

























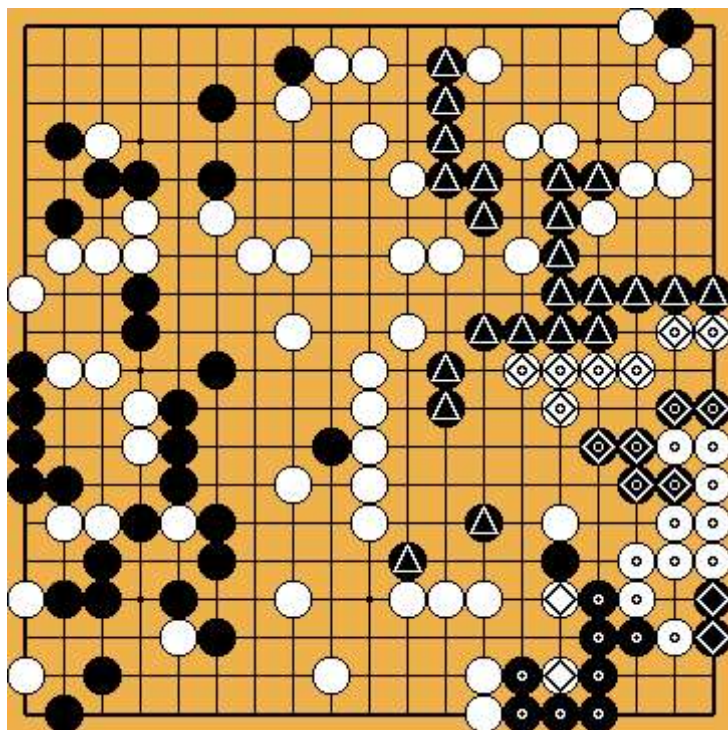
A Summary of Our Solution

We wrote this synopsis primarily to give an outline of our solution ( 39), but also to highlight some of the problem's main features and interdependencies, in an attempt to clarify the structure. Although the style may be unfamiliar, we hope that it will be helpful, for reference purposes. You will find a further overview that highlights technical details in more depth in the chapters "Technical Notes". We have also written a more historical outline ( 775).

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In the Very Beginning (Dia 0)

(Referenced by  35)



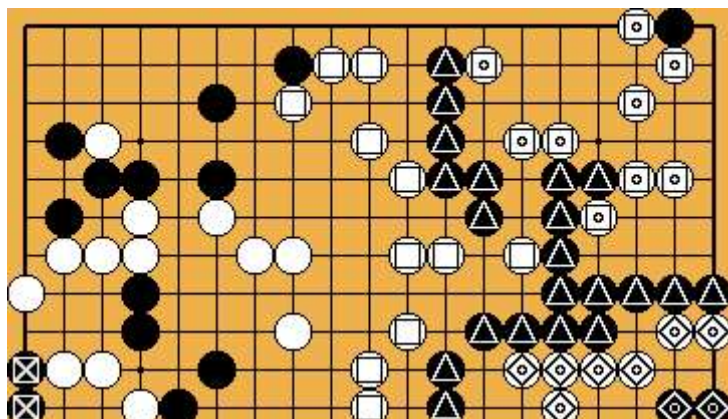
In Dia 0, at the very beginning, / are all weak. The other groups can live. can get two eyes, but then must let live at lower right, and will probably die. If all major groups live, is most likely to win with more territory.




The Birth of the Hanezeki (Dia 1)

primarily threatens the life of / , and only secondarily threatens to connect , and . tries to connect , and . If succeeds, then dies. If dies, and does not kill a big group, then loses.

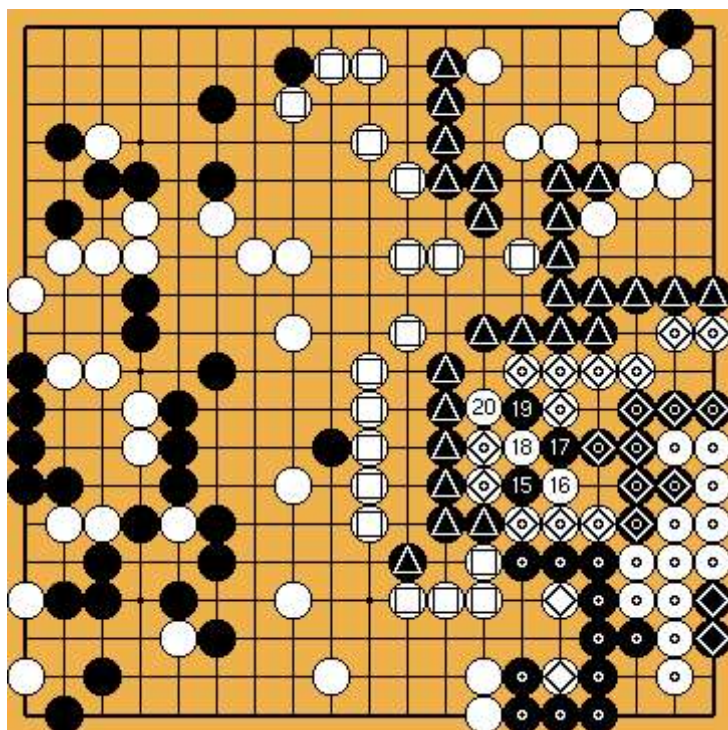
If we look ahead to Dia 6 (24): there will be a liberty race between / , with / / / / / , and temporarily caught in between!







 is stable, and not involved in the fighting below.









Some Unexpected Sacrifice (Dia 2)





(Referenced by  30)

Neither player succeeds, and  gets cut off, as do  (forming a simple seki).

