

Results summary of “Side Event: Predict Professional Moves” from European Go Congress 2007

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Abstract

This report briefly summarizes the results in the “Side-event: predict professional moves”, which took place in European Go Congress 2007.

Experiment Setup

The experiment took place in European Go Congress 2007. The experiment consisted of 15 game situations from professional games and the participants were asked to give 5 predictions on the next move in the game record. If a participant predicted the next move exactly, points were awarded to him/her according to Table 1 (the scoring scheme was chosen more or less arbitrarily). Player’s score was the sum of all his/hers points. Players were divided into five groups based on their ranks and those with the highest score were awarded with a book (in order to motivate people to try their best).

The 15 game situations were selected by the author from games played in the beginning of year 2001 (for no particular reason other than the games were not recent). The game situations are from middle game or early end game, where the next move were supposedly not trivial. The aim was to have few relatively easy, some medium and few hard situations from 3 dan’s perspective (which is the author’s rank).

For each game situation 2 minutes were allocated, hence the experiment took 30 minutes. Time marks were given, although in practice 2 minutes per game situation was not forced. Distributing the game situations and collecting answers also took some time, during which it was possible for the participants to study the situations. Also there were few participants who started a bit late.

Prediction	1.	2.	3.	4.	5.
Points	6	4	3	2	1

Table 1: The scoring scheme

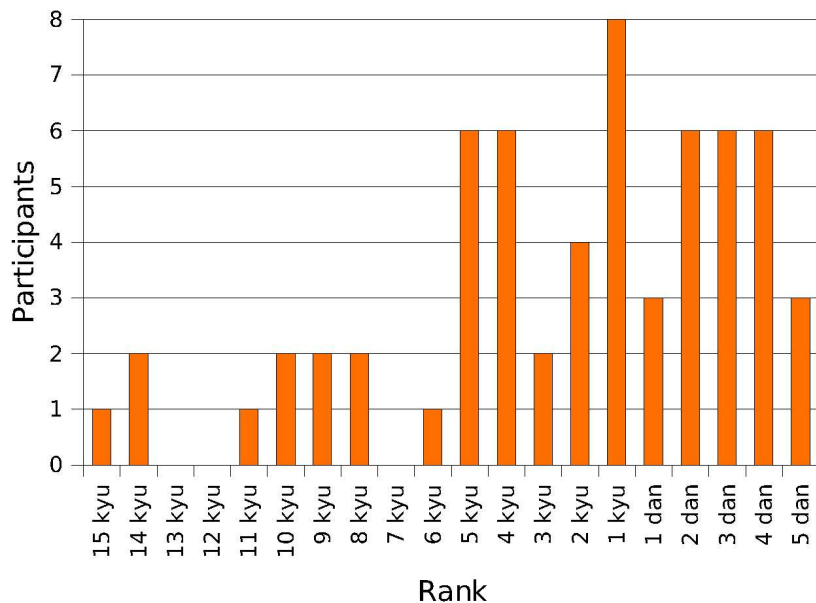


Figure 1: Participants' ranks

To summarise, each participant had at least 20 minutes and at most 35 minutes for the whole experiment.

Results

There were 61 participants, whose rank distribution is shown in Figure 1. The average scores of the groups are shown in Figure 2 and the variances of the scores are shown in Figure 3. The Manhattan distance refers to the allowed distance to the actual move while still awarding points (i.e., with distance 0 exact prediction is needed).

In Figures 4-18 the number of correct predictions by each group are shown as well as the game situations. In the game situations letters A–E are used to indicate the group's preferred move (the move which got highest score by the players using the point system in Table 1). As curiosity, GNU go's (level 19, which needed approximately 26 minutes computing time for all situations) suggested move is marked with I. The text "rest" means every aforementioned label, which are not shown in the corresponding figure. In case the actual move in the game record is not among the preferred moves, it is marked with a circle. The three preceding moves in the game record are shown with numbers.

