Table Talk

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Editor's Musings

July 18 - 4 months into the Covid shut-down. Vermont feels a lot more normal to me, especially as my firm is fully back at work. Masks. No outside visitors. Temperature taking. Separate space for rare face-to-face contact with outsiders. Fewer court appearances. Otherwise, no common events. No travel. No bricks & mortar bridge. Online is OK, but it's no substitute for the real thing.

July 29 - Phil Sharpsteen did a little tidying at home and came across his stash of old *Table Talks*. He asked whether I was interested. Silly question. Regular readers know that I have a collection of back issues. I was *intensely* interested. When Phil's FedEx box arrived, it contained several dozen issues. Some I already had in my collection, but quite a few I did not. And even with the ones that I had, some of Phil's were in better shape, allowing me to substitute better specimens here and there. My collection of past issues now stands at 99. I am missing between 16 and 17 issues, concentrated in 2 periods: 1989-1992 and 2002-2004. All

12 issues since Ingi and I took over, and about two dozen other issues, can be found on <u>bridge quarterly.org</u>, and we will scan and upload the others as time and resources permit. The collective writings of *Table Talk*, dating back to January 24, 1986, are a fascinating history of competitive bridge in Vermont over the past 35 years. If you find any old *Table Talk* issues, please let me know the date(s)!

September 4 - Soon 6 months into the shut-down. The ACBL has just cancelled tournaments through February 2021. The Vermont Virtual game on BBO is the "new normal," and draws about 40 tables per week over 4 sessions. In addition, the ACBL runs 4-day online "Regionals" every other month, which attract large fields. Anecdotally, the online Regionals cost comparatively little to put on, and provide a much-needed cash infusion for an otherwise financially strained national office.

October 1 - Rumor has it that when bricks & mortar bridge eventually does return, the number of Regionals will be dramatically reduced. District 25, it is said, will have only 2 Regionals per year, instead of the present six! No word about Sectionals, but I think that Unit 175 (Vermont) should be planning to promote an increasing number of Unit games in a variety of parts of the State. There's a lot to be said for a 2-session event, punctuated by a meal, in a pleasant setting, in a part of the State that you don't see every day. A nice day trip without the cost of an overnight. Or you can stay a night. Readers: please share your thoughts.

Rules of Bridge: Goldwater Rule (Ingi Agnarsson)

We are probably all familiar with this one. Who hasn't been in the position of being about to lay down dummy when your left hand opponent suddenly volunteers a lead? Or finding yourself having just thrown a lead on the table and noting that the other three people present are just sitting there staring at you... Yes, you just made a lead out of turn. The legendary ACBL tournament director Harry A. Goldwater (1901-1995) rose to fame by his deep knowledge and memory of the laws governing the game of bridge, and to popularity by his amiable mannerism and wit. The "Goldwater rule" basically states that an opening lead out of turn should be accepted, on the logic that the player who does not know whose lead it is probably does not know what to lead either. It's an interesting hypothesis. I don't know if it has really been scientifically tested and supported. As in, have leads 'out of turn' systematically been compared to leads from the right hand (preferably against the same contract in the same tournament) and statistically tested and shown to be inferior? I doubt it. Very much. But then, for most people that do not do this systematic testing of data for a living, anecdotal evidence supporting an idea is just fine (sadly, this holds true in our society where anecdotal 'observations' are treated as equal to scientific evidence when it comes to important matters like Covid, Climate Change, and closest to my own heart, Evolution). I digress. It makes intuitive sense, but I think there are other things to consider. A player may lead out of turn because they are simply not paying attention, and that would tend to imply a lead that has not been thought through. On the other hand, a player may be eager to make an obvious lead from their hand because it is likely to cause trouble, and thus lead out of turn out of eagerness to beat the contract. In this case, accepting the lead you may find yourself to be the only pair going down in an otherwise safe contract... The scientist in me would be curious to see actual data.

But, this entry is not about science, or my own abstract way of observing the universe. The above is simply a preamble and an excuse to reprint Mr. Goldwater's own account on the origin of this rule. It's an entertaining read, and perhaps, just perhaps, suggests that Mr. Goldwater's wit could sting a little; at least when he was not making a ruling at the table: verbatim from ACBLstory.wordpress.com, https://acblstory.wordpress.com/2012/07/23/acbl-bridge-beat-83-goldwaters-rule/ [with some comments...]

"I have been a National Tournament Director for many, many years. I have seen a lot of famous players come and go. I have been involved in some of the most incredible incidents at the bridge table. Yet I will probably be remembered, not for my many years of service to the ACBL or my talents as a director, but for a theory I tested [sic: it's a hypothesis, not a theory—there's a difference—and n=1 is not a serious test... [[shut up Ingi]]] at a tournament in Philadelphia years ago which has been embraced and popularized by thousands across the country whom I have never met. It is called Goldwater's Rule.

"Al Sobel was running a regional where it all began. During one of the afternoon sessions, he called me to a table where he was making a ruling and asked me to play a hand. I was a little surprised by his request, since it is quite rare that a director finds himself declaring while he is working.

"As it happened, one of the players had inadvertently picked up the wrong hand before the bidding began and consequently was a little more familiar with LHO's cards than he should have been. Al was promptly summoned, made sure everyone had the correct hand, and ruled that the auction should proceed normally. Satisfied that it had, Sobel still faced a problem. The man who had seen his opponent's cards was declarer. To achieve par, Al needed a third party to play the hand which I consented to do.

"The bidding had gone 1 \(\blacktriangle - 3 \(\blacktriangle - 4 \) and I received the \(\blacktriangle 10 \) lead out of turn. Staring at Kxx of clubs, my options were to accept the lead out of turn, force Lefty to lead a club, or make the \(\blacktriangle 10 \) a penalty card and forbid a club lead. Although you might think me foolish, I decided to accept the lead, leaving my king of clubs vulnerable to attack. Sure enough, dummy hit with AJxx, RHO had led from Q109, and I had found the only way to play the club suit for no losers.

"My pet theory was proven [no, your hypothesis was not 'proven', but I will let this point go...] in actual play: a lead made out of turn should always be accepted because anyone stupid enough to not know whose lead it is isn't smart enough to make a good one." [Emphasis added]

Again, an interesting rule. However, as we would say in science, n=1. A single observation does not a rule make, nor can such hypotheses be tested absent lots of evidence. In any case, when I next make a lead out of turn in the future we all hope for—a game at the BBC's headquarters in Williston—and you have to decide what to do, I will stare into your eyes and dare you to call me stupid:)

Splinters vs. Jacoby 2NT; Italian Cuebids; and Slam Leads (Mark Oettinger)

"There's a universe in every hand." Well, maybe not *every* hand...but many. We come across them in competitive play. They pose a particular dilemma. Often, we have "guessed" wrong at the crucial juncture. Sometimes it's worse than that: We've simply made a mistake. A slip of the mind can be the result of fatigue, or a lack of rigor in calculating the probabilities from among multiple possible lines of play. Sometimes, it's an error of bidding or defense. Further analysis of the

hand yields previously unseen subtleties. The following is such a hand. Explore the universe with me.