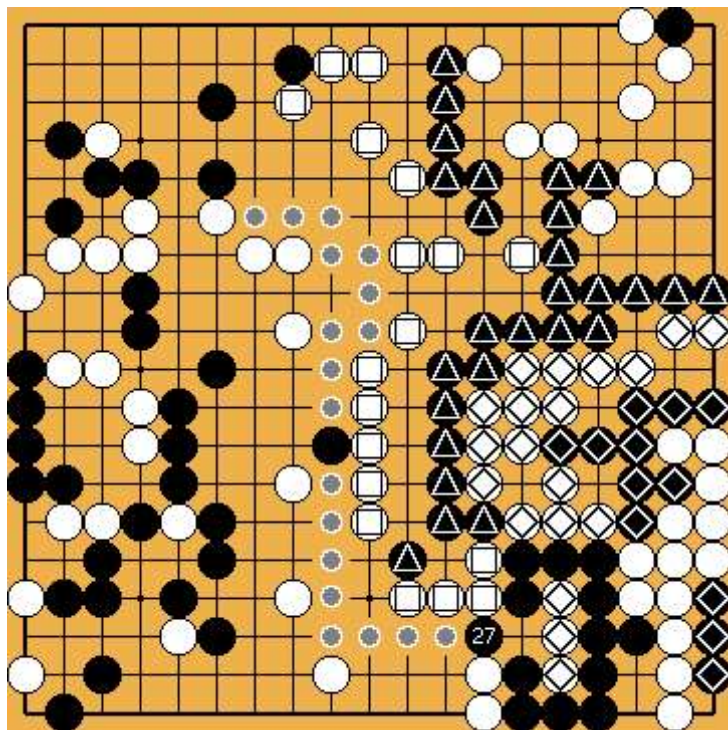
 now plays some kikashi, spoiling 's shape, which will make life easier for him in a far future.

 still does not try to build two eyes for  , with  at **18**, instead. The territorial balance is still in 's favour overall.

 **19** (which we call the "second throw-in";  914) is a surprising sacrifice that was assumed for decades to be harmful for the solution or at least would lose points unnecessarily.



The Birth of the Hanezeki's Tail (Dia 3)



Neither , , nor , can live independently; cannot link out to the left. By Dia 3, , , / form what is almost a hanezeki (a strange seki, where both players **can** capture, but normally neither **wants** to; 1111)! Only the tail is still missing - it starts with .

The dotted path through 's potential territory in the centre will become a one-way street.

Both , and , will be either captured together (the regular case), or they will live together (the exceptional case). Due to their closely tied co-existence, we will further neither mark, nor mention, them.

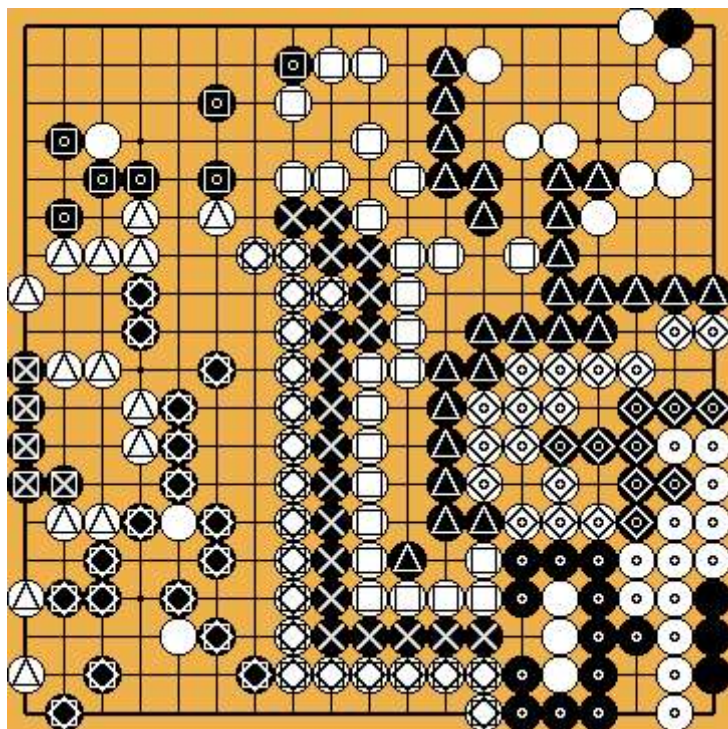
The groups in the hanezeki will remain untouched for a long period of time; we will not mark them temporarily from here on, until they get into focus again.








Calm Before the Storm (Dia 4)

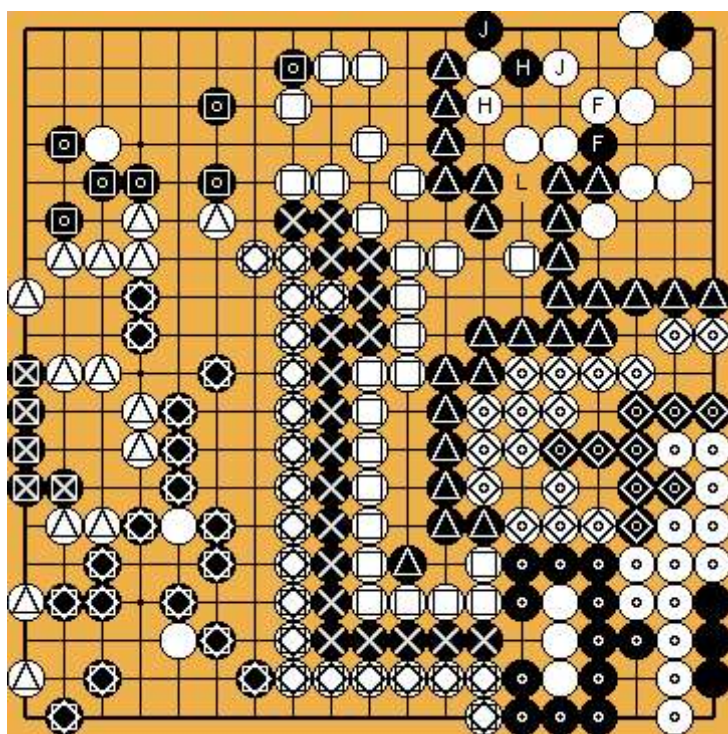
The hanezeki's tail, , wanted to escape, but could not, and kept growing bigger.







wanted to stop the growth of the hanezeki's tail, , which destroys her potential territory in the centre, but could not. Else would lose her stones in the lower right corner, and so the game.











On the other hand, the larger  becomes, the better for , should she ever get the chance to capture .

At the end of Dia 4, , and  cannot connect.