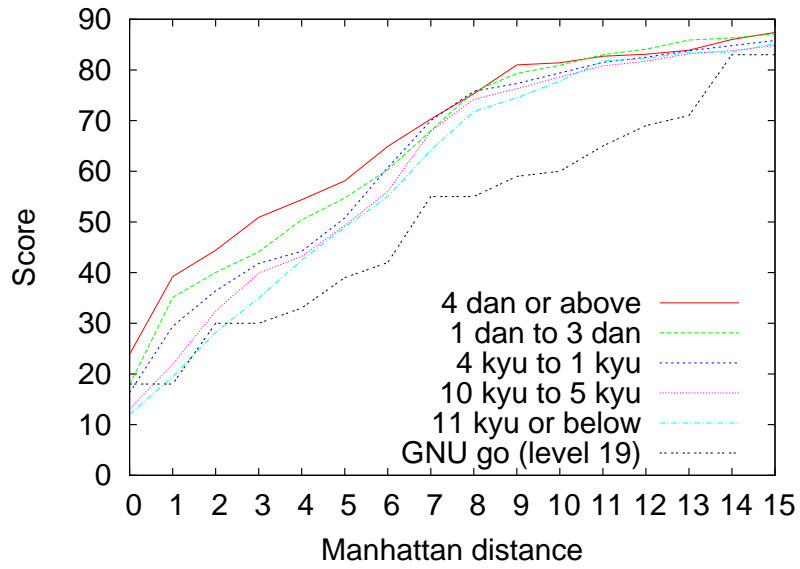


Figure 2: Average scores of the groups

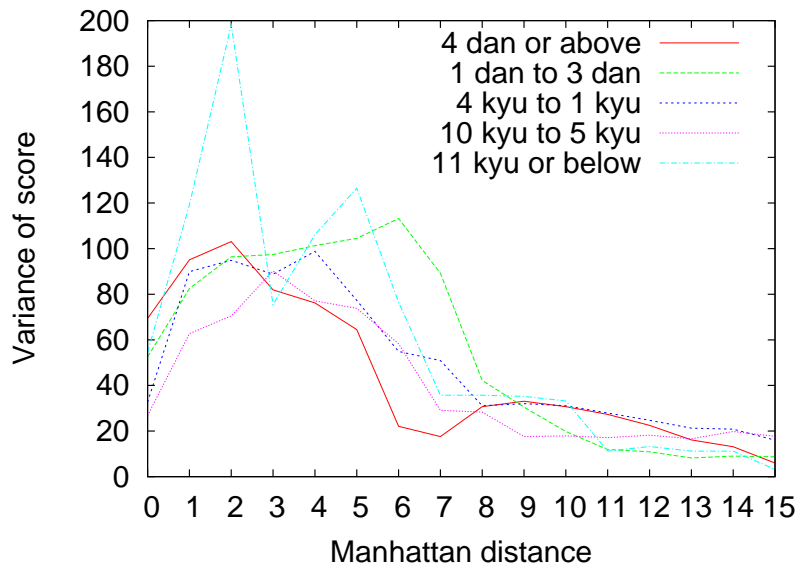


Figure 3: Groupwise variances of the scores

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	0	1	0	0	0
1 dan to 3 dan (15), B	1	0	2	2	0
4 kyu to 1 kyu (20), C	0	0	1	0	0
10 kyu to 5 kyu (13), D	0	0	1	0	1
11 kyu or below (4), E	0	0	0	0	0

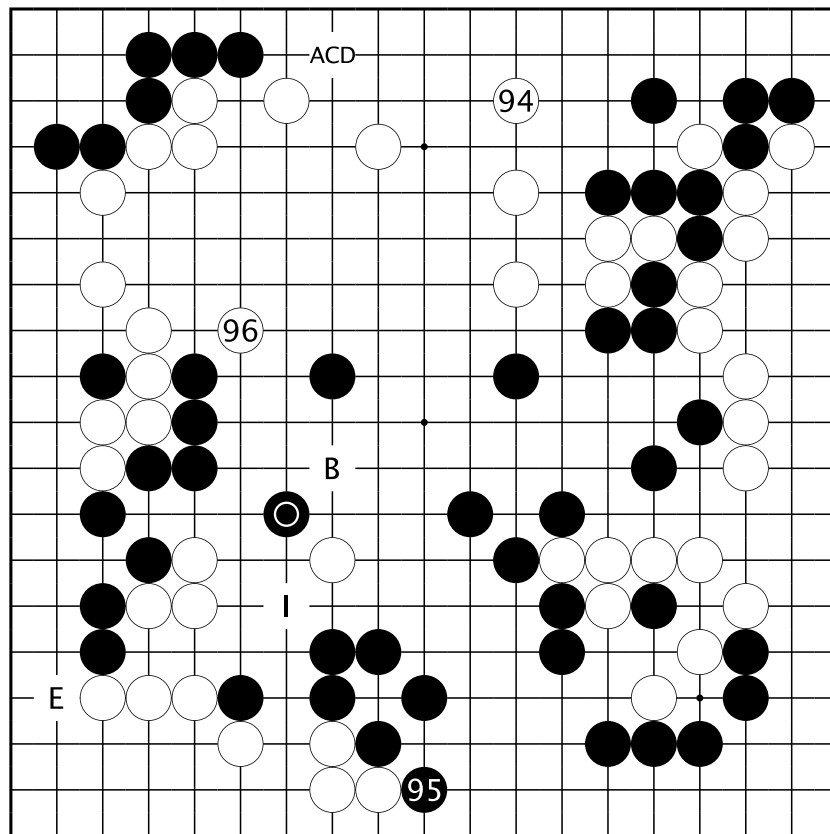


Figure 4: Game situation 1

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	2	2	0	4	0
1 dan to 3 dan (15), B	6	3	2	1	1
4 kyu to 1 kyu (20), C	5	7	1	2	1
10 kyu to 5 kyu (13), D	8	1	0	1	0
11 kyu or below (4), E	0	1	1	1	0