Sitting South, playing matchpoints, in 3rd seat, you pick up this fine-looking assortment:

J1096 AKQ76 KJ76

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14 HCP, lovely concentration, great intermediates (no card lower than a 6!), only 5 losers (a rare "+2" hand), and hugely promising 4=5=4=0 shape.

A quick digression about **3-suited hands** (4-4-4-1 or 5-4-4-0): With this shape, the chance of finding a fit is greatly increased. In the highly likely event that we *do* have a fit, South's Club void will carry its full 3+ "total point" distributional weight. I say 3+ because I have at least 4-card support for any suit which partner has except for Clubs. As far as 3-suited hands go, for this reason, it is my opinion that a 5-4-4-0 hand is even more promising than a 4-4-4-1 hand. Regular readers of *Table Talk*, and my opponents at the table, know that I favor opening 2 ◆ as Mini-Roman, for the purpose of announcing 11-15 HCP and 3-suited distribution immediately. Knowing my distribution is often also extremely helpful to partner on defense. Yes, it can sometimes help the opponents as well...if they are up to doing the work...but in my opinion, the value to us of having efficacious bidding agreements far outweighs the extent to which they may inform capable and determined opponents.

[Ingi's editorial comment: in addition to this, bidding 3-suited hands absent mini-roman, can be very tricky. In fact, you frequently have to 'lie' in your second bid. For example holding 1444 you open a club, partner responds with a spade, and now what? 1NT on a singleton? A different lie? Mini-roman is a great convention. I also like to pre-empt a diamond suit, but with $6 \blacklozenge$ and a pre-emptive hand, if $2 \blacklozenge$ is unavailable for pre-empt, I'll just bid 3!]

Back to the featured hand...

J1096 AKQ76 KJ76

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As you contemplate both your opening and second bids, partner opens 1 in 1st seat in *front* of you. Yikes! Given the proven 9-card+ fit, your void is working, and you therefore have 17+ confirmed "total points." In addition, your mere 5 losers imply that you and your partner are odds-on for 12 tricks *even if he has a minimum opener*.

Loser Count In A Nutshell

Add your losers to partner's expected losers. Subtract the total from 24. That's how many tricks you can expect to take. 24 - (5+7) = 12 tricks. The opponents will pass throughout. On first blush, it seems like you have three potential bids...2 \checkmark (natural), $4 \clubsuit$ (Splinter), or 2NT (Jacoby). What are the pluses and minuses of each?

- **2 . Natural**. You have a game-going hand and a lovely 5-card Heart suit headed by the top three honors. Playing "two over one" (and if you don't, you should), 2 **v** is a perfectly good description of *those aspects* of your hand. What the 2 **v** bid fails to reflect is that you have a 9-card Spade fit, and that there is therefore no need to explore other suits for trump. It is more strategic and descriptive to force to game, *and at the same time*, to set Spades as the trump suit. Either 2NT or 4 ***** will accomplish these goals. Which approach is better, and why?
- **4.** Splinter. Also shows 4-card trump support, and is (of course) forcing to game, and has the additional advantage of showing another important aspect of your hand...Club shortness (i.e., a singleton or void). Splinters are generally said to have an upper limit of 16 "total points." And since they are game forcing, their range is 13-16 total points. Distinguish Jacoby 2NT, described below, which has no upper limit.
- **2N**. **Jacoby 2NT** also shows 4-card trump support, and is also forcing to game, and generally shows a balanced hand. By balanced, I mean no singleton or void. Aside from being a 4-card game force, Jacoby 2NT does not have a top end, point-wise. Splinters have a top end of 16, but Jacoby 2NT does not. You will therefore sometimes find yourself using Jacoby 2NT in spite of the fact that you have Splinter shape...when you have more than 16 total points. That's why I said that Jacoby 2NT *generally* shows a balanced hand.

So, based upon South's Club void, 4* would seem like the obvious bid. That said, careful readers will note that South has 17 total points, and so, is 1 point too strong for a textbook Splinter. Are you persuaded to use Jacoby 2NT? Let's assume that you choose to go with the Splinter (rule-breaker that you are). The auction therefore starts as follows:

Here's the whole hand:

North Deals NS Vul

> AKQ753 82 42 AK9

82 4 1043 J95 Q83 A1095 J7532 Q10864

> J1096 AKQ76 KJ76

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What should North rebid? His Club honors are unlikely to carry their full weight opposite my known shortness. Also, as South is advertising "no more than 16 total points," we seem point-shy of the slam. On that basis, some slam-going North hands will be deterred from exploring a promising slam, and will instead simply retreat to $4 \spadesuit$, and in that event, South will be hard-pressed to go on. If we miss a slam because of South's "underbid," it's presumptively his fault for "breaking system."

But...as luck would have it, North has an undisclosed 5-loser hand, and over South's presumptive 7 losers (minimum opening hand), North sees that we are odds-on for 12 tricks. He therefore bids 4N, planning to bid 6 after ensuring that we are not missing 2 Aces. This has been the rather inelegant, and minimally informative, 1430 auction:

W	N	E	S
	1 🛦	P	4 .
P	4NT	P	5 .
P	6 ♠	P	P
P			

If South chooses to use Jacoby 2NT instead of the Splinter, the auction starts like this:

W	N	E	S
	1 🖍	P	2NT
P	?		

Textbook Jacoby 2NT calls for opener to show shortness (a singleton or void), failing which, to bid $4 \spadesuit$ with a minimum (fast arrival = weak) or $3 \spadesuit$ (slow arrival) showing extras. Practiced partnerships assign 3NT a role in this context as well. In North's position above, lacking shortness, he would bid $4 \spadesuit$ with 12-14 total points, 3NT with 15-17 total points, and $3 \spadesuit$ with 18-20 total points (as usual, the faster the arrival, the weaker the hand...and vice versa). North has 18 total points, and therefore bids $3 \spadesuit$.

W	N	E	S
	1 🌲	P	2NT
P	3 ^	P	?

What should South bid now? He knows that our side has 35+ total points. It is clear that we belong *at least* in small slam. Blackwood is clearly in our future, but situations such as this are made for cuebidding. Why not exchange a little more information? It just might equip you better to make the gram slam decision that may well be looming.

There's an argument that a highly informative auction can sometimes help the defense more than it helps declarer, but in my view, improving one's slam bidding accuracy is a big matchpoint gain proposition. Plus, it's *really* satisfying.