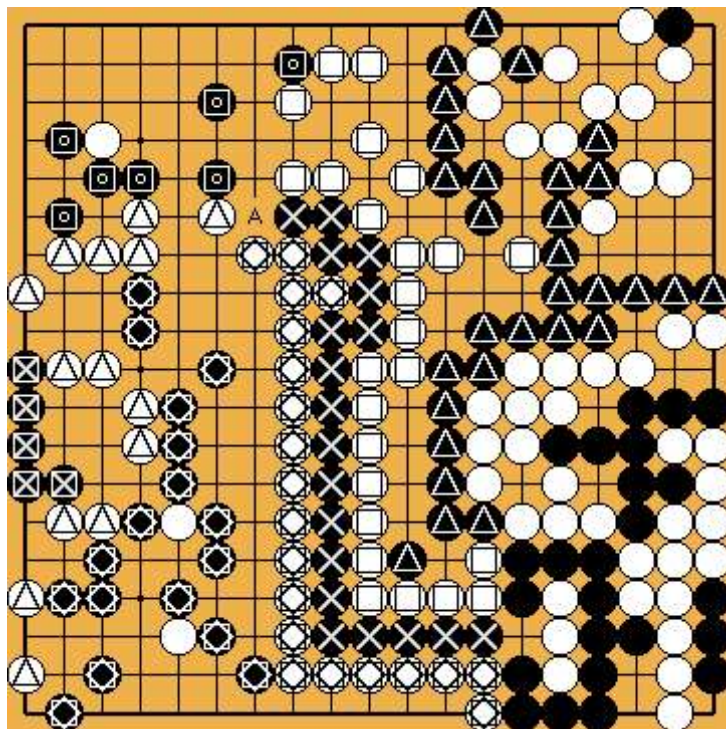
Before carrying on with the main business,  takes the chance to play some **forcing moves** ( /  / ;  790), at **no cost to himself**, but reducing 's potential territory in the top right corner, for the time being.

Now, after her large territorial loss in the centre,  cannot allow  to simply get two eyes in the upper right corner any longer. In the meantime, the territorial balance has shifted in 's favour.

Michael Redmond 9p kindly drew our attention to the kikashi  in the bamboo joint ( 838), which "naturally" gains an additional liberty for . However,  has to recognize that only one additional liberty does not really help  with the semeai, so he waived this move.



The Problem's Real Problem (Dia 5)



We now have reached the very critical moment of the problem, which confronts us with the real challenge that is hidden in Igo Hatsuyōron 120:

● to play and win.

● has three main options now.

(I) He can immediately bump the tail's head against **○**'s stones on the left side, with a move at **A** - following the classical line of play - ...

(Ia) ... to attack the **△**-group on the left side, or ...

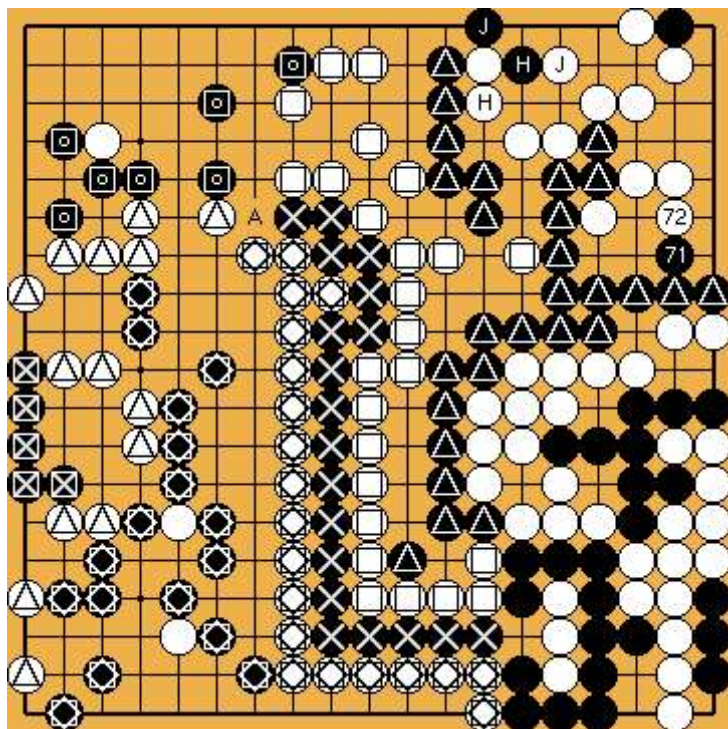
(Ib) ... to attack the **□**-group on the upper side, ...

... aiming at forcing **○** to capture **⊗**, so saving **△**.

However, by following option (Ia) - the classical line of play again - **●** will be taken by surprise over 60 moves later, and lose the game by a small margin.

Black also cannot hope on a semeai against **○**'s group on top - option (Ib) leads to a very complicated ko-fight that ends with a **○** win.

(II) After a long search, **●** found the very calm, and contained, move of **71** (the **guzumi**; **893**), which further destroys **○**'s potential territory in the corner and re-opens the path to success.



After 71, 72 has to make a big decision. 72 has the option to play tenuki at top right, and let 71 live, while hoping that she can get sufficient compensation by attacking 72, 73, and parts of 74, on the left side. However, after much analysis (432), 72 sees that this option does not provide a better result for her than 72, and so she has to play 72, which stops 71 from getting two eyes.

It is 71, and the previously played forcing moves H / J (790), which are the main reason that our solution looks different to the **Solution of Fujisawa Hideyuki 9p** (754). Please refer to the end of this tour (30) to see, why Fujisawa's Solution does not work any more.



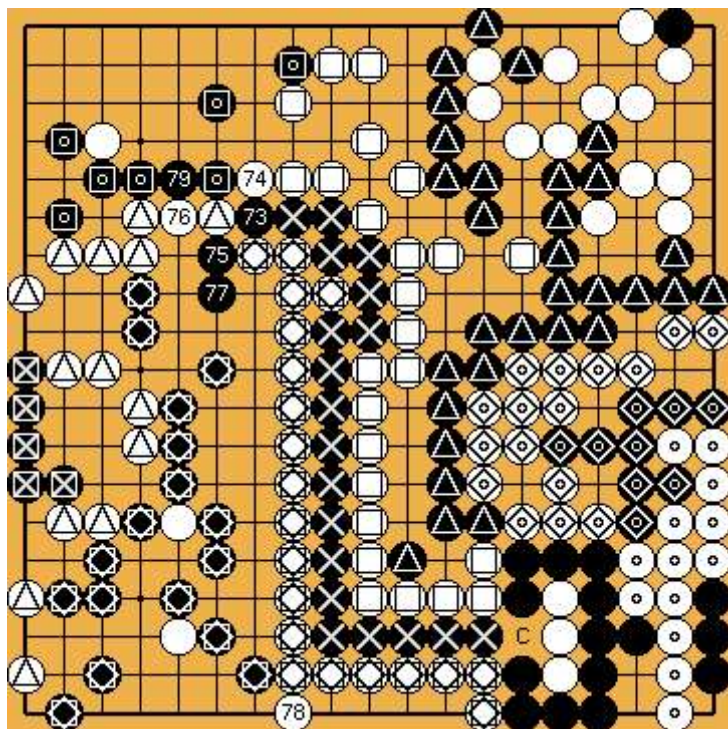
The Crosscut in the Top Left Centre (Dia 6)

