

Fig. 1

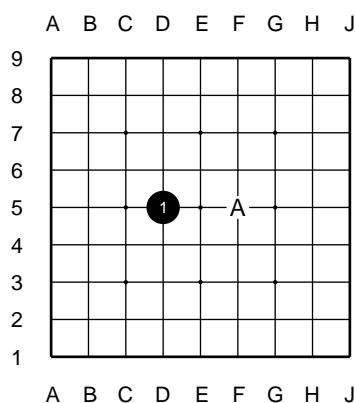


Fig. 1.1

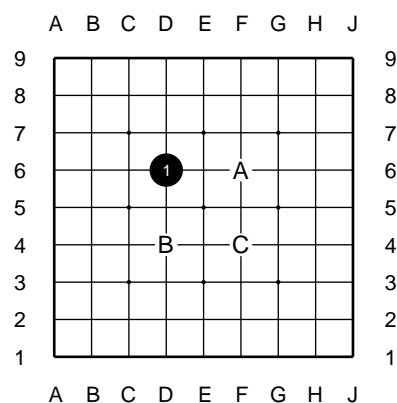


Fig. 1.2

Hypotheses:

1. Tengen (E5 in Fig. 1) is the best first move for Black, regardless of komi sizes. Black can attack White soonest. Tengen is the only best move if komi > 7, when Black needs to be very aggressive.

2. Takamoku (e.g., D5 in Fig. 1.1) is a bad first move for Black. White 2 can happily approach on A for a balance opening which favors White.

3. Hoshi (e.g., D6 in Fig. 1.2) is another bad opening. White can happily approach on A, B, or C to split the land equally.

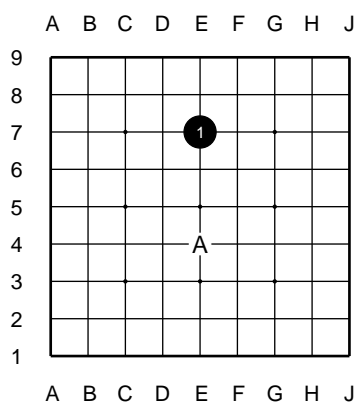


Fig. 1.3

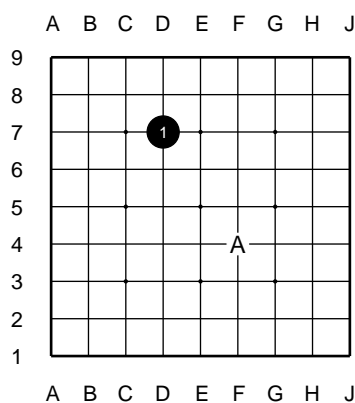


Fig. 1.4

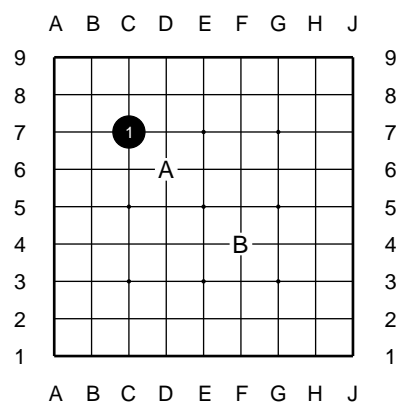


Fig. 1.5

4. Moku-hazushi (e.g., E7 in Fig. 1.3) is equally bad. White can control over the larger area in the bottom zone, by occupying on A.

5. Komoku (e.g., D7 in Fig. 1.4) is another bad opening. White can enjoy placing White 2 on A, to control the larger space in the right bottom corner.

6. Sansan (e.g., C7 in Fig. 1.5) is the worst opening of all moves above the second line. White can enjoy approaching on A or controlling the larger bottom zone by placing White 2 on B.

To measure the accuracy of these hypotheses, we observed Black's win rates after the first 10 moves best played in the verified superhuman's self-play games and in the verified superhuman vs Crazy Stone 5 Dan games .

Results will be given in the 9x9go repository.