90
	1st=	♦ Q	69.0%	3.89
9. • 84 • Q 10 9 6 5 3 2 • A 6 3 • 3	1st	v 10	65.8%	4.09
	2nd	4 3	62.3%	3.96
(Auction is: $1 - 2 - 2 - 4 $)				
10. ♠5 4 3 2 ♥ 9 7 5 3 ♦ A 8 4 3 ♣ A	1st	♣A		
	2nd	♦ A	40.4%	
11. \bigstar K 9 8 7 \blacktriangledown K Q 6 \bigstar 10 9 8 5 2 \bigstar 5	1st	4 5	48.9%	
	2nd		46.1%	
12. ♠ 9 8 7 5 2 ♥ 7 ♦ A J 7 6 3 2 ♣ J	1st=	♣ J	68.6%	
	1st=	♠ 9/5	68.5%	4.05

Chapter 6

Leading a doubleton

When you lead a singleton, you have two great chances of obtaining a ruff. Partner may hold the ace of the suit that you lead; he may also hold the ace or king of trumps, allowing him to win and give you a ruff. Doubleton leads offer less prospect of an early ruff. Suppose you lead from a spot-card doubleton. Once in a while, your partner may hold two quick winners in the suit (A-K, or A-Q over dummy's king) and you could then receive a third-round ruff. There are other situations that may result in an eventual ruff, but most bridge players are not very keen to lead a doubleton. One of our main conclusions in this book is that leads from a doubleton are much more successful than most players think.

Why is leading a low doubleton a good idea?

When you are declarer, you are accustomed to leading towards honors that you hope will score tricks for you. For example, you may lead from ◆8-6 in your hand towards ◆K-Q-7-2 in the dummy. In just the same way, it may pay you to lead from ◆8-6 when on lead against (say) a spade game. You hope that partner has one or more honors in the suit and that you can start the process of establishing them. This is just as important an objective as seeking a ruff in the suit.

Comparing doubleton leads from different honors

Is it better to lead a doubleton from A-x or K-x? Is a lead from Q-x more promising than one from J-x? There is no need to debate the matter. Let's run some simulations to find out.

Hand 1

```
The bidding is 1 \triangleq -3 \triangleq -4 \triangleq. What would you lead from:

4 42 \implies A2 \implies K9 \implies 1098642?
```

First thoughts Perhaps you think that leading from a doubleton honor is a risky venture and that the \$10 is the wisest first move. The present authors are not admirers of trump leads, in general, but a lead from either red-suit doubleton may turn out well. Let's see.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	18.0%	2.69
٧A	30.4%	2.99
♦ K	23.8%	2.67
4 10	20.8%	2.79

The ♥A heads the list. This is not simply because you will have a fair chance of scoring a heart ruff. We have noted before that the lead of an ace may give you the chance to switch effectively at Trick 2. The ♣10 lead — perhaps the choice of most players — is not even as good as the ◆K.

Hand 2

The bidding is
$$1 - 3 - 4$$
. What would you lead from:
• 10 8 4 • K 7 • Q 6 • K 10 7 6 3 2?

First thoughts Which doubleton do you prefer? The ♥K is more risky, since it may give declarer tricks with the ace and queen. Against that, it may result in an immediate ruff when you find partner with the ♥A.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
4	8.8%	2.24
٧K	9.8%	2.09
♦ Q	10.3%	2.22
\$ 6	8.9%	2.22

The ▼K does better than expected and (at IMPs) is not so far behind the safer ◆Q. A profile of the 5000 simulation deals shows that East will hold an average of 4.6 cards in the heart suit and these will include the ▼A 30.6% of the time. So, there is a respectable chance of a quick heart ruff.

We ran a further simulation to compare the effectiveness of a lead from \bigvee J-8 against \bigvee Q-5, finding that their prospects were virtually identical.

Hand 3

The bidding is
$$1 - 3 - 4$$
. What would you lead from: $\bigcirc Q 9 7 4$ $\bigcirc K J 10 8 4$ $\bigcirc Q 7$ $\bigcirc Q 9 6 ?$

First thoughts Neither major-suit lead is attractive, so the eye turns to the minor-suit doubletons. Do you prefer queen doubleton or two low cards?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	9.7%	2.25
♥ J	11.1%	2.43
♦ Q	15.2%	2.51
. 9	16.0%	2.56

There's not much in it but the low club doubleton is just ahead.

How does your trump holding affect a doubleton lead?

When your trumps are headed by the ace or king, you may score a ruff even if declarer can win the first or second round of the suit that you lead. When you win with your trump honor, you will have the chance to cross to partner's hand for a ruff. In this section we will investigate if doubleton leads become more attractive when you hold a top trump.

Hand 4

The bidding is
$$1 \triangleq -2 \triangleq$$
. What would you lead from:
 $\triangleq K76 \implies 52 \implies KJ982 \implies A73?$

First thoughts The minor-suit leads are dangerous and could easily misfire. Are you going to lead from the heart doubleton?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 6	19.5%	4.59
v 5	29.8%	4.87
♦ 8	20.3%	4.58
♣ A	23.4%	4.69

The doubleton lead is easily best. It has three factors in its favor. The alternative leads, from an honor, are potentially costly. Leading from a low

doubleton may assist your partner's chance of taking tricks in the suit. Finally, you may eventually score a heart ruff.

(An inspection of the simulation output revealed the very occasional deal where East held ♥A-x-x-x and would have to duck at Trick 1 to give you a third-round ruff after you won with the ♠K. Although the double-dummy nature of our runs would not reflect this, the effect would be scarcely noticeable in our table anyway.)

How much are the prospects for such a lead enhanced by your ownership of a high trump that will prevent declarer from drawing trumps immediately? Let's pull the $\bigstar K$ and rerun the simulation...

Hand 5

The bidding is 1 - 2. What would you lead from:

♦ 1076 ♥ 52 ♦ KJ982 ♣ A73?

First thoughts Obviously there is less chance of scoring a heart ruff now. Will that affect the prospects for a heart lead?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 6	18.0%	4.47
v 5	24.2%	4.65
♦ 8	16.7%	4.43
♣ A	19.3%	4.48

The magnitude of all four numbers drops when the $\bigstar K$, a likely trick, is removed. However, there is little difference in the assessment of the $\checkmark 5$ heart lead compared with the other options. Since the prospect of a heart ruff is obviously much less without the $\bigstar K$, we can conclude that seeking a ruff is not a large part of the advantage in leading a low doubleton.

Perhaps you were surprised that the overall figures did not drop *more* when the trump king was removed. Remember that the less you hold in defense, the more your partner is likely to hold. The values for the declaring side are fixed within a narrow range for this auction.

Hand 6

The bidding is 1 - 2. What would you lead from:

♦ 107 ♥ 52 **♦** KJ982 **♣** A732?

First thoughts Now we will investigate whether the number of trumps has a bearing on the prospects of leading a doubleton. With only two trumps, you will not score a delayed ruff if partner wins the second round of trumps (perhaps from AK-Q, AK-J or AK-x).

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 10	16.6%	4.40
v 5	23.8%	4.62
♦ 8	15.9%	4.39
♣ A	19.0%	4.49

There is no significant difference in the rating of the doubleton lead, confirming that the main reason for its success is not that it may result in a subsequent ruff. The results were similar when we gave West a singleton trump with one more club.

Is a doubleton the best lead from small cards?

Once you have decided to make a passive lead, is it better to lead from two low, three low or four low? Let's take a look.

Hand 7

The bidding is:
$$1 \triangleq -3 \triangleq -4 \triangleq$$
. What would you lead from: $\triangleq A \ 10 \ 6 \ 2 \quad \forall \ 8 \ 5 \ 3 \ 2 \quad \blacklozenge \ 9 \ 8 \quad \clubsuit \ 6 \ 4 \ 3$?

First thoughts Lead a trump from this hand and the men in white coats will soon be round to collect you. Which side suit is best, though?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΛA	12.4%	2.54
♥ 5/2	16.6%	2.65
♦ 9	20.9%	2.74
4 4/3	17.4%	2.67

When you are leading from spot cards, the prospects are better the shorter your holding is. A doubleton gives you some chance of a ruff, although this is not very significant. Look instead at the chance of scoring honors in partner's hand.

Suppose your partner holds K-Q-J-x in the suit that you lead. When your lead is from a doubleton, you can hope to collect two tricks in the suit. This chance is progressively less when you lead from three low cards or four low cards. If you lead from ♥ 8-5-3-2 and find partner with ♥ K-Q-J-7, declarer will hold a doubleton (maybe a singleton) in one hand or the other.

How do doubletons compare with other leads?

We have seen already that doubletons make quite promising leads — better than most people think. We will now see how they compare with other well-rated leads, such as leads from an honor sequence.

Hand 8

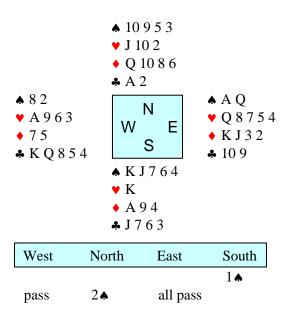
The bidding is: 1 - 2. What would you lead from:

♦82 ♥ A 9 6 3 ♦ 7 5 **♣** K Q 8 5 4?

First thoughts Leading unsupported aces is a good idea only when you hold six or more cards and there is a fair chance of finding partner with a singleton. Do you like the aggressive lead of a top club? If not, you must choose between the diamond doubleton and a trump.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	14.5%	4.31
٧A	14.5%	4.30
♦ 7	19.2%	4.46
♣K	14.5%	4.40

A diamond is best, which will not cause you to fall off your chair, followed by an IMP triple-tie for second place. Let's lower a bucket into the well and bring up a deal from the simulation:



East-West had a playable part-score in hearts and perhaps should have contested the auction. Anyway, let's follow the play in 2♠ when West makes the approved lead of the ◆7. South wins East's ◆J with the ◆A. If he leads a low trump from hand next, he will lose two trumps, three side-suit tricks and a diamond ruff. Suppose instead that he crosses to the ♣A to lead a trump from dummy. East will rise with the ♠A, cash the ◆K and deliver a diamond ruff. West has two top winners to take and a club overruff defeats the contract, the defenders scoring three trump tricks.

Hand 9

First thoughts If we've already persuaded you to look at doubleton leads in a new light, you have two to choose from here. What about the ◆A? Perhaps partner has a singleton diamond and would welcome a ruff.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
4	39.9%	3.29
y 9	42.0%	3.39
♦ A	48.0%	3.49
♣ A	47.2%	3.48

The two ace leads head the table. That's because you will have a chance to consider the matter further when dummy goes down and you see a signal from your partner. Suppose partner has a singleton diamond and the ◆A lead would bring a handsome return; you might beat the contract just as well by leading the ♣A and switching to a diamond. Suppose instead that partner holds the ♣K and a lead of the ♣A is destined to shine. If you lead the ◆A and dummy goes down with a singleton, you will have the chance to switch to clubs. This will not be the case if you start with the ♥9 instead.

Hand 10

The bidding is: 1 - 2 - 4. What would you lead from: • A 7 \checkmark J 8 7 6 4 • J 9 4 3 • K 2?

First thoughts The red suits offer a passive lead. (Remember that leading from a jack is almost as safe as leading from low cards.) How about the risky-looking ♣K lead? You do have trump control, which will give you a double chance of achieving a club ruff. Which lead will you choose?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	44.9%	3.42
v 6	49.7%	3.54
♦ 3	48.4%	3.50
♣K	38.3%	3.20

Despite the presence of the trump ace, leading the *K is easily worst. South is strong and your *K will lie over the *A 56.6% of the time.

Note that it is slightly better to lead a heart than a diamond because there is more chance of giving partner a ruff in that suit. East will hold a singleton or void heart 11.9% of the time, a singleton or void diamond only 6.0% of the time.

Hand 11

The bidding is: 1 - 2 - 4. What would you lead from: • 10 6 • Q J 10 5 3 • 10 7 • A J 9 5?

First thoughts We have a head-to-head between the diamond doubleton and the queen-high heart sequence. Suppose a bookmaker gave you a free \$50 bet on the matter. Where would you place it?

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	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 6	37.4%	3.18
♥ Q	41.2%	3.30
♦ 10	38.3%	3.21
♣A	29.4%	3.03

Most players would reach for the $\bigvee Q$ without even thinking about it. On this occasion they would be right! Low doubleton leads are good, yes, but not that good.

Does the overall strength of your hand have an effect?

There is one final question we would like to answer. The success of a lead from A-x or K-x depends on the likelihood of finding partner with a fitting honor in the suit (or perhaps a quick trump entry). Are such leads a better bet when your own hand is weak and partner has more chance of holding a few high cards? Let's see.

Hand 12

The bidding is: 1 - 3 - 4. What would you lead from: $4742 \lor 1865 + 9764 + K3$?

First thoughts We can expect fairly low Beats numbers with the hand being so weak and the opponents producing a strong auction. Does this mean that we should choose the aggressive &K lead? Even though the odds are moderate of finding partner with the &A, perhaps the prospects are so limited on a passive lead that we should take the risk?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 7/	4/2 7.5%	2.15
v 5	10.5%	2.25
♦ 7/	4 10.2%	2.18
♣K	10.7%	2.10

The *K is a good shot at IMPs; you will find East with the *A 37.0% of the time. As we might expect, it is not so good at match-points. Indeed, it's in fourth place. That's because you will often give declarer an extra overtrick when the lead misfires. We will see next what happens when the *K-3 combination lies in a stronger hand.

Hand 13

The bidding is: $1 \triangleq -3 \triangleq -4 \triangleq$. What would you lead from: $4 \times 7 \times 4 \times 2 = 100$ What would you lead from: $4 \times 7 \times 4 \times 2 = 100$ A Q J 4 $4 \times 6 \times 4 \times 3 = 100$

First thoughts We have changed the ◆9-7-6-4 to the stronger ◆A-Q-J-4. This will make a diamond lead less attractive but we are not concerned with that. We're more interested to see how the ♣K lead compares with the passive major-suit leads. Will it fall back, compared with Hand 12, because our overall strength has gone up and partner's hand is likely to be weaker?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
↑ 7/4/2	20.3%	2.71
v 5	19.4%	2.65
♦ A	14.8%	2.61
♣ K	18.8%	2.45

Indeed it does! The **&**K lead is now 1.5% worse than a passive trump lead, whereas before it was 3.2% ahead. You are stronger, so partner will be weaker. The chance of him holding the **&**A drops to 24.9%

CONCLUSIONS - Leading a doubleton

- Leads from a doubleton are much more effective than most players think.
- A lead from A-x or K-x is likely to be a better prospect when you expect (from your own weakness) that partner has a strong hand. He is then more likely to have a matching honor in the suit led.
- Aggressive leads from a doubleton honor may give you the best chance of beating a contract. They are less likely to give you a good score at matchpoints, since they may give away an unnecessary overtrick when partner holds nothing useful in the suit.
- Leads from a spot-card doubleton work well. This is mainly because you may be leading towards partner's honors in the suit. Do not be deterred from such a lead if you hold only one or two trumps.
- The prospects for a doubleton lead are not particularly enhanced when you hold the ace or king of trumps.

74 Leading a doubleton

Pick a Winner! Leading a doubleton

The bidding is a one-suit auction to 4 and you must judge which is the best opening lead from the twelve West hands below. Note also if you think a different lead would be best at match-points. The results are given overleaf.

(Auction is: 1 - 2 - 4)

- 1. 742
 - ♥ A Q 5 4
 - ♦ A 5
 - ♣ J 10 9 7
- 2. 873
 - **♥** A 3
 - ♦ Q 3
 - ♣ QJ8754
- 3. ♠ Q 5
 - **v** 8 5 2
 - ◆ AJ9865
 - ♣ Q 7

(Auction is: 1 - 2)

- 4. 874
 - **♥** K 2
 - ♦ QJ10943
 - ***** 84

- 5. ♠ A 7
 - ♥ J 9 5 2
 - **♦** J 3
 - ♣ A 7 6 3 2
- 6. 109
 - ♥ K J
 - ♦ KJ4
 - ♣ KJ8763

(Auction is: $1 \land -3 \land -4 \land$)

- 7. J 10 6
 - **♥** J 6
 - ♦ K 7
 - ♣ KJ9732
- 8. 6
 - ▼ 7 5 4 3 2◆ A 8
 - **♣** K 9 4 3 2
- 9. 73
 - AJ7652
 - Q 10
 - **♣** J 6 2

(Auction is: $1 \spadesuit - 4 \spadesuit$)

- 10. **♠** A 8
 - ♥ QJ1093
 - **♦** 10 5
 - ♣ 10984
- **▲** 10 5

11

- **v** 10 9 8 5
- QJ
- **♣** K Q 9 7 5
- 12. 4
 - **♥** A 5
 - 1098742
 - ♣ QJ53

Answers

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

			IMPs	MPs
(Auction is: $1 - 2 - 4$)				
1. ♠ 7 4 2 ♥ A Q 5 4 ♦ A 5 ♣ J 10 9 7	1st		48.2%	
	2nd		47.9%	3.47
2. ♠873 ♥ A3 ♦ Q3 ♣ QJ8754	1st		26.5%	
	2nd	♦ Q	25.8%	2.85
3. ♠ Q 5 ♥ 8 5 2 ♦ A J 9 8 6 5 ♣ Q 7	1st(I)	♣ Q	18.8%	2.55
	1st(M)	♦ A	17.9%	2.59
(Amaticalia 14 24)				
(Auction is: 1 \(\text{A} - 2 \(\text{A} \))	1-4	• 0	15 50/	1 2 1
4. ♠ 874 ♥ K 2 ♦ Q J 10 9 4 3 ♣ 8 4	1st		15.5%	
5	2nd		13.6%	
5. ♠ A 7 ♥ J 9 5 2 ♦ J 3 ♣ A 7 6 3 2	1st	♦ J	27.4%	
		♣A	26.7%	
6. ♠ 109 ♥ KJ ♦ KJ4 ♣ KJ8763	1st (I)		20.6%	
	1st(M)	♠ 10	18.9%	4.53
(Auction is: $1 \land -3 \land -4 \land$)				
7. ♠J106 ♥J6 ♦ K7 ♣ KJ9732	1st(I)	♦ K	15.4%	2.35
	1st(M)			
8. ♠ 6 ♥ 7 5 4 3 2 ◆ A 8 ♣ K 9 4 3 2	1st		19.9%	
			18.9%	
9. ♠73 ♥ A J 7 6 5 2 ♦ Q 10 ♣ J 6 2	1st (I)			
	1st(M)	_	11.2%	
	, ,			
(Auction is $1 - 4$)				
10. ♠ A 8 ♥ Q J 10 9 3 ♦ 10 5 ♣ 10 9 8 4	1st	♦ 10	40.9%	3.26
	2nd	♥ Q	37.0%	3.21
11. ♦ 105 ♥ 10985 ♦ QJ ♣ KQ975	1st	♦ Q	30.2%	2.84
	2nd	♣ K	25.8%	2.79
12. ♠ 4 ♥ A 5 ♦ 10 9 8 7 4 2 ♣ Q J 5 3	1st	♥A	41.2%	3.28
	2nd	♣ Q	39.5%	3.22

Chapter 7

Leading against game with a side suit in dummy

When dummy has shown a side suit, either by opening the bidding or responding in the suit, declarer may well be able to set up some discards. There is a presumed greater urgency for the defenders to claim whatever tricks are their due in the other two side suits. In this chapter we will investigate how the choice of opening lead is affected.

What type of opening lead should I make?

Hand 1

Your RHO opens 1♠ and you overcall 2♠. Your LHO responds 2♥ and raises the opener's 2♠ rebid to game. What would you lead from:

♦82 **♥**AK **♦**QJ10532 **♣**KJ10?

First thoughts We can surely discount a club lead. Which of the other three suits catches your eye?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	17.7%	2.70
٧A	18.5%	2.77
♦ Q	25.7%	2.93
♣ J	16.3%	2.63

Some players regard an ace-king combination as a gift from on high — one that should not be lightly cast aside when it comes to making the opening lead. Here dummy has a worthwhile heart suit and it will be declarer's job to establish it. A trump lead is rarely a wise choice, as we have seen in other chapters, and the $\diamond Q$ is an easy winner.

In which ways is a diamond lead likely to assist your cause? Partner may hold the ◆A (a 3.1% chance) or the ◆K (9.9%), allowing you to score or

establish diamond tricks. He may instead be void in diamonds (2.7%) or hold a singleton diamond (19.8%), which may mean that declarer cannot fulfill his plans without you scoring a diamond ruff or two. In addition to that, a diamond lead may dislodge an entry that would otherwise assist declarer in developing the heart suit.

Hand 2

Your RHO opens $1 \spadesuit$ and you overcall $2 \spadesuit$. Your LHO responds $2 \blacktriangledown$ and raises the opener's $2 \spadesuit$ to game. What would you lead from:

♦6 ♥87 ♦AJ10963 **♣**AJ96?

First thoughts Leading from an unsupported ace is unattractive but the two major suits have been bid against you. What is your choice?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
4 6	46.9%	3.33
v 8	48.0%	3.38
♦ A	61.6%	3.81
♣ A	53.2%	3.57

Well, it's a huge win for the ◆A at both IMPs and match-points. Presumably this is because you have a great chance of giving partner a diamond ruff or two. Let's see what information the profile has for us. East has a 2.3% chance of diamond void and an 19.2% chance of a diamond singleton. There is also a 20.4% chance that partner will hold the ◆K. On this bidding, the chance of a club singleton opposite is only 1.9%.

Hand 3

South opens 1♠. Whether or not you venture a 2♣ overcall, North responds 2♥ and raises the opener's 2♠ rebid to game. What would you lead from:

First thoughts A diamond lead is aggressive but slightly risky. If you lead the ♣A and find partner with a singleton, this may be a great start to the defense. Meanwhile, how do you assess the lead of a singleton in dummy's announced heart suit?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	40.7%	3.17
v 6	48.3%	3.34
♦ K	45.7%	3.35
♣ A	50.0%	3.47

A singleton lead rarely fails to be best. Here it is pushed into second place by the *A. If a club continuation is uninviting, once you have inspected dummy and the first trick, you will have the option to switch to the heart singleton.

Hand 4

South opens $1 \triangleq$ and you overcall $2 \triangleq$. North responds $2 \triangleq$ and raises the opener's $2 \triangleq$ rebid to game. What would you lead from:

First thoughts There is no reason to select a major-suit lead. Which of the two minor suits do you prefer? Will you hope to find partner with a singleton diamond or lead from the two low clubs?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	11.8%	2.14
v 2	10.7%	2.12
♦ A	11.5%	2.48
. 8	21.9%	2.50

At IMPs a club lead is almost twice as good as the ◆A. Your partner will hold a singleton or void diamond with frequency 15.2%, permitting a diamond ruff. Against that, South will hold the ◆K a substantial 38.3% of the time. When this is the case, you are helping him considerably by laying down your ace.

Hand 5

The bidding is 1 - 2 - 2 - 4. What would you lead from: $983 \times A982 + 53 + J1097$?

First thoughts Again it seems that you must choose one of the minors. Do you prefer the low doubleton diamond or the honor sequence in clubs?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	23.4%	2.90
٧A	22.7%	2.77
♦ 5	35.5%	3.17
♣ J	29.8%	3.10

It's a big win for the diamond doubleton, where many players would lead a club. Let's upgrade the club sequence and rerun the simulation:

♦ 983	▼ A 9 8 2	♦ 53	. Q	J 10 7	

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	20.6%	2.78
٧A	16.7%	2.56
♦ 5	29.8%	3.01
♣ Q	25.6%	2.98

The diamond doubleton still wins. You may regard it as a paradox that the numbers dip when the West hand has stronger clubs. However, the other three hands in the simulation will adjust accordingly. The North-South hands are now more likely to contain club shortness.

We will improve the club suit one more time:

♦ 983	♥ A 9 8 2	♦ 53	♣ K Q J 7

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	19.4%	2.71
٧A	12.3%	2.49
♦ 5	28.5%	2.99
♣ K	30.2%	3.02

The diamond doubleton battles bravely but now has to concede defeat.

Hand 6

South opens $1 \spadesuit$. Over your pass, $2 \spadesuit$ or $3 \spadesuit$, North responds in hearts and raises the opener's spade rebid to game. What would you lead from:

First thoughts If you would lead one of the majors, you have our sympathy. Meanwhile, which minor suit do you prefer?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	5.8%	2.03
♥ Q	5.3%	1.99
♦ K	15.0%	2.39
. 3	22.9%	2.61

The solidity of the diamonds is a mirage, since declarer is likely to hold the •A and may well be able to ruff the second round in one hand or another. It is another convincing win for the singleton lead.

Should I lead differently at match-points?

For most of the West hands in this book, the best lead at IMPs is also best at match-points. Let's look at this aspect specifically.

Hand 7

South opens $1 \clubsuit$, the opponents' bidding continuing $2 \blacktriangledown - 2 \spadesuit - 4 \spadesuit$. What would you lead from:

First thoughts The minor-suit holdings both lie well down the traditional 'Best Leads' tables. Will you lead a trump or is this too passive? Perhaps it is better to risk a minor-suit lead rather than let declarer set up dummy's hearts for discards. What do you think?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	25.9%	2.74
♥ J	24.1%	2.71
♦ A	20.6%	2.81
4 5	26.4%	2.77

The far from alluring **&**K-9-5 combination finishes ahead of a trump. The **\(\int\)** A lead is worst at IMPs but, as is sometimes true with ace leads, overtakes all its rivals at match-points. Why is this? Because a passive lead may allow declarer to discard his diamonds on dummy's heart suit.

Hand 8

The bidding is
$$1 - 2 - 2 - 4$$
. What would you lead from:
• Q J 8 • 8 5 4 • Q J 8 2 • A J 3 ?

First thoughts You face the same sort of problem as on the last deal. The minor-suit leads are a bit risky but at match-points you would be nervous of leading a major and giving declarer a clear run to set up the hearts. What would you lead at IMPs and at match-points?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠Q	16.1%	2.54
v 4	17.2%	2.73
♦ Q	25.3%	2.91
♣ A	21.3%	2.98

At IMPs the \bullet Q is a clear winner. Just as on the last hand, however, you should act differently at match-points, putting the \bullet A on the table.

Should I ever lead dummy's side suit?

Much of the time it is right to lead one of the unbid suits. Are there situations where it's best to lead dummy's announced side suit? Let's see.

Hand 9

The bidding is
$$1 - 2 - 2 - 4$$
. What would you lead from: $\bullet KQ42 = 94 \bullet KJ7 \bullet KJ95$?

First thoughts You gaze at your minor-suit holdings, finding two prickly K-J holdings. Should you attack in one of those suits, hoping to score a trick or two before declarer can establish the hearts in dummy?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	40.0%	3.32
y 9	53.9%	3.62
♦ 7	39.3%	3.28
4 5	41.1%	3.34

It is easily best to lead a passive heart and sit back in your chair, hoping for some minor-suit tricks to fall into your lap. A profile of the simulation shows that East has a 6.5% chance of holding the \bullet A and a 29.6% possibility of holding the \bullet Q. This leaves a huge chance that declarer holds both of these cards and will benefit from an opening lead in the suit. The figures are similar for East's club suit: \clubsuit A (7.0%), \clubsuit Q (28.0%).

So, you should lead dummy's suit when your holdings in the unbid suits are too risky to contemplate.

Hand 10

The bidding is
$$1 - 2 - 2 - 4$$
. What would you lead from:
• Q 10 6 • 9 8 • Q J 7 6 • K 10 8 3 ?

First thoughts Your minor-suit holding are not quite as unattractive as in the previous example. Will you lead a minor or again lead from the doubleton heart?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 6	18.4%	2.48
y 9	29.9%	3.03
♦ Q	34.5%	3.13
♦ 6	31.6%	3.06
. 3	30.0%	3.03

The \bullet Q is a better bet than a passive heart. Note that leading a low diamond is not as good. The third round of the suit is likely to be ruffed by someone or other, so you should make sure that your diamond honors participate in the first two rounds.

A club lead from the K-10 combination is rated equal to a heart lead.

Hand 11

South opens $1 \triangleq$ and, vulnerable against not, you pass. North responds $2 \checkmark$ and raises the opener's $2 \triangleq$ to $4 \triangleq$. What would you lead from:

First thoughts You have a singleton in one of the unbid suits but only the bare ace of trumps for ruffing purposes. Your holding in the other unbid suit

is headed by the dreaded K-J. It could be right to lead one of the majors. What is your decision?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	39.3%	3.24
v 6	50.2%	3.51
♦ J	40.3%	3.25
4 5	44.9%	3.36

The best chance of beating the contract involves giving partner a heart ruff. There is a 50.4% chance that East holds a singleton heart (void 2.7%). You will gain the lead on the first round of trumps and can give partner a ruff when the suit is distributed 5-5-1–2 around the table.

The club singleton comes second. If partner turns up with the AA (29.7%) and gives you a ruff with the bare ace, this will sometimes promote a trump honor in his hand.

Should I ever lead a trump?

Trump leads have fared poorly, not only in this chapter but throughout the book. It is reasonable to ask if a trump lead is *ever* a good idea when leading against a game with a bid side suit in the dummy.

Hand 12

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The bidding is
$$1 - 2 - 2 - 4$$
. What would you lead from:
• 10 2 • Q 10 6 4 • J 9 5 • Q 10 5 2 ?