(Referenced by 20)

After the short, but decisive, intermezzo in the upper right corner, 71 returns to the classical line again, with playing the Crosscut Sequence in the top left centre.

In-between the Crosscut Sequence

...



... cannot set her hopes on capturing , with . As usual with a hanezeki, she will lose / , and so the game.

... cannot set her hopes on a semeai between her -group on the bottom and in the upper right, without capturing . She will be one step too late to win the game.

... cannot hope on attacking on the upper edge, which is stable now.

As usual with a hanezeki, must not connect the tail, , with a move at , so remains as his only target for attack.

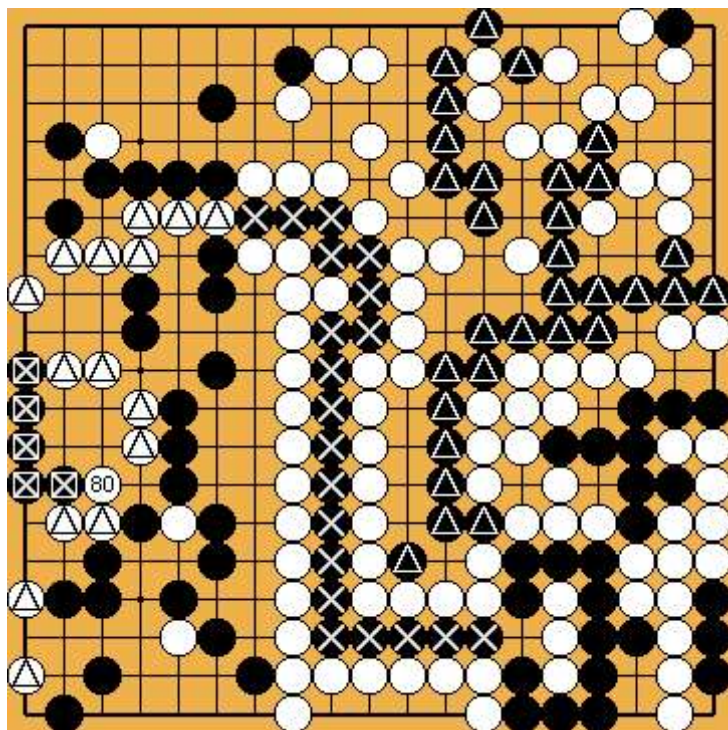
, by attacking , will try to make capture , then he can (probably) save - this becomes clearer after Dia 10 (26).

If refrains from capturing , can reduce 's liberties so that he can safely connect at . However, saving does not mean saving .

N.B. / / are all stable, and alive.



The Birth of the Main Semeai (Dia 7)



White, to win the semeai against Black, tries to live with White outright, starting with 80, but will not manage to get two eyes for White eventually, despite she will be able to capture Black.

We know already that, before capturing Black, White must wait until it is profitable, if ever. So White must hope on receiving sufficient compensation due to Black's need to keep her White-group down to only one eye.

And indeed, Black will add to, and then repeatedly sacrifice, Black, later.

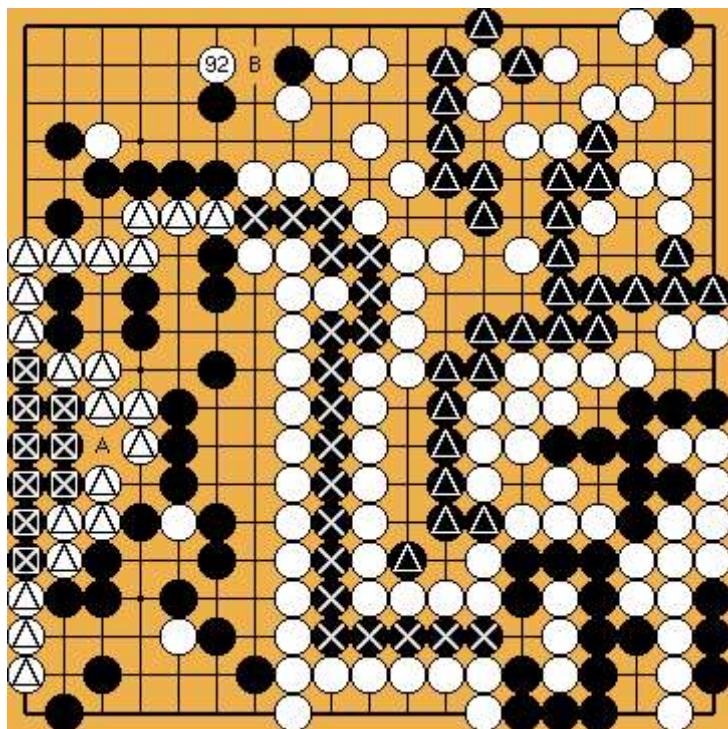


Interlude - Border Fortification (Dia 8)

(Referenced by 30)

Now, Black attacks White, and Black gets bigger. If White is to avoid capturing Black, she must not lose the liberty race between White, and Black.

