

Elementary Go Series, Volume 5

**ATTACK  
AND  
DEFENSE**

by Akira Ishida  
and  
James Davies

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## PREFACE

The middle game is the most tangled and chaotic part of the game of go. By the time this stage is reached, every game has developed in its own peculiar way, and the same situation never seems to come up twice. Yet despite the vast diversity of forms, there are certain basic ideas that shine through and reveal order in the chaos: principles such as contact moves for defense, non-contact moves for attack; techniques such as leaning and splitting. Knowledge of these is essential to any player's progress; this book attempts to explain them.

### Organization

Our main themes are the strategy and tactics of large-scale fighting. These are covered in Chapters Two to Four, which form the core of the book. Chapter One sets the stage by discussing the twin balances that the fighting is all about. Chapters Five and Six, on forcing and inducing, add necessary refinements. Chapters Seven and Eight then apply this knowledge to the invasion and reduction of large and small frameworks. Chapter Nine considers ko fighting. Chapter Ten offers a summary and review in the form of twenty full-board problems.

### Prerequisites

We assume that the reader is familiar with the basic moves of the game — the diagonal move, hane, one-space jump, etc. — and that he knows what a push, a cut, and an invasion are. If he does not, he should read Vol. 1 of this series, *In the Beginning*, and find out.

We also assume that he is familiar with elementary tactics — ladders etc. — and that he knows the meaning of the term 'miai'. Actually, no real tactical knowledge is needed to comprehend this book in a general way, but some such knowledge will prove necessary to follow it in detail and even more will be required when putting its contents to use. Readers who are deficient in tactics should work through Vol. 3 of this series, *Tesuji*.

### Caution

At several places, such as the ends of Chapters Two, Five, and Six, we have included rather long sequences from professional play. We put them in because we thought the reader might like to see how professionals use the techniques being discussed, but if he finds them uninteresting or incomprehensible, he may skip past them without breaking the continuity.

### Reminder

Go is a game; you are free to devise your own strategies and play wherever you want. If you win – fine; if you lose – so what? The more experiments you try, the more interesting the game becomes. This book will show you plenty of good moves, but we do not mean to imply that they are the only good moves, or that you must bind yourself to them. We encourage every reader to develop on his own.

### Acknowledgements

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Richard Bozulich of the Ishi Press, without whose encouragement and prodding we might never have finished.

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Tokyo, Japan  
December 1979

Akira Ishida  
James Davies

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## *Chapter One* TERRITORY AND POWER

Attack and defense provide most of the excitement in go. If stones could not be captured and groups killed, the game would be dull indeed. Go players are supposed to be a rational, calm, calculating lot, but that does not stop them from enjoying the thrill of attacking and watching their opponents wriggle and squirm. It could even be argued that go appeals to the same human emotions as do hunting and warfare.

Strategically as well as emotionally, attack and defense are of great importance in go, especially in the middle game. They are, in fact, so deeply involved with the middle game that it would be difficult to consider the one without considering the other. Before getting caught up in the subject of attack and defense, accordingly, we ought to make sure we know what the basic purpose of the middle game is. It is not to attack or to defend; these are means rather than ends. It is to be found, instead, in two fundamental balances, which also correspond to human drives: the balance of territory and the balance of power.

### **The Balance of Territory**

By the balance of territory we mean the balance of definitely controlled areas – the territory that Black has secured so far as opposed to the territory that White has secured. Is this balance important? Yes, because whoever leads in it at the end of the game is the winner! The balance of territory in the middle of the game is less decisive, but it is still important. Since go is a territorial game, the balance of territory is always a primary factor.

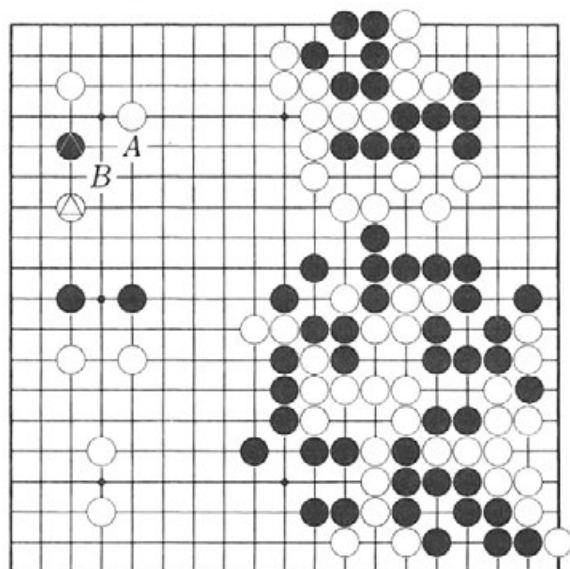
And since go is a strategic game, knowledge of the balance of territory is a primary factor in planning strategy. Knowing how you stand in the balance of areas secured so far tells you what you have to accomplish in the areas of potential territory and no-man's-land – it clarifies your goals. Knowing your goals greatly increases your chances of finding a winning strategy. Professional players in serious games keep a constant watch on the balance of territory, sometimes evaluating it at almost every move. We do not suggest that you go that far – you should not distract yourself in the middle of a fighting sequence by worrying about unrelated territorial questions – but whenever the fighting dies down and you find yourself wondering what to do next, it is a good idea to start by estimating the balance of territory.

That raises the problem of how to estimate it. Since the boundaries of most territories tend to be somewhat unsettled during the middle game, an exact numerical value will be hard to obtain. One can try to make reasonable conjectures about what will happen in the endgame and thus determine a precise value for each piece of territory, perhaps using certain averaging techniques, but this is hard for even a professional to do accurately, and the exercise is unlikely to be worth the time required.

That leads one to make rough estimates of territories, to what looks like the nearest multiple of five–ten points here, thirty-five there, etc. This method can be useful, but it is still time-consuming and its accuracy is not too much to be relied upon. A few bad estimates can distort the total balance by ten to twenty points, or more, and a numerical estimate that is that far off is not worth much.

The simplest way to estimate the balance of territory, and the way we want to recommend for the middle game, is to match the black and white areas against each other directly. 'This black territory is about the same size as that white one; that black territory is as big as those two white ones put together,' and so on. This method is quicker than any numerical method and is accurate enough to steer one away from gross strategic blunders, which is all that is required.

Take the game in Dia. 1 for example. It is Black's turn, and considering the relative positions of the triangled stones a move like A or B seems appropriate. A hasty player would probably play at one of these points. What happens, however, if Black estimates the balance of territory?

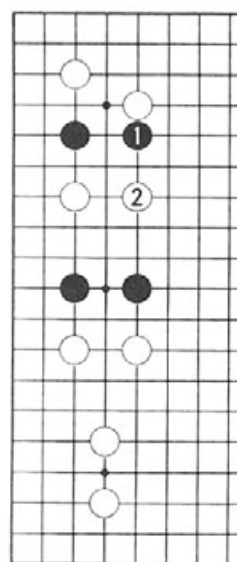


*Dia. 1*

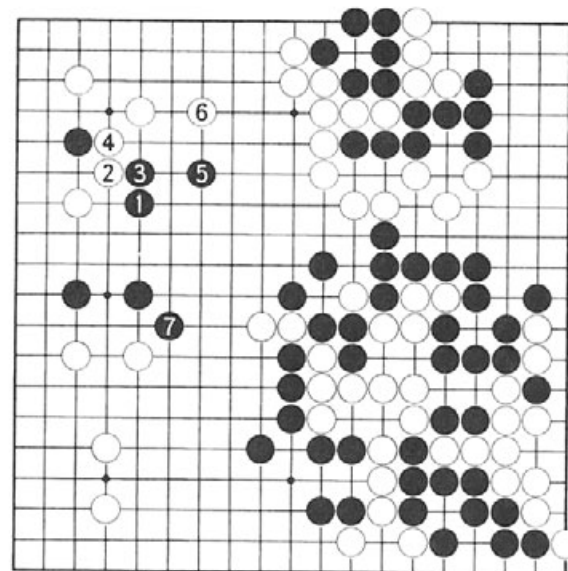
The upper side is divided in half. Black has the right half, and if we grant White control of the left half, these two areas roughly cancel.

White has a small territory in the lower right and a framework in the lower left. The latter is not absolutely secure, but let's not quibble about that; let's turn to the white group in the lower right center. It is dead; White would have trouble making even one eye, let alone two. Since a point with a prisoner on it counts double, this piece of black territory is almost twice as big as it looks, and almost twice as big as White's holdings in the lower right and lower left combined. Black has a large territorial lead.

With that comforting knowledge to guide us, let's begin considering Black's next move. How about Black A, or Black 1 in Dia. 2?



*Dia. 2*



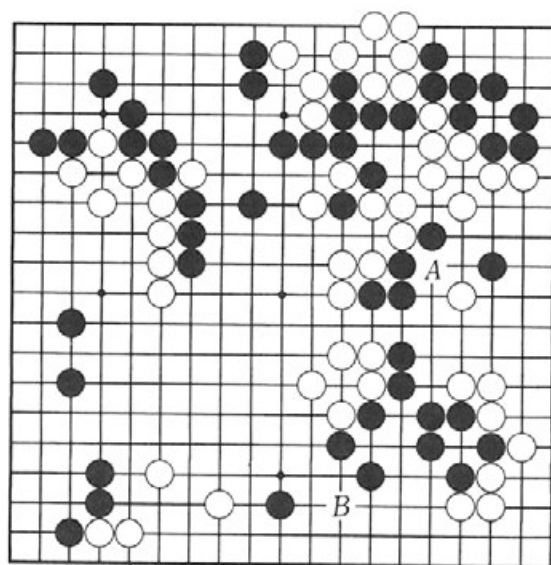
*Dia. 3*

This is a fighting move, and if Black plays it White may fight back by jumping to 2. With a solid white wall off to the right, it is not inconceivable that Black might end up being captured in a big way. The fact that he won the encounter in the right half of the board does not necessarily mean that he will win this one too. This line of play involves all sorts of tactical risks, and if Black adopts it there is a very real chance that White will stage an upset. The same goes for Black B in Dia. 1.

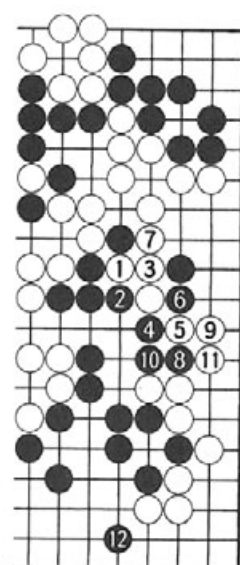
What then should Black do about his triangled stone in Dia. 1? Well, since he already has a big territorial lead he can afford to sacrifice it. He can do that with Black 1 and 3 in Dia. 3. If he keeps on in the same spirit with 5 and 7 he gains territory in the center to compensate for the stone he has lost. His territorial lead remains about the same. If he avoids fighting and plays like this, he can hardly lose.

There is a Japanese saying that 'a rich man shouldn't pick quarrels.' The player who leads in the balance of territory should try to stabilize the game by playing safe and simple. It is his opponent who will welcome combat.

Next let's examine the position in Dia. 4: White to play. Who is leading in the balance of territory this time? What should White do? Consider White A and B.



*Dia. 4*

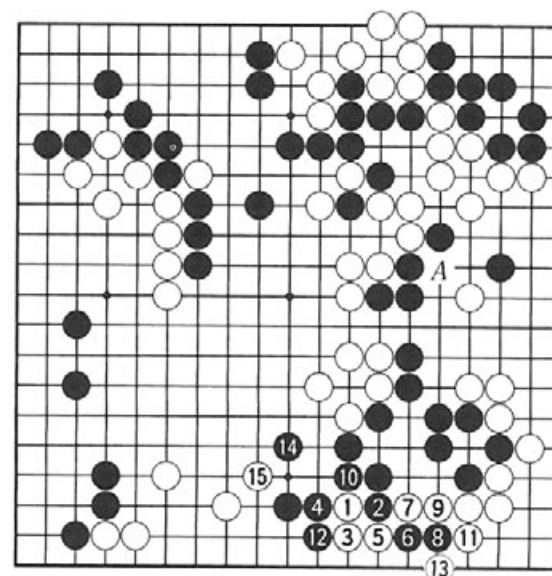


*Dia. 5*

White has nothing to compare with Black's large territory in the upper left, so Black leads in territory at the moment. Can White even the balance by cutting at A, i.e. at 1 in Dia. 5? Black will force him through 11, then defend the lower side at 12. How do Black's and White's territories compare now? The large one White has just made on the right side is about equal to Black's large one in the upper left (count and verify if you wish), but Black's upper right corner is bigger than White's small upper-side territory, Black's left-side territory is bigger than White's left-side territory, and Black's lower side is, after 12 in Dia. 5, bigger than White's lower side. Black has a considerable lead. It seems that if White lets Black defend the lower side at 12, he cannot win.

If Black has any vulnerability in this game, it is his group in the

lower right, which is large but open at the bottom, and lacks definite eye shape. White's only chance lies in taking advantage of its weakness, not in a minor way like cutting at A, but in a major way, like invading at B. From B White can escape to either the right or the left.



*Dia. 6*

*Dia. 6.* This position is from one of the Japanese author's games, and the sequence shown is the one actually played. White invaded at 1. Black let him out to the right, sacrificing two stones in order to play 10 and 12 in sente, then defended at 14, but White 15 meant that he still did not have two sure eyes, so he could not stop to connect against A. White's invasion was a success. A few moves later White went back to cut at A, and what with the profit taken on the lower side, the game became reasonably close. Black was still ahead, but his group was still weak and White was able to chase it toward the left, then make a move that threatened both it and the lower left corner. Black, under pressure, defended incorrectly and lost the corner. White's strategy was rewarded with victory.

Fight, invade, and try to generate confusion – the strategy to follow when one is territorially behind is exactly the opposite of the strategy for when one is ahead. Estimating the balance of territory and choosing one's strategy accordingly is not difficult, but many players fail to take this step.

The reason may be that they are just too caught up in the excitement of the game to stop and consider what is actually happening, but perhaps they are also in the grip of primal human urges. Naturalists tell us that most animals, man included, have a territorial instinct. Much human history can be viewed as a struggle for territory. Men have always been most aroused when their home territory was threatened with invasion. We can see these instincts at work on the go board, too.

At one extreme we have the player who is so jealous of his own territory that he protects it against the slightest incursion; who constantly forgoes attack in favor of defense; who loses through timidity. At the other extreme we have the player whose jealousy engulfs the whole board; who tries not to let his opponent have any territory at all; who usually ends up losing large groups of over-extended stones. These people are deluded. They understand the concept of 'territory', but they lack the faintest inkling of the meaning of 'balance'.

### The Balance of Power

We have already observed that the balance of territory in the middle game is not decisive. It is constantly shifting. What governs the way it shifts? The two players' skill or otherwise is one obvious factor, but that being equal, the way the balance of territory shifts is governed by what we shall call the balance of power.

The player who leads in the balance of power is the player whose groups are stronger, or placed where they exert more influence. This player finds it relatively easy to enlarge his own territories, reduce his opponent's, and take the initiative. He can play with freedom. His opponent, whose groups are weaker or more surrounded, is more often forced to give way and defend, and finds it difficult to extend his areas or take the initiative. If the balance of

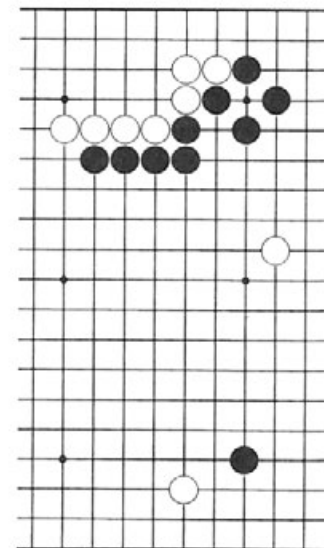
territory provides the goal in the game, the balance of power provides one of the keys for reaching it.

Evaluating the balance of power is easier than estimating the balance of territory. Perhaps for that reason, if a Japanese professional is asked who is leading in a game his response is likely to be that Black or White is *atsui*. This word literally means 'thick', and thickness in go means strength, or power. What he is saying is that Black or White leads, not necessarily in the balance of territory at the moment, but in the balance of power, and in the balance of territory to come.

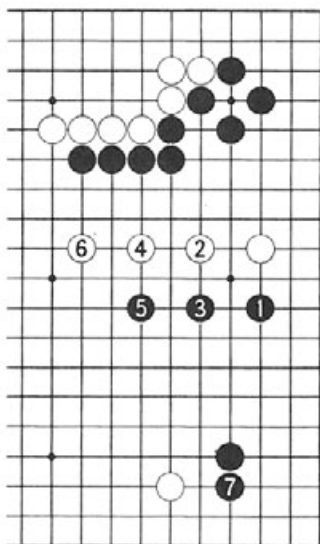
There are so many ways in which power can be useful that it is hard to know where to start giving examples. Here are three of the more common things that the player who holds the balance of power can often do.

#### 1. Attack.

*Dia. 7.* Black has given White fifth-line territory on the upper side in exchange for a powerful, thick wall. The way for him to use this power is shown in the next diagram.



*Dia. 7*



*Dia. 8*

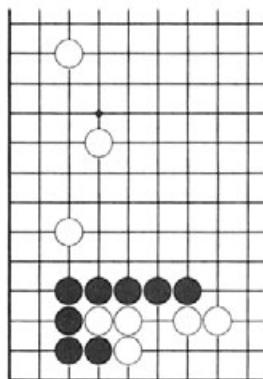
*Dia. 8.* He should attack and push White against his wall. He continues attacking with 3 and 5, then closes the corner with 7. This gives him a nice piece of territory that White cannot easily invade. His thickness has yielded profit, not in its own immediate vicinity, but in another part of the board. This is often how power works.

### 2. Invade.

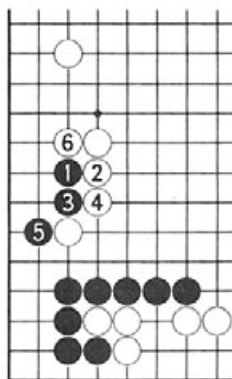
*Dia. 9.* Black holds the balance of power in this local position too. His outer wall is solid and the white group above it is thin, so the stage is set for an invasion.

*Dia. 10.* Black invades at 1, and White has no choice but to let him link up with 3 and 5. Black's power advantage is converted into a territorial advantage.

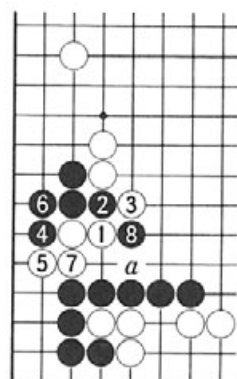
*Dia. 11.* If White tries to capture Black by playing 1, Black hanes at 4, connects at 6, cuts at 8, and his position suddenly makes its power felt. Giving atari at *a* would accomplish nothing, so White's four stones are dead.



*Dia. 9*



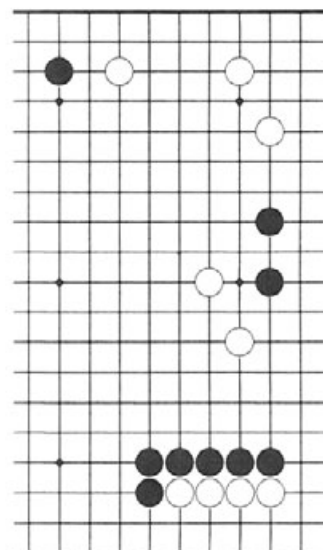
*Dia. 10*



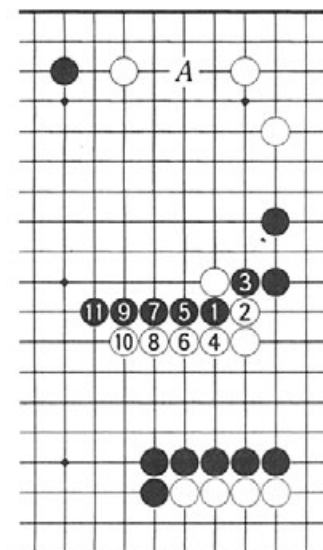
*Dia. 11*

### 3. Cut and fight.

*Dia. 12.* Black's outer wall gives him a great fund of power in the lower right. In view of that, how should he play here?



*Dia. 12*



*Dia. 13*

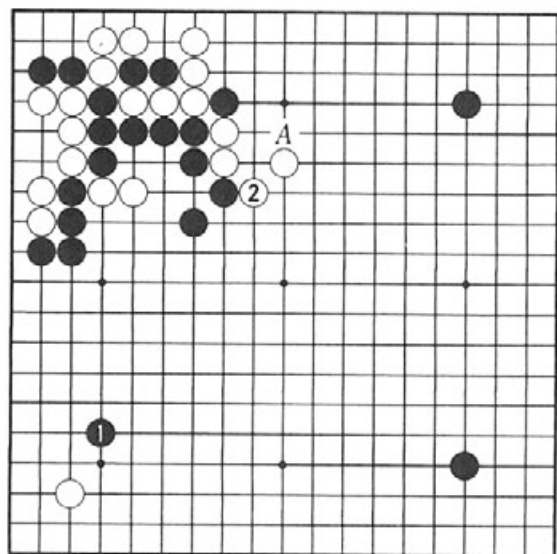
*Dia. 13.* He should cut with 1 and 3. If White plays 4 to 10 he may be able to escape, but his group remains weak and Black is building up power in the center. If he uses this power by invading next at *A*, his thickness in the lower right corner will end up earning him profit on the upper side.

These three examples could be summarized by saying that the player who holds the balance of power can play aggressively. He should look for weaknesses in the enemy stones and strike before his opponent has a chance to defend. The player who is behind in the balance of power, conversely, should play with caution and restraint until by so doing he has restored the power equilibrium.

If power is useful to have, then it can be worth spending moves to acquire. Realizing this can change one's whole attitude toward the game. One learns to evaluate moves, not only in terms of the amount of territory they create or destroy, but also in terms of



what they do to the balance of power. One learns to build up thickness and influence, then use them to gain profit later. One learns to make moves like the following.

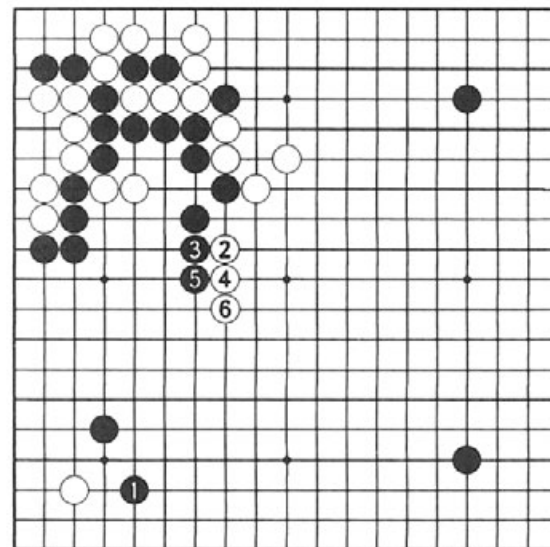


*Dia. 14 (1 - 2)*

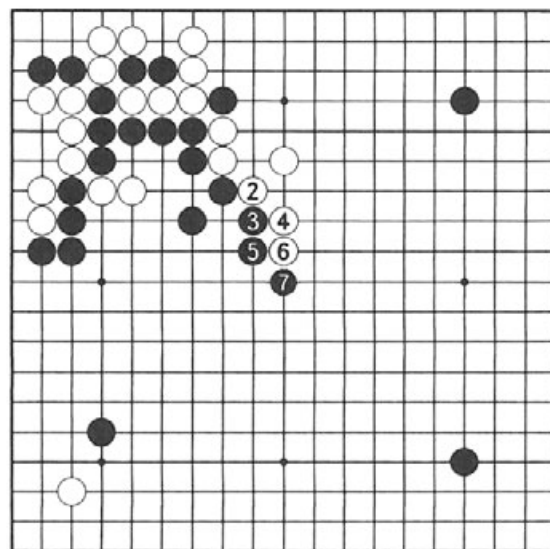
*Dia. 14.* This is another of the Japanese author's games. Black 1 was probably a mistake, for White 2 was a beautiful reply. It may have had no direct territorial value, but it beamed power throughout the right-hand half of the board, and it strengthened White's position by destroying Black's tesuji at A. Furthermore, it was sente.

*Dia. 15.* (next page) If Black ignored it, to play 1 in the lower left corner for example, White would press at 2, 4, and 6, gaining power at every step. Black's position would be compressed into a concave shape and its influence would be restricted to the left edge, while White's wall would dominate two-thirds of the board. This would be too much to allow.

*Dia. 16.* So Black answered White 2 with 3, and with the balance of power at stake there was nothing for each side to do but keep pushing back against the other. This kind of power struggle is a frequent occurrence. All the moves in this diagram were necessary.

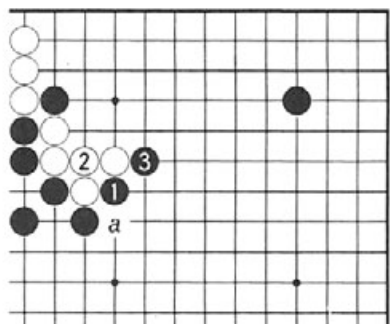


*Dia. 15*

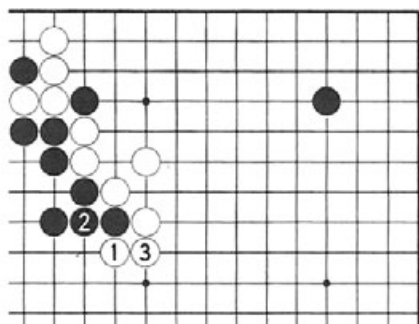


*Dia. 16 (2 - 7)*

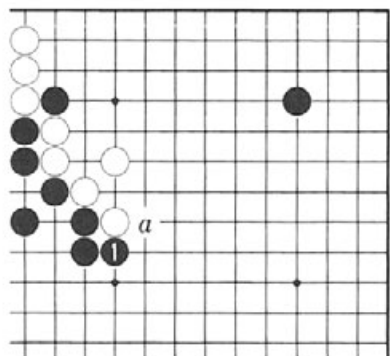
The reader can test himself by playing through this sequence and asking himself at each step what would have happened if the move had been omitted.



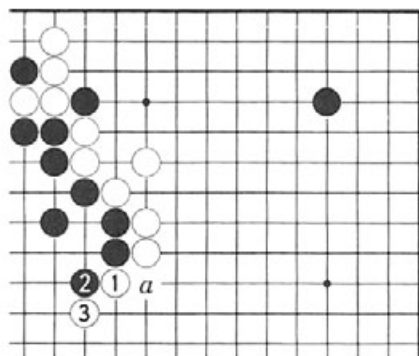
*Dia. 17*



*Dia. 18*



*Dia. 19*



*Dia. 20*

*Dia. 17.* If White omits *a*, Black plays 1 and 3. White's influence completely vanishes.

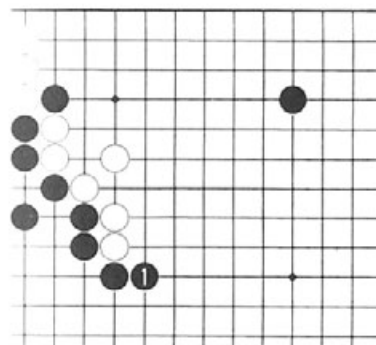
*Dia. 18.* If Black omits 1, White gives atari there and connects.

*Dia. 19.* If White omits 1, Black turns there, threatening *a*.

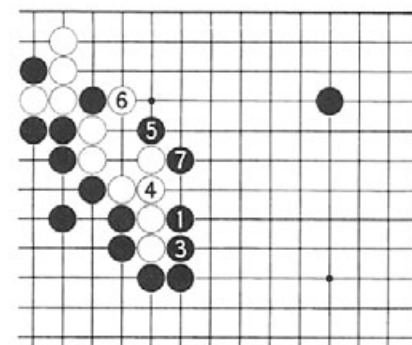
*Dia. 20.* If Black omits *a*, White bends around him with 1 and 3. Any of these four sequences would be a calamity for the player who allowed it to happen.

*Dia. 21.* (next page) If White ignores Black's last move in Dia. 16, next Black will extend to 1. Besides gaining influence and power, this aims at the attachment shown in the next diagram.

*Dia. 22.* Black 1 is a tesuji. If White ignores it Black walls him in with 3 to 7. Once this happens White may as well resign. His previous pushing moves go completely to waste.

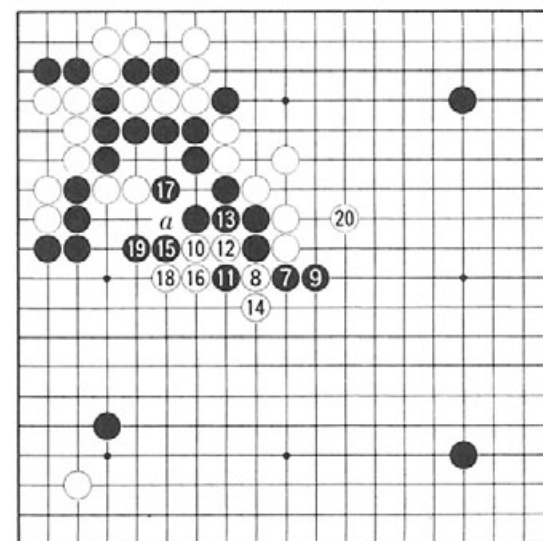


*Dia. 21*



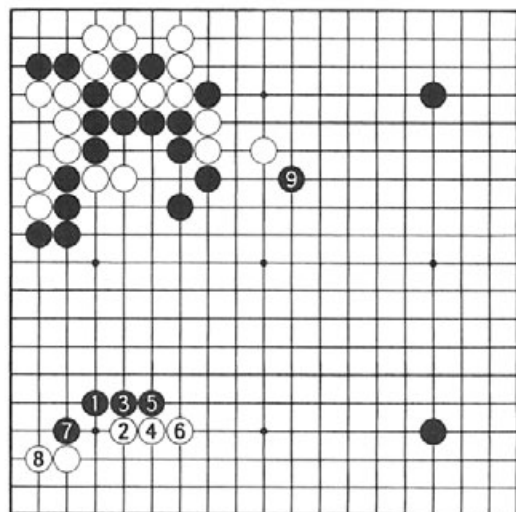
*Dia. 22*  
2 elsewhere

*Dia. 23.* White, of course, did not ignore Black 7; he cut at 8. It would take us off our subject to follow the succeeding moves in detail (Black 17 should probably have been at *a*), but White had succeeded in evening up the balance of power in the center and he went on to win the game. Note that if Black next draws out his stone at 11, White will extend straight below 14, willingly sacrificing 10, 12, 16, and 18 in exchange for more power in the center.



*Dia. 23 (7 - 20)*

## Chapter Two ATTACKING STRATEGY



*Dia. 24*

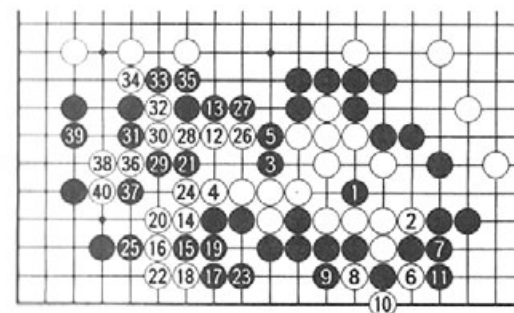
*Dia. 24.* Suppose, for comparison, that White had answered Black 1 at 2. Black would have forced him with 3 to 7 then taken the key point in the center at 9, doing essentially what White did in the diagrams above. (Black should actually have played 1 at 9.) White 2 in this diagram helps Black to form a large framework embracing the left side, and it shows poor appreciation of the balance of territory. White already leads in secure territory because of his capture of the upper left corner, so his strategy should not be to acquire more territory but to cancel Black's outside power.

Just as man has an instinctive craving for territory, he has a thirst for power, and if much of history can be viewed as a struggle for the former, much can also be viewed as a struggle for the latter. It is interesting that the middle game in go can be viewed in the same ways. Which factor, territory or power, is more important is hard to say — probably the two are about equal. What matters is to be aware that there are such things as a balance of territory and a balance of power, to take note of how they stand during the game, and to build your strategy around them.

It often happens that during the opening one player will skimp on safety in order to build up a territorial lead. The other player's job then becomes to overtake him by attacking his weak groups. It may also happen that both sides have weak groups that attack each other. This chapter deals with the basic strategies of attack.

What does it mean to attack? The obvious answer to this question would be that it means trying to capture stones and kill groups, but this is not always correct. One must not let oneself become obsessed with killing and capturing, like a certain player we knew whose sole purpose in the game was the destruction of enemy stones. This player was perhaps an extreme case. Territory meant nothing to him unless it contained a dead group. He mastered all forms of the eye-stealing tesuji and terrorized weaker opponents, but he generally fared badly against players of equal or greater strength.

*Dia. 1* shows this player performing as Black. Black 1 is an unreasonable placement, but it is typical of his style. For the next thirty-eight moves he fights doggedly to hold White to one eye, even though this means ruining the greater portion of his own territory. He nearly succeeds, but in the end he has no answer to 40, so White lives. Considering how much potential territory he had before he started this attack and how little he was left with at the



*Dia. 1*

*Question:*  
What should Black do instead of this?

*Answer:*  
Play 1 at 21.

end, one begins to see why he lost so frequently.

One evening, after dropping his nineteenth consecutive game to the local expert, this player decided to swallow his pride and ask what he was doing wrong. The expert, by way of reply, laid out Dia. 2, pointed to the point marked *a*, and said,

'Would you play this ladder?'

'No, of course not.'

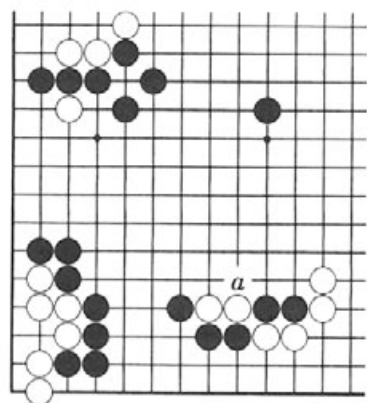
'Why not?'

'Because it doesn't work.'

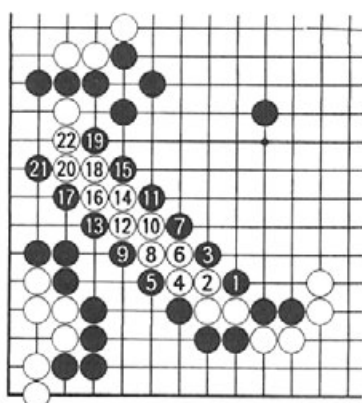
'So?'

'So if I play it,' demonstrating with the moves in Dia. 3, 'not only will you escape, but I'll have driven you right through the middle of my own territory and I'll have cutting points left all up and down the line where you can make double ataris. I'll just be ruining my own position.'

'Well, that's what you keep doing every time you try to kill a group and fail,' the expert said.



*Dia. 2*



*Dia. 3*

Our player remained sitting at the board for a long time, thinking about the resemblance between Dia. 3 on this page and Dia. 1 on the last. Slowly the light dawned on him. He realized that he had been modeling his style of play after the Charge of the Light Brigade. He was embarrassed to think how foolish he had been. 'After all,' he mused to himself, 'it's the player with the weak group who

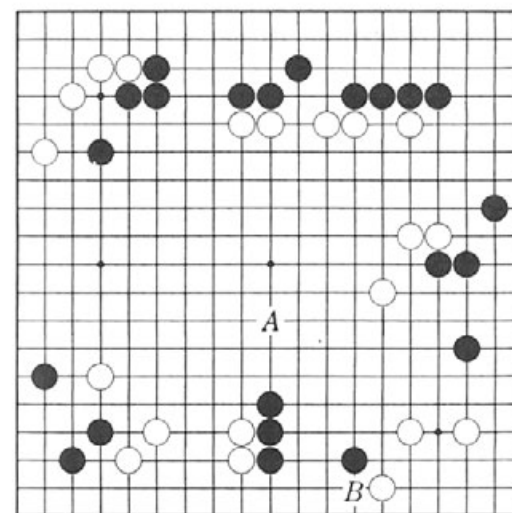
should be taking the risks, not his opponent.'

After this his game changed remarkably. He continued to attack, but no longer in the style of a mad charge by an undermanned troop of cavalry. Now his methods were patterned after a steady infantry advance, which gains ground and takes time to consolidate its gains, even if that means letting the enemy survive. He started to win more often, and his rating went up. He still occasionally brought down a large group – some of his opponents simply refused to see the need to defend, and others had an outright death wish – but these successes no longer mattered much to him, for he had learned to exchange the pleasure of making the enemy die big for the subtler pleasure of making him live small. If anyone asked him now about the purpose of attacking, his answer would not be 'To capture and kill,' but 'To gain territory,' or 'To gain power.'

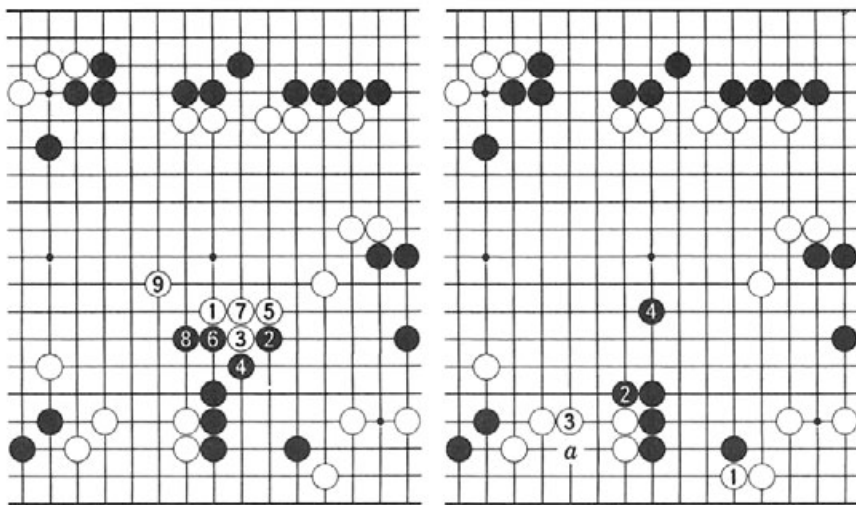
### Attacking to Gain Territory

How does one gain territory by attacking? The best way to explain is with a few simple examples.