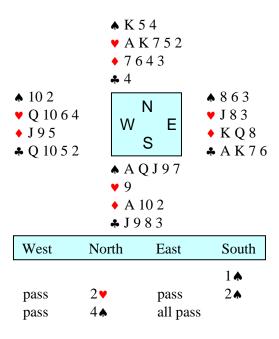
First thoughts Your heart holding gives you some hope of preventing discards on dummy's suit. What opening lead should you choose?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	14.7%	2.48
v 4	9.0%	2.36
♦ 5	12.4%	2.50
. 2	10.7%	2.47

Mission accomplished! We have found a West hand where a trump lead is best. Our next task is to discover exactly why a trump lead is good here. Perhaps it's because we have a useful holding in dummy's suit.

Leading against game with a side suit in dummy

While we ponder that question, let's look into the simulation and pick out a typical deal where the trump lead works well.



Declarer has eight tricks on top. If you lead anything but a trump, he will surrender a club trick and score two club ruffs in dummy to bring his total to ten. Find the trump lead and you can play a second trump when he gives up a club. This will leave declarer a trick short.

Hand 13

The bidding is
$$1 - 2 - 2 - 4$$
. What would you lead from:
 $4 \cdot 7 \cdot 3 \cdot K \cdot Q \cdot 10 \cdot 5 \cdot 3 \cdot Q \cdot 10 \cdot 2 \cdot 4 \cdot Q \cdot 10 \cdot 7 \cdot ?$

First thoughts Again you have a fine holding in hearts, dummy's suit. Does this mean that you should lead a trump?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	15.4%	2.56
♥K	10.4%	2.42
♦ 2	8.5%	2.29
. 7	8.2%	2.28

Indeed it does! We have discovered something. On auctions of this type you should lead a trump when you have a good holding in dummy's suit.

Leading when dummy has opened in a minor

In this section we will consider the situation where dummy opens $1 \\llet$, the eventual declarer responds $1 \\llet$ and North raises to $2 \\llet$. What do we know about the North hand when they settle in $4 \\llet$?

North's diamonds are an unknown quantity. He will often hold only four diamonds. Some players open $1 \blacklozenge$ with 4=4=3=2 shape and only three diamonds. Many players are happy to raise to $2 \spadesuit$ with only 3-card support. In that case a responder who is strong and holds only four spades must use some method to discover whether there is a 4-4 fit.

Hand 14

North opens $1 \blacklozenge$ and the bidding continues $1 \spadesuit - 2 \spadesuit$, arriving in $4 \spadesuit$. What would you lead from:

First thoughts Your holdings in the unbid suits are not particularly abhorrent. However, if there is one message that shines clearly throughout this book it's that singleton leads are red-hot. Should you therefore lead the •J despite dummy having opened in the suit?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 5	12.5%	2.40
٧K	20.4%	2.75
♦ J	25.7%	2.78
4 10	19.2%	2.62

The singleton lead wins easily once again. Of the leads in the unbid suits, the \forall K is marginally better.

Hand 15

North opens $1 \blacklozenge$ and the bidding continues $1 \spadesuit - 2 \spadesuit$, arriving in $4 \spadesuit$. What would you lead from:

First thoughts Leads from unsupported aces are not generally rated. Perhaps this is the moment for a passive trump lead or even a lead from three low in dummy's suit. Have you made up your mind?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 4/2	22.5%	2.79
٧A	28.8%	3.08
♦ 7/3/2	25.1%	2.87
♣A	29.5%	3.09

Look how hopeless a trump lead is, despite the two unbid suits being headed by aces! This is a further strong warning against lazy trump leads when nothing else appeals.

It is better to lead an unbid suit (rather than dummy's suit, albeit a minor suit that has been opened) even when that suit is headed by the ace.

Hand 16

North opens $1 \blacklozenge$ and the bidding continues $1 \spadesuit - 2 \spadesuit$, arriving in $4 \spadesuit$. What would you lead from:

First thoughts Look first at your holdings in the unbid suits. The doubleton ♣K is a dangerous hit-or-miss lead, one that has not featured well in previous simulations. The ♥J-9-7-2 combination is much less risky, not far away from an all-spotcard lead. Harder to assess is the ◆A from dummy's bid suit. This may result in a ruff for your partner; meanwhile, it could help to set up dummy's suit for discards. Where will you place your money?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
4	15.8%	2.66
v 2	22.6%	2.86
♦ A	27.8%	2.97
♣ K	20.5%	2.68

A trump lead is totally useless, as usual. A heart is the better of the two unbid-suit leads. However, the •A wins by a clear margin. East will have a singleton diamond 20.0% of the time (void 4.0%).

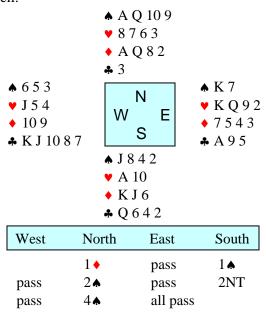
Hand 17

North opens $1 \blacklozenge$ and the bidding continues $1 \spadesuit - 2 \spadesuit$, arriving in $4 \spadesuit$. What would you lead from:

First thoughts Let's rule out a club lead, based on the ranking of previous efforts from a king-jack combination. How do you rank the other three leads?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	13.9%	2.42
v 4	12.5%	2.40
♦ 10	16.0%	2.47
♣ J	8.9%	2.33

It's a win for the doubleton in dummy's suit. We will dip into the simulation and see if we can find an interesting deal where the diamond lead does well:



Suppose you lead the •4. Declarer will win with the ace and concede a club, aiming for some ruffs in dummy. You win the club trick and play a trump to East's king. Declarer wins the trump return with the jack, ruffs a

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club with the queen, returns to the $\bullet J$ and ruffs a club with the $\blacktriangle A$. He can then reach his hand with the $\bullet K$, draw the missing trump and claim the contract.

After a trump lead, the contract can be made by rising with the $\triangle A$ and conceding a club. You continue on similar lines, benefiting from the blockage in the trump suit.

Only a diamond lead is certain to defeat the game. Declarer wins in hand, concedes a club and wins the diamond continuation. He can ruff one club, return to the •A and ruff another club. If he now plays, say, the ace and queen of trumps, East will win and give West a diamond ruff. No other continuation is any better. The diamond attack disrupts declarer's communications.

Hand 18

North opens $1 \blacklozenge$ and the bidding continues $1 \spadesuit - 2 \spadesuit$, arriving in $4 \spadesuit$. What would you lead from:

First thoughts You might think there was a case for any of the four leads. In fact, the best lead is almost twice as good as the worst one! How do you rank the four leads?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 10	16.4%	2.50
♥K	25.4%	2.66
♦ 7/3/2	19.5%	2.60
♣A	30.0%	2.90

A trump lead is worst (surprise, surprise). The ♥K from a doubleton is risky, yes, but it is much better than a passive diamond lead. Easily top of the table is the ♣A, hoping to find partner with a singleton (or void). East will have zero or one clubs 11.8% of the time, the ♣K 32.8% of the time. If you lead the ♥K, you will find partner with the ♥A 25.7% of the time.

If instead you lead passively in spades or diamonds, there is just too much chance that declarer will reach the tape with tricks in the two bid suits.

CONCLUSIONS – Leading against a game with a side suit

- Side-suit singletons are excellent leads and should nearly always be chosen, even if dummy has bid that suit.
- The best lead against a game with a known side suit in dummy will usually be in one of the unbid suits.
- Leads from two, three or four low cards in an unbid suit are usually better than those from an honor combination (except for a 3-card honor sequence). For example, prefer ♣8-4-3 to ♦Q-9-7-6. Prefer ♥9-7-6-3 to ♣Q-J-7.
- Consider a trump lead when you hold dummy's suit strongly.
- Leading the ace of dummy's suit can work well when you hold four or five cards. Finding partner with a singleton may be the best chance of beating the contract.

Pick a Winner! Leading against game with a side suit in dummy

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 overleaf.

(Auction is: 1 - 2 - 2 - 4)

- 1. 95
 - **9** 9 8 7 5
 - ◆ 10 7 3
 - ♣ K 10 9 5
- 2. 86
 - **v** 10 8 5
 - Q 10
- 3. **♦** 6 2
 - ▼ A 10 8 3
 - ♦ A 9 8 7
- ♣ A Q 10 7 4 3 ♣ 5 3 2

- 4. 106
 - **V** K 10 3
 - ♦ AJ65
 - **♣** 9 7 4 3
- 5. **A** K Q 10
 - **v** 10 9 5 2
 - **♦** 7 2
 - **♣** KJ63
- 6. 87
 - ♥ KJ 10 7
 - ◆ Q953
 - ♣ J 10 6

(North opens $1 \blacklozenge$, the auction continuing $1 \spadesuit -2 \spadesuit$, arriving in $4 \spadesuit$.)

- 7. **A** K 9 6
 - ♥ J 10 9 6 2
 - **♦** 972
 - **♣** 64
- 8. 10 2
 - **v** 83
 - ◆ A 7 2
 - ♣ QJ9732
- 9. ♠ Q 2
 - **♥** K 7 3
 - ♦ J 10 9 8 3
 - ♣ A 10 8

- 10. 2
 - ♥ AJ 10 8 7 6
 - ♦ J 9 7 5
 - **♣** K 4
- 11. ♠ Q J 10
 - ♥ A 8 6 5
 - **♦** 84
 - **♣** Q 9 7 6
- 12. ♠ K 3
 - **y** 8
 - ♦ K9653
 - ♣ QJ1095

Answers

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

			IMPs	MPs
(Auction is: $1 - 2 - 2 - 4$)				
1. ♠95 ♥9875 ♦ 1073 ♣ K 1095	1st	♦ 3	27.3%	2.79
	2nd	. 10	22.8%	2.74
2. • 86 • 1085 • Q10 • AQ10743	1st	♦ Q	27.8%	2.75
	2nd	♣ A	20.5%	2.76
3. • 62 • A 1083 • A 987 • 532	1st	* 2	40.0%	3.32
	2nd	• A	37.2%	3.28
4. • 106 • K 103 • A J 65 • 9743	1st	* 7/3	23.9%	2.72
	2nd	4 6	19.0%	2.52
5. ♠ K Q 10 ♥ 10 9 5 2 ♦ 7 2 ♣ K J 6 3	1st	♦ 7	42.1%	3.32
	2nd	. 3	36.0%	3.21
6. ♠87 ♥ KJ107 ♦ Q953 ♣J106	1st	\$ 8	17.5%	2.59
	2nd	. J	12.8%	2.51
(North opens 1 ♦ and the bidding continues 1 ♣	-2♠, aı	rrivin	g in 4♠	.)
7. ♠ K 9 6 ♥ J 10 9 6 2 ♦ 9 7 2 ♣ 6 4	1st	\$ 6	25.6%	2.82
	2nd	∨ J	20.2%	2.76
8. • 102 • 83 • A72 • QJ9732	1st	∨ 8	17.2%	2.63
	2nd	♣ Q	14.9%	2.63
9. • Q 2 • K 7 3 • J 10 9 8 3 • A 10 8	1st	♦ J	17.1%	2.64
	2nd	♣A	13.2%	2.52
10. ♠ 2 ♥ A J 10 8 7 6 ♦ J 9 7 5 ♣ K 4	1st	٧A	33.2%	3.08
	2nd	♦ 5	31.0%	2.99
11. ♠ QJ10 ♥ A 8 6 5 ♦ 8 4 ♣ Q 9 7 6	1st	♦ 8	24.4%	3.01
	2nd	. 6	23.9%	3.01
12. ♠ K 3 ♥ 8 ♦ K 9 6 5 3 ♣ Q J 10 9 5	1st	v 8	17.6%	2.59
	2nd	♣ Q	14.6%	2.51

Chapter 8

Leading after a splinter-bid auction

The opponents bid to a major-suit game, using a splinter-bid on the way. This is important information that will surely affect your opening lead. In this chapter we will seek some general guidelines for this situation.

Auction is 1 \$\(-4 \div -4 \div \)

Your right-hand opponent opens 1. You pass and the next player responds 4. This is a splinter bid, showing a sound raise to game in spades and at most one card in clubs. Most people treat 4. as a limited bid. The message is: 'I don't have many points to spare but we may have a slam if you have a good fit for my club singleton.'

Hand 1

The bidding is
$$1 - 4 - 4$$
. What would you lead from:
• 3 • A Q 10 4 2 • A 3 2 • 9 7 3 2 ?

First thoughts Leading unsupported aces is not most people's idea of fun. Does the situation change when your left-hand opponent has used a splinter bid?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	24.4%	2.88
٧A	27.2%	3.04
♦ A	32.5%	3.12
♣ 7/2	26.5%	2.94

Yes, it does! The first lesson to be drawn from this result is that a trump lead is a waste of time. The opponents have at least a 5–4 fit, possibly a 6–4 or 5-5 fit, so you are most unlikely to prevent ruffs by leading a trump. Nor

is a club lead likely to be much use. Suppose declarer holds *A-Q-x-x or *K-Q-x-x. He will welcome a lead round to his high cards.

So, the best lead will usually be in a red suit. Here the \bullet A is rated ahead of the \blacktriangledown A. Is that because of the differing suit lengths or because the \blacktriangledown A is part of an \blacktriangledown A-Q combination? It's easy enough to find out. We will switch the red queen for Hand 2.

Hand 2

The bidding is 1 - 4 - 4. What would you lead from: • 3 • A 9 7 4 2 • A Q 2 • 9 7 3 2 ?

First thoughts We have moved the queen from the 5-card heart suit to the 3-card diamond suit. Which red ace is now better, do you think?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	26.9%	2.95
٧A	37.8%	3.26
♦ A	32.0%	3.13
♣ 7/2	30.7%	3.06

We have our answer. An ace becomes a less attractive lead when you have a queen alongside it. By preserving the A-Q tenace, you improve your chances of eventually scoring two tricks in the suit.

We see also that the numbers are higher than for Hand 1. That is because the $\bullet Q$ is more likely to score a trick than the $\bullet Q$ was. In a suit where you hold five cards, declarer is more likely to be short in one hand or other.

Hand 3

The bidding is 1 - 4 - 4. What would you lead from:

First thoughts With three unattractive leads in the side suits, perhaps the moment has come for a trump lead. If that doesn't appeal, how do you rank the side-suit leads?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	12.9%	2.55
٧A	21.5%	2.79
♦ 3	17.6%	2.67
♣ A	18.8%	2.81

This is another strong reminder that leading a trump is no good on the present auction. Remember also that leading a singleton trump will sometimes give away partner's AQ-x-x. This is not reflected in the figures for the three side-suit leads above, because declarer plays double-dummy in our simulations and will always guess queens correctly. Add a smidgeon to the side-suit numbers (because those leads will not give away partner's trump holding) and the trump lead would lag even further behind.

So far as the unbid suits are concerned, the \vee A is rated ahead of a low diamond. You will at least be able to see the dummy before judging what is best at Trick 2.

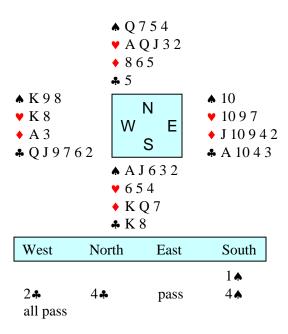
Hand 4

First thoughts This time you overcall in clubs and North then makes the splinter bid. A major-suit lead is out of the question but how do you compare the ◆A and the ♣Q?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♦ 8	13.4%	2.58
٧K	16.8%	2.55
♦ A	28.0%	2.85
♣ Q	18.1%	2.73

The club sequence looks pretty, yes, but there is little defensive trick potential in a suit where dummy holds at most one card. Leading the ◆A is much less likely to cost a trick than a heart lead. Meanwhile, it may result in a second- or third-round ruff.

Let's dip into the simulation and look for a deal where a diamond lead fares well:



You play ace and another diamond. Suppose declarer plays a heart to the queen followed by ace and another trump (hoping to lose just a trump, a diamond and a club). When you win with the $\bigstar K$ you disappoint him by crossing to the $\bigstar A$ for a diamond ruff.

Hand 5

First thoughts Will you lead one of the aces? If so, which one? If you feel you can sit back and hope to catch a king or a queen with each ace, you have the option of a neutral \$10 lead. Over to you!

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	46.3%	3.52
٧A	51.9%	3.65
♦ A	54.2%	3.66
4 10	41.1%	3.45

A club lead is too passive and would sometimes allow declarer to discard dummy's potential red-suit losers on his club honors. The A is the most

dangerous ace to lead, costing a trick when partner holds a singleton $\bigstar K$ and perhaps when he has $\bigstar Q$ -J or $\bigstar Q$ -10. The $\bigstar A$ is rated ahead of the $\blacktriangledown A$. A heart lead may find partner with a singleton, but you can try for that later — at Trick 2 or when you are in with the trump ace.

Conventional doubles of splinter bids

Some partnerships play that after 1 \(-\text{pass} - 4 \) a double by the fourth player does not show good clubs; instead it carries a lead-directing message. For example, it may request a lead in the lower of the unbid suits (here diamonds). This is fine if you hold the \(\lambda \)-K or \(\lambda \)K-Q. It is dangerous with such as \(\lambda \)-Q or \(\lambda \)K-J because it may allow the next player to bid a slam in the knowledge that the defender's cards are well-placed for him.

Even if you play such doubles, the fourth player will have to pass on the majority of hands and the guidelines in this chapter will then prove useful.

Auction is $1 \checkmark -1 \land -4 \checkmark -4 \land$

Your LHO opens 1♥. Over his partner's 1♠ he leaps to 4♣, a splinter-bid agreeing spades. Responder signs off in 4♠ and you have to find a lead. The opener is likely to hold 4=5=3=1 or 4=6=2=1 shape. Much of the time a diamond lead will work well, allowing you to score or establish diamond tricks before discards become available on dummy's hearts.

Hand 6

The bidding is
$$1 \checkmark -1 \land -4 \checkmark -4 \land$$
. What would you lead from: $4975 \checkmark 108 \land 65 \checkmark QJ10632$?

First thoughts With little hope of making tricks in your hand, you may not expect to beat the contract. They have stopped in game, however, so partner will have good values. Where should you look for them?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	12.6%	2.41
v 10	15.4%	2.47
♦ 6	28.6%	2.82
♣ Q	16.3%	2.53

It's a huge win for the diamond lead recommended in the introduction to this section. You can see that it makes sense. You know that declarer may establish dummy's hearts for discards and must try to beat him to the wire.

Hand 7

The bidding is
$$1 \checkmark -1 \land -4 \checkmark -4 \land$$
. What would you lead from: $\land 62 \lor A872 \lor KJ4 \lor J1097$?

First thoughts If the diamonds were, say, ♦ 954, a lead in that suit would win by a mile. A combination headed by the king-jack is usually a poor lead. Does the situation demand a diamond lead nevertheless?

▲ 62 • A 9 7 2 ▲ V I 4 • I 10 0 7

	♦ 02 ♦ A 8 / 2 ♦ K J 4	# J 10 9 /
	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	40.1%	3.16
٧A	36.9%	3.06
♦ 4	43.8%	3.25
♣J	41.5%	3.25
• ₩ J	41.370	3.23

The magnetic pull of a diamond lead is so strong that you should yield to it even if your diamonds are headed by the dreaded king-jack.

Hand 8

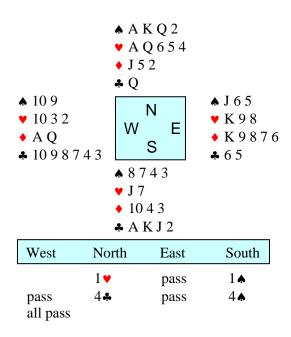
The bidding is
$$1 \checkmark -1 \land -4 \checkmark -4 \land$$
. What would you lead from: $109 \lor 1032 \land AQ \lor 1098743$?

First thoughts We continue our search for a situation where a diamond lead is not best. Would you lead the ◆A here or look elsewhere?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
▲ 10	36.1%	3.02
v 2	35.6%	3.02
♦ A	46.8%	3.41
4 10	42.1%	3.26

Wow! A diamond lead is still best. A profile of this simulation shows the likely position of the •K: North (dummy) 39.2%, East 40.2%, South (declarer) 20.6%. A lead from the ◆A-Q is most likely to cost when South holds the ◆K, but this will happen only one time in five.

The \bullet A lead can work well in several ways. It may unblock the diamond suit when partner has the king. It may set up partner's \bullet J before declarer can achieve a discard. Even when partner holds neither the \bullet K nor the \bullet J, you may score a diamond ruff. Let's dip into the simulation and look for a deal where the \bullet A lead fares well:



You play the ace and queen of diamonds. Your partner cannot be sure whether you have led from \bullet A-Q or \bullet A-Q-x. However, he should reason that if you have three diamonds, declarer has only two and is unlikely to lose more than two diamonds and a heart. He therefore overtakes with his \bullet K and gives you a diamond ruff. In the fullness of time he scores the \bullet K to put the game one down. Any other defense would let declarer discard diamonds on his club honors.

Hand 9

The bidding is $1 \checkmark -1 \land -4 \checkmark -4 \land$. What would you lead from: $4765 \checkmark KJ64 \checkmark K6 \checkmark 6432$?

It is risky leading from a doubleton king. You need four tricks from somewhere, though. Does the ◆K give you the best chance?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	26.6%	2.66
v 4	17.9%	2.37
♦ K	31.1%	2.73
4 4/2	27.8%	2.71

It's not so surprising that the $\bigstar K$ heads the field. The $\bigstar K$ lies under dummy's hearts and the splinter-bid response means that you cannot score more than one club trick. Unless partner has something good in diamonds, it is hard to imagine the game being defeated.

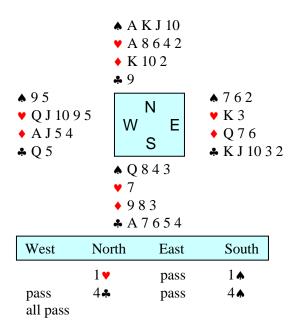
Hand 10

The bidding is
$$1 \checkmark -1 \land -4 \checkmark -4 \land$$
. What would you lead from: $\land 95 \lor Q J 10 9 5 \lor A J 5 4 \lor Q 8 ?$

Once again we have a dodgy diamond holding. Is any other lead better? You may wonder how a heart lead can cost. Let's see the results:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	46.9%	3.41
♥ Q	43.8%	3.31
♦ A	37.3%	3.18
♦ 4	39.6%	3.20
♣ Q	41.6%	3.26

We would have led a heart, let's admit it, and are somewhat surprised at the win for a trump lead. Let's dip into the simulation, looking for a deal where a trump lead is effective.



Suppose you start with the $\bigvee Q$. Declarer will score the $\bigvee A$, the $\clubsuit A$ and eight more tricks on a complete cross-ruff. Lead a trump instead and declarer can score only seven trump tricks for a total of nine. If he tries to sneak one more trick by leading towards the $\bigstar K$ (while he still has some trumps left), you will rise smartly with the $\bigstar A$ and play another trump.

What is the clue that suggests you should lead a trump? It is the solidity of your hearts. It is unlikely that declarer can establish extra tricks from dummy's main side suit. He may well have to score a large number of ruffing tricks.

CONCLUSIONS

Leading against a splinter-bid auction

- A trump lead is rarely the best lead. The opponents typically have a big trump fit and you are unlikely to cut down declarer's ruffs.
- After an auction such as 1 4 4, a lead in one of dummy's longer side suits (hearts and diamonds) will usually be best.
- After an auction such as $1 \checkmark -1 \land -4 \land -4 \land$, a lead in dummy's third-longest suit (diamonds) is nearly always best.
- Leading from an A-Q or A-J combination is generally a poor bet. Prefer to lead from an ace without an accompanying honor.
- After an auction such as $1 \checkmark -1 \land -4 \land -4 \land$, consider a trump lead when you have a long and strong holding in dummy's main suit (hearts). Do not lead hearts even when you hold something like \checkmark K-Q-J-9-7.

Pick a Winner! Leading after a splinter-bid

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 overleaf.

(Auction is 1 - 4 - 4)

- 1. 7
 - **♥** A J 5
 - ♦ K Q 9
 - **♣** J 8 7 6 5 2
- 2. Q 9 8
 - **v** 10 3
 - ♦ 8762
 - ♣ A 10 8 3
- 3. AA75
 - **Q** 10 9 4
 - ♦ K 10 3
 - **♣**975

- 4. ♠ A
 - **♥** J 9 4 2
 - ♦ KJ752
 - ♣ A 10 7
- 5. ♠ A 7
 - **♥** K Q 6 5
 - ◆ A 10
 - **4** 10 9 7 6 2
- 6. ♠ Q J 3
 - **v** 8 4 2
 - **♦** 62
 - ♣ QJ1083

(Auction is $1 \checkmark -1 \land -4 \checkmark -4 \land$)

- 7. 10
 - **v** 10 6 5
 - ◆ 10 8 6 3 2
 - **♣** K 8 5 3
- 8. **A** J 10 8 4
 - **♥** Q J 9
 - ◆ A Q 8
 - ♣ A 7 2
- 9. 987
 - **v** 8 3 2
 - ♦ KJ85
 - ♣ J 8 2

- 10. ♠ Q J 10
 - **♥** J 2
 - ♦ Q92
 - ♣ Q 10 9 4 2
- 11. 975
 - KQJ97
 - ♦ A J 5
- ***** 8 3

- 12. A A 5
 - **v** 10 9
 - ◆ J 10 9 7 6
 - **♣** AJ76

Answers

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

			IMPs	MPs
(Auction is $1 - 4 - 4$)				
1. ♠7 ♥ AJ5 ♦ KQ9 ♣J87652	1st	♦ K	20.6%	2.79
	2nd	\$ 6	19.0%	2.66
2. • Q 9 8 • 10 3 • 8 7 6 2 • A 10 8 3	1st (I)	v 10	21.5%	2.56
	1st (M	. •A	19.8%	2.63
3. AA75 VQ1092 K103 A975	1st	♠A	13.6%	2.52
	2nd	v 10	11.6%	2.41
4. ♠ A ♥ J 9 4 2 ♦ K J 7 5 2 ♣ A 10 7	1st	v 2	21.6%	2.91
	2nd	♠A	17.8%	2.75
5. AA7 VKQ65 A10 A109762	1st	♦ A	33.8%	3.14
	2nd	♥ K	30.8%	3.11
6. ♠ Q J 3 ♥ 8 4 2 ♦ 6 2 ♣ Q J 10 8 3	1st	♦ 6	14.7%	2.59
	2nd	♣ Q	11.9%	2.56
(Auction is $1 \checkmark -1 \land -4 -4 \land -4 \land$)				
7. • 10 • 10 65 • 10 8 6 3 2 • K 8 5 3	1st	♦ 3	24.3%	2.80
	2nd	♠ 10	22.2%	2.64
8. • J 10 8 4 • Q J 9 • A Q 8 • A 7 2	1st	♣A	72.5%	4.04
	2nd	♦ A	64.6%	3.94
9. ♦ 987 ♥ 832 ♦ KJ85 ♣ J82	1st	♦ 5	19.4%	2.50
	2nd	\$ 2	18.2%	2.44
10. ♠ Q J 10 ♥ J 2 ♦ Q 9 2 ♣ Q 10 9 4 2	1st	♦ 2	32.8%	3.10
	2nd	4 4	31.4%	3.08
11. ♠ 9 7 5 ♥ K Q J 9 7 ♦ A J 5 ♣ 8 3	1st	\$ 5	59.7%	3.75
	2nd	. 8	52.4%	3.53
12. ♠ A 5 ♥ 10 9 ♦ J 10 9 7 6 ♣ A J 7 6	1st	♦ J	55.5%	3.68
	2nd	♣ A	48.5%	3.54

Chapter 9

Leading when partner has opened

Your partner opens 1♥; the next player overcalls 1♠ and is raised to 4♠. What opening leads are likely to work well in this situation? You will not be surprised to hear than a singleton or doubleton in partner's suit will usually be a good start, but is it better than a strong honor sequence elsewhere? When you hold three hearts headed by an honor, is this a good lead? What difference does it make when the opening bid is in a minor suit and may be based on a moderate 4-card (or even 3-card) suit? We will seek answers to such questions in this chapter.

Leading from shortness in partner's suit

We start with the assumption that a lead in partner's suit is likely to be a sound investment. Let's see if we can find some exceptions to this guideline.

Hand 1

Partner opens $1 \checkmark$ and the next player overcalls $1 \spadesuit$. You pass on the hand below and North raises to $4 \spadesuit$. What would you lead from:

First thoughts It would take something special to remove your thumb from the ♥7. Is that club sequence persuasive enough?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 6	24.5%	2.84
♥ 7	44.1%	3.37
♦ 5	30.4%	3.02
♣ Q	35.4%	3.15

It's 'business as normal'. The singleton lead wins the contest and the trump lead is hopelessly last.

Hand 2

Partner opens $1 \vee$ and the next player overcalls $1 \wedge$. You pass on the hand below and North raises to $4 \wedge$. What would you lead from:

First thoughts You have a singleton in partner's suit but only one trump. Is there any reason to lead a diamond instead?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 6	13.5%	2.44
v 10	33.1%	2.96
♦ J	21.7%	2.68
♣ 6/4	21.7%	2.65

Again, the singleton in partner's suit wins easily. The ◆J does not even win a clear second place, since the 6-card length increases the chance that declarer will hold diamond shortness in one or other hand.