But White is not in a hurry, and can take a rest now, just before capturing Black with a move at A. White looks around on the board, and realizes that the outcome of the

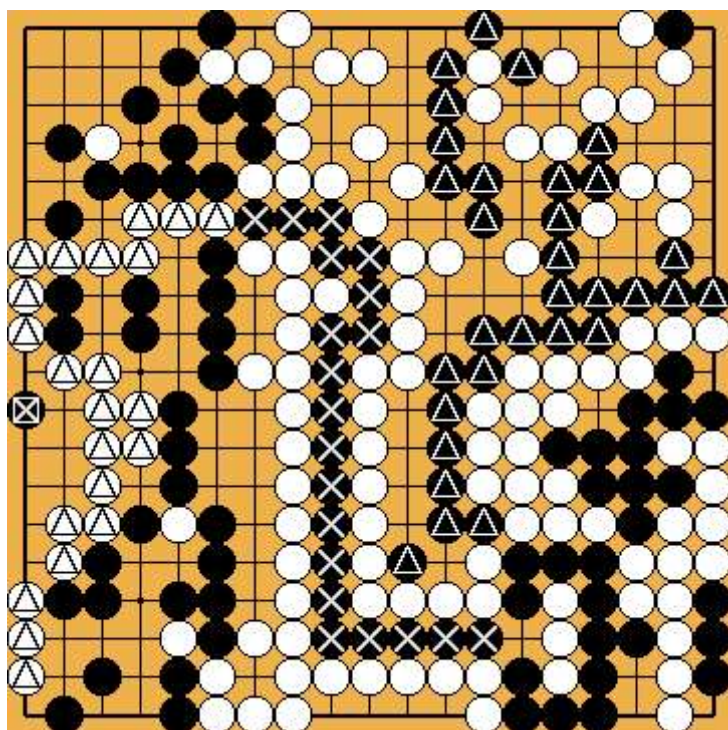


main semeai, between and , is already decided. Neither can capture , while saving , nor can capture , while saving . and will die together, or they will live together.

So takes sente with the tsuke of (787) to start the endgame on the left side - she fixes the boundaries, first at top, and then at the bottom. Thereafter, will return to the main semeai by capturing with .



Back to the Main Semeai (Dia 9)

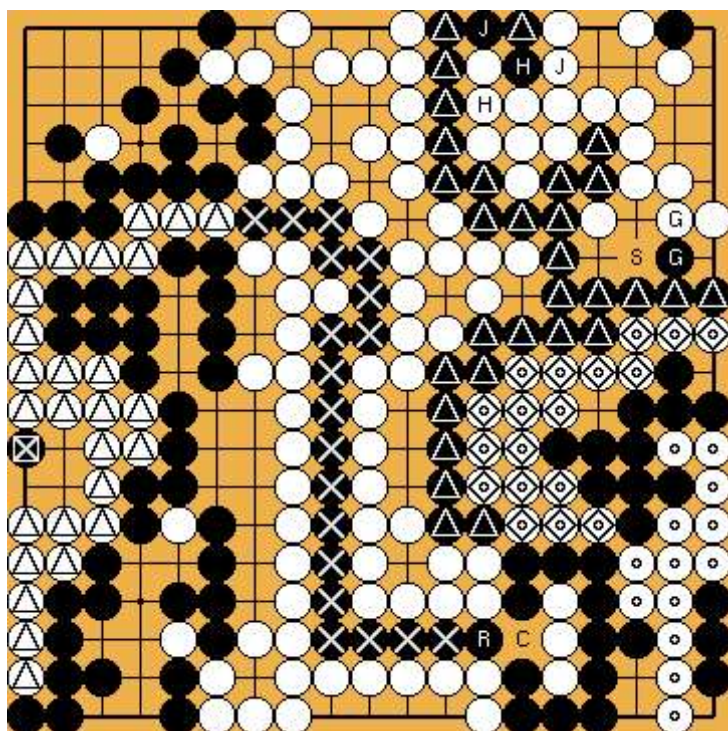


Then torpedoes 's hopes on two eyes for with the oki at .

will continue to take 's liberties, while takes 's liberties. Meanwhile, repeatedly sacrifices , and gets more prisoners.



The Final Decision (Dia 10)



(Referenced by 24)

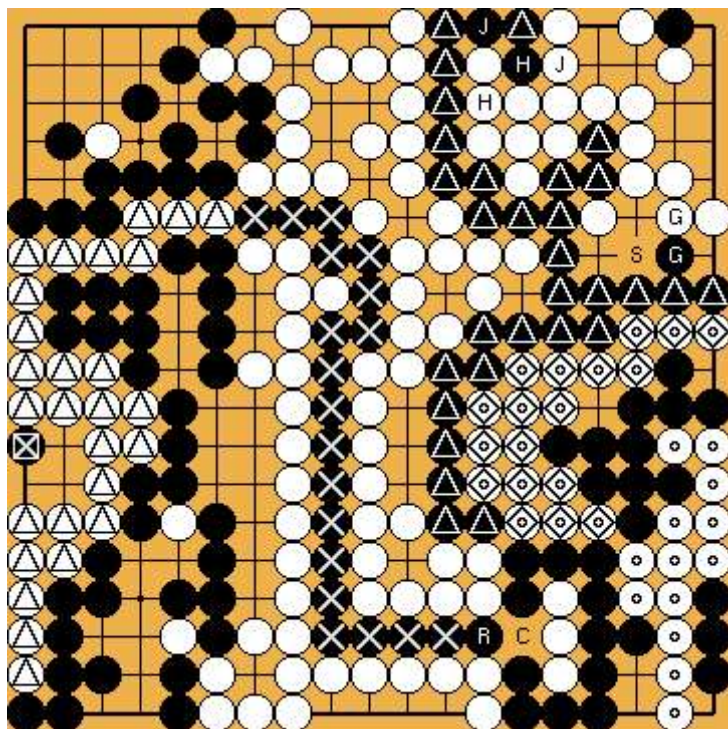
When (= 161) is played, again is at a fundamental decision point.

- can still capture (by starting at , for example), but then will kill (510).

- Instead, can play at , capturing , and saving . However, this will let live, while capturing , and (583).

Throughout all of Dia 6 - Dia 10, is handicapped by the imminent threat of what we call the **Punishment Semeai**. At the moment that plays into 's eye on the left, has **eight liberties**. If has **lost only 1 more liberty** in the process so far, will capture at now. After recaptures at , will start taking liberties of immediately (at , for example), and win the capturing race between , and , by one move.