*Dia. 1.* White to play and attack the black group on the lower side. Should he attack from above with A or below with B?



*Dia. 1*



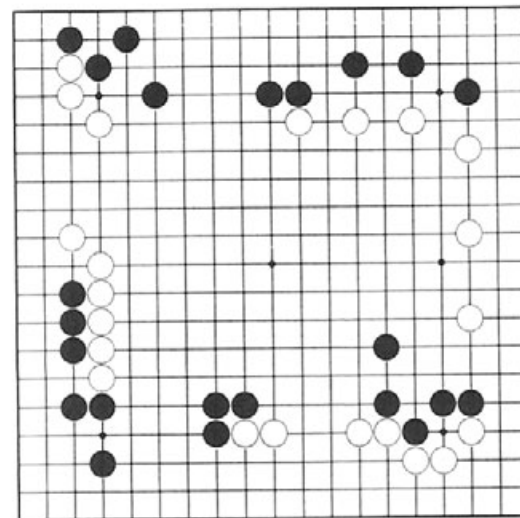
*Dia. 2*

*Dia. 3*

*Dia. 2.* (correct) White 1 attacks from the right direction. The idea is not to kill the black group, but to expand White's center while threatening the black group. A continuation like 2 to 9 is possible, and White is starting to get a large amount of central territory.

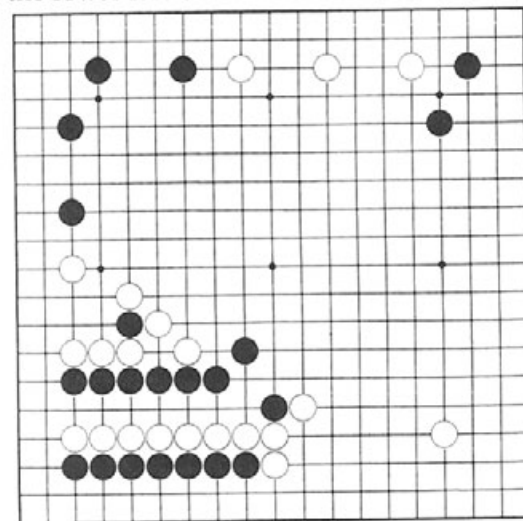
*Dia. 3.* (wrong) This White 1 may keep Black from getting two eyes at the edge, but White has no real chance of capturing him. Black turns at 2, threatening *a*, and jumps to 4. White is spoiling his own central framework — his chief asset in this game — by chasing Black into it.

The basic question in attacking is not how to kill the enemy group — that is usually impossible — but what direction to attack from. Building up a territorial framework in one part of the board by attacking a group that lies in another part, as White does in *Dia. 2*, is one of the first strategies that one should learn. All it takes to master this strategy is the ability to see in two directions at once, and anyone who cannot do a simple thing like that has no business playing go.

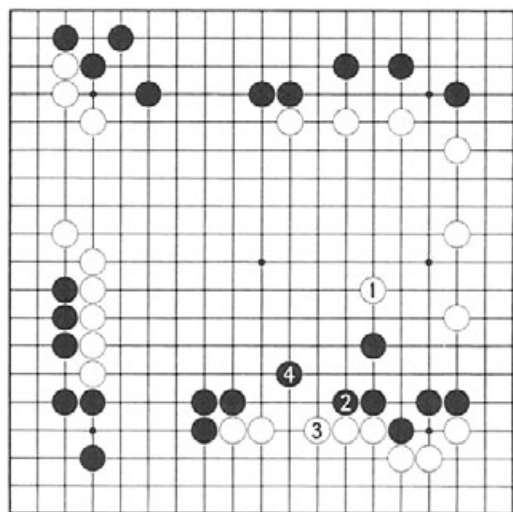


*Dia. 4*

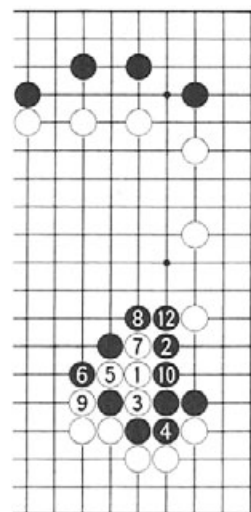
Try two examples without hints.  
*Dia. 4.* White to play. How should he attack the black group in the lower right?  
*Dia. 5.* White to play. From what direction should he attack the group in the lower left center?



*Dia. 5*



*Dia. 6*

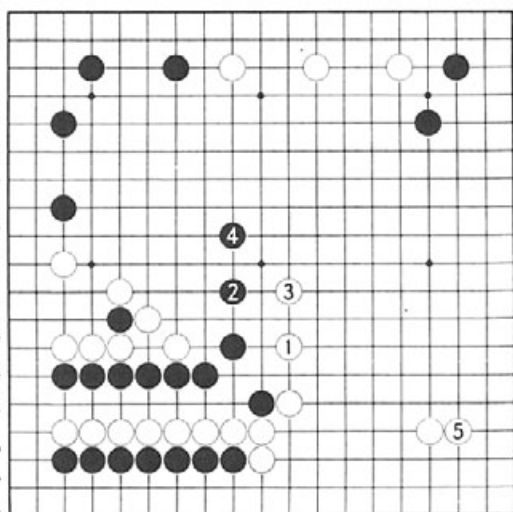


*Dia. 7 11 connects*

*Dia. 6.* White should attack at 1, building up his framework above and forcing Black to travel through neutral space with 2 and 4.

*Dia. 7.* White must not attack by peeping at 1. Black counters with 2, and the damage inflicted by Black 4 and 12 is unbearable.

*Dia. 8.* Since additional territory can be made in the lower right quarter of the board and not in the upper half, White attacks with 1 and 3. Once again Black is forced to play 2 and 4 in a neutral area. Next White should close the corner with 5, to keep Black from invading at the three-three point.



*Dia. 8*

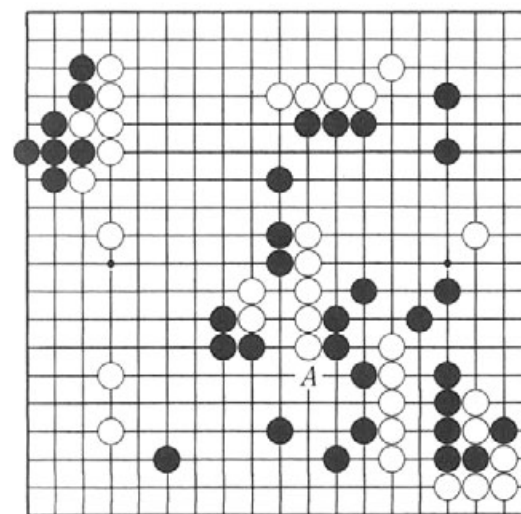
### Attacking to Gain Power

Just as one can attack to gain territory, so can one attack to gain power. This time we shall look at only one example, but in more detail, seeing how the power was used.

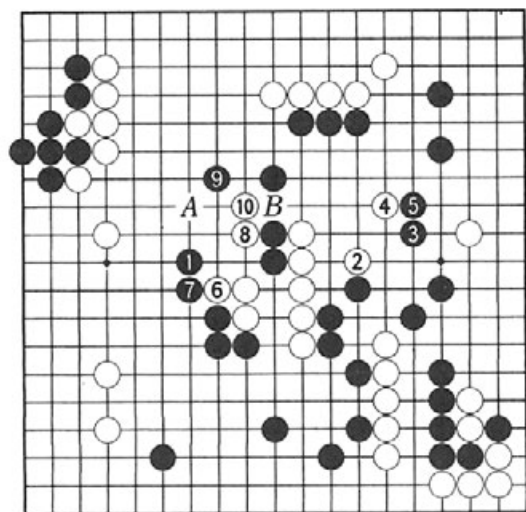
*Dia. 1.* Our example comes from a game between two professional 9-dans, Sakata and Fujisawa. Black (Fujisawa) is somewhat behind in the balance of territory, but it is his turn to play and there is a weak white group in the center. To win, he needs to find a way to exploit its weakness.

Black A might seem natural, but that move would not attack very strongly, and would still leave Black's lower side smaller than White's upper side. A better way for Black to redress the balance of territory would be to invade the large frameworks White has on the upper and left sides. At the moment, however, he lacks an adequate power base from which to launch any invasions.

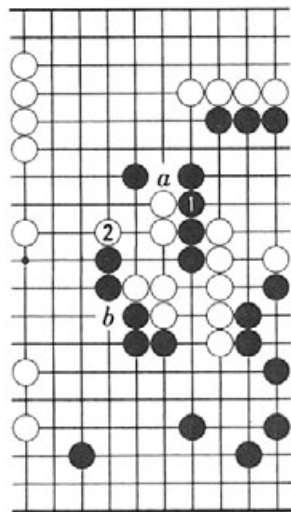
Black's strategy, accordingly, will be as follows. First he will acquire the necessary power base by attacking White's center. Then he will invade.



*Dia. 1*



*Dia. 2 (1 - 10)*



*Dia. 3*

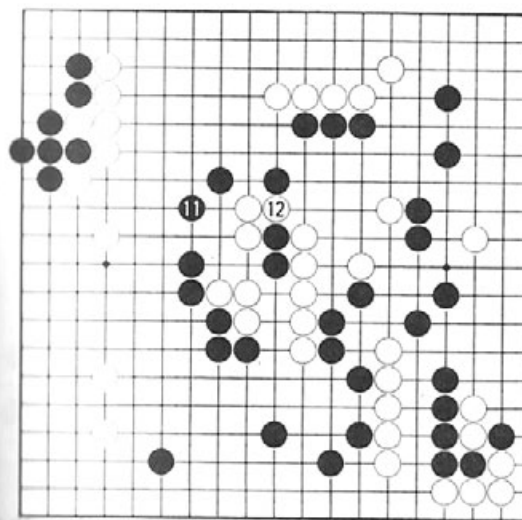
*Dia. 2. (1 - 10)* For the next few diagrams we shall follow the sequence actually played. Black began his attack with 1. White squirmed to the right with 2 and 4, then wriggled to the left with 6 and 8. Black pursued his strategy of containing White and gaining power with 3, 5, 7, and 9.

After White 10 Black faced a decision. Should he keep playing from the outside with A, or should he connect at B? Which move would the reader have made?

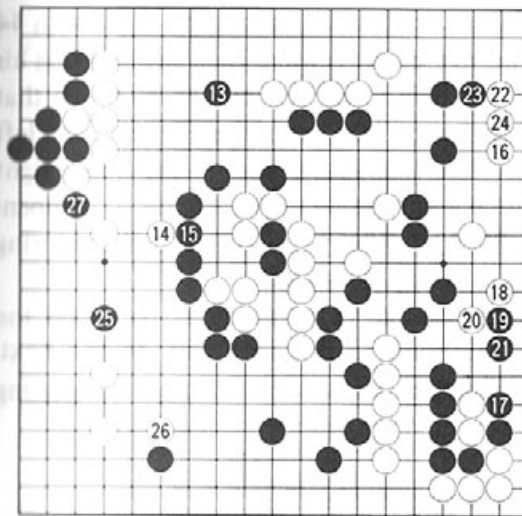
*Dia. 3.* If Black were going to try to kill White, 1 would be the move, but White has the contact jump at 2, and because of the cutting points at *a* and *b* Black will find it impossible to hold him in. Once White gets out, Black's own center position is left dangerously thin.

*Dia. 4. (11 - 12)* (next page) Black played 11. White 12 captured two stones, but two stones are only four points of territory, and only one eye. White's group was alive, but just barely.

As for Black, since the beginning of *Dia. 2* he had succeeded in placing four stones (1, 7, 9, and 11) in the center facing the gaps in White's frameworks on the upper and left sides. He had his power base, and now he was ready to invade.



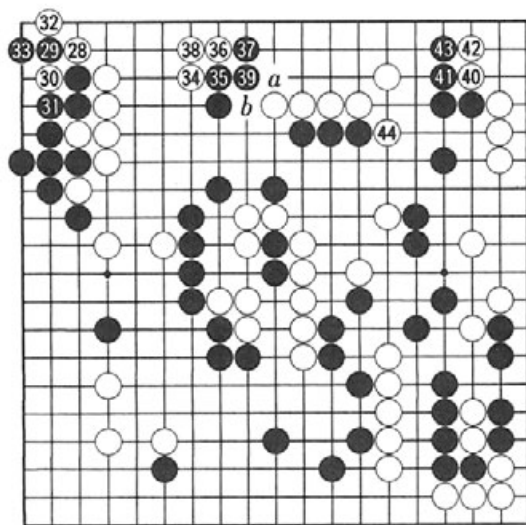
*Dia. 4 (11 - 12)*



*Dia. 5 (13 - 27)*

*Dia. 5. (13 - 27)* Black began by invading the upper side at 13. White attempted to maintain his territorial advantage by saving his stone on the right side with 16 to 24, but Black was able to balance that to some extent by playing 17, and got sente to invade the left side at 25. White defended the lower left corner with 26, but Black ignored him and played 27.

With this, the power that Black had gained by attacking in the center had enabled him to break up all White's former territorial frameworks. White's best remaining prospect was of securing a large corner in the lower left, but before he could play another stone there to do so, he had to defend his wall in the upper left, which Black was now threatening to capture entire.



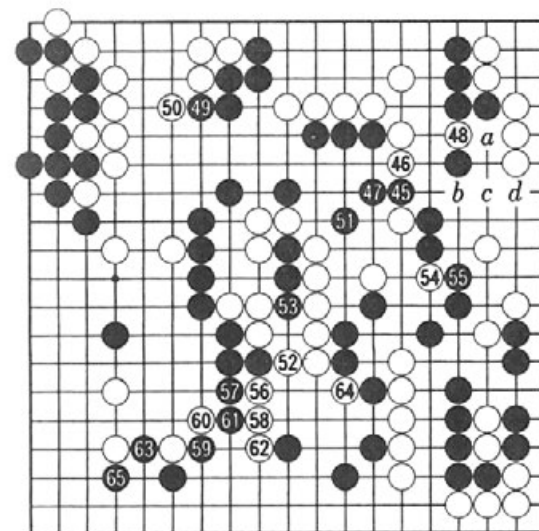
*Dia. 6 (28 - 44)*

Dias. 6 and 7 show how all this turned out. While saving the upper left with 28 - 38, White damaged his own position to the right by having Black play 35 to 39. (Question: why Black 39, making an empty triangle and not Black *a*? Answer: to keep White from playing *b* in sente.) Next, while saving the upper right with 44 to 48, White lost his second eye in the center. Then while saving his center group, he damaged his own lower left corner, so much that after 65 Black was threatening to take over the entire lower left quarter of the board. Black had lost four stones in the upper right - if Black *a* in Dia. 7, White *b* - but he was in a position to compensate for this by playing Black *c*, White *a*, Black *d* and capturing the right side. He won by a comfortable margin.

This game is a beautiful example of what might be called the billiard-ball effect, Black caroming from one attack to the next. What set the whole chain-reaction off was his initial power-gaining attack in the center.

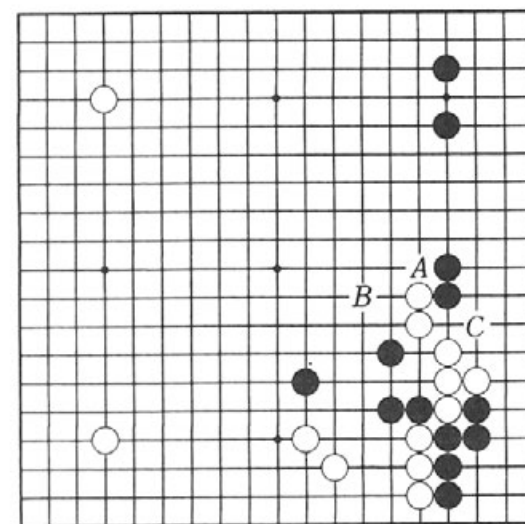
### Running Battles

*Dia. 1.* (bottom of facing page) We have seen that one can attack for either territory or power. Here is a position in which Black



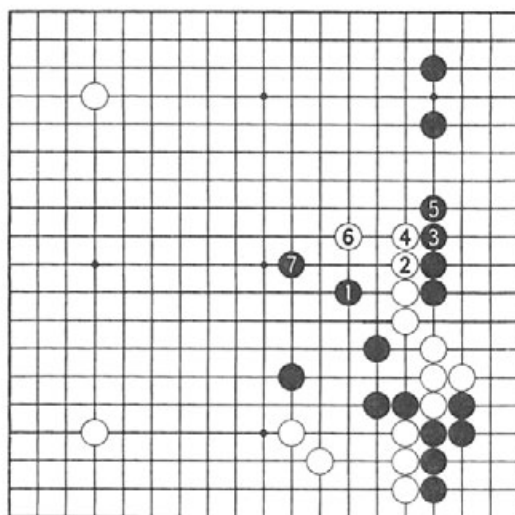
*Dia. 7 (45 - 65)*

has a choice between these two aims. He can go for territory with A, or C, or he can go for power with B. Which move is correct?



*Dia. 1*





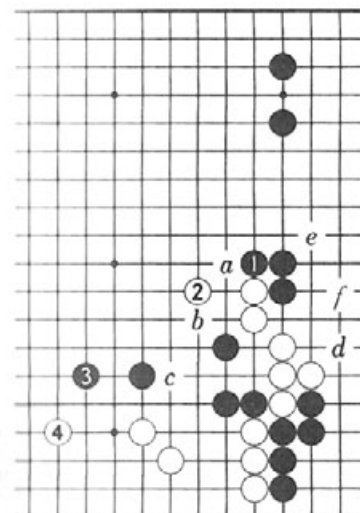
*Dia. 2*

*Dia. 2.* Black 1 is correct. The reason is that this is a running battle between two weak groups, the black one and the white one in the center. The balance of power between them is the crucial issue. Black 1 strengthens the former group and weakens the latter. As a side benefit, it induces 2 to 5, giving Black some solid territory on the right edge. Black 7 is the same type of move as Black 1, attacking the enemy's running group while defending Black's own.

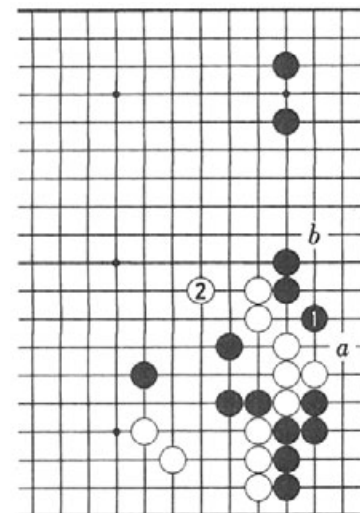
*Dia. 3.* (next page) If Black turns at 1, he pushes White into attacking with 2. Then he has to run with 3 while White makes territory with 4, just the opposite of what happened in *Dia. 2*. He cannot continue with Black *a* because White *b* would threaten *c*. Worse yet, White *d* is sente against the lower right corner, so White can invade at *e* with a possible link-up at *f*.

*Dias. 2* and *3* show very clearly how territory tends to fall naturally to the side that holds the balance of power.

*Dia. 4.* This Black 1 is an endgame-type move. Again White will take the key point at 2, and again he can play *a* in sente, which means he can easily invade at *b*.

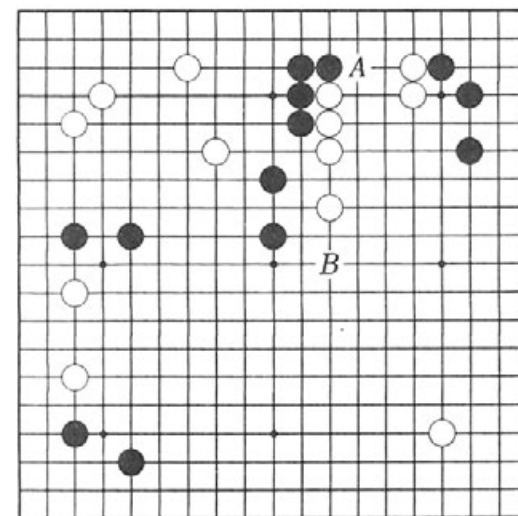


*Dia. 3*

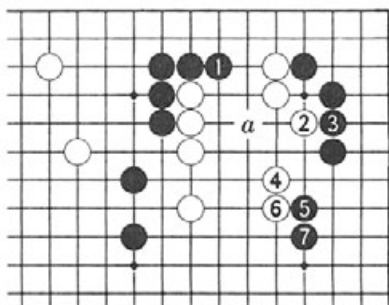


*Dia. 4*

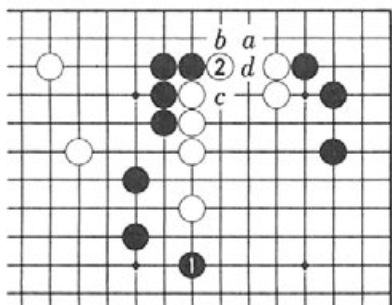
*Dia. 5.* A running battle is a struggle for supremacy between two opposing groups. In this position the two groups are the white one in the upper right and the black one coming down from the upper side. It is Black's move, and he has a good chance to gain the upper hand in the power struggle. Should he play A, or B?



*Dia. 5*



*Dia. 6*



*Dia. 7*

*Dia. 6.* Black 1 is correct, because it concerns the eye space of both running groups. Once Black plays here he is practically alive, while White has no eyes and is threatened with Black *a*. If he defends with 2 to 6, Black gets territory on the right side.

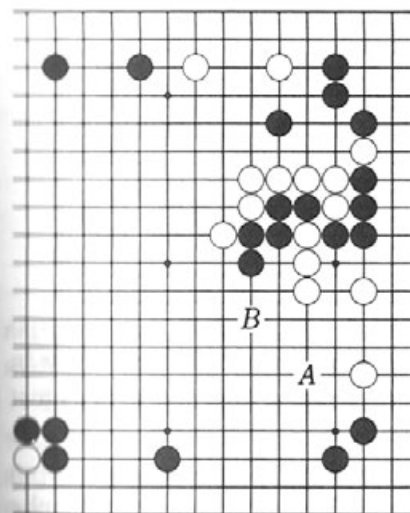
*Dia. 7.* If Black plays 1 here, White takes the key point at 2, and now he is just one move (White *a*) away from living. Black can attack at *a*, but he does not want to because White *b* in reply would undermine his own running group. Nor would Black *b*, White *a*, Black *c*, White *d* be good. Black *c* could not escape and White would be alive. The point of this example is that running battles do not always have to be waged by running in the center. A struggle for power is basically a struggle for eye space.

### Indirect or 'Leaning' Attacks

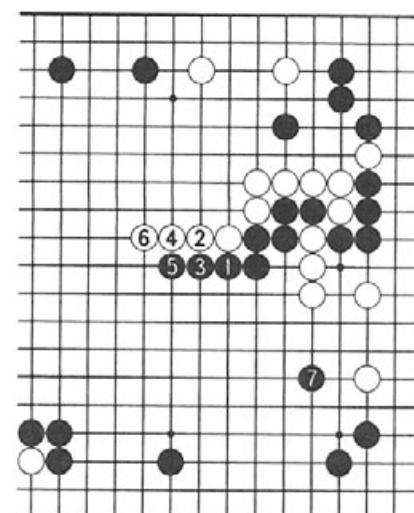
*Dia. 1.* (next page) This position is from a professional title game: Black to play. He has a nice target to attack in the form of the white group in the lower right.

If we try to apply the strategies we have seen so far, the first move that looks good is Black A, building up the territorial framework on the lower side while attacking. But then we notice a weak group consisting of five black stones in the center. Attacking from the direction of A could have undesired consequences for it.

Our next idea, accordingly, is to follow the strategy of the previous section and play B, strengthening the black group while attacking. That, however, would induce White A. Black does not want to push White into his own framework.



*Dia. 1*



*Dia. 2*

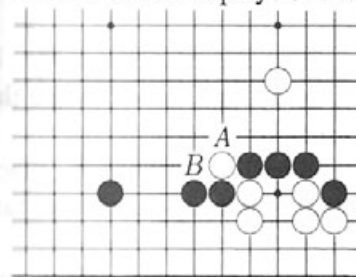
The direct moves, A and B, are both undesirable, so if Black is to find a move that works he will have to try an indirect approach.

*Dia. 2.* Black 1 to 5 provide the solution to this problem. By leaning against White's center group, Black swings the balance of power between his own center group and White's right-side group to something approaching equality. Then he can attack from the direction he wants to with 7. Now he has a strategy that works.

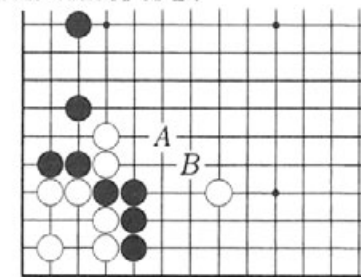
Leaning against one group to reinforce oneself in preparation for an attack on another is a standard technique. Try applying it to the next two positions.

*Dia. 3.* White to play. A or B? Try to imagine the continuation.

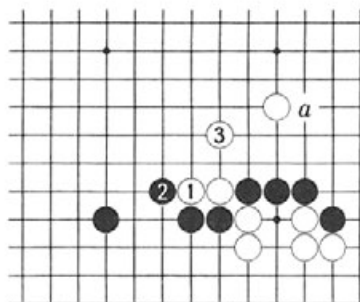
*Dia. 4.* Black to play. Should he run with A or B?



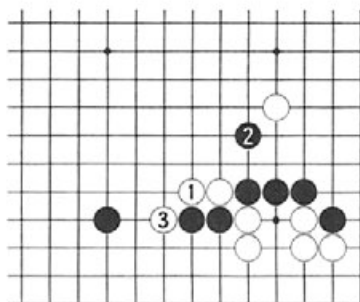
*Dia. 3*



*Dia. 4*



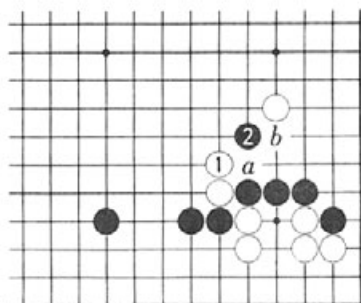
*Dia. 5*



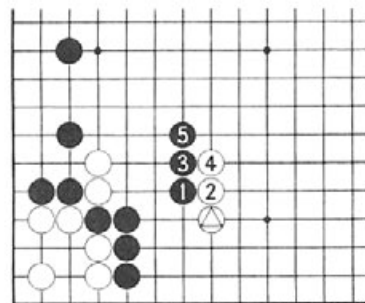
*Dia. 6*

*Dia. 5.* White 1 is correct. If Black answers at 2, White 3 shuts in his right-side group and it will have to struggle (starting with *a*) just to live.

*Dia. 6.* If Black jumps out at 2, however, White can capture an important pair of cutting stones with 3. This would be a catastrophe for Black.



*Dia. 7*



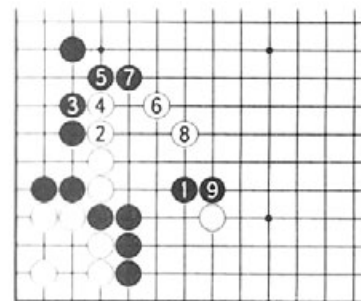
*Dia. 8*

*Dia. 7.* If White plays 1 here, Black escapes with 2 (next if White *a*, Black *b*). White cannot capture anything, and his center group is left weak.

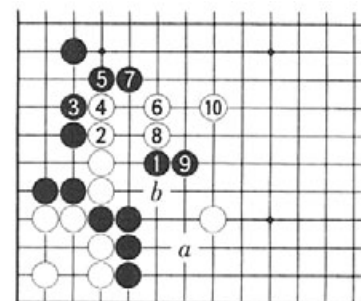
*Dia. 8.* Black 1 is correct, leaning against the triangled stone. If White pushes back with 2 and 4, Black extends at 3 and 5 while the two white stones to the left fade into oblivion.

*Dia. 9.* (next page) If White runs out with 2 through 8, Black makes another leaning attack at 9. From a basically defensive start he has captured the offensive.

*Dia. 10.* Black 1 here is loose. It has no leaning effect, and



*Dia. 9*



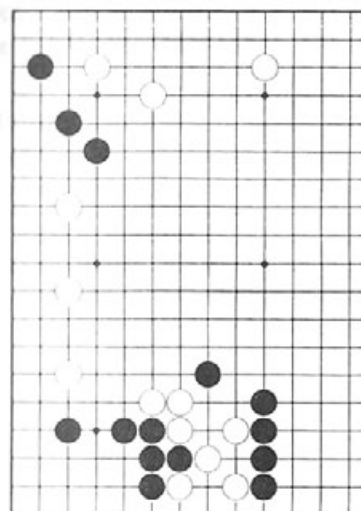
*Dia. 10*

neither does Black 9. As further punishment for Black's aimless maneuvering, White can play *a* in sente, threatening *b*.

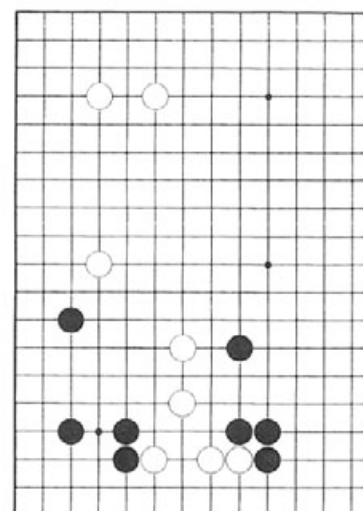
In order to lean against something, you have to make contact with it, or at least come close, so contact plays (1 in Dias. 5 and 6) and shoulder moves (1 in Dias. 8 and 9) are the most common leaning attacks. Here are a couple more illustrations, this time not from running battles but from pure attacking situations.

*Dia. 11.* Black to play. How should he attack the white group on the lower side?

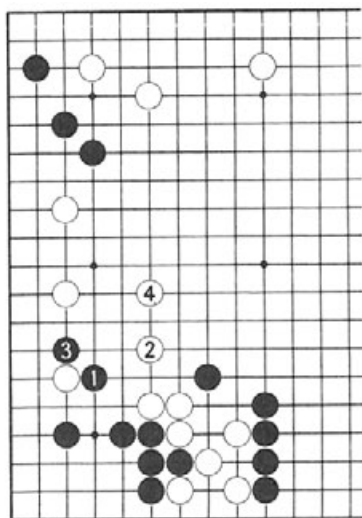
*Dia. 12.* Black to play, attacking the white group coming up from the lower side.



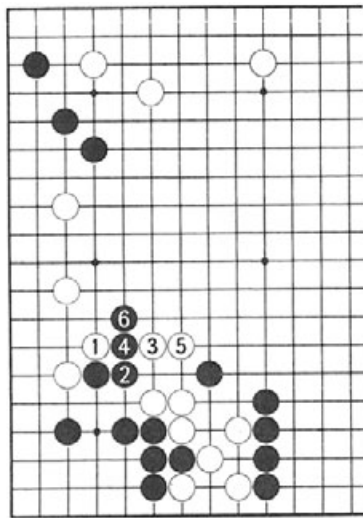
*Dia. 11*



*Dia. 12*



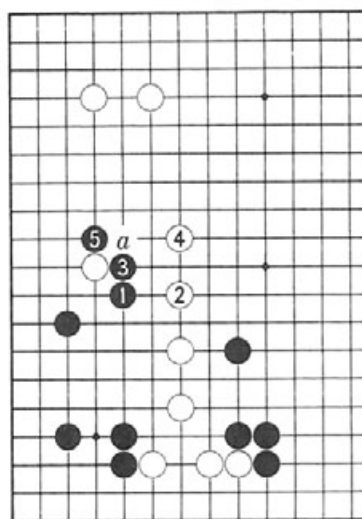
*Dia. 13*



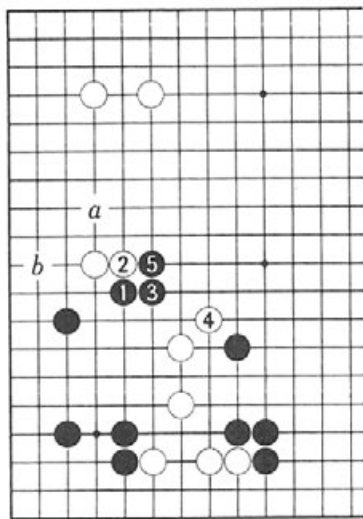
*Dia. 14*

*Dia. 13.* Black 1 is the correct leaning attack, and White's best reply is to run to safety with 2 and 4. If he plays 2 at 3, Black can play 2.

*Dia. 14.* If White hanes with 1 here, inducing Black 2, he makes Black's attack much stronger. To force the enemy out the way White forces Black out at 6 is almost always wrong.



*Dia. 15*



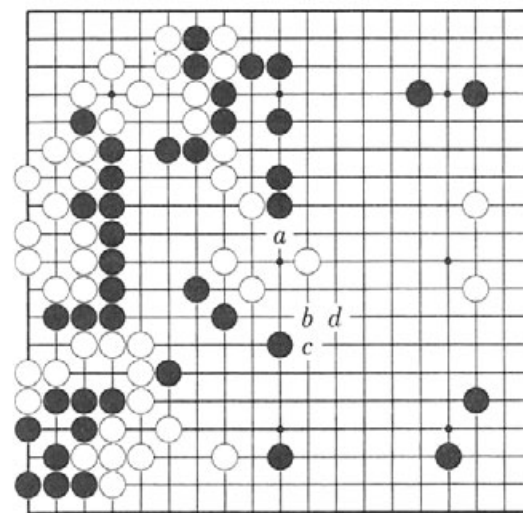
*Dia. 16*

*Dia. 15.* Here the shoulder move at 1 is effective. Once again White's best reply is probably to run out with 2 and 4 and give up his stone on the left side. If he plays 4 at 5, Black will of course keep leaning on him with *a*.

*Dia. 16.* If White answers Black 1 at 2, he pushes Black into attacking him further with 3. After White 4, Black leans again at 5. His attack is gaining weight, and he threatens to start a second attack at *a*. White 2 is doubtful for these reasons and also because White's territorial prospects were bad here to begin with, since Black can slide to *b*.

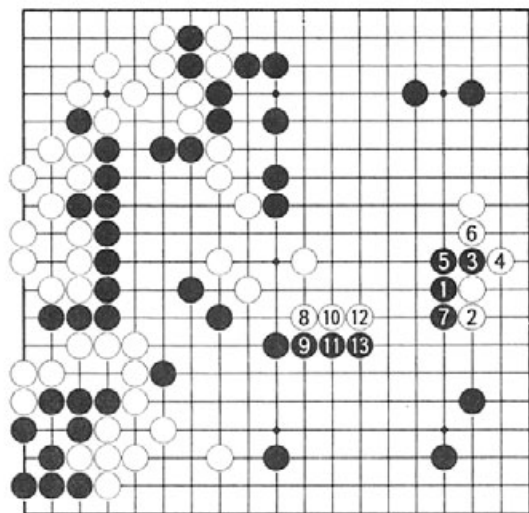
Leaning attacks like these are the essence of go. The satisfaction of toying with an enemy group – not attacking it directly but circling around it, away from it, and forcing the enemy to concede stones and territory while protecting it – can be just as great as the satisfaction of killing it through brute force. Brute-force attacks are fine when they succeed, but when they fail the result tends to be like Dia. 1 at the beginning of this chapter. Leaning attacks cannot fail so badly. The attacker is not taking any big risks.

*Dia. 17.* A full-board position: Black to play and attack the white group in the center. The brute-force move would be Black *a*, but White would escape towards his two stones on the right side with White *b*, Black *c*, White *d*. After White escapes, Black *a* loses most of its value. Can the reader imagine a better way to attack?



*Dia. 17*

*Dia. 18.* How about leaning at Black 1? That is what the Japanese author did in this position during a recent title match. White replied at 2 and Black kept leaning on him with 3, 5, and 7. At this point White could no longer ignore the danger to his center, so he defended with 8 to 12.



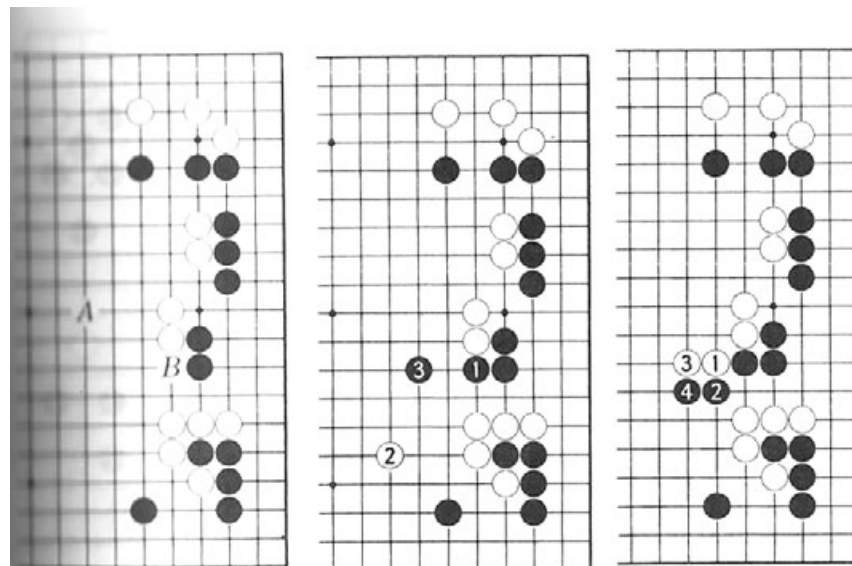
*Dia. 18*

Now in a very narrow-minded sense Black's attack had failed, because he had not done any damage to the right side and he could not capture the center, but even in failure he had succeeded, because Black 9 to 13 led to his getting over forty points of territory in the lower right. This drastically upset the balance of territory. In addition, White's center remained cut off by Black 1-7 and susceptible to pressure. None of Black's stones went to waste. This attack won him the game.

Would the reader have played 1 at 5, or at the point above that? If so, good enough — he has the right idea. Black 1 was chosen because it related well with the framework below. Black 1 at 7 might also do the trick, although it would probably fail to cut off the center.

