

Strategy in Bao

-- notation and the house

by Alex de Voogt

(See AG4 for rules.)

In a Bao move a player chooses a particular starting hole and often, a playing direction. The choice of playing direction may mean either that seeds are picked up from the player's own hole and sown *toward* the left (L) or right (R), or captured from one of the the opponent's four central holes and sown *from* the left or right *kichwa*, the hole at the end of the row. With one exception, a move related to the house, or *nyumba*, knowledge of the starting hole and, if necessary, direction is sufficient for communicating a Bao move. (Although the term '*nyumba*' was used in the last article, we will use it interchangeably with the English equivalent 'house.') The notation system for the holes is shown below. The two houses are A5 and a5.

		87654321		
	b	00000000	b	
Right	a	02260000	a	Left
Left	A	00006220	A	Right
	В	00000000	В	
		12345678		

This system of recording moves has certain redundancies, which may be eliminated for reasons of brevity or included for clarity:

- 1. If a capture is made from a *kichwa* (A1, A8, a1, a8) or *kimbi* (A2, A7, a2, a7), the direction of sowing is fixed, and the left or right designation is redundant and may be omitted.
- 2. The letters A/a do not have to be mentioned in the first 22 moves since playing from the back row is not an option.
- It is not necessary to mention a forced move, i.e. a move where there is only one obligatory capture possible from only one direction. Eliminating this redundancy, however, adds little to the brevity of the notation, while reducing its clarity.
- 4. In many cases it is advisable to identify *takasa* and *takasia* moves by (*tak*) and (*takasia*), respectively. (The former is discussed in this article, the latter will be the subject of a future article.) This helps the interested reader replay the game and double-check the correctness of the moves.

In the previous article a short summary of the Bao rules was given. The rules may appear complex because of their interaction. In other words, in each move a series of rules is applied, often according to a hierarchy. The following example shows the workings of a complex capturing move in the initial stages of the game, the so-called *namua* stage, when seeds are being entered from the stock. It leads to a win, in which the front row of the opponent is completely cleared. The whole complex move would be designated just by A6R according to our notation system.

One seed is added to A6, and the two seeds from a3 opposite A6 are then captured and sown from the right into row A, reaching A7. Three seeds from a 2 opposite A7 are captured and also sown from the right into row A, reaching A6. There are no seeds opposite A6, so the four seeds of A6 continue to A2, capturing the two seeds opposite A2, but this time (obligatorily) sowing into row A from the left side, reaching A2 again. Since there are now no seeds opposite A2, the three seeds in A2 continue, reaching A5, and capturing three seeds from a4. These are again sown from the left into row A, as the direction has now been fixed, reaching A3. The three seeds from a6 are captured and sown into row A from the left, and then the five seeds in A3 are picked up and sown to A8. One seed is captured from a1, but this time (obligatorily) it is entered from the right and sown into A8. Since a 1 is now empty, the four seeds in A8 are sown, reaching A4. The two seeds from a5 are captured and sown, again from the right, reaching A7. There are no seeds opposite, so the six seeds in A7 are sown, reaching A1. The one seed in a8 is captured and (obligatorily) sown from the left into A1. The five seeds from A1 are sown, reaching A6, and the four seeds in A6 continue to B7, finishing the turn. Meanwhile all the seeds from the opposite front row have been captured, and the game is over. The final position is as follows:

 $\begin{array}{c} 00000000 \\ \underline{00000000} \\ 04266012 \\ 00000011 \end{array}$

The house (nyumba)

The rules for the house reveal some of its special attributes that in many cases will dominate the strategies in the *namua*.

The house can be defined as the fourth hole from the right on the A/a row, unless a) it contains, at any moment, less than 6 seeds, or b) there is no stock left.

A house, therefore, only exists in the first part of the game. [This supercedes the rule implied in AG4 that the house could exist throughout the game. -- Ed.] The rules of Bao allow for the house to be preserved in certain circumstances when we cannot capture. The reason for this complexity is that the house is central to the capturing strategies at the start of the game. Keeping the house from being captured and using the house to make multiple captures are important skills in Bao. The rules that preserve the house when no captures are possible are welcomed by experienced players.

Let us examine the rules for the house in the situation where no captures are possible. A move made when a capture is not possible is called a *takasa* move. In the first part of the game a seed is taken from the stock and placed in an occupied hole in one's

inner row. This seed is not allowed to be played in the house. If there is still a house, holes with one or more seeds may be chosen; if the house is gone – captured or played – only holes with two or more seeds may be chosen, unless there is no other option and only holes with one seed remain in the front row. [This supercedes the rule implied in AG4 that a seed could be placed in a hole with only one seed even when a capture is not possible. -- Ed.] Even though this first seed from the stock may not enter the house, a subsequent sowing of seeds may indirectly reach the house, after which the move should continue by sowing the seeds of the house. Instead of emptying the house in this indirect way or disallowing the move, the Bao rules state that such a move stops at the house if it reaches the house with the last seed.

In general, we can state that a *takasa* move of the house is not allowed. In one situation we may have no choice. If the front row has no occupied holes except the house, then how should we make a *takasa* move? There are a few solutions we could think of, such as playing the back row, skipping a turn, or actually emptying the house. In Bao the solution is found in the other exception mentioned, that of the hole with the single seed that can be played only if the house is in place. If the house is on its own, a *takasa* move consists of placing one seed in the house and removing two seeds and sowing them in the chosen direction: the house is therefore played as if it were a singleton.