Ever since the forcing moves in the top right corner (, ,), it is better for to kill , and



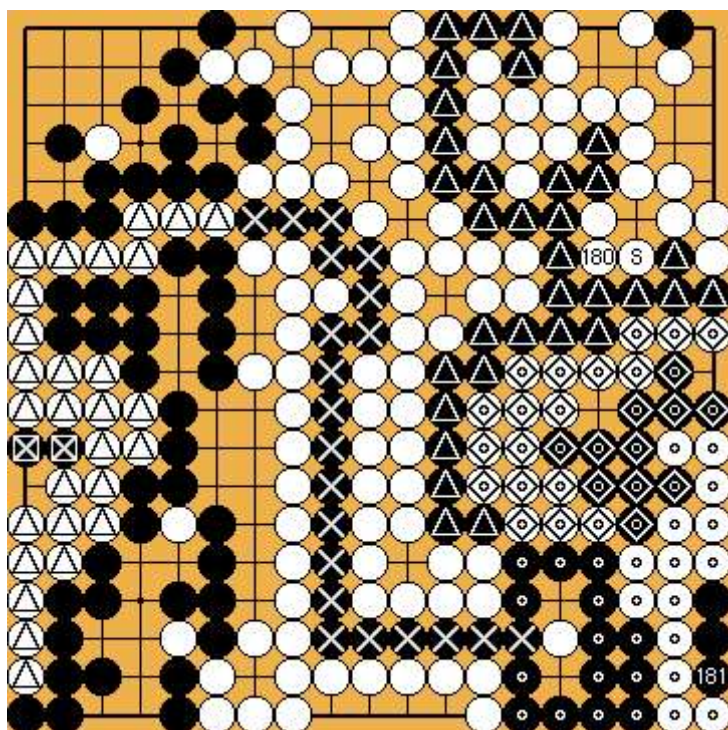
sacrifice . Therefore, continues to occupy 's liberties (with 162 at), and connects, and saves, (with 163 at), eventually also killing .

N. B.: We use the term "**Semeai Variation**" throughout this book to name this kind of variation, in which White (instead of capturing Black's centre) takes further liberties of Black's top right group, eventually capturing it.

Both players then take each other's liberties, until we reach the position shown in Dia 11.



The Dust has Settled (Dia 11)



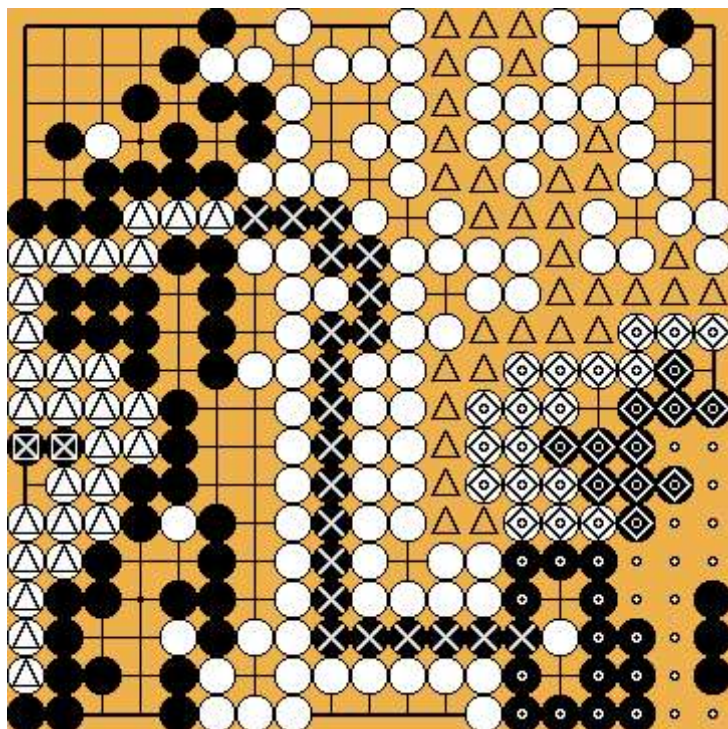
Finally, 180 kills , and 181 kills , so saving .


Both of the larger groups that were in the liberty race - , and - have died!



Note that the seki (with /) slowed down the semeai on the right side. wins the fight with , but cannot save . lives.



The Score (Dia 12)







We now have Dia 12. N.B.  is dead.

 50  64 Prisoners, also on the board

 77  60 Territory

 127  124 Total points

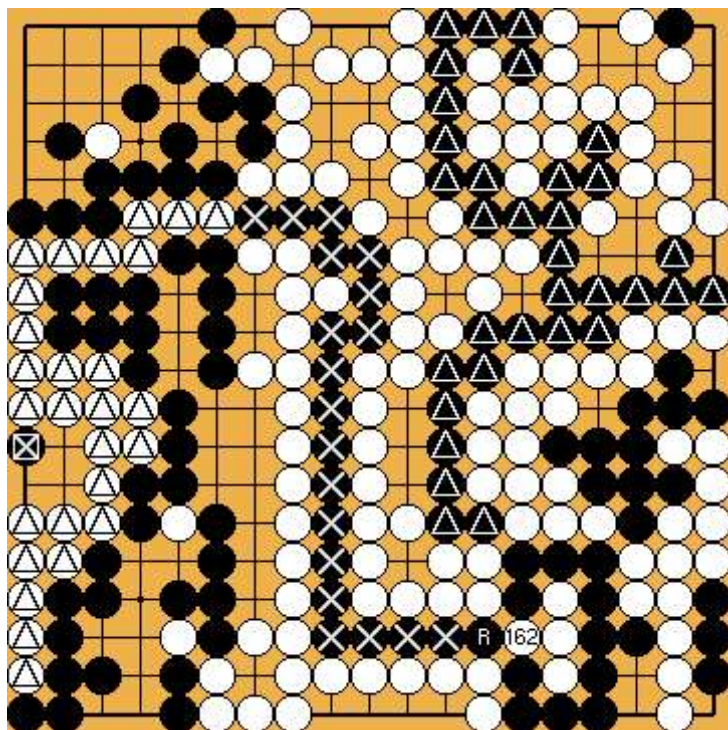
 wins by three points.

We can now see that the additional seki of   (compared to the classic version of a hanezeki, in which there is only one  group, and no  one in-between), serves also to adjust the score, i.e. making this Semeai Variation relatively close.














We have reached the end of our solution. However, we will now take a quick look at some other key features, and interdependencies.



