Rin (2010)

Rin (as known as 环棋, **環棋**, **リング ゲーム**) is a two-player abstract strategy game played on a 16×16 grid with 256 intersection points.

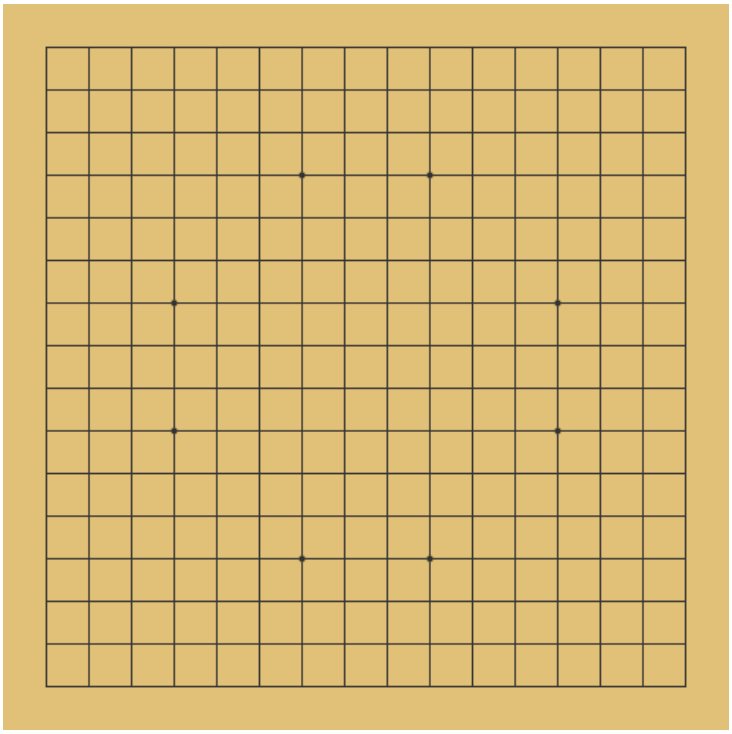

fig. 0 - A Rin board.

The two players are conventionally called *Black* and *White*; each player has an unlimited number of playing stones in his color.

Players take turns placing their own stones on the board and surrounding territory with *rings*. The object of the game is to have the most territory (and hence most stones) on the board when the board is full.

Black takes the first turn of the game. From then on, each player takes *two* turns in succession before the other player moves; hence, the turn order is B-W-W-B-B-W-W-B-B-..., etc.

Each turn consists of two steps:
1. The player puts one stone of his own color on any unoccupied intersection point.
2. The player fills in any ring that he has just made (explained below).

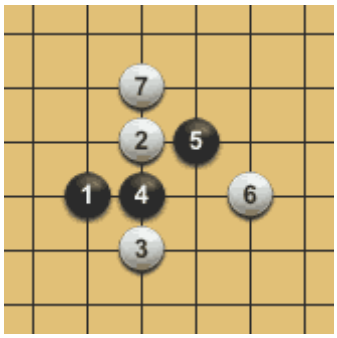

fig. 1 - An example of opening moves.

The set of 60 intersection points along the four edges of the board (including the four corners) is called the *safe zone*. A stone that can trace a path along grid lines to the safe zone, only going through empty intersection points or stones of its own color, is *alive*. Any stone in the safe zone or connected to the safe zone through just stones of its own color is not only alive, but *immune*; non-immune stones can potentially be captured by the opponent.

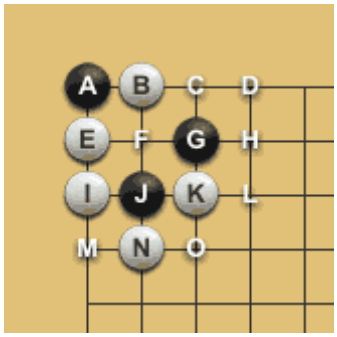

fig. 2 - An example of a corner situation where all stones are alive.
A, B, E, I are all situated in the safe zone (and therefore immune) while G, J, K, N can reach the safe zone via G-C, J-F-G-C, K-L-H-D/K-O-N-M, and N-M, respectively.

A player makes a *ring* when he creates a group of stones that surround at least one vacant point or an enemy stone, in such a way so that any enemy stones in the ring are no longer alive. All enclosed enemy stones, if any, are immediately killed and removed from the board; then all points inside the ring are immediately filled by stones of the same color as the ring.

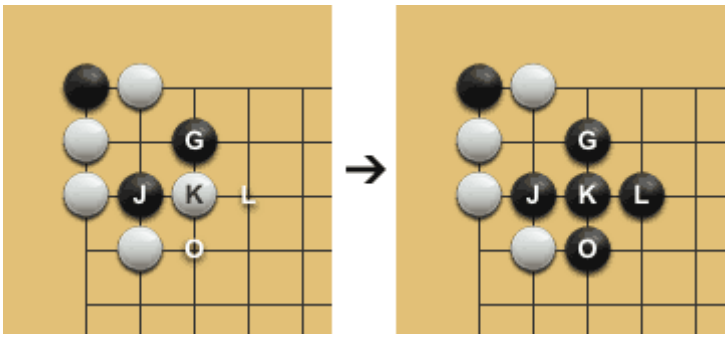

fig. 3 - An example of a black ring.

In the previous example, if it's Black's turn to play, Black can place two stones at L and O to form a ring G-J-O-L that surrounds the white stone at K, which is immediately killed and replaced by a black stone.

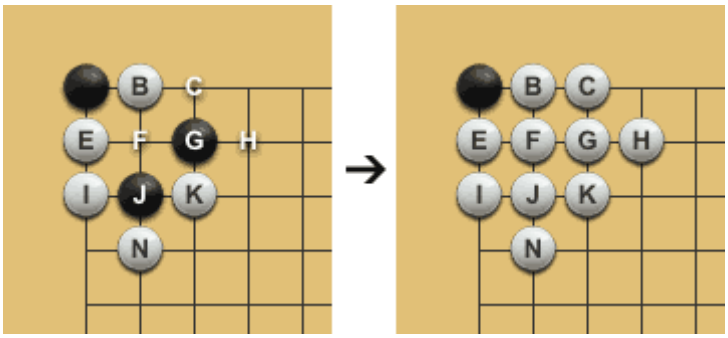

fig. 4 - An example of a white ring.

In the same example, if it's White's turn to play, White can place two stones at C and H to form a large ring, B-C-H-K-N-I-E, that fully encloses the vacant point F plus two black stones at G and J, all of which are immediately taken by White.

The game ends when the entire board is filled. At that point, the winner is the player who has the most stones on the board. A Rin game may also end in a draw if each player controls 128 points.

Additional notes

- Point coordinates consist of a row number (increasing from top to bottom) and a column number (increasing from left to right), both zero-based. The top left corner is therefore (0, 0).
- Eight points with strategic implications are marked with a small dot on the board: (3, 6), (3, 9), (6, 12), (9, 12), (12, 9), (12, 6), (9, 3), (6, 3). Markers do not affect the gameplay.
- Passing is not allowed (and not useful anyway).
- Rin was designed by Zhen Wang in 2010.