Playing **Italian Cuebids**, you cuebid up the line and show *either* first *or* second-round control. Some call this approach "control bids." The

cuebidder can have an Ace, a King, a singleton, or a void. On first impression, it sounds confusing, but it can be remarkably informative. Let's see how it plays out here. South cuebids 4♣ with his void. Since North has the Ace and King of Clubs, he knows that South has a singleton or void. North does not have the holding to cuebid either 4♠ or 4♥, i.e., he doesn't have 1st or 2nd round control of either of those suits. As such, he bids 4♠. South certainly has the Heart suit covered, but he now knows that North-South are missing the Ace of Diamonds, and could therefore be off the first two Diamond tricks if North declares in 6♠. The Jacoby 2NT auction has been as follows:

W	N	E	S
	1 🌲	P	2NT
P	3 ^	P	4♣
P	4	P	?

We know that we have 35+ total points, and that the opponents have the Ace of Diamonds, so it seems almost unthinkable that we could be off two aces, but keep in mind that we found a fit right away, so we have both been adding distributional points since the start of the 3rd round of bidding. So, it can't hurt to check for key cards. Still playing 1430, North bids 5♦ to show 3 key cards which, by process of elimination, have to be the Ace of Spades, the King of Spades, and the Ace of Clubs. The conservative South bids 6♠ and hopes that partner can get the Diamonds right. The aggressive player bids 6NT to protect the King of Diamonds on the opening lead, hoping that there's a path to 12 tricks. If you were aggressive, this was your auction:

W	N	Е	S
	1 🌲	P	2NT
P	3 ^	P	4 ♣
P	4 🖍	P	4NT
P	5 ♦	P	6NT
P	P	P	

What, if anything, does all of this teach us about **Splinters vs. Jacoby 2NT**? One hand is certainly not a statistical sample, but perhaps there are some useful takeaways. We will get to the play of the hand shortly, but (spoiler alert), as it turns out, Jacoby 2NT gets us to the better contract (6NT vs. 6♠). It also right-sides the contract in the sense that it protects the vulnerable King of Diamonds on the opening lead. It also affords us a much more informative auction, in large part because it takes up less space than the Splinter does. Having the opportunity to cuebid *really* helps. And even more importantly, violating the "13-16 total point cap" for Splinters is off-system. Why "mastermind?" Going off-system is very bad for partnership morale. Stay on system, and use the hand, *after the round*, to discuss whether you should revisit your relevant bidding agreements. "Circle that one."

Here's the hand again:

AKQ753 82 42 AK9

82 4 1043 J95 Q83 A1095 J7532 Q10864

> J1096 AKQ76 KJ76

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Opening Lead Against 6♠?

Let's say you're East, on lead after the Splinter auction above, Looking at just your own hand and the auction, what's your lead? It is often said that one should lead aggressively against "suit small slams." Interestingly, authors David Bird and Taf Anthias of *Winning Suit Contract Leads* report that their data contradict this traditional advice and recommend the most passive non-trump lead available. Exception: when opening leader has a side suit Ace, he should usually cash it at matchpoints. Bird and Anthias' book has a lot of worthwhile advice, and I commend it to you.

Generalities aside, on this hand, you know that South is short in Clubs, so leading your singleton trump, hoping to cut down ruffs, has a certain amount of appeal. Of course, South has 4+ trumps, and you can only lead them once, so on balance, a trump lead strikes me as likely futile. On the further down side, a trump lead might pick up Qxx in partner's hand for declarer.

By the sounds of the auction, your 7 HCPs don't leave much for partner, so it's a long-shot to think you might find partner with the King Clubs (to assist in establishing a second-round Club trick). This same logic argues against a Heart lead, since partner can't have much in that suit either. One danger is that you will play the suit for declarer (thereby preventing him from making a wrong guess). Another danger is that you find partner with Qxx Hearts, turning one potential trick for your side into none. Keeping in mind that when you have Jxx opposite Qxx, it is all but impossible to develop a trick if you lead the suit yourself the first time it is led. On the other hand, if the opponents lead the suit, you are guaranteed a trick (unless the 3rd round is ruffed).

What about the Diamond suit? Should you simply bang down the Ace? We are cautioned about leading unsupported Aces. "They are meant to take Kings," we are reminded. The nice thing about leading an unsupported Ace is that if it's not ruffed, it gives you a chance look at the board, and to have the benefit of partner's (attitude) signal when he follows to the first trick. If you agree that a Diamond lead is indicated, might this be the time to underlead an Ace against a suit contract?! As it turns out, if you lead anything but a Diamond, declarer makes 7, since the Hearts split. If you lead the Ace of Diamonds, you hold declarer to 6. If you underlead the Ace of Diamonds, you likely defeat the contract,

since no declarer will expect the underlead, and will insert the Jack when playing second hand from the dummy at Trick 1.

Ingi's editorial comment: My question is, will PARTNER believe you if you underlead the ace? I sometimes underlead aces, in team games, when the contract seems desperately strong and I want to put declarer on a guess immediately. I did this once 'very successfully', in a major competition (Reykjavik Bridge festival) against a strong team. In a team match you don't worry about the overtrick. It was clear to me that the opponents had ample strength for the slam and the only hope was the Q in partners hand matching my Ace. I underled it, dummy came up with KJx, ducked, and partner with the Q ducked as well!! Inspiration gave us a brief shot at 15 imps, instead we lost one for the overtrick!

Opening Lead Against 6NT?

Now let's say you're West, on lead after the Jacoby 2NT auction above, Looking at just your own hand and the auction, what's your lead? Bird and Anthias' companion book, *Winning Notrump Leads*, strongly recommends passive leads against 6NT, again with the exception that you should cash an Ace at matchpoints if you have one. Do not lead from Qxx or Kxx. If you have a choice of worthless suits, lead the longer. On this hand, anything but a Diamond gives up 13 tricks. A Diamond gives up only 12. The use of Jacoby 2NT somewhat accidentally sets the stage for right-siding 6NT. But it also gives you the information necessary to bid it. Give your opponents the opportunity to make their own mistakes. They often do. And if they get it right, congratulate them with sincerity.

Some Blackwood Esoterica

- 1. Do not initiate Blackwood with a void, because most of the time, partner's response(s) will not give you the information that you need. "Temporizing," i.e. biding time, for example with a cuebid, (preferably Italian) will sometimes prompt partner to initiate Blackwood instead of you. Problem solved [unless partner has a void as well].
- 2. Exclusion Blackwood (also known as Voidwood) is the exception to Guideline 1, above, but is beyond the scope of this article. Articles on Exclusion Blackwood (sometimes referred to as Voidwood) can be found in the January and July issues of *Talk Table*.
- 3. If *partner* initiates Blackwood, and *you* have a void, know the responses. They are:
 - a. 5NT = even # of Key Cards and a "useful" void;
 - b. $6\clubsuit$, or $6\spadesuit$, or $6\clubsuit$ (if not trump) = odd # of Key Cards and void in the bid suit; and
 - c. 6 of our trump suit = odd # of Key Cards and void in a suit above our trump suit.

