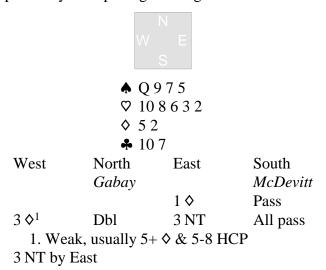
http://3nt.xyz -- Opening Lead against 3 NT -- Problem

Board 2
East Deals
N-S Vul



This hand was defended by multiple NABC champions Pat McDevitt and Sheila Gabay, in a matchpoint pairs game in Westwood, while I was kibitzing Pat. Suppose he had been called away, and you were asked to make the opening lead for him. Given partner's double, only these standard leads make sense:

- ♠ 5 -- more likely to strike four cards in partner's hand, which could well produce three defensive tricks. If partner has just one entry, this lead would hold declarer to nine tricks. This could well be the best available result at matchpoints.
- \heartsuit 3 -- may produce as many as four defensive heart tricks, if partner has four hearts. However, if partner has only three, then declarer will likely make overtricks on the deal. This lead appears best at IMP scoring.

Make your choice. Should your choice be different, had partner not doubled? *Turn the page for conclusions*.

Method of analysis, for those who care:

The point is to make the lead that gives the defense the best chance for a good score. I ran a simulation with the given South hand, and these specs for 1000 deals:

East: 18-19 HCP, balanced hand, at least as many diamonds as clubs, all suits stopped. For expedience, I omitted hands based on 6+ diamonds; the above was hard enough to specify.

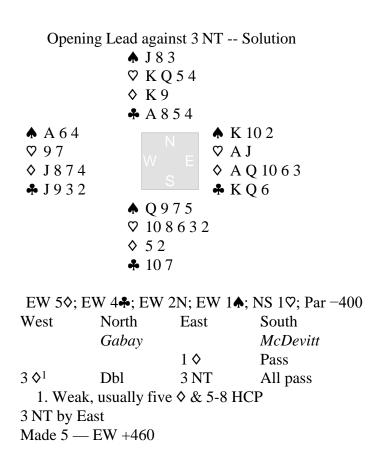
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West: 5-8 HCP; ♠:1-3, ♡:1-3, ◊:5, ♣:2-4
5-8 HCP; ♠:1-3, ♡:1-3, ◊:4, ♣:4-5
4-6 HCP; ♠:1-3, ♡:1-3, ◊:6, ♣:1-3

North: 11+ HCP; ♠ 4, ∇:4, ◊:0-1, ♣:4-5
13+ HCP; ♠ 3-4, ∇:3-4, ◊:0-2, ♣:3-5
12+ HCP; ♠:5 [not good], ∇:4, ◊:0-2, ♣:2-4
12+ HCP; ♠:4, ∇:5 [not good], ◊:0-2, ♣:2-4
```

If North held a long, strong suit, she would have bit it. Since most of the time, East-West will have at least 23 HCP between them, and you are looking at two, North cannot have a strong hand with a long suit.

Afterward, I re-ran the simulation with no specs for North, for 200 deals (as if there were no double).





Gabay and McDevitt were on their way to winning two thirds of the available matchpoints. Without this deal, East-West would have been dead average; indeed, they scored 29% and 0% on boards 1 and 3 in this round. I like West's aggressive $3 \diamondsuit$ bid very much, in this context, especially since a 1 NT response is unpalatable. When outclassed by the opponents, a random result is more likely to be useful than a normal one. However, East could have redoubled $3 \diamondsuit$, possibly setting $3 \heartsuit X$ two tricks for 500 points and a top score.

McDevitt chose a matchpoint lead of the ♠ 5, and declarer had no trouble raking in 11 tricks for 5 of 7 matchpoints. A heart lead would set the contract; declarer would get only 1 matchpoint in a 3-way tie.

This is a normal contract, despite North's aggressive double. When not playing inverted minor raises, the equivalent auction would be: $1 \diamondsuit - P - 2 \diamondsuit - Dbl$; 3 NT - All pass. West declares on this auction: $1 \diamondsuit - P - 1 NT - P/Dbl$; 3 NT - All pass. North must select a heart honor to set the contract. Would you?

The simulation shows that the \clubsuit 5 produces an average of 3.50 defensive tricks per deal, more tricks than the \heartsuit 3 on 23.0% of the deals, and sets the contract 15.0% of the time.

The \heartsuit 3 produces an average of 3.78 defensive tricks per deal, more tricks than the \spadesuit 5 on 36.8% of the deals, and sets the contract 27.3% of the time.

While the \clubsuit 5 lead had its attractions at matchpoints, this was definitely an inferior lead to the \heartsuit 3 at any scoring. The \heartsuit 3 produces an average of 0.28 more tricks per deal, does better on way more deals, and sets the contract close to twice as often. [However, also see "Which Major" from 10-18-2017.]

Without the double, the conclusions are the same. The \heartsuit 3 is still the better lead, and by about the same ratios of more tricks and setting the contract. However, the chance of setting the contract is halved.

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