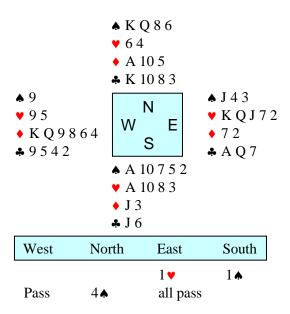
Hand 3

Partner opens $1 \checkmark$ and RHO overcalls $1 \spadesuit$. You decide to pass on the hand below, North raising to $4 \spadesuit$. What would you lead from:

First thoughts You have a doubleton in partner's suit but only one trump for ruffing purposes. Your diamonds are headed by touching honors. Which red suit catches your eye?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 9	21.1%	2.64
y 9	27.9%	2.85
♦ K	26.0%	2.82
♣ 5/2	22.5%	2.67

It's a closer contest but the doubleton in partner's suit takes top spot. Sometimes you will score a heart ruff with your singleton trump. You may instead establish a trick or two for partner before declarer can arrange discards. That's what happens on this deal from the simulation:



If West leads the \bigstar K, declarer must duck to make the contract! Let's say he plays low from dummy and unblocks the \bigstar J. A club switch to the queen leaves East with no good continuation. If he cashes the \bigstar A, declarer will have three discards for the hearts. If he does not, declarer will win the \blacktriangledown K switch, draw trumps and finesse the \bigstar 10 to pitch a club. He then takes a ruffing finesse in clubs, ruffing one heart loser and discarding another.

After the recommended ♥9 lead, the defenders cannot be deprived of their four tricks.

Hand 4

Partner opens $1 \checkmark$ and RHO overcalls $1 \spadesuit$. You pass and North raises to $4 \spadesuit$. What would you lead from:

First thoughts You have a doubleton in partner's suit and a singleton in a different suit. Which red suit will you lead?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
4 3	18.5%	2.59
v 10	31.9%	3.04
♦ 7	42.4%	3.22
♣ Q	26.7%	2.87

It's a runaway win for the singleton. Did we ever doubt it? Leading a club honor is quite hopeless by comparison.

Leading from three or four cards in partner's suit

Again we start with the assumption that a lead in partner's suit is likely to be a sound idea. Let's see if we can find some exceptions to this guideline.

Hand 5

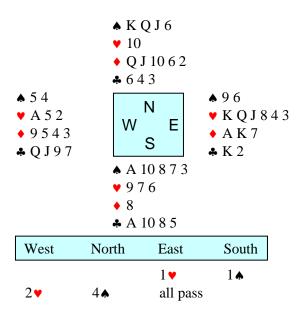
Partner opens $1 \vee$ and the next player overcalls $1 \wedge$. You raise to $2 \vee$ on the hand below and North leaps to $4 \wedge$. What would you lead from:

First thoughts Partner opened $1 \checkmark$, so the odds of finding him with the \checkmark K must be at least reasonable. Will you lead the \checkmark A or attack with the \clubsuit Q?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	35.4%	3.01
٧A	37.8%	3.15
♦ 5/3	37.2%	3.05
♣ Q	40.9%	3.20

The \clubsuit Q is preferred at both IMPs and match-points. A profile of this simulation shows that partner will hold the \blacktriangledown K on 60.4% of the deals. When it is South who holds the \blacktriangledown K (17.7%), leading the ace is likely to give away a trick. A club lead may find East with the \clubsuit A (48.4%) or \clubsuit K (40.0%).

Let's dip our net deep into the simulation tank and see what comes out:



West makes the approved lead of the \$Q and East overtakes with the \$K to avoid a blockage in the suit. After this bright start to the defense, declarer cannot avoid the loss of two clubs, one diamond and one heart.

Suppose instead that West is less inspired and begins by laying down the A. This does no direct damage in the heart suit, as it happens, but it does kill the side-entry to his hand. When he switches to the 7, East playing the K, declarer holds up the A. He wins the club return, draws one round of trumps with the ace and plays a diamond to the queen and ace. With one trump entry and two ruffing entries remaining to the dummy, he can take a ruffing finesse in diamond and eventually set up a long card in the suit. This will give him two discards for his remaining club losers.

Hand 6

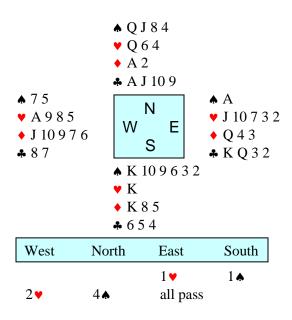
Partner opens $1 \checkmark$ and South overcalls $1 \spadesuit$. You raise to $2 \checkmark$ (or $3 \checkmark$ if that is your style) and North leaps to $4 \spadesuit$. What would you lead from:

First thoughts Partner holds opening-bid values and at least five of the eight missing hearts, so there is a good chance of finding him with the ♥K. Perhaps you can do better elsewhere.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	16.9%	2.45
٧A	19.6%	2.69
♦ J	19.6%	2.68
. 7	22.6%	2.56

A club lead gives you the best chance of beating the contract and should be chosen at IMPs. At match-points it's a toss-up between the red suits. Even when partner has opened in a major, it is not automatic to lead the ace of his suit. A profile of this simulation shows that the $\forall K$ will lie with North (16.6%), with East (67.4%) and with South (16.0%).

Even when West does find the club lead, some smart work is required to beat 4. on this deal from the simulation:



Treat it as a defensive problem if you wish, taking the East cards. After the bidding shown, your partner leads the \$8. Declarer calls for the \$J and you win with the \$Q. What now?

Crossing to partner's ♥A for a second club lead will not be good enough; declarer will rise with the ♣A and ditch his remaining club on the established ♥Q. No, you must return a second round of clubs into dummy's ♣A-10-9. You can then give partner a club ruff when you win with the ♠A.

Hand 7

Partner opens $1 \checkmark$ and the next player overcalls $1 \spadesuit$. You raise to $2 \checkmark$ on the hand below and North leaps to $4 \spadesuit$. What would you lead from:

First thoughts Should you lead a heart, partner's suit, or rely on the diamonds that are before your eyes?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	30.3%	2.85
v 2	36.1%	3.05
♦ Q	37.1%	3.08
♣ 8/2	30.3%	2.83

The diamond lead is slightly better at both forms of the game.

Hand 8

Partner opens $1 \checkmark$ and the next player overcalls $1 \spadesuit$. You raise the hearts and North leaps to $4 \spadesuit$. What would you lead from:

First thoughts Which red suit do you lead now?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 5	23.9%	2.64
v 5	27.4%	2.82
♦ Q	30.7%	2.87
. 8/2	24.7%	2.66

As on the previous hand, the odds favor leading from the diamond sequence.

Leading when partner has opened in a minor

What difference does it make when partner has opened in a minor suit rather than a major? You can no longer rely on a suit of at least five cards opposite. When you are considering an opening lead from the ace or king in partner's

suit, there is correspondingly less chance of finding him with the matching king or ace.

Hand 9

Partner opens 1 ♦ and the next player overcalls 1 ♠. You pass on the hand below and North bids 4 ♠. What will you lead from:

First thoughts Should you risk a diamond lead, when partner may hold only four of the missing ten diamonds? If you think not, which of the other three suits looks best?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	34.5%	3.03
v 6	40.3%	3.15
♦ A	38.4%	3.22
. 7	38.8%	3.19

The results are close but they do give us some information, nevertheless. The trump lead is worst. The side-suit doubleton is best at IMPs; cashing the ace of partner's suit is best at match-points.

Hand 10

Partner opens 1 ◆ and the next player overcalls 1 ♠. You pass on the hand below and North bids 4 ♠. What will you lead from:

First thoughts Now you hold K-x-x in partner's suit and can expect to find helpful diamond honors opposite. If a diamond lead does not appeal, will you reach for a heart or a club?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♦ J/9	23.1%	2.63
♥ J/6	28.3%	2.82
♦ 3	26.6%	2.83
& 6	26.2%	2.73

The results are close but again we see that leading from three cards to an honor in partner's minor suit is not such a good prospect as you might imagine. It is OK at match-points but a heart is preferable at IMPs.

Hand 11

Partner opens 1 ◆ and the next player overcalls 1 ♠. You pass on the hand below and North bids 4 ♠. What will you lead from:

First thoughts With five cards in partner's diamond suit, is there a good expectation of tricks there? Perhaps you will need to make an attacking lead in hearts to beat the contract. What do you think?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	33.9%	2.89
٧K	34.1%	2.80
♦ 10	39.1%	3.12
. 3	34.7%	3.02

The ♥K lead is hopeless at match-points and not much better at IMPs. It is simply too risky. A lead from your five cards in partner's suit is an easy winner.

Hand 12

Partner opens 1. this time and the next player overcalls 1. You pass on the hand below and North bids 4. What will you lead from:

First thoughts Partner has opened 1♣, but does this mean you should lead from a doubleton club when holding only one trump? A heart lead looks a bit wild, even though partner has opening-bid values. Perhaps the ◆J is right.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
↑ 7	21.3%	2.64
v 4	20.1%	2.62
♦ J	24.7%	2.76
. 8	25.6%	2.78

You should lead partner's suit. The chance of a ruff is not that enormous but by leading towards partner's holding you may establish a winner or two there. The diamond honor sequence may look pretty but it's quite likely that declarer or the dummy will contain a singleton diamond; your J-10-9 may be no more valuable that lowly spot-cards would have been.

Hand 13

Partner opens 1♣, and the next player overcalls 1♠. You make a negative double on the hand below and North bids 4♠. What will you lead from:

♦3 ♥10952 **♦** KQ1096 **♣** K95?

First thoughts You hold K-9-5 in the suit that partner opened. Do you fancy a club lead or are you more impressed by those chunky diamonds?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	39.7%	3.20
v 2	34.7%	3.05
♦ K	42.0%	3.28
4 5	36.4%	3.10

You can bet that the \clubsuit 5 would be a popular lead. The table tells us that this is not such a good idea. The \spadesuit K is the best opening shot. A trump is also better than a club. You have 9 points opposite an opening bid, so declarer will doubtless have to score a good number of ruffing tricks to make the game.

We will end this section by switching the hearts and clubs (both the cards in the suit and East's opening bid). We can then see if the K-9-5 lead becomes more effective facing a known 5-card suit in partner's hand.

Partner opens $1 \checkmark$, and the next player overcalls $1 \spadesuit$. You raise the hearts and North bids $4 \spadesuit$. What will you lead from:

▲3 **♥** K 9 5 **♦** K Q 10 9 6 **♣** 10 9 5 2?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 3	36.9%	3.12
y 5	37.9%	3.16

K	41.2%	3.26
* 2	35.3%	3.07

The difference is marginal and a diamond is still best. Let's consult the profile to see the difference between East holding a major-suit and a minor-suit.

	East opens 1♣	East opens 1♥
Average suit length	4.7	5.3
East holds ♣A (♥A)	58.9%	67.6%
East holds ♣Q (♥Q)	49.3%	58.8%

East will hold an average of 4.7 clubs for his 1.4 opening, higher than you might expect because of the spade shortage implied by the opponents' bidding. When East opens 1. there is more chance that he will hold the ace of his suit. This is not enough to affect the choice of opening lead, however.

Leading when partner has opened a weak two-bid

Your partner opens $2 \checkmark$ and RHO overcalls $2 \spadesuit$. Whether or not you bid something (perhaps raising the hearts), North closes the auction with $4 \spadesuit$. In this section we will investigate which opening leads work best.

What quality of suit can you expect for partner's 2♥ opening? Beginners are often taught that you should hold a 6-card suit including two of the three top honors. In some parts of the world, particularly those with a large student population (ahem), it is common to open a weak-two based on a moderate 5-card suit such as ♥K-10-8-6-3. Those are the two extremes. For our simulations we will assume that East has a 6-card suit including at least one of the three top honors.

Hand 14

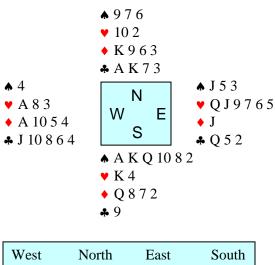
Partner opens 2♥ and the next player overcalls 2♠. You raise to 4♥ on the hand below and North bids 4♠. What would you lead from:

First thoughts You hold the \forall A and expect partner to hold at least one of the \forall K and \forall Q. Is the \forall A the best start or will you try something different?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
4	14.9%	2.60
٧A	26.2%	2.94
♦A	28.8%	2.98
♣ J	22.0%	2.79

The •A is a better shot. Why might that be? Since you hold only one trump, there is a fair chance that partner will be 3-6 in the majors. It is quite possible, therefore, that he will hold a singleton or void diamond. A profile or our simulation shows that this is a 14.4% chance. (If you held five diamonds, the odds would be even higher).

Here is a deal from the simulation where the • A lead works well.



West	North	East	South
		2♥	2
3♥	4 ♠	all pass	

You make the recommended lead of the \bullet A and give partner a diamond ruff. When he returns the \bullet Q, covered by the king, you win with the ace and give him another diamond ruff. A further heart trick puts the game two down.

Leading the ♥A is no good. What if you lead the ♣J? Declarer can win and throw a heart on the second club. He then draws trumps and sees that only East can hold a singleton diamond. He starts with the ♠Q and picks up the diamond suit for only one loser, scoring eleven tricks instead of eight.

Hand 15

Partner opens $2 \checkmark$ and the next player overcalls $2 \spadesuit$. You pass on the hand below and North raises to $4 \spadesuit$. What would you lead from:

First thoughts You have strong hopes of scoring your two major-suit honors. Which lead, probably one of the doubletons, will give you the best chance of adding two more tricks to your pile?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	10.8%	2.41
٧A	25.2%	2.92
♦ 6	22.6%	2.74
\$ 8	23.1%	2.73

East has only a 51.2% chance of holding the ♥K, according to the profile of our 5000-deal simulation. Nevertheless leading the ♥A gives you the best chance of beating the spade game.

The prospects of partner holding various club honors are fairly moderate: AA (15.2%), KK (17.8%), Q (21.3%). So, a club lead is just a bit too speculative.

Hand 16

Partner opens $2 \checkmark$ and the next player overcalls $2 \spadesuit$. Whatever you say on the hand below, North raises to $4 \spadesuit$. What will you lead from:

First thoughts There are four plausible winners in this contest. The ◆A might work well if partner holds a singleton diamond. You also hold two touching club honors. If neither of those leads appeal, you can fall back on 'lead partner's suit' or choose a passive trump. What do you reckon?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	19.8%	2.64
v 2	26.0%	2.84
♦A	22.3%	2.71
♣K	25.4%	2.80

The \bullet A is not well rated. That's because partner is likely to hold only two trumps and would then need 2=6=1=4 shape to score a quick diamond ruff. Meanwhile, a safe heart edges out the more speculative club.

CONCLUSIONS - Leading when partner has opened

- A singleton in an unbid side suit is a better lead than any non-singleton in partner's suit. Always lead a singleton in partner's suit, even if you hold only one trump.
- Be wary of leading from ace-doubleton in partner's suit. The chance of partner holding the king of his suit is little better than 50%, in general.
- Similarly, leads from A-x-x or K-x-x in partner's suit may well misfire. They are slightly more likely to work when partner guaranteed at least five cards with a major-suit (rather than a minor-suit) opening, but the difference is marginal.
- The longer your support, the less attractive a lead of partner's suit becomes.
- When partner has opened a weak-two bid and you are considering a lead from A-x in his suit, the prospects will vary according to your general style of such opening bids. If you open them freely, on a wide variety of hands, then again the prospects of partner holding the matching king will be no better than 50%.

Pick a Winner!

Leading when partner has opened

You must judge the best opening lead from the 12 West hands below. Note also if a different lead would be best at MPs. In each case partner opens the bidding; whether or not you respond, your RHO ends in 4. The results are overleaf.

Auction is: $1 \checkmark -(1 \spadesuit) - pass/bid-(4 \spadesuit)$

- 1. ♠ K 7 6
 - **∨** K 7
 - ◆ J 10 9 8 3
 - ***** 873
- 2. 64
 - ♥ Q 6
 - Q 10 8 5 **♣** KJ953
- 3. **♦**865
 - **9** 8
 - ♦ KQJ76

4 10 9 7

♠ 10 7 6

y 5

- 4. 843
 - **♥** A 8
 - ◆ QJ 10 5
 - **♣** 10 9 8 4
- 5. ♠ 8 6
 - ♥ J 10 9
 - ◆ 10987642 ***** 6

6.

- ♦ J9654
- ♣ A K 9 8

Auction is: 1 - (1) –pass/bid–(4)

- 7. ▲ J 4
 - **♥** K 8 6 5
 - ♦ J7654
 - **♣** K 10
- 8. 107
 - ♥J98654
 - **♦** 9 6
 - ♣ A 7 3
- 9. 10
 - **♥** K 10 9 8 3
 - ◆ K 7 6 3
 - ♣ J 9 6

Auction is: $2 \lor -(2 \land) -pass/bid-(4 \land)$

- 10. ♠ A 8
 - **♥** K 6
 - ◆ O 10 9 8 7 4 3
 - **.** 104
- 11. AQJ5
 - ♥ Q74
 - **♦** 84
 - ♣ K 10 6 5 2
- 12. **♠** 2
 - **♥** A 7
 - ◆ OJ 10 7 6
 - ♣ KJ863

Answers

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

			IMPs	MPs
Auction is: 1 ♥ –(1♠)–pass/bid–(4♠)				
1. ♠ K 7 6 ♥ K 7 ♦ J 10 9 8 3 ♣ 8 7 3	1st	٧K	46.5%	3.36
	2nd	♦ J	43.1%	3.29
2. ♠ 64 ♥ Q 6 ♦ Q 10 8 5 ♣ K J 9 5 3	1st	^ 4	35.8%	3.10
	2nd	♥ Q	34.4%	3.09
3. ♠865 ♥98 ♦ KQJ76 ♣1097	1st	v 9	34.6%	3.06
	2nd	♦ K	33.5%	3.03
4. • 843 • A8 • QJ105 • 10984	1st	♦ Q	52.4%	3.53
	2nd	٧A	51.0%	3.51
5. ♠86 ♥J109 ◆ 10987642 ♣6	1st	. 6	37.3%	2.94
	2nd	♥ J	27.7%	2.81
6. ♠ 1076 ♥ 5 ♦ J9654 ♣ A K 98	1st	v 5	77.4%	4.34
	2nd	♣ A	75.9%	4.31
Auction is: 1 - (1 -)-pass/bid-(4 -)				
7. ♠ J 4 ♥ K 8 6 5 ♦ J 7 6 5 4 ♣ K 10	1st		40.9%	
	2nd	♦ 6	39.4%	
8. ♠ 107 ♥ J 9 8 6 5 4 ♦ 9 6 ♣ A 7 3	1st(I)	♦ 9		
	1st(M)		31.4%	
9. ▲ 10 ♥ K 10 9 8 3 ♦ K 7 6 3 ♣ J 9 6	1st	♠ 10	40.1%	
	2nd	\$ 6	36.6%	3.12
A				
Auction is: 2♥–(2♠)–pass/bid–(4♠)	1 .	17	21 10/	2.77
10. ♠ A 8 ♥ K 6 ◆ Q 10 9 8 7 4 3 ♣ 10 4	1st	♥ K	21.1%	
11 . 0 . 7 . 0 . 7 . 0 . 7 . 10 . 10	2nd	. 10	16.9%	
11. ♠ QJ5 ♥ Q74 ◆ 84 ♣ K 10 6 5 2	1st	v 4	15.6%	
10 . 0 . 1.7 . 0.110.7	2nd	* 5		2.28
12. ♠ 2 ♥ A 7 ♦ Q J 10 7 6 ♣ K J 8 6 3	1st	♦ Q		
	2nd	^ 2	12.5%	2.44

Chapter 10

Leading when declarer has a two-suiter

In this chapter we consider auctions where declarer has bid two suits and responder has chosen to play a game contract in one of them. For example, we will look at the auction 1 - 2 - 2 - 4. Declarer is then playing in hearts with a spade side-suit of at least five cards. How does this affect the opening lead?

The bidding is 1 - 2 - 2 - 4

On this auction declarer will often be in a 4–4 fit. Dummy's club suit may or may not be substantial. A forcing 1NT response is not part of Standard American (or Acol), so responder would follow the present sequence with 2=4=3=4 or 1=4=4=4 shape.

Hand 1

After bidding of
$$1 - 2 - 2 - 4 \lor$$
, what would you lead from:
 $A 9 4 3 \lor K 10 8 \lor J 10 9 8 3 \lor J 10 9 8 0 \lor J 10 9 0 \lor J 10 0 \lor J 10$

First thoughts Singleton leads normally fare very well. Does this apply when dummy has bid the suit and you have an honor sequence lead in the unbid suit?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	53.2%	3.65
v 8	23.9%	2.89
♦ J	52.1%	3.55
♣ J	57.1%	3.74

The singleton lead in dummy's suit is a better prospect than the diamond sequence. Much less expected is the strong showing of the A. Wow! Why should it be a good idea to release the ace of declarer's known 5-card (or

longer) side suit? The reason for this high marking is that such a lead allows you to switch to the singleton club, 'riding on the back' of the lead that is best. It does not imply that the \(\black A \) is an intrinsically good lead.

Hand 2

After bidding of
$$1 \triangleq -2 \triangleq -2 \checkmark -4 \checkmark$$
, what would you lead from:
 $\triangleq 10.7.6 \checkmark 10.7.6.4 \rightarrow J.6 \triangleq A.6.4.2.?$

First thoughts Now we hold a doubleton jack in the unbid suit. Does that also represent a promising lead? A major-suit attack looks unpromising but perhaps there is some reason to lead the A. What do you think?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
4 6	15.4%	2.68
v 4	15.9%	2.69
♦ J	29.3%	2.94
♣ A	20.3%	2.65

A huge win for the diamond doubleton. Nothing else needs to be said.

Hand 3

After bidding of
$$1 - 2 - 2 - 4 \lor$$
, what would you lead from:
 $4 \cdot 5 \cdot 4 \cdot 3 \lor A \cdot O \cdot 2 \lor K \cdot 9 \cdot 7 \cdot 4 \lor A \cdot 10 \cdot 5 \cdot 3 \cdot ?$

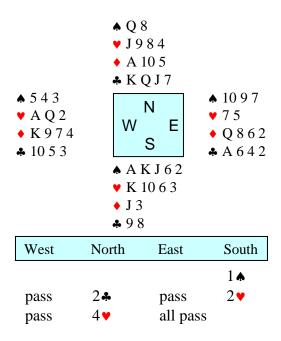
First thoughts Leads from a king have received harsh appraisals from our simulations so far. Does the fact that diamonds is the only unbid suit point a spotlight on the ◆4, nevertheless? If not, which alternative do you like best?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	18.6%	2.73
٧A	17.1%	2.65
♦ 4	22.3%	2.81
. 3	17.8%	2.71

There you have it. A lead from king fourth in the unbid suit is best. A profile of the simulation gives these probabilities for East to hold a key diamond honor: \bullet A (26.0%), \bullet Q (42.3%). When partner holds neither honor, there is a good chance that you would never have scored the \bullet K

anyway. There would have been discards available on one or other black suit.

Although one deal proves nothing, let's look at a typical lay-out from the simulation where a diamond lead is necessary to beat the contract:



West makes the recommended lead of the $\blacklozenge 4$, setting up a diamond trick for the defense before declarer has a chance to take discards on one of the black suits. When the $\blacktriangledown Q$ is offside, the contract has to go one down.

Hand 4

After bidding of 1 - 2 - 2 - 4, what would you lead from: $4976 \cdot 1043 \cdot AJ1086 \cdot 74$?

First thoughts When we led from the \bullet K on the last deal, either the \bullet A or the \bullet Q would be useful in partner's hand. Now we may need him to hold the king — one card instead of two. Furthermore, the 5-card length suggests that declarer will be ruffing at an early stage in one hand or the other. Will you still reach for the \bullet A?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 6	13.6%	2.43
v 3	12.9%	2.41
♦ A	21.0%	2.73
. 7	26.5%	2.72

A club lead is easily best at IMPs, with the ◆A a fair shot at match-points.

Hand 5

After bidding of $1 \triangleq -2 \triangleq -2 \checkmark -4 \checkmark$, what would you lead from: $\triangleq 6 \checkmark KQ6 \checkmark KQ1082 \triangleq 9765$?

First thoughts Now the diamond holding is more attractive but faces opposition from the singleton spade. How do you compare these two leads?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 6	18.7%	2.81
٧K	6.5%	2.30
♦ K	28.3%	2.98
4 7/5	14.0%	2.67

It's a relief to see that singleton leads are not always best. Here you would be leading into declarer's first suit. Also, you have high hopes of two trump tricks anyway. The •K lead (the unbid suit) wins by a good margin.

We reran this simulation, reducing the trump suit:

♦ 6 ♥ K 8 6	◆ K Q 10 8 2	♣ 9765?
Beats Contract (1	MPs)	Avg. Tricks (MPs)

	beats Contract (IMPS)	Avg. Tricks (MF
\$ 6	27.2%	2.73
v 6	8.9%	2.13
♦ K	27.9%	2.84
4 7/5	16.2%	2.45

With a spare trump for ruffing, the \$\delta 6\$ lead is much more attractive.

Hand 6

After bidding of $1 - 2 - 2 - 4 \lor$, what would you lead from: • K 9 6 • A 7 3 • 9 8 5 • O J 10 5 ?

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First thoughts Next we compare a club honor sequence with three spot cards in the unbid suit. Which of these appeals to you?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 6	6.2%	2.33
∨ A	13.9%	2.75
♦ 9/8/5	18.1%	2.81
♣ Q	16.6%	2.80

The club sequence trails behind three-low in the unbid diamond suit. A profile of the simulation showed these chances of East holding a big club: AA (11.8%), KK (22.9%).

We reran the simulation, upgrading the clubs to ♣K-Q-J-5. A club lead was then better than a diamond by 5.7%. When the club holding was downgraded to ♣J-10-9-5 a diamond lead was better by 6.2%

The bidding is 1 - 2 - 2 - 4

Next we look at the situation where responder goes to game in declarer's first suit. Declarer's side suit will then often be of only four cards rather than five. Responder is likely to have three spades. He will hold four clubs when his shape is 3=3=3=4 or 3=2=4=4, otherwise at least five clubs.

Hand 7

After bidding of
$$1 - 2 - 2 - 4$$
, what would you lead from:
 $4 \cdot 165 \cdot 5 \cdot 10842 \cdot 406432$?

First thoughts Singleton leads normally fare very well. Does this apply when the singleton is in declarer's (probably 4-carded) side suit?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	9.2%	2.45
v 5	33.1%	3.05
♦ 2	19.4%	2.84
. 3	14.7%	2.65

The answer is 'YES!' (Sorry to shout).

Hand 8

After bidding of
$$1 - 2 - 2 - 4$$
, what would you lead from:
 $4 \cdot 165 \cdot 5 \cdot KQJ3 \cdot Q6432$?

First thoughts We have strengthened the holding in the unbid diamond suit to a handsome king-high sequence. Do you have any idea how the numbers in the table will change, compared with those for the previous hand? You're in for a big surprise.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	4.5%	2.08
v 5	12.9%	2.42
♦ K	12.6%	2.58
♣ J	5.6%	2.18

We greatly strengthen West's diamonds and the chance of beating the contract drops from 33.1% to 12.9%. What do you make of that?

Before you throw the book out of the nearest window, give us a chance to explain these numbers. The first point to note is that the 6 points in diamonds are unlikely to be productive in terms of defensive tricks. Declarer will hold a doubleton diamond 47.2% of the time, a singleton 18.7% and a void 1.1%. North (the dummy) will hold two or fewer diamonds 14.0% of the time. So, the chance of scoring two diamond tricks is not high.

Secondly, the fact that West has 6 points more in diamonds than on Hand 7 means that East will hold correspondingly fewer points. (East's average point-count drops from 12.4 to 6.8). We are swapping East honor cards that might have taken tricks on Hand 7 for your • K-Q-J-3, which are less likely to do so.

There is also a reduced chance that partner will have the entries to give you a heart ruff or two. As a result, the singleton heart is only marginally better than the diamond sequence at IMPs and well behind it at match-points.

Hand 9

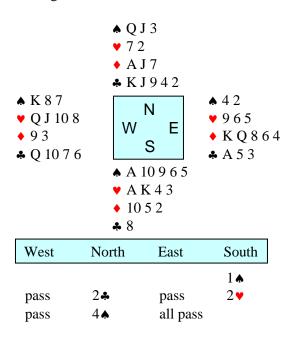
After bidding of
$$1 - 2 - 2 - 4$$
, what would you lead from:
• K 8 7 • Q J 10 8 • 9 3 • Q 10 7 6 ?

First thoughts Next we compare a doubleton in the unbid suit with an honor sequence in declarer's side suit. Are you expecting a close contest?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 7	13.7%	2.66
♥ Q	17.6%	2.79
♦ 9	24.3%	2.89
\$ 6	14.6%	2.68

The doubleton wins by a good margin, aided by the presence of a top trump that may increase the chance of receiving a ruff.

Let's take a 'lucky dip' into the simulation and see a deal where the diamond lead gains because it is a lead towards honors in partner's hand.



Suppose first that West leads the \bigvee Q. Declarer wins with the ace and leads a club to the jack and ace. When East returns a trump, declarer can succeed now by rising with the ace and ruffing two hearts with the \bigwedge Q and \bigwedge J. Even if he runs the trump return to West's \bigwedge K, he will still survive. He wins the second trump with the \bigwedge A, cashes the \bigvee K and ruffs a heart with dummy's last trump. He discards his remaining heart on the \bigwedge K and ruffs a club in his hand. After drawing the last trump he leads a diamond to the jack. With nothing but diamonds in his hand, East has to win and lead into declarer's split diamond tenace.

A diamond opening lead is deadly. East wins and can beat the contract with a spade or a diamond return.

Hand 10

After bidding of
$$1 - 2 - 2 - 4$$
, what would you lead from:
 $42 \vee J97 \wedge KJ95 + 10643$?