### Divide and Conquer

So far we have been talking about attacking one enemy group, but the fun increases when there are two. When one can threaten two groups simultaneously, it becomes much harder for the enemy to defend. The basic technique is just to play between the two groups and keep them divided. We shall call such attacks splitting attacks, or double attacks.



*Dia. 1*

*Dia. 2*

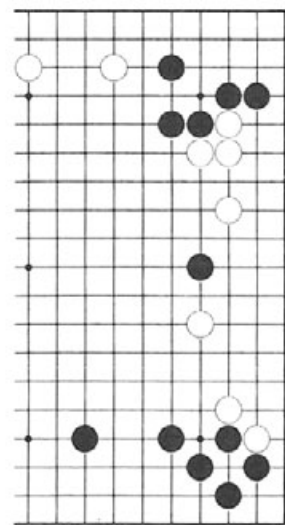
*Dia. 3*

*Dia. 1.* The weak groups here are the chains of white stones facing the center. The wrong way to attack them would be with a move like Black A. White would join up at B, and then the sheer size of his formation would make it relatively invulnerable.

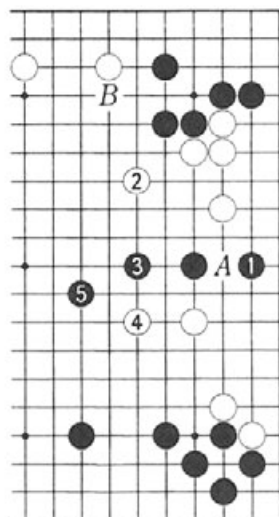
*Dia. 2.* But suppose Black attacks by splitting White with 1. If White jumps to 2, Black keeps splitting him with 3. The bottom half of White's group is being forced to flee and the top half, although not actually captured yet, has become just so much inert, dead weight.

*Dia. 3.* If White resists with the hane at 1, Black keeps him separated with 2 and 4. Now the bottom white group is in trouble.

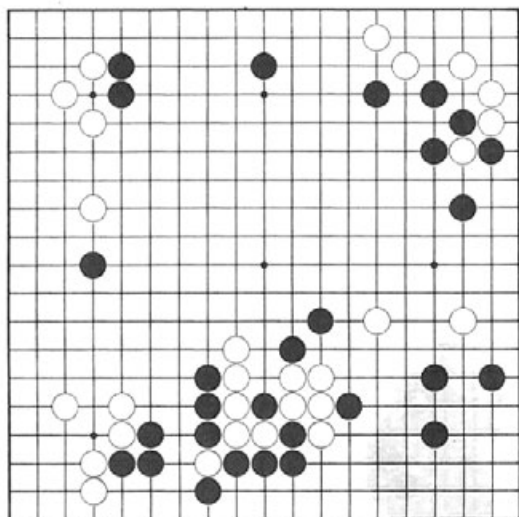
*Dia. 4.* This position was made in order for a splitting attack. How should Black play on the right side?



*Dia. 4*



*Dia. 5*



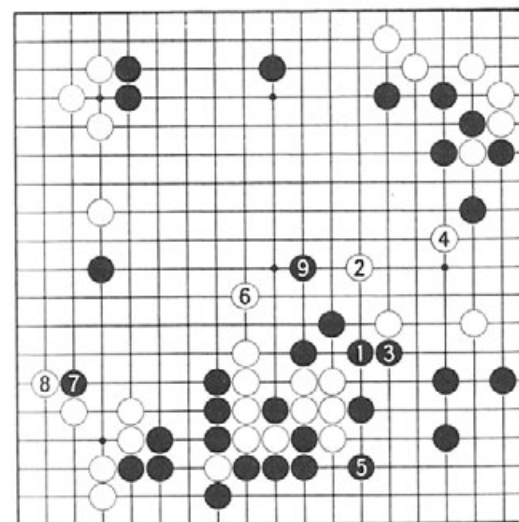
*Dia. 6*

*Dia. 5.* Black 1 bisects White's position. (Black A would do the same.) Black 3 continues the double attack. With 5 Black begins to bear down on the lower white group, but he is not abandoning the upper one. He is plotting a leaning attack at B. He will probably not kill either group, but he is gaining power and is not letting White make any significant amount of territory.

If Black failed to play here, White would gleefully cross under at A.

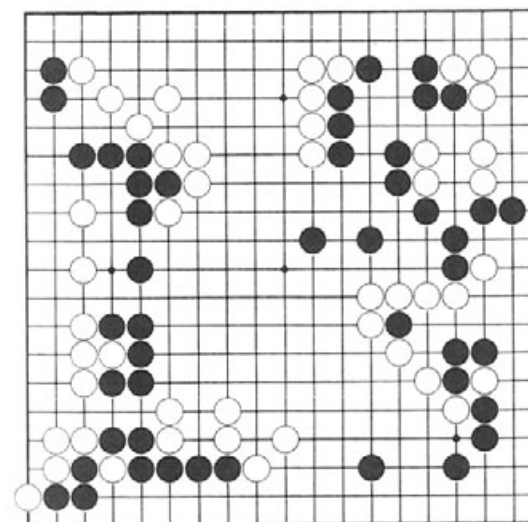
*Dia. 6.* Black to play. This position comes from a classic game between Go Seigen (black) and Kitani, but the move is one the reader should have no difficulty seeing. Where can Black make a splitting attack?

*Dia. 7.* (next page) Black played 1 – even go geniuses are not above availing themselves of obvious moves like this. Black consolidated his position with 3 and 5 while White had to defend with 2, 4, and 6. Black 7 was a forcing move incidental to the flow of play, but Black 9 was another splitting attack. Of course Black's splitting strategy did not lead to the capture of either group – that would have been too much to expect – but by attacking in this way he was able to keep the initiative and eventually won.

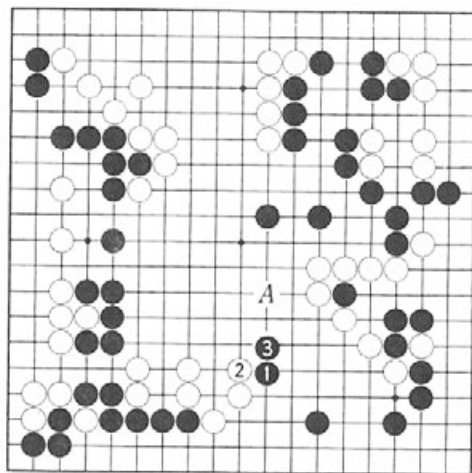


*Dia. 7*

*Dia. 8.* Black to play. This time the position is from an amateur game. What should Black's strategy be?



*Dia. 8*



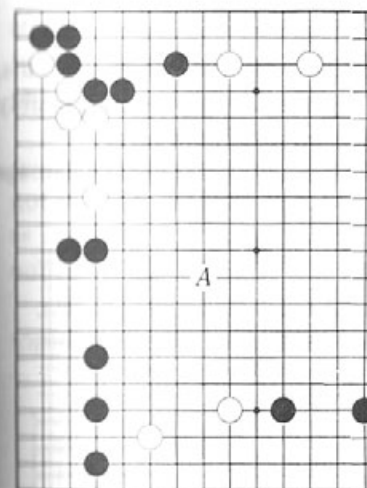
*Dia. 9*

*Dia. 9.* Black should play to split the two white groups exposed in the lower half of the board. Black 1 looks like the best attack; with the groups farther apart, a play on the midline between them would not be so severe. If White replies at 2, Black keeps him divided with 3. We have been stressing that to attack does not necessarily mean to kill, but in this case there is a chance that one of the white groups will actually die. If White plays 2 at A, Black 2 ruins the shape of his lower group.

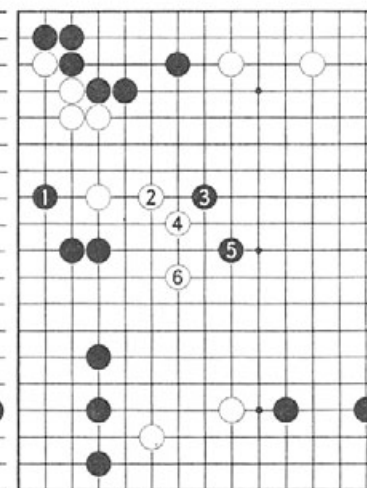
What if the two enemy groups are even farther apart than in *Dia. 9*, so that one stone can no longer attack both of them? In this case the trick is to chase them toward each other, wait until the gap has sufficiently narrowed, then split between them. When it works, this can be one of the most devastating maneuvers in the game.

*Dia. 10.* (next page) In this position a move like Black A would not be much of a threat to either the white group in the upper left or the one on the lower side.

*Dia. 11.* But watch what happens as Black chases the upper group into the center with 1, then steers it toward the lower side with 3 and 5. With White 6, the distance has closed enough for a splitting attack.



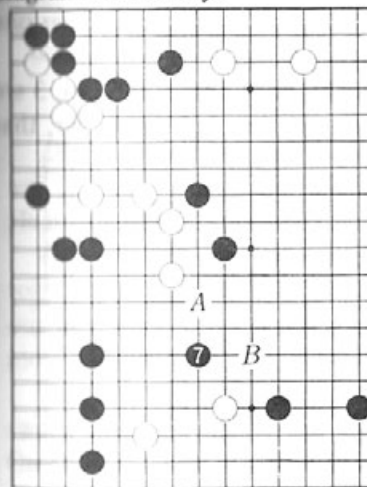
*Dia. 10*



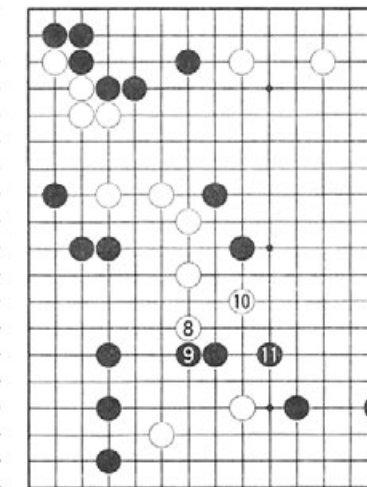
*Dia. 11*

*Dia. 12.* Black strikes at 7. This makes miai of A, trapping the upper group, and B, trapping the lower one.

*Dia. 13.* White defends his larger group with 8 and 10 as Black 9 and 11 finish off the smaller one, which is still pretty big. It is generally dangerous to have two weak groups on the board. This diagram shows why.



*Dia. 12*

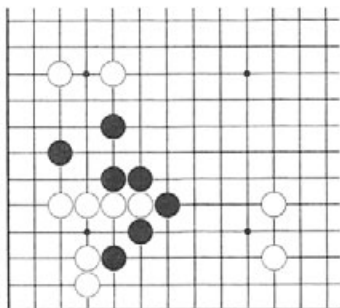


*Dia. 13*

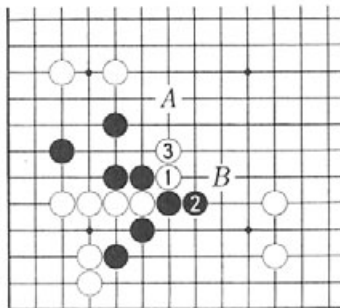
## Cuts

The ultimate form of splitting attack is the cut. When one cuts, the two enemy groups are as close together as they could possibly be and the resulting double attack takes on maximum force.

*Dia. 1.* In a position like this White can do a great deal of damage by cutting.



*Dia. 1*

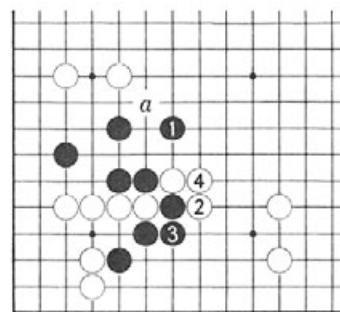


*Dia. 2*

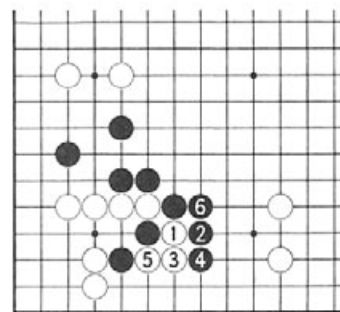
*Dia. 2.* He cuts at 1. If Black answers from below with 2, White extends at 3. Now A and B are miai, and Black is probably going to lose one group or the other.

*Dia. 3.* If Black defends from above with 1, White gives atari at 2 and connects at 4. The lower black group is dead and the upper one is not entirely out of danger (White *a*).

The cut in *Dia. 2* worked very nicely; both *Dia. 2* and *Dia. 3* are splendid results for White. One should not conclude, however, that



*Dia. 3*

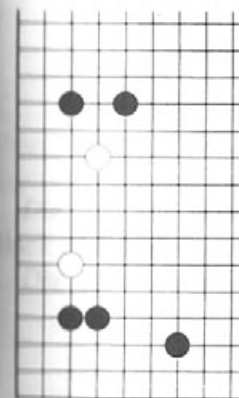


*Dia. 4*

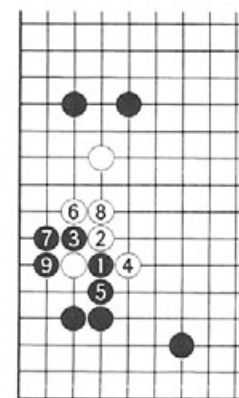
all cuts are good. If you cut off something that the enemy can afford to give up, the cut may actually be counter-productive, helping him to strengthen his position.

*Dia. 4.* A white cut here, for instance, would be atrocious. The two stones White cuts off get captured all right, but the capture is not very big, and Black 2, 4, and 6 do wonders for Black's position as a whole. If you are going to cut small like this, you had better not cut at all.

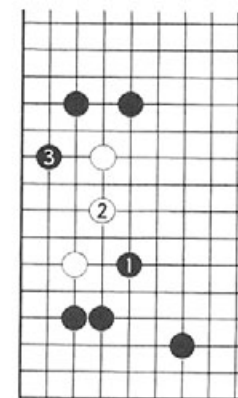
*Dia. 5.* Sometimes it is more effective to herd the enemy's stones together than to hack them apart. Here, for example -



*Dia. 5*



*Dia. 6*



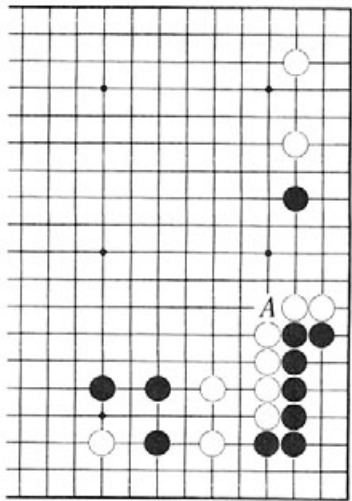
*Dia. 7*

*Dia. 6.* Black can easily capture one stone by crosscutting with 1 and 3, but as compensation White gets to play 2, 4, 6, and 8 in sente. He now has much better defensive shape than he started with.

*Dia. 7.* Instead of cutting White apart, Black should push him together with 1, then undermine his eye space with 3 and chase him out into the center. Black is still taking profit, and White is in much more trouble.

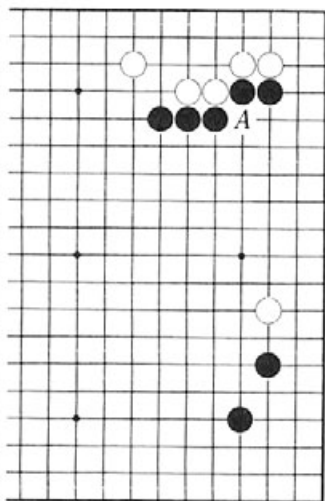
Can you tell the difference between a good cut and a bad - between what the enemy can afford to sacrifice and what he cannot? On the next two pages we have collected six examples of cuts, some good and some not. Which are which?





*Dia. 8*

*Dia. 8.* Should Black cut at A?

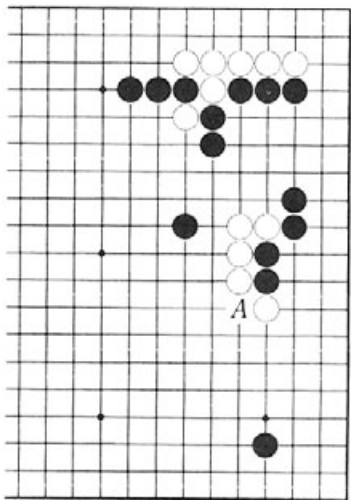


*Dia. 9*

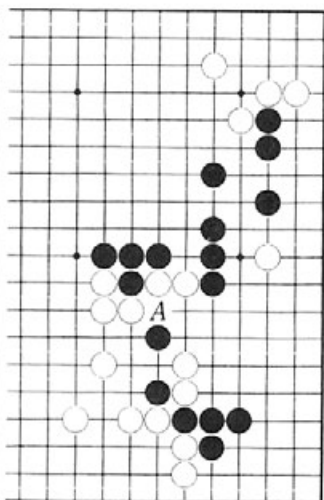
*Dia. 9.* How about White A?

*Dia. 10.* Black A would cut off one stone. Is it worthwhile?

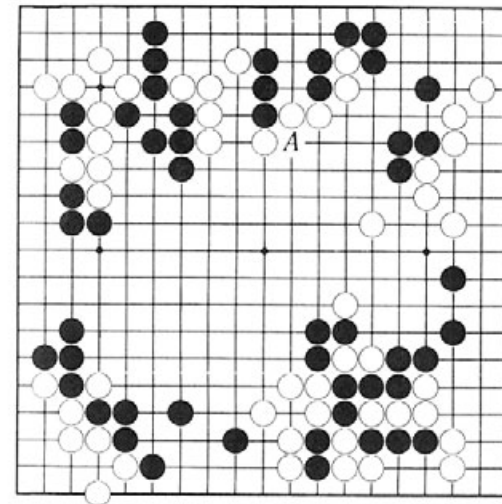
*Dia. 11.* This time Black A would cut off two stones.



*Dia. 10*



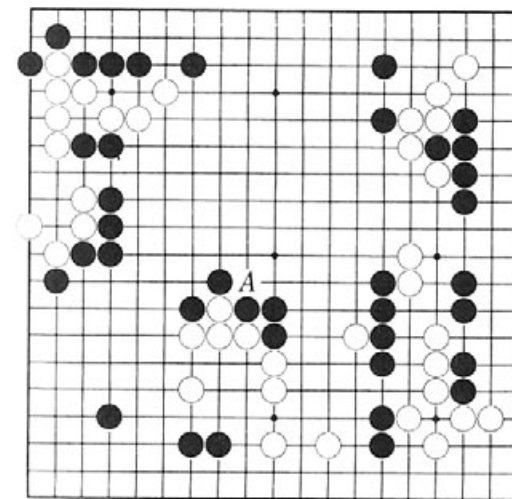
*Dia. 11*



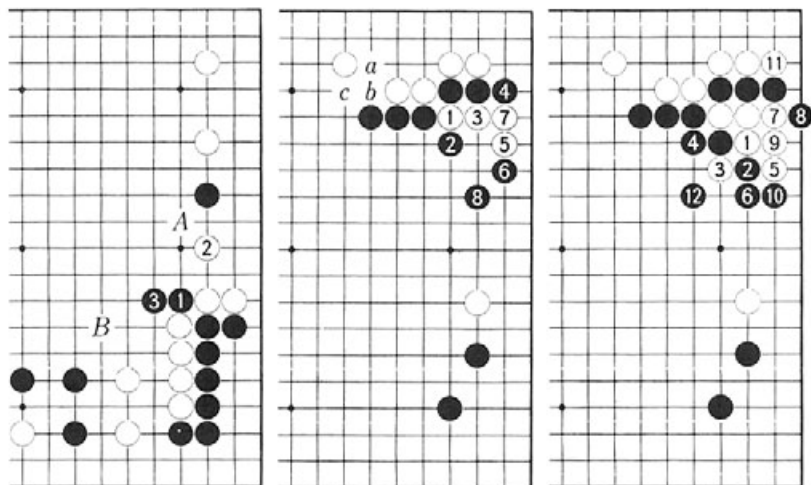
*Dia. 12*

*Dia. 12.* The white stones on the upper side are weak. Should Black cut at A?

*Dia. 13.* Should White cut at A?



*Dia. 13*



*Dia. 14*

*Dia. 15*

*Dia. 16*

*Dia. 14.* Good! Black 1 is an ideal cut. White cannot easily surrender either group, but he will have a hard time saving both of them. Black 3 aims toward A and B.

*Dia. 15.* Bad! Black willingly gives up two stones, even adding a third at 4 in order to squeeze White more effectively. White has gained a pittance in the corner and lost a fortune on the outside. Note incidentally that Black threatens *a-b-c*.

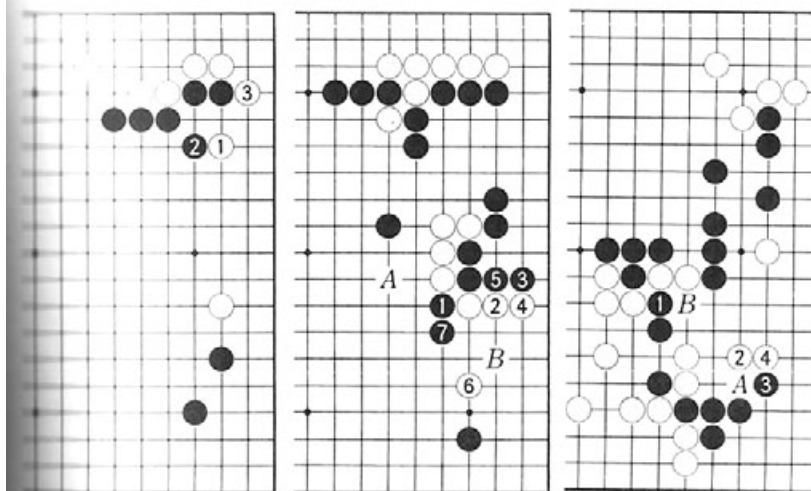
*Dia. 16.* If White plays 5 in the last diagram at 1 here, Black's outside position becomes even stronger.

*Dia. 17.* (next page) Instead of cutting, White should approach at 1 – the eye-stealing tesuji. If Black connects at 2 (his best reply) White can link under at 3.

*Dia. 18.* Good! Although Black 1 cuts off only one stone, capturing it would be very big. White accordingly tries to save it with 2 through 6, but Black 7 threatens A and B.

*Dia. 19.* Bad! White ignores Black 1 and invades the right side with 2. Adding to Black's problems in the corner is the fact that White A threatens B.

*Dia. 20.* Far from cutting, Black should connect at 1 and sacrifice three stones to wall off the right side in sente. This time if White plays 2 at *a* Black wedges in at 7.

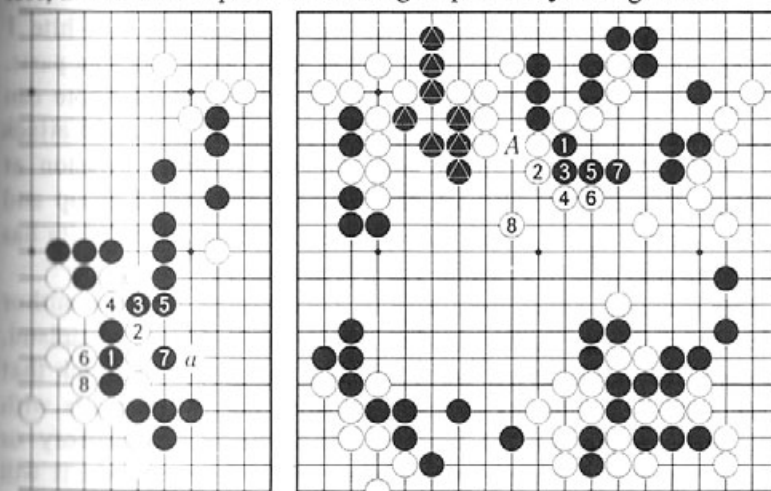


*Dia. 17*

*Dia. 18*

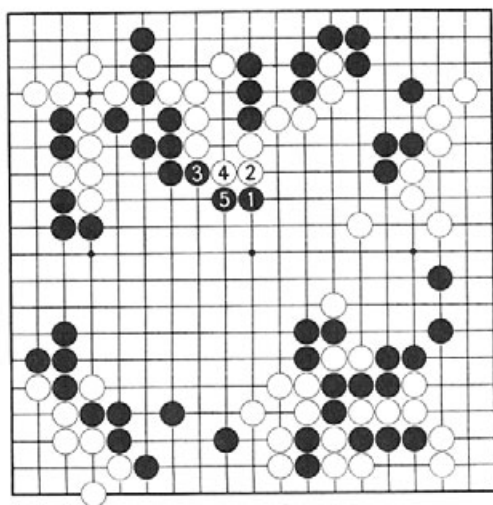
*Dia. 19*

*Dia. 21.* Bad! Black 1 threatens A, so White has to answer at 2 and Black catches four stones with 3 to 7 for a grand total of about twelve points. In view of the balance of territory this is not nearly enough to win the game. White 8 begins to threaten the triangled group and wipes out the influence of the black wall in the lower left, and the main part of White's group is vastly strengthened.



*Dia. 20*

*Dia. 21*

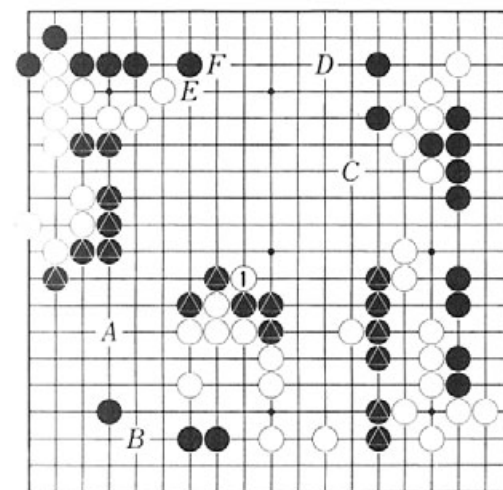


*Dia. 22*

*Dia. 22.* Black should attack White's group as a whole with 1. He may not be able to kill it, but he is building a wall that coordinates with his wall in the lower left and may lead to his getting a large territory in the center.

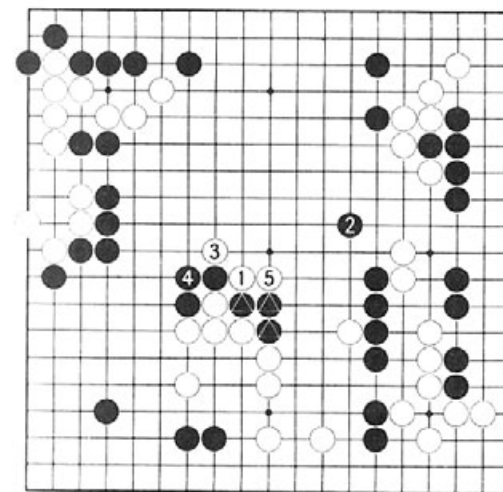
*Dia. 23.* (next page) Good! The ladder is broken, so White 1 divides the triangled collection of stones into two attackable parts. Neither part may be capturable, but as events unfold White can look forward to double attacks at A and C. White A would attack the left-hand triangled group and threaten a corner invasion at B. White C would attack both the right-hand triangled group and the two stones on the upper side (White D). In addition, White has leaning attacks at E or F. White 1 is a promising cut.

This problem comes from a game between the Japanese author (white) and Chen Zude, a leading player of the Chinese mainland. To conclude this chapter, we would like to follow the attack that began with 1 out to its conclusion. Note that White starts with very little in the way of territory, while Black has territory or potential territory almost everywhere, so if White can win it will be testimony to what can be accomplished by attacking.

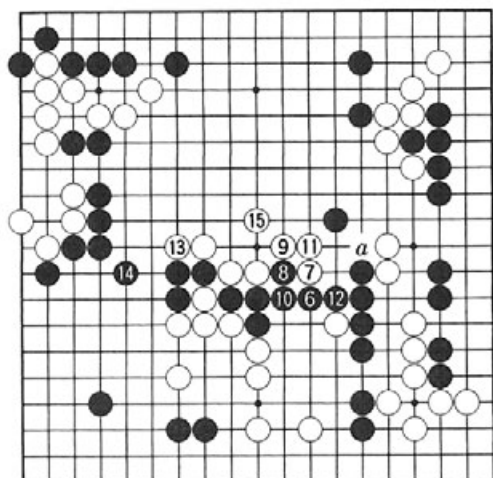


*Dia. 23*

*Dia. 24.* (1 - 5) Black answered the cut at 1 with a ladder-block at 2 and White gave atari at 3. White could have made a double atari at 4, but then Black 3 would have ended the usefulness of the cutting stone at 1. White 3 was played to prevent Black 3. Next White 5 threatened to capture the three triangled stones.

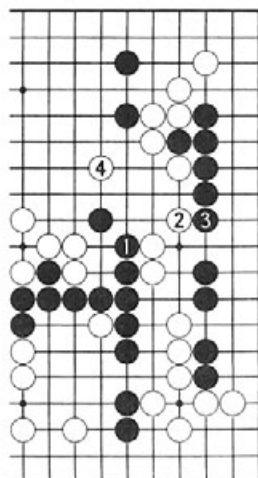


*Dia. 24 (1 - 5)*



*Dia. 25 (6 – 15)*

*Dia. 25. (6 – 15)* Black defended with 6 and White continued to develop his cutting group with 7 through 15. At the end of this sequence Black's army in the lower right was in acute danger. It had no eyes yet and White could cut it off with *a*.



*Dia. 26*

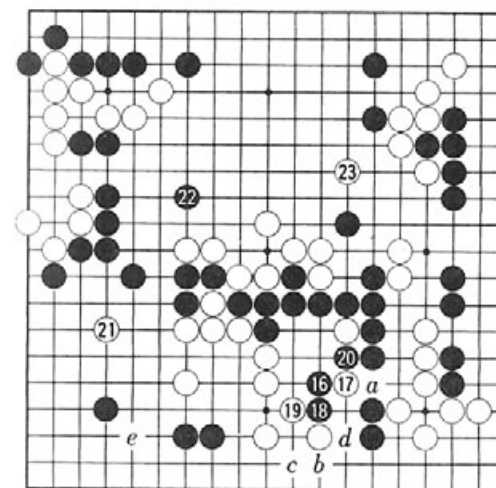
*Dia. 26.* One way to defend it would be to link at Black 1, but this would merely invite the double attack at 4, one of White's aims when he originally cut.

*Dia. 27. (16 – 23)* So Black attempted to live locally with 16. Black 20 captured one white stone for one sure eye and half-captured White 17 for a second. If White rescued 17 with *a*, Black could resort to a ko – Black *b*, White *c*, Black *d* – for life.

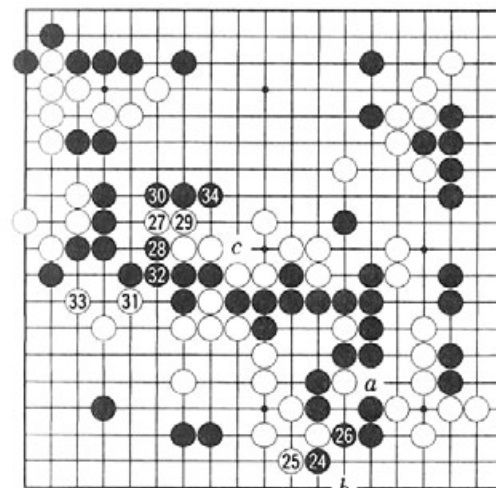
Rather than force the ko at once, White made the two double attacks he had been planning with 21 and 23. White 21 threatened *e*, whereas White 23 meant that Black's lower-right group was effectively sealed in and the ko from White *a* to Black *d* was a serious issue.

*Dia. 28. (24 – 34)* Black answered the worst threat by living with 24 and 26. Now if White played *a* Black could, aside from fighting the ko, make an unconditional eye with *b*.

White shifted his attack to the upper left with 27 to 33. Black ignored White 33 to play in the center at 34. This was a good move, defending by threatening Black *c*, but the fact that 33 had not been



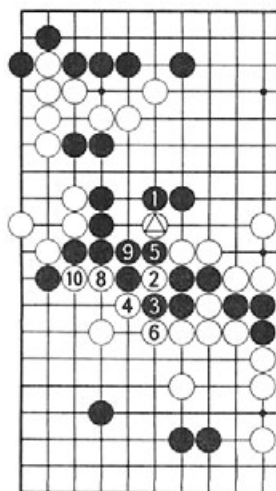
*Dia. 27 (16 – 23)*



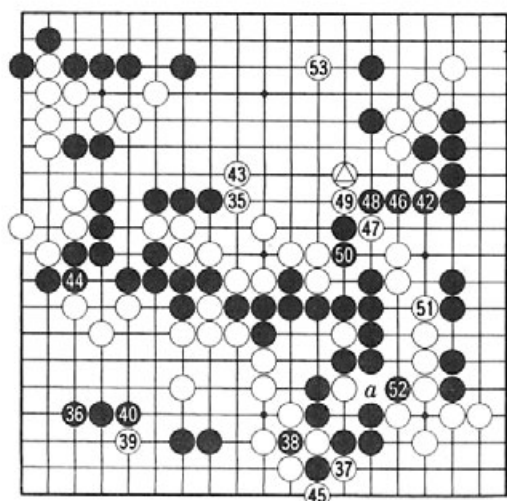
*Dia. 28 (24 – 34)*

answered meant that the lower left corner was that much more vulnerable to invasion.

During the course of these moves, both White 27 and 31 threatened the sequence shown in Dia. 29 on the next page.



*Dia. 29*  
7 connects



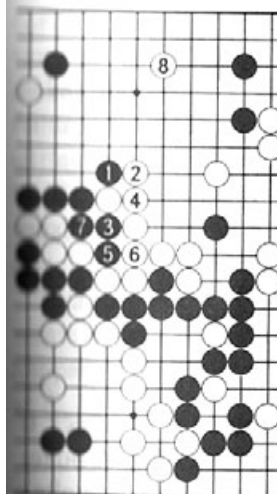
*Dia. 30 (35 - 53)*  
41 takes ko

*Dia. 29.* If Black answers the triangled move at 1, White wedges at 2, squeezes with 4, 6, and 8, and cuts at 10.

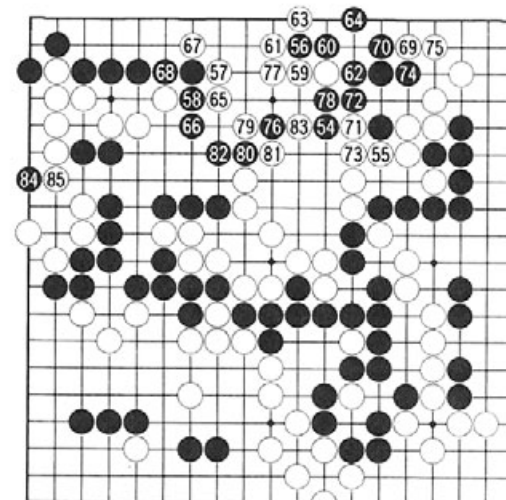
*Dia. 30. (35 - 53)* White 35 protected the center and Black 36 the bottom left corner. Here White decided to settle the ko on the lower side and played 37. He had lots of ko threats, starting with 39. Connecting at 44, Black offered him a chance to play *a* and make the ko a life-or-death affair, but White declined this gambit and captured at 45. By doing so he put his own lower-side group out of any possible danger and made Black live at 52.

So far, all White's attacking had not brought him much actual territory, but his attacks were becoming progressively severe. White 53 was the death-blow. Now that both the triangled stone and White 43 had been played, Black's two stones in the upper right were in an extremely bad position.

*Dia. 31.* As a side note, instead of playing 36 in Dia. 30 Black could have captured four stones with 1 to 7, but aside from not defending the bottom left corner, these plays would let White kill the triangled stones with 8.



*Dia. 31*



*Dia. 32 (54 - 85)*

*Dia. 32. (54 - 85)* This shows the final denouement. Black's upper-side group died and he resigned. Note the leaning moves at 57, 65, and 67 that helped White capture it. White 57 was a kind of probe. Depending on how Black answered it, White might have chosen to play 59 at 60.

### Chapter Three ATTACKING MOVES

In the last chapter we considered the strategy of attack. In this one we turn to the tactics for implementing the strategy.

#### Make Non-Contact Moves

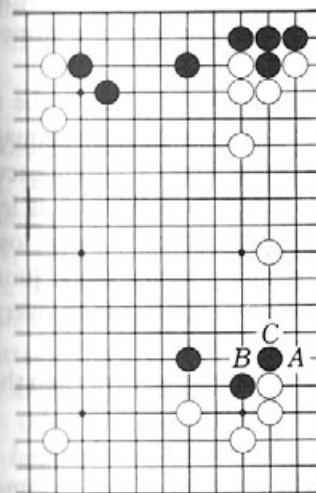
In the realm of human combat, the basic technique of attack is to make forceful contact with the thing you are attacking. A boxer attacks his opponent by punching him, a wrestler by grappling with him; neither can do anything by hovering out of reach. Caesar's armies used swords, spears, and battering rams — all contact weapons — to conquer Gaul. Modern warfare substitutes bombs and missiles, but forceful, smashing contact remains the basic idea.

By analogy with this, a beginning go player might reasonably assume that the strongest attacking moves on the go board are contact moves, which actually touch the stones being attacked. This assumption may become strengthened through experience when the beginner finds that his opponents' contact moves are the ones that cause him the most trouble. 'Cut and thrust' becomes his style, and 'attack in contact' his motto. This is dangerous, because it is wrong.

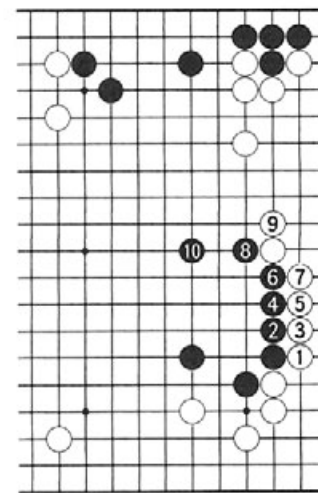
The reader might like to look back through the last chapter and see how many of the attacking moves shown there were contact moves. If he does so he will make a useful discovery. Except for the cuts, almost all were non-contact moves, and those that were contact moves were mostly leaning attachments, which made contact with something other than the group being attacked. This is not a coincidence. Beginners' intuition notwithstanding, there is a basic principle of the game which says, 'Don't touch what you are attacking.'