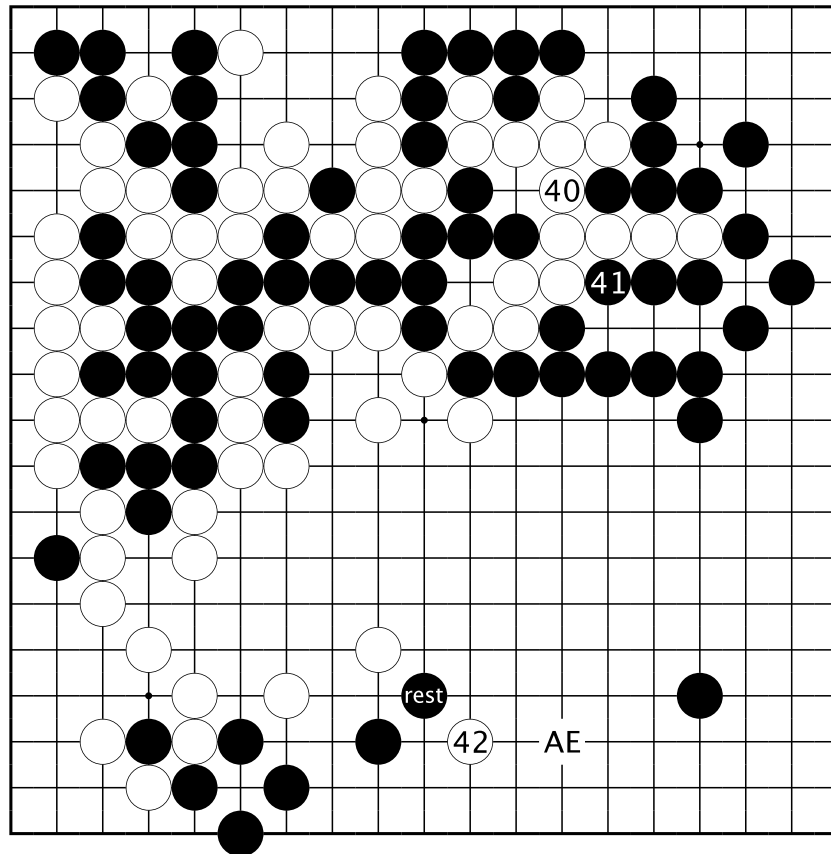


Figure 5: Game situation 2

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	0	0	0	1	1
1 dan to 3 dan (15), B	0	1	0	0	0
4 kyu to 1 kyu (20), C	1	1	1	1	0
10 kyu to 5 kyu (13), D	0	1	0	0	0
11 kyu or below (4), E	1	1	0	0	0

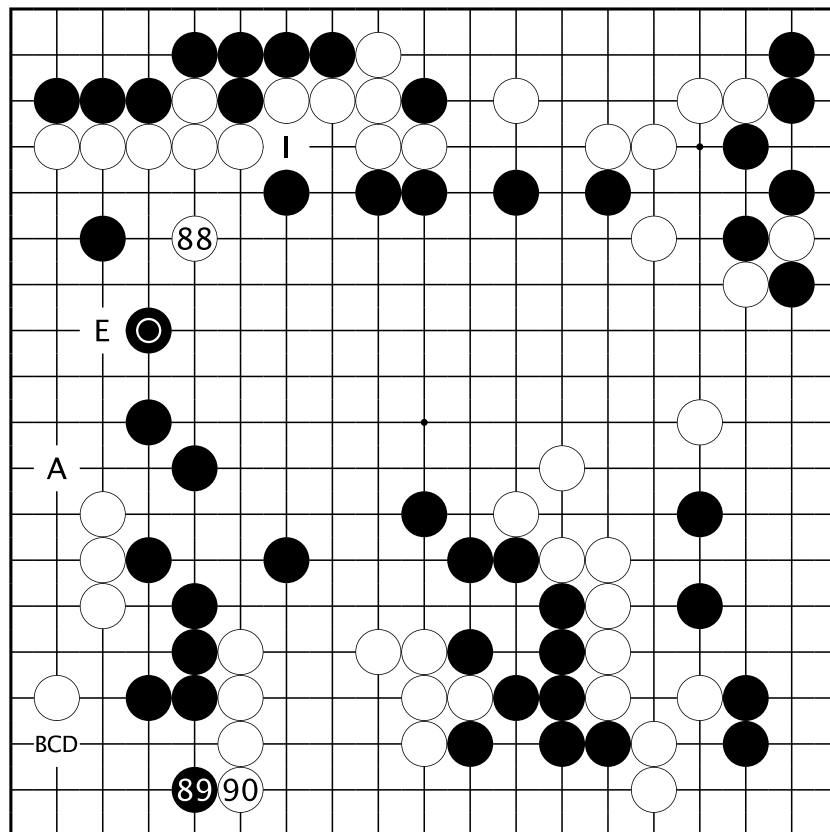


Figure 6: Game situation 3

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	1	0	0	0	0
1 dan to 3 dan (15), B	0	1	0	1	1
4 kyu to 1 kyu (20), C	0	0	0	0	2
10 kyu to 5 kyu (13), D	0	2	1	0	0
11 kyu or below (4), E	0	0	0	0	0

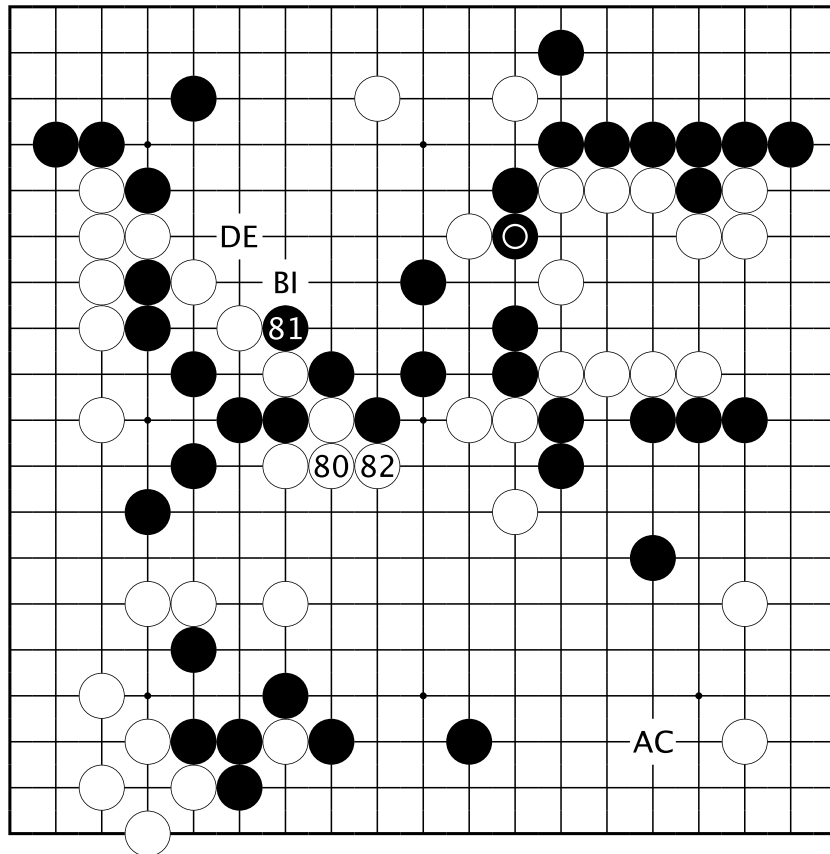


Figure 7: Game situation 4

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	0	0	2	0	0
1 dan to 3 dan (15), B	0	0	1	0	0
4 kyu to 1 kyu (20), C	0	1	0	0	0
10 kyu to 5 kyu (13), D	0	0	1	0	0
11 kyu or below (4), E	0	0	0	0	0