Ingi's editorial comment: 1) Partnerships should discuss the strength range of a splinter clearly. 10-14 or 11-15 hcp is common (translating to about 12-17 *total points*). You should discuss this with partner. I think it is wise to define that even more precisely to include 3-5 controls. You want to do this with a *sharp hand*, not super strong, but absent many quick losers. Partnerships should similarly discuss the meaning of 2NT. I think it *tends* to be balanced, like Mark says, but does not need to be. 2) I don't think the 6NT bid is aggressive, it seems practical, and based

on inspired but sound reasoning. I'd say the practical bidder bids 6NT, the Las Vegas style casino junkie bids 6 knowing that a diamond lead is coming! 3) One thing I would note is that I would not necessarily dismiss the 2 bid so quickly. Like 2NT it has the benefit of being unlimited and if you subsequently support partners suit, it usually signals to them that you have trick taking power in your first bid suit (otherwise, you wouldn't bid it with a fit found already). In the above hand N would likely respond with $2 \blacktriangle$ ($3 \blacktriangle$ is possible but seems unnecessary at this point). South can now splinter giving N clear information (5+ good ♥, singleton or void in clubs, 4. support, strong slam interest). Or south could opt to simply bit $3 \spadesuit$, again providing good info (strong trick taking ♥, slam interest in ♠) and looking for cue bids. In the example hand, 2NT is most likely to lead to 6NT--or South bidding 2 v followed by a raise of $2 \blacktriangle$ to $3 \blacktriangle$. But as Mark points out, this is not a statistical sample. The main question, in general, how can you provide partner with the maximum amount of information. Bidding a trick taking side suit first is certainly among the attractive options. If splinters are well defined, and 2x followed by support of openers suit under game also, then this takes a lot of the burden off 2NT in terms of what types of hands it could imply. 4) One more option is available, if South wanted simply to take things into her own hands, she could bid 5. voidwood directly. However, the final contract in this case would be 6 \(\infty \) since Norths club stoppers are not revealed.

No signs of Artificial Intelligence in BBO robots: haphazard thoughts on why bridge engines 'blunder' and don't outcompete humans as easily as chess engines (Ingi Agnarsson)

This is an unusual piece, an article based on some research and a lot of speculation (absence of research) with little reference to actual bridge hands! I hope this entry is still worth reading, at least if you're a little curious about your BBO robot opponents and more generally how computers are starting to outplay humans at the most complicated games.

I am often flabbergasted. Are kids STILL wearing saggy jeans below their butts!? Did I just lead out of turn!? People still talk about whether or not to 'believe' in climate change!? Is this really the time!? Did Mr. Robby the robot really just throw away a winner!? Did Mr. Trump just say that!? I'm legitimately surprised by all of these and also by, give or take, about half of the other things I experience in life. In this entry I thought-experiment to try to figure out why 1) BBO robots don't play better bridge than they do, as in near perfect, and in that light, 2) why they tend to do pretty well in competition against humans at the BBC virtual club, and in virtual competition in general.

I've provided some examples in earlier issues of Table Talk regarding strange robot 'decisions' at the table. During Covid I expect all of you to have noticed that robots make a lot of obvious mistakes. But, they can also be very accurate, especially in situations where humanoids have a hard time keeping track of all the cards that have been played and the suit lengths and the points that must remain on each player's hand [in the words of Frank Hacker "computers don't get tired"]. So, yes, I've seen accurate and brutal defense by robot-robot partnerships and then observed the 'same' robot discarding in a peculiar manner when I run a long suit, giving away one or a few tricks most humans would not do. In sum, they got strong and weak points as do typical humans. But there seems to be no particular reason for this. Robots/computers certainly easily outperform humans in a broad array of complicated tasks,

including most mind games. And algorithmically, they should be near perfect, like chess engines. Furthermore, recent advances in engine design using Bayesian Inference (methodology used nowadays in topnotch math research, statistics, and across sciences, for example, in my analyses of DNA evidence) applied to *Artificial Intelligence* (AI) approaches, promise to make computers even better at games. Vastly superhuman. Why then don't computers totally crush humans at bridge?

Before returning to bridge and considering the above question, I wish to draw your attention to a thrilling chess duel that demonstrates not only engine superiority over humans, but serves as an outstanding example of how novel ideas and research on Artificial Intelligence (AI) are leaping technology forward—but for some reason, not bridge robots. In 2017, a famous challenge by the DeepMind programmers behind the mysterious 'Alpha Zero' chess engine was launched against the dominant chess engine over the last few years; 'Stockfish'. The conditions were mind-blowing and the results legendary.

For decades, chess engines have largely been developed using the same basic recipe, with computers being fed algorithms to evaluate chess positions based on calculations of variables such as values of each kind of piece, available 'space' on the board, tempo and initiative, position and coordination of pieces, and so on and on to exquisite detail. They are also provided with an 'opening book', detailed opening repertoires based on the best of human research. Through ever more advanced tweaks in said algorithms, and especially through increased brute computational power, chess engines became highly competitive in the late 1980s, and reached 'world class level' in the mid 1990s. When a world class engine 'Deep Blue' was given access to supercomputer processing power in 1996, it took mankind's finest effort to beat. Famously, world champion and, at the time dominant chess player, Garry Kasparov—in top form—

eked out a win in the duel. A year later Kasparov lost. The last duel between a world chess champion, in this case Vladimir Kramnik, and a computer engine (now simply run on a standard commercial computer) occurred in 2006. It was starting to become embarrassing for the humans involved. Since, computers have simply fought besting each other. Now, the world's best [most accurate] chess occurs exclusively at the Top Chess Engine Championship (TCEC) established in 2010. Engine vs engine vs engine. Stockfish programmers seemed to have found a winning combination of power and algorithm design. Stockfish was already a TCEC runner-up twice in 2013 after which it has either won, or come in second (third once), with an unbeaten streak spanning four seasons during 2018-2019. It leads in the current 19th season first division's (Division Premier) 2020 TCEC tournament, an assembly of the absolutely highest rated engines. Further, Stockfish has for a long time been used as the default engine to evaluate (or more accurately, reveal the shortcomings of) human chess games. [On a side note, this provides an interesting insight into the human psyche. Humans watch top-rated online human chess games with the Stockfish engine running in the background. This gives any observer access to superhuman moves and many people seem to relish in taking cheap shots in virtual space at vastly stronger chess players than themselves—shouting 'blunder!' whenever the supercomputer indicates the grandmaster in question didn't find the best move. Said humans, in turn, don't stand any chance in a matchup with those grandmasters]. However, in 2017 and immediately before the start of Stockfish's most impressive unbeaten TCEC streak, it was challenged by Alpha Zero for an unusual duel. Stockfish came to the match outfitted with well over a decade of intense programming effort, machine learning, access to an 'opening book' database of all common chess openings and move sequences, 'tablebases' used to calculate certain 'finite problems', etc. An