The reason for this is that when one makes a contact move, the enemy generally responds with a solid extension or a solid connection, so he solidifies — strengthens — his position. That in itself makes the contact attack a contradictory move, and a probable failure. To make matters worse, the attacking stone, since it is left sitting in contact with a strengthened enemy stone, is very likely to find itself counterattacked. The best the contact player can usually hope for is a back-and-forth even fight in which both sides attack and defend simultaneously.

*Dia. 1.* For a concrete example, let's take this position. White wants to attack the loose black group in the lower right. What will happen if he chooses one of the three likely-looking contact plays, at A, B, or C?

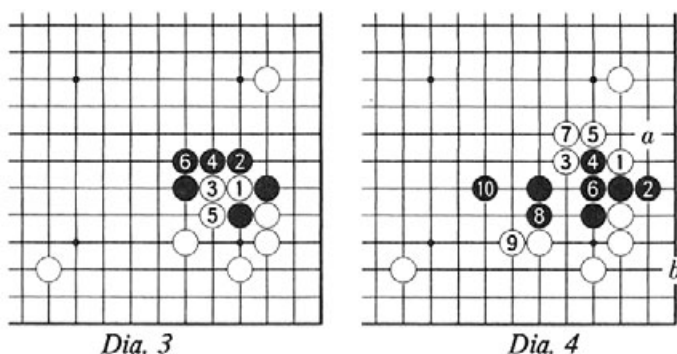


*Dia. 1*



*Dia. 2*

*Dia. 2.* (A) Suppose he plays the hane at 1. He can link up along the right edge, but while he is marching, or rather crawling, along the second line, Black's formerly loose group is acquiring solidity, territory, and eye space. This is the worst possible way for White to play.



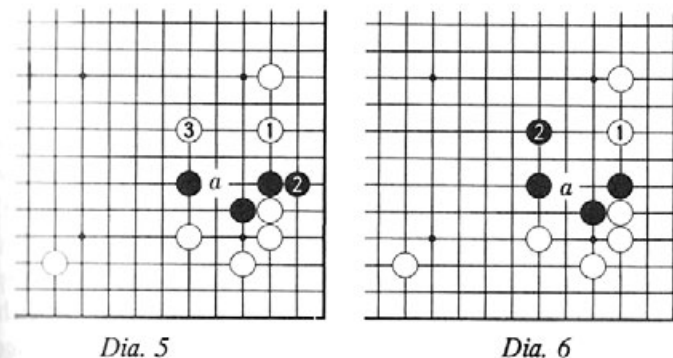
*Dia. 3.* (B) Next in line for appraisal is the cut at 1, but this is the type of cut the reader was warned in the last chapter not to make because the enemy can afford to sacrifice what is cut off. Black responds with 2 to 6. This time he may not get territory or eye space, but he does gain solidity. White gets just one stone, the loss of which causes Black no pain.

*Dia. 4.* (C) Third comes the white clamp at 1. This is the most interesting of the three contact moves – it does the most damage to Black’s shape – but note how once again Black’s group becomes solid as he responds with 2 to 10. Note also how White 1 is left in a weak position. Note finally that Black 2 inflicts a large loss on White at the edge – nearly twenty points. Picture Black jumping to *a* and sliding to *b* in sente in the endgame. White 1 is an overplay, provoking a response White does not want to see.

None of these contact plays lead to good results. How then should White attack?

*Dia. 5.* (next page) He should keep his distance and play 1. For comparison with the last diagram, let’s suppose Black descends at 2. White can jump to 3. This looks like *Dia. 4*, but there are two important differences. The first is that Black’s group is not as solid as White made it before: consider White *a* for example. The second is that White 1 is left in a strong, not a weak position. This result is much better for White.

*Dia. 6.* (next page) Rather than descend, Black will more likely respond with a jump like 2 in the center, so as to defend against



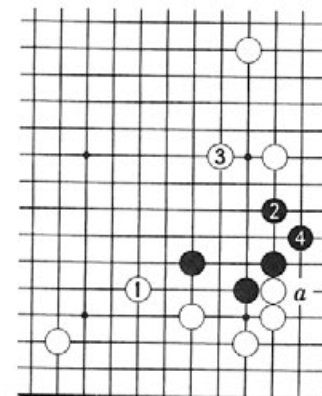
White *a*, but once again it is clear that White has a better result than in *Dias. 2* to *4*. Black’s group is still loose and devoid of eye shape.

What was true here is true in general. Contact attacks tend to backfire. Comparatively innocent-looking non-contact moves are much more effective.

### Seek Severity

Avoiding contact, however, does not in itself make for a strong attack. More is required. An attacking move must be severe; it must hit the enemy where it hurts. Indeed, severity is the heart of the matter, while being a non-contact move is more a surface issue.

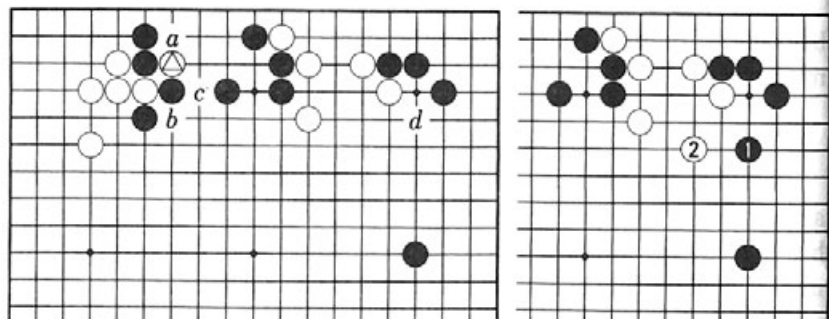
*Dia. 1.* One might ask why in the previous example White did not attack from the direction of 1, so as to gain territory on the lower side. This would seem to make sense strategically, but if we look deeper, we detect a lack of severity. Black can extend to 2. If White continues his attack with 3, Black lives with 4. White’s attack is now over and Black was never in trouble. Black has even gained profit while living, for later he can play *a* etc. in sente.



*Dia. 1*

Anyone can tell the difference between a contact and a non-contact play, but distinguishing between a severe and a non-severe attack is a little harder. Could the reader find the severe attack in the following position?

*Dia. 2.* This happened to the Japanese author. His opponent, White, had just played the triangled move. Apparently he wanted Black to respond at *a* so that he could trade *b* for *c* in sente, then protect the upper right with *d*. Black's upper-side group, however, was not in mortal danger, so rather than respond as White hoped, it looked better to take the offensive in the upper right, and this the author did. To make the most of his opportunity, Black needs to attack severely. Where?



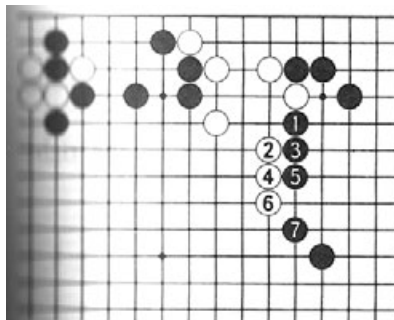
*Dia. 2*

*Dia. 3*

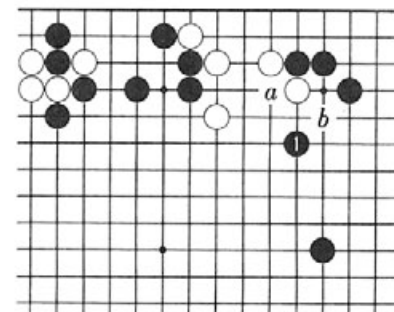
*Dia. 3.* Not here. Although Black 1 is a standard move, it gives White an easy defense at 2. Black is attacking from the right general direction, but getting only a mediocre result.

*Dia. 4.* (next page) Well then, for a more severe move, how about clamping at 1? The reader, however, already knows that this contact play is unlikely to be correct. White will respond at 2 and let himself be pushed out into the center, giving Black territory but becoming strong in sente in compensation. This is still not satisfactory.

*Dia. 5.* The severest attack lies here, only one line away from each of the two incorrect moves just considered. Its severity comes partly from the fact that White cannot jump in front of it as he did in Dia. 4



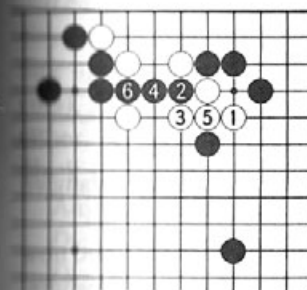
*Dia. 4*



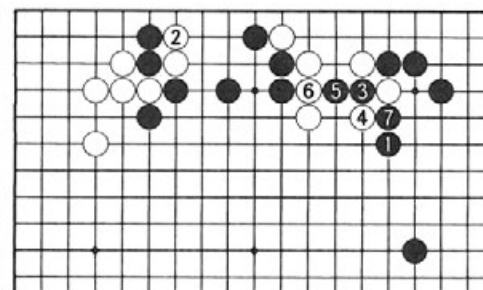
*Dia. 5*

and partly from the way it prepares for a cut at *a*. Black *a* makes it inadvisable for White to try to push past 1 into the right side with *b*.

*Dia. 6.* If he does try, this is the result. White may have broken through, but he has lost half his group in the process, and the other half has no eye shape and is still very much under attack.



*Dia. 6*



*Dia. 7*

*Dia. 7.* In the actual game, White decided he had no good response to Black 1, so he ignored it and played 2. Black 3 to 7 were the continuation. White 4 and 6 are a tesuji combination, but in spite of them White's group was left eyeless and poorly developed while Black built toward a large territory on the right. The attack was a success.

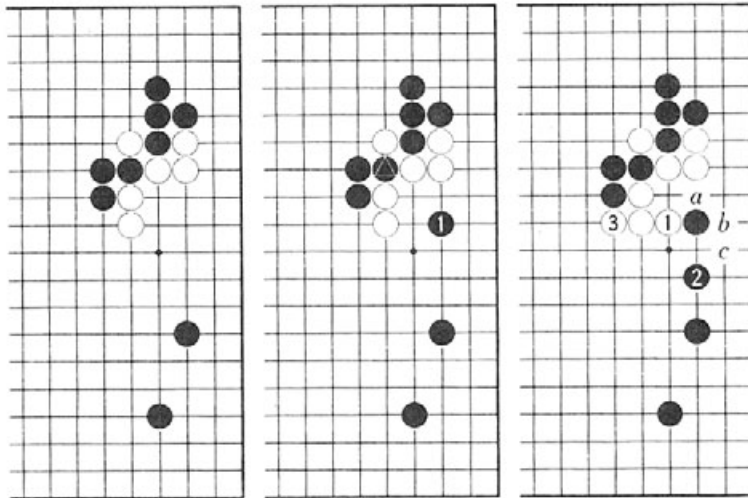
It takes a certain amount of searching to find moves like Black 1 in Dia. 5, but with experience one learns where to look. It helps that some attacking moves recur frequently enough to qualify as standard formulas. Five of the most common are described next.



### The Eye-Stealing Tesuji

The strongest attacking moves are those that ruin the enemy's eye shape, and foremost among them is the eye-stealing tesuji.

*Dia. 1.* Black to play and attack the white group on the right side. There is a key point here that should leap to one's mind.



*Dia. 1*

*Dia. 2*

*Dia. 3*

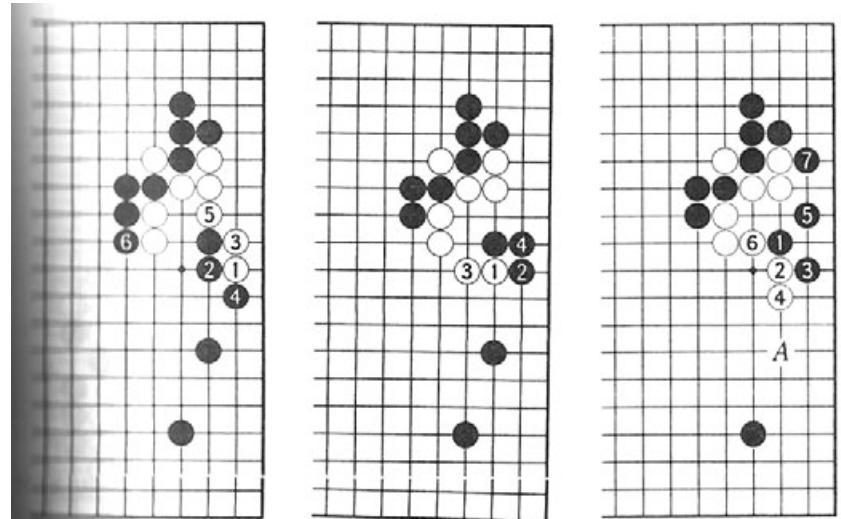
*Dia. 2.* That point is Black 1. The relation with the triangled stone makes this the eye-stealing tesuji.

*Dia. 3.* White's standard reply is 1. Black jumps back to 2, and now what can White do for eyes? White *a*, Black *b* would get him nowhere. White *b*, Black *c*, White *a* would be better, but he can still make no more than one eye on the edge. He must therefore turn toward the center with 3.

The reader may be wondering if White does not have a stronger reply than 1 in *Dia. 3*, but as the stones sit, he does not.

*Dia. 4.* (next page) The placement at 1 is conceivable, but doubtful, because after 3 and 5 White cannot live unconditionally at the side and Black gets to play 6.

*Dia. 5.* The outer attachment is also doubtful. Black hanes underneath at 2, and his connection at 4 threatens to cut. This time White cannot get even one eye at the edge.



*Dia. 4*

*Dia. 5*

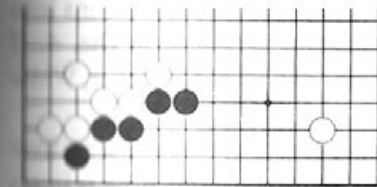
*Dia. 6*

*Dia. 6.* Take away the black stone at A, however, and White 2 becomes effective. Now White answers 3 by extending at 4. Black can link up with 5 and 7 (if White plays 6 below 7 to block him, Black cuts), so his attack has not exactly failed, but White's result is not bad either. Without Black A, then, there is a question of the timing of Black 1.

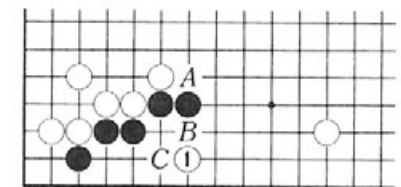
Anyway, when the time does come to attack, Black 1 is the point.

*Dia. 7.* Different position, same tesuji. White to attack.

*Dia. 8.* The move is White 1. Once again there is a question of timing, because given certain conditions on the left side or in the center White might prefer to lean at A instead, but if he wants to attack the lower side, 1 is the move. Black answers at B or C, but even playing on both these points would add only a false eye to his position.



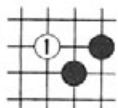
*Dia. 7*



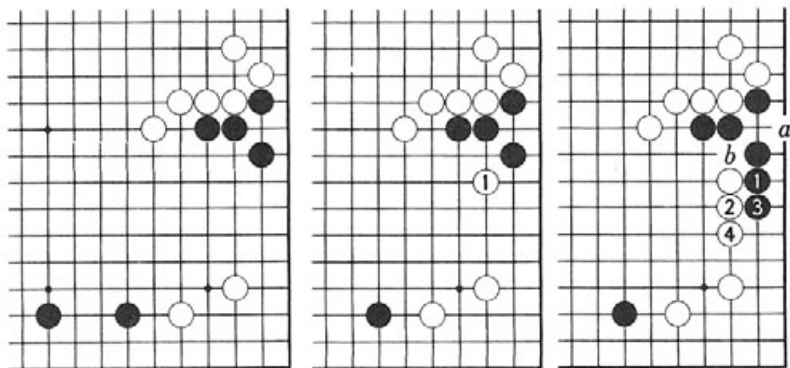
*Dia. 8*

### The Angle Tesuji

This is another move that strikes at the enemy's eye shape. Abstractly it is 1 at right, forming an angular V with the two enemy stones.



*Dia. 1.* White to play and attack the black group on the right.



*Dia. 1*

*Dia. 2*

*Dia. 3*

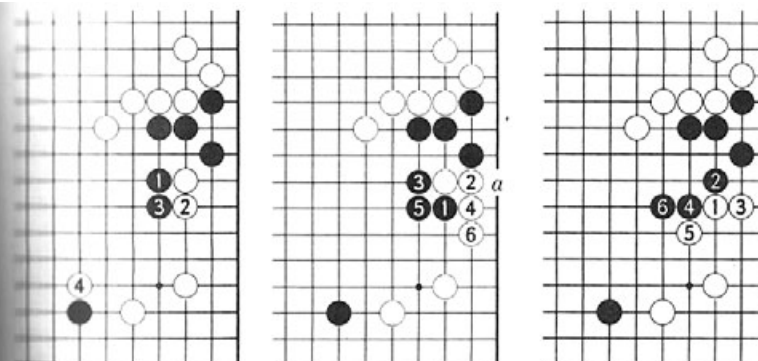
*Dia. 2.* This is a clear case for the angle tesuji.

*Dia. 3.* If Black crawls with 1 and 3 White draws back as shown. Black cannot get more than one eye along the right edge (Black *a*, White *b* for example) and there is a good chance that his entire group will die.

*Dia. 4.* (next page) If Black plays 1 and 3 on top, White can shift to a leaning attack at 4. Once again, Black cannot get more than one eye on the right edge.

*Dia. 5.* Black's strongest, or at least trickiest, defense is 1, which makes miai of 2 and 3. White's responses from 2 to 6, however, leave Black with not even one eye on the edge, and as he runs into the center White can make the same leaning attack as in Dia. 4. If Black plays 3 at 4 in this sequence White will play 3, Black *a*, White 5, and Black will be dead.

*Dia. 6.* For comparison, suppose White attacks more conservatively at 1. Black then takes the key point at 2, and after 6 he is in no trouble at all.



*Dia. 4*

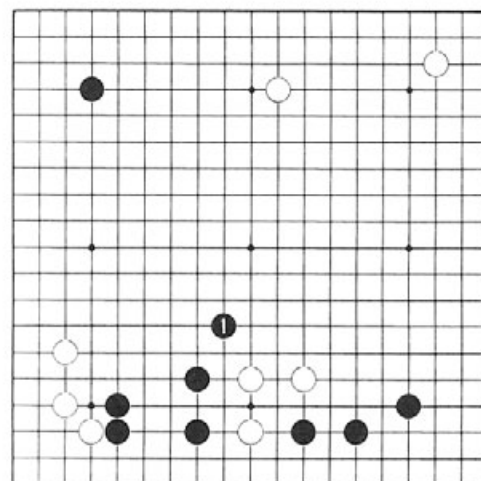
*Dia. 5*

*Dia. 6*

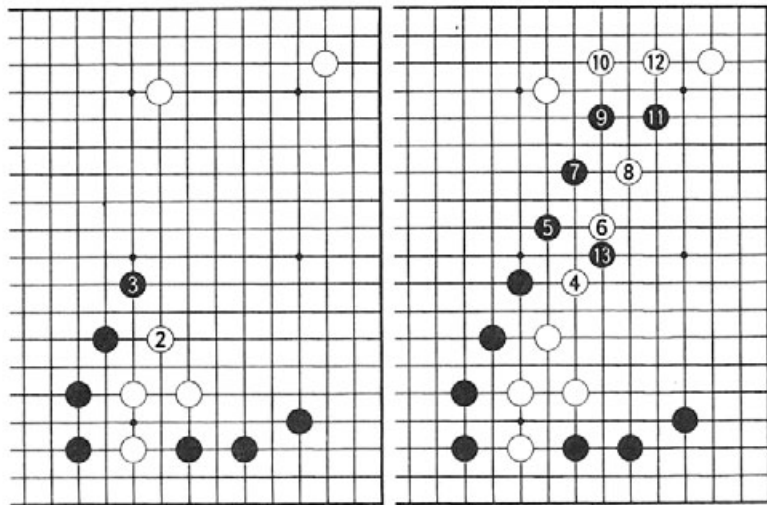
### The Knight's Attack

This attack does not hit directly at the enemy's eye shape. Rather, it is used to drive him toward or against something, or to build a framework while attacking, or to do both.

*Dia. 1.* A typical example is this knight's attack, which was made against the Japanese author during a televised game. Black is aiming to drive White toward the upper side.



*Dia. 1*



*Dia. 2*

*Dia. 3*

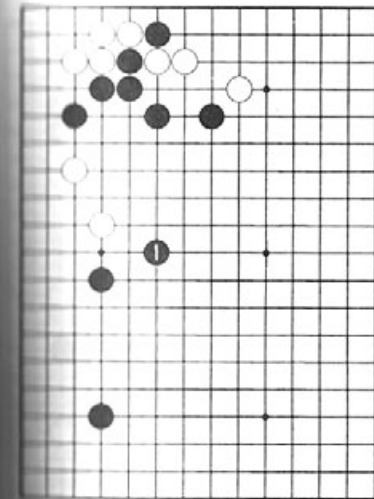
*Dia. 2.* White defended at 2, and Black attacked with a second knight's move at 3.

*Dia. 3.* White defended at 4 and Black kept attacking with knight's moves at 5, 7, and 9. Here the attack began to endanger the upper side – this had been Black's purpose all along – and White had to defend with 10 and 12. The white group below had grown too big to tackle as a whole, but Black was able to cut at 13, which led to a difficult fight.

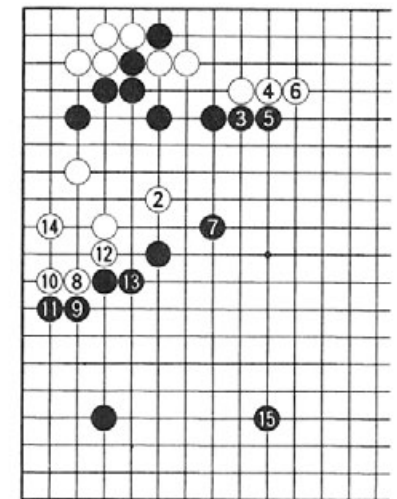
One could not ask for a better illustration than this of what a knight's attack is.

*Dia. 4.* (next page) Here is another typical knight's attack. Black has a wall in the upper left. He wants to make use of it by pushing White against it, hence the knight's move at 1.

*Dia. 5.* If White flees with 2, Black leans against the upper side with 3 and 5, then attacks with a second knight's move at 7. White cannot get out, so perhaps he will defend with 8 to 14. This makes him secure, but it also gives Black a nice outer position which he can use to build an ideal large-scale framework with 15. A result like this is a huge success for the attacker.



*Dia. 4*



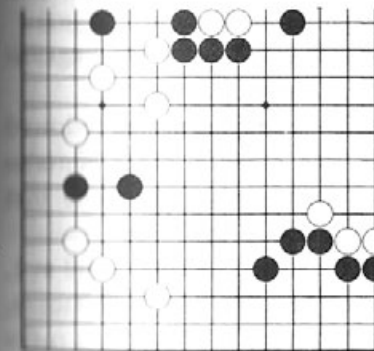
*Dia. 5*

### The Capping Attack

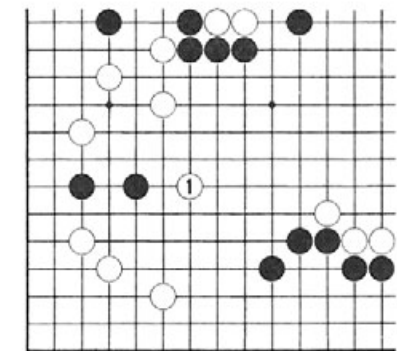
Whereas the aim of the knight's attack is to chase the enemy, the capping attack stops him head-on.

*Dia. 1.* White to play and attack the two black stones in the lower left. The move should be obvious.

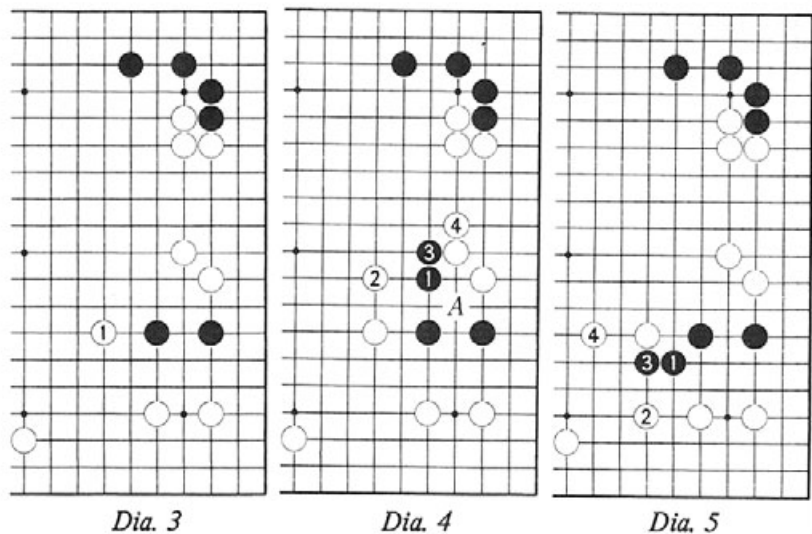
*Dia. 2.* White caps Black at 1. Black is trapped. He cannot get out into the center. We will see in the next chapter whether or not he can live.



*Dia. 1*



*Dia. 2*



*Dia. 3.* The capping attack can be effective even when it does not completely contain the enemy, as in this case. Black is not actually trapped, but —

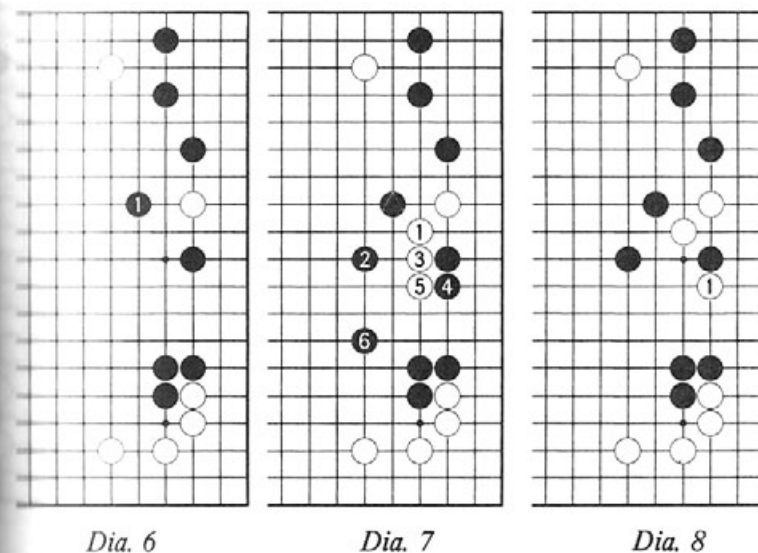
*Dia. 4.* If he moves to escape with 1, White caps him again with 2. Although Black can get out with 3, he leaves a weakness at A in his rear, and his group as a whole is being strongly attacked.

*Dia. 5.* If Black moves in the other direction with 1, White takes territory with 2. White 4 keeps Black under fire, making it impossible for him to invade the lower right corner.

*Dia. 6.* (next page) The capping attack can even be used against isolated enemy stones, as here. Can White escape this time?

*Dia. 7.* If White plays 1 Black plays 2 — a capping attack followed by a knight's attack. If White pushes with 3 and 5, Black contains him with 6. Playing this way, White will probably die. Note that Black ▲ is sitting on his angle point.

*Dia. 8.* White is not really doomed, for he has a saving tesuji at 1. The reader may explore the variations on his own. White can escape, at the possible sacrifice of one or two stones, but Black can make profit and keep up his attack.

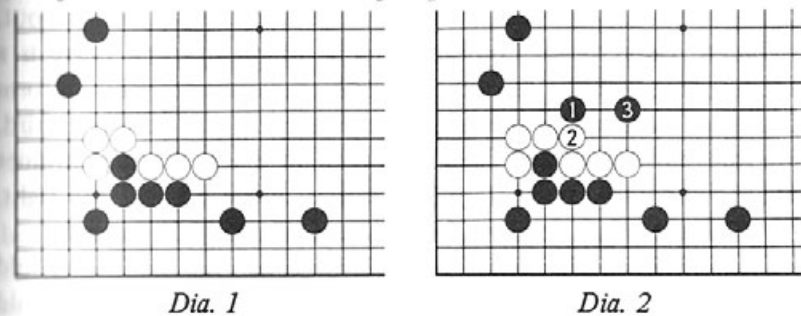


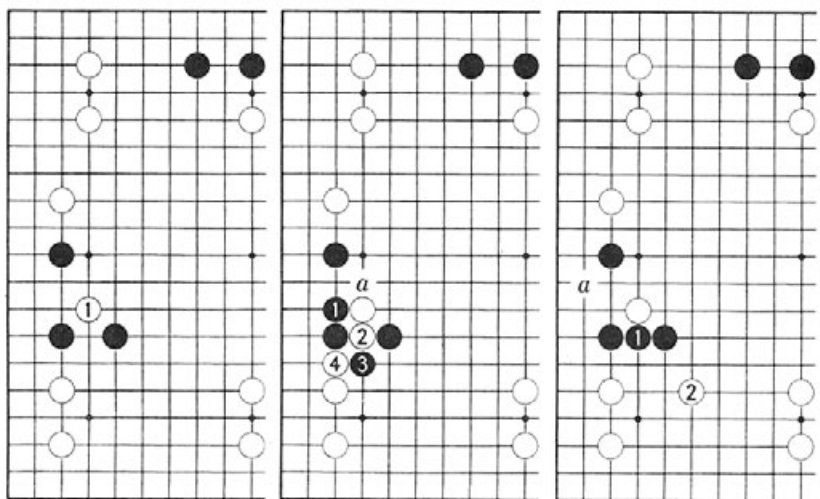
### Peeping Attacks

Finally we have peeping attacks, which can be used for a variety of purposes. The first is to spoil the enemy's eye shape, as in the following example.

*Dia. 1.* Black to play and attack the white center group.

*Dia. 2.* Black peeps at 1. White has little choice but to connect at 2, but then Black jumps forward to 3. White, with his empty triangle, has very poor shape; this is a direct result of the 1-2 exchange. Black has a nice attack going.





*Dia. 3*

*Dia. 4*

*Dia. 5*

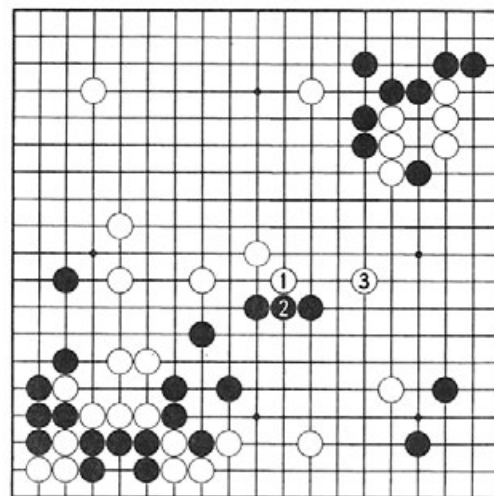
*Dia. 3.* When the enemy has the three-stone formation consisting of a two-space extension and a one-space jump, the peeping attack at 1 is frequently made. This time the peep is not an assault on Black's eye shape but a probe to see how he connects.

*Dia. 4.* If he answers at 1 White can, in this case, push through immediately with 2. The ladder at *a* does not work, so Black has no good way to continue. If he defends his stones on the left side, White is going to get a large territory below.

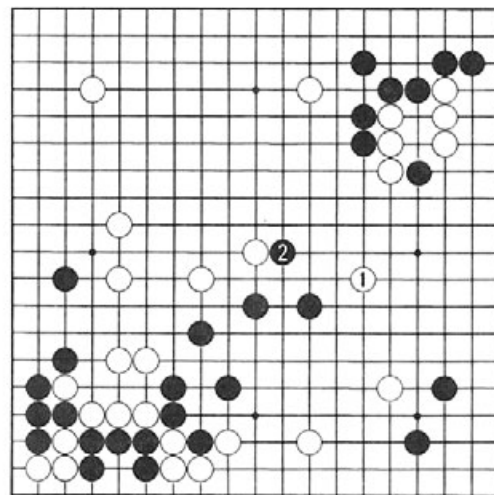
*Dia. 5.* Black will therefore connect at 1, but then it suffices for White to play 2. The fact that Black has connected at 1 instead of playing as in Dia. 4 means that he has White *a* etc. left to worry about.

*Dia. 6.* (next page) Combinations in which the first move is a peeping move and the second is something else are a common form of attack. We have already seen two examples, and here is a third. Now the purpose of the peep is to contain Black. White continues with 3, building toward large territories above and to the right. White 3 is the principle move, but White 1 is equally important.

*Dia. 7.* If White just attacked at 1, without peeping, Black could get past him with 2. Now White's framework-building strategy would



*Dia. 6*



*Dia. 7*

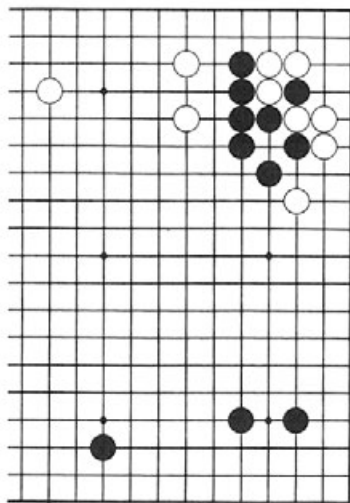
be much less likely to succeed.

This completes our rundown of standard attacking moves; next come some problems.

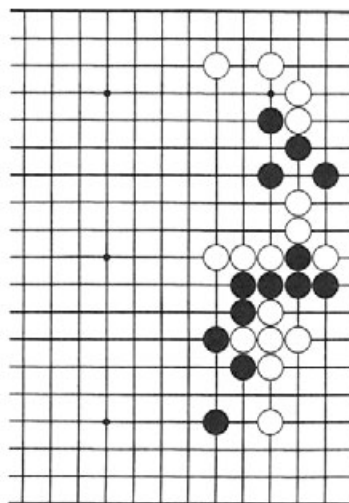
### Problems

The following ten problems are applications of the five attacking moves presented on the preceding pages. In some problems the moves appear independently but in some they are combined, for example, a knight's attack may be at the same time an angle tesuji. Answers follow on pages 78 to 85.

In doing these problems, bear in mind that the moves you choose should be strategically as well as tactically correct, that is, they should attack from the right direction. Several of the problems concern running battles. In these the direction of attack is particularly important.



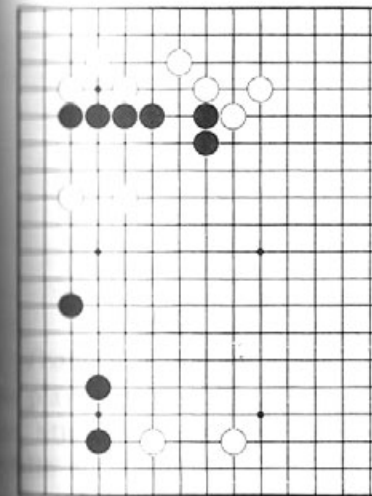
*Problem 1*



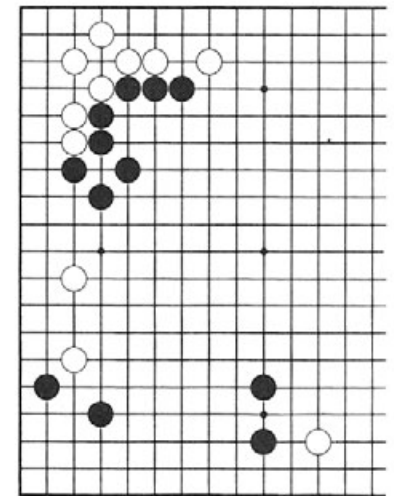
*Problem 2*

*Problem 1.* White to play. Despite its pon-nuki shape, the black group in the upper right is ripe for attacking.

*Problem 2.* Black to play. This time it is the white group in the middle of the right side that is to be attacked.



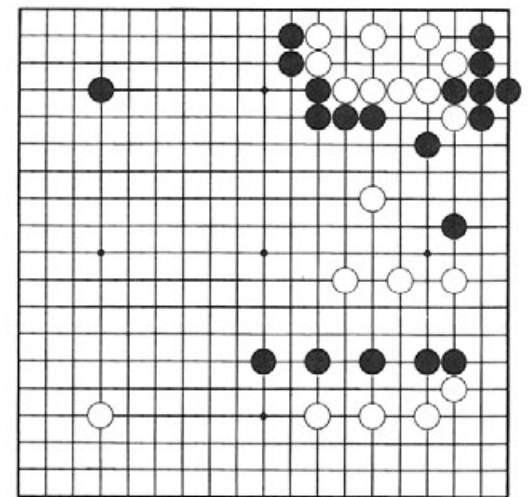
*Problem 3*



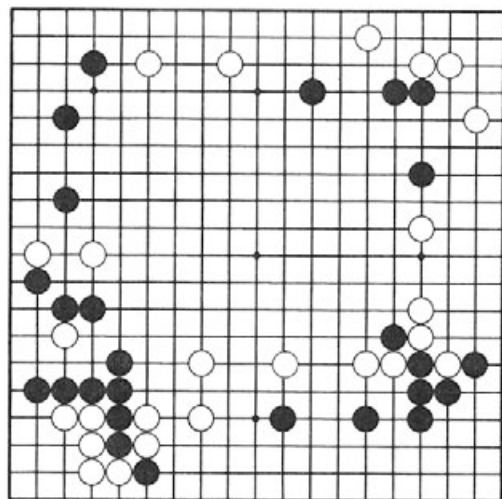
*Problem 4*

*Problem 3.* Black to attack the two white stones on the left side.  
*Problem 4.* Black to play against the two white stones in the lower left.

*Problem 5.* Black to play. This time he has a larger group to attack, consisting of the four white stones on the right side.