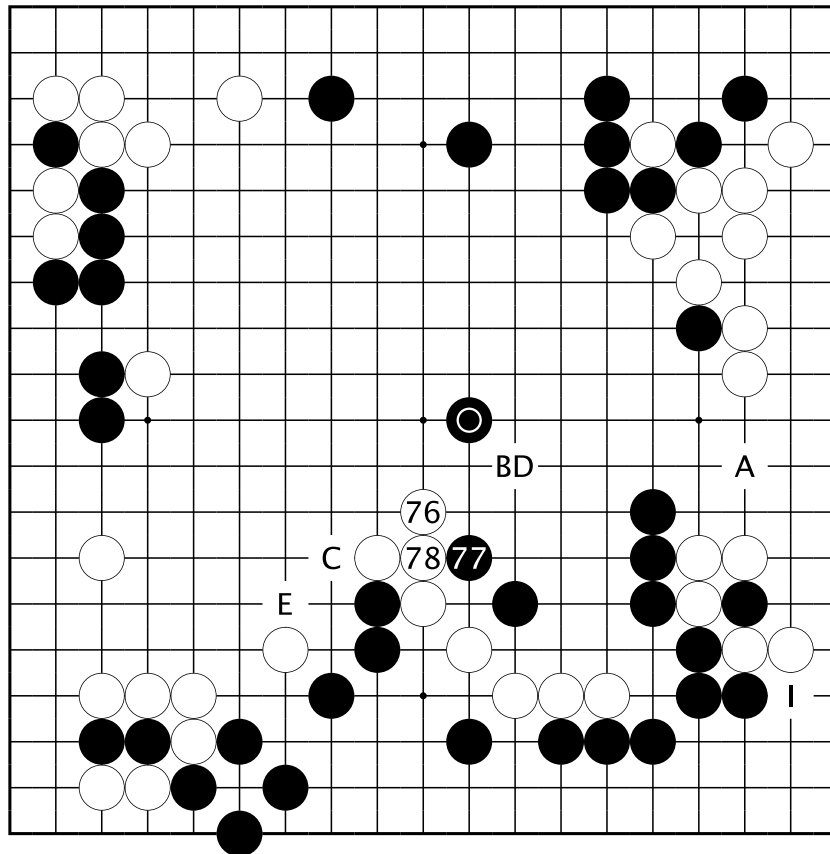


Figure 8: Game situation 5

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	2	1	1	0	0
1 dan to 3 dan (15), B	1	4	2	0	1
4 kyu to 1 kyu (20), C	4	3	2	0	0
10 kyu to 5 kyu (13), D	1	1	0	0	1
11 kyu or below (4), E	1	0	1	0	0

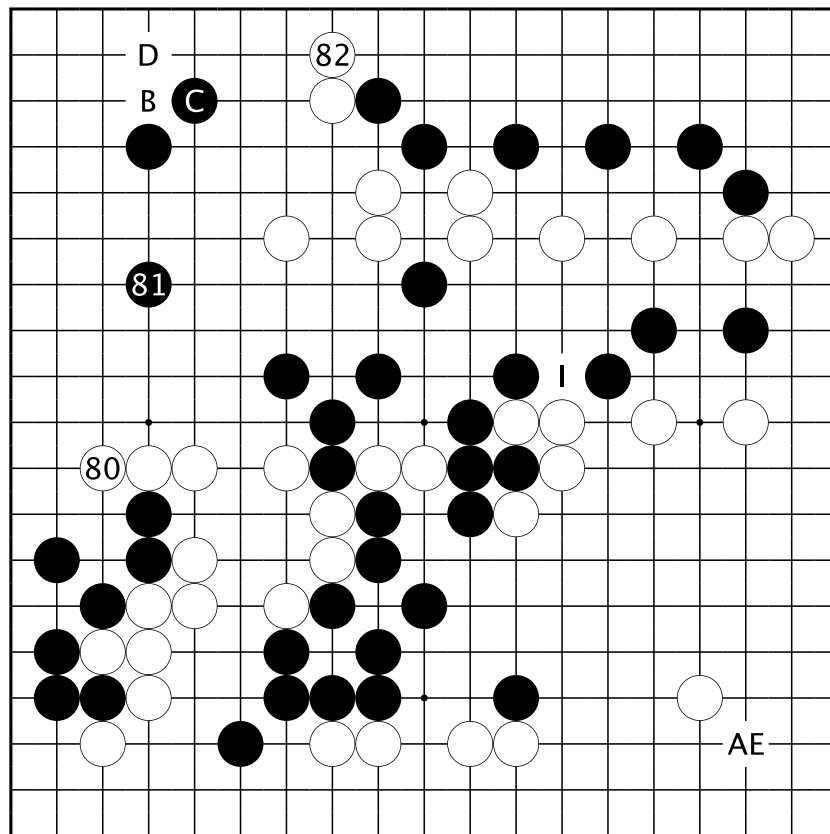


Figure 9: Game situation 6

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	7	2	0	0	0
1 dan to 3 dan (15), B	4	3	0	1	0
4 kyu to 1 kyu (20), C	2	2	5	4	0
10 kyu to 5 kyu (13), D	1	0	0	1	2
11 kyu or below (4), E	0	0	1	1	0