First thoughts We have seen elsewhere that leads from a K-J fare poorly. (You pay a price for leading from the jack as well as leading from the king). Is this nevertheless the best available lead when diamonds is the unbid suit?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	14.0%	2.45
v 7	10.1%	2.33
♦ 5	11.6%	2.46
. 3	10.5%	2.35

A trump lead will give you the best chance of beating the contract. A diamond lead is as good as a trump at match-points.

Hand 11

After bidding of
$$1 - 2 - 2 - 4$$
, what would you lead from:
 $A 9 = 87 + A = 109654 + A = 1769$?

First thoughts Leading the ◆ A will give you a chance of finding partner with a singleton and delivering a ruff. How do you compare it with the other leads?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΛA	27.6%	3.10
v 8	35.3%	3.20
♦ A	38.4%	3.29
\$ 6	29.5%	3.08

The ace of the unbid suit comes out on top. Opposite this West hand the chance of finding East with a singleton diamond is only 9.7% (void 0.4%) but there is also a 25% chance of finding him with the ◆K. It is this second chance that helps bring the lead to the fore. Note also that the doubleton lead in declarer's side suit is a better bet than a foray in one of the black suits.

We reran the simulation, downgrading the diamonds to \star K-10-9-6-5-4. The heart doubleton then won by over 6%.

The bidding is 1 - 1NT - 2 - 3 - 4

We end the chapter by looking at a sequence where dummy has a minimum response (1NT) and then shows a fit for opener's second suit. The responder will hold four hearts (occasionally five hearts) and at most two spades

Hand 12

The bidding is
$$1 - 1NT - 2 - 3 - 4$$
, what would you lead from: $\uparrow 76 \lor Q J 105 \to A 1076 \to 742$?

First thoughts You have an honor sequence in hearts. When you know that the opponents hold at least eight of the missing hearts, leading from such a suit is risky. As for the three side-suit leads, it is anyone's guess which is most likely to be effective. Let's see the results:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 7	77.2%	4.19
♥ Q	61.7%	3.81
♦ A	81.3%	4.25
♣ 7/4/2	78.2%	4.25

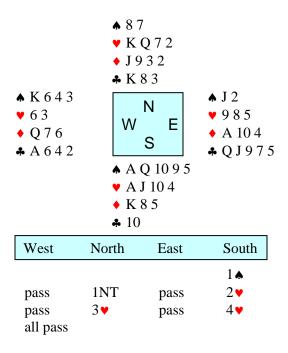
You should avoid a heart lead, as we thought. The ◆A finishes ahead of a passive black-suit lead, at IMPs anyway.

Hand 13

First thoughts If the presence of an unaccompanied honor in each of the three side suits turns you off, you can fall back on a trump lead. Meanwhile, which of the minor-suit leads do you prefer?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	16.9%	2.54
v 3	28.9%	2.94
♦ 6	34.3%	3.07
. 2	29.9%	3.00

Once again a trump lead disappoints. The diamond lead wins by a fair margin. Let's dip into the simulation and look for a typical deal where the diamond lead does well.



If you make the approved lead of the \bullet 6, East will win and return a diamond. Declarer is then booked for one down, losing two diamonds, the \bullet K and the \bullet A. On a passive trump lead, declarer can win and set up a diamond discard on the \bullet K.

Leading from three or four cards to a lone honor is not normally a good idea but here there is too much chance of diamond losers vanishing on one of the black suits. Remember also that leading from a queen is not so dangerous as leading from a king or ace.

Hand 14

The bidding is
$$1 - 1NT - 2 - 3 - 4$$
, what would you lead from: $Q 8 6 4 \times K 6 \times K J 5 2 + 9 8 7$?

First thoughts There is no apparent reason to lead either major suit. Do you prefer an aggressive diamond lead or a passive club? In diamonds, you hold some honors and these may be converted into tricks if partner holds the

◆A or ◆Q. In clubs you have nothing to contribute yourself but may be leading towards honors in partner's hand. What do you think?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	20.1%	2.66
♥K	11.8%	2.18
♦ 2	24.7%	2.81
\$ 9/8/7	26.0%	2.83

With leads from a K-J on our black list, the passive club lead wins. The results were similar, with the club lead still winning, when the diamonds were reduced to \bullet K-9-6-2.

Hand 15

The bidding is
$$1 - 1NT - 2 - 3 - 4$$
, what would you lead from:
 $10 \quad Q \quad 7 \quad 4 \quad 9 \quad 4 \quad Q \quad 10 \quad 7 \quad 5 \quad 4 \quad 9$

First thoughts You can rule out a heart lead, but the three side suit leads are all candidates. Which will receive your vote?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 10	27.3%	2.86
v 2	17.2%	2.59
♦ 9	28.9%	2.92
♣ Q	19.9%	2.65

The doubleton in an unbid suit eases out the singleton in South's spades. Are you surprised that leading from the *Q-J-10 fares so badly? A profile of the 5000 deals in the simulation shows that South will hold a singleton club 63.8% of the time (void 13.0%, doubleton 22.0%). You need four tricks to beat the heart game and these will not include many club tricks.

CONCLUSIONS

Leading when declarer has a two-suiter

- When the bidding starts 1 2 2 4, a singleton heart lead may work well.
- When the bidding starts 1 2 2 = 0 and ends in a major-suit game, a lead in the unbid diamond suit is often best.
- After bidding of 1 1NT 2 continuing to 4 , a general guideline is to lead your shorter minor suit. For example, a low doubleton diamond is better than Q-J-10-x-x-x.
- After bidding of 1 1NT 2 continuing to 4, consider a trump lead when your spades are strong.

Pick a Winner! Leading against a two-suiter

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 overleaf.

(Auction is: 1 - 2 - 2 - 4)

- 1. ♠ J 7
- 2. A 10 9 4
- **3.** ♠ 8 4 2

- **9** 9 7 3 2
- ✓ J 8 2✓ Q 7 4

♥ A 9 3

♦ A 4

♣ J 9 7

◆ K 10 7 5 ♣ 7 3 2

- ♣ Q 7 5 4 3
- 5. Q 10 8 7
- 6. ★ K 2

♥ J 8 7

4. ♠ K J 6

- **3**7 **♥**974
- **v** 10 7

- **♦** 8 7 6 2
- ◆ K Q 8 4 3
- ♦ QJ75

- **4** 10 7 6
- **.** 7

♣ Q 10 8 7 5

(Auction is: 1 - 2 - 2 - 4)

- 7. 54
- 8. **A** J 7 5
- 9. ♠ K 7

- **∨** K 8 4 3
- **v** 3
- **v** 10 6 5 4

♦ KJ9

- ♦ Q 10 8 5 3
- ♦ K 7 5

- ♣ J 9 8 7
- ♣ K 10 9 4
- ***** 8765

(Auction is: 1 - 1NT - 2 - 3 - 4)

- 10. 3
- 11. **A** J 10 9 6
- 12. AAKJ96

- **∨** K93
- **v** 87
- **♥** 7 6 5

♦ 985

- ◆ QJ543
- Q85

- ♣ J 10 8 6 4 3
- **♣** J 9

***** 10 6

Answers

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

	IMPs	MPs
(Auction is: $1 - 2 - 2 - 4 $)		
1. ♠J7 ♥9732 ♦ A4 ♣Q7543	1st	◆A 26.4% 2.96
	2nd	♥ 2 20.7% 2.72
2. ♠ A 10 9 4 ♥ J 8 2 ♦ Q 7 4 ♣ J 9 7	1st	♦ 4 26.7% 3.07
	2nd	♣ 7 21.5% 2.95
3. ♠842 ♥ A93 ♦ K1075 ♣732	1st	♦ 5 19.6% 2.76
	2nd	4 2 18.1% 2.69
4. ♠ KJ6 ♥ J87 ♦ 8762 ♣ 1076	1st	◆7/2 26.1% 2.99
	2nd	♣ 6 23.8% 2.92
5. ♠ Q 10 8 7 ♥ 9 7 4 ♦ K Q 8 4 3 ♣ 7	1st	♣ 7 34.9% 3.13
	2nd	◆K 29.8% 3.03
6. ♠ K 2 ♥ 10 7 ♦ Q J 7 5 ♣ Q 10 8 7 5	1st	◆Q 13.8% 2.59
	2nd	♥ 10 10.5% 2.40
(Auction is: $1 - 2 - 2 - 4$)		
7. ♠ 54 ♥ K 8 4 3 ♦ K J 9 ♣ J 9 8 7	1st	♦ 5 16.6% 2.56
	2nd	♦ 9 14.7% 2.55
8. • J 7 5 • 3 • Q 10 8 5 3 • K 10 9 4	1st	♥ 3 29.2% 2.97
	2nd	♦ 5 17.5% 2.70
9. ★ K 7 ♥ 10 6 5 4 ♦ K 7 5 ♣ 8 7 6 5	1st	♦ 5 21.3% 2.75
	2nd	4 20.2% 2.65
(Auction is: $1 - 1NT - 2 - 3 - 4 $)		
10. ♠ 3 ♥ K 9 3 ♦ 9 8 5 ♣ J 10 8 6 4 3	1st	★ 3 56.3% 3.63
	2nd	♦9/5 54.4% 3.55
11. ♦ J 10 9 6 ♥ 8 7 ♦ Q J 5 4 3 ♣ J 9	1st	♣ J 30.2% 2.97
	2nd	◆Q 26.1% 2.92
12. ♠ A K J 9 6 ♥ 7 6 5 ♦ Q 8 5 ♣ 10 6	1st	♥ 7 65.8% 3.89
	2nd	♣ 10 62.3% 3.79

Chapter 11

When to lead a trump

Trump leads have fared very poorly indeed, so far in the book. Against slams, as we will see later, a trump lead is very often the worst lead of all. In this chapter we will track down some hands where a trump lead is best. We will then try to formulate some guidelines on the matter.

The most well-known advice, decades old, is 'When in doubt, lead a trump'. In other words, when you have no particularly obvious lead elsewhere, a trump lead may be best. Our simulations so far have not backed up this advice.

Leading a trump when all side suits contain honors

When the opponents' sequence is 1 - 2 - 4, there is no particular reason to lead a trump. It's true that the dummy will often hold only three trumps and you might cut down ruffs in the dummy. However, the most common reason to lead a trump is nothing to do with reducing declarer's ruffs. It's because you don't like the look of the available side-suit leads.

Hand 1

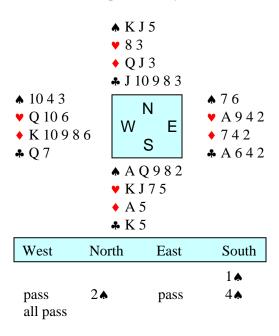
The opponents bid 1 - 2 - 4. What will you lead from: $1043 \quad Q106 \quad K10986 \quad Q5?$

First thoughts You have an honor in each of the side suits. Will you risk a lead of one of those suits or fall back on a safe trump lead?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	19.9%	2.66
v 6	16.5%	2.52
♦ 10	17.3%	2.57
♣ Q	17.9%	2.58

Of the three side-suit leads, the $\triangle Q$ is best. It is far from attractive, though, and a trump lead is a wiser investment at both forms of the game. Sometimes a trump lead will succeed merely because one or more of the

other leads would have given away a trick. Let's look for a deal from the simulation where a trump is the only successful lead.



Suppose first that West leads a heart to the ace and East returns a trump to dummy's jack. Declarer crosses to the ♥K and ruffs a heart, bringing down West's queen. After playing the bare ♠K, he returns to hand with the ♠A and draws the last trump. He then plays a diamond. West wins and is end-played, forced to play a diamond to dummy or a club. (Suppose the cards lay differently and East won with the ♠K, returning a club. Declarer would then need to guess correctly in the suit.)

Now see what happens on a trump lead, won in the dummy. Declarer cannot avoid two heart losers and one further loser in each minor suit. Suppose he guesses to play a heart to the king and continues with a second heart. He can take one heart ruff but eventually finishes a trick short.

Hand 2

The opponents bid 1 - 2 - 4. What will you lead from: $54 \times KJ94 \times K105 \times J864$? **First thoughts** Leads from a king have not exactly covered themselves with glory so far. Do you prefer a club or a trump?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	33.2%	3.08
v 4	26.5%	2.88
♦ 5	27.0%	2.87
4 4	32.4%	3.06

A club lead is less likely to give away a trick than leading from a king. However, it is not quite as safe as a trump lead, which heads the table.

If you reduce the club holding to a safer \$\.10-8-6-4\$, it overtakes the trump lead by a small margin.

Leading a trump when responder prefers second suit

Now we will look at a situation where a trump lead is universally advocated. What can you deduce from the opponents' bidding when it goes something like 1♣-1NT-2♦-pass? If responder held two spades and three diamonds he would generally give preference to spades, the known 5-card suit. It is quite likely therefore that responder holds no more than one spade, alongside at least three diamonds. Left alone, declarer will often score extra tricks by ruffing spades in the dummy and a trump lead may thwart his intentions.

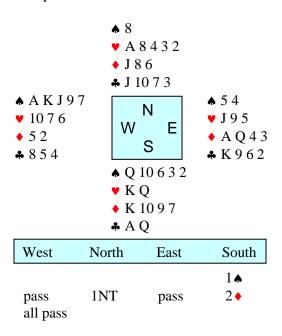
Hand 3

The opponents bid $1 - 1NT - 2 \cdot$. What will you lead from: $A \times J = 7 \cdot 1076 \cdot 52 \cdot 854?$

First thoughts You have been granted a fabled A-K combination but unfortunately it is in declarer's main suit. Will you lead from three low spotcards in an unbid suit or perhaps try a trump?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΛA	11.6%	4.11
v 6	12.8%	4.13
♦ 2	21.1%	4.41
♣ 8/5/4	12.7%	4.13

That's a massive endorsement for the trump lead. Declarer's spades are relatively weak, with the defenders' high cards lying over them. He will surely be looking for a ruff or two in the dummy. Let's see a simulation deal where a trump lead will beat the contract.



Suppose you lead the \blacklozenge 2. East does best to play low, retaining the \blacklozenge A so that he can play two more rounds of trumps later. Declarer wins in his hand, cashes the \blacktriangledown K-Q and exits with a low spade. You win with the \spadesuit 9 and play another trump. East wins with the \spadesuit A and returns the \spadesuit Q to prevent dummy winning the trick. Declarer wins with the \spadesuit K and draws the last trump, as you discard a heart and a club. When declarer puts you on lead with a spade, you must give him a spade trick or a second club. He is still one down.

After any other opening lead declarer can make an overtrick.

Hand 4

The opponents bid $1 - 1NT - 2 \cdot$. What will you lead from: $10975 \cdot K852 \cdot J \cdot 973?$

First thoughts This time you have only a singleton jack in the trump suit. Will that be the best lead, nevertheless?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
۸J	21.4%	4.60
v 2	20.7%	4.59
♦ J	33.2%	4.97
4 7/3	23.0%	4.65

Yes, a trump lead is best at both forms of the game. Remember that an average of 0.3 tricks per deal is a truly huge match-point advantage.

Hand 5

First thoughts The A-K-Q combination, normally described as an obvious God-given lead, is perhaps not best when spades is South's longest suit, particularly as dummy is likely to hold a singleton in the suit. Do you prefer the singleton club or a trump?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A/K	23.2%	4.64
v 3	26.1%	4.73
♦ 4	34.5%	4.92
. 7	30.7%	4.87

A trump lead is a better prospect than the singleton club. When you hold the top spades, it is likely that any spade ruff declarer can score in dummy will give him an extra trick. Start with a trump and you have an excellent chance of winning the first round of spades and playing a second trump.

It is interesting to note that a lead from an A-K-Q combination is sometimes the very worst that you can make!

Hand 6

The opponents bid
$$1 - 1NT - 2 \rightarrow$$
. What will you lead from: $8763 \rightarrow 6 \rightarrow A104 \rightarrow KQ1094?$

First thoughts This deal offers two possible alternatives to the trump lead that has so far proved to be best. The singleton heart has its attractions, as

does the broken sequence in clubs. Will either of those dissuade you from leading a trump?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 3	12.8%	4.19
v 6	20.2%	4.55
♦A	9.9%	4.00
♦ 4	9.4%	3.99
♣ K	18.9%	4.51

The trump lead comes last! Why is that? One reason is your four low cards in spades. This implies that declarer may not need to take many spade ruffs; your partner's spade honors (if any) will drop early in the play.

Another reason is that you may lose a natural trump trick by leading from the A-10-4. Your ownership of the trump ace also increases the chance that a singleton heart lead will be productive. Even if East does not win immediately, you may be able to reach his hand later to receive a heart ruff.

Hand 7

First thoughts The reasons why a trump lead disappointed on Hand 7 have gone. If a trump is right, will you lead the ace or a low trump?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
٨K	7.4%	3.90
y 5	14.4%	4.25
♦ A	15.9%	4.25
♦ 3	17.5%	4.31
. 3	12.6%	4.20

A low trump is better than the ace at both IMPs and match-points. It will work well when partner holds a doubleton king of trumps and the defenders can then play three rounds of trumps immediately. A profile of this simulation shows that East will hold the ◆K on 13.8% of the deals and a doubleton diamond 58.9% of the time.

Hand 8

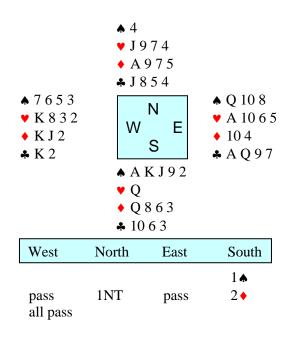
The opponents bid $1 - 1NT - 2 \cdot$. What will you lead from: $\uparrow 7653 \quad \text{K} \quad 832 \quad \text{K} \quad 12 \quad \text{K} \quad 2?$

First thoughts Here your trump holding is ◆K-J-2 and we must ask the question: should I still lead a trump despite the fact that it may well give a trick away in the suit? What do you think? The alternative leads in the unbid suits are also away from a king, so they are hardly attractive alternatives.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 6/3	14.3%	4.15
v 2	16.7%	4.26
♦ 2	11.7%	3.78
♣K	16.7%	4.20

Well, there you have it. A trump lead is easily worst, even though responder has preferred declarer's second suit. You should pick a lead from the two side-suit kings. (Again we note that the four low spades mediate against a trump lead.)

Let's see a typical deal from the simulation where a trump lead fares less well than a side-suit lead:



Suppose you make one of the recommended leads - a low heart. East wins with the ace and notes the fall of declarer's \mathbf{Q} . Seeing the need for some club tricks, he switches brightly to the \mathbf{A} 7. You win with the \mathbf{A} K and continue clubs, East scoring two more tricks in the suit. A fourth round of clubs now beats the contract. If South discards, you will ruff with the \mathbf{A} 2 and score a second trump trick subsequently. If instead South ruffs with the \mathbf{A} 6, you will overruff with the \mathbf{A} 7 and exit passively. Declarer cannot avoid the loss of a second trump trick. The play is similar if you lead the \mathbf{A} 6.

After a trump lead, the contract is easily made. Declarer wins East's \bullet 10 with the \bullet Q and draws a second round of trumps. Whether or not he finesses the \bullet J, he will establish the suit and make at least eight tricks.

Should I lead a trump against an obvious sacrifice?

You bid to 4♥ on good values, expecting to make the contract. The opponents then sacrifice in 4♠, which you or your partner doubles. What type of opening lead is likely to pick up the best penalty? You have more high-card points than the other side, so perhaps you should lead a trump to prevent declarer taking too many ruffs for your liking. Many players take this view. Perhaps, though, it is better to lead a heart, in case your winners there disappear.

For this section only, we will be using a different version of the 'Beats Contract' figures. We will have four separate columns, stating how often a particularly lead will put the sacrifice one, two, three or four down. At the various vulnerabilities, you may need to aim for 500 to beat a non-vulnerable game your way, or 800 to beat a vulnerable game.

Hand 9

East opens $1 \checkmark$ and South overcalls $1 \spadesuit$. When you bid constructively to $4 \checkmark$ the opponents sacrifice in $4 \spadesuit$ doubled. What will you lead from:

♦96 ♥Q863 **♦**KJ106 **♣**KJ6?

First thoughts Those players who think that a trump lead is best against a clear sacrifice will see no reason to lead anything else here. Are they right? We will look at the Beats numbers for 1/2/3/4 down, since that will tell us the recommended lead whatever the vulnerabilities of the two sides.

	(IMPS at the various vulnerabilities)				(MPs)
	1 down	2 down	3 down	4 down	Avg. Tricks
^ 6	94.5%	84.1%	62.1%	33.8%	5.87
v 3	95.3%	84.7%	64.0%	35.1%	5.93
♦ J	94.2%	83.0%	61.7%	31.5%	5.81
. 6	93.7%	82.2%	59.9%	31.8%	5.77

As you see, a heart lead is best (ahead of a trump lead) whether your aim is to beat the contract by 1, 2, 3 or 4 tricks. Suppose the score is Love all or Game all and you need to beat the contract by three tricks to score 500 (instead of 420/450) or 800 instead of (620/650). A heart lead will give you a 64.0% chance of achieving this, rather than 62.1% for a trump lead.

The ranking order of the four leads is the same throughout, except that the 4^{th} -ranked $\clubsuit6$, just about creeps into 3^{rd} place when you are vulnerable against non-vulnerable and need to take the sacrifice four down.

Hand 10

East opens $1 \checkmark$ and South overcalls $1 \spadesuit$. When you bid constructively to $4 \checkmark$ the opponents sacrifice in $4 \spadesuit$ doubled. What will you lead from:

First thoughts Once again, there will be many players reaching for a trump the moment the auction is over. Can a red-suit ace or a lead from the club doubleton be better than that?

	(IMPS at the various vulnerabilities)				(MPs)
	1 down	2 down	3 down	4 down	Avg. Tricks
4 4	96.4%	88.0%	68.5%	38.0%	5.87
♥A	97.0%	89.2%	71.4%	41.9%	5.93
♦ A	96.5%	87.3%	66.2%	35.5%	5.81
♦ 3	95.7%	86.5%	66.5%	37.1%	5.81
♣ Q	95.7%	86.4%	67.4%	39.9%	5.77

It's much the same as for the last hand. The ♥A is slightly better than a trump, whatever your trick target is. In fact the gap grows as the trick target increases.

A low diamond lead can work better than the ace. This is of academic interest only, since a heart is the best lead.

Hand 11

East opens $1 \checkmark$ and South overcalls $1 \spadesuit$. When you bid constructively to $4 \checkmark$ the opponents sacrifice in $4 \spadesuit$ doubled. What will you lead from:

First thoughts We are still searching for a West hand where a trump lead is better than a heart lead. If there is one, this will probably be it. We have an unexpected Q-J-10 sequence in their trump suit. Should we now, at last, choose a trump lead?

	(IMPS at the various vulnerabilities)				(MPs)
	1 down	2 down	3 down	4 down	Avg. Tricks
♠Q	97.6%	89.7%	68.8%	38.6%	6.09
♥ K	98.0%	89.6%	67.9%	37.2%	6.06
♦ 2	96.8%	86.9%	64.1%	33.2%	5.91
♣ Q	97.1%	88.2%	65.7%	33.3%	5.95

So, the $\triangle Q$ is better than the $\bigvee K$ by a small margin, when aiming for 2, 3 or 4 down. It's an exception to the rule, caused by the sequence of honors. You will not go far wrong by leading partner's suit in sacrifice situations.

Hand 12

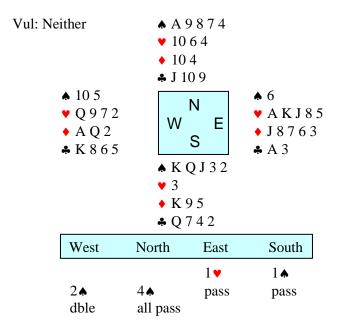
East opens $1 \checkmark$ and South overcalls $1 \spadesuit$. When you bid constructively to $4 \checkmark$, the opponents sacrifice in $4 \spadesuit$ doubled. What will you lead from:

First thoughts One final tester, then. We are back to a nondescript doubleton trump and expecting a heart lead to be best. Let's just make sure of that.

	(IMPS at the various vulnerabilities)				(MPs)
	1 down	2 down	3 down	4 down	Avg. Tricks
♦ 5	95.2%	82.3%	56.8%	28.2%	5.72
v 2	96.2%	85.3%	62.2%	32.8%	5.87
♦ A	95.5%	82.4%	57.1%	28.5%	5.71
4 5	95.1%	83.7%	60.7%	31.1%	5.80

A heart is better than a trump, by the biggest margins that we have seen. There is no need to run any more simulations in this category. We have obtained a clear picture: lead partner's suit!

Before moving on, let's pick a typical deal from this simulation, one that demonstrates how a trump lead can lose out by surrendering control:



You had an easy 450 available in hearts, so you need to get $4 \spadesuit$ three down for a penalty of 500. This is straightforward enough if you lead a heart. Your partner wins with the $\blacktriangledown K$ and switches to ace and another club. You win with the $\clubsuit K$ and give him a club ruff. A diamond switch then allows you to score two tricks in that suit. The first six tricks are yours and the required 500 is safely in the bag.

As you see, a trump lead would surrender the lead. Declarer would simply draw trumps and establish the club suit, escaping for 300.

Which trump should I lead?

A general guideline when you lead a trump is to play your lowest trump. If you are leading from something like 9-7–3, your top card may sometimes have a role to play, later in the deal. In this section we will take a look at such leads, also whether you lead an honor from such as J-10-6 and A-9-6.

Hand 13

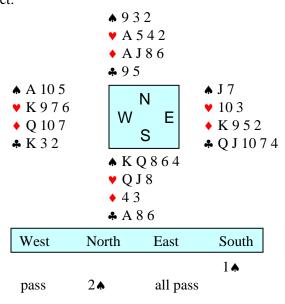
The opponents bid
$$1 \triangleq -2 \triangleq$$
. What will you lead from:
 $\triangleq A \ 10 \ 5 \quad \forall \ K \ 9 \ 7 \ 6 \quad \Leftrightarrow \ Q \ 10 \ 7 \quad \clubsuit \ K \ 3 \ 2 \ ?$

First thoughts The side-suit leads do not look attractive. If you decide to lead a trump, which card will it be?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	21.6%	4.64
\$ 5	28.6%	4.86
v 6	25.9%	4.81
♦ 7	27.0%	4.83
. 2	26.0%	4.80

A low trump is the best of the five leads; the ace of trumps is the worst. The $\triangle A$ lead is all too likely to blow a trump trick. Your partner has these chances of holding a trump honor: $\triangle K$ (18.0%), $\triangle Q$ (20.2%), $\triangle J$ (29.1%).

Let's look for a simulation deal where the $\clubsuit 5$ is the only lead to break the contract:



West, who had recently read a rather unusual book on opening leads, put his finger on the \$\delta 5\$. East's \$\delta J\$ forced the \$\delta Q\$ and declarer paused to take stock. Three trump tricks, two hearts and two minor-suit aces would bring

his total to seven. Without a trump lead, he could have added a club ruff to the pile. If he ducked a club now, though, East would win and send a second trump through the king, allowing West to remove dummy's trumps. As the cards lay, there was no way to make the contract.

As you see, ace and another trump would give up the defenders' second trump trick. Any other lead would allow declarer to score a club ruff.

We ran a similar simulation with West holding $\triangle A$ -9-6 (and slightly different honors in the side suits). The $\triangle 6$ won with 29.1% and the $\triangle A$ lagged behind with 25.6%. As expected, the difference between leading high or low was less than for $\triangle A$ -10-5.

Hand 14

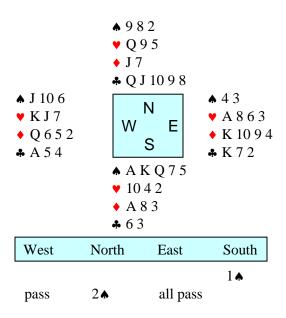
The opponents bid $1 \triangleq -2 \triangleq$. What will you lead from: $4 \times J = 106 \implies K = J = 7 \implies J = 106 \implies J$

First thoughts The side suits do not demand attention. If you think a trump lead is best, will you lead the $\blacktriangle J$ or the $\blacktriangle 6$?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
۸J	17.6%	4.55
\$ 6	17.1%	4.54
v 7	14.1%	4.44
♦ 2	16.9%	4.55
♣ A	14.3%	4.48

A trump lead is indeed best and you should lead the \$\int J\$. There is a 22.1% chance that partner will hold the \$\int Q\$, but it is much more likely to be doubleton than singleton.

How can the lead of a trump honor (rather than the ♠6) gain? We looked in the simulation and found a variety of such deals. Sometimes declarer could win cheaply in the dummy and benefit from the extra entry. On other occasions, declarer would run into a trump promotion, as on this deal:



When West leads the $\blacktriangle J$, declarer wins with the $\blacktriangle A$ and plays a low diamond to the jack and king. He wins the trump return with the $\blacktriangle K$, cashes the $\blacklozenge A$ and ruffs a diamond. After a club to the $\clubsuit A$, West plays the $\blacktriangledown K$, continuing with the $\blacktriangledown 7$ to East's $\blacktriangledown A$. A third round of hearts goes to dummy's $\blacktriangledown Q$. East then wins the second round of clubs and leads a fourth round of hearts to promote West's $\blacktriangle 10$.

If West's opening lead had been the \(\bullet 6 \) instead, declarer would win cheaply. He would then have two trump honors remaining in the end position and would not succumb to the trump promotion.

We ran a further simulation with West holding:

A trump was marginally better than a low diamond. Leading the $\triangleq 2$ is generally recommended from 10-2 in the trump suit but on none of our 5000 deals did it make any difference which trump you led.

Will my trump lead catch partner's queen?