'experienced' top-of-the-world-class engine with its thoroughly designed and thought out gadgets fine tuned though countless encounters with other top engines. Alpha Zero showed up to the welcoming party without any knowledge of chess! It was an engine that had received training in some other games (Go, Shogi) and bested the world's elite engines after a few hours of teaching itself these games. Nine hours before the match, AlphaZero was provided with the rules of chess. No background, no database of top chess games, no tablebases, no opening book—just the rules of chess. It's Artificial Intelligence driven 'brain' (artificial neural networks) then simply played itself, millions of times. It became world class in under 4 hours, and at the end of the 9, its programmers estimated it could beat the amazing Stockfish. And it did. It wasn't even a close competition. No one and nothing was supposed to be able to simply outcompete Stockfish. Two other engines with long history of intense development could compete with it. Stockfish being crushed was unimaginable. AlphaZero, nine hours after simply being given access to the rules of chess, played 100 games against Stockfish in their first match and lost not a single game! 72 games were drawn, while Alpha Zero won 28! In another different match setup totaling 1200 games, Stockfish managed to win some games, but overall AlphaZero won decisively showing unimaginable dominance. The impossible just happened... Quickly thereafter, some of the Stockfish programmers built a new engine using AlphaZero's basic approach creating "LCZero". AlphaZero was a supercomputing experiment and the engine has never played, and probably will never play, in the TCEC. However, LC Zero, brand new to the scene based simply on the same fundamental idea, came in second to Stockfish on its first try (in a vast pool of chess engines backed up by teams of programmers developing over years to decades) and then was top of the field twice in 2019 and 2020. LC Zero is currently second in the ongoing 10th season TCEC series.

The AlphaZero news sent shockwaves to the chess community and computer science and was touted as one of the finest feats of Artificial Intelligence development to date. The trick lies somewhere in the interplay of neural networks and the use of Bayesian inference (in a very oversimplified nutshell, a method used to estimate probabilities or likelihood of outcome based on sequential queries resulting in ever more information becoming available). Alpha Zero is able to improve its game through time, not through additional human input (though that certainly continues), but through trial and error—experience: actual learning. To achieve this, essentially, it not only plays multiple games against itself during 'training'. The key thing is that in competitions, it evaluates the best next move in any given position by playing out all reasonable moves and sequences following them, picking the move that—on average—leads to the most successful line of play. In other words, during competition, it is constantly trying to beat itself by testing all available moves at any given point. Thinking about the next move, say in a game against Stockfish, it plays millions of chess games and rates the results, before it makes an actual move in the duel! This approach, it turns out, allows AlphaZero to quickly rule out the majority of possible lines (that quickly lead to inferior positions). Thus the Bayesian methodology offers the main advantage of focusing processor time narrowly on promising lines rather than 'wasting' it to brute force approximate calculations of every possibility (of course, the totality of which are in practice infinite and thus incalculable, but more importantly, most of which are 'obviously' inferior). Typically, humans with genius level 'IQs' share a trait; the ability to ignore the vast majority of all possibilities/information and focus exclusively on the very few things that matter given the problem at hand. AlphaZero plays chess uniting human 'genius level thinking' with the raw power of billions of calculations per second. In other words, it is a robot thinking

in an eerily human kind of way, really really really fast. All of this yields vastly superhuman chess engines. And I'm playing bridge with robots that sometimes seem unable to count points. Why?

I don't know. I have some ideas, but honestly, I haven't put in the research. I've followed chess engine development because it has been so fascinating. Apparently, there are some really strong bridge programs out there, Zia did after all withdraw his infamous 1 million dollar bet. He did so after playing against really strong computers, managing a win more by discovering a programming glitch than being able to readily outplay them. But I've not had the privilege to play against one, nor have I scrutinized in detail any match pitching computers against top players. Perhaps I'll do the research, but it would be fascinating to learn of such accounts if anyone is familiar with any!? Or indeed learn about bridge engine development from anyone familiar with the topic. If there is interest among the readership (e.g. if more than one person shoots me an email and says 'that would be fun'), I'd be curious to look into the Zia-computer match and go over some hands in a future issue of Table Talk.

No matter what, clearly BBO does not have Bayesian AI robots, and even then, has got their robots playing not at their highest level. It also feels like the robots have been programmed to make mistakes (so as to not scare away customers?). BBO indeed characterizes their robots as 'capable of brilliance...' but 'also occasionally capable of some really poor bids and plays (just like all human players)'. Modern chess engines are more than capable of brilliance, but they are not capable of poor play. They do not 'blunder'. Ever. Bridge robots play down a game in a single action sometimes making mistakes that no human would. I recall a hand where I played 3NT after bidding both spades and hearts (showing at least 5-4). Then running my spade suit, the robot on my left,

holding QJxx of hearts and not much else to defend decided to throw all the hearts away, giving me the rest of the tricks! It 'knew' I had hearts, and that throwing these away would lose tricks... yet, it did. Or consider this auction:

W	N	E	S
			1N
2 . *	P	2♦	P
3♣	P	P	X
P	4 . **	P	4 ♥
P	?		

^{*}Cappeletti, single suited

I made an aggressive double on the 1NT hand with a doubleton club (3442) and good values in the other suits. Don't be afraid to takeout double on a NT hand! Partner seemed to ask me to pick suit, I naturally bid 4 v and expected to play there. However, the robot with:

K1052 A975 1073 43

now bid 4♠!!!??? No sane humanoid would bid like this. Instead of making 4♥ for a near top, we went down 2 in 4♠ for a near 0. What on earth??

Chess engines lose games (only, of course, against other engines) very gradually over a series of perhaps slightly less brilliant moves than their opponent engine, generating slight imbalances that top human

^{**} presumably 'pick a suit'

grandmasters generally do not well understand move-to-move. AlphaZero Bridge should be able to become superhuman in a few hours.