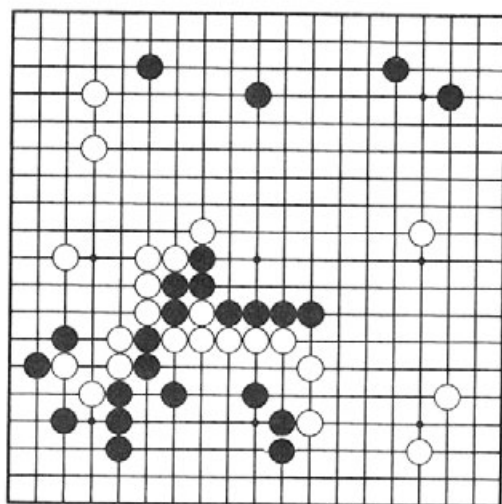
*Problem 5*



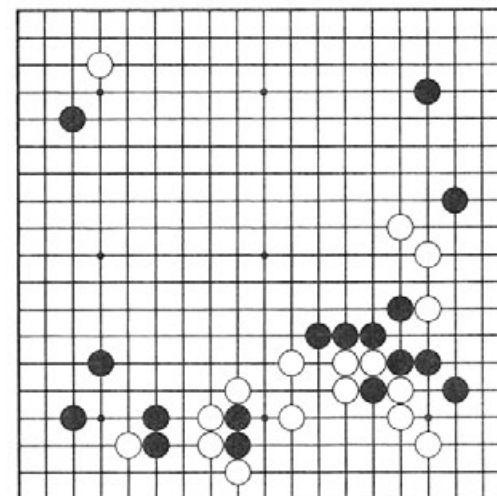
*Problem 6*

*Problem 6.* White to play. The group to attack is the black one in the upper right corner.

*Problem 7.* White to attack the black group in the center.



*Problem 7*

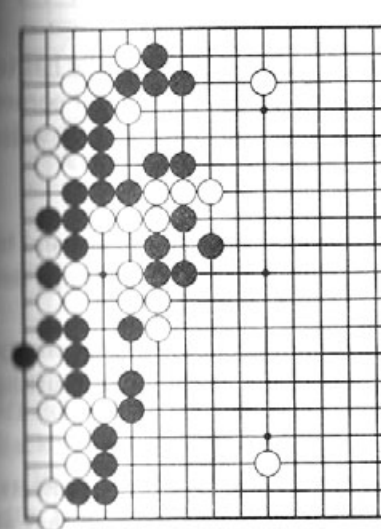


*Problem 8*

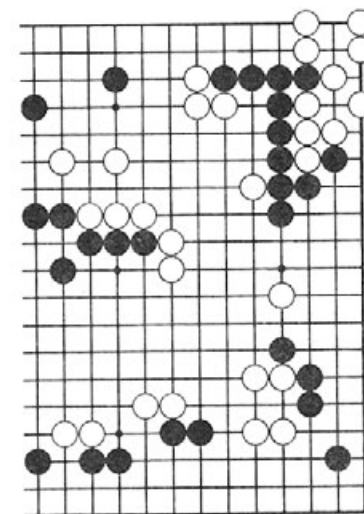
*Problem 8.* Black to play. How should he attack the three white stones on the right side?

*Problem 9.* White to play. With a choice of targets, he should attack the larger one: the black group in the lower left.

*Problem 10.* White to attack the black group in the upper right.



*Problem 9*

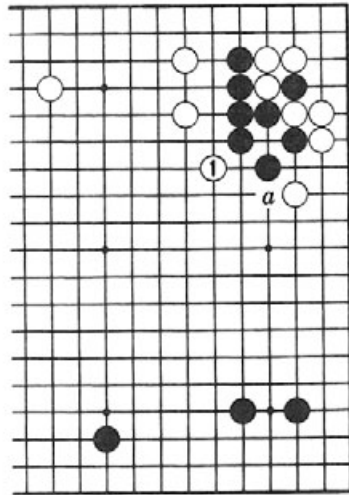


*Problem 10*

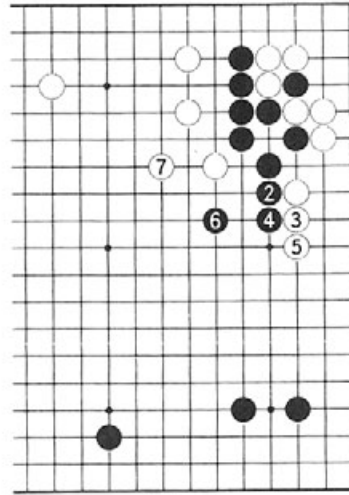
Answers

Answer to problem 1

*Dia. 1.* White 1, a combination knight's attack and angle tesuji, hits Black at a painful point. If he ignores this attack, White *a* captures him, so –



*Dia. 1*



*Dia. 2*

*Dia. 2.* He runs out with 2, 4, and 6, but in the process he has to push White into the valuable area in front of the lower right corner enclosure. White strengthens his upper position with 7 and awaits further attacking opportunities.

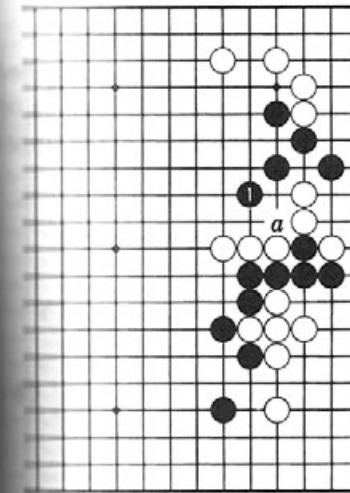
Answer to problem 2

*Dia. 3.* (next page) The move that gives Black the upper hand in this running battle is the eye-stealing tesuji at 1. It threatens *a*, a cut that White cannot allow.

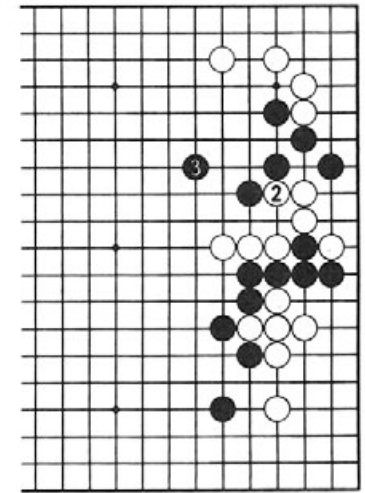
*Dia. 4.* White defends with 2 – he cannot avoid making an empty triangle – and Black develops his group with 3, leaving White sitting behind with very poor shape.

Answer to problem 3

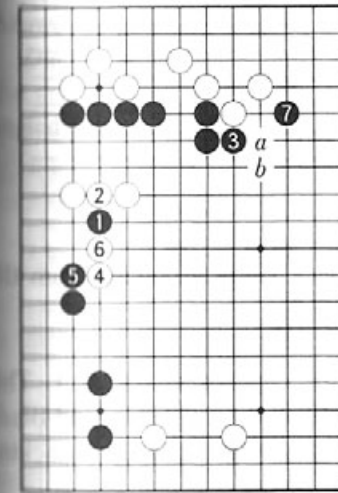
*Dia. 5.* Black 1 is a natural peeping attack. If White connects, Black follows with a leaning attack at 3. If White answers that at *a*, Black keeps leaning with *b*; this could lead to trouble for White's



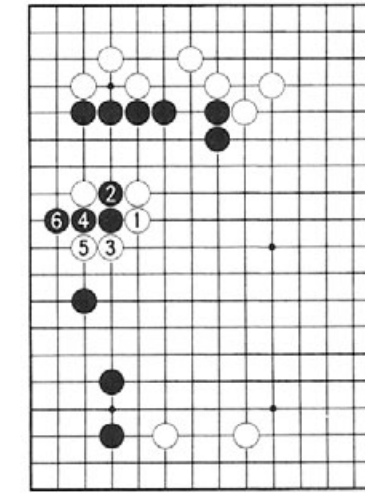
*Dia. 3*



*Dia. 4*



*Dia. 5*



*Dia. 6*

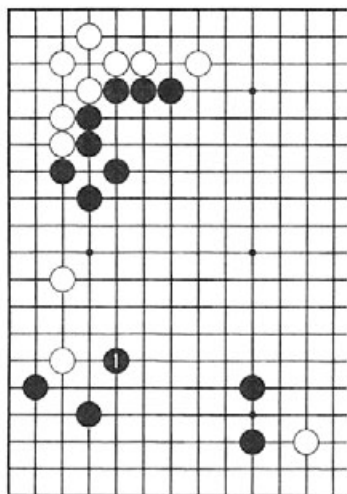
left-side group. White accordingly defends with 4 and 6, letting Black make an ideal pressing move at 7.

*Dia. 6.* If White wants to be defiant he can resist Black's peep with 1, but the result this leads to has little to recommend it. Connecting at 2 in Dia. 5 is correct.

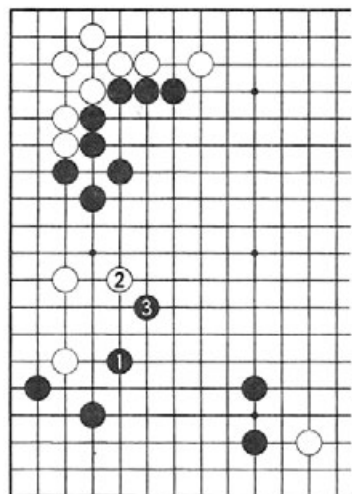


**Answer to problem 4**

*Dia. 7.* This is a perfect set-up for Black 1, which could be called either a knight's attack or a capping attack. Enlarging Black's area on the lower side while driving White toward the thickness in the upper left, Black 1 does exactly what a good attack should do.



*Dia. 7*



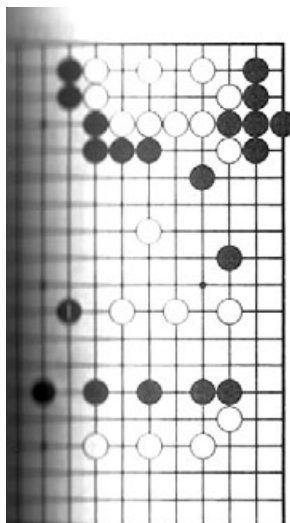
*Dia. 8*

*Dia. 8.* If White defends with 2, Black keeps attacking from the same direction with the knight's move at 3.

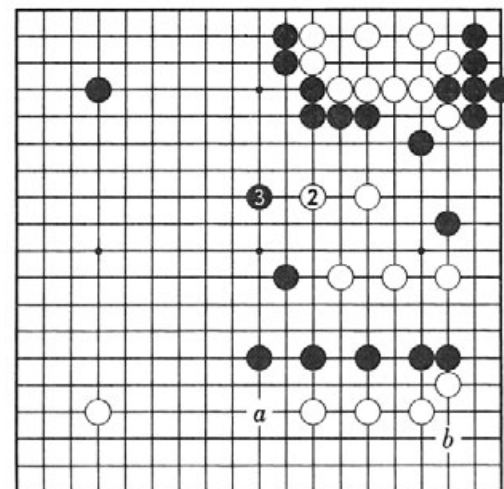
**Answer to problem 5**

*Dia. 9.* Black seizes control with the capping attack at 1. This position has arisen from a running battle on the right side, and Black 1 is the key point that defends the friendly group while attacking the enemy one.

*Dia. 10.* If White replies with 2, Black makes a second capping attack at 3. Besides his group on the right side, White has to worry about the large framework Black has built in the upper left, the even larger extension of it he can make on the left side, and Black *a* and *b* on the lower side. Black practically has the game won already.



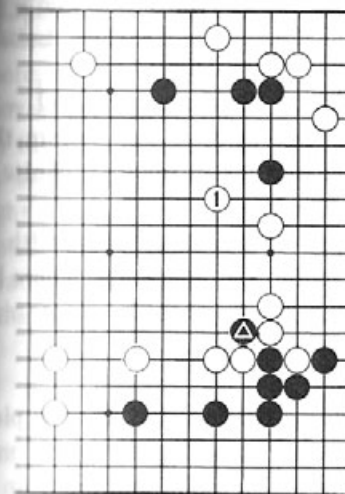
*Dia. 9*



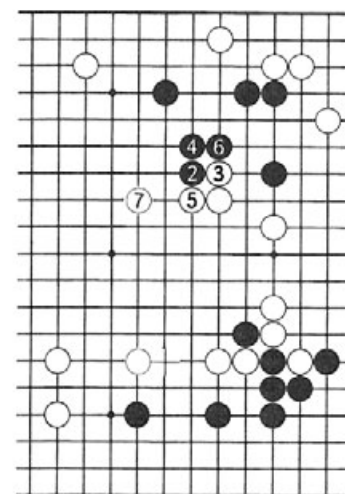
*Dia. 10*

**Answer to problem 6**

*Dia. 11.* The correct move is the knight's move at 1. While attacking the group above, it thwarts any plans Black may have had for the tri-angled stone below and builds toward a nice territory in the center.



*Dia. 11*

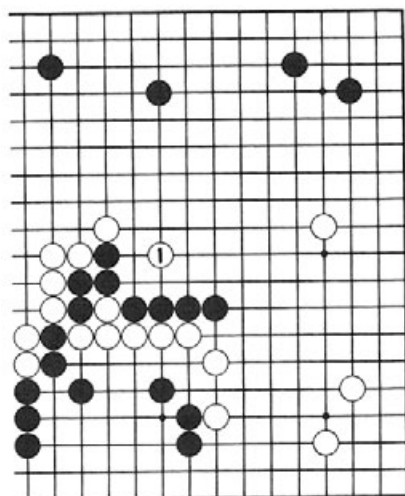


*Dia. 12*

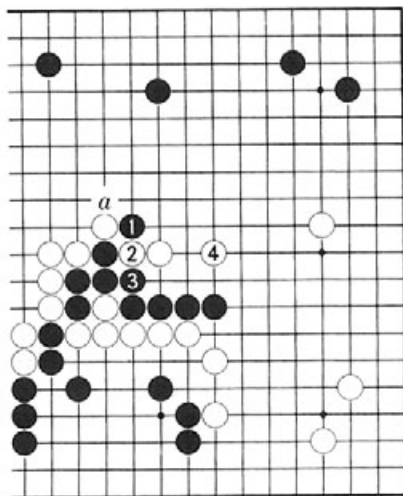
*Dia. 12.* (previous page) If Black defends with 2, White plays 3 and 5 in sente, then enlarges his center area with 7.

**Answer to problem 7.**

*Dia. 13.* Here we have the eye-stealing tesuji again. This is the key point. If White attacked from any other direction, Black would defend by playing 1 himself, instantly achieving good shape.



*Dia. 13*



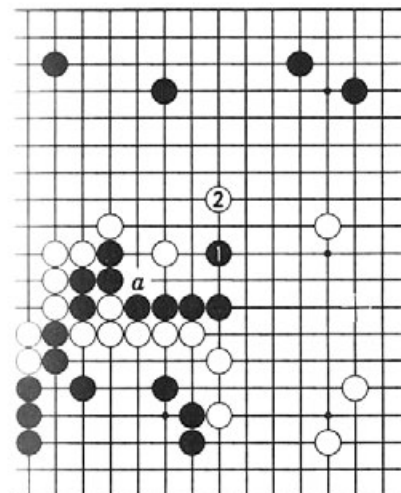
*Dia. 14*

*Dia. 14.* Before connecting at 3 Black plays the hane at 1 – if he played 1 after 3 White might respond at *a*, – but despite the cutting stone at 1 White has Black in serious difficulties. White 4 takes another key point in his shape.

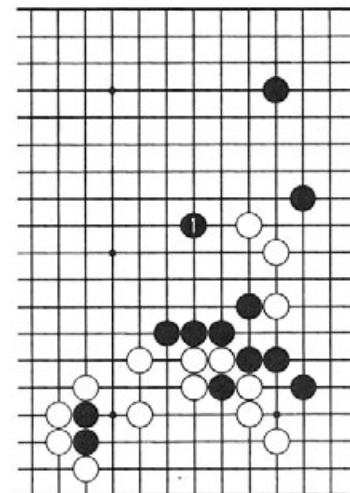
*Dia. 15.* (next page) If Black jumps to 1, White caps him with 2. Black may live, but the power White acquires in the center, where he can capture four stones at will with *a*, means that the upper side stands naked to invasion.

**Answer to problem 8.**

*Dia. 16.* The key point in this running battle is the capping play at 1, which defends the black group while attacking the white one. To make this clearer, before looking at the continuation from 1 let's examine two other conceivable but incorrect ways of attacking.

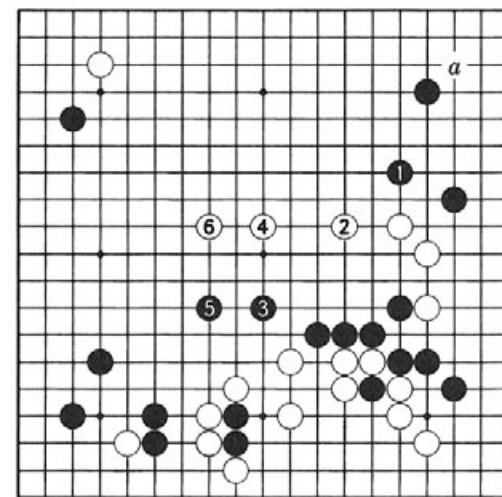


*Dia. 15*

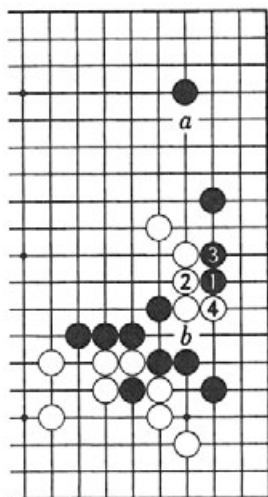


*Dia. 16.*

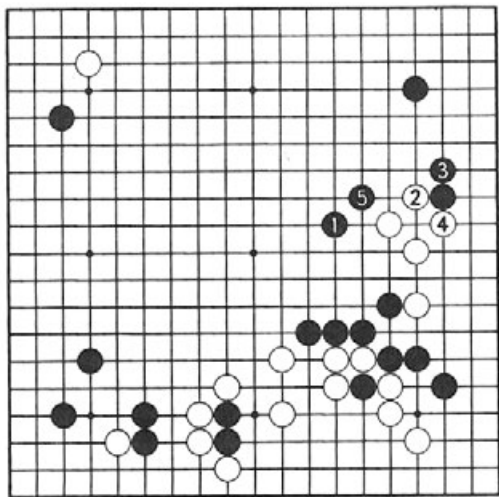
*Dia. 17.* Suppose Black attacks from this direction with 1. White's escape at 2 forces Black to flee with 3, and White continues to chase him with 4 and 6, pushing him against the solid position on the lower side. Black's plays have no effect on the already settled white group there, while White's moves have a large effect on the open upper side. In addition, the upper right corner is still invadable at *a*, so Black's strategy is completely bankrupt.



*Dia. 17*



*Dia. 18*



*Dia. 19*

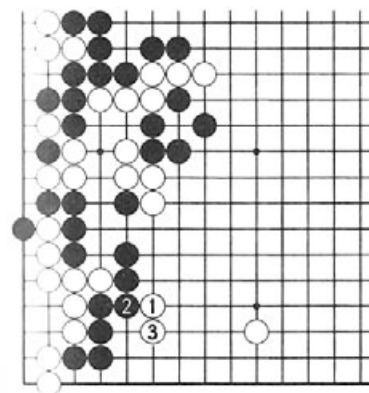
*Dia. 18.* Another attack to avoid is the peeping attack at 1. White 2 and 4 greatly weaken the black group below, and Black is also vulnerable to a leaning attack at *a* from above. Note that Black cannot play 3 at 4, because of White *b*.

*Dia. 19.* That brings us back to the correct capping attack at 1. This problem was taken from one of the Japanese author's games, and when he played 1 White defended with 2 and 4. Black was then able to continue with a nice angle attack at 5. The ensuing fight gave Black a strong center position and a clear lead.

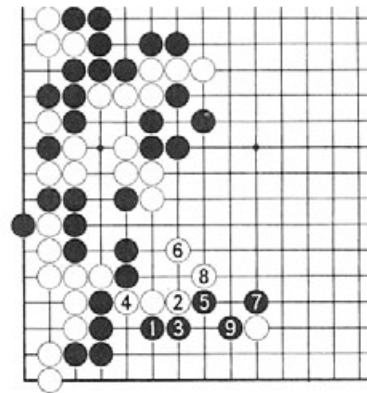
**Answer to problem 9.**

*Dia. 20.* The best move is the peeping attack at 1. If Black connects at 2, White's descent at 3 leaves him with little in the way of eye shape. Black then must escape, and by chasing him White should be able to make a large capture of territory in the center.

*Dia. 21.* Black should probably defend with 1 and 3, letting White cut at 4. By throwing half his group overboard, he gains smooth sailing for the other half. Still, White's center prospects are growing very large, not to mention the twenty-five points safely captured by 6 and 8. The reason for White 8 is to prevent a black wedging tesuji between 2 and 6.



*Dia. 20*

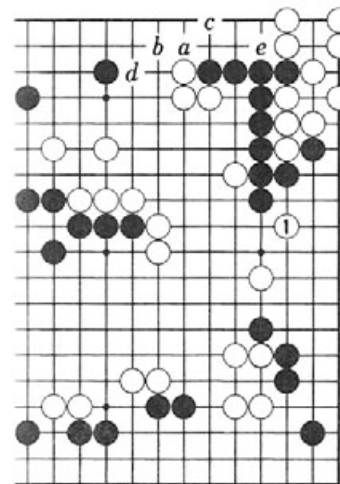


*Dia. 21*

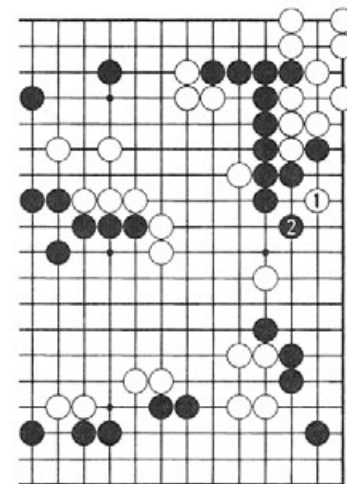
**Answer to problem 10.**

*Dia. 22.* White 1, an angle attack, is most severe. It is very hard to see how Black can live after this. He can get an eye in gote on the upper edge (Black *a* to *e*) but to make another eye in sente first seems just about impossible.

*Dia. 23.* The mistake to avoid is the peeping move at 1. That would be fine if Black connected, but he does not connect; he plays 2. This threatens to link with the group in the lower right, and Black's chances of living improve markedly.



*Dia. 22*

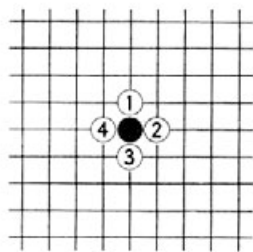


*Dia. 23*

## Chapter Four DEFENSE

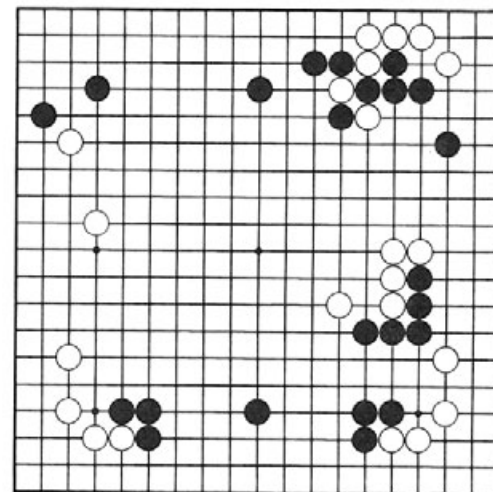
Having taken a long and detailed look at the strategy and tactics of attack, it is time for us to turn the problem around and view it from the side of the defender. This will require less space. The main points will be covered in one chapter.

One reason for this is that defense is intrinsically easier than attack. To see why, consider the simplest possible case, the attack and defense of an isolated stone. It takes four moves to capture one stone, even in the efficient shape shown in Dia. 1. It would take only one move to defend it – Black 4 after White 3 for example. Escape is easy, capturing hard. Killing groups that consist of several stones is even harder. That is what makes the indirect and double-attacking strategies of chapter two necessary. In go, the odds are weighted in favor of the defender.



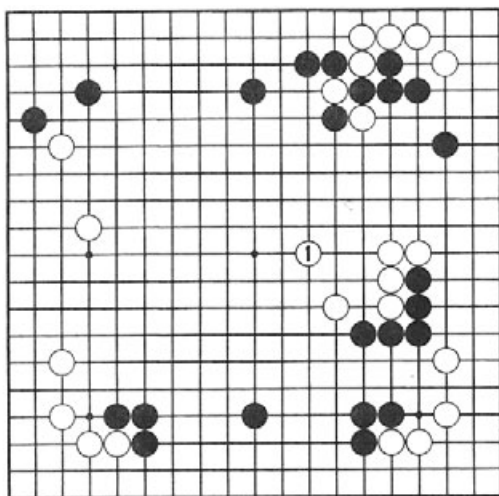
*Dia. 1*

Because of this, one may develop a tendency to shirk defensive duties – to let non-fatal weaknesses go unprotected in order to keep forging ahead. To an extent this is a healthy thing. Defense is less productive than offense, and the compulsive defender generally loses. On the other hand, neglecting defense can easily be carried too far. We have seen numerous examples of how the attacker can make territory or gain other advantages without actually killing the group he is attacking. These ‘side effects’ must not be forgotten. One of the first things one notices about the way professionals play is that they do defend, frequently even when it seems that they could get by without defending.



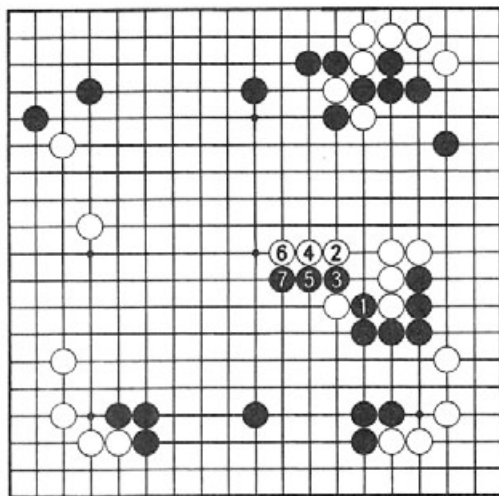
*Dia. 2*

*Dia. 2.* This position arose in a game in the second Meijin League between Kitani and Go Seigen. It is White’s (Kitani’s) move. Should he invade the framework Black is building on the upper side, or try to break up Black’s more established lower-side territory, or should he enlarge his own area on the left side? What would the reader have done?



*Dia. 3*

*Dia. 3.* Kitani played White 1. Admittedly this move does not look like much. It destroys no black territory, it creates no white territory; it just sits there out in the open. What business, one might ask, did a famous 9-dan professional have playing a move like this?

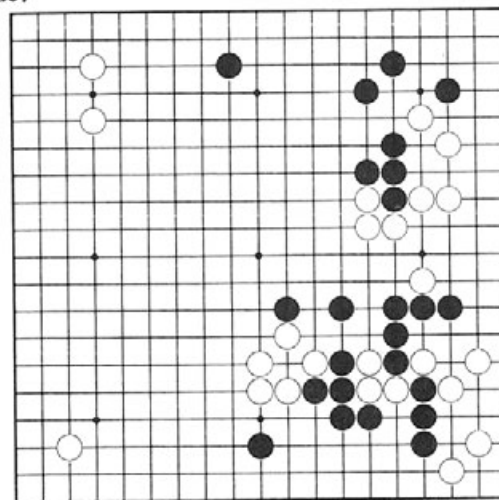


*Dia. 4*

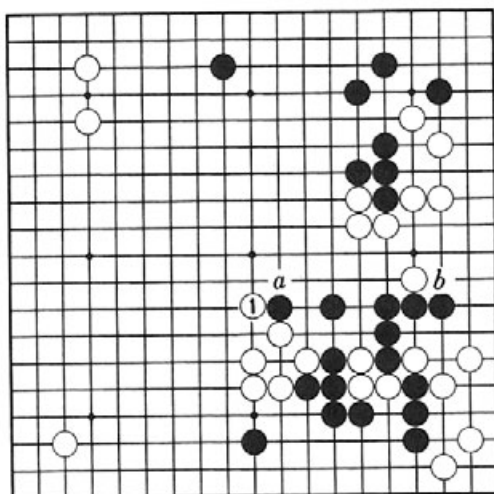
*Dia. 4.* The answer becomes clear when we imagine White not defending and Black attacking with 1 and 3. This is the classic strategy of expanding a territorial framework in one place (the lower side) by attacking an enemy group in another place, and Black is making perfect use of his thickness in the upper right by pushing White against it. Of course he cannot actually kill the white group, but if he gets fifty points of territory on the lower side he will not need to kill it; he will win anyway.

Seen in this light, White 1 in *Dia. 2* begins to look much better, but there is more to consider. For one thing, there is the balance of territory. White has secure territory in three corners and good prospects on the left side, so he does not have to invade immediately; he can afford to defend. For another thing, if he ever does have to invade the upper or lower side, White 1 will furnish valuable back-up support.

*Dia. 5.* This is a Honinbo title game between Sakata (white) and Takagawa – White to play. One notes some slightly weak stones on the board, but Sakata is famous for his ability to escape from trouble, so it seems too early for him to defend. Surely he extended on the lower or left side, or perhaps moved to reduce Black's framework on the upper side.



*Dia. 5*

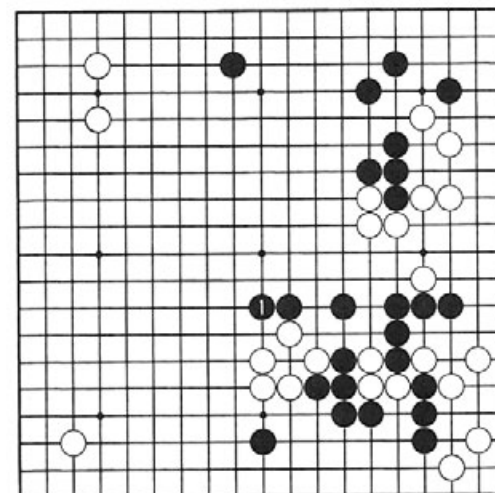


*Dia. 6*

*Dia. 6.* Sakata, however, did nothing of the kind. He defended the small knot of white stones in the lower middle area by playing 1, and if Black had responded at *a*, he was planning to defend his right-side group with *b*.

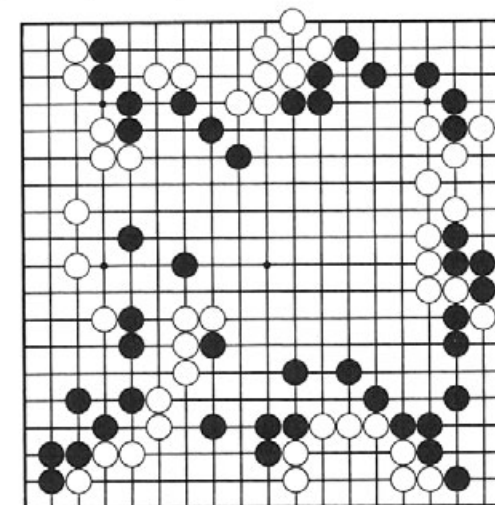
White 1 is not the kind of defensive move that one feels ashamed to make. It is clearly a major point as regards the balance of power, with a large indirect effect on the lower, left, and upper sides. Once one sees it played, it looks quite impressive. Still, its main function is to defend.

*Dia. 7.* Black 1, if permitted, would attack both the five white stones below, hitting their angle point, and the large group on the right side. White could undoubtedly save both groups, but he would have to scramble, and while he was scrambling he would not be able to do anything else. Psychologically too, being attacked strongly is not an enjoyable experience. Look at the expression on a player's face when he is on the verge of losing a large group – the tightly clenched jaw muscles, the knitted brow, the glint of despair in the eyes. It is much easier on the nerves to nip the attack in the bud by defending early, before it becomes severe, as Sakata did in *Dia. 6*.

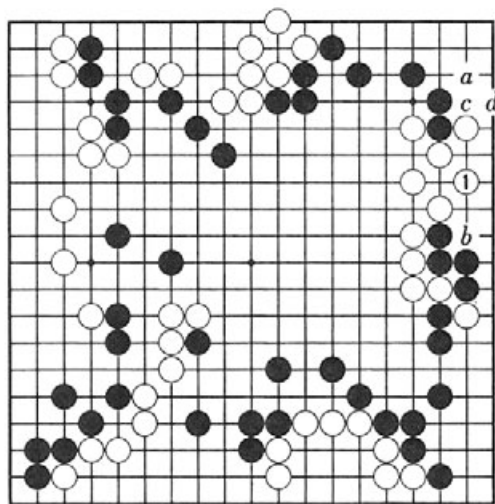


*Dia. 7*

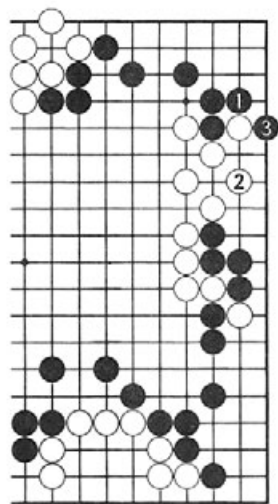
*Dia. 8.* This is a more recent Honinbo game, the players being Yoshio Ishida (white) and Rin Kaiho. White to play. By now the reader must realize that Ishida's next move is going to be defensive, but even so, he may be surprised when he sees it.



*Dia. 8*



*Dia. 9*



*Dia. 10*

*Dia. 9.* Ishida played 1. Surely, one feels, this was a mistake – he was playing inside his own territory – but White 1 was correct. Note firstly that this move, and no other, makes the right-side white group absolutely alive. Note secondly that White has another weak group in the lower left, so by defending at 1 he is preventing a double attack. Note thirdly that White 1 is not small in terms of territory, for next White can jump into the upper right corner at *a*, and on the right side he has a sente play at *b*. Playing 1 is worth more than playing in the largely neutral area in the center would be.

*Dia. 10.* Suppose Black blocks first at 1. White 2 is the correct response, but Black gives atari at 3. Compare this with Black *c*, White *d* in *Dia. 9*. The danger of being rendered eyeless by a black placement at 2 instead of 1 is an additional argument in favor of occupying this key point early.

If even top-ranking professional players make defensive moves like these and go on to win (White won all three of the games above), there must be something basically correct about them. It comes down to the balance of power. When you defend your weak groups, you gain power, and that helps you to do whatever you have

to do next. If you leave your groups weak, you keep having to play around them – to restrict your activities elsewhere to avoid getting them into trouble. We put attack before defense in this book, but in practice it is generally the other way around. First to defend and make sure that your own groups are all healthy, then to go forth and attack with confidence is one of the basic strategies of the game.

It takes no special skill to defend in good time like this. The moves commonly required are one-space jumps, extensions, hanes – moves that everyone knows. Special skill is needed only when one is fighting for one's life.

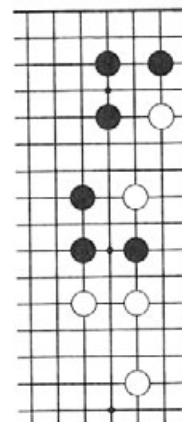
So the ideal is to stay out of trouble and never be called upon to exercise special skills – but as every go player knows, that is impossible. The game is too complex, and making the most of your position sometimes requires that you play close to the line between life and death. For that reason, we turn next to the subject of defensive tesuji.

### Defend with Contact Plays

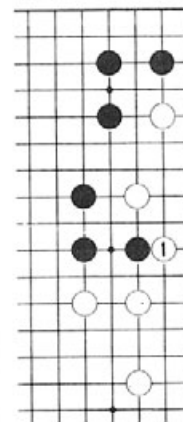
We saw in the last chapter that the strongest attacking moves usually avoid making contact with the group being attacked. One might expect moves made for the opposite purpose to have the opposite property, and in fact they do. Contact plays, or near-contact plays, are generally strongest for defense. They are the moves to use in emergencies. We shall look at a number of standard ones, then examine a few cases from professional play.

*Dia. 1.* White to play. How can he defend his two stones in the upper right?

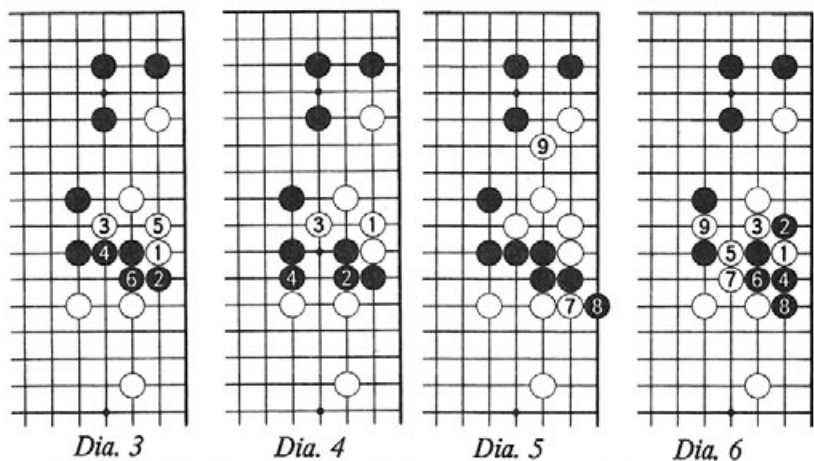
*Dia. 2.* The contact play at 1 is the tesuji. Since it threatens to link White's two positions together, Black will reply with a hane above or below.



*Dia. 1*



*Dia. 2*



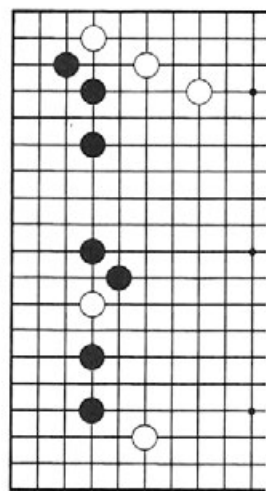
*Dia. 3.* If Black replies at 2, White peeps at 3 then draws back at 5. Black has to connect in bad shape with 6. The order of White's moves bears noting.

*Dia. 4.* If White drew back at 1 first, then peeped at 3, Black would make a bamboo joint with 4, getting good shape.

*Dia. 5.* Continuing from Dia. 3, White plays 7 in sente, then lives with 9. Black 8 hurts White's lower position somewhat, but this is a price that can easily be paid.