When you lead from one, two or three trump spot-cards, there is some chance that you will catch partner's queen, saving declarer a guess. This small advantage to all the non-trump leads is not reflected in our double-dummy simulations because the computer declarer 'knows' where the trump

queen is. Our 'Beats' and 'Avg. Tricks' tables may therefore give a marginally inflated view of such leads in the trump suit. (Remember, though, that side-suit leads too may occasionally assist declarer in a guess. This is an example of how double-dummy effects may cancel each other out.)

In this section we will try to estimate how likely it is that a lead from trump spot-cards will save declarer a queen-guess. We will look at a typical West hand where a passive trump lead seems best. After a Stayman auction the North-South trumps are very likely to be 4-4.

Hand 15

The opponents bid 1NT-2 - 2 - 4. What will you lead from:

First thoughts The side-suit leads look risky. It seems to be one of those deals where a trump lead will not achieve much directly but it should be the least likely to give a trick away. What do you think?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
∧ 8	27.9%	2.80
v 2	21.0%	2.53
♦ 3	19.1%	2.50
4 4	21.9%	2.56

The trump lead is a clear winner and but we must ask ourselves how often it will give away the position of partner's trump queen.

Although the times when an opening lead has given away the position of the trump queen are engrained on our memory (and even more so on partner's memory) our investigations show there is only a small chance of this happening. Why is that?

A profile of this simulation tells us that the chance of East holding the various spade honors is: $\triangle Q$ (16.4%), $\triangle J$ (24.4%), $\triangle 10$ (31.6%). We will look first at the situation where he has the trump jack alongside his queen:

Most of the time when partner has the jack accompanying his queen, declarer will not have a guess in the suit. Only in position (2) might a trump

lead prompt declarer to take a double finesse. He has the option of doing this anyway, provided the necessary entries are present.

When partner's AQ is accompanied by the A10, these are the two key positions:

On (3) declarer must lose a trump trick. On (4) declarer plays low at Trick 1, winning East's 10 with the ace. Since West is not likely to have led from the queen, declarer will doubtless finesse against the queen on the next round. Without a trump lead he might well have chosen to play the ace and king, hoping to drop the queen. So, the trump lead may give away a trick.

When partner does not hold the jack or 10, the lead may save declarer a two-way guess:

On (5) declarer might have misguessed the trumps. On (6) there is no cost because declarer would probably have finessed the 10 anyway.

If we assume that declarer will take a two-way finesse correctly 50% of the time, our calculations show that the low doubleton trump lead will give away a trick no more than 2% of the time – in other words, only one eighth of the time that partner holds the \mathbf{AQ} . This is likely to be way less than the potential cost of an alternative side-suit lead from an honor.

CONCLUSIONS - Leading a trump

- Against a one-suit auction to a major-suit game, a trump lead is rarely best. Choose one only when all three of the side suits are headed by honors.
- When responder opts to stop in the opener's second suit, a trump lead is indicated. Nevertheless, prefer to lead a side-suit singleton or from a side-suit honor sequence. A trump lead is less attractive when you hold four or more low cards in declarer's first suit.
- Many players recommend a trump lead when the opponents have sacrificed and you have a clear balance of the points. Our simulations do not back this up. If the opponents bid 4♠ over your 4♥ with a trump fit that is at least 5–4, you are unlikely to prevent a ruff by leading a trump. Generally, prefer a lead in the suit that partner opened.
- When you lead from three or four trumps to the ace, a low card is usually better than the ace. Be wary of leading a trump from A-J-x or A-10-x. Even a lead from A-9-x may cost a trick.

Pick a Winner! Leading a trump

On the twelve West hands below your main decision is whether or not you should lead a trump. Note also if you think that a different lead would be best at match-points. The results are given overleaf.

(Auction is: $1 - 1NT - 2 \rightarrow$)

1. • 84

♥ J 7 6 5 4 2

♦ 74

♣ A K J

2. • 75

♥ K Q 10 8

◆ 10 8 5 2

♣ A 9 7

3. • 104

v 5 2

♦ K985

♣ A Q 10 8 3

4. • A Q 9 3

♥ J 10 9 2

♦ J 6

♣ K 9 7

5. **A** A 6

♥ K 6

◆ A 6 5 3 2

♣ Q 8 7 6

6. **A** K Q 9 5

♥ Q J 5

• 9

♣ J 10 9 8 5

(Auction is: 1 - 2 - 4)

7. • J 10 6

y J 6

♦ K 7

♣ KJ9732

8. • 873

♥ KJ965

♦ Q 6 4

♣ K 3

9. • 764

▼ K Q 7 4

♦ K Q 5

♣ Q 8 6

(Auction is: 1 - 3 - 4)

10. **♠** J 3

♥ K 8 4 3

◆ KJ 10 6

♣ A 9 5

11. AA7

♥ Q 6 3

• K 10 8 7

♣ KJ32

12. **♠** 10 5

♥ Q 9 6 2

♦ A Q 2

♣ K 8 6 5

Answers

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

IMP	s MPs	
(I) •4	10.8%	4.00
M) ♣A	10.1%	4.10
♦ 2	27.6%	4.83
٧K	21.1%	4.67
v 5	36.0%	5.11
♦ 5	29.8%	4.91
♦ J	27.2%	4.72
♥ J	24.3%	4.64
♦A	69.4%	6.05
. 6	49.9%	5.51
♦ 9	23.4%	4.56
♥ Q	15.0%	4.17
♥ J	30.9%	3.04
♦ K	29.9%	2.93
A 3	24.3%	2.84
♦ Q	20.9%	2.70
^ 4	20.7%	2.70
♥K	15.0%	2.56
I)	13.5%	2.51
M) ▲ 3	12.9%	2.54
♠A	13.4%	2.54
v 3	11.9%	2.41
v 2	13.1%	2.39
\$ 5	11.7%	2.40
	(I) •4 M) •A •2 •K •5 •5 •J •J •A •6 •9 •Q •K •X	◆2 27.6% ▼K 21.1% ▼5 36.0% ▼5 29.8% ▼J 27.2% ▼J 24.3% ▼A 69.4% ♣6 49.9% ▼9 23.4% ▼Q 15.0% ▼J 30.9% ▼K 29.9% ♠3 24.3% ▼Q 20.9% ♠4 20.7% ▼K 15.0% I) ♣A 13.5% M) ♠3 12.9% ♠A 13.4% ▼3 11.9% ▼2 13.1%

Chapter 12

Leading against a pre-emptive raise

A sequence such as 1 - 4 suggests that the responder is fairly weak but has an excellent trump fit, often a 5-card fit. The same is true when an opponent intervenes with a double or an overcall: 1 - (dble) - 4, or 1 - (2 -) - 4. In this chapter we will look at the opening lead against such contracts. Although responder is known to be fairly weak, the opener's hand may be either weak or strong. It will be interesting to see whether the optimal leading style is any different from that when leading against a sound auction to 4 - 4.

Which types of lead work well?

Hand 1

The bidding is 1 - 4 (where 4 is pre-emptive). What would you lead from:

First thoughts Members of a bridge magazine panel might pick any of the four possible leads. Which is your choice?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	38.1%	3.20
v 10	38.4%	3.22
♦ 4	37.8%	3.20
♣ K	42.9%	3.31

The **&**K wins and there is a tight finish for second place. The club lead would not be rated so highly from a shorter suit. Leading from K-Q-x carries a greater risk of costing a trick than a lead from K-Q-x-x or K-Q-x-x-x. That's because declarer and the dummy are likely to hold more cards in the suit and may score an undeserved trick with dummy's jack.

To judge whether the pre-emptive auction makes any difference, we will rerun the simulation for this West hand on an auction of 1 - 2 - 4:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	32.5%	3.10
v 10	36.5%	3.21
♦ 4	32.2%	3.08
♣K	36.3%	3.23

The numbers all drop a bit because South will now have a strong playing hand. Attacking with the ♣K loses its 4.5% lead at IMPs and falls behind the passive heart lead.

Hand 2

First thoughts You overcall $2 \checkmark$ (or perhaps a weak $3 \checkmark$) on these West cards and North leaps pre-emptively to $4 \spadesuit$. Do you prefer a top heart or the singleton club?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	27.4%	2.90
٧K	39.7%	3.21
♦ J	33.6%	3.09
. 9	48.9%	3.41

No contest! As is usually the case, the side-suit singleton lead is easily best at both forms of the game.

Hand 3

The bidding is
$$1 - 4$$
. What would you lead from:
• J 10 • K J 9 5 • K 2 • Q 6 4 3 2 ?

First thoughts A bundle of unattractive leads, yes, but which will you choose?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
۸J	25.1%	2.76
v 5	23.5%	2.77
♦ K	27.9%	2.70
. 3	29.2%	2.87

Leading the \bigstar K – an aggressive thrust that might beat the contract – is a fair shot at IMPs. It comes a poor last at match-points, where it will often concede an undeserved overtrick. The passive trump lead, doubtless the choice of many, is not rated. The best start at both forms of the game is the safest of the three side-suit leads, a club from the queen.

We reran this simulation against an auction of 1 - 2 - 4 and found that the relative standings of the leads were identical (albeit with all the Beats numbers roughly half of those above). It's not surprising because all three side-suit leads are aggressive rather than passive.

Hand 4

The bidding is $1 \triangleq -4 \triangleq$. What would you lead from: $4 \times 12 \times 014 \times 107 \times 9765$?

First thoughts How do suits headed by two touching honors rate as opening leads? Are they a better bet than leading from four low cards?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♦ J/2	20.7%	2.55
♥ Q	24.3%	2.65
♦ K	25.5%	2.76
4 7/5	22.5%	2.62

It is better to lead from a suit headed by touching honors than from low cards. The K-Q-10-7 combination is better than Q-J-4.

To judge the effect of the pre-emptive auction, once again, we will rerun the simulation for this West hand after an auction of 1 - 2 - 4:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♦ J/2	16.2%	2.54
♥ Q	16.9%	2.57
♦ K	17.7%	2.69
♣ 7/5	17.8%	2.63

The message from Hand 1 is confirmed. The aggressive red-suit leads headed the poll against 1 - 4. They now fall back and are leap-frogged by the passive club lead.

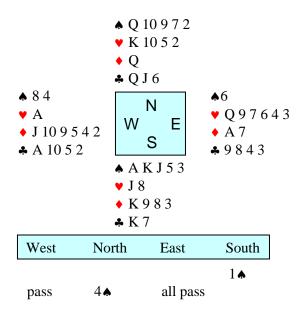
Hand 5

The bidding is 1 - 4. What would you lead from: $84 \lor A \lor J 109542 & A 1052?$

First thoughts What is your opinion of leading a singleton ace? If you don't like the idea for some reason, perhaps because you would prefer to capture an honor with it, what else will you lead?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	45.1%	3.43
٧A	73.0%	4.21
♦ 5	51.3%	3.69
♣ A	67.5%	3.99

It's a massive win for the singleton ace at both IMPS and match-points. Your idea will be to reach partner's hand for a ruff, which is what can happen on this deal from the simulation:



You lead the \checkmark A and the \checkmark 2 is played from dummy. What signal should East give now? Holding six hearts, he can guess that the lead is a singleton and that you would like some assistance with your lead at Trick 2. However, suppose East follows with the \checkmark 9. Is that obviously a suit preference card from West's point of view? If the lead was from \checkmark A-x, East might feel that he should encourage from something like \checkmark Q-9-4-3.

On this particular deal, West does not have to commit himself at Trick 2. He plays the A next. When East signals his discouragement with the 3, West switches smartly to a low diamond. East wins with the ace and delivers a heart ruff to beat the contract.

Hand 6

The bidding is 1 - (2) - 4. What would you lead from: 4 + 4 A J 3 + K 9 3 + A J 9 7 6 3 ?

First thoughts Which combination headed by the A-J is the better lead? Perhaps the singleton trump tops the list. Let's see the figures:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
4	59.4%	3.69
♥A	57.1%	3.66
♦ 3	54.0%	3.60
♣ A	60.7%	3.79

Why is the \clubsuit A better than the \blacktriangledown A? The first reason is that there is a 12.0% chance that East will hold a singleton or void club, only a 2.0% chance of a singleton or void heart. Although East holds an average of 4.0 hearts and only 2.8 clubs, he has about the same chance of holding the \clubsuit K as the \blacktriangledown K (31.9% compared with 31.4%). Does that surprise you? It's because East holds an average 2.8 of the 7 missing clubs, 4.0 of the 10 missing hearts. The two fractions are identical.

Hand 7

The bidding is 1 - 4. What would you lead from:

♦8 ♥Q3 ◆10763 **♣**QJ10874?

First thoughts There can be little reason to lead the singleton trump. It is fairly safe against a likely 5-5 fit, yes, but so is a club and that may have a constructive benefit. Which of the three side-suit holdings catches your eye?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 8	11.7%	2.38
♥ Q	13.1%	2.39
♦ 3	12.6%	2.46
♣ Q	15.0%	2.52

Your partner may hold a good hand, with around opening-bid values. Even so, there is no guarantee that you will find him with something useful in a chosen red suit. The odds favor the safe club lead, despite the fact that this is the most likely place for declarer to be short in one hand or the other.

Hand 8

The bidding is 1 - 4. What would you lead from:

First thoughts Look at a standard text-book on opening leads and you will not find any of these holdings in the 'Highly Recommended' list. A club is the most passive of the leads, since there is not so much difference between a jack and a spot-card. Against that, we have often noted that side-suit doubletons can work well. What will you choose?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΛA	28.6%	3.03
v 3	31.2%	3.09
♦ Q	34.6%	3.12
. 3	29.8%	3.06

Another win for the previously under-rated 'Doubleton Lead Society'. We will have to send their president an apology. Many players have been sniffy about doubleton leads throughout their lives, with no real justification. The two aggressive leads from a queen are rated better than the more passive club lead.

One purpose of this chapter is to identify whether there is any difference in leading against a pre-emptive auction rather than a full-value one. Continuing our comparisons, we will rerun against a 1 - 2 - 4 auction.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΛA	22.6%	2.85
v 3	24.0%	2.90
♦ Q	24.0%	2.86
. 3	25.3%	2.91

Much to our relief, previous findings are confirmed. The aggressive lead from •Q-6 is less attractive against the stronger auction and loses its top place. The relatively passive club lead rises from third place to first.

Hand 9

The bidding is 1 - 4. What would you lead from:

A A 8 5 **V** Q 6 3 **→** K 9 **A** A 10 7 6 4 ?

First thoughts You have an honor in every suit, often a sign that you may have a difficult lead to make. How do you rank the possible leads?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΛA	56.0%	3.62
\$ 5	56.3%	3.63
v 3	53.5%	3.56
♦K	44.5%	3.40
♣A	52.4%	3.56

Any lead will give you a good chance of beating the contract. That's because your own high point-count suggests that the opener may hold a minimum hand opposite the pre-emptive raise. That said, the three side-suit leads are not particularly attractive and your best bet is a low trump.

Lead the ♠A instead and you will find East with a singleton ♠K 3.9% of the time.

Hand 10

The bidding is 1 - 4. What would you lead from:

♠ QJ2 ♥ K10 ♦ 8764 ♣ K962?

First thoughts A trump lead is clearly a non-starter. In many other simulations we have seen that a passive lead from spot-cards is rated more

highly than a lead from a king. Is there any reason why this should be an exception?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠Q	25.1%	2.77
♥K	41.1%	3.26
♦ 7/4	42.4%	3.27
. 2	43.3%	3.29

Leading from the *K is the winner! The margin is minimal, but top-rated leads from a king are rare and we must try to understand the cause.

The main benefit of leading from spot-cards is that you may promote honors in partner's hand. This is less likely when you have length in the suit, also when the other side's strength is with declarer rather than the dummy.

That said, it is scarcely believable that the two leads from a king will fare so well against a full-value auction. Let's rerun against 1 - 2 - 4:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠Q	27.9%	2.90
٧K	23.6%	2.80
♦ 7/4	35.3%	3.12
4 2	31.1%	3.02

Normal service is resumed. The passive diamond lead assumes its rightful top spot and the madly aggressive lead from ♥K-10 plunges a full 20 percentage points compared with the trump lead.

Hand 11

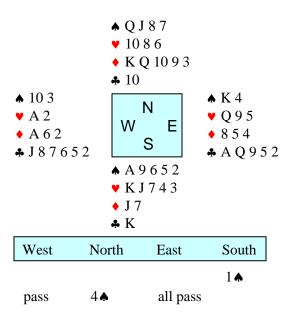
The bidding is 1 - 4. What would you lead from:

♦ 103 **♥** A2 **♦** A62 **♣** J87643?

First thoughts Should you lead a macho ace or go passive with a black-suit lead?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	46.6%	3.44
٧A	57.0%	3.69
♦ A	55.9%	3.67
\$ 6	45.2%	3.56

We have a huge margin in favor of an ace lead, with the doubleton ace preferred. Here is a deal from the simulation where the ♥A pays off in an unexpected way.



You lead the ♥A and another heart to the queen and king. With three aces to lose, declarer must reach dummy for a trump finesse. When he leads the ♦7, you rise with the ♦A and cross to partner's hand with a club for your heart ruff.

We reran this simulation against the 1 - 2 - 4 auction and found that the two aces leads were still on top, but by a smaller margin:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	36.1%	3.25
٧A	48.4%	3.53
♦A	48.6%	3.53
\$ 6	43.5%	3.47

We have a different winner in both the 'red aces' and the 'black sixes' classifications.

Conclusions – Leading against a pre-emptive raise

- As we have seen on many other auctions, a trump is nearly always the worst of the four leads.
- Aggressive leads from an honor (particularly two touching honors) are more likely to succeed against a pre-emptive auction than against a sound-value auction such as 1 2 4.
- Risky leads from Q-x (and even K-x) come into the reckoning against a pre-emptive auction because there is more chance of finding partner with matching honors. Consider a lead from K-x when your own hand is weak and partner therefore has more chance of holding the matching ace.

Pick a Winner!

Leading against a pre-emptive raise

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 overleaf.

Auction is: 1 - 4

- 1. **A** J 10 3
 - ♥ Q 8
 - ◆ A Q 8 5
 - ♣ K 10 5 2
- 2. 7
 - **♥** K Q 5
 - ♦ J 10 8 6 4
 - ♣ Q 7 5 4
- **♠** 7
 - **v** 76
 - ◆ QJ1084
 - ♣ A Q 9 7 2

- 4. ♠ K 3
 - **7** 4 3 2
 - ♦ A 5
 - ♣ K 10 9 8 4
- *5.* **♠** 10
 - **A** 10 8 3 2
 - ◆ Q 8 7 6 5
 - **♣**83
- 6. **♦** 5 2
 - **♥** K 3
 - A 7 6 5 2
 - ♣ A Q 5 4

Auction is $1 \spadesuit - (dble) - 4 \spadesuit$

- 7. **^** —
 - **♥** A 6 4 2
 - ♦ KJ986
 - **♣** O J 7 3
- 8. **A** 2
 - ♥ A Q 9 5
 - ♦ K 9 8 2 ♣ K 10 6 5
- 9. **♦** A 3
 - ♥ Q 9 7 3
 - ♦ A Q 7 6
 - ♣ Q 10 5

Auction is: $1 \spadesuit - (2 \spadesuit) - 4 \spadesuit$

♣ KJ54

• A 10 7 5 4 3 2

10. ♠ —

9 6.5

- 11. ♠ Q J 5

 - **v** 10 6
 - ◆ A K J 9 8 5 3
 - **♣** A
- 12. ♠ J 6
 - **♥** K Q 8
 - ◆ KQ8742
 - ♣ Q 4

Answers

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

			IMPs	MPs
Auction is: 1 ♠ – 4 ♠				
1. ♠ J 10 3 ♥ Q 8 ♦ A Q 8 5 ♣ K 10 5 2	1st	♠J	40.5%	3.20
	2nd	♥ Q	38.8%	3.17
2. ♠ 7 ♥ K Q 5 ♦ J 10 8 6 4 ♣ Q 7 5 4	1st	♦ J	29.2%	2.89
	2nd	\$ 4	28.6%	2.85
3. ♠ 7 ♥ 7 6 ♦ Q J 10 8 4 ♣ A Q 9 7 2	1st	♦ Q	41.7%	3.27
	2nd	♥ 7	39.2%	3.17
4. ♠ K 3 ♥ 7 4 3 2 ♦ A 5 ♣ K 10 9 8 4	1st	♦ A	49.4%	3.48
	2nd	♥ 4/2	46.1%	3.34
5. • 10 • A 10 8 3 2 • Q 8 7 6 5 • 8 3	1st	\$ 8	41.7%	3.21
	2nd	♦ 6	39.2%	3.20
6. ♠ 5 2 ♥ K 3 ♦ A 7 6 5 2 ♣ A Q 5 4	1st	♦ A	53.3%	3.65
	2nd	^ 2	52.5%	3.51
Auction is 1 ♠ – (dble) – 4 ♠				
7. ♠ — ▼ A 6 4 2 ◆ K J 9 8 6 ♣ Q J 7 3	1st	_	44.6%	
	2nd	♥ A	39.6%	3.26
8. • 2 • A Q 9 5 • K 9 8 2 • K 10 6 5	1st	^ 2	49.3%	
	2nd	♦ 2	44.7%	3.34
9. ♠ A 3 ♥ Q 9 7 3 ♦ A Q 7 6 ♣ Q 10 5	1st	♠A	44.6%	3.40
	2nd	v 3	43.5%	3.36
Auction is: $1 \spadesuit - (2 \spadesuit) - 4 \spadesuit$				
10. $ \leftarrow $ $ \leftarrow $ 65 $ \leftarrow $ A 1075432 $ \leftarrow $ K J 54	1st	♦ A	53.8%	
	2nd	v 6	52.4%	
11. ♠ Q J 5 ♥ 10 6 ♦ A K J 9 8 5 3 ♣ A	1st	♣A	57.1%	3.72
	2nd	♦ A	53.1%	3.63
12 ♠ J 6 ♥ K Q 8 ♦ K Q 8 7 4 2 ♣ Q 4	1st	♦K	18.6%	
	2nd	♥ K	15.7%	2.42

Chapter 13

Leading when declarer opened 1NT

South opens 1NT and ends in 4♥ or 4♠, North having used Stayman or a transfer response. How does this affect the choice of opening lead? After a Stayman sequence the trump fit will usually be 4–4. After a transfer sequence there will usually be five trumps in dummy, while declarer will hold 3 or 4 trumps. Whether these slight differences in the trump lay-out will affect the opening lead is not clear. We will see what we can discover.

Auction is 1NT-2 - 2 - 4

We begin with a typical Stayman auction where declarer will usually be in a 4–4 trump fit.

Hand 1

First thoughts A red-suit lead could easily cost a trick. It looks likely that the doubleton club lead is best. This may result in a ruff, perhaps after getting in with the trump king. Let's see:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	13.0%	2.42
v 10	12.1%	2.36
♦ 2	14.3%	2.47
4 10	17.5%	2.57

Yes, the club lead is a clear winner. As always, when you lead from twolow, the main intention is to lead towards whatever honors partner may hold rather than seeking a ruff.

Hand 2

The bidding is 1NT-2 - 2 - 4. What would you lead from:

First thoughts All four suits might attract votes from a panel. Do you like the aggressive thrust from the touching diamond honors? If you lean towards passive leads, which black suit do you like?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	10.6%	2.24
♥ Q	11.7%	2.21
v 2	10.1%	2.17
♦ K	7.7%	2.16
♣ 8/4	11.1%	2.25

It's all very close but the ♥O surprises us by claiming first place at IMPs. At match-points you do slightly better to choose a passive black-suit lead.

Let's run a comparison simulation, using the same West hand and an auction of $1 \triangleq -2 \triangleq -4 \triangleq$:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 4	13.0%	2.48
♥ Q	10.9%	2.21
v 2	10.0%	2.17
♦K	9.5%	2.16
\$ 8/4	11.6%	2.25

The **VQ** drops to a less surprising third place. The trump lead swaps places, grabbing the top spot. Perhaps we can draw one message – that trump leads are less effective when declarer is known to be in a 4–4 fit.

Back in Chapter 1, we looked briefly at leads that might launch a forcing defense. We will now rerun the simulations against a Stayman auction, to see if a forcing defense is more promising against a 4–4 trump fit.

Hand 3

The bidding is 1NT-2 - 2 - 4. What would you lead from:

First thoughts If you lead a low heart and find partner with the \blacktriangleleft A or \blacktriangleleft Q, the ensuing forcing defense may defeat the contract. Against an auction of 1 - 2 - 4 we found that the risk of leading from the K-J outweighed any potential forcing advantage. These are the numbers after a Stayman sequence:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	28.6%	2.94
v 7	23.6%	2.80
♦ 9	30.8%	3.00
4 10	30.2%	3.00

The results are similar. The heart lead is easily last and you should pick one of the minor-suit doubletons.

When the hearts were improved to \sqrt{K} -Q-9-7-2, the \sqrt{K} lead won with a 'Beats Contract' of 29.5% against 25.4% and 25.2% for the doubletons. When the heart suit was \sqrt{Q} -J-10-9-4, the heart lead won again - this time with 27.6% against 23.7% for the each of the doubletons.

Hand 4

The bidding is 1NT-2 - 2 - 4 = 4. What would you lead from:

First thoughts It seems to be a choice between a trump and a passive heart. The minor-suit leads look over-aggressive and dangerous. What would you choose?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	14.2%	2.55
v 2	15.5%	2.61
♦ A	20.3%	2.70
♣K	15.7%	2.34

Well, that shows how much we know! The two aggressive leads have ended at the top of the IMPs table. We will look at the idea of leading unsupported aces in the next section. Meanwhile, let's rerun this simulation against an auction of 1 - 2 - 4 to see if the outcome is similar.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	23.4%	2.80
v 2	25.5%	2.87
♦ A	25.9%	2.90
♣ K	22.8%	2.64

The ◆A just manages to squeak home, but the ♣K tumbles into last place (where it deserves to be, you may think). It seems that leading from suits headed by an honor is more promising when declarer has opened 1NT and will therefore hold a balanced hand.

Leading unsupported aces

The ultra-aggressive • A lead on Hand 4 was a surprise winner. How can that be? We were all taught that aces are meant to capture kings and queens and should not be played on thin air. When you lead the ◆A here, the nightmare scenario is that South holds the •K and you have found the only way to rescue a doomed contract.

The first point to note is that the 'Beats Contract' expectation of the passive leads from Hand 4 is not very high, around 15%. This suggests that desperate measures may be called for. Also, the 'nightmare scenario' does not arise as frequently as you may think.

- South may not hold the king (51%)
- South's king may be matched with the queen in his hand or the dummy
- South may have the K-J and would have finessed the jack anyway.
- South may have the king, also the jack and 10 between the two hands
- South may have the king with a singleton in dummy.

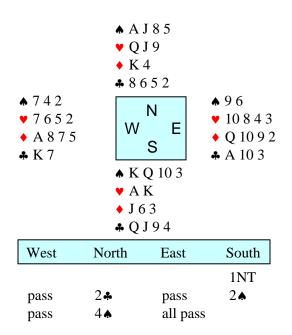
Although your ace lead will sometimes cost in the above situations, this leaves only about 7% for the 'nightmare scenario'. Out of that 7%, declarer will sometimes be able to discard some or all of his diamonds.

When can the lead of an unsupported ace have a positive effect? Firstly, it may succeed in the suit led. Perhaps you can give partner an immediate ruff. Even if he has a doubleton, you may win the lead before partner's trumps can be drawn. Partner may hold the ◆K (23% here) or the ◆Q over dummy's king, good for a trick on the third round.

In addition, leading an ace may allow you to avail yourself of the benefits of the alternative leads. You may choose to switch to the *K (15.7%) 'Beats') or a heart (15.5% 'Beats'). By looking at dummy, and possibly at partner's signal, you will have a good chance of diagnosing the best play at Trick 2. This ability to 'take a look at dummy' has been well understood for leads from an A-K. We may have underestimated the similar benefits of leading a stand-alone ace lead because of its clearer downside.

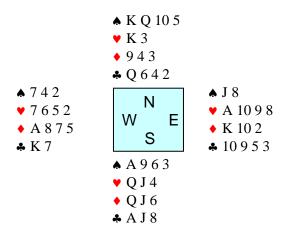
If you do decide to lead unsupported aces more often, you should consider leading the king from ace-king. This method, which is already in common usage at the five-level and above, allows partner to signal accurately. (Otherwise an ace lead may or may not be from the ace-king and partner does not know how to signal when he holds the queen.)

Let's look at two deals from the simulation where the ◆ A lead fares well:



A passive heart or trump lead gives declarer an easy ride; he will lose just three tricks in the minor suits. A dangerous lead of the *K would (as it happens) allow the defenders to take the first four tricks. Suppose West starts with the recommended •A lead. With dummy's •K precluding any further tricks in diamonds, partner's signal is suit preference. He plays the •2 to suggest something good on clubs and a switch to the *K defeats the game.

On the next deal (after the same auction) all leads except a club beat the contract:



This time the dangerous club lead would prove disastrous. Once again, West makes the recommended lead of the ◆A. West cannot be entirely certain of the best continuation when East follows with the ◆10, but the odds strongly favor continuing diamonds. At any rate a switch to the *K would be very wild, with the evidence on view. East wins the second diamond and the contract is defeated.

The • A lead might prove costly, of course, but it will often allow you to judge the best play at Trick 2.

Auction is $1NT-2 \lor -2 \land -3NT-4 \land$

Next we look at a transfer auction to 4. Typically dummy will hold five trumps and declarer, who chose to play in 44 rather than 3NT, will have three or four trumps.