There are some reasons why bridge engines are not like chess engines. Most obviously, and disappointingly, bridge has a vastly lower public profile than Chess or some of the other mind games like Go. Thus, less resources have been thrown at the development of bridge engines. But surely, it should be relatively straightforward to feed the rules of bridge to AlphaZero. As far as I know, that has not been done yet. Another reason may be more satisfying and give humanity some hope. Bridge is a very 'human' game. It is not a game where the one that can do calculations fastest simply wins. Sure, it is a game of probabilities and a half decent engine can always play with the probabilities. Human players also do well to be familiar with the most routinely applicable probabilities, but that alone does not win bridge tournaments. Indeed, so many other human things play a role; things that robot 'brains' have a harder time with. Humans have expressions, they think, they hesitate, they have 'tells'. Good players are happy to go against the probabilities based on what they have picked up by human behavior. Even a brief hesitation on BBO can provide key information. Also, bridge is an interesting mix of chess and poker. Humans take risks in certain circumstances, some individuals take certain risks more frequently than others—good players pick up on playing styles. Humans are also not constrained by 'soft' rules, for example, a bid may 'promise' 5 hearts, but a human may employ it holding only 4, choosing among multiple available alternative less-than-perfect bids. Standard bridge engines follow the rules they have been fed and will be readily fooled by any 'unorthodox' action. AlphaZero Bridge, of course, would just test all the available bids and see how each worked over millions of deals given relevant parameters before making a bid, in less than a second... Humans also lie and steal, for example false carding and aggressively

preempting, in a manner engines do not (yet) and therefore can be mislead by. Finally, humans are excellent at pattern recognition. We pick up on things that computers are not typically programmed to compute. I don't think I'm offending anyone by stating that say Steve Ackerman tends to bid more aggressively than Jerry Divincenzo. Mary Savko is more likely to open 1NT with unusual distribution than Phil Sharpsteen (and just about anyone else in the club). Ellie Hanlon often plays contracts in very tricky ways, constantly trying to mislead defenders. When I play with my partner Mary Tierney I am the aggressor, she keeps things sane. Some players double aggressively, others almost never. I often false card while my frequent partner Mark Oettinger tends to card honestly. Such patterns are information we as players can use, but typical engines cannot. In short, it is harder to make computers excel in games that cannot simply be 'solved' via brute power calculation. That's classic bridge engines. Again, AlphaZero bridge would play a game somewhere at the interface of world-class human and best calculation computer styles, and probably would beat us all.

All that said, and even with all the shortcomings of popular standard bridge engines, they still do pretty well against humans. Robot-robot pairs have won several BBC tournaments. BBO claims their robots average 55% in typical online human tournaments. In part, this must have something to do with robot-robot pairs 'understanding' each other. They are clones playing together. We humans do not understand each other nearly as well, nor do we understand the engines. In part, it is because our blunders are probably more common and haphazard than (pre programmed?) engine blunders. And, in particular towards ends of hands where humans tend to be a bit fuzzy, computers have a tight grip on every card that has been played and they are never unsure if a card is high or not, or forget if declarer ran out of a suit or not. Nor do they forget what the contract is. Of course, they do not lead out of turn or

revoke, but neither can we when playing against them. So, engines have certain advantages. However, a good human bridge pair routinely paying attention to bidding and carding throughout every hand, utilizing pattern recognition and human-specific behaviors to their advantage, I think will in the long run win against BBO robots. There are certainly player pairs in our club I expect to do much more poorly against than against a robot pair. What about human-robot pairs? These take a while to develop. I have had some success playing with a robot partner in BBC, but I've also had very bad games with them. Sounds just like playing with a human partner! Except, I understand errors humans make, because I've made all of them myself. Sometimes I'm playing with a computer partner, I expect a given play and then gadzooks! – the computer makes a decision that I cannot understand and a mistake I have not even thought of making, nor seen a human replicate.

OK. This article is already too long. To sum up, bridge engines need to learn from chess engines to be up to snuff. They do pretty good, but humans can still proudly play against them, and strong players can certainly beat them. Notwithstanding, I expect as soon as AlphaZero, or another Bayesian AI engine starts playing bridge, they will better us. We may find a way to fight back and offer some competition by 'pokering up' our bridge game to make it 'more human' and less algorithmic. Inevitably, however, in the end AI will understand us better than we do, and win out against humans on all fronts.

Happy trails!

Jordan/Truscott and Related Sequences (Mark Oettinger)

You are South. Partner opens 1 of a Major, and RHO doubles.

W N E S $1 \checkmark$ X ?

What do your various bidding options mean? Set out below is what I like to play. I'm not wedded to it, however, and will play whatever my partner prefers. Whatever you decide to play, have clear agreements.

XX = 10+ HCP; implies no fit; penalty-oriented [*Ingi*: aka 'business';

1 = 4 + Spades; 6 + total points;

1NT = Is it forcing? I recommend yes. As a general guideline, I treat opponents' Doubles as "transparent." Using this principle, our auction (at least responder's first bid) proceeds as if the Double had not occurred. And if the opponents do not compete further, the rest of the auction is "systems on" as well. Note that this structure allows responder to first bid a Forcing 1NT, and then to rebid 2NT to show a balanced invitational hand without support for opener's Major. In that respect, it replaces a natural $1 \checkmark - X - 2N$...and thereby sets the stage for Jordan/Truscott (see below);

- 2♣ = 2/1 game-forcing and natural; 5+ Clubs;
- 2♦ = 2/1 game-forcing and natural; 5+ Diamonds;
- 2♥ = 3-card Heart support; 6-9 total points;

2♠ = This bid can have at least two highly-divergent meanings, so it requires careful partnership discussion informed by other elements of your bidding style and agreements. It can be a Weak Jump Shift. I like a preemptive style, so this is how I play with many partners. 0-5 total points and a Weak 2-type hand. A "weak Weak 2," if you will. This is probably best played non-vulnerable. It can also be a Soloway Jump Shift, showing a self-sufficient suit and something like 17 total points. Slam interest. Pick your poison…but have a clear agreement…and then follow it;

2N = Jordan/Truscott. Lest we forget the title of this article... I was originally taught that Jordan shows 3+ card trump support and an invitational or better hand. That was before Bergen. With Bergen (if you play it as "on over a X"), we can now show 4-card support with either a "constructive" or "invitational" hand (see below), so it makes sense (at least to me) to play Jordan as game forcing (13+ total points). The question came up recently, and I did a little research. **Bridgebum.com** and **Bridgehands.com** are good sources of pithy, well-written articles on conventions. Interestingly, their view is that Jordan shows 4 card trump support. That's not my preference. How else do you show a game forcing hand with 3 card trump support? However you decide to play it, my advice to serious partnerships is to have...and to follow...clear agreements. It's far less important what those agreements are.