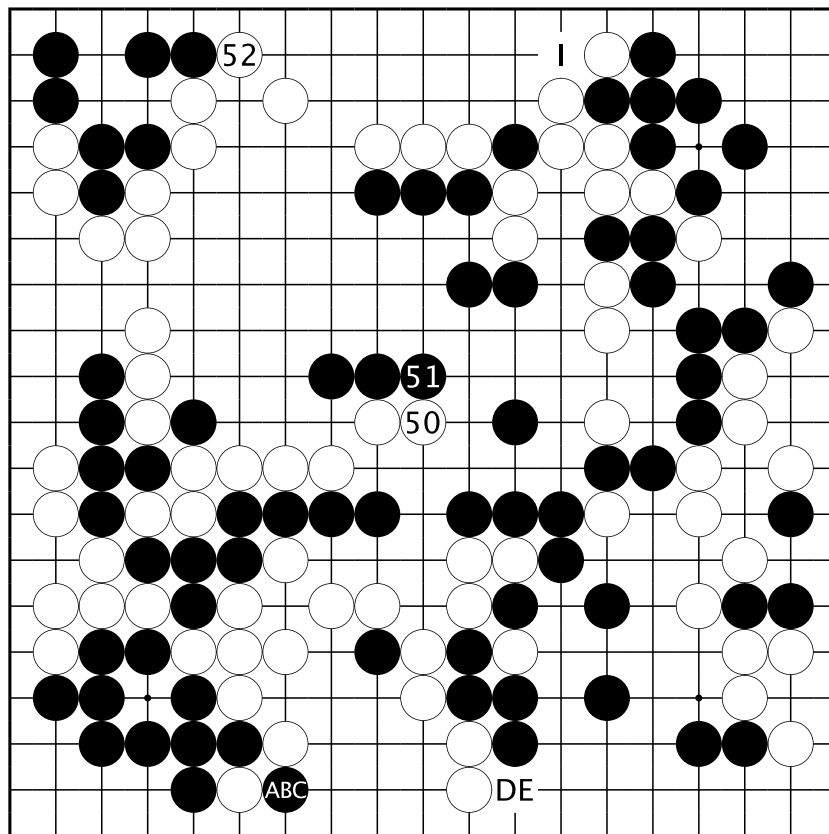


Figure 10: Game situation 7

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	0	2	0	0	0
1 dan to 3 dan (15), B	0	0	0	0	0
4 kyu to 1 kyu (20), C	0	2	3	3	1
10 kyu to 5 kyu (13), D	0	1	0	0	1
11 kyu or below (4), E	0	0	0	0	0

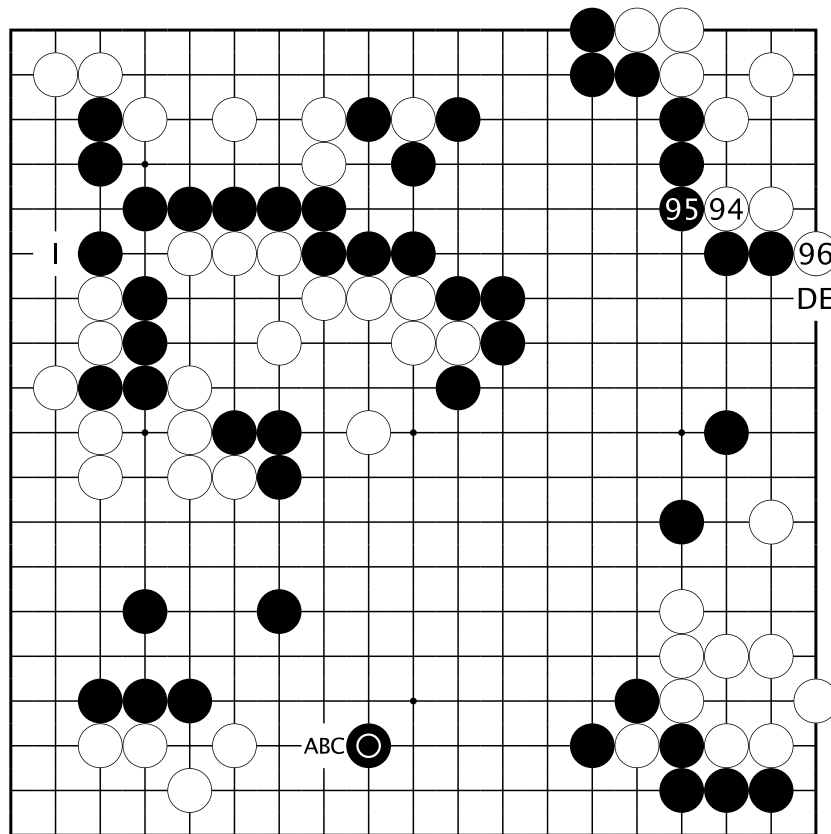


Figure 11: Game situation 8

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	0	0	2	1	1
1 dan to 3 dan (15), B	0	0	0	0	0
4 kyu to 1 kyu (20), C	0	0	1	1	2
10 kyu to 5 kyu (13), D	0	0	2	0	0
11 kyu or below (4), E	0	0	0	0	0