Hand 5

The bidding is $1NT-2 \checkmark -2 \blacktriangle -3NT-4 \blacktriangle$. What would you lead from: **A** A J 10 6 ♥ Q J 10 8 2 ◆ 9 ♣ J 9 7 ?

First thoughts Throughout this book singleton leads have fared well. Here, though, you have a powerful trump holding and a forcing defense may be better than seeking a diamond ruff. What do you think?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	27.7%	3.00
♥ Q	53.7%	3.55
♦ 9	57.1%	3.59
. 7	47.3%	3.41

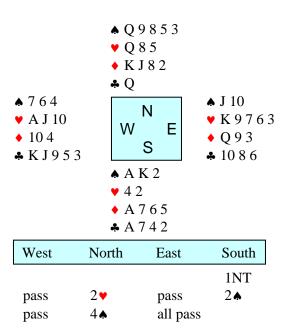
If we needed any further evidence in favor of singleton leads (which is debatable), we have found it. Perhaps it is not so surprising. If the A-J-10 are worth two tricks anyway, a third trump trick from a diamond ruff will still be welcome.

Hand 6

First thoughts A heart or club lead looks risky and there seems to be no great reason for a trump lead. We have seen doubleton leads do well several times, so the diamond ten looks the best bet. Let's see.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
4	23.8%	2.77
♥A	11.8%	2.39
♥ J	16.1%	2.47
♦ 10	22.6%	2.74
4 5	14.9%	2.47

It's close but the trump lead edges out the doubleton lead. North will frequently have a doubleton diamond, killing our ruffing potential. There will also be some cases where our trump lead prevents a ruff in declarer's hand. That's the situation on this deal from the simulation:



Suppose you lead the \bullet 10. Declarer wins with the \bullet A and ducks a heart, preparing for a ruff in his hand. When you win and play a second diamond, declarer rises with the \bullet K and ducks another heart. A heart ruff in the short trump hand (South) will produce a tenth trick.

Make the recommended trump lead instead, continuing trumps if declarer ducks hearts, and you beat the contract.

Hand 7

The bidding is
$$1NT-2 \checkmark -2 \blacktriangle -3NT-4 \blacktriangle$$
. What would you lead from: $\blacktriangle 98 \checkmark A864 \spadesuit 10743 \clubsuit A72$?

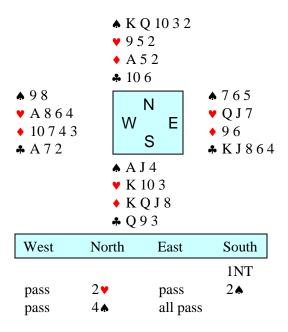
First thoughts By all normal standards, the safe diamond lead should be the one to choose. However, you will remember the West hand in the Stayman section where ace leads did well. Will we see the same again here?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 9	20.7%	2.88
٧A	26.5%	3.05
♦ 3	24.7%	2.97
♣A	27.8%	3.07

Indeed we do! As we saw on the earlier two-ace West hand, leading an ace gives you a double chance. The lead itself may prove effective. If not, you will retain the lead and have a good chance of diagnosing the best continuation.

A look at the profile tells us that on the majority of deals where a particular ace was the only one to defeat the contract, this was because East held a singleton in the suit. The chance of East holding a singleton heart (which, after North's chosen sequence, can happen only when South has 5 hearts to North's 3) is just 1.5%. The chance of East holding a singleton or void club is only 2.6%. So, the reason for the large gap between an ace lead and a passive trump lead is largely because such a lead retains control and allows a continuation or a switch, once dummy has been seen.

The success of these ace leads is such a surprising finding that we will once again look into the simulation to pick out a deal where leading an ace works well.



West makes the recommended start of the A. East encourages, wins the club continuation and switches to the Q, picking up two heart tricks to beat the contract. On a passive lead, as you see, declarer can ditch one of dummy's clubs on the fourth round of diamonds.

Hand 8

The bidding is
$$1NT-2 \checkmark -2 \land -3NT-4 \land$$
. What would you lead from: $\land 432 \lor AJ \lor KQ10876 . 42?$

First thoughts A heart lead looks risky, although we would not freak out if any of the four leads was rated best. Which one do you fancy?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	9.0%	2.32
٧A	7.0%	2.22
♦K	12.1%	2.50
4 4	10.3%	2.36

The often-favored low doubleton lead fails to win. Leading from the • K-Q-10 is better than a trump, even though you can scarcely hope for more than one diamond trick unless partner holds the ace.

Hand 9

The bidding is
$$1NT-2 \checkmark -2 \blacktriangle -3NT-4 \spadesuit$$
. What would you lead from: $\spadesuit 1096 \checkmark J10863 \spadesuit K73 \clubsuit 98$?

First thoughts We can surely exclude a diamond lead but any of the remaining three leads could work well. Partner will be stronger now, so perhaps the club doubleton will best.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 10	9.0%	2.26
∀ J	11.7%	2.39
♦ 3	9.5%	2.22
4 9	14.6%	2.43

Indeed, the weakness of our hand improves the prospects for a club lead. Partner is more likely to hold club honors that can be developed.

Hand 10

The bidding is
$$1NT-2 \checkmark -2 \blacktriangle -3NT-4 \spadesuit$$
. What would you lead from: $\blacktriangle A 9 3 \checkmark A 10 6 4 \spadesuit 9 2 \clubsuit A 4 3 2 ?$

First thoughts We've seen unsupported ace leads do well earlier. Will they surprise us again or should we stick to the 'normal' ◆9 lead?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	30.6%	3.32
A 3	30.7%	3.31
٧A	45.8%	3.53
♦ 9	35.6%	3.42
♣ A	47.0%	3.57

The two side-suit ace leads are best once again. The ♣A edges it over the ◆A, presumably due to the presence of the ◆10. You will remember that the presence of a secondary, non-touching honor, makes a lead more likely to give away a trick. (For example, it is more dangerous to lead from K-J-x-x than K-x-x-x). Again, partner is too weak for the doubleton lead to shine.

Hand 11

First thoughts A minor-suit lead looks best and, if there's any justice, the doubleton will edge out the tripleton.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	16.3%	2.45
♥A	13.4%	2.47
v 5	11.4%	2.25
♦ 4	22.6%	2.65
. 3	22.0%	2.60

No surprises this time. Remember that the main objective when leading from two-low or three-low is to promote partner's honors. When you hold two cards, rather than three, there is more chance that partner's promoted honors will stand up. Declarer will hold one more card between the hands.

Hand 12

The bidding is $1NT-2 \checkmark -2 \blacktriangle -3NT-4 \blacktriangle$. What would you lead from: $\blacktriangle J 7 3 \checkmark 10 8 6 4 2 \checkmark 7 5 2 \clubsuit A 3 ?$

First thoughts How do you like the ♣A lead? We saw a side-suit lead from the ♥A-J failing to win earlier, but perhaps the presence of the ♥J made that less attractive. The hand is weak, so an inspired strike may be necessary to beat the game.

	Beats Contract (IMPs)	Avg. Tricks (MPs)		
A 3	9.1%	2.31		
v 4	15.2%	2.56		
♦ 2	15.1%	2.56		
♣ A	20.1%	2.76		

The AA wins easily, as you see, but we need to understand why. The clue is in the low 'Beats' figures, around 15% after the alternative passive leads. This suggests that even a quite modest chance of finding partner with the &K may justify attacking in the suit. (If the lead misfires, we probably wouldn't have beaten the contract anyway.)

With our hand being so weak, East has an average of 9.2 points and a 30.9% chance of holding the ♣K. The fact that the ♣A lead wins well at match-points too shows that it will not give away an unnecessary trick too often, even if the game succeeds. Meanwhile, if we find partner with the *K and score a ruff, we will at least prevent declarer from scoring an overtrick.

CONCLUSIONS

Leading when declarer opened 1NT

- Leading aces from A-x-x-x, A-x-x or A-x fares surprisingly well when declarer has opened 1NT. If you bring such leads into your partnership's repertoire, consider leading the king from ace-king combination.
- Do not lead an ace when it is accompanied by a queen or jack.
- When defending a likely 4–4 fit after a Stayman auction, a trump lead is (even) less effective than against auction such as 1 - 2 - 4.
- Leading from suits headed by one or two honors is less dangerous when declarer has opened 1NT than when he opened in a suit.

Pick a Winner! Leading when declarer opened 1NT

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 overleaf.

(Auction is 1NT-2 - 2 - 4)

v 10

◆ QJ832

♣ 9 4

♥ J 10 9 8

♦ 9 6

♣ K 7 5 3 2

♥ QJ92

♦ J952

♣ A

♥ J 10 6 5 4 3

♦ 8 5 4

4 10 7

5. • A J 10

♥ K 3

◆ QJ 1082

4 7 6 4

6. • 1097

V K 9 7 4

♦ Q 5 4

4 9 8 7

(Auction is $1NT-2 \lor -2 \land -3NT-4 \land$)

y 974

◆ K 6 2

♣ K 7 5 4

8. • 9842

9 4 3

• 9

♣ J 10 9 7 3

9. • 9

♥ K Q 10

♦ KQ73

♣ K 9 8 7 6

♥ Q 10

♦ 9 3 2

♣ K Q 4 2

11. **♦** J 2

∨ KJ9

♦ KJ 10 9 5

4 9 7 6

12. • Q 6 4 3

♥ A J 10 9 7 6

♦ 9 4

4 10

Answers

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

			IMPs MPs
(Auction is $1NT-2 - 2 - 4 $)			
1. ♠ K Q 9 3 2 ♥ 10 ♦ Q J 8 3 2 ♣ 9 4	1st	v 10	76.9% 4.13
	2nd	. 9	75.3% 4.01
2. ♠ K 4 ♥ J 10 9 8 ♦ 9 6 ♣ K 7 5 3 2	1st	♥ J	19.2% 2.60
	2nd	♦ 9	18.2% 2.53
3. ♠ A 10 8 6 ♥ Q J 9 2 ♦ J 9 5 2 ♣ A	1st	♣ A	45.9% 3.42
-	2nd	♥ Q	44.0% 3.38
4. • 98 • J 10 6 5 4 3 • 8 5 4 • 10 7	1st	4 10	11.6% 2.33
	2nd	♥ J	7.6% 2.28
5. ♠ A J 10 ♥ K 3 ♦ Q J 10 8 2 ♣ 7 6 4	1st	♦ Q	33.9% 3.17
-	2nd	4 4	32.8% 3.14
6. ♠ 10 9 7 ♥ K 9 7 4 ♦ Q 5 4 ♣ 9 8 7	1st	\$ 9/7	11.7% 2.33
-	2nd	♠ 10	10.2% 2.27
(Auction is $1NT-2 \lor -2 \land -3NT-4 \land$)			
7. ♠ K 8 4 ♥ 9 7 4 ♦ K 6 2 ♣ K 7 5 4	1st	v 4	18.0% 2.55
	2nd	♦ 2	13.7% 2.36
8. • 9842 • 943 • 9 • J10973	1st	♦ 9	30.0% 2.76
	2nd	v 3	14.5% 2.39
9. ♦9 ♥ K Q 10 ♦ K Q 7 3 ♣ K 9 8 7 6	1st	٧K	44.7% 3.42
	2nd	^ 9	42.6% 3.35
10. ♠ Q 10 5 3 ♥ Q 10 ♦ 9 3 2 ♣ K Q 4 2	1st	♦ 2	15.3% 2.45
	2nd	♥ Q	15.0% 2.40
11. ♦ J2 ♥ KJ9 ♦ KJ1095 ♣ 976	1st	. 6	18.4% 2.57
	2nd	۸J	15.2% 2.42
12. ♠ Q 6 4 3 ♥ A J 10 9 7 6 ♦ 9 4 ♣ 10	1st	. 10	29.8% 2.77
	2nd	٧A	24.8% 2.70

Chapter 14

Leading against a small slam

In our companion volume, *Winning Notrump Leads*, we included a chapter on leading against 6NT. A clear message emerged that you should lead passively. It was rarely right to lead from a suit headed by an honor or two. Against a suit slam the traditional advice has always been to make an aggressive opening lead. If instead you lead passively, it is all too likely that declarer will be able to discard any potential loser(s) that he may have. We aim to discover by the end of this chapter whether this idea is right or not.

There is a big problem when simulating opening lead situations against suit slams: the auctions tend to be long and complicated. There are many hundreds, even thousands, of auctions that may lead to a contract of $6 \checkmark$, for example. There would not be much value in choosing one particular auction and evaluating the leads from several different hands against it. You would rightly push the book to one side, saying 'What's the chance of that auction coming up?'

So, you will be shown a West hand and no bidding will be given. The simulations will generate 5000 deals where it is likely that a contract of $6 \checkmark$ would be bid, via one auction or another. We will then give the simulation results, describing the best opening lead in the absence of any information to the contrary. Let the wagons roll!

Disciplined and undisciplined slam auctions

Each chosen West hand will be tested against a set of deals where the other three hands are randomly generated and found to represent a likely 6♥ contract. North-South will hold 26–34 HCP, a trump fit of 8-13 cards and a combined loser-count of 10-12. They will also contain at least four of the five key-cards (the four aces and the trump king). Our tests show that hands fitting these requirements give a worthwhile play for a small slam.

One question remains. When we run the simulations, should we include deals where two tricks are cashable in a side suit? When good players bid a slam, using an auction that involves control-showing cue-bids, it is reasonable to rule out the possibility that you can cash the ace and king of one suit. When opponents of an unknown standard bid a slam in an auction

that does not involve cue-bids, there are at least two possibilities. Maybe they do not incorporate cue-bids in their methods (you can discover this from their convention card). Alternatively, the cards in front of their eyes may tell them that all the suits are controlled and there is no need for a cue-bid exchange.

In an attempt to cover both good and bad slam auctions, we will generate deals in two different categories: 'All slams', which include deals where there may be two quick losers in one of the side suits, and 'AK-proof slams'. The latter category will not include any deals where the defenders can cash the ace and king of a suit. It is for you to judge, from the particular auction you have witnessed (and the studious nature, or otherwise, of the opponents...) whether their slam is likely to be AK-proof.

Leading against a possibly undisciplined slam auction

Should you lead an ace against a suit slam? Players have held differing views on this since the early days of the game. Fifty years ago there were many players who would always lead a side-suit ace. To some extent this was because slam bidding was less disciplined in those happy-go-lucky days and there was a fair chance of finding your partner with the king of the suit.

Nowadays, we like to think that slam bidding has improved and many pairs (particularly good pairs) will use cue-bidding to determine whether they are missing the ace and king of a suit. Consequently, fewer players regard it as automatic to lead an ace against a slam.

In this section we will evaluate ace leads. We will give the results against both disciplined auctions (no cashable ace-king) and possibly undisciplined auctions. It will be for you to judge which type of auction you are facing when at the table.

Hand 1

The opponents bid 6♥, without using cue-bids. What would you lead from:

▲ 10843 **♥**9 **♦** AQ72 **♣** 10652?

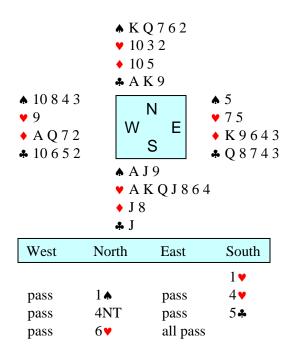
First thoughts With only four diamonds, the chance of giving partner a second-round diamond ruff is small. The risk of the ace lead giving declarer a critical extra trick in diamonds is considerable. Should you still lead the •A?

(All slams)	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	14.3%	0.72
y 9	13.0%	0.70
♦ A	17.6%	1.11
* 2	14.3%	0.72

The \bullet A is best at IMPs and best by a landslide margin at match-points. The chance of partner holding a singleton or void diamond is only 2.6%. . On auctions that have not confirmed a diamond control by cue-bidding (our current assumption), there is a 24.7% chance that partner will hold the \bullet K. You may then have two diamond tricks to cash. Note that South will hold a diamond control by shortage 28.5% of the time; North will hold such a control 22.7% of the time.

South will hold the $\bigstar K$ with frequency 36.1%, so leading the $\bigstar A$ will often set up this card. Nevertheless, it is best in the long run to lead the ace.

What sort of deal lies behind an 'undisciplined slam auction'? Let's pick one from the simulation, so that we have some idea.



A disciplined bidder would cue-bid 5. on the North cards, seeking a diamond control from partner. Here North blasts into the slam via RKCB. As

you see, the slam meets our criteria. There are only 12 losers in the combined North-South hands and (at least) 4 of the 5 key cards are held.

Of course, it is one thing to say that a particular pair *may* bid a slam with two top losers in a suit, another to say that they *will* bid such a slam (when they hold the general values for a slam). When we said above that there was a 24.7% chance of East holding the •K, this was under the assumption that opponents who don't employ cue-bids would always bid a slam when they held the general values. That is obviously an exaggeration; also, on many deals you will not have the faintest idea how competent the current opponents' bidding is. So, the whole business of running simulations to determine what to lead when there may be two top losers in a suit is an imprecise art. You must take it as you find it!

We will rerun the simulation, this time assuming an auction (perhaps using cue-bids) that persuades you that the opponents will not have two top losers in any side suit. These are the new results:

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	15.0%	0.75
y 9	13.6%	0.73
♦ A	11.5%	1.04
* 2	14.9%	0.76

With the chance of two cashable diamonds removed, the •A is no longer best at IMPs. Indeed, it is worst and you should choose one of the black-suit holdings. At match-points, however, it is absolutely essential to score a trick with the •A before declarer can discard diamonds from one hand or the other. Preventing an overtrick may be worth a bundle of match-points.

Hand 2

The opponents bid to $6 \checkmark$. What would you lead from:

First thoughts How do you rate the ace lead here? If you are not going to lead the ♣A, should you perhaps try a low spade, hoping to find partner with the ♠K? You may then be able to set up a spade winner before declarer establishes discards on the club suit. Let's see the simulation results:

(All slams)	Beats Contract (IMPs)	Avg. Tricks (MPs)
4 5	12.5%	0.74
v 3	13.3%	0.79
♦ 5	14.2%	0.80
♣A	16.9%	1.07

Once again the ace lead is best. You have a 3.8% chance of finding partner with a singleton or void club. (Natural club bids by the opponents en route to 6 may have increased this chance, but it is true that they have preferred hearts as trumps.) There is also a 23.1% chance of finding partner with the *K, when the opponents have not precluded this with their cuebidding.

We will rerun the simulation assuming that the opponents' auction has ruled out the chance that the A and K will cash.

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 5	10.4%	0.76
v 3	9.5%	0.79
♦ 5	10.1%	0.79
♣ A	8.7%	0.98

The \$A lead goes from best to worst, at IMPs. There is relatively little chance that partner has a singleton club. When the opponent's cue-bidding auction implies that two club tricks cannot be cashed, there is no reason to think that a club lead will help you to beat the contract. That said, the \$A\$ lead is still easily best at match-points, largely to prevent an overtrick.

Even against a sound cue-bidding auction, where partner will not hold a cashable king opposite your ace, leading an ace may work well when it is part of a long suit. Partner may then be able to ruff the second round. We will see next see how ace leads are affected by the length of the suit containing them.

Hand 3

The opponents bid to 64, on an auction suggesting they do not have two top losers in a suit. What would you lead from:

First thoughts Should you lead the ◆A? partner may hold a singleton diamond. Against that, declarer may hold the ◆K and a diamond lead would then set up this card. How do the odds lie?

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 8	7.6%	0.48
v 9	8.3%	0.48
♦ A	11.3%	0.91
. 2	8.2%	0.48

A particular auction may offer evidence on partner's diamond length, one way or another. Overall, our profile of the 5000 deals in this simulation tells us that partner will hold a singleton diamond with frequency 5.3% (void 0.5%). This is a fairly large number in the context of the generally low Beats figures for this West hand.

Note also what a huge winner the • A lead is at match-points. In addition to scoring well when you can give partner a ruff and beat the contract, you may also prevent an overtrick by banking your ace. (The length of your own diamonds also increases the chance that declarer can discard diamond losers, given time.)

Hand 4

The opponents bid to $6 \clubsuit$, on an auction suggesting they do not have two top losers in a suit. What would you lead from:

First thoughts With only a 5-card diamond suit, the chance of giving a ruff will now be less. Should you still lead the ◆A?

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 8	8.9%	0.55
v 9	9.9%	0.56
♦ A	10.0%	0.95
4 2	9.7%	0.57

The chance of a singleton diamond with partner drops to 3.0% (void 0.4%). Prospects of a diamond ruff are consequently diminished, while the chance that the \bullet A lead will set up declarer's \bullet K is increased. That's because the diamond length for declarer/dummy will be slightly more.

We ran one more simulation, reducing the diamond length to four:

The 'Beats' numbers are: ♠8 13.1%, ♥9 13.7%, ♠A 10.5%, ♣4 14.6%. The ace lead drops into last position, as you see. However it is still an enormous winner at match-points (0.70, 0.70, 1.02, 0.74).

Hand 5

The opponents bid to 6♥, without cue-bidding. What would you lead from:

First thoughts Now we put two very attractive leads face-to-face. You hope to score the ♣A and there will surely be a good chance of adding a diamond trick if you lead the ♠K. Perhaps it is better to lead the ♣A and hope that partner can ruff the second round. What is your preference?

(All slams)	Beats Contract (IMPs)	Avg. Tricks (MPs)
▲ 10	15.3%	0.87
v 4	14.3%	0.85
♦ K	20.9%	0.94
♣ A	26.4%	1.13

It's surprising, yes, but the \clubsuit A is the best lead. Opposite this hand, your partner will hold a singleton club 12.1% of the time (void 2.2%). If you lead the \blacklozenge K instead, declarer will usually be able to draw trumps immediately and the ruff will be lost. There will still be some chance of scoring a diamond and a club, but not often enough to compensate for the lost ruff.

As you would expect, with the ace being in a 6-card suit, there was little difference in the figures when we reran the simulation for a disciplined auction.

Should I lead a side-suit singleton?

A side-suit singleton is a splendid lead against a suit slam — everyone knows that! Does that mean it will always be the best choice? Let's see.

Hand 6

The opponents bid to 6♥ without cue-bidding. What would you lead from:

First thoughts Your trump holding offers high hopes of a trick. Your singleton diamond is an honor, also, so there is some chance of the lead giving away a trick. Are these drawbacks enough to deter the ◆ J lead?

(All slams)	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠J	65.4%	1.75
v 4	30.7%	1.10
♦ J	71.2%	1.83
♣ 6/4/3	62.9%	1.70

The singleton lead wins the day, at IMPs and match-points. Opposite this West hand your partner will hold an average of 8.2 points and these will include the ◆A 26.7% of the time, the singleton ▼A 3.4% of the time.

Hand 7

The opponents bid to 6♥ without cue-bidding. What would you lead from:

First thoughts Now you hold a rock-solid trump trick and an attractive honor lead in spades. Will you still lead the singleton ♣9?

(All slams)	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΑK	90.3%	2.20
♥ J	81.0%	2.01
♦ 10	81.7%	2.03
. 9	82.7%	2.05

A spade honor is easily best. You expect to score a trump trick and a spade lead will increase your chance of scoring a spade also.

Hand 8

The opponents bid to $6 \checkmark$, without cue-bidding. What would you lead from:

First thoughts You may think that there are three promising leads here: an ace, a singleton and an honor from a sequence. How would you rank these three leads?

(All slams)	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	21.6%	1.15
v 2	15.7%	0.90
♦ 4	16.9%	0.91
♣ J	18.0%	0.94

The ♠A is best, a fair margin ahead of the ♣J. Why does the singleton diamond lead fare so badly? It is because you hold an ace in your hand. Unless the opponents are madmen, they will not have bid a slam with two aces missing. You cannot therefore expect partner to hold the ◆A or the ♥A (unless, perhaps, one of the opponents has a void spade but the bidding would often reflect this). Nor, in these days can you expect him to hold the ♥K. In that case Roman Key-card Blackwood would have kept the opponents out of a slam.

Should I choose an active or passive lead?

It is commonly thought that you should lead aggressively against a small slam in a suit. When you can judge that dummy has a threatening side suit, this may well be the case (we will investigate this in Chapter 15). On many slam auctions, however, it is better to make a passive lead. Whatever side-suit kings and queens you may hold, you sit back in the hope that declarer will eventually concede a trick in that direction.

In this section we will look at some West hands offering both active and passive leads. Again we will not give a specific slam auction, since there are so many sequences possible. We will create 5000 deals featuring the given West hand, where you would expect North-South to bid a small slam.

Hand 9

The opponents bid to $6 \clubsuit$, on an auction suggesting they do not have two top losers in a suit. What would you lead from:

First thoughts Do you like an active lead in clubs or a passive start in one of the other three suits? Let's see what the simulation results tell us.

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	16.2%	0.87
v 3	17.2%	0.91
◆ 7	17.6%	0.92
. 2	11.0%	0.81

An attacking lead in clubs is easily worst at both forms of the game. East will hold an average of 6.9 points opposite this hand. These will include the *Q on 30.6% of the deals. They will include the *A on 16.0% of the deals, but a club lead will not then give you two quick tricks because the opponents will hold a control by shortage.

Let's see how the odds change if the opponents' auction is less convincing and gives you hope that they may have two top club losers:

(All slams)	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	18.2%	0.80
v 3	19.2%	0.83
♦ 2	20.0%	0.85
. 2	17.5%	0.77

A club lead edges upwards, as you would expect, but it is still the worst of the four leads. Partner will now hold the A on 12.7% of the deals and you may then be able to cash two club tricks. (All such figures are approximate, of course, because it is anyone's guess when a particular pair of moderate opponents will choose to bid a slam with two losers in a suit).

Hand 10

The opponents bid to $6 \clubsuit$, on an auction suggesting they do not have two top losers in a suit. What would you lead from:

First thoughts You have honors in all three side suits. Will you choose one of those combinations or is a trump lead better?

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 9	15.7%	0.78
♥ Q	17.0%	0.85
♦ 5	12.7%	0.74
. 2	7.3%	0.67

The presence of two touching heart honors is just enough for a lead of that suit to edge ahead of a safe trump lead. Occasionally the heart lead will give away a trick. Against that, you may find partner with the ♥K or ♥A and benefit accordingly.

Hand 11

The opponents bid to 64, on an auction suggesting they do not have two top losers in a suit. What would you lead from:

First thoughts We can assume that a heart lead will be well down the list. Nor is a trump lead appealing, particularly as it may assist declarer in guessing the suit correctly. Which minor-suit lead do you prefer?

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
۸J	9.7%	0.70
v 10	10.4%	0.77
♦ K	14.0%	0.85
. 5	9.7%	0.71

Why is it better to lead a diamond honor than a club? Declarer will sometimes be able to set up a discard on the club suit and the defenders need to cash a diamond winner when a club trick is surrendered. Let's peek into the simulation to see if this is the case.

Yes, there were examples of partner holding the AA or K, where he would gain the lead as declarer set up the clubs for a discard. There was the occasional deal where East had a void diamond over dummy's ace, also deals where dummy had a running side suit but East held a trump trick.

These situations could also arise when West holds \star K-10-8-7-3 and East has the \star Q. That doesn't imply that a diamond lead would be right from such a holding. Whenever East did not hold the \star Q, a lead from the king might give away a critical trick.

Hand 12

The opponents bid 6♥ without using cue-bids. What would you lead from:

First thoughts There is no reason to lead a major — let's agree on that. It is not so easy to decide between the minors, perhaps. Do you prefer the low doubleton diamond or the club honor sequence?

(All slams)	Beats Contract (IMPs)	Avg. Tricks (MPs)
4	15.7%	0.96
v 3	12.8%	0.87
♦ 6	15.9%	0.96
♣ Q	20.4%	1.08

The club honor is best and maybe you think that's obvious. It is right only because the contract is a slam. We reran the simulation with a contract of only 4 v and the minor-suit leads finished neck-and-neck with a Beats figure of 23.8%. That's because partner will hold more high cards when you are defending a game. A diamond lead may be essential to set up one or more diamond tricks in partner's hand.

Hand 13

The opponents bid to $6 \clubsuit$, on an auction suggesting they do not have two top losers in a suit. What would you lead from:

First thoughts Those who favor attacking leads would consider a low club, hoping to find partner with the ♣Q. A lead of the ◆A might result in a ruff for partner. Are either of the major-suit leads worth a look?

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
۸J	13.6%	0.84
v 6	15.6%	0.87
♦ A	19.4%	1.09
* 3	10.8%	0.73

A club lead is too risky. A profile of the simulation shows that East will hold the *Q surprisingly often (41.0% of the time). You are far from guaranteed to beat the slam in that case, however. On the remaining 59% of the deals, a club lead could give the slam away.

East will hold 1 or 0 diamonds only 7.5% of the time, but this is a large number in the context of the 'Beats' numbers in this table.

Hand 14

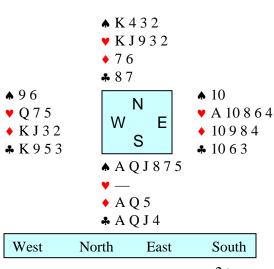
The opponents bid to 64, on an auction suggesting they do not have two top losers in a suit. What would you lead from:

First thoughts You have attacking leads available in all three side suits. If you are beginning to doubt that attacking leads are a good idea against a small slam in a suit, you can reach for a trump. What is it to be?

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 6	20.6%	0.86
♥ 7	17.0%	0.81
♦ 2	11.3%	0.72
. 3	12.1%	0.73

An attacking lead from an honor is a poor idea, as the table shows. Best is a trump, sitting back and waiting to score a couple of honors (you hope!)

One deal proves nothing (have we said that before?), but let's see a deal from the simulation where a trump lead works well in a constructive sense.