Here's a link to the *Bridgebum.com* point of view:

https://www.bridgebum.com/jordan_2nt.php

And here's a link to the slightly more expansive *Bridgehands.com* point of view:

https://www.bridgehands.com/J/Jordan_2_Notrump.htm

- **3♣** = Is Bergen on over a Double? Again, I recommend yes. If so, 3♣ shows 4-card trump support and a "constructive" (7-9 total point) hand;
- 3 ◆ = If Bergen is on over a Double, 3 ◆ shows 4-card trump support and an "invitational" (10-12 total point) hand;

Note: Some play Reverse Bergen, inverting the meanings of 3♣ and 3♠. This affords a small but non-trivial technical improvement from the standpoint of fast arrival and preemption.

- **3** ♥ = 4-card support; weak/preemptive: fast arrival; Law of Total Tricks;
- **3**♠ = Splinter; 4-card Heart support; 0-1 Spade; 13-16 total points; systems on over opponents' transparent Doubles;
- 3NT = 3-card support and balanced (e.g., 3-3-4-3). Offering opener the choice of games...4 \checkmark or 3NT;
- **4♣** = Splinter; 4-card Heart support; 0-1 Club; 13-16 total points; systems on over opponents' transparent Doubles;
- **4** ◆ = Splinter; 4-card Heart support; 0-1 Diamond; 13-16 total points; systems on over opponents' transparent Doubles; and

4♥ = 5-card support; weak/preemptive: fast arrival; Law of Total Tricks.

With this structure, you have a variety of forcing sequences. You use Jordan with invitational hands+ containing 3-card support, and you use Bergen with invitational hands containing 4-card support. Whether you use Standard Bergen or Reverse Bergen is another decision point. Again, the latter is marginally better from the standpoint of fast arrival and preemption.

Your bid! (Ingi Agnarsson)

I want to see if I can get covid-trapped bridge-hungry readers to send in responses... So, here are a couple of bidding problems, please send your bids/arguments to iagnarsson@gmail.com

1) You sit North (all vul) and hold:

Q642

J4

QJ95

1065

Partner opens and opponents are silent, and the bidding goes: $1 \checkmark -1 \land -3 \checkmark$ what is your bid and why?

2) You hold:

J AQ63 Q953 KJ106

You unfortunately do not play mini-roman and open 1♣ (better minor—1♦ is an option anticipating to the upcoming bidding problem...), partner bids the expected 1♠ and its your turn. What to bid? If you had preferred a 1♦ opening what would be your bid now?

3) You hold:

A983 9854 A654 10

You pass, and partner opens 1♥. Let's assume you play both drury and Bergen on after pass, plus the usual arsenal (Jordan, direct raises with jumps weak etc). What do you bid?

4) You hold:

K AK832 A762 AKJ Opponents are silent throughout. You open $1 \checkmark$ and the bidding goes $1 \checkmark$ - $1 \land -3 \checkmark -3 \checkmark$, what do you bid?

A Matchpoint Dilemma - Do you play to assure 12 tricks, or do you play for 13 at the risk of making only 11? (Mark Oettinger)

Dealer North None Vul

> Q1094 J10975 AQ 65

52 J63 Q 86432 KJ876 43 KQ1072 J92

> AK87 AK 10952 A84

Our auction went like this:

W N E S $P P 1 \bullet$

P	1♥	P	2N
P	3♣	P	3 ♠
P	4 •	P	P
P			

West led the King of Clubs, and I won the Ace. I started by cashing the Ace and King of Spades, disclosing the 3-2 split. Thinking that I may need to use the Queen of Spades for transportation to establish and run the Heart suit, I next cashed the Ace of Hearts, felling the Queen(!)

Digression... Had my Ace of Hearts produced only small Hearts from the opponents, I would have continued with the King of Hearts (6 opposing cards split 4-2 or 3-3 a combined total of 84% of the time), and *then* led to the Queen of Spades on the board, thereby drawing the last trump, and positioning myself to play the 3rd round of Hearts. Under those hypothetical circumstances, if East had followed with a 3rd Heart, I would have had to decide whether to play for the drop or the ruffing finesse.

Returning to the play... The Heart Queen has dropped. I have 4 Spade tricks, 5 Heart tricks, 1 Diamond trick, and 1 Club trick, for a total of 11. I can ruff a Club to make 12 tricks, but I have to lose a Club to do so. If I take and lose the Diamond finesse, I will have an immediate Club loser in addition to the off-side King of Diamonds...making 5. On the other hand, if I take the Diamond finesse and win, I will also be able to ruff a third Diamond on the board, thereby generating 5 Spade tricks, 5 Heart tricks, 2 Diamond tricks, and 1 Club trick...making 7! Choices, choices!

Ingi adds: Well - there is an alternative line of play that should be considered. After taking the Ace and King of trumps, and Ace of Hearts,

you can try for 12-13 tricks by playing the King of Hearts. If this is not ruffed, you have now assured 12 tricks, taking the last trump and the remaining Heart tricks and throwing dummy's Clubs (and one Diamond). Now you can ruff a Club in dummy without any risk of losing Club tricks and have a free shot at 13. So, the question becomes should you try this line versus risking getting only 11 tricks right away? The Diamond finesse is 50%...11 or 13 tricks. What are the odds that King of Hearts will *not* be ruffed? With West having a singleton Heart, there are more "empty spaces" in West's hand, so West is more likely to have the final trump. But even in the worst case scenario, you always have 11 and the free finesse for 12. This is complicated, but it is clear that if you try this line, and the King of Hearts is not ruffed, and the Diamond finesse is off, you'll be the only one making 12 tricks.

Mark again: When faced with this type of matchpoint decision, declarer must always ask: "Am I in a standard contract?" In this case, I think that I am in a standard contract. If I were not, playing to make is paramount, and overtricks...or multiple undertricks...matter less. In a sense, being in a non-field contract makes play of the hand at matchpoints much easier...more like IMPs. In a standard contract, however, the quest for overtricks can cause declarers to take 'unnecessary' chances...such as risking a guaranteed path to 12 tricks, in an effort to produce a non-guaranteed 13 tricks. Should I do that here? Matchpoints is a pernicious form of bridge. Some go as far as to say, "It's not real bridge." Before I tell you what I chose to do, here's a look at the "traveller:"