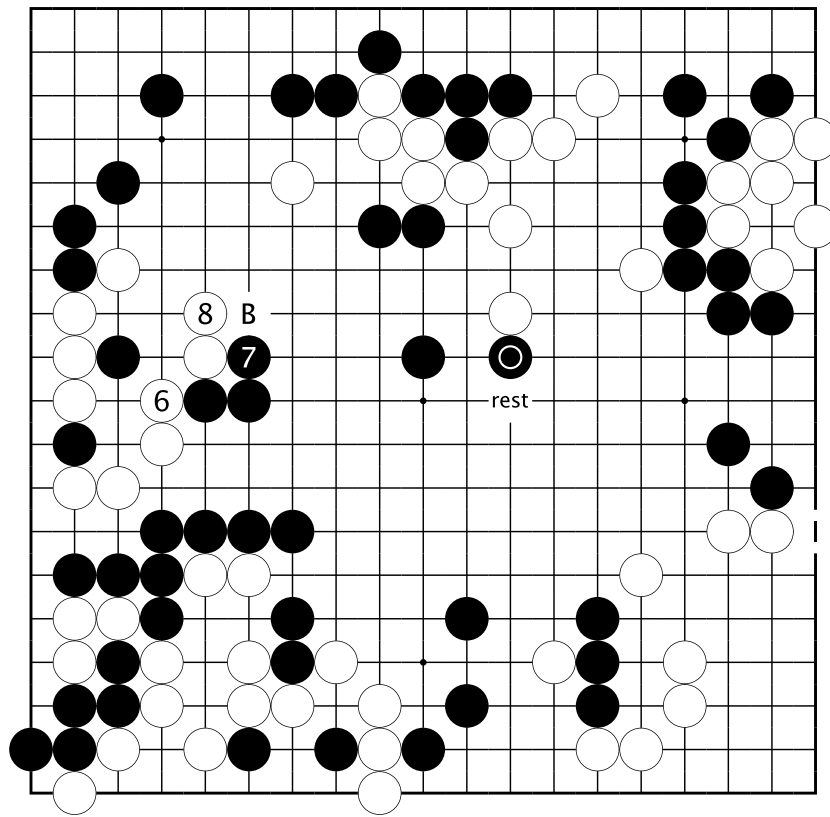


Figure 12: Game situation 9

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	1	3	0	0	0
1 dan to 3 dan (15), B	0	1	1	2	0
4 kyu to 1 kyu (20), C	4	0	0	2	0
10 kyu to 5 kyu (13), D	0	0	2	0	0
11 kyu or below (4), E	0	0	0	0	0

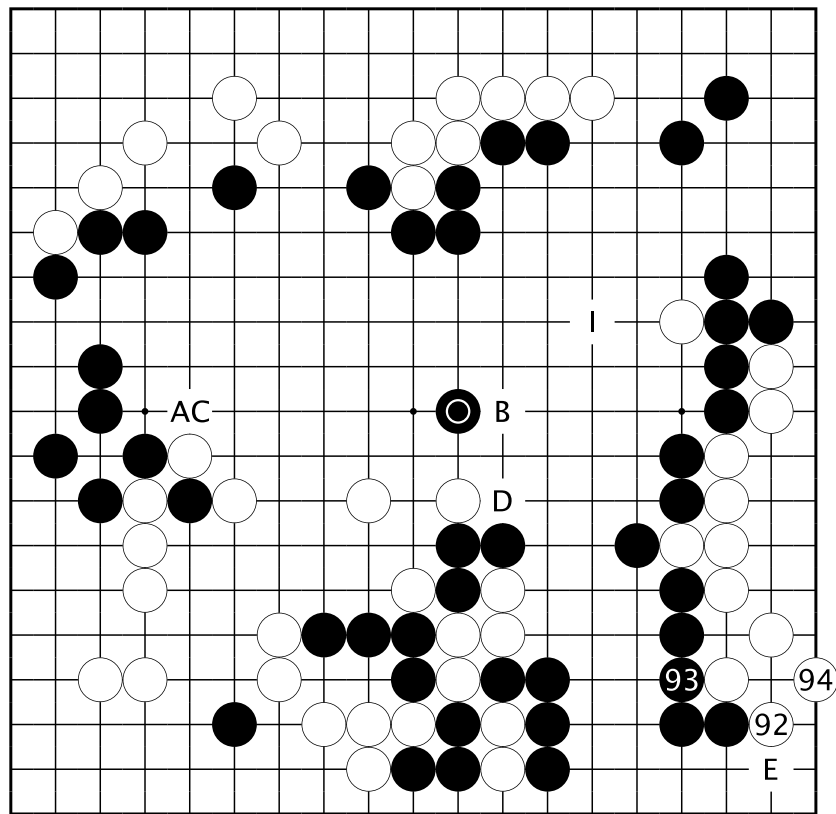


Figure 13: Game situation 10

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	5	1	2	0	0
1 dan to 3 dan (15), B	7	6	0	0	1
4 kyu to 1 kyu (20), C	7	3	1	4	2
10 kyu to 5 kyu (13), D	6	1	0	1	0
11 kyu or below (4), E	2	0	0	0	0