Observe the following situation in which the two possible moves by (A) will result in another *takasa* move for (A). If (A) plays a seed into the house, and then sows the two seeds to the right, A5R, then (a) will play a2; if, on the other hand, (A) plays A5L, then (a) will play a5R. The reader should verify this for himself.

00000000 11190111 00009000 00000011

The definition above said that a house stops being a house with less than the six starting counters in place. In a situation where the house is forced to be played in this way as though it contained a single counter, the house may end up with five counters. It can still count as a house unless the next move is again a *takasa* move, at which time it is emptied as if it were any other hole. It is no surprise that some variations to this rule exist. In some areas the house reduced to five seeds is no longer a house even if the next move is not a *takasa* move.

Finally, the situation in which we can capture also has an exception for the house, and again this rule of exception preserves the house. Whenever the house is reached after a capture, the move should continue with the seeds of the house if the hole opposite is empty. In Bao one is allowed to choose: one may continue by sowing the seeds of the house and perhaps make many captures, or one may end the move by leaving the last seed of the move in the house, thereby allowing the house to grow. This extra choice in the game of Bao needs to be accounted for in the notation system, and since the house can only be emptied once, the choice of emptying it should be indicated rather than the choice of preserving it. Therefore, a5R> would mean a capture which started at the house, and reached the house again, after which it was emptied.

The superb artwork at the top right was produced by Daniel Bauer. It shows a black cardinal and a white marshal. In future, stylized representations of these pieces will be used in our diagrams rather than the sideways bishops and rooks used previously. -- Ed.

The Grand Chess Corner

(See AG3 for rules.)

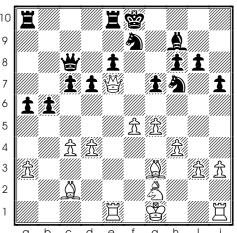
by Tony Gardner



As of this submission, the Schmittberger-Vehre 1999 World Cyberspace Championship playoff is still underway. The first game, lacking flair, ended in a draw; a second game, hopefully more vibrant, is now in progress. Here are two NOST battles: Graham Allen-Larry Waite (1998-2000) 1.d5 g7, 2.e5 f6, 3.e6 Nh7, 4.Nc4 b7, 5.g4 Ba7, 6.Mh1 d7, 7.exd7 exd7, 8.Kf1 Rje10, 9.Bg1 Kf10, 10.Cf4 Bc9, 11.Bb6+ Kg10, 12.Kg2 a7, 13.Ba5 b6, 14.Bb4 e7, 15.Bxh7 Cxh7, 16.Cxj8 Cxj8, 17.Qxj8 Nc7, 18.d6 Na6, 19.dxe7 Nxb4, 20.axb4 Bxe7, 21.Nh4 Qb7, 22.Nf5 Bh10, 23.Qd2 Ra9, 24.Rae1 Rae9, 25.Mf2 g6, 26.Nh4 Mg7, 27.Rxe9 Rxe9, 28.Qh6 Bg9, 29.Nxg6 Mg8, 30.Qh5 Me8, 31.Qj5 b5, 32.Nd2 Me3+, 33.Kg3 Qb8+, 34.Kh4 Bf7, 35.Ni5 Qf4, 36.Ng6 Bxg6, 37.i4 Qg5+, 38.Qxg5 fxg5+, 39.Kxg5 Be7+, and WHITE RESIGNS in view of 40.Kxg6 Me5+, 41.Kh6 Bh4, and either 40.Kf4 or 40.Kh6 can be answered by 40....Bh4.

Larry has quickly taught me the hard way the true value of the cardinal. In the following game I sacrificed mine for a knight in order to retain a pawn advantage and perhaps win another pawn. That did not succeed, but I did manage to procure a dangerous passed-pawn on the b-file. However, Larry finished with a nice combination which not only bagged my queen but threatened checkmate in all ensuing lines!

Larry Waite-Tony Gardner (1999-2000) 1.f5 Nh7, 2.e5 d7, 3.Rae1 Bg5, 4.Qd1 f6, 5.h4 Bi7, 6.Nc4 fxe5, 7.g5 Cc5, 8.d4 exd4, 9.cxd4 Ca6, 10.Kf1 c7, 11.Ng3 j7, 12.Kg1 Cxc4, 13.bxc4 Qa6, 14.Qe2 Nd10, 15.Me4 Re10, 16.Nh5 Bj8, 17.Mc5 Qc8, 18.Nf4 Bh10, 19.Mb3 Kf10, 20.Ng6 g7, 21.Bg3 b6, 22.Me3 a6, 23.Ne7 Bxe7, 24.Mxe7 Mxe7, 25.Qxe7 Nf9 (diagram)



Position after 25....Nf9

26.Qe2 c6, 27.Kh2 b5, 28.c5 a5, 29.Rb1 b4, 30.a4 Rab10, 31.Bb3 Bxb3, 32.Rxb3 e6, 33.Qc4 Kg10, 34.fxe6 dxe6, 35.Bd6 Ne7, 36.Bxe7 Rxe7, 37.Ce4 Rf10, 38.Rf1 Rxf1, 39.Qxf1 Rd7, 40.Cc2 e5, 41.Rf3 Qc7, 42.Kh1 Rxd4, 43.Cg6 Qd8, 44.Rf10+ Qxf10, 45.Ce8+, BLACK RESIGNS. ■