Melih Ozdil

THE DISTRIBUTION OF THE OUTSIDE CARDS

Wizard of Oz Bridge

The number of outside cards	Distribution	Probability	Distribution count
2	1 - 1.	% 52	2
	2 - 0	48	2
3	2 - 1	78	6
	3 - 0	22	2
4	3 - 1	50	8
	2 - 2	40	6
	4 - 0	10	2
5	3 - 2	68	20
	4 - 1	28	10
	5 - 0	4	2
6	4 - 2	48	30
	3 - 3	36	20
	5 - 1	14.5	12
	6 - 0	1.5	2
7	4 - 3	62	70
	5 - 2	30.5	42
	6 - 1	7	14
	7 - 0	0.5	2
8	5 - 3	47	112
	4 - 4	33	70
	6 - 2	17	56
	7 - 1	2.9	16
	8 - 0	0.1	2
9	5 - 4	59	252
	6 - 3	31.5	168
	7 - 2	8.5	72
	8 - 1	1	18
	9 - 0	0.05	2
10	6 - 4	46.2	420
	5 - 5	31.1	252
	7 - 3	18.5	240
	8 - 2	3.8	90
	9 - 1	0.35	20
	10 - 0	0.01	2

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THE DISTRIBUTION OF OUTSIDE HONORS

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One honor in six cards

% 2.40	singleton	% 1.20	at left	% 1.20	at right
16.00	within two	8.00	"	8.00	"
36.00	within three	18.00	"	18.00	"
32.00	within four	16.00	"	16.00	"
12.10	within five	6.05	"	6.05	"
1.50	within six	0.75	"	0.75	"

One honor in five cards

% 5.60	singleton	% 2.80	at left	% 2.80	at right
27.20	within two	13.60	"	13.60	"
40.80	within three	20.40	"	20.40	"
22.40	within four	11.20	"	11.20	"
4.00	within five	2.00	"	2.00	"

One honor in four cards

% 12.40	singleton	% 6.20	at left	% 6.20	at right
40.00	within two	20.00	"	20.00	"
37.60	within three	18.80	"	18.80	"
10.00	within four	5.00	"	5.00	"

One honor in three cards

% 26.00	singleton	% 13.00	at left	% 13.00	at right
52.00	within two	26.00	"	26.00	"
22.00	within three	11.00	"	11.00	"

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DISTRIBUTIONS & THEIR PROBABILITIES

Wizard of Oz Bridge

DISTRIBUTIONS

4 - 4 - 3 - 2	21.55	7 - 3 - 2 - 1	1.88
5 - 3 - 3 - 2	15.52	6 - 4 - 3 - 0	1.33
5 - 4 - 3 - 1	12.93	5 - 4 - 4 - 0	1.24
5 - 4 - 2 - 2	10.58	5 - 5 - 3 - 0	0.90
4 - 3 - 3 - 3	10.54	6 - 5 - 1 - 1	0.71
6 - 3 - 2 - 2	5.64	6 - 5 - 2 - 0	0.65
6 - 4 - 2 - 1	4.70	7 - 2 - 2 - 2	0.51
6 - 3 - 3 - 1	3.45	7 - 4 - 1 - 1	0.39
5 - 5 - 2 - 1	3.17	7 - 4 - 2 - 0	0.36
4 - 4 - 4 - 1	2.99	7 - 3 - 3 - 0	0.27
		Others	0.69

Determining the Distribution

Counting the played cards in groups of four is a bad habit even if the count of left over cards is determined correctly. If counting the total cards in dummy and hand as well as the ones being played in a suit seems sufficient, there will be no difference for bridge from an ordinary game since necessary analysis can't be made.

Bridge player must determine the count towards finding the outside distribution. One way of this is assuming equal outside distribution when playing a suit and determine how many each has by looking at the cards played. This way, the distribution of the fourth suit can be determined after the counts in three suits are completed. A good player with the habit of using this application, will determine the distributions without any hardship and spending special effort at the end of each play.

A642

K53

After seeing the cards in dummy and hand, this suit is played assuming 3-3 outside distribution and if West doesn't give at the third round, outside distribution is determined to be 2-4

THE CHANCE TO MAKE THE CONTRACT WITH FINESSE

If it is possible to make the contract by taking another finesse after the first one fails the chances increase but if more than one finesse is required to make the contract, chances decrease.

Possible finesses	The finesse count that needs to work	Chance %
1	1	50.00
2	1	75.00
3	1	87.50
4	1	93.50
2	2	25.00
3	2	50.00
3	3	12.50
4	2	68.70
4	3	31.30
4	4	6.25

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THE CHANCE TO ESTABLISH LENGTH AND HONORS

Wizard of Oz Bridge

Suit			Times to play outside	Established	Chance %
KQJ10	-	x	1	3	100
QJIO9	-	x	2	2	100
J1098	-	x	3	1	100
AKxxx	-	xx	1	2	36
AKxxx	-	xxx	1	2	68
AQ	-	xx	0	1	50
AKJx	-	xxx	0	2	18
AKJxx	-	xx	0	3	18
Kx	-	xx	1	1	50
Qxx	-	xx	2	1	25
Q109	-	xx	2	2	50
AJ10	-	xx	1	1	75
AJ10x	-	xxx	1	2	27
AJ109	-	xxx	1	2	75
KQx	-	xx	1	2	50
KQxx	-	xxx	3	1	18
QJx	-	xx	2	1	75
Axxx	-	xxx	2	1	36
Axxxx	-	x	3	1	62
Axxxx	-	xx	2	2	36
Axxxx	-	xxx	2	2	68
Axxxx	-	xxxx	1	3	40
xxxx	-	xxx	3	1	36
xxxx	-	xxxx	3	1	68
xxxxx	-	x	4	1	62
xxxxx	-	xxx	3	2	68
xxxxx	-	xxxx	2	3	40

Chances

The main purpose of the game can be summarized as to give up tricks to the higher cards and establish smaller ones to take tricks. To achieve this, the possible distribution of the outside cards in all suits needs to be determined as accurately as possible with the analysis after few plays in order to make the right choice of the suit to be established:

If the total number of outside cards in a suit is even number (4-6-8), the probability of the equal distribution of these among two opponents is low. On the other hand, if the total number of outside cards is an odd number (5-7-9), the probability of balanced distribution of these is high. In order to become a good competitor, it is necessary to know the distribution probabilities of 5-6-7-8 outside cards as a minimum.

ESTABLISHIG

Getting rid of opponents high cards in a suit and converting smaller cards into winners is named as establishing. If there is possibility of establishing more than one suit in NT contracts, first how many tricks from each suit can be established needs to be determined based on the necessary trick count as well as distribution probabilities. After this, suit selection will be made based on the condition of lead suit or a dangerous suit that they may attack and considering how many tricks needs to be given to establish. If there is no timing problem, the suit with better chances is chosen to be established. Otherwise, the suit that can be established quicker, is chosen.