If Captures 's Centre (Dia 13)



(Referenced by  30)





After  (= ) is played into 's eye on the left side in Dia 10,  can, instead, capture  with  - this is similar to the variation of the Fujisawa Solution ( 754). Next,  recaptures at .  can't kill , so takes points in sente, with the **oki** at  ( 884).

N. B.: We use the term "**Capture Variation**" throughout this book to name this kind of variation, in which White captures Black's centre.







Please also note that Fujisawa Hideyuki 9p played the endgame on the left side last, after capturing the centre, in his solution.

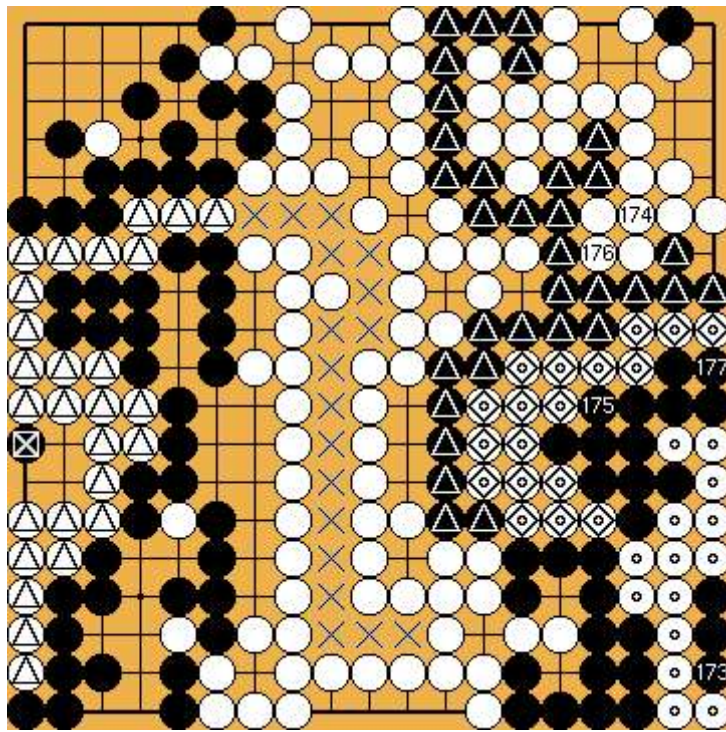


The Dust has Settled Again (Dia 14)

Both players now take each other's liberties, with  first capturing , and finally playing  to capture . The picture in Dia 14 looks completely different from Dia 12.

The scoring for this variation is:

 40	 50	Prisoners, also on the board
 63	 48	Territory
 103	 98	Total points



● wins by five points.

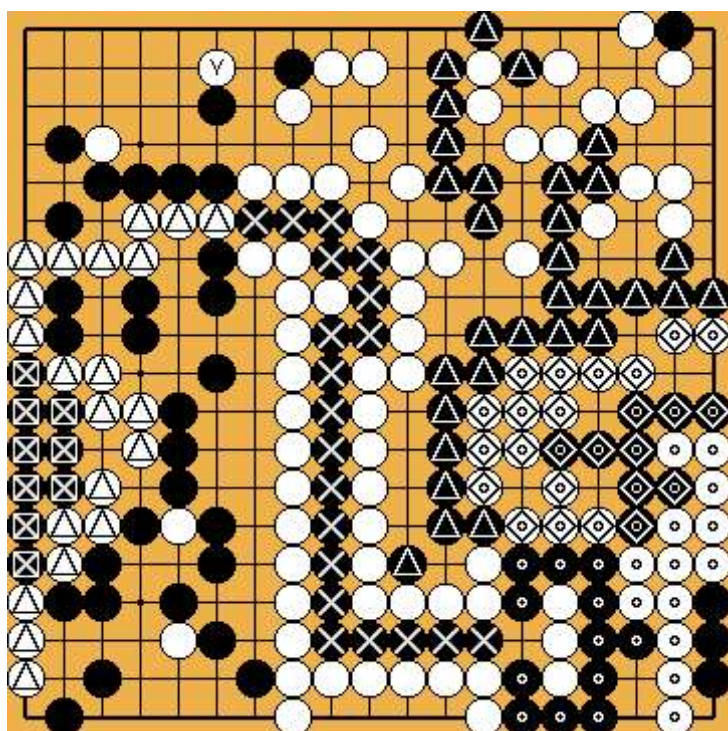
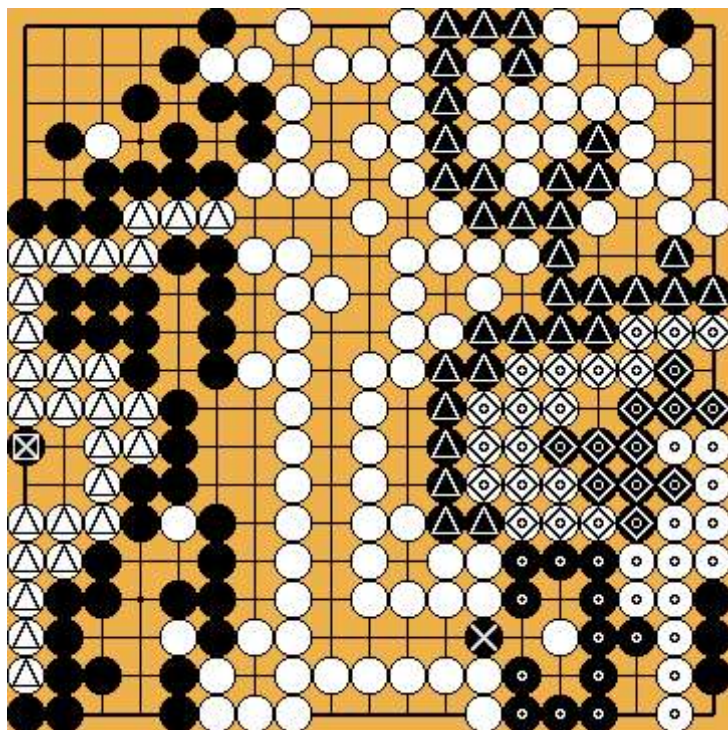
In our solution (Dias 1 - 12), ○ will do better by two points (📄 512), when not choosing this variation.