West	North	East	South
			2*
pass	2 •	pass	2
pass	3♠	pass	4 ♣
pass	4♥	pass	6♠
all pass			

You lead the recommended \$6. Declarer wins in the dummy and finesses the \$Q. You win with the \$K and play another trump. Declarer can ditch a diamond from dummy on a club, but he has three minor-suit losers remaining and only two trumps in dummy. He will have to finesse in diamonds, going one down. A lead in any of the side suits would have given declarer the slam.

Hand 15

The opponents bid to $6 \clubsuit$, on an auction suggesting they do not have two top losers in a suit. What would you lead from:

First thoughts The Q would be a gamble. Is there any reason to cash the A? If not, you must choose a passive leads in diamonds or trumps.

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	18.7%	0.99
♥A	8.2%	1.00
♦ J	17.1%	0.94
♣ Q	17.3%	0.93

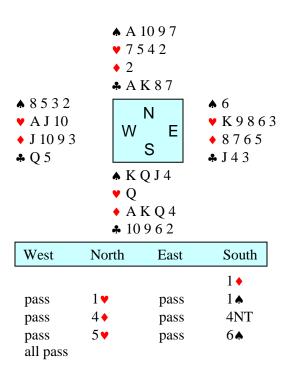
The \bigvee A is a hopeless proposition at IMPs, giving up the chance of scoring two heart tricks. More of a surprise is the fact that a trump lead is ranked ahead of the \bigvee J.

On the next page we will look at a simulation deal where a trump lead is successful. To fill the remaining white space here, meanwhile, we will rerun the simulation for an undisciplined auction to $6 \clubsuit$. With two cashable heart tricks now possible, we can expect the evaluation of the \blacktriangledown A to improve.

(All slams)	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	18.7%	0.97
♥A	12.1%	1.04
♦ J	17.1%	0.93
♣ Q	16.4%	0.90

A small bump in its rating but the ♥A lead is still worst. It greatly lessens the chance of scoring two heart tricks.

Here is the promised deal from the simulation:



Our methodology gives the results for all AK-proof spade slams. When you are faced with a particular deal at the table, you will usually have further clues from the auction. Here South has opened 1, so that makes the diamond lead less attractive. Also, North has made a splinter bid, which brings the possibility of a cross-ruff into focus.

Any lead but a trump permits a cross-ruff for twelve tricks. If West finds a trump lead, he can win the first round of hearts and play a second trump. This leaves declarer a trick short. Stopping a cross-ruff is just about the only way in which a trump lead can work positively (as opposed to being merely a safe lead). It's still a bit surprising that it will happen often enough to bring a trump lead to the top of our ranking list.

What difference does a cue bid make?

You will recall that we are assuming a wide variety of auctions to the specified slam contract and investigating the best leads in general from a given West hand. We will now see what difference it makes if you know (or are fairly sure) that a particular side-suit ace will lie in the dummy. Perhaps that player has cue-bid in the suit and the opponents cue-bid only on aces.

Should you be less inclined to lead that suit, armed with this extra piece of knowledge?

Hand 16

South opens 1♠ and they reach 6♠ on a disciplined auction (no cashable AK in a suit). North holds the ♥A. What would you lead from:

First thoughts A club is no good, clearly, and a trump is rarely best. How does the fact that North has shown the ♥A affect your choice in the red suits?

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	16.1%	0.82
∀ J	15.9%	0.82
♦ J	18.3%	0.91
* 2	8.3%	0.72

Even though you would be leading through the ace, perhaps to partner's king, a heart lead is not as good as a diamond lead. The relatively big advantage for a diamond lead at match-points is because partner has a surprisingly high 35.1% chance of holding the •A and this trick will sometimes vanish on a non-diamond lead.

Right, now we will rerun the simulation and specify that the \bigvee A is known to lie in the South hand (rather than the North hand). Will that make any difference?

(AK-proof)	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	14.8%	0.79
♥ J	13.6%	0.78
♦ J	16.6%	0.88
4 2	8.5%	0.74

There is no difference to the ranking of the four leads. The numbers dip somewhat overall, because the defenders can no longer hold the ♥K sitting over the ♥A. Again a diamond lead is easily best at match-points because partner may hold the ◆A. A non-diamond lead may allow declarer to dispose of any diamond losers and score an overtrick.

CONCLUSIONS - Leading against a suit slam

- Many text-books will tell you to lead aggressively against a small slam in a suit, but our results do not support this idea. It may well be right to choose the most passive lead in a side suit.
- Side-suit singletons are usually excellent leads.
- Do not lead a side-suit singleton when you have a natural trump trick or a side-suit ace.
- When the opponents' auction does not appear to have checked on the possibility of an A-K being cashable in one of the side suits, an ace lead becomes more attractive.
- When the auction involved cue-bids, or the opponents use cue-bids in general but chose not to, it is unlikely that an ace lead will allow you to score two tricks in the suit. At IMPs you should lead an ace when you have length in the suit and partner may hold a singleton opposite.
- Lead a trump against a small slam only when the three side-suit leads look too risky.
- At match-points (duplicate pairs) it is usually right to lead a side-suit ace, to prevent declarer from making an overtrick.
- When either dummy or declarer has indicated possession of a side-suit ace, a lead in that suit becomes less attractive.

Pick a Winner! Leading against a suit slam

On the first six hands the opponents did not employ cue bids and may therefore have two top losers in one of the side suits. On the second batch of six the opponents were superior characters, employing cue-bids to ensure that they did not have two top losers in one of the side suits. You must judge which is the best opening lead and note if you think a different lead would be better at match-points. The results are given overleaf.

(The opponents bid to $6 \checkmark$, any auction.)

- 1. ♠ QJ 10 6
 - **9** 9 3 2
 - ♦ A 10 5 4
 - **4** 10 9
- 2. Q 7 6 2
 - **v** 64
 - 9643
 - **♣** K Q 2
- 3. **♦** A 9 8
 - **v** 10 6
 - ♦ J32
 - ♣ Q 9 8 4 2
- 4. K 10 8 5 5. Q J 6 3
 - **y** 54
 - **•** 9
 - **♣** K Q 9 8 5 4
- - **9** 9 8
 - 10964
- ♣ J 10 7
- 6. 963
 - **v** 8 2
 - ◆ AJ8743
 - **&** 87

(The opponents bid to 64 and their auction, perhaps using cue-bids, convinces you that each side-suit contains a 1st- or 2nd-round control.)

- 7. 832
 - **v** 2
 - ♦ J8643
 - ♣ A 10 4 2
- 8. **♦** 9 7 3
 - **Y** Q
 - ♦ KQJ876
 - **♣**863
- 9. 1032
 - **♥** AJ3
 - ♦ QJ853
 - ***** 84

- 10. **♦** J 10 3
 - **♥** A 5
 - ◆ J 10 9 2
 - **♣** 10 9 8 4
- 11. **♠** 7
 - ♥ QJ92
 - ♦ K 10 9 8
- **4** 9 7 5 4
- 12. ♠
 - **v** 8 5 4
 - ♦ J 9 3 2
 - ♣ AJ10953

Answers

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

			IMPs N	ЛРs
(Opponents bid 6♥, cashable AK possible in a sid	le suit)			
1. ♠ Q J 10 6 ♥ 9 3 2 ♦ A 10 5 4 ♣ 10 9	1st	♦ A	13.9%	1.05
	2nd	♠Q	13.3%	0.87
2. ♠ Q 7 6 2 ♥ 6 4 ♦ 9 6 4 3 ♣ K Q 2	1st	♣K	20.9%	0.92
	2nd	^ 2	10.6%	0.71
3. ♠ A 9 8 ♥ 10 6 ♦ J 3 2 ♣ Q 9 8 4 2	1st	♠A	16.1%	1.11
	2nd	♦ 2	11.2%	0.82
4. ♠ K 10 8 5 ♥ 5 4 ♦ 9 ♣ K Q 9 8 5 4	1st	♦ 9	29.8%	0.92
	2nd	♣K	20.1%	0.89
5. ♠ Q J 6 3 ♥ 9 8 ♦ 10 9 6 4 ♣ J 10 7	1st	♠Q	13.2%	0.83
	2nd	♦ 10	10.5%	0.76
6. ♠963 ♥82 ◆ AJ8743 ♣87	1st	♦ A	16.9%	1.00
	2nd	\$ 6	8.9%	0.55
(Opponents bid 6♠, indicating no cashable AK in				
7. • 832 • 2 • J8643 • A 1042	1st(I)		15.1%	
	1st(M)		12.9%	
8. ♠ 973 ♥ Q ◆ K Q J 876 ♣ 863	1st	♥Q	25.7%	
		♦ K	8.1%	
9. ♠ 10 3 2 ♥ A J 3 ♦ Q J 8 5 3 ♣ 8 4	1st(I)	\$ 8	14.1%	
	1st(M)	♥ A	8.2%	1.02
10. ▲ J 10 3 ♥ A 5 ♦ J 10 9 2 ♣ 10 9 8 4	1st(I)	4 10	15.4%	0.99
	1st(M)	♥ A	14.6%	1.12
11. ♠ 7 ♥ Q J 9 2 ♦ K 10 9 8 ♣ 9 7 5 4	1st	♥ Q	20.9%	0.97
	2nd	♣ 7/4	18.5%	0.91
12. ♠ — ♥ 8 5 4 ♦ J 9 3 2 ♣ A J 10 9 5 3	1st	♣A	24.4%	1.16
	2nd	v 4	17.9%	0.81

Chapter 15

Leading against a slam with a side suit in dummy

When the dummy in a slam contract is known to hold a worthwhile side suit, one that might eventually provide discards, this may affect your choice of opening lead. In this chapter we will look at some small slams where dummy has either opened or made the first response in a different suit.

We saw in the previous chapter that leading an ace can work well, as can leading a singleton. Now we will see what difference it makes if the ace or singleton is in a suit that the dummy is known to hold well.

Note that in this chapter we will assume that the opponents' slam bidding is disciplined and that they will not have two top losers in a side suit, nor be missing two of the five top key cards.

Should I lead a singleton in dummy's suit?

When you are defending a game contract, it may not be such a good idea to lead a singleton in dummy's best side suit. Even if partner wins with the ace (or later with the ace of trumps) and gives you a ruff, this may be at the expense of setting up dummy's suit for discards. The situation is not the same against a slam contract. If partner can win an early trick and give you a ruff, the slam will already be defeated.

Hand 1

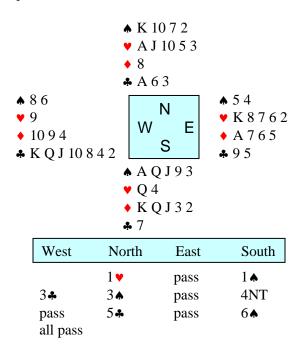
North opens 1♥, South responds 1♠ and you make some club bid. The opponents then bid to 6. What would you lead from:

♦ 86 ♥ 9 ♦ 10 9 4 ♣ K Q J 10 8 4 2 ?

First thoughts It's hard to see how a diamond lead could work better than a club. It is therefore a two-horse race between a club and the singleton heart. Where is your money?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
\$ 8	9.2%	0.67
y 9	26.3%	0.87
♦ 10	12.6%	0.77
♣ K	14.9%	0.88

The singleton heart is hugely best at IMPs. Your partner will hold the \checkmark A 20.1% of the time and the \checkmark K 11.5% of the time. On some deals it may pay off to establish partner's \checkmark K before he gains the lead in another suit. Here is an example of that from the simulation:



Suppose you lead the &K. Declarer wins with dummy's ace and leads the singleton diamond. If East takes the •A, declarer will have four discards for dummy's heart losers. If instead East plays low, declarer will win and draw trumps. He can then give up a heart trick and easily make twelve tricks.

Lead the recommended ♥9 and declarer is sunk.

Hand 2

Dummy opens $1 \checkmark$ and the opponents bid to $6 \spadesuit$. What would you lead from: $\spadesuit 10964 \checkmark Q \spadesuit Q J 9 4 2 \clubsuit 985?$

First thoughts Now the heart singleton is an honor. Will that make any difference?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 4	32.8%	1.16
♥ Q	53.8%	1.45
♦ Q	39.9%	1.37
. 9	38.0%	1.31

Again the singleton heart wins by a clear margin. We saw in the previous chapter that a singleton is generally the best lead against a slam, unless you hold an ace in your hand or the ruff will be from a natural trump trick. It seems that we can safely extend this advice to the situation where the singleton is in dummy's best suit. The 'Beats' numbers are unusually high because both of declarer's long suits are breaking badly.

Hand 3

Dummy opens $1 \checkmark$ and the opponents bid to $6 \spadesuit$. What would you lead from: **♦** K 5 2 **♥** J **♦** K 10 9 4 3 **♣** J 10 8 3 ?

First thoughts You have a good chance that the **AK** lies over the ace and will score a trick. How does that affect the prospects of a singleton lead?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	19.4%	1.07
♥ J	25.8%	1.16
♦ 10	21.7%	1.09
♣ J	28.8%	1.20

The singleton lead is less attractive now. That's because the AK is a likely trick (South will hold the AA on 62.4% of the deals). If partner happens to gain the lead, to give you a ruff, that will then be a second trick for the defenders anyway. Also, East cannot hold the ♥A or the slam would have been bid with two keycards missing.

Should I lead the ace of dummy's suit?

It may seem like a poor idea to lead the ace of dummy's main suit. Yes, but when you hold several cards in the suit your partner may have a singleton or void there. Even if this is not particularly likely, and it is just as possible that declarer is short in the suit, it may still be your best chance of beating the slam. Let's see, by running some simulations.

Hand 4

Dummy opens $1 \checkmark$ and the opponents bid to $6 \spadesuit$. What would you lead from: $\spadesuit J 10 \checkmark A 9 8 4 2 \spadesuit 8 7 6 \clubsuit J 5 3 ?$

First thoughts A minor-suit lead may, just possibly, set up a king in partner's hand. Meanwhile, leading the ♥A may allow you to give partner a second-round ruff. Where is your money?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠J	15.2%	0.99
٧A	33.3%	1.16
♦ 8/7/6	20.7%	1.05
. 3	19.2%	1.02

The ♥A is a massive winner. Opposite this hand, East will hold a singleton heart with frequency 29.1% and a void with frequency 2.5%. North holds at least five hearts, of course. When he happens to hold six, declarer will hold a singleton as well as your partner. On some of the deals where partner is void in hearts, he may have ventured a Lightner Double. Nevertheless, the ♥A is easily the best lead.

Hand 5

Dummy opens $1 \checkmark$ and the opponents bid to $6 \spadesuit$. What would you lead from: $\spadesuit 9 6 \checkmark A 10 7 6 \spadesuit J 10 4 2 \clubsuit 7 6 3 ?$

First thoughts Now you hold only four hearts, so the chance of giving partner a ruff will be lower. Will the ♥A lead be best, nevertheless?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
• 9	10.5%	0.95
٧A	13.7%	1.00
♦ J	14.9%	0.98
4 7/6/3	17.2%	1.00

The A loses its big lead, tumbling into third place. Opposite this West hand East will hold a singleton heart with frequency 6.5%, a void with frequency 0.3%. A club, the shorter of the unbid suits, is the best prospect.

When is it right to lead dummy's suit?

Suppose you have a sequence in dummy's main side suit. Should you lead from the sequence, despite the advertised length over you? What if the leads in the other three suits are very uninviting? Will it then be best to make a passive lead in dummy's suit? We will investigate such situations in this section.

Hand 6

Dummy opens $1 \checkmark$ and the opponents bid to $6 \spadesuit$. What would you lead from: **▲** J9 **♥** OJ10 **♦** KO83 **♣** J1087?

First thoughts The Q-J-10 combination would normally catch your eye. Should you choose something else now that North has opened 1♥? If you decide to lead one of the minors, which holding is more promising?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠J	5.1%	0.43
♥ Q	7.0%	0.53
♦ K	9.5%	0.62
♣ J	6.8%	0.56

The 'Beats' figures are low, because the West hand is balanced, with all the suits breaking well for declarer. The heart lead is not top of the list, with the suit having been bid. A diamond honor is a more promising lead than a club honor. For example, setting up a diamond trick may work well when declarer has a trump loser.

Hand 7

Dummy opens $1 \checkmark$ and the opponents bid to $6 \spadesuit$. What would you lead from:

♦ K7 ▼ 10854 **♦** K65 **♣** K754?

First thoughts Suit slams can be bid on much lower point-counts than notrump slams. If the opponents hold only 26 points between them, your partner could hold a 5-count and may hold a minor-suit queen. Should you risk a lead from one of your kings or push out a passive heart, despite the fact that this may assist declarer in setting up dummy's advertised side suit?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
↑ 7	4.8%	0.36
v 4	19.5%	1.02
♦ 5	14.1%	0.93
. 4	14.6%	0.94

A heart lead is easily best. Against disciplined slam bidders, you cannot expect to cash the ace and king of a minor suit. A profile of our simulation shows that East will hold an average of 3.4 HCP opposite this West hand. This will include the •Q on 29.9% of the deals and the •Q on 30.9% of the deals. So, lead from a minor-suit king and there is around a 70% chance that declarer will own the ace and queen of the suit.

Which unbid suit should I lead?

Most of the time you will choose an opening lead from one of the unbid suits. Very occasionally (miracles do happen), it may even be right to lead a trump.

Hand 8

South opens 1 ♦ and North responds 2 ♣. What do you lead against 6 ♦ from: • 10 8 6 5 4 ♥ 7 6 2 • 3 2 ♣ 9 8 2 ?

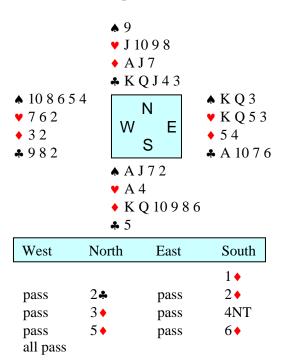
First thoughts There is no apparent reason to lead one of the suits bid by the opponents. Will you lead a heart or a spade?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♦ 5	7.6%	0.75
♥ 6/2	9.3%	0.74
♦ 3	4.8%	0.55
♣ 8/2	6.0%	0.58

There are two main chances of beating the slam. The first is to score two quick tricks in the major suit that you lead, perhaps finding partner with the ace-queen over dummy's king. The second is to set up a major-suit king in partner's hand, which he will be able to cash when he scores a winner in one of the other suits.

In both these situations you do better to lead your shorter unbid suit, hearts here. Declarer or the dummy will hold a spade singleton or void with frequency 47.9%. They will have a heart shortage only 25.1% of the time.

Here is a deal from the present simulation that illustrates the point:



Cast aside any opinions you may have about the North-South bidding and look at the opening lead situation from West's point of view. If he starts with a heart, he will set up a heart trick for East before declarer can establish discards on dummy's clubs. A spade lead would not be so effective, despite East holding the **AK-Q**, because dummy has a singleton in the suit.

Hand 9

Dummy opens $1 \checkmark$ and the opponents bid to $6 \spadesuit$. What would you lead from: **♦**8 ♥ J6 ♦ A Q 9 5 3 ♣ K Q 10 8 3 ?

First thoughts With a K-Q combination before your very eyes, accompanied by an ace, the ♣K may seem the world's most obvious lead. How do you rate leading the ◆A?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♦ 8	14.9%	0.66
♥ J	15.7%	0.68
♦A	15.7%	1.10
♣K	20.3%	0.78

The \bigstar K is indeed best at IMPs. As we have seen many times before, it is essential to lead an ace (here the \bigstar A) at match-points. If you don't, there is a big chance that declarer can offload his diamonds on dummy's heart suit.

The • A's edge at match-points, 0.32 tricks per deal is gargantuan. Let's use our alternative measure for that form of the game, where the West cards remain the same in a 5000-board duplicate pairs tournament and the 13 West cards act as competitors. The eventual leader-board will be:

A massive win for the diamond ace, as you see.

Hand 10

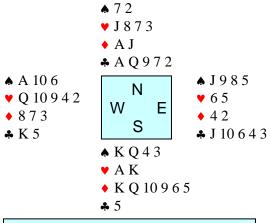
South opens 1 ◆ and North responds 2 ♣. What do you lead against 6 ◆ from: A 10 6 ♥ Q 10 9 4 2 ◆ 8 7 3 ♣ K 5 ?

First thoughts Should you cash the ♠A, risk a heart or lead a trump?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠A	12.8%	1.10
v 10	16.4%	0.89
♦ 3	19.9%	0.96
♣ K	8.3%	0.75

At IMPs a passive trump is best. We assume a disciplined auction, so there's no chance of cashing the $\triangle A$ followed by partner's $\triangle K$. A heart might find partner with the $\bigvee K$ but could give away a trick.

Let's see a deal from the simulation where a trump lead is necessary:



West	North	East	South
			1 •
pass	2 .	pass	2♠
pass	2NT	pass	3♦
pass	4 ♦	pass	4NT
pass	5♥	pass	6♦
all pass			

A trump lead prevents a ruff, defeating the slam. Otherwise declarer ruffs a spade, finesses the \$\,\mathbb{Q}\, and ditches a spade on the \$\.\mathbb{A}\.

Hand 11

South opens $1 \blacklozenge$ and North responds $2 \clubsuit$. What do you lead against $6 \blacklozenge$ from: **♦** QJ1083 **♥** 1043 **♦** A4 **♣** J106?

First thoughts This is the first time that West has held the ace of trumps. Is ace and another trump a good idea? If not, which side suit catches your eye?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠Q	10.5%	1.11
v 3	10.3%	1.10
♦ A	7.3%	1.07
♣ J	7.8%	1.08

The \mathbf{AQ} edges ahead of a heart (the lead from the shorter unbid suit), partly because of the honor sequence and partly because partner may hold a singleton spade (3.1%), allowing you to give him a second round ruff.

Hand 12

South opens 1 ♦ and North responds 2 ♣. What do you lead against 6 ♦ from: A Q J 3 ♥ K Q 8 7 2 ♦ 3 ♣ J 10 6 3 ?

First thoughts No reason to lead a minor suit springs to mind. If you are going to lead a major, which one do you prefer?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠Q	13.4%	0.76
♥ K	12.4%	0.80
♦ 3	8.6%	0.67
♣ J	6.8%	0.60

There is not much in it. A spade lead edges it at IMPs (because spades is the shorter unbid suit). The \checkmark K is better at match-points.

Hand 13

South opens $1 \blacklozenge$, you overcall $1 \spadesuit$ and North responds $2 \clubsuit$. What do you lead against $6 \blacklozenge$ from:

First thoughts Does your singleton heart represent a good lead? If you think not, what other lead will you select?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 7	13.8%	1.14
v 3	9.1%	1.10
♦ A	8.9%	1.10
4 10	15.5%	1.16

The reason to lead a side-suit singleton is that you hope partner may be able to give you a ruff subsequently. If East can win a trick here, the contract will go down anyway, since you hold the ace of trumps!

Why is the club lead rated ahead of the spade lead, when you might think that a spade would give you a fair chance of finding partner with a singleton for a second-round ruff? A profile of the simulation shows that East has a 7.4% chance of a singleton/void spade. However, because North responded in clubs, East has a 10.3% chance of a club singleton/void!

Imagine that East had been on lead against the same contract. He would have made the obvious lead of his side-suit singleton. When you hold the trump ace and are considering your lead from the other side of the table, you may have to calculate which side-suit singleton your partner is most likely to hold.

Hand 14

South opens $1 \blacklozenge$ and North responds $2 \clubsuit$. What do you lead against $6 \blacklozenge$ from:

First thoughts 'You should make an attacking lead against a suit slam!' How many times have you heard that? If it's true, surely you should lead a spade, hoping partner has the ♠Q. If you win subsequently with the ♥A, you can cash the setting trick in spades. That's the theory. Let's see the facts.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	4.9%	0.59
٧A	7.1%	1.03
♦ 5	9.4%	0.79
4 9/2	8.7%	0.79

A spade lead is hopelessly last at both forms of the game. A trump is best at IMPs (particularly when dummy has only two trumps, if the bidding suggests that). At match-points you must place your ♥A on the table!

Hand 15

South opens $1 \blacklozenge$ and North responds $2 \clubsuit$. What do you lead against $6 \blacklozenge$ from: **∧** K 8 7 3 **♥** 9 8 2 **♦** 7 6 5 **♣** A 5 4 ?

First thoughts If a spade lead was wrong on the previous West hand, let's move the side ace into dummy's strong side suit. Declarer will usually have to develop the clubs (as opposed to the hearts on Hand 16) and you

would then be happy to have set up a spade trick, if possible. Is the spade lead right now?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	9.0%	0.94
♥ 9/2	10.9%	1.01
♦ 5	6.1%	0.98
♣ A	3.4%	0.93

The aggressive spade lead moves upwards in the ranking, as you would expect, but it cannot overtake the passive lead in the other unbid suit.

CONCLUSIONS

Leading against a slam with a side-suit in dummy

- The traditional advice is to make aggressive leads against a small slam in a suit. Our simulations do not support this. Even when dummy has announced a side-suit that may supply discards, it is not with the odds to lead away from a king or a queen in some different side-suit.
- It is generally right to lead a singleton in dummy's main suit, unless you have an ace in your hand or any ruff would be from a natural trump trick.
- It is often right to lead the ace of dummy's main suit when you have four or more cards and therefore some chance of giving partner a ruff.
- At match-points (duplicate pairs) it is usually essential to lead an ace in an unbid suit, to prevent declarer from making an overtrick.
- When you have no singleton or ace, it is often right to lead the shorter of similar holdings in the unbid suits.

Pick a Winner!

Leading against a suit slam with a side suit

On the twelve West hands below, the opponents have bid a slam via a disciplined auction. You cannot therefore expect to cash the ace-king in any side suit. Try to judge which is the best opening lead and note if you think a different lead would be better at match-points. The results are given overleaf.

(North opens $1 \vee$ and South ends in $6 \wedge$.)

- 1. 62
 - **♥** Q
 - ◆ A 9 8 4 2
 - ♣ J 10 9 8 5
- 2. 10 9 7 4
 - K
 - ◆ QJ842
 - **4** 10 8 6
- 3. ♠ Q 9 3
 - **Y** A 9 5
 - ♦ 10 5 4
 - ♣ J 10 9 7

- 4. 863
 - ♥ J 10 8
 - **♦** 865
- 5. **♦** 9 6
 - ♥ A 10 6
 - 10 9 4
- 6. **♠** 8
 - ♥ J8654
 - **♦** 64
- ***** A Q 9 3 ***** J 9 6 4 2 ***** A Q J 4 2

(South opens $1 \blacklozenge$, North responds $2 \clubsuit$ and South ends in $6 \blacklozenge$.)

- 7. 732
 - **∨** K 6 2
 - ♦ 10 8 5 2
 - **♣** 10 8 4
- 8. **4**
 - ♥ Q 10 9 8 7
 - ★ K 4
 - **♣** 98764
- 9. \(\blacktriangle 95
 - **v** 10 9 8 5 4
 - ◆ K 10 6
 - **4**985

- 10. **▲** J 6 5 4 2
 - **v** 10 9 8 3 2
 - ♦ Q 7
 - ***** 8

- 11. AKJ84
 - **♥** K 9 6
 - **♦** 10 9 3
 - **4** 10 9 4
- 12 AAQ9
 - **7** 6 3 2
 - ♦ J 5
 - **4** 10 9 8 7

Answers

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

(North opens $1 \vee$ and South ends in $6 \wedge$.) IMPs MPs 1. ♠ 62 ♥ Q ♦ A 9 8 4 2 ♣ J 10 9 8 5 22.1% 1.15 1st **♦** A 2nd **♣**J 13.6% 0.75 2. ♠ 10 9 7 4 ♥ K ♦ Q J 8 4 2 ♣ 10 8 6 1st **♥**K 54.8% 1.50 2nd 42.6% 1.40 **♦** Q **♦** Q 9 3 ♥ A 9 5 ♦ 10 5 4 ♣ J 10 9 7 1st **♥**A 49.8% 1.47 44.5% 1.41 2nd **♣**J 4. ♠863 ♥J108 ♦865 ♣AQ93 16.5% 1.10 1st ♣A 10.4% 0.48 2nd **♦**5 5. ♠96 ♥ A 106 ♦ 1094 ♣ J 9 6 4 2 1st(I) **♦**10 16.1% 1.00 1st(M) ♥A 11.4% 1.03 6. ♠ 8 ♥ J 8 6 5 4 ♦ 6 4 ♣ A Q J 4 2 1st **♣**A 29.2% 1.25 21.5% 0.86 2nd **v**5 (South opens $1 \blacklozenge$, North responds $2 \clubsuit$ and South ends in $6 \blacklozenge$.) 7. \bigstar 7 3 2 \forall K 6 2 \bigstar 10 8 5 2 \bigstar 10 8 4 1st **^**2 17.1% 0.84 2nd **.**4 14.8% 0.75 8. ♠ 4 ♥ Q 10 9 8 7 ♦ K 4 ♣ 9 8 7 6 4 1st 24.3% 1.10 ***** 6 2nd **♥**10 17.9% 1.02 9. ♦ 95 ♥ 109854 ♦ K 106 ♣ 985 32.6% 1.28 1st **♠**9 2nd **♥**10 30.7% 1.26 10. **▲** J 6 5 4 2 ♥ 10 9 8 3 2 ♦ Q 7 ♣ 8 1st **.**8 22.1% 0.74 2nd **♥**10 16.9% 0.74 11. ★ K J 8 4 ♥ K 9 6 ♦ 10 9 3 ♣ 10 9 4 **♣**10 10.2% 0.57 1st 2nd **♦**3 9.5% 0.53 12. AAQ9 • 7632 • J5 • 10987 **♣**10 14.6% 0.64 1st(I) 1st(M) ♠A 13.3% 1.10

Chapter 16

Leading against a grand slam

We may be proved wrong but we are not expecting this to be a very long chapter. Most grand slams are either destined to succeed or destined to fail (perhaps because a side-suit finesse is wrong or a key suit breaks badly). It is not so often that the opening lead will make much difference.