Contract	# Tricks	Score	Matchpoints
4S	13	510	7.5
4S	13	510	7.5

4S	13	510	7.5
5S	13	510	7.5
4S	12	480	5
4S	11	450	3.5
4S	11	450	3.5
2S	12	230	2
3S	11	200	1
2S	10	170	0

What does the traveller tell us? It tells us that 4 of the 10 declarers risked 12 tricks in an attempt to make 13 tricks. And since the King of Diamonds was onside, they were rewarded with a 4-way tie for top...7.5 matchpoints out of a possible 9 (83%). That was me with the sole +480, worth 5 matchpoints (56%). I decided to take my 12 assured tricks. Had the King of Diamond been offside, I would have had an outright top (100%). With the King of Diamonds onside, if I had risked the finesse, I would have earned 7 matchpoints for +510...for a gain of 2 matchpoints. Interestingly, had the King of Diamonds been offside, and had I taken the finesse, there would have been a gaggle of +450s, and I would have earned 6 matchpoints...for a gain of one matchpoint. So, interestingly, regardless of where the King of Diamonds was located, I would have gained from taking the finesse. A single hand doesn't mean much, but it does appear that "greed is good" at matchpoints. As Ingi notes, "It's complicated," but I will also point out that Ellie Hanlon was one of the +510s...if that tells you anything. [*Ingi*: well to give Mark the benefit of the doubt, its quite possible that some declarer did not get a club lead, after which the path to 13 tricks is clear, risk free]

Bidding note for intermediate players:

The auction is worth a quick mention. Opener's 2NT jump rebid shows a balanced 18-19 HCP. Responder's 3* is New Minor Forcing (NMF). Opener's first obligation is to show 3-card support for responder's first-bid suit (in this case, Hearts), if he has it. If opener does not have 3-card support for responder's first-bid suit, opener's second obligation is to show 4 of the other Major (which, in this case, he has). NMF easily discloses the 8-card Spade fit, while letting Opener clarify his strength with his second bid.

Discuss New Minor Forcing with Partner both of the following situations:

1 ***** - 1 ***** 1N - 2 ***** ...

and

Agree on the priority of opener's potential second rebids. In most systems, showing 3-card support for responder's first-bid suit has first priority.

Upcoming Vermont Tournaments

Face-to-face tournaments are cancelled through February 2021.

Play local, national, regional and silver point tournaments online. Go to Bridge Base Online (BBO)

Vermont and Nearby Clubs

Many, if not all, bricks & mortar clubs are closed due to Covid. Check websites and call or email first!

Manchester Equinox Village Open

49 Maple Street

Manchester, Vermont 05254

Elizabeth VonRiesenfelder; (802) 362-5304

Tuesday; 1:00 p.m.; 0-200 MPs

Tuesday; 1:00 p.m.; open, stratified

Sunday; 2:00 p.m.; February, March; open; stratified

Multiple sites; call first; reservations requested

Taconic Card Club

6025 Main Street

Manchester, Vermont 05255 Kim Likakis; (802) 379-1867

Thursday; 12:30 p.m.; open; reservations requested

Apollo Bridge Club

115 Main Street

Montpelier, Vermont 05602

Wayne Hersey; (802) 223-3922

Friday; 6:30 p.m.; open

Newport Club

84 Fyfe Street

Newport Center, Vermont 05855

Eric McCann; (802) 988-4773

Wednesday; 1:00 p.m.; exc. Jan, May, Oct, Nov, Dec; open; stratified

Barton Bridge Club

34 School Street Orleans, Vermont 05860 Linda Aiken; (802) 525-4617

Monday; 12:30 p.m.; open; stratified

Rutland Duplicate Bridge Club

66 South Main Street Christ the King Church Rutland, Vermont 05701

Raymond Lopes; (802) 779-2538

Monday, 12:00 Noon; open; stratified Tuesday; 6:00 p.m.; open; stratified

Thursday; 6:00 or 6:30 p.m. (time changes seasonally...call first); open; stratified

Multiple sites - call first for locations

St. Albans DBC

75 Messenger Street St. Albans, Vermont 05478 Marsha Anstey; (802) 524-3653

Monday; 7:00 p.m.; open

Burlington Bridge Club

600 Blair Park Road

Williston, Vermont 05495

Phil Sharpsteen; (802) 999-7767

Monday; 6:30 p.m.; Non-LM 0-500 MPs; stratified

Tuesday; 6:30 p.m.; open; stratified (May-October only; call first)

Wednesday; 9:15 a.m.; open; stratified Thursday; 12:30 p.m. 0-300 MPs; stratified

Friday; 9:15 a.m.; open; stratified Sunday; 1:00 p.m.; open; stratified

Website: www.bridgewebs.com/burlingtonacademy/

Norwich DBC

43 Lebanon Street Hanover, New Hampshire 03755 Paul Hoisington; (802) 249-0839 hoise430@gmail.com Tuesday; 6:30 p.m.; open; stratified

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Quechee Duplicate Bridge Club

Quechee Club 3268 Quechee Main Street Quechee, Vermont 05059

Dick Tracy; (802) 384-0461; gmboy51@gmail.com

Monday; 1:00 p.m.; open; stratified; weekly; year-round 1st Thursday of each month; 6:30 p.m.; *monthly*; year-round

Mad River Valley Bridge Club

The Waitsfield Inn 5267 Main St Waitsfield, VT 05673

Vickie Walluck; 802-590-3068 <u>VickieWalluck@gmail.com</u> Monday; 12:30 p.m.; open

Call or email Vickie in advance if you need a partner

Eastman Bridge Club

48 Lebanon Street Street, Hanover, NH (Wednesday at 1:00 + Friday at 1:00) 6 Club House Lane, Grantham, NH (Tuesday at 12:30)

Jane Verdrager; (603) 865-5508

Website: www.eastmanbridgeclub.com

Keene DBC

Elks Lodge 81 Roxbury Street Keene, New Hampshire 03431 Anne McCune; (603) 352-2751

Monday; 12:00 Noon; open; stratified (partner available)

Thursday; 12:00 Noon; open; stratified (no partner guaranteed)

Ticonderoga (New York) DBC

109 Champlain Avenue

Ticonderoga, New York 12883 Michael Rogers; (518) 585-3322

Monday; 12:30 p.m.; open; stratified; reservations requested Thursday; 12:30 p.m.; open; stratified; reservations requested

Plattsburgh (New York) DBC

5139 North Catherine Street Plattsburgh, New York 12901 George Cantin; (518) 563-6639 Tuesday; 6:45 p.m.; open; handicap

Thursday; 6:45 p.m.; open Friday; 12:30 p.m.; open

Useful & Fun Links

Table Talk Online www.bridgequarterly.org

ACBL www.acbl.org

District 25 www.nebridge.org

Unit 175

Bridge Base Online

OKBridge

Bridge Guys

Pattaya Bridge Club

www.vermontbridge.org

www.bridgebase.com

www.okbridge.com

www.bridgeguys.com

www.bridgeguys.com

www.pattayabridge.com

Larry Cohen www.larryco.com

Mike Lawrence https://michaelslawrence.com/

Marty Bergen <u>www.martybergen.com</u>
Baron Barclay Bridge Supply <u>www.baronbarclay.com</u>

Michael's Bridge Sanctuary www.mapiano.com/bridge.htm

Power Rankings www.coloradospringsbridge.com/PR_FILES/PR.HTM