**Answers to Chances: Competition 8**
*by Richard Cowan*

In the recent Interstate Teams in Hobart, NSW bid (with silent opposition) to a non-vulnerable 6D by the opener, South. The contract made. At the other table, Victoria reached 7D by South and this failed when East turned up with all 4 trumps.

There are, of course, other distributions which defeat 7D. So was Victoria unlucky or was the less ambitious 6D the appropriate contract? Assuming that West would lead (in order of priority)

(i) the ♥K from a KQ sequence,
(ii) the ♥Q from QJ10,
(iii) a trump from 1-3 trumps, or
(iv) an uninformative club,
and that neither defender has a 7-card heart suit which might have tempted him into the auction, find the best line to make 7D and the chance that 7D succeeds with this line. Which was the better bid: NSW’s 6D or Victoria’s 7D?

**Solution:**

**This style of question**

This question is different in style from earlier CHANCES problems. Here we ask, as often one does during bridge post-mortems, whether the correct contract was bid. Such questions are asked without reference to the lead -- as this is not known until the bidding is complete. We ask “was 7D the correct contract?” for these North/South hands -- we do not add “given the particular lead of the ♥K (say)”.

In earlier CHANCES problems, we asked how best to play a contract, given a particular lead. In such problems, the analyst draws inferences from the lead and tries the various sensible lines of play before coming up with the best.

The correct way to approach “was this the correct contract” questions, is to specify the range of possible leads (using common-sense bridge nouse, much in the manner that I did in this question). The analyst must then break the problem into sub-cases depending on the lead.

If the best strategy of play is essentially independent of the lead, such breakdowns are not needed. This seems the case here but, for most problems, one can’t be sure without considering each case.

**The chances of each lead**

As is my usual way when the opponents are silent, I eliminate extreme distributions: 8-card suits and 6-6 hands. I also eliminate 7-card heart holdings here, as specified in the problem; any 7-card heart suit would be a contender for a bid (and every 7-card club suit would not).

Using these constraints, and the suppositions on leads contained in my question, I have calculated that the lead will be:

- The ♥K with chance 23.22%;
- The ♥Q with chance 6.14%;
- A trump with chance 64.11%;
- A club with chance 6.53%.

**The best line of play for 7D is obvious**

We win the opening trick (with the ♠A if a club lead) and play the ♥A.

- If West shows out, concede.
- If East shows out, cross to hand with the ♠A and play the ♥10. It is better for West to cover. Win in dummy and return to the ♥9. Play to the ♥K and ruff a spade. Hope that spades either break 3-3 or the Q falls single or double from East.
- If both follow to the ♥A, indicative that West must have not led a club, play the ♥K.
  * Claim if trumps are 2-2.
  * If the ♥J has gone, play ♥A (drawing the last trump and claiming if the ♥Q falls). If the ♥Q is still out, play low to the ♥K (making a similar claim if the ♥Q falls). If the hand with 3 trumps has 2+ spades, the ♥K holds. If the ♥Q is still out, then ruff a spade; claim if the suit is 3-3. If not, play the ♥A (if still held), cross to dummy using the intact ♥A and ruff another spade. Enter dummy by ruffing a heart; if not over-ruffed-- a fate possible only if East has the long trump and can shorten his hearts when spades are played (ie. if he started with 2-2-3-6 or 2-3-3-5) -- draw the last trump and claim.
  * If the ♥J is still out, play as above (when the ♥J has gone). Success occurs only when the hand with the ♥J has 3+ spades or ♥Q single or double.

Since this strategy is the same for each lead, it can be evaluated numerically without consideration of the various leads suggested. It’s
chance of success is 79.05%. (Alternative lines which finesse spades or rely only on a favorable spade drop, are at least 7% worse.)

For illustrative purposes only, I have checked each “lead sub-case” and arrive at chances for each given lead, as per the following table.

<table>
<thead>
<tr>
<th>Lead</th>
<th>chance of this lead</th>
<th>chance of success with lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>♥K</td>
<td>23.22%</td>
<td>78.46%</td>
</tr>
<tr>
<td>♥Q</td>
<td>6.14%</td>
<td>78.38%</td>
</tr>
<tr>
<td>trump</td>
<td>64.11%</td>
<td>85.02%</td>
</tr>
<tr>
<td>club</td>
<td>6.53%</td>
<td>23.20%</td>
</tr>
</tbody>
</table>

Aggregated, we obtain the figure 79.05% as above.

**Which contract is best?**

In the non-vulnerable situation, one should bid an uncertain 7D instead of a certain 6D if the chance of the grand coming home exceeds 66% (calculated exactly as 970/1470). This threshold reduces if the 6D contract is not absolutely certain. Here, 6D is close to a certainty, but not quite.

Clearly, the Victorian team’s 7D was the right bid. The chance of success exceeds even the most conservative threshold.