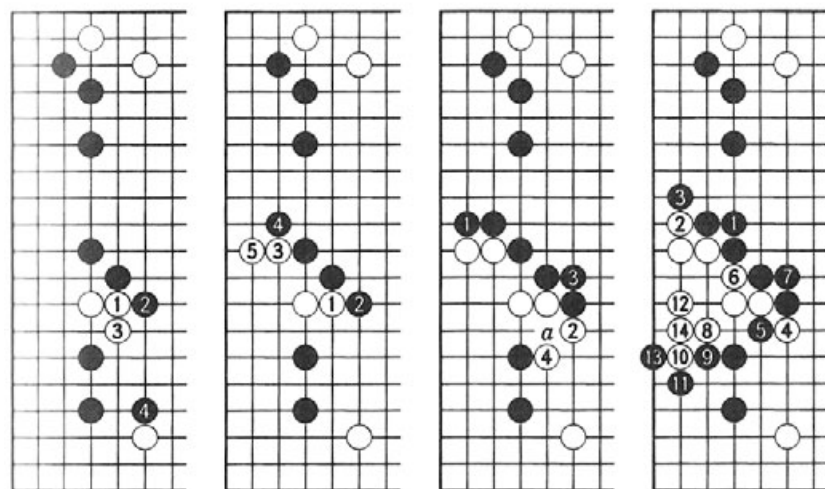
*Dia. 6.* If Black hanees from above with 2, White can link up with 3 to 7. The result is an exchange, each side damaging the other's position, but White has the best of it, because his stones are connected and Black's are badly cut up. Black should stick with the less drastic line of play shown in Dias. 3 and 5.

*Dia. 7.* This position might arise in a handicap game. White has to defend his invading stone on the left side.



*Dia. 7*

*Dia. 8.* He can escape by playing 1 and 3, but then he faces a double attack at 4. If he is to save his left-side group, he will have to abandon the stone on the lower side, so this is not a very satisfactory defense. White 1 is correct, but White 3 is too slow.



*Dia. 8*

*Dia. 9*

*Dia. 10*

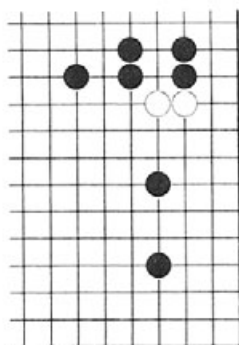
*Dia. 11*

*Dia. 9.* The right play is the contact play at 3. Against Black 4, White descends at 5. This attachment and descent are a much-used defensive combination.

*Dia. 10.* If Black persists at 1, White can get out with 2 and 4. This is not at all like Dia. 8. White has better shape and Black's corner is starting to look weak. If Black plays 3 at *a*, White cuts at 3 and captures his way into the open. The reader should work it out for himself.

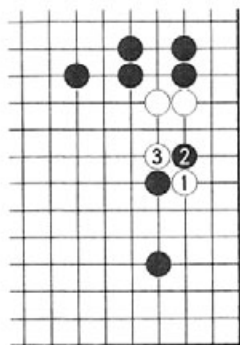
*Dia. 11.* Black does better to connect at 1. Now he can cut at 5 when White hanees at 4, but White lives and has several cuts of his own to aim towards. Most important, he has managed to avoid hurting his stone on the lower side.





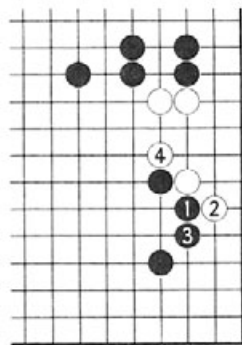
*Dia. 12*

*Dia. 12.* Here White has to care for his two stones on the right side. His initial tesuji is the same as before.



*Dia. 13*

*Dia. 13.* He makes the attachment at 1. If Black hanes at 2, White crosscuts at 3. From this there are many variations, and White may lose a stone or two or three, but there is no way he can be destroyed as a whole. By starting a fight, Black 2 actually makes it easier for White to defend.

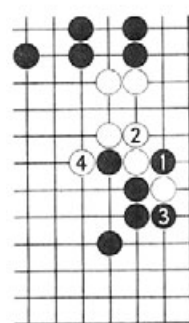


*Dia. 14*

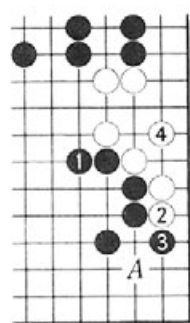
*Dia. 14.* Black does better to hane on this side with 1. White hanes back at him with 2 and 4, playing contact moves to the hilt.

*Dia. 15.* Black can capture a stone with 1 and 3, but then White plays 4, which gives him a satisfactory position.

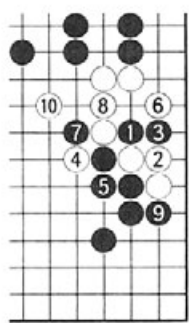
*Dia. 16.* If Black tries to prevent White 4 in the last diagram by extending at 1 here, White lives as shown. Next he can invade the corner at A; this result is intolerable for Black.



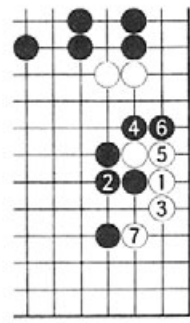
*Dia. 15*



*Dia. 16*



*Dia. 17*

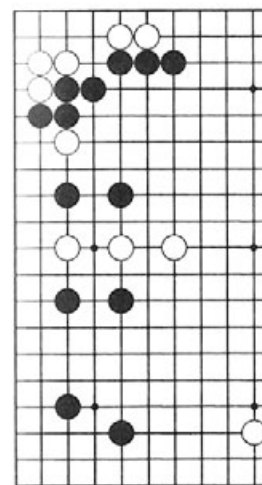


*Dia. 18*

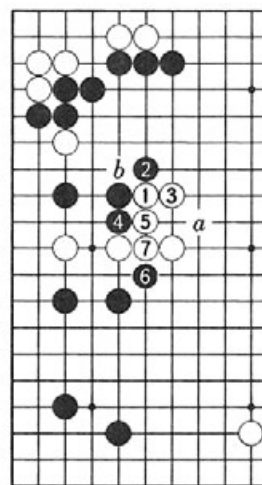
*Dia. 17.* Another continuation from Dia. 14 sees Black sacrificing 1 and 3, hoping to make 7 and 9 sente. White spurns the sacrifice and jumps into the center with 10. Either this sequence or the one in Dia. 15 would be reasonable for both sides.

*Dia. 18.* What if Black answers White 1 by connecting at 2? He expects White 4, Black 3, leaving White with inadequate eye shape, but White extends at 3 and exchanges the outside for the corner. The exchange favors him: the corner is large and Black is left with various cutting points and weaknesses.

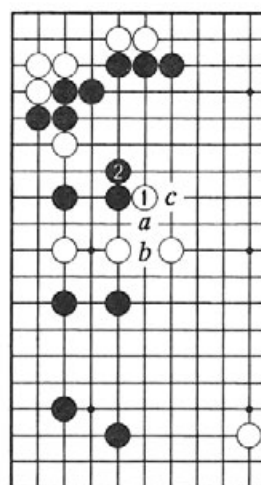
*Dia. 19.* Having seen three examples of attachments made underneath enemy stones, let's look at two examples of attachments made on top. Here White wants to give his group on the left side a more solid footing in the center.



*Dia. 19*



*Dia. 20*

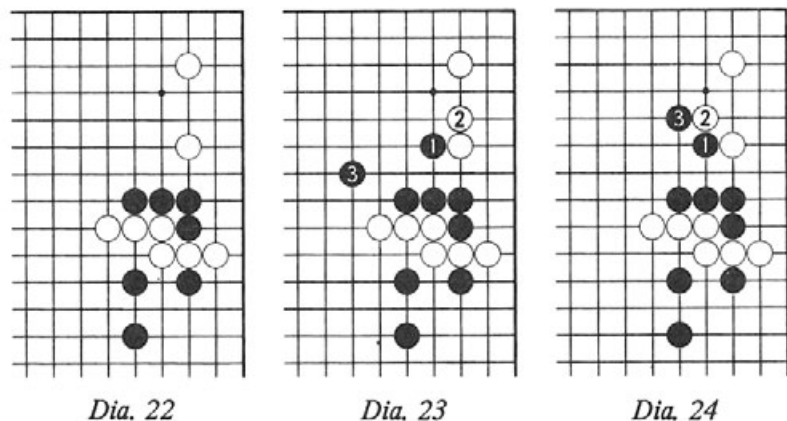


*Dia. 21*

*Dia. 20.* He does this with the contact play at 1. By playing 2-6 Black gains sente and forces White to make an empty triangle, but he also helps White get eye shape; visualize White *a* in time of need. There is also the cut at *b*. White has reinforced himself quite successfully.

*Dia. 21.* If Black replies at 2, White's position improves considerably even without further play. For example, Black can no longer peep at *a* in sente. After White *b*, he has to play once more at *c*.

*Dia. 22.* This is a running battle. Black's immediate concern is to defend his L-shaped group of four stones, and there is a standard contact tesuji for him to use.

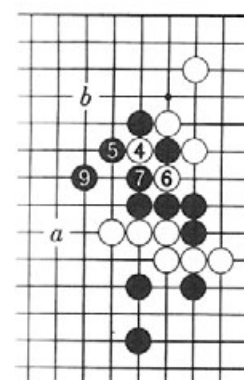


*Dia. 23.* Black's play is 1. If White draws back at 2, Black can advance to 3 in the center with no fear of being cut. Black 1 may also prove useful in making eyes later on, or in holding down whatever territory White tries to take on the upper side.

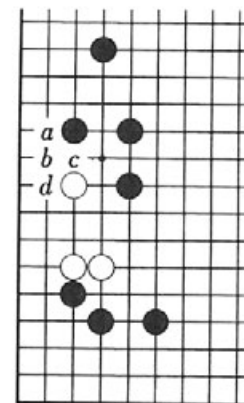
*Dia. 24.* If White resists Black 1 with the hane at 2, Black makes the counter hane at 3, a second contact tesuji.

*Dia. 25.* (next page) White gives atari at 4, but Black gives counter-atari at 5 — a third contact tesuji. White 6 and Black 7 follow. The ko is not very attractive to White, so he will generally connect at 8. By gluing his stones on top of White's like this Black has worked his way neatly into the center. The diagonal connection at 9 completes his shape and gives him good next moves at *a* and *b*.

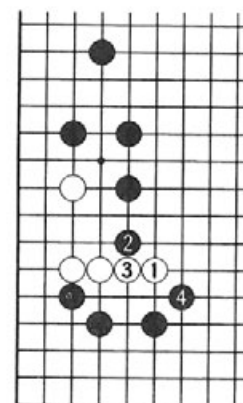
Sacrificing unimportant stones, as Black does in *Dia. 25*, is an important defensive technique. A player who committed himself to defend every stone that he put on the board would be assuming an impossible task. Learning to sacrifice is one of the keys to learning to defend.



*Dia. 25*  
8 connects



*Dia. 26*



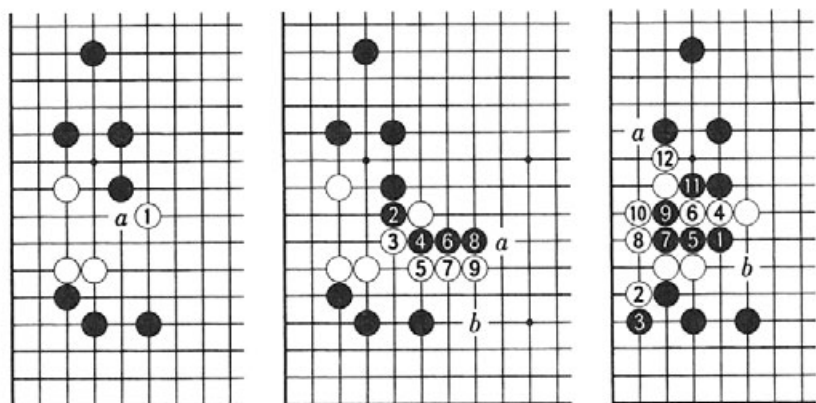
*Dia. 27*

For White, whether to answer Black 1 with 2 in *Dia. 23* or 2 in *Dia. 24* is a difficult choice. There is a sense in which *Dia. 23* is rather submissive, but there is a sense in which *Dia. 24* just helps Black to develop. Sometimes one play is preferable, sometimes the other.

A close relative of the contact play is the shoulder play, which lies diagonally adjacent to an enemy stone. Since contact plays are such useful defensive moves, it is reasonable to expect shoulder plays to come in handy too. We do not want to give the false impression that contact plays are correct 100 per cent of the time, so next is an example in which a shoulder play is better.

*Dia. 26.* White has to defend his group on the left side. One naturally recalls the contact tesuji at *a* which he used in *Dias. 1* to 6 before, but after Black *b*, White *c*, Black *d* he is not going to have such an easy time as he did then. The reader can try this sequence and discover White's problems for himself.

*Dia. 27.* The alternative to playing at the edge would seem to be to jump into the center with White 1, but that invites the peep at 2 and diagonal play at 4, a nice attacking combination. White 1 is a little slow; one has to move faster when under attack.



*Dia. 28*

*Dia. 29*

*Dia. 30*

*Dia. 28.* The correct move is the shoulder move at 1; this is much more vigorous and effective than the one-space jump in the last diagram. If Black ignores it, White has a strong continuation at *a*.

*Dia. 29.* If Black makes the natural response of pushing with 2, White meets him in contact at 3. After 4 to 9 (more contact plays), *a* and *b* are miai and White has escaped. This is better for him than *Dia. 27*.

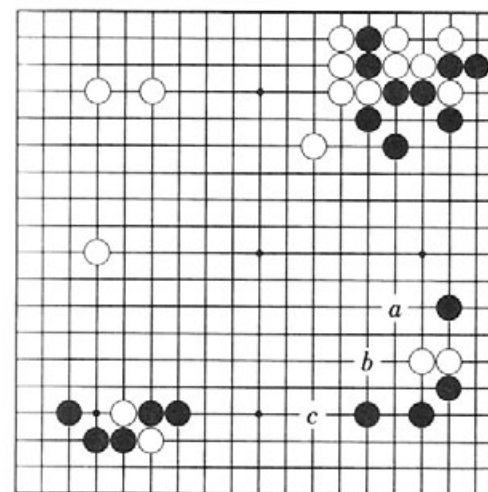
*Dia. 30.* What if Black tries to pierce the gap at 1? White exchanges 2 for 3 in preparation, then pushes through at 4. After 12, White *a* and *b* are miai and Black's attack has failed badly.

### Case Studies from Professional Games

Finally let us see some of these contact and shoulder tesujis being used in professional play. The following are five case studies.

*Dia. 1.* Case 1: White to play. Black is threatening to play the sequence Black *a*, White *b*, Black *c* and make territory on both the right and lower sides while attacking, so White has to defend his two stones. The reader can probably guess what his next move will be.

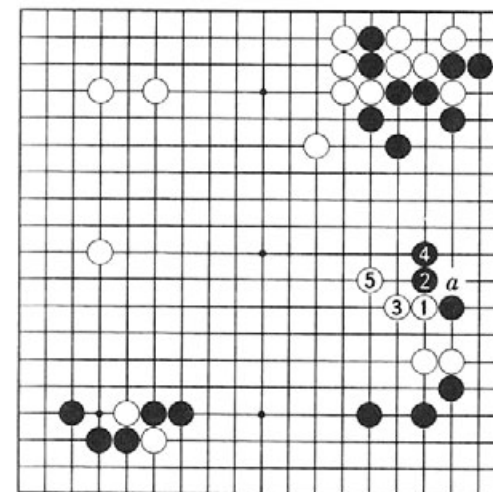
*Dia. 2.* It is the contact play at 1. Black wants to get a decent amount of territory on the right side, so he hanes at 2. This is



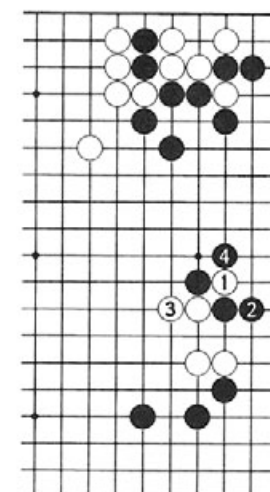
*Dia. 1 Takemiya (white) v. Sugiuchi*

not the place for him to draw back at *a*. One might now expect White to crosscut at *a*, but here that does not work out so well. It is better for him to play 3, threatening to crosscut. Black defends with 4 and White develops toward the center with 5.

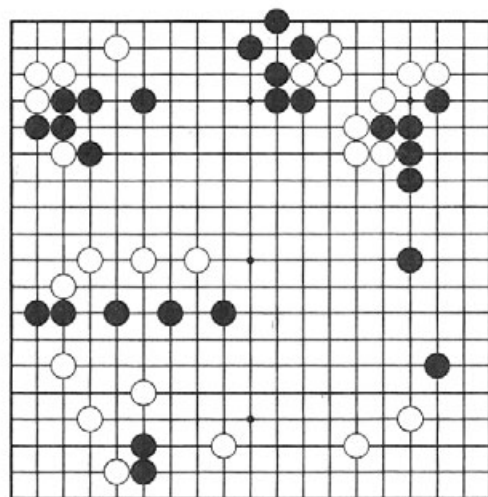
*Dia. 3.* If White crosscut at 1, Black would descend at 2. Next would come White 3 and Black 4. White's position is a little better than after 3 and 4 in *Dia. 2* – he can give atari above 3 – but the improvement in Black's position is obviously much greater. That explains why White sticks with the plain moves of *Dia. 2*.



*Dia. 2*



*Dia. 3*



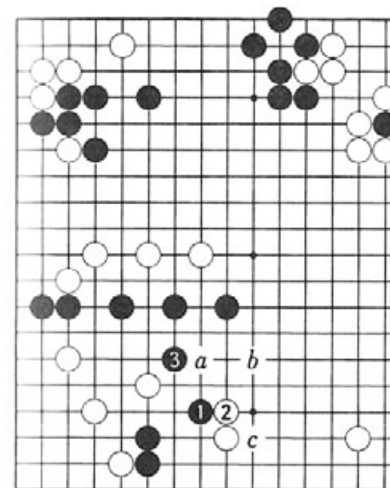
*Dia. 4 A. Ishida (black) v. Yamashiro*

*Dia. 4.* Case 2: Black to play. The urgent problem concerns the two stones on the lower side. How should Black go about saving them?

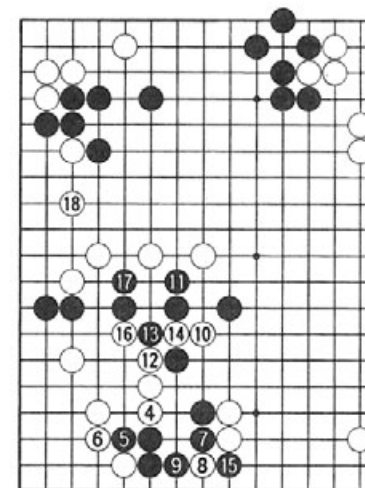
*Dia. 5.* The shoulder move at 1 is routine in this type of configuration. If White responds at 2, Black plays another shoulder move at 3. This combination may look thin, but it is unexpectedly resilient; can the reader find any way for White to break through? If White cannot break through, then Black has linked his two weak groups together and White, instead of attacking, will have to defend the corner.

If White plays 2 at *a* to keep Black split apart, Black pushes at 2. If next White *b*, Black *c*, White may have isolated Black's left-side group, but it should be safe because the white left-side group is equally weak, and White's loss on the lower side is enormous.

*Dia. 6.* This was the actual continuation. White played 4 to 8 in sente, then attacked by peeping at 10. Although he succeeded in breaking through, Black lived with profit on the lower side, and Black 11 and 17 weakened the left-side white group, so that White had to defend it with 18.



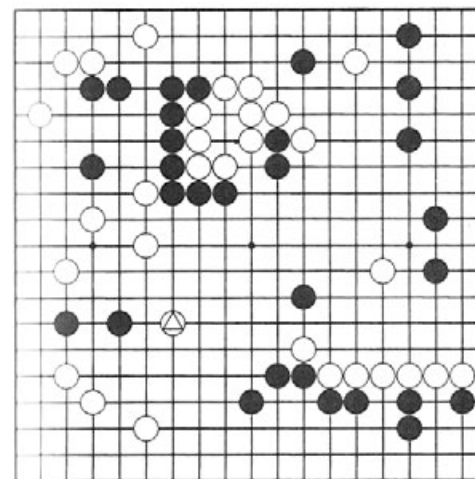
*Dia. 5*



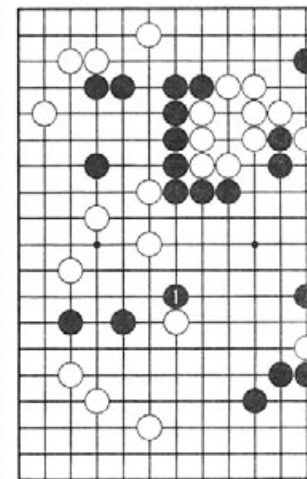
*Dia. 6*

*Dia. 7.* Case 3: Black to play. His two stones on the left side have just been capped by White  $\Delta$ ; can they be rescued?

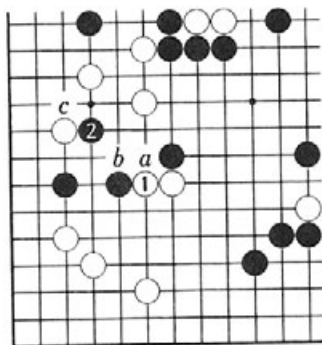
*Dia. 8.* If they can, it is only by Black 1. The ensuing variations provide some good examples of defensive technique, so we shall examine them in detail. First there is the question of White's reply.



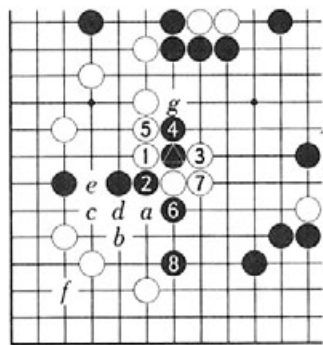
*Dia. 7 A. Ishida (black) v. Cho*



*Dia. 8*



*Dia. 9*

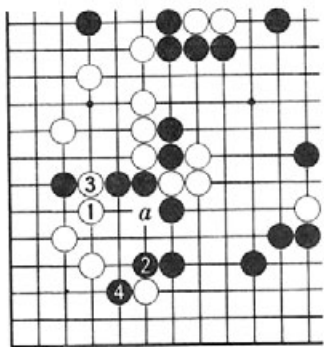


*Dia. 10*

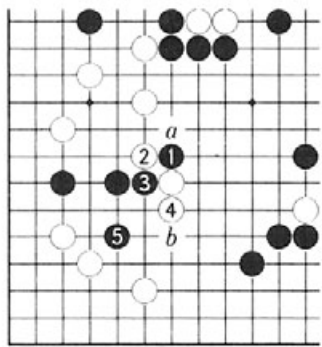
*Dia. 9.* Suppose White plays 1. He wants Black to answer at *a*, so that he can cut at *b*, but Black dodges this trap with the attachment at 2. That makes miai of Black *a* (linking to the center) and Black *c* (living along the side), so White 1 does not work.

*Dia. 10.* That leaves White only this hane for 1. Black naturally cuts at 2. White 3 and 5 are a tesuji combination, but Black plays 6 and 8. He has no objection to sacrificing 4 and ▲ if he can thereby save his main group. If White cuts at *a*, Black replies at *b*. White *c*, Black *d*, White *e* would then pick up one stone, but White would be left with *f* in the corner and *g* in the center to contend with – a bad result for him.

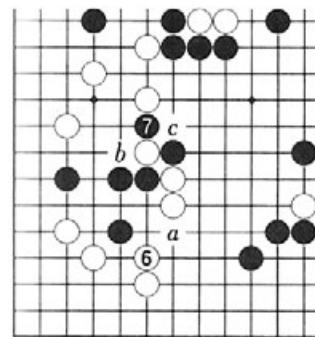
*Dia. 11.* Or if White peeps at 1, threatening *a*, Black counters with 2. The 3–4 exchange is not good for White.



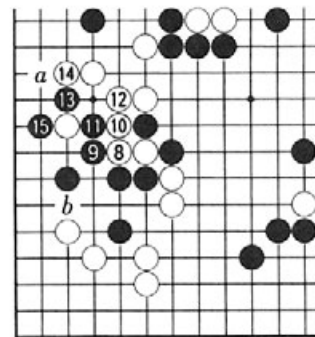
*Dia. 11*



*Dia. 12*



*Dia. 13*



*Dia. 14*

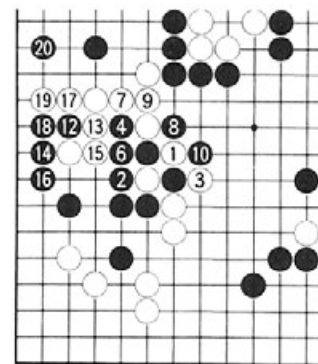
*Dia. 12.* In the actual game after Black 1 and 3 White extended at 4 to keep Black from giving atari there and escaping. That left Black free to give atari to White 2, but first he jumped to 5. If White *a*, Black escapes with *b*. Black *b* was the immediate threat behind Black 5, but its deeper purpose was to help Black form eye shape, as we shall see.

*Dia. 13.* White played 6 to prevent Black *a*. Black gave atari at 7, and now there were two possible moves for White: *b* and *c*.

*Dia. 14.* White chose the former, coming out at 8. Black drove him ahead with 9 and 11, then haned at 13 and 15. With *a* and *b* as miai, he was alive. Here we see the reason for the triangled stone; it combines with Black *b* to make an eye below 9.

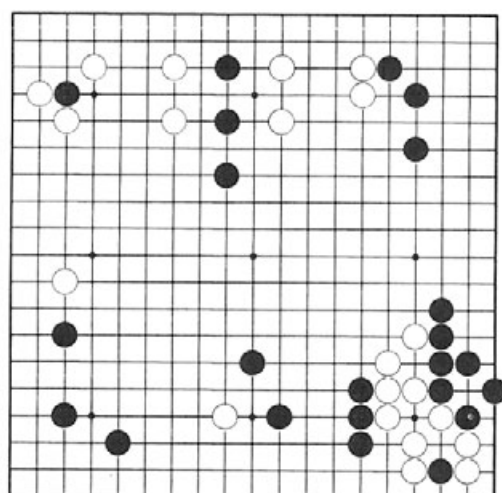
*Dia. 15.* If White had attacked from the outside with 1 and 3, Black was ready with the sequence shown. The key moves are the cutting-across tesuji at 12 and the hane at 14. If White persists with 15–19, Black confines him with 20 and wins the capturing race.

The reader is certainly not asked to learn these sequences by heart, but the way Black dodges White in Dias. 9 and 11 and drives him around in Dia. 14 is worth remembering.

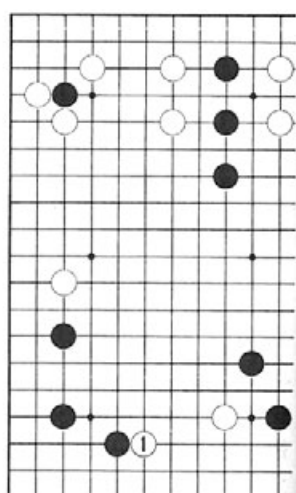


*Dia. 15*

*5 takes ko. 11 connects.*



*Dia. 16 S. Fujisawa (white) v. Y. Ishida*



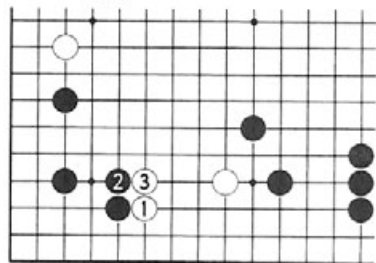
*Dia. 17*

*Dia. 16.* Case 4: White to play. The problem lies in the lower left. It is not so much that White has to save the isolated stone beside the star point as that he has to develop some kind of viable shape in the area as a whole.

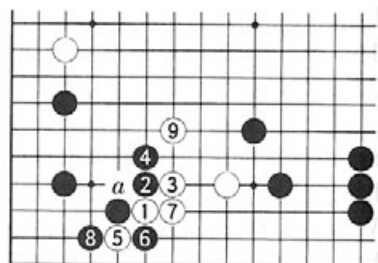
*Dia. 17.* The standard way to begin is with the contact play at 1 against the corner enclosure.

*Dia. 18.* If Black extends at 2, White extends in contact at 3, getting the widest possible eye space in the room available.

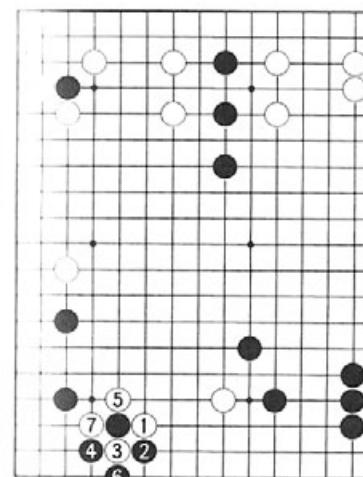
*Dia. 19.* If Black hanes from above with 2, White counter-hanes with 3 and 5, forcing 6 and 8, then jumps to 9, a move which exploits the cutting potential at *a*.



*Dia. 18*

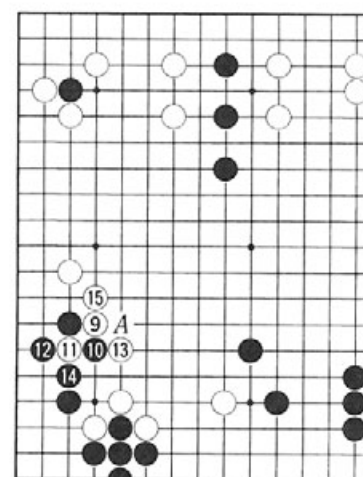


*Dia. 19*



*Dia. 20*

*8 connects*

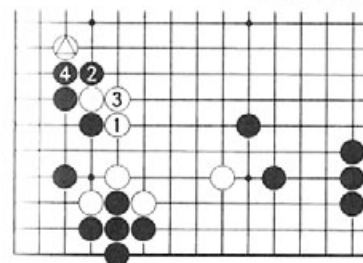


*Dia. 21*

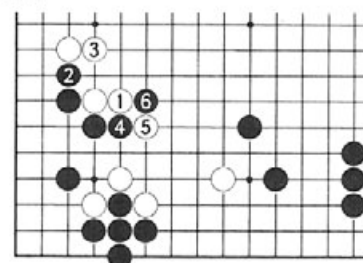
*Dia. 20.* In the actual game Black hane from underneath with 2 to destroy White's eye space along the edge. White replied by sacrificing a stone at 3, so as to play 5 and 7 in sente.

*Dia. 21.* White followed with another attachment and crosscut at 9 and 11. Sacrificing 11 let him play 13 in sente, then draw back at 15, and with this he had defended the lower side in such a way as to simultaneously develop his framework in the upper left. His only remaining worry was the cut at *A*. We shall see how he handled that, but first let's go back for a closer look at 11.

*Dia. 22.* Without sacrificing, White cannot hane at 1. If he simply plays 1, Black 2 and 4 separate his lower-side group from the triangled stone and leave the latter in a bad state.



*Dia. 22*

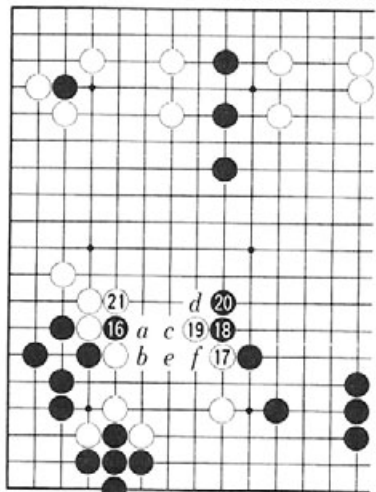


*Dia. 23.*

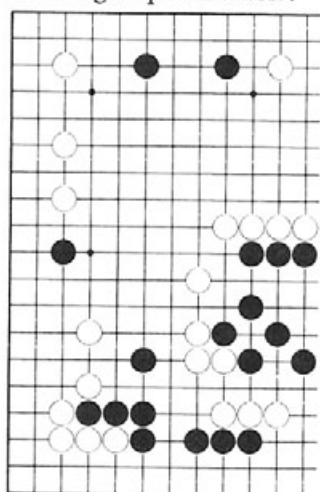
*Dia. 23.* (previous page) White 1, copying the attach-and-extend joseki, is also bad. The reader should be able to recognize 6 as a strong cut.

*Dia. 24.* Following White 15 in Dia. 21, Black cut at 16 here (note that the ladder at *a* favored him). White's response was two more contact plays at 17 and 19, then 21. If Black now escaped with *a*, White would follow with *b*, Black *c*, White *d*, Black *e*, White *f*, at which point Black faces either a white hane above 20 or a capturing move below *e*.

What White did in Dias. 20, 21, and 24 was to beat a swift retreat, sprinkling stones in his rear to slow down Black's pursuit. This type of light play epitomizes skillful defense. Black has captured a couple of the stones White sprinkled, and could easily pick up a few more, but he has no attack on White's group as a whole.



*Dia. 24*

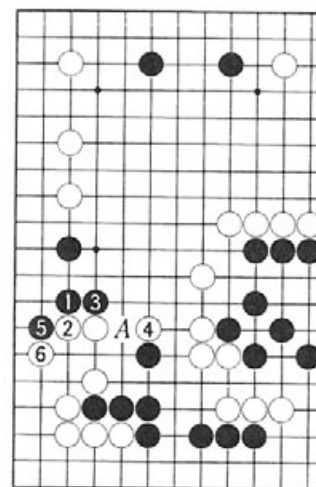


*Dia. 25*

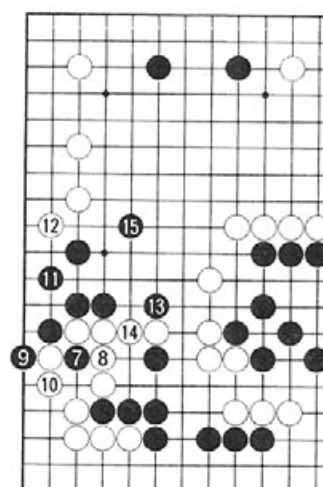
*K. Kobayashi (black) v. A. Ishida*

*Dia. 25.* Case 5: Black to play. His problem is to defend the stone in the middle of the left side.

*Dia. 26.* (next page) He began with a shoulder-type move at 1 and followed with contact plays at 3 and 5, pushing for maximum space. White 4 was a slight mistake – A was correct. Not that White A would have killed Black, but White 4 gave him a helpful tesuji to play next.



*Dia. 26*

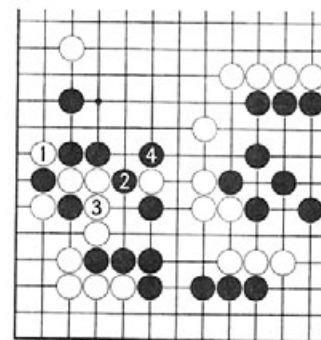


*Dia. 27*

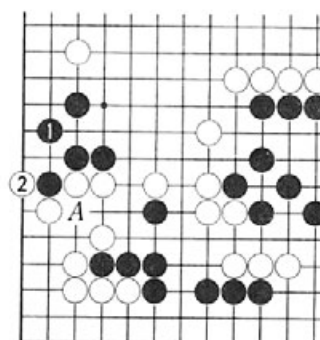
*Dia. 27.* The tesuji was the cut at 7. White 8 was forced, so Black was able to play 9 in sente before making the diagonal connection at 11. White 12 was the only way to continue the attack, but Black played 13 and 15 and was out of danger.

*Dia. 28.* When Black sacrificed 7 in Dia. 27, White was free to capture with 1 here, but then Black would link up with 2 and 4.

*Dia. 29.* If Black made the diagonal connection at 1 without the sacrifice at A, White could reply at 2. Black would now be rather less sure of eyes.



*Dia. 28*

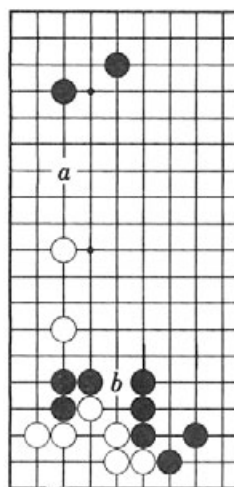


*Dia. 29*

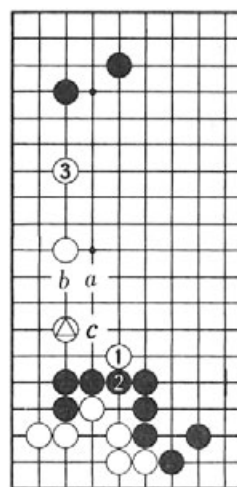
## Chapter Five FORCING MOVES

In the course of doing all the things described in the preceding chapters, a player has frequent opportunities to make small, unrelated, but coercive moves that will help his cause and irritate his opponent. We have already alluded to them, but they are such a pervasive part of the game that they deserve a chapter of their own.

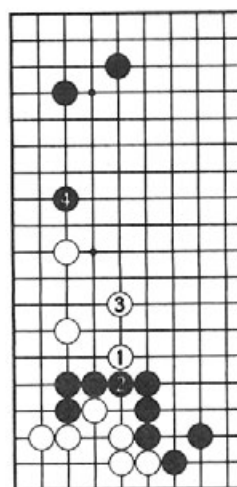
*Dia. 1.* White to play. The big move is White *a*. Black has a gap at *b* in the lower left, but White cannot divide him by wedging there, for Black's reply would be a double atari. Still, this gap is a defect in Black's shape, and there is a way for White to exploit it before extending to *a*.