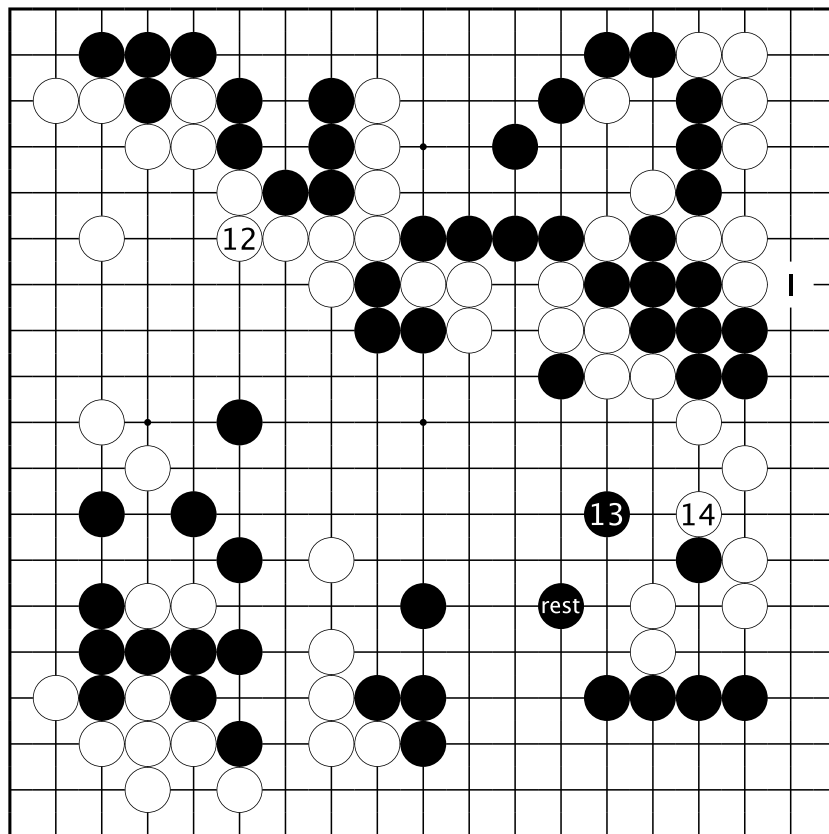


Figure 14: Game situation 11

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	0	1	0	0	0
1 dan to 3 dan (15), B	0	0	0	1	0
4 kyu to 1 kyu (20), C	0	1	0	0	0
10 kyu to 5 kyu (13), D	0	0	1	0	0
11 kyu or below (4), E	0	0	0	0	0

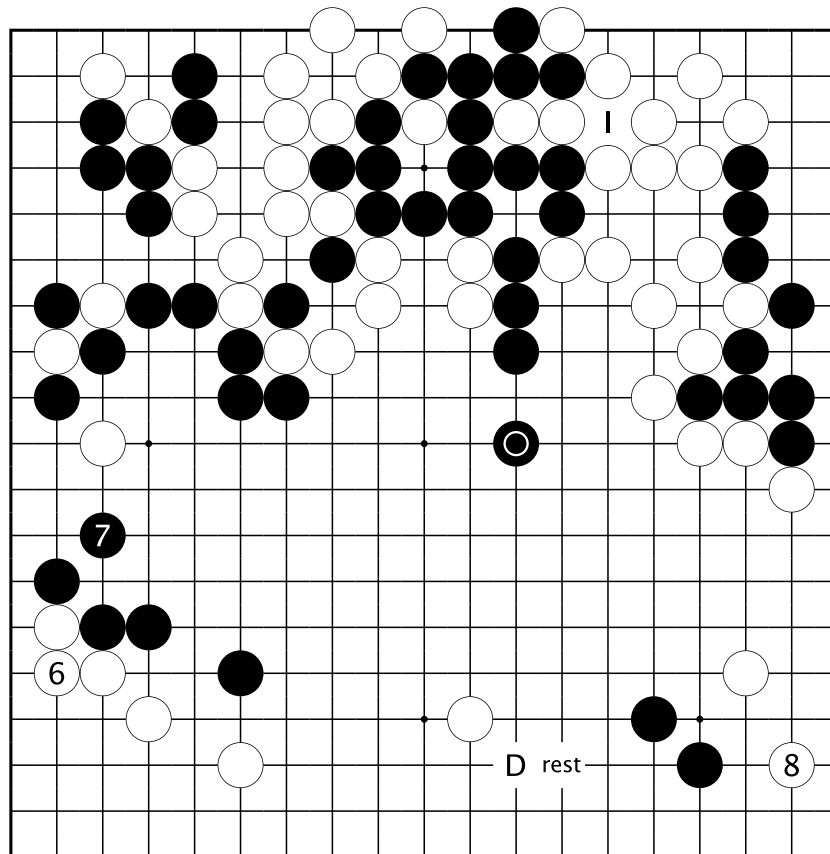


Figure 15: Game situation 12

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	0	0	0	0	0
1 dan to 3 dan (15), B	0	0	1	0	0
4 kyu to 1 kyu (20), C	0	0	0	0	0
10 kyu to 5 kyu (13), D	0	0	0	0	0
11 kyu or below (4), E	0	0	0	0	0

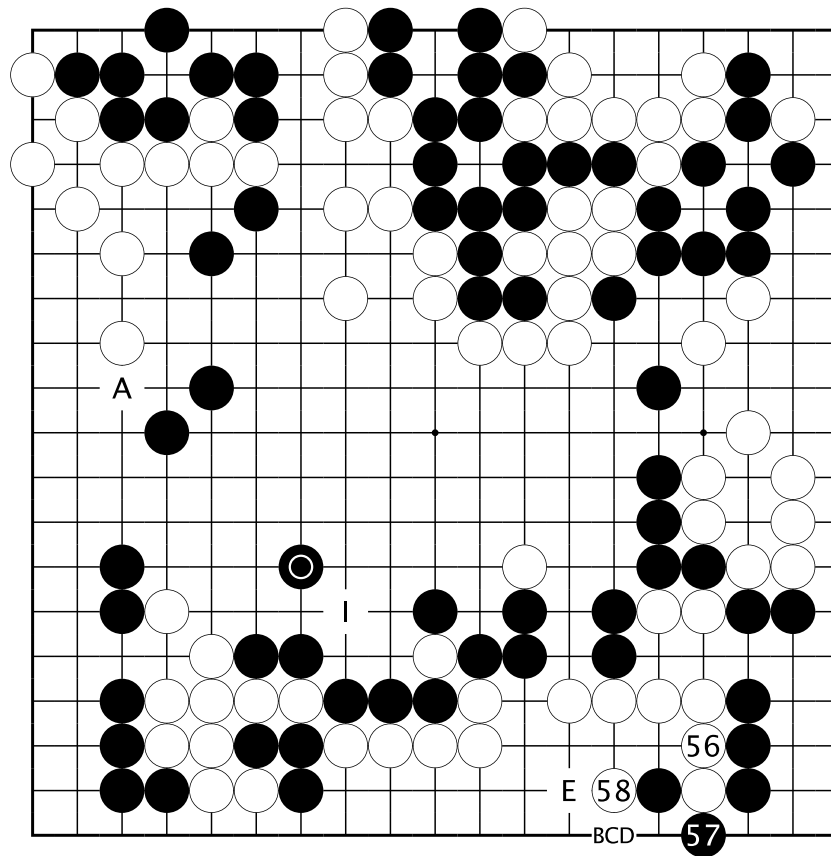


Figure 16: Game situation 13

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	1	1	0	0	0
1 dan to 3 dan (15), B	1	3	2	2	0
4 kyu to 1 kyu (20), C	0	1	2	1	0
10 kyu to 5 kyu (13), D	1	0	1	1	0
11 kyu or below (4), E	0	0	1	0	0