If you have a side suit that is at least six cards in length, partner may be void there and be able to score a ruff. We will discuss in a moment whether it is good tactics for him to make a (lead-directing) Lightner Double in such a situation.

It will usually be a poor idea to lead away from a king or a queen against a grand slam. It would not help you at all if you happened to find partner with a matching honor in the suit. Meanwhile, you risk giving a trick away. There is usually little advantage in leading from combinations headed by the K-Q or Q-J either, since setting up a trick is worth little when the contract is a grand slam. Even if such leads do not surrender a trick directly, they will give away the position of high cards and may assist declarer to find the winning line.

A lead from a solid sequence such as Q-J-10-x-x is safe, it's true, but in these days of Roman Key-card Blackwood a trump lead is probably safe too. RKCB is usually employed to confirm that the three top trumps are present. Even a singleton trump should then be a safe lead, unless the opponents are in an 8-card fit and partner's J-x-x-x or J-10-x-x could be put at risk.

In rough terms, it is likely that on 80-90% of grand slams, the result is pre-ordained (in the absence of some foolish lead from an honor). Our task will be to identify which leads are likely to be effective on those deals where the opening lead can make a difference.

As in the two chapters on leading against small slams, we are not going to mention any explicit auctions here. There are many thousands of possible auctions resulting in a grand slam. We will take a particular West hand and then create 5000 random deals where North-South have the requirements for bidding a grand slam. They will hold all six key cards: the four aces and the trump king and queen.

Should I lead a trump or from touching honors?

You will know that many text books recommend leading a trump against a grand slam. It may seem obvious to make a passive lead of some sort, since there can be no direct benefit from setting up a trick. (If your side ever gained the lead to cash it, the grand would be down anyway!)

That said, on our very first exploratory run, choosing random West hands on lead against 7♦, a trump was the best lead on only 6 West hands out of 50! How can that be? It is because a side-suit lead may remove a key entry to dummy; a lead from a long side suit may give partner a ruff.

In this section we will see whether it is better to lead from touching honors in a side suit than to lead a trump.

Hand 1

The opponents bid to $7 \bullet$. What would you lead from:

♦ 97 **♥** K Q 7 2 **♦** 8 5 **♣** 10 8 7 5 4 ?

First thoughts Should you lead a trump or is there some reason why the **♥**K may be a better shot? In all probability it will not make much difference what you lead, but we will see...

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠ 9	12.2%	0.13
٧K	13.7%	0.14
♦ 8	12.6%	0.13
♦ 5	12.7%	0.13
4 5	13.5%	0.14

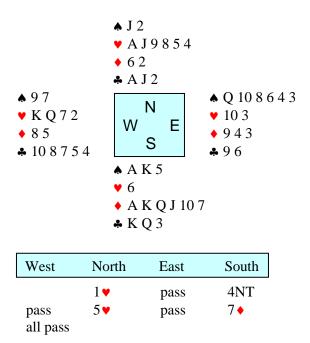
Well, there you have it. Your choice of lead will make very little difference on most grand slam deals. Those who take the game seriously may still be interested in finding the best lead on those deals where the choice can make a difference. Remember too that the IMP-swing may be enormous. Suppose the other table plays in a small slam. By beating the grand you may pick up 17 IMPs instead of losing 13.

The **V**K wins narrowly. Occasionally it will knock out a key entry to dummy, perhaps preventing the establishment of a side suit.

When will a club lead be the winner? Our profile of the 5000 deals in this simulation shows that East will be void in clubs 1.6% of the time. Would he then have made a Lightner Double? Maybe, but many players are rightly

concerned about a flight to 7NT; they rely on their partner to lead a long side suit anyway.

Look now at the figures for a trump lead. The ◆5 is rated fractionally ahead of the ◆8. This confirms the standard recommendation to lead low in the trump suit, in case your higher trump(s) may be of use later. Let's see a deal from the simulation where this policy would prevent an expensive loss:



The immediate 4NT was not asking for key-cards in hearts, it was straight Blackwood for aces. Suppose West decides to lead a trump and mistakenly selects the ◆8. Declarer wins in his hand and plays on the heart suit, hoping for a 3–3 break. He crosses to the ♥A, ruffs a heart, returns to dummy with the ♣J and ruffs another heart. When the suit does not break 3–3, he has to take a spade ruff. He plays the ♠A-K, leads a third spade and... disaster for West! He is out of spades but, after his misguided opening lead, cannot ruff higher than dummy's ◆6. The grand slam is made.

Hand 2

The opponents bid to 7♦. What would you lead from:

First thoughts A club lead is out of the question. (Imagine if West had held $\triangle Q$ -7-6 on our Hand 1 and led the suit. Dummy's $\triangle J$ would win!) Even a heart from the jack carries some risk. For example, partner might hold the $\triangledown Q$ and the lead could give declarer three heart tricks. So, it is between a spade and a trump.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
ΑK	11.9%	0.13
♥ 7	10.6%	0.11
♦ 2	11.2%	0.12
\$ 6	8.1%	0.08

It's a narrow win for the **\Lapsilon K** over a trump. When you lead from a spade combination like this and the contract is at some lesser level, you run the risk that dummy will hold **\Lapsilon J-x-x** and declarer will hold the **\Lapsilon A-x** or **\Lapsilon A-x-x**. This is not a worry at the seven-level of course, since one spade winner will defeat the contract.

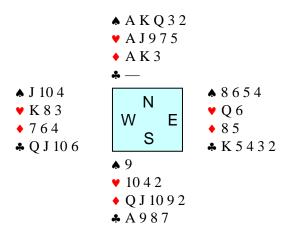
Hand 3

The opponents bid to 7♦. What would you lead from:

First thoughts You would choose a heart lead only if you had recently committed a serious crime and were hoping to plead not guilty on grounds of insanity. The ♠J is fairly safe but the main choice is between a trump and the club sequence. Let's see the numbers:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠J	17.3%	0.18
v 3	8.4%	0.09
♦ 7	17.7%	0.19
♣ Q	17.5%	0.18

A trump lead is best by a tiny margin. Let's look for a simulation deal where a trump leads works better than the AQ:



North opens $2\clubsuit$ and the diamond fit soon comes to light, the partnership going all the way to $7\spadesuit$. Suppose that West starts with the $\clubsuit Q$. Declarer can ruff with the $\spadesuit K$, cross to his hand with a trump and ruff another club with the $\spadesuit A$. Ace and another spade, ruffed, establishes that suit and declarer draws the outstanding trumps. A heart to dummy's ace then allows him to discard two hearts and a club on dummy's three spade winners.

Meanwhile, a trump lead would have beaten the contract. Declarer does not then have the entries to score two club ruffs and enjoy four spade winners.

On other deals from the simulation, club and spade leads (even occasionally a heart lead) removed a critical entry to the dummy. Remember that our 'Beats' figures are the average for all 5000 simulated deals. On a particular auction to 7, at the table, you will often pick up clues as to which lead may work against the current lie of the cards. For example, when dummy has shown a strong side suit, an attacking lead in one of the other side suits might remove a useful entry.

Leading a long suit to seek a ruff

When you hold a side suit of six cards or more, there is a fair chance that your partner will be void in the suit. This chance becomes slightly better when you are short in the trump suit, since you can expect partner to hold trump length (which slightly increases his chance of a void in the side suit). In this section we will investigate leads from long side suits against a grand slam.

Hand 4

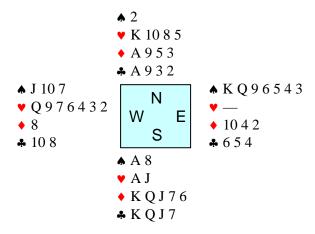
The opponents bid to $7 \bullet$. What would you lead from:

First thoughts Leading from a queen is not normally attractive. Here you hold seven cards in the suit and this gives you some expectation of a void in partner's hand. It is also less likely that you will give away a third trick in the suit when partner is not void.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠J	13.5%	0.14
y 6	15.0%	0.16
♦ 8	12.5%	0.13
4 10	13.1%	0.14

The heart lead comes out best but you may think the 15.0% figure should be reduced to account for the situations where partner will make a Lightner Double when void in hearts. A profile of the 5000 deals showed that East will be void in hearts 2.9% of the time opposite this West hand. Maybe your partner would have doubled with a void heart. Remember, though, that it is extremely expensive to make a Lightner Double that causes the opponents to run to a making 7NT.

This is a typical deal from the simulation:



North-South bid to 7♦, surviving any intervention you may have thrown at them in the majors. The question then is: should East make a Lightner

Double to make sure of a heart lead? If he does, South may well take flight to 7NT. East's double will place West with the •Q, allowing declarer to score three heart tricks in addition to the ten top winners in the other suits. It is probably better tactics to hold back the Lightner Double and rely on partner leading his long heart suit anyway.

Hand 5

The opponents bid to 7♦. What would you lead from:

♦ J 10 ♥ Q 8 7 ♦ 7 4 ♣ J 10 6 5 4 2 ?

First thoughts Here you have only a 6-card suit. To compensate, you will not be leading away from a queen. Do you like the look of a club lead?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♠J	8.9%	0.09
v 7	7.5%	0.08
♦ 4	8.5%	0.09
♣ J	11.0%	0.12
4 5	10.5%	0.11

The profile gives East a 3.3% chance of holding a void club. As usual, you should lead the jack, rather than a low card, to deal with situations similar to this:

A low lead (in a situation where you're surely not underleading a king) allows declarer to play low from dummy, scoring two club tricks.

Hand 6

The opponents bid to $7 \bullet$. What would you lead from:

♦8 ♥95 ♦854 **♣** K976432?

First thoughts You have a 7-card suit but it is headed by the king. Should you risk giving a trick away, leading from a king, to pick up the cases where partner is void in the suit? If not, what other lead do you fancy?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
♦ 8	17.0%	0.19
v 9	16.8%	0.18
♦ 4	16.0%	0.17
\$ 6	14.0%	0.15

A club lead is worst. East will be void in clubs 2.1% of the time, so there is some chance of a ruff. Against that, he will hold the *Q only 44.7% of the time. When he does not have this card, you may well be giving declarer two club tricks on a plate. Not a worthwhile exchange.

You may be puzzled why partner has a lower chance of a club void on some deals where West has a 7-card suit, compared with others where West has only a 6-card suit. This is due to the algorithm we use to determine whether the North-South hands merit bidding a grand slam. When a side-suit king is missing, for example, it is quite likely that declarer or the dummy will hold a singleton (or void) in the suit.

Leading when dummy has announced a side suit

Next we will see what effect it has when dummy has announced a side suit, by opening or responding in the suit. We will take the case where North has opened $1 \checkmark$ and South responded $1 \spadesuit$, the bidding proceeding in disciplined fashion to $7 \spadesuit$.

Hand 7

North opens $1 \checkmark$ and South arrives in $7 \spadesuit$. What would you lead from: $\spadesuit J 4 2 \checkmark K 7 6 3 2 \spadesuit J 6 \clubsuit J 7 2 ?$

First thoughts Again there is a chance of giving partner a heart ruff, but is it safe to lead away from the ♥K? If you don't like the look of a heart lead, should you lead one the minors, hoping to dislodge an entry to dummy, or stick with a safe trump?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	24.4%	0.25
v 2	17.2%	0.18
♦ J	20.5%	0.22
. 2	21.6%	0.22

A trump is best and a ruff-seeking heart worst. There are two ways in which a trump lead can work well. Firstly, it may save you from giving a trick away with an unlucky side-suit lead from an honor. Secondly, it may prevent a ruff for declarer when the dummy is relatively short of trumps.

Hand 8

North opens $1 \checkmark$ and South arrives in $7 \spadesuit$. What would you lead from: $\spadesuit 3 \checkmark 108643 \spadesuit Q 104 \clubsuit 10976$?

First thoughts Leading from the ◆Q looks hopeless but none of the other three leads can be dismissed immediately. A club lead might dislodge a side entry to be used for establishing the hearts; a heart lead might be ruffed by partner; a trump lead might possibly save a ruff in dummy.

	Beats Contract (IMPs)	Avg. Tricks (MPs)
A 3	12.3%	0.13
v 4	17.7%	0.19
♦ 4	12.5%	0.14
4 10	13.1%	0.14

A heart lead is easily best but the second place is closely contested. Our profile shows that East will be void in hearts 6.1% of the time and this is what gives the heart lead its advantage.

You may be thinking: 'My partner would always make a Lightner Double with a void heart'. We reran the 5000 deals in the present simulation with a final contract of 7NT and found that a run-out to the notrump grand would be successful 67% of the time. So, it is by no means obvious to make a Lightner Double in such circumstances.

Hand 9

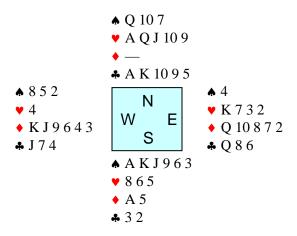
North opens 1 v and South arrives in 7 ★. What would you lead from: ★ 8 5 2 v 4 v K J 9 6 4 3 ♣ J 7 4 ?

First thoughts We can guess that a diamond lead from the king will not be favored. Is there any reason to lead the singleton heart? Let's find out:

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	21.5%	0.23
v 4	21.8%	0.24
♦ 6	14.7%	0.15
. 4	20.4%	0.23

We'll call it a dead-heat between a trump and the singleton heart. There are obviously some cases where a singleton lead in dummy's main side suit disrupts declarer's communications. For example, dummy's hearts might be headed by the A-K-Q. If there is no side entry to dummy in a minor suit, declarer would have to 'draw trumps, ending in the dummy' to enjoy more than one heart trick. This would not be possible if dummy held either two trumps or three trumps headed by a card lower than the eight.

Here's a simulation deal where a heart lead gains for a different reason:



Suppose West leads a trump against 7♠. Declarer wins in hand and ruffs a diamond in the dummy. He then draws trumps in two further rounds. Before relying on the heart finesse, he plays the ♣A-K and ruffs a club high. Glory be! The suit breaks 3–3 and will provide two discards for his heart losers. He crosses to the ♥A and plays the two established clubs, throwing two hearts.

As you see, a heart lead will prevent this line of play by removing the \checkmark A. Declarer cannot rise with the \checkmark A and set up the clubs, planning to 'draw trumps, ending in the dummy', because he needs a diamond ruff.

Hand 10

North opens 1 v and South arrives in 7 ♦. What would you lead from: ♦ 5 4 2 v K Q J 7 • J 3 2 • 10 8 5 ?

First thoughts A trump may prevent a ruff and a heart looks safe. A diamond or a club might remove an entry that could assist in setting up five hearts in dummy opposite a singleton in declarer's hand. What will it be?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
^ 2	19.1%	0.20
♥K	16.4%	0.17
♦ 2	16.2%	0.17
\$ 5	17.3%	0.18

A heart lead is unproductive since East will be void in hearts only 0.4% of the time. A diamond or a club could remove an entry from dummy; the diamond lead is slight more risky, being away from a jack. The trump lead heads the listing since it might gain in two different ways. It could prevent a ruff; it could also remove an important entry if dummy held, say, •A-J.

We looked into the simulation and found plenty of deals where dummy held five or six hearts opposite a singleton in declarer's hand. A lead of the VK allowed the hearts to be set up. A trump lead (sometimes a minor-suit lead) removed an entry and thwarted that line of play.

Hand 11

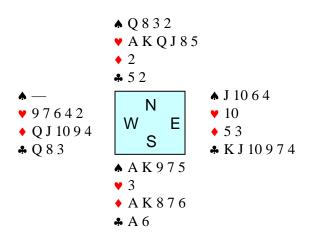
North opens $1 \checkmark$ and South arrives in $7 \spadesuit$. What would you lead from: $\spadesuit \longrightarrow 97642 \spadesuit QJ1094 \spadesuit Q83?$

First thoughts A club looks wild, so it's a choice between the two red suits. It 'feels good' to lead from a sequence of honors. Is that the best idea here, though?

	Beats Contract (IMPs)	Avg. Tricks (MPs)
v 4	28.3%	0.33
♦ Q	24.4%	0.30
. 3	22.7%	0.28

Why is a heart lead better than a diamond? There are two main ways in which it can succeed. Firstly, you may be able to give partner an immediate ruff. A profile of this simulation showed that East would hold a void heart 7.4% of the time. In addition to that, a heart lead may cut declarer off from the dummy when declarer has a singleton heart, which is a 47.3% chance.

Let's see an example of that from the simulation:



West	North	East	South
	1♥	pass	1 🛦
pass	4 ♦	pass	4NT
pass	5 ♦	pass	5♥
pass all pass	6♥	pass	7♠

South uses RKCB to discover that North holds the \checkmark A and then the \spadesuit Q with the \checkmark K. You can see what would happen on the \spadesuit Q lead. Declarer would win in hand and lead low to the \spadesuit Q, because he can pick up a 4-0 trump break only if East holds the trump length. When a second round of trumps is led, let's say that East splits his J-10. Declarer wins, crosses to dummy with a diamond ruff and picks up the trumps with a finesse of the 9. He can then return to dummy with a heart to discard his remaining losers.

A heart lead defeats the contract. Declarer wins in the dummy and again plays the AQ, West showing out. When he plays a second top heart, East can either ruff or discard a diamond. The situation is then hopeless for declarer.

CONCLUSIONS - Leading against a grand slam

- It is only on a relatively small fraction of grand slams that your opening lead will make any difference.
- Unless you have some specific purpose in mind, do not lead away from a king or queen against a grand slam. The occasions where a lead in the chosen suit proves to be a killer for some reason, are outnumbered by the times when you give away a trick in the suit.
- Traditional text-books recommend leading a trump. It's true that this is unlikely to give a trick away but it is less likely to be a killing lead than one in a side suit. (A trump lead may prevent a ruff when dummy's trumps are short; a side-suit lead may destroy a key entry.)
- When you have a side suit of six cards or more, or length in dummy's main suit, finding partner with a void and giving him a ruff may be your best chance. Even so, do not lead from a king and be wary of leading from a queen.
- When declarer is in a grand slam after the dummy has shown a good side suit (by opening or responding in that suit), consider a lead of dummy's suit.

Pick a Winner! Leading against a grand slam

The opponents have a disciplined auction to a grand slam. You must judge which is the best opening lead and note if you think a different lead would be better at match-points (unlikely against a grand slam). The results are given overleaf.

(The opponents bid 7♦ on a disciplined auction that identifies all 6 key cards.)

1. • 3 2

∨ K 9 8 7

♦ 3

♣ J 9 6 5 3 2

2. • 84

▼ K Q J 7 4 2

♦ 8 7 3

♣ J 9

3. **♦** Q J 9

♥ Q 10 6 3 **•** 6

4 10 7 5 4 2

4. • KQ6542 5. • 8765 6. • 765

♥ J 7 5 3

♦ 3

♣ K 3

♥ Q J

4

♥ Q J 10 9 **♦** J 6 5

(North opens 1♥, South responds 1♠ and ends in 7♠ after a disciplined auction that identifies the 6 spade key cards.)

7. **•** 10 7 3

♥ J 2

♣ 7 6 2

8. • 98

∨ K 10 8 2

♣ Q 10 2

9. • 987

▼ K 9 3 2

♦ 8 5 4 2

♣ O 7

♥ O

♦ J 6 4 3

♣ J 10 7 5

9 9 8 7 6 3

10 8 4 3 2

. 97

12. • 9

♥ J 10 8

◆ J 9 6 5 4 2

♣ 7 2

Answers

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

			IMPs	MPs
(Opponents bid 7♦, disciplined auction)				
1. ♠ 3 2 ♥ K 9 8 7 ♦ 3 ♣ J 9 6 5 3 2	1st	4 5	22.4%	0.24
	2nd	A 3	19.8%	0.21
2. ♠84 ♥ K Q J 7 4 2 ♦ 8 7 3 ♣ J 9	1st	♦ 8	12.6%	0.13
	2nd	♥ K	12.3%	0.13
3. ♠ Q J 9 ♥ Q 10 6 3 ♦ 6 ♣ 10 7 5 4 2	1st	4 4	12.7%	0.13
	2nd	♦ 6	10.8%	0.11
4. ♠ K Q 6 5 4 2 ♥ J 7 5 3 ♦ 3 ♣ K 3	1st	♠K	30.7%	0.33
	2nd	v 3	29.3%	0.31
5. ♠8765 ♥ Q J ♦ 4 ♣ Q 108762	1st=	♠ 8	11.0%	0.12
	1st=	. 7	11.0%	0.12
6. ♠ 765 ♥ Q J 109 ♦ J 65 ♣ K Q 4	1st	♣K	18.6%	0.19
	2nd	♥ Q	17.7%	0.19
(North opens $1 \checkmark$, South responds $1 \spadesuit$ and ends in	-			
7. $\blacktriangle 1073 \lor J2 \lor Q10952 \clubsuit 762$	1st	♣ 6	12.1%	0.13
	2nd	A 3	11.5%	0.12
8. • 98 • K 1082 • Q J 52 • Q 102	1st	^ 9	18.2%	0.19
	2nd	♦ Q	14.4%	0.15
9. ♦ 987 ♥ K 932 ♦ 8542 ♣ Q 7	1st	^ 9	17.0%	0.18
	2nd	♦ 5	15.8%	0.16
10. ♦ 10 8 7 4 ♥ Q ♦ J 6 4 3 ♣ J 10 7 5	1st	♥ Q	38.1%	0.42
	2nd	♣ J	33.9%	0.38
11. ♦ 2 ♥ 9 8 7 6 3 ♦ 10 8 4 3 2 ♣ 9 7	1st	y 9	15.4%	0.16
	2nd	. 9	9.7%	0.11
12. ♠ 9 ♥ J 10 8 ♦ J 9 7 6 5 4 2 ♣ 7 2	1st	♦ 6	17.7%	0.19
	2nd	. 7	16.3%	0.17

Chapter 17

Methodology

In this final chapter of the book, we will discuss the methodology that we used for the simulations, both in this book and in *Winning Notrump Leads*. 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 right 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 from experience enough information to judge the best opening leads in various situations.

Instead of learning from experience, players are forced to rely on expert opinion that has been passed down through the decades. General guidelines and tables of recommended leads are a reasonable start, but there are many situations where these basic measures will not tell you the most productive opening lead. It is therefore desirable 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 given auction and a given West hand, then evaluate the possible opening leads. As there is no mathematical formula to guide us in opening lead selection, we have to rely on actual play of the hands and make a note of the results. To cover the scenarios in this book, millions of hands need to be played to get any degree of confidence in the results. Indeed that is precisely what we've 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 approaches and we have at various points 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 (2) but use single-dummy software that tries more faithfully to emulate a human's play.
- 3. Look at real-life deals that have been played over the decades and analyze which opening leads worked well.

While none of these is perfect, we found that the first method was easily the best. Single-dummy software was far too slow to analyze enough hands. It was also not a good enough representation of a real player, even though hand-playing software has improved considerably over the years. Nevertheless, we did use single-dummy software (in our case WBridge5, which won the World Bridge Computer Championships in 2005, 2007 and 2008) 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 hands played at both club and tournament level, including world bridge championships from 1955 to 2009. This was still not sufficient to get a realistic assessment of a particular lead situation, such as an auction of 1 - 2 - 4 - 4. Each deal was only played 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 given away 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 average player.

Our double-dummy methodology

How were the numbers shown in this book obtained and how reliable are they? We will discuss the reliability later but first let's look at how we generated the data.

Suppose we set a bidding sequence of 1 - 2 - 4, and want to calculate the best opening lead from: $487 \times KQ76 + J7 + QJ872$. We fix that West hand and randomly generate a large number of complete deals (often several million), until we find 5000 deals where all four hands conform to the bidding sequence.

In the present example, South would have to hold at least five spades and a hand strong enough to advance to game after a single raise from partner. North would hold the requirements for a single raise and East would not hold any hand worthy of intervention over the 2 raise. Perhaps you are worried that our ideas of a hand worth a raise to 2 do not match those of your opponents? It is not a cause for concern. We have seen from experience that small variations of definition (for example, using a range of 6-10 HCP for a single raise instead of 5-9 HCP) cause only a very small change to the numbers in the Beats Contract and Average Tricks tables. More importantly, they very rarely change the relative ranking order of the different possible leads.

Once we have 5000 52-card deals conforming to the chosen bidding, the software plays each deal automatically, at double-dummy. It does this 13 times, once for each of the possible opening leads. By accumulating the results we can determine which opening lead will give the best chance of beating the contract (the aim at IMPs) and which will give the defenders the most tricks on average (the aim at match-points). To check this process we have occasionally generated two different 5000-deal sets for the same situation. Although the numbers may go up or down slightly, again it is very rare for the relative order of the potential leads to change. We can therefore be confident in our recommended 'Best Leads'.

Our initial action, when looking at a particular bidding sequence for the first time, would be a fishing expedition. Typically, we might ask the software to create 100 random West hands, for each of which it would generate 1000 complete deals conforming to the chosen auction. By looking at each West hand, along with the recommended best lead, we would get a good early idea on which types of lead worked well. For example, are short-suit leads better than long-suit leads? Is it a good idea to lead aggressively, from honors, or to seek passive leads? We might also unearth a few interesting West hands where the recommended lead was somewhat surprising. Deals which appeared to be worthy of inclusion in the book would be rerun, 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 compare leads from different suit holdings.

Although we mainly use two metrics in the preceding chapters – Beats Contract frequency and Average Tricks – our software produces a number of

additional metrics. For example, we can simulate a pairs tournament of 13 East-West pairs. Each is represented by one of the 13 possible leads in a given West hand and we calculate the match-point scoring. For example, the **AK** might win the event with a match-point score of 72.3% against the rest of the field. Eventually, we felt that presenting the Average Tricks figures was as good a way as any to display the potency of each opening lead at pairs scoring.

Reliability of the data

We needed to satisfy ourselves on two fronts for this methodology.

- 1. Do we have a large enough sample to trust the results?
- 2. How representative is double-dummy analysis?

It would be inappropriate for us to discuss the science of statistical sampling in depth here, but we are happy that 5000 deals per West hand gives a satisfactory accuracy. With that sample size, it is very unlikely that any given 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 hand when both declarer and defenders can see all four hands relate meaningfully to play in the real world? 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 against data that was better known to us.

We did an analysis of hands from Nikos Sarantakos' *Vugraph Project*, which captures hands from world championships and other top class tournaments. We also analyzed data from club nights over 2 years at a local bridge club to see if there was a significance difference from top-class events. All in all, we ran the double-dummy analysis on over 100,000 plays of the hands and compared the actual result to that predicted by double-dummy analysis.

The results surprised us. Looking at top-class results, the actual number of tricks made corresponded to the double-dummy prediction around 55% of the time! Around 19% of the time an extra trick was made and 16% one fewer trick than at double-dummy. This variation is not because the double-dummy is off target; the actual results themselves varied with each other. Indeed, if you look at the results from any board at the table, you will see a similar spread of tricks made. At club level, we saw a somewhat bigger spread, with about 45% corresponding to the double-dummy result and similar figures for the adjacent 'tricks made' scores, reflecting a broader range of abilities at the typical bridge club.

These results encouraged us to persist with the double-dummy approach. Suppose, in an imaginary world, that we lined up competent bridge players to play each West hand 65,000 times (13 different leads, for each of the 5,000 deals for that West). Would we have a better basis for evaluating the best leads? It's not clear that we would.

It should also be noted that, even if a particular deal has an effect due to double-dummy (for example, double-dummy play drops a singleton king instead of finessing) this occurs only a small fraction of the 5,000 deals. More importantly, such a deviation from normal play is unlikely to affect whichever opening lead is chosen. Our intention is to assess the relative merits of the various leads, rather than get accurate statistics for them.

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 that 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 for our purpose.

The Vugraph Project and Bridge Base Online have captured a vast number of hand records from international tournaments and we were able to use 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 it to play hundreds of hands at a time, with the help of its creators. This allowed us to compare and contrast results with the double-dummy executions. See http://www.wbridge5.com.

We evaluated existing commercial software for applicability to our project. Bridge Analyser (myweb.tiscali.co.uk/lorne.anderson/Bridge/) has a nice user interface and Dealmaster Pro (http://www.dealmaster.com/) a comprehensive set of dealing functions. Although in the end we found it more suitable for our purpose to write custom software, both these products are worthy of attention.

COMPUTER ANALYSIS OF OPENING LEADS

Winning Notrump Leads was a ground-breaking and very well-received book that used the power of computers to determine which opening leads work best against a variety of auctions at notrump. Using enhanced software, the authors now turn their attention to suit contracts. They generate millions of random deals, retaining those that match the chosen auction, for example 14-24-44. By playing these deals automatically against each of the 13 possible opening leads from a given hand, they are able to discover which lead is most likely to beat the contract (also the best lead at matchpoint pairs). The authors provide insightful commentary to each result, answering timeless questions such as:

- When should I lead a trump?
- When is a doubleton a good opening lead?
- Should I lead differently against a partscore?
- Should I make an aggressive or a passive lead?
- Should I lead an ace against a small slam?
- Which leads work best against a grand slam?

By using the number-crunching computer power available nowadays, there is no longer any need to rely on general opening-lead guidelines passed down by our ancestors. We think you will be surprised by many of the discoveries made during this investigation!



David is now one of the world's top bridge writers with 116 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.