*Dia. 1*



*Dia. 2*



*Dia. 3*

*Dia. 2.* White peeps at 1. Black has little choice but to connect at 2. What is the effect of this exchange? On the one hand, it is clear that White 1 in some way helps the white group on the left side. It interferes with Black *a*, White *b*, Black *c* for example. Or if a fight

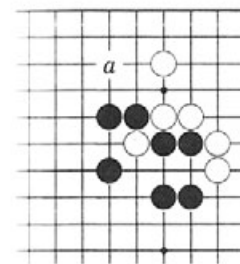
breaks out, it may become the crucial stone that gives White an extra liberty, or puts Black in atari. It may also affect ladders. At any rate, it is in a position where it will probably do White some good and cannot do him any harm.

Black 2, on the other hand, is a worthless stone. It connects where Black was effectively connected anyway, a humiliating move to have to make. To Black, the 1-2 exchange feels like a rap on the knuckles.

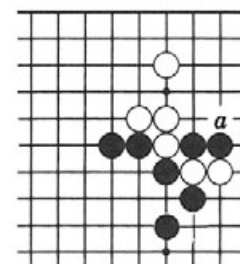
Having scored off Black in this way, White simply forgets about 1 and turns away to 3. This is not fickleness on his part; it is essential for him to abandon White 1.

*Dia. 3.* If he allows his attention to become snagged on 1 and defends it with a second move at 3, Black gets to make the large extension at 4. The whole point of White 1 is that it does not need to be defended. Even if it actually gets captured and removed, so that its value to White falls to zero, that is still no less than the value of 2 to Black. Once played, a stone like White 1 should be regarded as expendable and left alone.

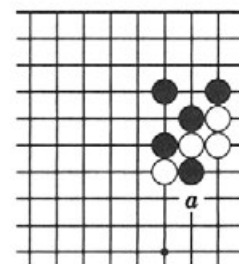
White 1 is called a forcing move (in Japanese a *kikashi*). A forcing move may be defined as a sente move that brings its player some potential advantage without having to be followed up or defended. Peeping plays like White 1 in Dia. 2 are one common variety of forcing move. Ataris are another. With that for a hint, can the reader find the forcing moves (four in all) for White to make in the next three diagrams before he plays *a* in each? Be careful of the order in Dia. 6.



*Dia. 4*

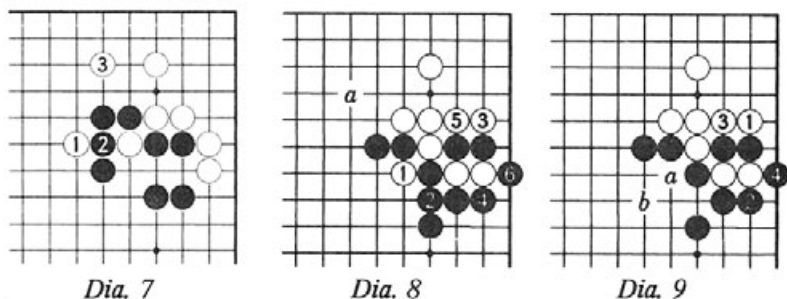


*Dia. 5*



*Dia. 6*



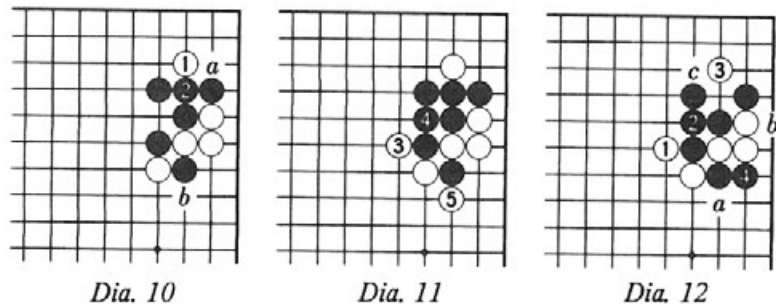


*Dia. 7.* White 1 is the forcing move; White plays it, then leaves it and skips to 3. Later on it may help him by affecting ladders, obstructing Black's movements, etc., while Black 2 has no such positive value.

*Dia. 8.* White 1 is the forcing move. By making it possible to detach the two marked stones, White 1 increases the value of White *a* or any other move White makes in this area. Note also how Black is forced into an empty triangle.

*Dia. 9.* If White plays 1 without forcing at *a*, he loses his chance. White 3 at *a* would be too late, since Black would reply at 4 and White would then be unable to play 3 in sente. After 1 to 4, if White cuts at *a* Black can net him with *b*.

*Dia. 10.* White 1 is the first forcing move. Black has to connect because White 2 would be an atari, (or at least if he gets fancy and plays 2 at *a*, White *b* becomes sente instead of gote). The value of 1 is that it may later help White invade the corner.



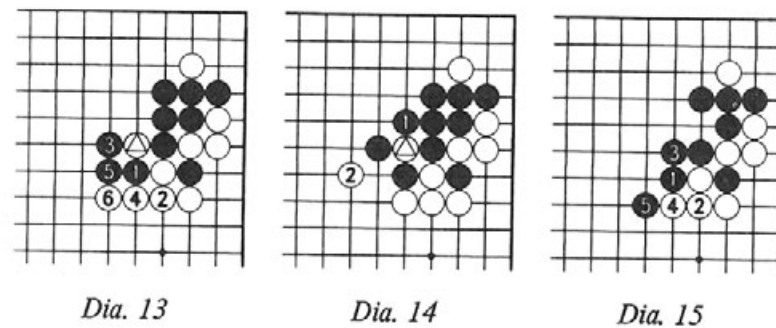
*Dia. 11.* White 3 is the second forcing move. Its value will become apparent in the continuation, but before looking at that let's see why the order of 1 and 3 is important.

*Dia. 12.* If White gives atari, then peeps, instead of vice versa, Black replies at 4. This is disastrous. In other words, White cannot peep at 3; he has to play *a* first. Nor can he peep at 3 after playing *a*, because Black replies at *b* and *c*, so he loses his forcing move entirely. Now back to Dia. 11.

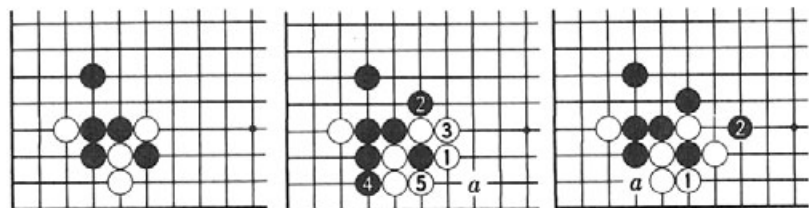
*Dia. 13.* In the continuation from Dia. 11, Black gives atari at 1 and grips White  $\triangle$  with 3. White  $\triangle$ , however, serves its purpose by making White 4 absolute sente, forcing Black to answer at 5 so that White can push onward at 6. In addition, at the end of this diagram White  $\triangle$  remains in a potentially useful position while Black  $\blacktriangle$ , the stone it was exchanged for, is practically useless.

*Dia. 14.* If Black decides to rid himself of White  $\triangle$  by capturing it, White can press around him at 2. Black's group is starting to resemble a lump.

*Dia. 15.* If White neglected to force Black at 3 before playing 5 in Dia. 11, Black could now connect at 3 after 1. Then he could meet White 4 at 5, or ignore it if he liked. Compare this with Dia. 13 and you can see the difference White's forcing move makes.



*Dia. 16.* A point that would be a forcing move for either side is particularly important. Such a point exists in this position. Can the reader find it, and thereby find White's next move?



*Dia. 16*

*Dia. 17*

*Dia. 18*

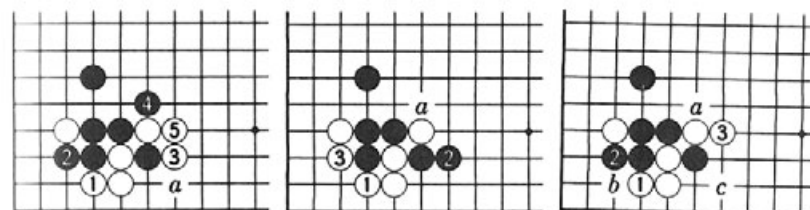
*Dia. 17.* White 1 is not the point. Of course White has to play here, but if he does so immediately, Black can force him twice at 2 and 4. This is rather bad. Black gets a large corner and White can still be attacked at *a*.

*Dia. 18.* It does not help for White to capture with 1 instead of playing 3 in the last diagram. This keeps Black from forcing at *a*, but it permits the angle tesuji at 2, which is even worse (White becomes semi-surrounded). The correct way for White to avoid being forced at *a* does not entail such a high cost.

*Dia. 19.* (next page) White 1 is the key point, and White should start by taking it for himself. Now Black is the one to be forced – he has to answer at 2. After 3 and 5 White is much better off, for both territory and eye shape, than in *Dia. 17*.

*Dia. 20.* When White plays 1, there is the risk that Black will reply at 2, but then White takes the corner with 3. The feasibility of Black's playing this way depends on the surrounding conditions, particularly on the ladder at *a*, but even if the ladder works, White gets to play a ladder block, and this exchange is better for him than being forced as he was in *Dia. 17*.

*Dia. 21.* Incidentally, after playing 1 and forcing Black to reply at 2, White could extend to 3 and thus avoid being forced by Black *a*, but this would be unwise. Black could then play *b* in sente, or attack from the other side with *c*.



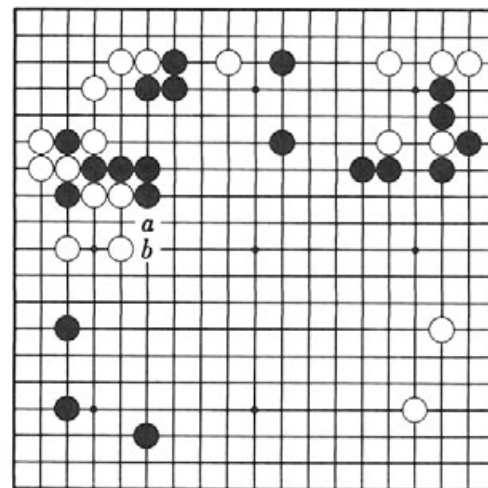
*Dia. 19*

*Dia. 20*

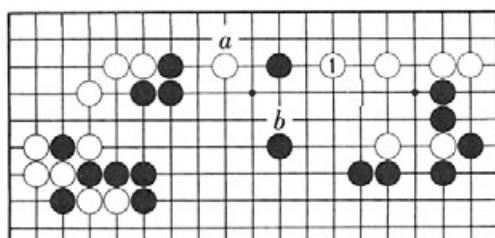
*Dia. 21*

This discussion has drawn us away from our subject, which was points that would be forcing moves for either side. Here is one more example.

*Dia. 22.* This position comes from one of the Japanese author's games – White to play. The main thing he wants to do is to play *a* to limit Black's territory and influence in the center and upper side – compare Black *b* – but first he has a forcing move to make, which would also be a forcing move for Black. It may not be easy to see, but if the reader feels inclined to hunt for it, he will find it on the third line.



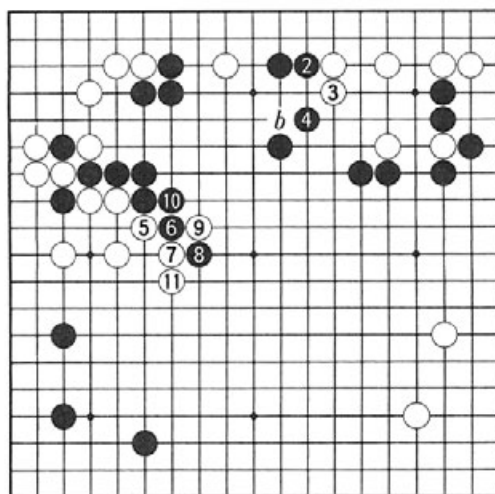
*Dia. 22*



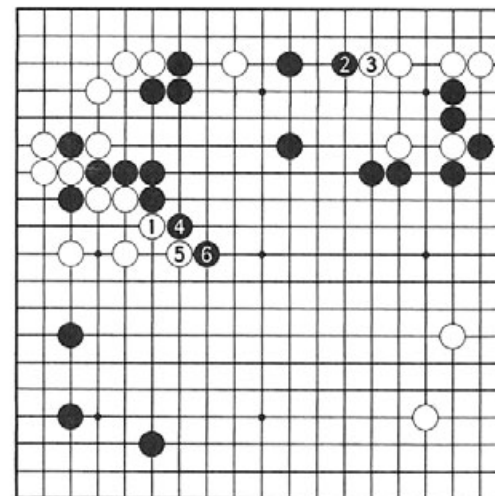
*Dia. 23*

*Dia. 23.* The forcing move is White 1. It is forcing because if Black ignores it, White can continue at *a* or *b* and ruin his only large territory.

*Dia. 24.* Black answers at 2, but White can also play 3 in sente, again threatening *b*. After Black defends with 4 White goes back to the main issue, which is the pushing battle in the center. In that White 9 is another forcing move, setting up a possible ladder after 11, giving Black an empty triangle, and in general performing the same sort of duty as did White 3 in Dia. 11 a few pages back.



*Dia. 24*

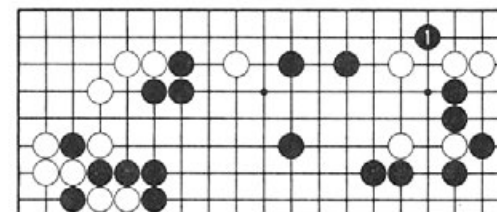


*Dia. 25*

*Dia. 25.* What if White played 1 without making the forcing move? Black would take it for himself with 2 and White would have to answer at 3 to save the corner. Black would then leave 2 and 3 as a forcing exchange and proceed with 4. Clearly he would have gained in comparison with Dia. 24.

*Dia. 26.* If White did not answer Black ▲, Black 1 would kill his corner.

In endgame terminology White 1 in Dia. 23 or Black 2 in Dia. 25 would be called a double sente point. Such points are pure profit for whichever side gets them.

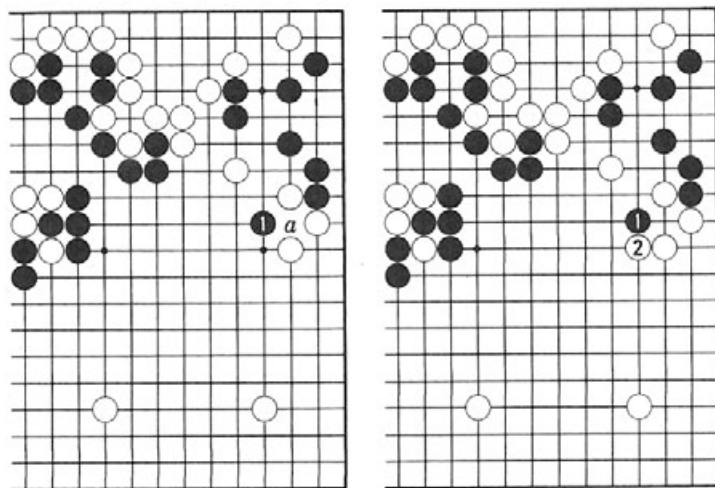


*Dia. 26*

### Resistance

So far, the forcing moves we have seen have gone smoothly, the enemy replying as expected. The enemy replies grudgingly, however – he does not enjoy being forced – so whenever possible he will try to resist.

*Dia. 1.* This peep was once played against the American author. Black is trying to force White as a prelude to invading the lower right. If White connects at *a* he will indeed have been forced.



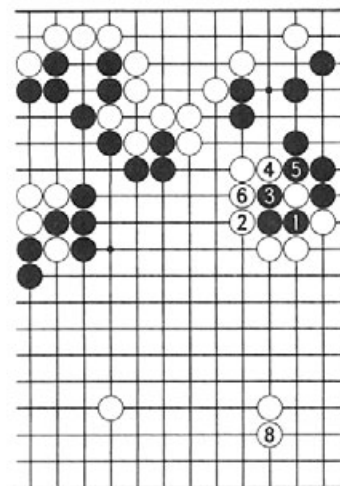
*Dia. 1*

*Dia. 2*

*Dia. 2.* White, however, is not going to be so obedient. He resists with 2. Now he is the one to profit from the exchange: White 2 does a great deal to enlarge his lower-right framework, while Black 1 does not do much of anything. Black's attempted forcing move has backfired.

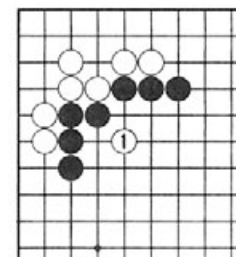
Before White resists like this he must check that he is not endangering his position, but in this case that is fairly obvious.

*Dia. 3.* (next page) If Black cuts, White squeezes him in sente, then closes the corner at 8. This is certainly not what Black intended when he peeped at 1 in Dia. 1.



*Dia. 3*

7 connects



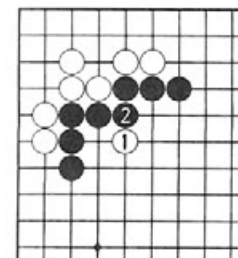
*Dia. 4*

*Dia. 4.* For a second example of resistance, take this joseki position. White peeps at 1. How should Black reply?

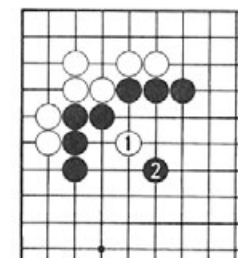
*Dia. 5.* If he connects at 2, he is forced.

*Dia. 6.* He can resist, however, with this shoulder move. If White lets 1 be captured, his intended forcing stone becomes a gift to Black.

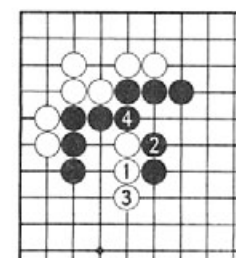
*Dia. 7.* But if he escapes with 1 and 3, he saddles himself with an unwanted weak group to care for. A real forcing move stands by itself; it does not drag one into complications like this. White 1 in Dia. 4 is accordingly a failure – provided, that is, Black answers it properly by resisting.



*Dia. 5*



*Dia. 6*

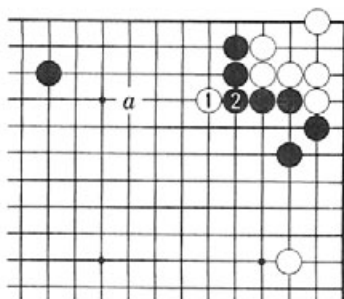


*Dia. 7*

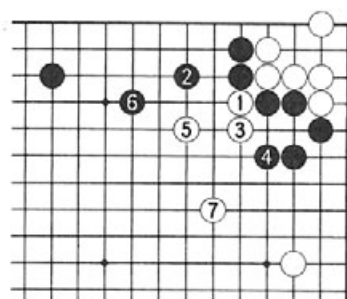
### Thank-You Moves

The essential quality of a forcing move is that it forces the enemy to answer against his will – to give in, to suffer some kind of loss. When the enemy is glad to answer, the term ‘forcing’ no longer applies.

*Dia. 1.* It does not apply to this White 1, for example, which only forces Black to do what he wants to do anyway, namely defend the cutting point at 2. White may be planning to continue with something like *a*, but now that Black has connected, any white invading force will come under fairly heavy fire. White 1 may be sente, but it is not a forcing move. Technically speaking, it is a potential-destroying move – White loses the potential of cutting at 2. In simple language White 1 is a ‘thank-you’ move – Black thanks White for playing it.



*Dia. 1*



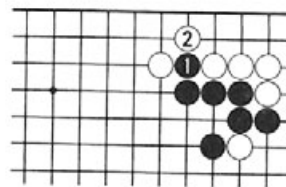
*Dia. 2*

*Dia. 2.* What White should do here is to cut directly at 1, divide Black in two, and attack. That puts Black in an uncomfortable position on the right side. Looking at this sequence, one can appreciate the depth of Black’s gratitude to White in *Dia. 1*.

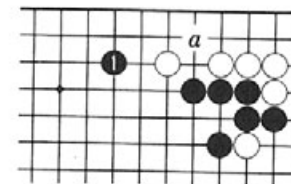
Once a beginner learns to make forcing moves, he tends to make them at random, which leads to mistakes like the above. There is a go proverb that warns one not to play next to a cutting point.

*Dia. 3.* Black 1 in this diagram is another common mistake. No matter how ‘forcing’ it appears, White is grateful to Black for playing it for at least three reasons:

1. Black loses a liberty.
2. Black loses a ko threat.
3. Black loses the potential shown in the next diagram.



*Dia. 3*

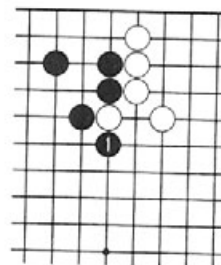


*Dia. 4*

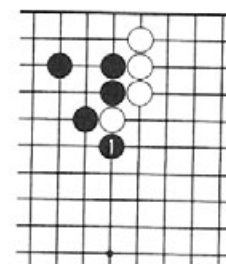
*Dia. 4.* If Black leaves the position alone, he can play 1 here, threatening a placement at *a*. This placement option is much more useful to him than the move which destroyed it in *Dia. 3*.

Sometimes it is hard to draw the line between forcing moves and thank-you moves. Stronger players tend to hold off in borderline cases, not wanting to commit themselves to forcing moves of doubtful value. Weaker players generally do the opposite, playing sente moves wherever they find them with little regard for which side benefits the more.

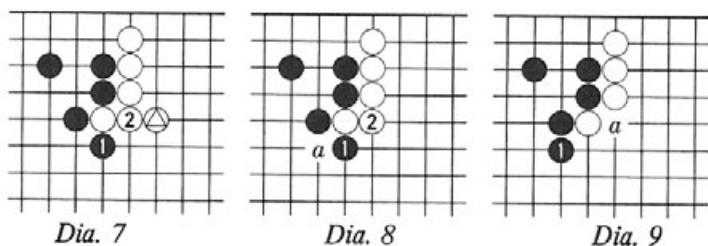
*Dias. 5 and 6.* What would the reader make of the two moves in these diagrams? Which of them is a forcing move and which a thank-you move? Or are they both forcing moves, or both thank-you moves?



*Dia. 5*



*Dia. 6*



*Dia. 7.* Black 1 is a genuine forcing move. When White connects at 2, White  $\Delta$  becomes a wasted stone. (White may omit 2, or play it a line lower, but then Black has defended his cutting points).

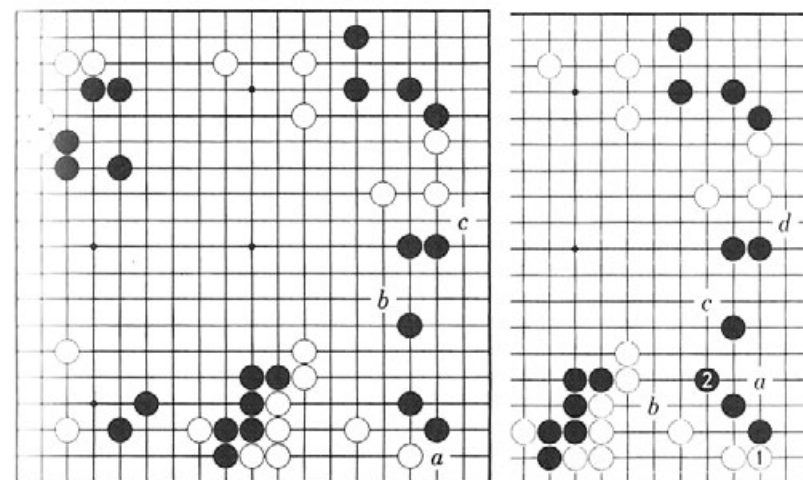
*Dia. 8.* This time Black 1 is a thank-you move, because it strengthens White's wall. Black, for his part, still needs to connect at *a*, but in that case –

*Dia. 9.* It would be better to play 1 alone and leave the cutting point at *a* open.

### More Examples from Actual Play

Forcing moves may seem like side issues in the game as a whole, but in serious play they assume great importance. If one can out-force one's opponent and thereby acquire a series of small advantages, that in itself may be sufficient to decide the outcome. Playing forcing moves becomes instinctive. So does resisting them; the player who always lets himself be forced never wins. It is not unusual to find in a professional game a long sequence of moves, each of which is a forcing move, a reply to or resistance to a forcing move, or a continuation from a forcing move. For example –

*Figure 0.* The Japanese author was white in this game. It is low-positioned and there is no fighting going on, so both sides are pressing hard for any advantage they can get. Note the black area in the lower right. This is territory – there is no way for White to invade it. What White would like to do, then, is to play moves like *a*, *b*, and *c*, which would threaten invasions and force Black to defend, as well as making the black territory smaller and the surrounding white groups bigger and stronger.



*Figure 0.* Kitamura (black) v. A. Ishida

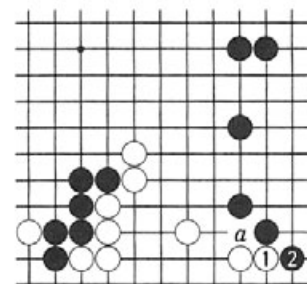
*Figure 1 (1 – 2)*

*Figure 1.* White began at 1, which threatened to invade at *a*. Black replied at 2.

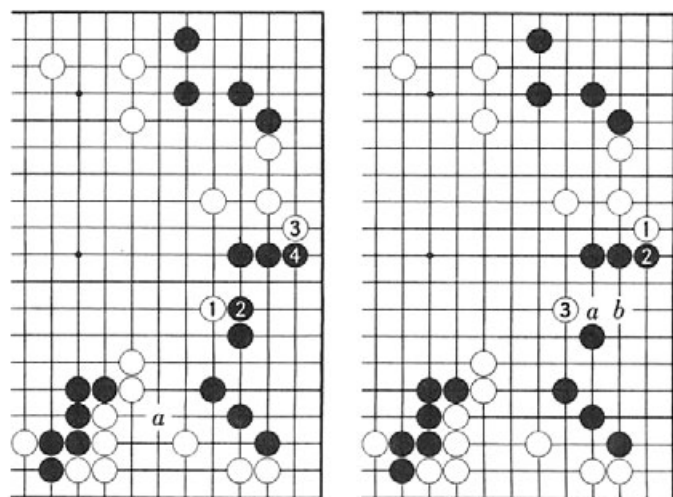
*Dia. 1.* The usual response to White 1 is to block at 2, but if Black plays this way he is completely forced. The 1–2 exchange is entirely in White's favor, and White can force again at *a*. Black gains nothing in compensation.

Black 2 in Figure 1 resists being forced. While defending against White *a*, it also has offensive meaning: it threatens to peep at *b*.

Next White would like to force Black at two more points, *c* and *d*, but the order is important. Which should he play first?



*Dia. 1*



*Dia. 2*

*Dia. 3*

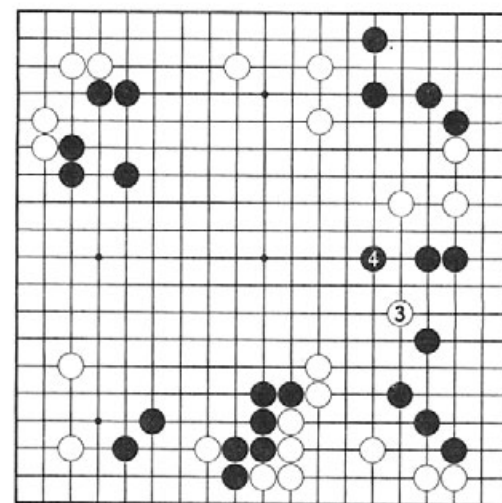
*Dia. 2.* White 1 is correct. If Black replies at 2, White can force him again at 3. White 1 slightly reduces Black's territory, and also reduces the threat of Black *a*.

*Dia. 3.* If White plays 1 here first, Black will not have to answer White 3. Next if White *a*, Black *b*.

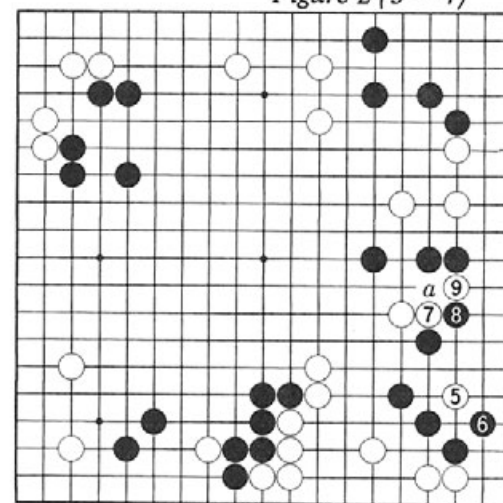
*Figure 2.* (next page) White played 3 correctly, but instead of answering as expected Black resisted by jumping out to 4. To a professional this is only natural. If Black meekly submits as in *Dia. 2* above, his lower right territory shrinks to barely fifteen points and the advantage is all White's. He cannot expect to win by playing that way.

White, for his part, was not going to sit still and let 3 be swallowed up. Black had left his territory exposed, so the natural thing would be to try to invade it. In the next two figures we shall see how White went about doing this.

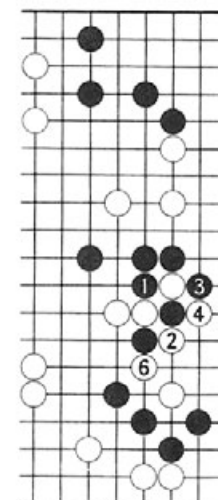
*Figure 3.* He started with a preparatory move at 5, then pushed at 7 and wedged at 9. Black could not capture 9 with *a* because of the sequence shown in *Dia. 4*.



*Figure 2 (3 - 4)*



*Figure 3 (5 - 9)*



*Dia. 4*  
*5 connects*

*Dia. 4.* Black lacks the ko threats to do anything but connect against White 4. White 6 means the capture of half his group. Note how White 5 in *Figure 3* supports this sequence.

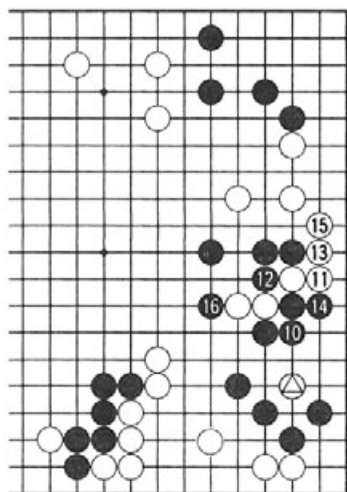


Figure 4 (10 – 16)

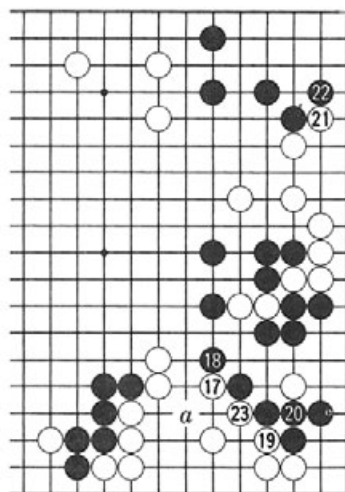


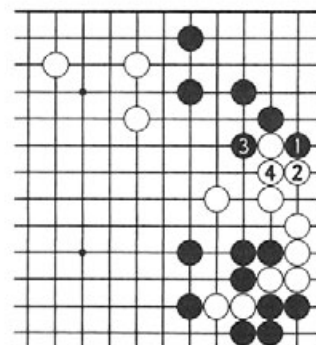
Figure 5 (17 – 23)

Figure 4. Black connected at 10, White took profit with 11 to 15, and Black 16 captured two white stones. You should verify that they cannot escape. Black's compensation for White's profit was these two stones plus the triangled gift stone White had to throw in to make the whole sequence work. White's attempted forcing move and Black's resistance had led to an interesting exchange.

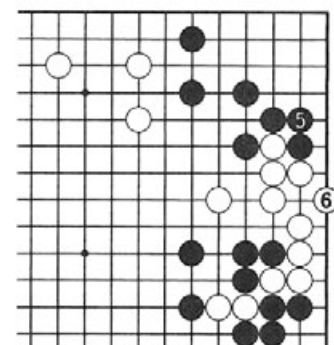
Figure 5. White forced Black at 17, 19, and 23. Besides reducing Black's territory, these moves prevented Black *a*. This time Black had no way to resist, but had to answer at 18 and 20.

In the midst of this sequence White slipped in a forcing move in the upper right corner at 21. Its function is explained in the next four diagrams.

Dia. 5. (next page) First of all, if White does not play 21 in the figure, Black can force him with 1 and 3. Apart from the merits or otherwise of 1 and 2, the 3–4 exchange is pure profit for Black.



Dia. 5

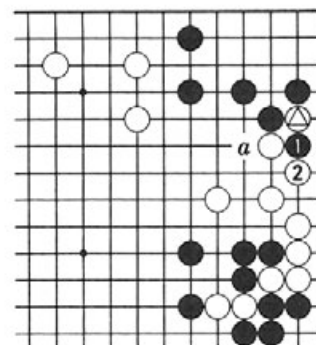


Dia. 6

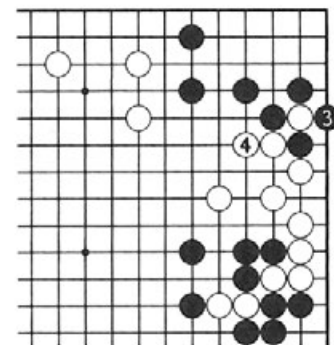
Dia. 6. Later, if Black connects at 5, White may have to make two eyes with 6.

Dia. 7. Once White has made the triangled exchange, he is safe from Dia. 5. Although Black can trade 1 for 2 as before, this has no value in itself, and Black cannot continue at *a* as he did in Dia. 5. White would reply with *b*.

Dia. 8. If Black captures at 3 and White has to make two eyes, now 4 is his move. This gives him more territory and a better development toward the center than in Dia. 6 – all this from the forcing move at 21 in Figure 5.



Dia. 7



Dia. 8



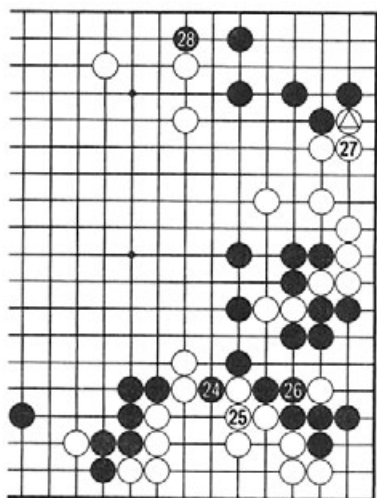
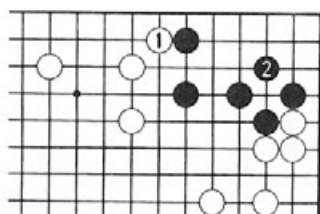
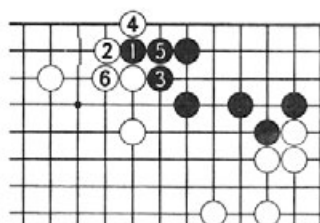


Figure 6 (24 - 28)



Dia. 9



Dia. 10

Figure 6. Black still had to reply to White 23 in the previous figure, but before he did so by connecting at 26 he forced White at 24. With 26 the long sequence in the lower right came to a halt.

Next, even though White  $\triangle$  was originally intended as a forcing move, White followed it up and connected at 27. This connection was extremely large for the following reason.

Dia. 9. If Black ignores it, White 1 threatens an invasion of the corner. Black's position is so weak that he has to answer at 2, (else White 2), but he is being egregiously forced. To prevent this Black played 28 in Figure 6, or 1 in the next diagram.

Dia. 10. Black's idea in playing 1 was to force White. If White answers at 2, Black 3 defends the corner in sente, White having to connect at 6. There is a big difference between Dias. 9 and 10.

Figure 7. (next page) So as not to be forced, White played 29 instead of *a*, forced Black again at 31 (threatening *b*), and finally played 33, which is obviously larger than *a*. He did not, however, try to force Black at *c*; that would have been a thank-you move.

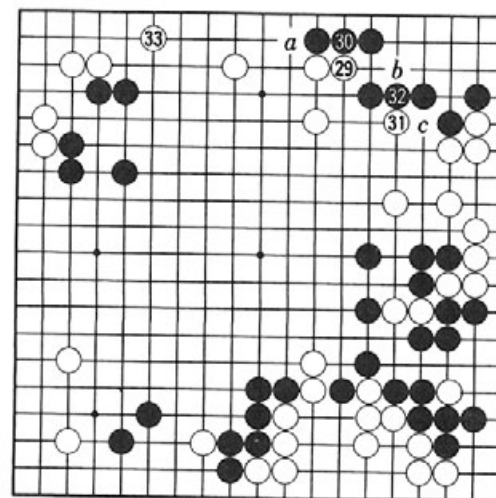
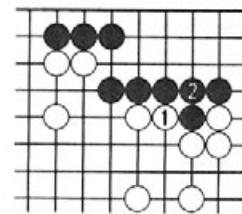


Figure 7 (29 - 33)

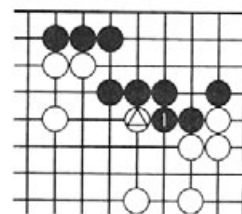
Dia. 11. The 1-2 exchange helps Black by eliminating what potential still exists in the corner. White 1 enlarges White's territory slightly, but is not an urgent play.

Dia. 12. Black would hardly be likely to make a bad-shape move like 1, and if he did White could ignore it, abandoning the triangled stone with a clear conscience.

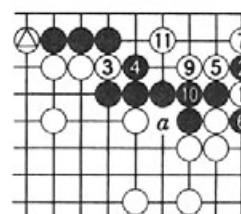
Dia. 13. By not giving atari at *a* White leaves this potential: if Black answers 1 at 2 and 3 at 4, White  $\triangle$  becomes sente, threatening the invasion from 5 to 11.



Dia. 11



Dia. 12



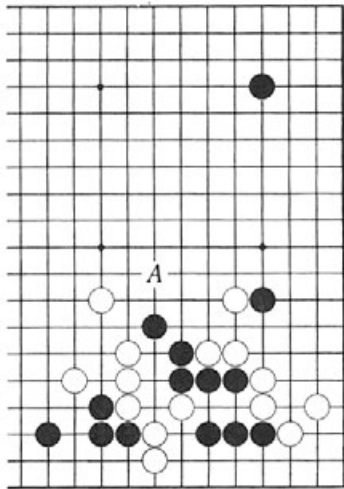
Dia. 13  
8 connects

At this point we shall stop following the game, but the reader should be pleased to know that the final result was a  $3\frac{1}{2}$  point victory for White.

