THE VALET SCORE

Many bridge players are familiar with the Butler score. It is often posted as an unofficial result in round-robin team tournaments such as national divisions and the European and World Championships, and it is used as the official scoring method in some pairs tournaments. Many pairs want to know their own effectiveness, whether to improve their game or to win the post mortem discussion with their teammates!

It is natural to ask if we can go further and assign separate scores to a pair's declarer play, defense and even opening leads. It turns out that this is possible. I call my creation the Valet score, as a valet is similar to a butler and the word "valet" means "jack" in French.

All analytical methods have weaknesses, even the official scoring systems. If you are the only pair to bid a great slam that goes down on bad breaks, you will get a bad official score, but you are entitled to consider yourself unlucky.

Results	Official scoreButlerValet	(not common, e.g. Epson tournament)		
Cards	Double dummySimulations	Post-mortemSingle dummy		

Ouantitative

Manual

Quantitative methods are not subject to judgment, whereas manual analysis attempts to find the "truth." Maybe it didn't cost that you missed that trump lead, but you should still have found it. So in the post-mortem your friends should charge you for this, and you should learn from it – maybe next time it will matter.

Result-based methods look only at the actual scores achieved at the table, without considering the actual distribution of the cards. Maybe you bid a game on a finesse for the king of trumps and went down, and others stayed out. Or maybe you bid the same game missing instead the ace of trumps, so the contract never had any play. You cannot tell the difference between these two distributions just by looking at the scores. For this you need card-based analysis.

THE PRINCIPLE

How do we separate the bidding from the play/defense, looking only at the results? Let us imagine that you bid to your contract, but then you are replaced by an average declarer. In fact you are replaced by all the declarers who played in your denomination from your side (maybe notrump), and you get the average of their results.

If all these declarers get better results than the "datum" score, then you have often bid to a superior contract. The difference between this average and the datum score is your bidding score, and whatever remains between your bidding score and your Butler score is your play score.

The defenders get the opposite of your bidding score as their bidding score, and the opposite of your play score as their defense score. This may not be fair in a particular case, but it is no more unfair than the actual score or the Butler score.

We only consider the declarers who played in your denomination from your side. If you sat North and protected your king, while the South players were vulnerable to a lead through that king, then rest assured that you will normally get a good bidding score.

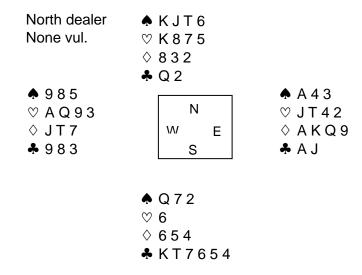
To get a lead score, we are going to look at all the pairs who were on lead against a contract in your denomination from your side (notrump). We already know the average score that all these opening leaders achieved against notrump, as this is the opposite of the bidding score that we assigned to you above. We use the same principle and to calculate the same type of score, but only against the opening leaders who led the suit that you were faced with (call it clubs).

Once we have this score, we are going to compare it to the total bidding score. If the average club leader did better than his bidding score, then this is considered to be due to his club lead. Whatever is left of his defense score is then his subsequent-defense score.

AN EXAMPLE

If we pick simple examples, we generally get the Valet scores that we expect. For example, if all pairs played in 3NT from West, then the bidding score will be 0 IMPs and the complete Butler score will be allocated to the play and defense.

If all pairs play in four hearts or six hearts from South, all of them making 12 tricks, then the play score will be 0 IMPs and the complete score will be in the bidding.



Let us consider a slightly more complex example from the 2015 Bermuda Bowl (Round 1, Board 1). East-West should be in four hearts which mainly depends on the heart finesse. If the finesse is off, they may go down more in 3NT than in four hearts. Against 3NT the defense has to lead a club. Against four hearts the defenders have to avoid some pitfalls, including a club ruff in East.

But the Valet score does not know the actual cards, only the results. It turns out that 3 out of 14 declarers made four hearts for a Butler IMPs-across-the-field score of +8.57, and 2 out of 8 declarers made 3NT (+8.33). Going down one cost -1.62, going down two cost -3.48 IMPs. This can be split as shown in the tables.

Contract	Lead	Tricks	Count	Overall	Bid	Play
4♡, E	\Diamond	8	1	-3.48	+0.44	-3.92
		9	4	-1.62	+0.44	-2.06
		10	2	+8.57	+0.44	+8.13
	^	9	2	-1.62	+0.44	-2.06
4♡, W	^	9	3	-1.62	+0.05	-1.67
	*	10	1	+8.57	+0.05	+8.52
		8	1	-3.48	+0.05	-3.52
3NT, E	*	9	1	+8.33	-0.52	+8.86
		7	6	-3.48	-0.52	-2.95
	^	9	1	+8.33	-0.52	+8.86

Valet scoring for declarers

Contract	Lead	Tricks	Count	Overall	Bid	Lead	Other def.
4♡, E	\Diamond	8	1	+3.48	-0.44	-0.59	+4.50
		9	4	+1.62	-0.44	-0.59	+2.65
		10	2	-8.57	-0.44	-0.59	-7.54
	^	9	2	+1.62	-0.44	+2.06	0.00
4♡, W	^	9	3	+1.62	-0.05	+1.67	0.00
	*	10	1	-8.57	-0.05	-2.50	-6.02
		8	1	+3.48	-0.05	-2.50	+6.02
3NT, E	*	9	1	-8.33	+0.52	+1.27	-10.12
		7	6	+3.48	+0.52	+1.27	+1.69
	^	9	1	-8.33	+0.52	-8.86	0.00

Valet scoring for defenders

Very little of the variation is assigned to the bidding. There is a single bidding score for the same contract played from the same side. The Valet score likes the spade lead against four hearts from either side, which makes sense as no declarer had any chance after that.

Against four hearts by East, it was better to lead a spade (which always beat the contract) than to lead a diamond (which sometimes let declarer make). The lead scores correctly reflect this. When the defenders did beat the contract on a diamond lead, their defense score benefits. Similarly, a spade lead against three notrump let the contract make, so that causes a terrible lead score.

COMPUTER PROGRAM

The Valet score is available for free as open-source computer code, and I hope to see it implemented in all bridge scoring programs.

I have applied the Valet score to all recent European and world championships, and the results are available online at https://github.com/valet-bridge/valet/releases/tag/v1.0. For players interested in the theory of scoring, there is also much more discussion in the documentation at this site. Several players including Michele Cammarata have provided useful input, and I welcome any comments by e-mail.