Some New ○ Gains (Dias 15 - 16)

(Referenced by 📄 23)

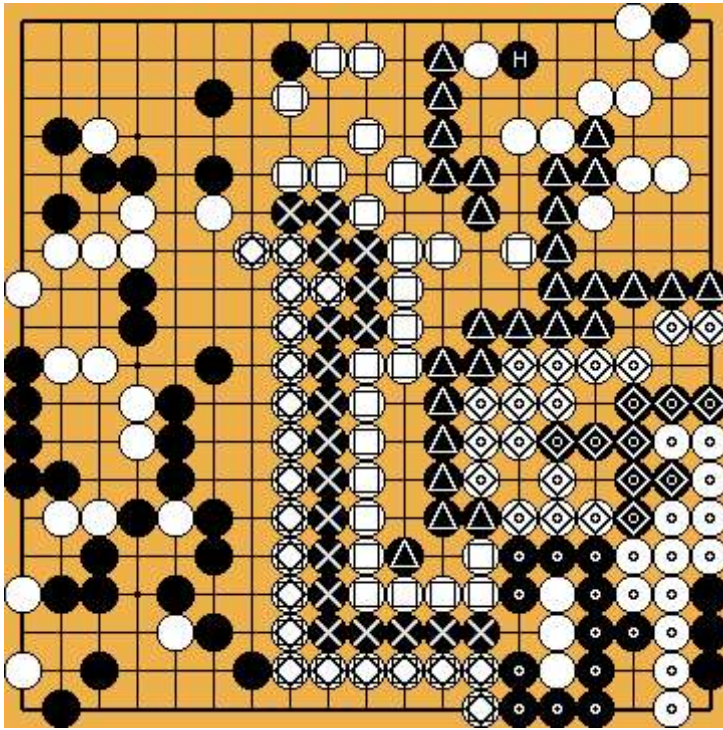
Working to increase ○'s score - are **the oki at O** in Dia 13 (📄 29) / Dia 15 (worth four points), ...




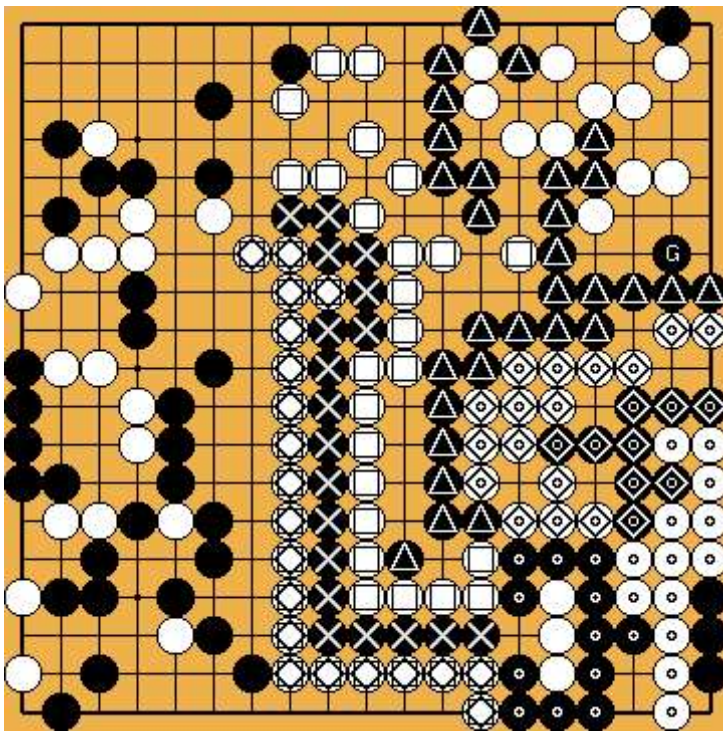
... and the **tsuke**  of  in Dia 8 ( 25) / Dia 16 (worth two points). The combined gain is six points. The variation of the Fujisawa Solution included neither of these moves (nor the second throw-in at **19** in Dia 2 ( 20) with a gain of one point for  in our Capture Variation, see below), so it was thought that  would win by three points. The discovery of these two moves for , then gave  a win by three points, apparently destroying the known solutions.





Some New Gains (Dias 17 - 19)





With the new moves - the **hasami-tsuke**  (worth four points, but only in conjunction with ...), ...

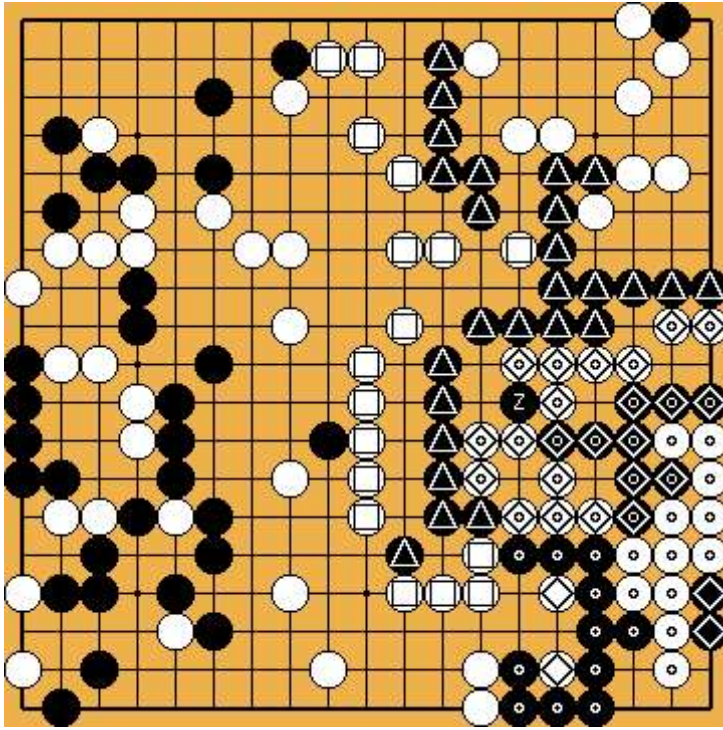


...the **guzumi**  (worth three points), ...

...and the (second) **throw-in**  (worth one point in the Capture Variation here) -  is eight points worse off.

Without these (but with the profitable oki - see above), by capturing ,  would win by three points, as mentioned above.

The importance of these new



moves, in reducing 's score, is clear.



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