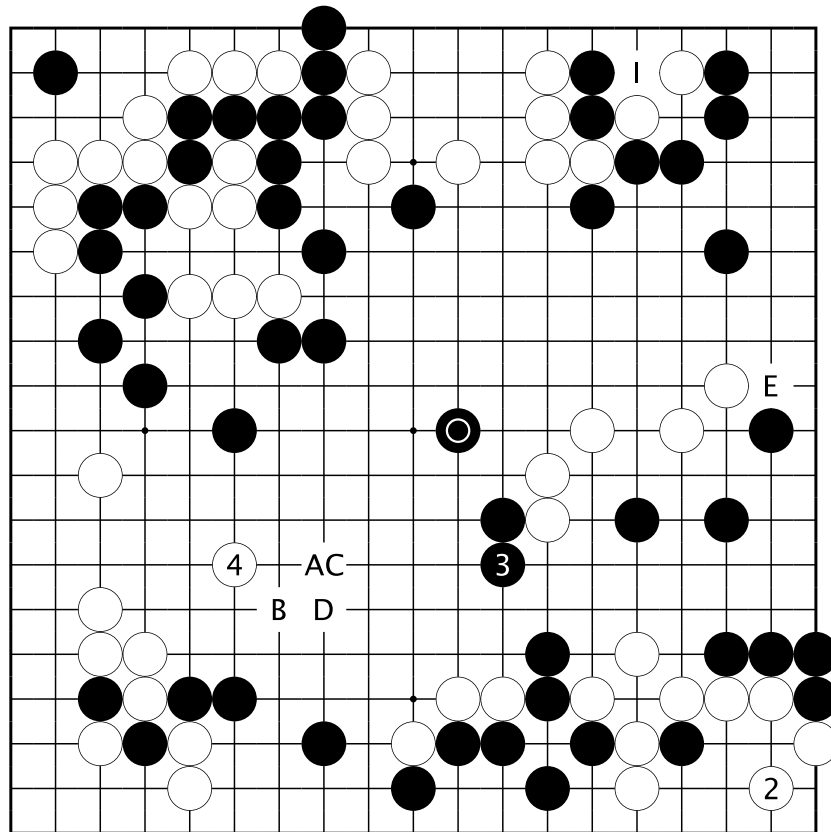


Figure 17: Game situation 14

Group	Correct prediction				
	1.	2.	3.	4.	5.
4 dan and above (9), A	1	1	0	0	0
1 dan to 3 dan (15), B	0	0	1	1	1
4 kyu to 1 kyu (20), C	0	1	1	1	0
10 kyu to 5 kyu (13), D	0	0	0	0	0
11 kyu or below (4), E	0	0	0	0	0

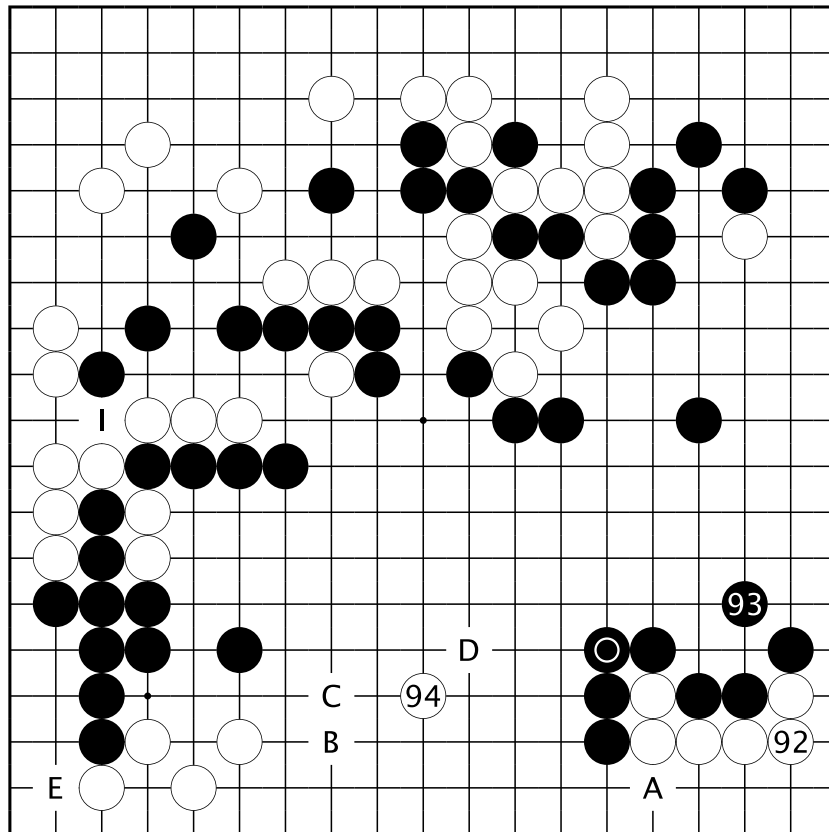


Figure 18: Game situation 15