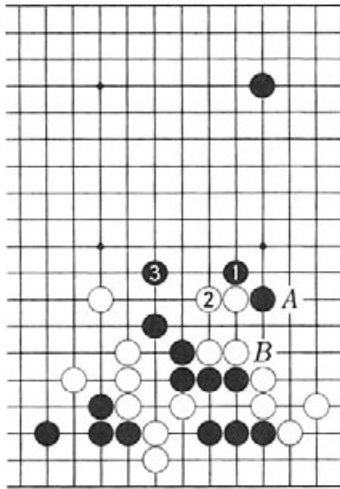
Chapter Six  
INDUCING MOVES

Closely related to the forcing moves of the last chapter are what we shall call inducing moves. They can be looked at as a special kind of forcing move, but with the difference that instead of simply trying to make the enemy submit, they try to make him cooperate.

*Dia. 1.* Black to play, and it is obvious that he has to jump out at A to protect his large group. What is less obvious is that he has a way to prepare the ground for this jump and make it more effective.



*Dia. 1*



*Dia. 2*

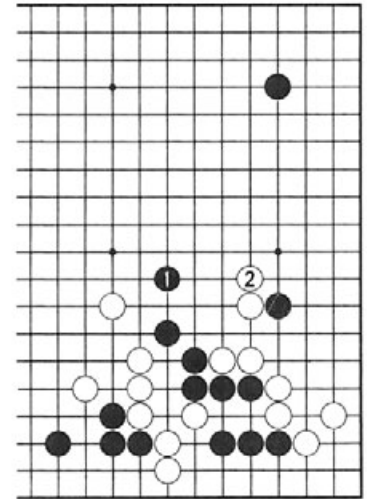
*Dia. 2.* First he hanes at 1. Black 3 then becomes a natural and necessary response to White 2. Black 1 induces White 2 which in turn induces 3, the move Black wanted to make in the first place. Another way of looking at it is that if Black is going to play 3 he can afford to have White play 2, so he may as well get the maximum out of his move by forcing White at 1 first. Black 1 increases his potential on the right side; later Black A, threatening B, may become a good continuation.

*Dia. 3.* If Black jumps directly to 1, White extends to 2, ending any relationship between the triangled stone and the center group and leaving Black with much less potential on the right side.

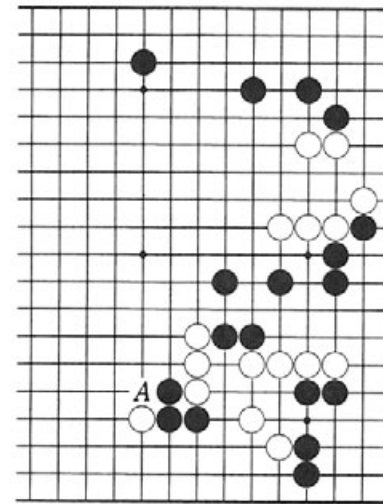
Enlisting the enemy's cooperation for a move you are planning by making him make you make it is a useful technique. Here are two more examples.

*Dia. 4.* Black wants to play A. How should he induce this move?

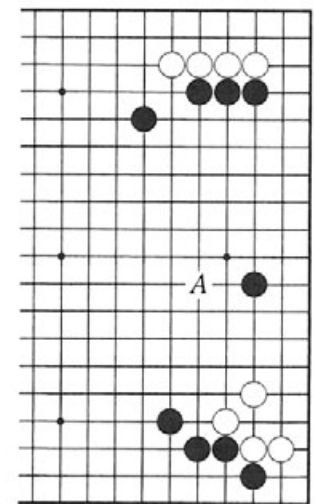
*Dia. 5.* Black wants to play A. Ditto.



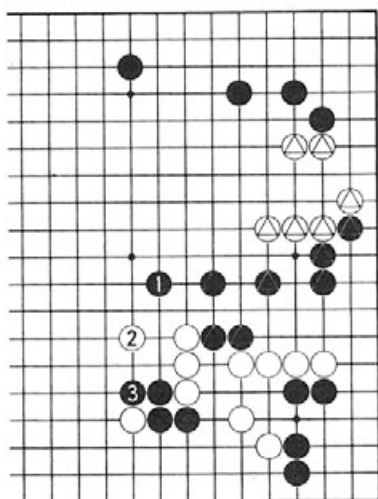
*Dia. 3*



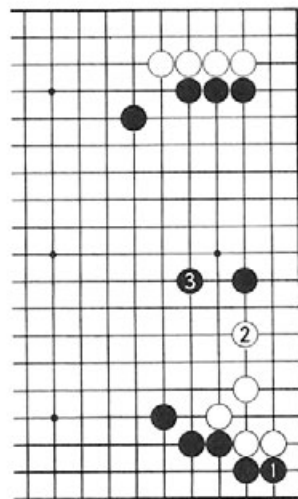
*Dia. 4*



*Dia. 5*



*Dia. 6*



*Dia. 7*

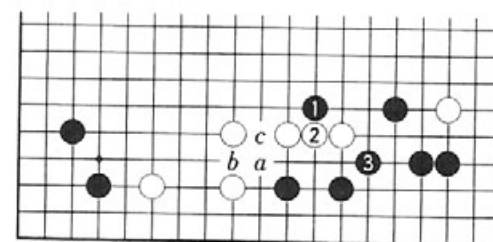
*Dia. 6.* Black 1 induces White 2 which induces Black 3. If Black simply played 3, White would attack at 1 and sandwich the triangled black group against the triangled white one.

*Dia. 7.* Black 1 induces 2 which induces 3; the sequence runs like clockwork. Having White play 2 first raises the efficiency of Black 3. Black 1 is big territorially, and it secures the eye space of the lower-side group.

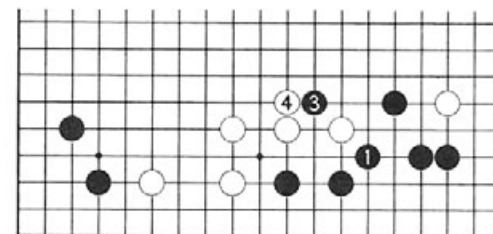
### Force Before Defending

*Dia. 1.* (next page) Black needs to defend his formation by adding a stone to it at 3. To induce this move, he forces White by peeping at 1. If White does not connect at 2, Black can push through there and will not have to play 3, while if White does connect at 2, the added strength that gives him is cancelled by Black 3. Black 1 will be useful in the center, particularly if Black gets to play *a* (White *b*, Black *c*), which is what he is aiming at next.

*Dia. 2.* If Black plays 1 first, then tries to force White at 3, White will resist with 4, or perhaps even ignore Black 3 completely. In this diagram Black 1 goes to waste. It should be on the point below 3.



*Dia. 1*

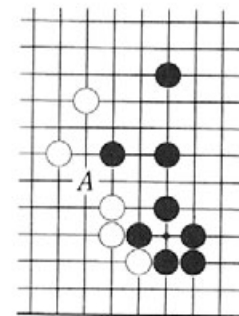


*Dia. 2*

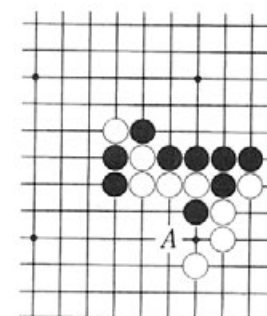
*2 elsewhere*

'Force before defending' is a basic principle of go, with applications arising in every game. Numerous examples occurred in the last chapter without being identified as such.

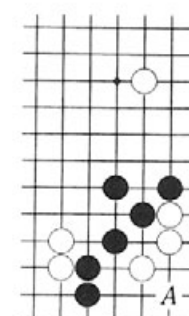
*Dias. 3 - 5.* In each case White wants to defend at the point marked A, and in each he has a forcing move that he should make first. See if you can find these three forcing moves.



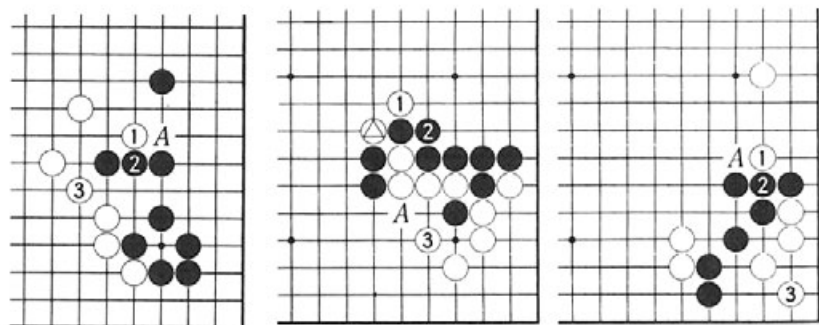
*Dia. 3*



*Dia. 4*



*Dia. 5*



*Dia. 6*

*Dia. 7*

*Dia. 8*

*Dia. 6.* White peeps at 1, waits for Black to connect at 2, then defends at 3. If he played 1 after 3, Black would answer at A, not 2.

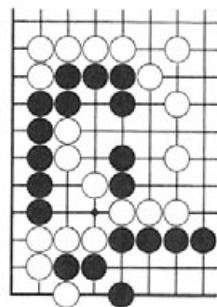
*Dia. 7.* White 1 gives Black an empty triangle and assists  $\triangle$ . If White simply played 3, Black would reply at 1. The exchange that starts with Black 2 at A, White 2 is bad for Black.

*Dia. 8.* If White played 1 after 3, Black would quite possibly reply at A. White 3 would then become superfluous.

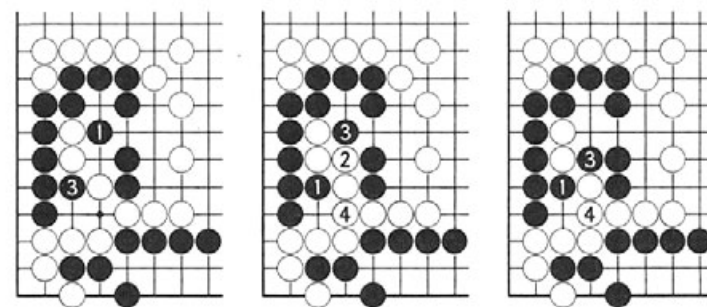
### Tactical Situations

*Dia. 1.* Inducing moves furnish clues to many tactical situations. Here Black has one eye on the left edge – five stones in a row on the second line equal one eye – but he needs to make a second.

*Dia. 2.* (next page) He can get it by playing 1, and as a bonus, Black 3 later on captures two white stones, but this is a bit wasteful. Both 1 and 3 are gote.



*Dia. 1*



*Dia. 2*

*Dia. 3*

*Dia. 4*

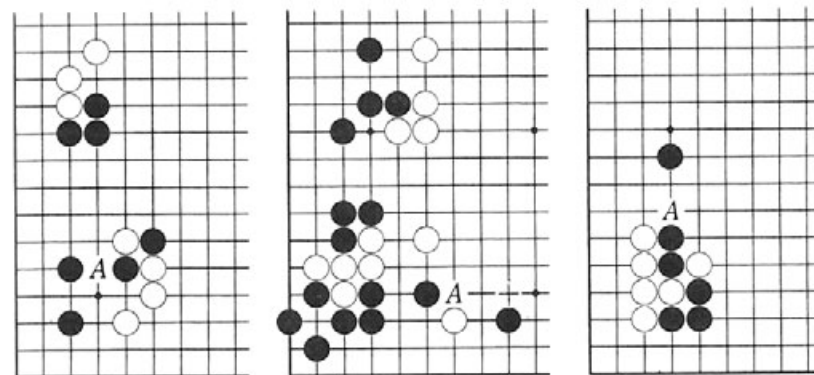
*2 elsewhere*

*2 elsewhere*

*Dia. 3.* Black should start with 1. If White replies at 2, Black 3 becomes an atari and Black lives in sente. Black 1 primes the pump; it induces White 2, which then makes Black 3 work to its fullest.

*Dia. 4.* Black cannot really expect to live in sente because White will ignore 1. Then, however, Black need not accept gote in capturing the two white stones, so this is better than Dia. 2.

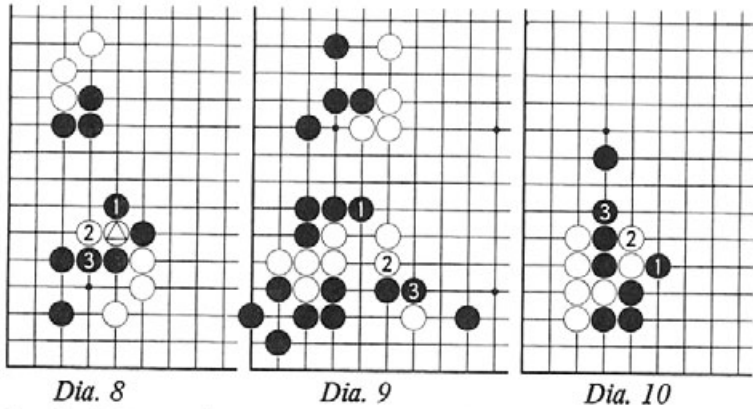
*Dias. 5 – 7.* In each case Black wants to play A. How should he induce these moves?



*Dia. 5*

*Dia. 6*

*Dia. 7*



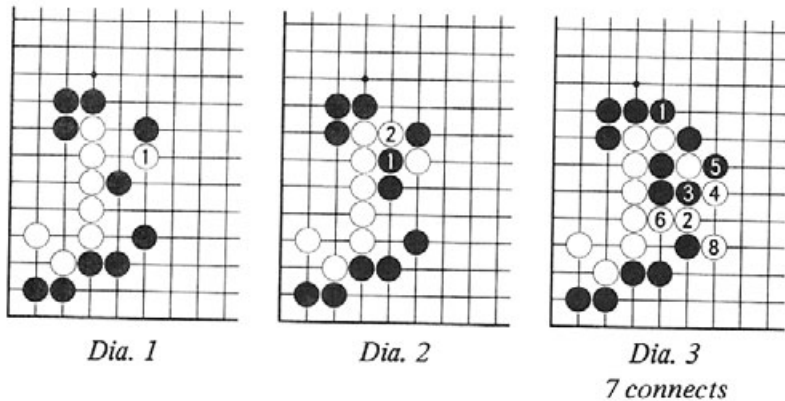
*Dia. 8.* This combination works so well that White 2 and  $\triangle$  are actually captured. If Black played only 3, White would extend to 1 and get away.

*Dia. 9.* If Black played only 3, White would link up with 1 and be safe. As it is, his group remains under attack.

*Dia. 10.* Once again, if Black played only 3, White would reply at 1.

### Resistance

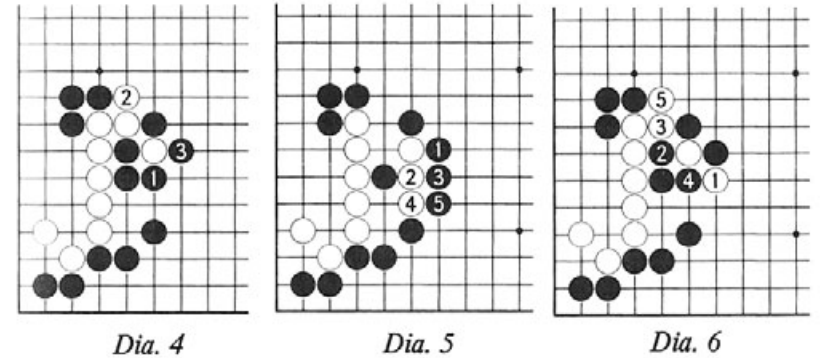
*Dia. 1.* Inducing moves, like forcing moves, must at times be resisted lest they turn into traps. One inducing move for which this is often true is the cut across the knight's move, of which White 1 is an example.



*Dia. 2.* It seems natural to intercept behind White with 1, but that is what White is hoping for. Black 1 induces White 2.

*Dia. 3.* If Black holds White in at 1, White breaks out on the other side with 2 through 8, getting a beautiful squeeze.

*Dia. 4.* So Black plays 1 here, letting White out at 2. Next he has to capture at 3, so White escapes in sente, like a football player faking his way past a would-be tackler and leaving him blinking in disbelief. Black has been induced.

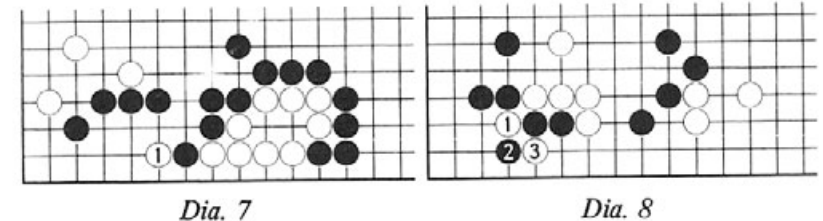


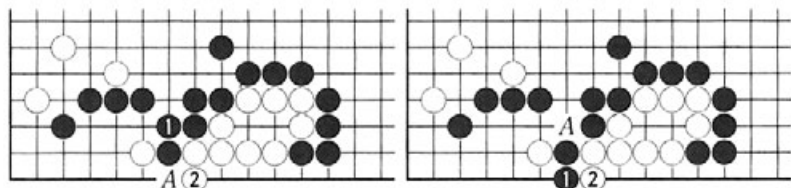
*Dia. 5.* To avoid inducement, Black should play the outer hane at 1. If White follows with 2 and 4, Black walls him in with 3 and 5. White now has a life-and-death problem to solve, and even if he solves it and lives, Black's outer wall is an excellent result.

*Dia. 6.* White can perhaps fight his way out of confinement with the double hane at 1, but White 1 gets stranded and White emerges in gote. Compare this with Dia. 4.

*Dia. 7.* White 1 is a standard inducing move. Black's response?

*Dia. 8.* What is White trying for with the crosscut at 1 and 3? Where should Black play next?



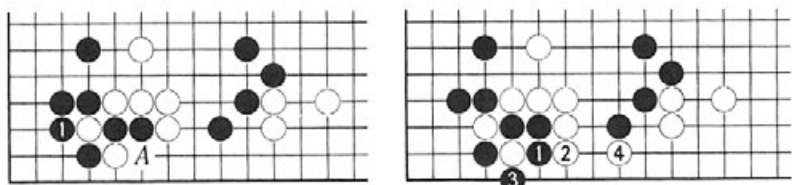


*Dia. 9*

*Dia. 10*

*Dia. 9.* Black 1 is correct. White has to live in gote with 2. If he played 2 at A, Black 2 would kill him.

*Dia. 10.* If Black descends at 1, White 2 lives while threatening A. For Black this is somewhat embarrassing.



*Dia. 11*

*Dia. 12*

*Dia. 11.* Black 1 is correct, even though it means giving White the endgame move at A. White's groups remain separated.

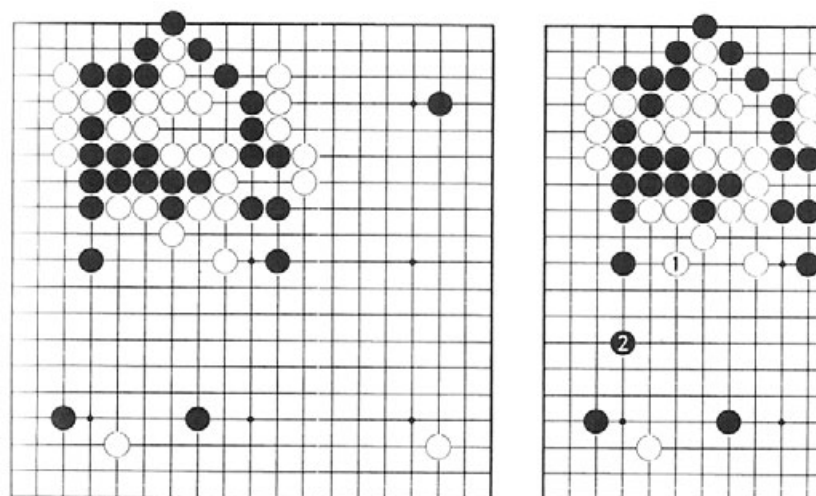
*Dia. 12.* If Black plays 1 here, he falls into the trap. White 2 becomes sente, after which White can cross under at 4, linking his two groups safely together.

### Inducing an Attack

*Dia. 1.* (next page) We would like to conclude with one higher-level example of inducing technique, taken from professional play. The position was as shown. T. Yamabe, 9-dan, was playing white, and it was his move. He is looking for a way to attack the black group on the left side.

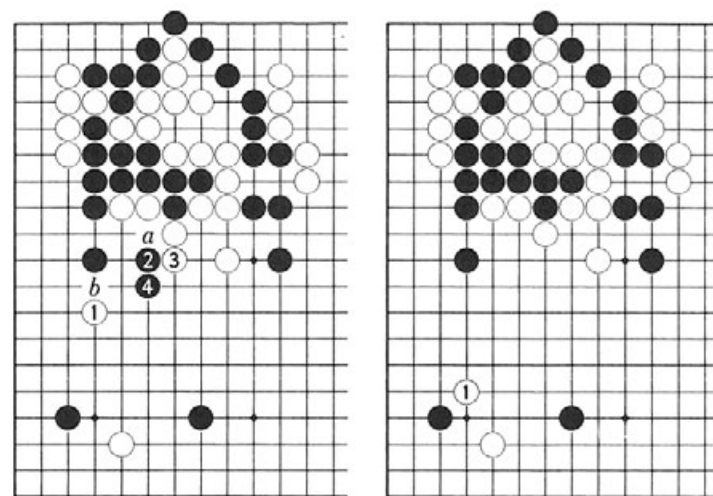
*Dia. 2.* It will not do, of course, to start with White 1. Black will link up with 2, which also helps his bottom left corner.

*Dia. 3.* The direct attack would be White 1 here, but after Black 2 and 4, White 1 is weaker than the black group above it and White has no clear continuation. White *a*, Black *b*, for example, would weaken White 1 still further. (Note that Black 4 at *a*, White 4 would leave Black surrounded with only one definite eye.)



*Dia. 1*

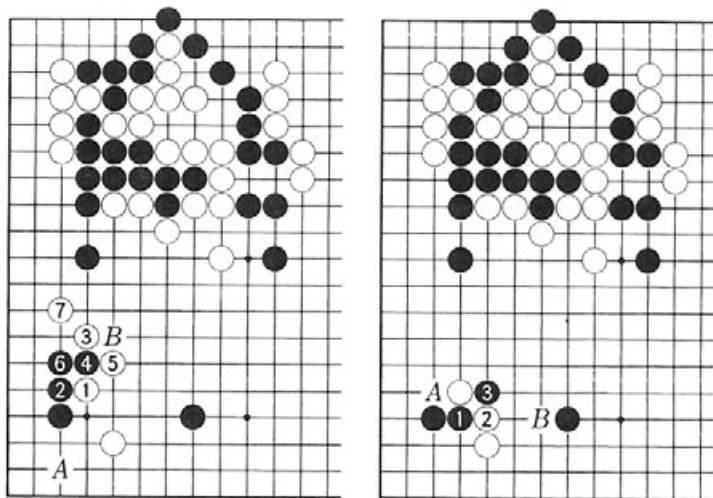
*Dia. 2*



*Dia. 3*

*Dia. 4*

*Dia. 4.* Since direct attacking does not succeed, White has to work his way up to the attack more slowly. The move he chose to begin with was White 1. If you like, you can view this as a kind of leaning attack.



*Dia. 5*

*Dia. 6*

*Dia. 5.* If Black answers 1 at 2, White comes glancing off him with 3, 5, and 7. Now he has a double attack going against the black group above and the one in the corner, where he threatens A. Even considering only the top group, he is doing better than before because he has brought three stones to bear against it instead of just one. White 1, 3, and 5, incidentally, are joseki moves, but White 7 departs from the joseki, which has White connecting at B. White B would allow Black 7.

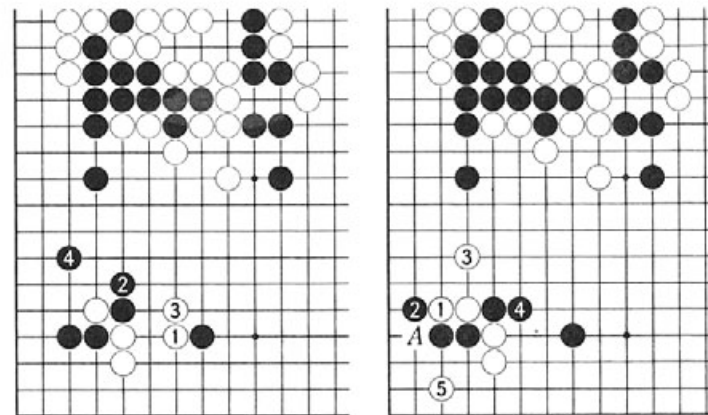
*Dia. 6.* Black could foresee White 7 in the last diagram, so he avoided it by playing 1 and 3 here. Bearing in mind White's overall objective, which move should he choose next: A or B?

*Dia. 7.* (next page) The joseki move is White 1, but here that would be criminally wrong. Black would gain perfect safety.

*Dia. 8.* White blocked at 1. Black had to hane at 2 (else White A), but that induced White 3. Once again White had a double attack going against Black's group above and the corner, which White 5 threatened to kill.

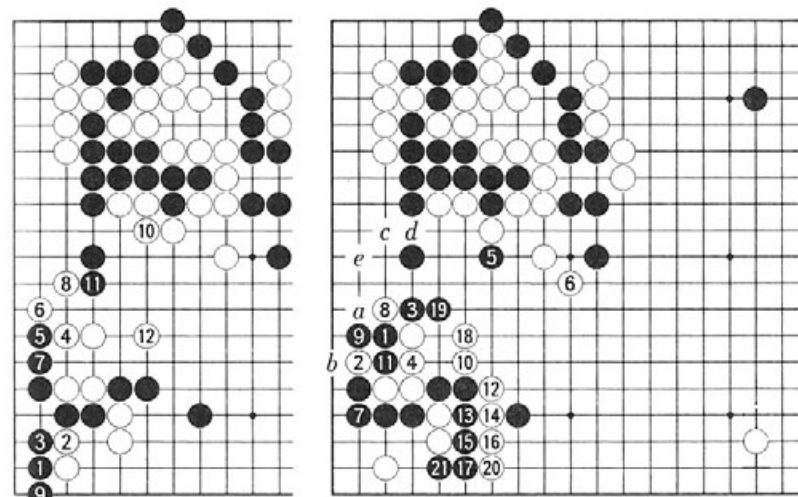
*Dia. 9.* To live in the corner, Black would have to play 1 to 9, provoking White 4, 6, and 8. This would spell disaster on the outside – White 10 and 12 for example.

*Dia. 10.* It would be nice to report that White actually captured



*Dia. 7*

*Dia. 8*



*Dia. 9*

*Dia. 10*

one of the groups, but professional games rarely have such storybook endings. Black (A. Ishida) countered with 1, 3, and 5, saved both his groups, and took the corner. A failure for White? No, because with 8–20 he built a magnificent outside wall, ended in sente, and left himself the potential of a–b–c–d–e. Despite Black's skillful counter-moves, White's attack had succeeded.

*Chapter Seven*  
**REDUCING AND INVADING LARGE FRAMEWORKS**

The middle game is, among other things, the part of the game in which the fates of large frameworks are decided. By 'large frameworks' we mean large areas of the board that are partially surrounded or occupied by one side, but not yet completely secured: that can still be invaded or reduced. Much of the middle-game fighting tends to arise from incursions into such areas, and attack, defense, forcing moves, inducing moves, and the balances of territory and power all come into play.

There are two approaches one can take toward a large enemy framework. The first is to reduce it from the outside, by indenting it where its boundaries are still open. The second is to invade it from within and try to live or escape. The reduction approach is safer, but milder. The invasion approach is riskier, but if successful, it usually destroys more of the framework. We shall examine both approaches.

How does one choose between the two? Partly on the basis of the balance of territory: if one is behind in territory, a drastic invasion may be necessary to restore equilibrium; if one is ahead in territory, a modest reduction of the framework may be enough.

One chooses on the basis of the balance of power as well; invasions work best when one has the power to back them up. These points have already been made in Chapter One.

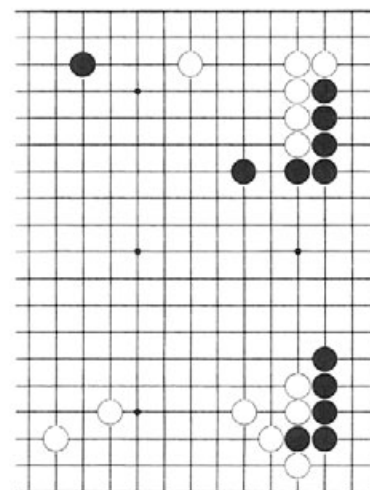
Tactically, there are several specific invading and reducing moves to know – the shoulder and capping moves, for example – and they will be found in the pages ahead. Strategically, there are three eternal, fundamental principles:

1. Consider relations with adjacent areas.
2. Strike at enemy weaknesses.
3. Play flexibly.

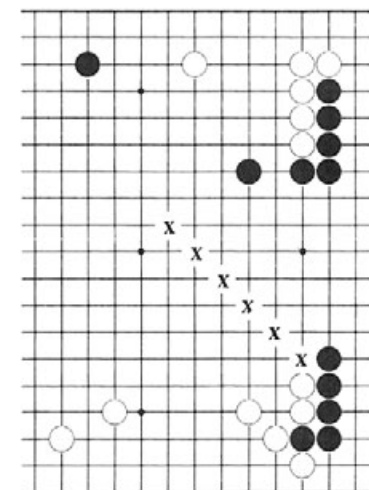
This chapter is organized around these three principles, taking them in turn, with a time-out during the first to go over shoulder and capping tactics.

**Junction Points**

*Dia. 1.* White to play against the black framework on the right side. Should he invade it, or just reduce it? Precisely what point should he aim for?



*Dia. 1*

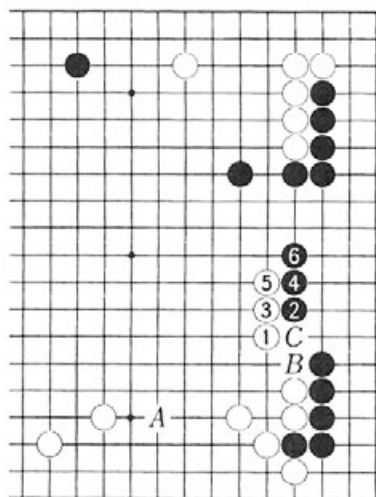


*Dia. 2*

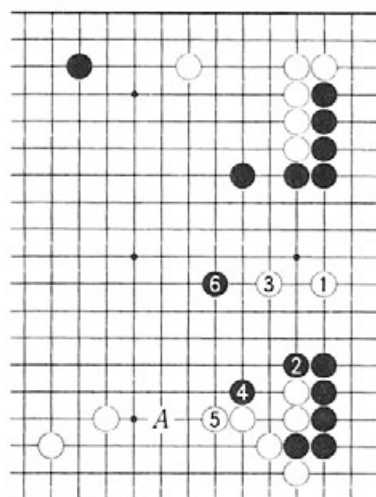
If one looks only at the black framework, the answers to these questions are not immediately clear. Either an invasion or a reduction might be justified. Looking at the lower side, however, we see that the black framework adjoins a white framework which is no less large and open. The relation between these two adjoining frameworks dictates White's move.

*Dia. 2.* Draw a hypothetical boundary with x's midway between the two frameworks. If both frameworks become territory along this junction line, it will mean an even result. If White can seize this line and push Black above it, he will have the advantage. White should therefore play right on the junction line. Which of these junction points would the reader choose?





*Dia. 3*



*Dia. 4*

*Dia. 3.* White 1 is best. If Black replies at 2, White pushes straight ahead with 3 and 5. Compare this result with the hypothetical even result in *Dia. 2* and see how much White has gained.

It might be argued that Black's framework, although reduced, is now secure territory, while White's, although enlarged, is still open to invasion. That is true, but White has kept sente, so if he wants, he can use his next move to defend his framework. Besides, just look at the difference in scale between his framework and Black's.

If Black does not reply at 2 but invades with 2 at A, White 1 becomes a good dual-purpose move, both attacking Black A and reducing Black's framework.

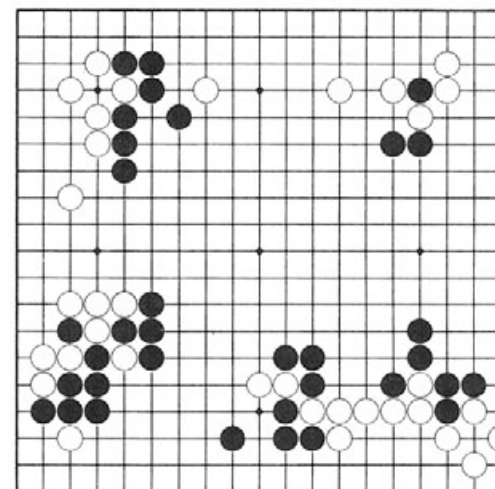
White B instead of 1 would be the second-best move. After Black C and White 1, Black could double-hane at 3 and climb a line higher than before.

*Dia. 4.* It should be as plain as day that *Dia. 3* is correct, but let's suppose White is one of those unbalanced players with a complex about enemy territory and that he invades at 1. Is there anything wrong with this? Indeed there is. Black makes leaning attacks at 2 and 4, caps White with 6, and White is immediately in trouble. He should not actually die, but Black will gain power by attacking him

and this will have many consequences. One consequence might be a counter-invasion by Black at A, which will do more damage to the bottom than White 1 and 3 do to the right.

Another thing to note is that Black 2 and 4 cross the junction line of *Dia. 2* in the same way that White 1, 3, and 5 cross it in *Dia. 3*. This is exactly what White does not want.

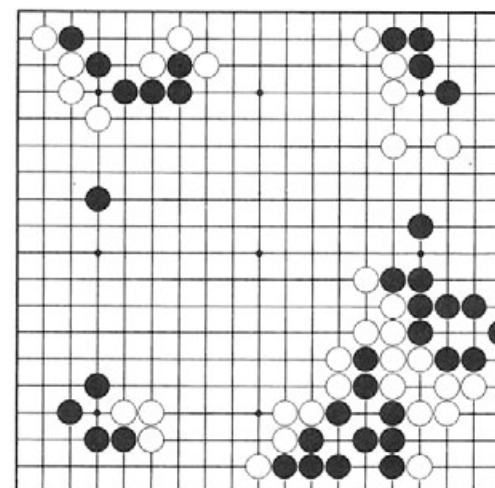
*Dia. 5.* White to play. Can the reader find two large, adjacent, open frameworks and identify the junction line between them? Where would he play?



*Dia. 5*

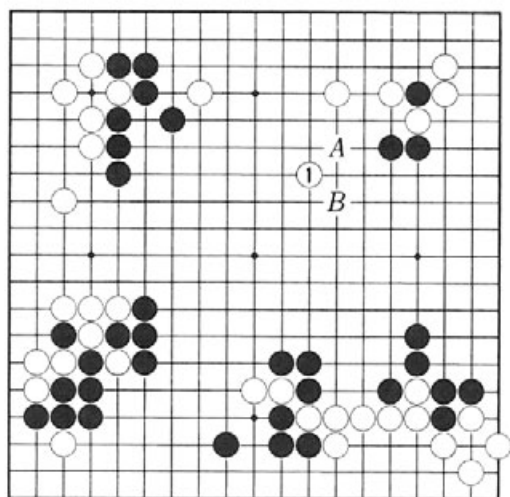
Sharp-eyed readers may actually find two junction lines. To help them choose between them, a word of advice: don't play near thickness.

*Dia. 6.* Again White to play: same question as above. This time White may be safe in slightly overstepping the junction line.



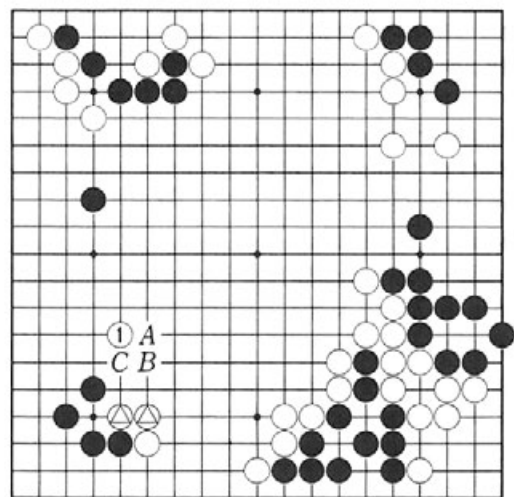
*Dia. 6*

*Dia. 7.* White 1 is the junction point, reducing Black's right side and center while enlarging White's upper side. A second choice would be White A: the important junction line runs through these two points. White 1 is somewhat the better move, because White A can be stopped by Black B, but when this position arose in a game between Rin Kaiho, 9-dan and the Japanese author, Rin played A.



*Dia. 7*

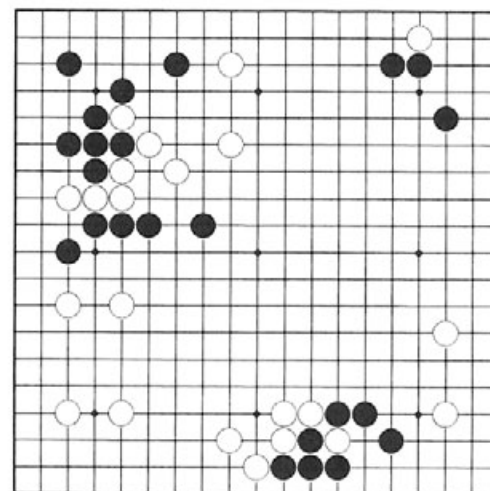
*Dia. 8.* White 1 occupies the junction between Black's left-side framework and White's center-and-lower-side framework. It somewhat oversteps the junction line, which runs through B, but that is justified by the strength of the triangled stones. White A, B, and C would also be good points, although less severe.



*Dia. 8*

### Relations with Attack and Defense

*Dia. 1.* In this position there is a rather large white framework in the lower left. What type of move should Black use against it: a deep invasion or a shallow reduction? If a reducing move, at what point?

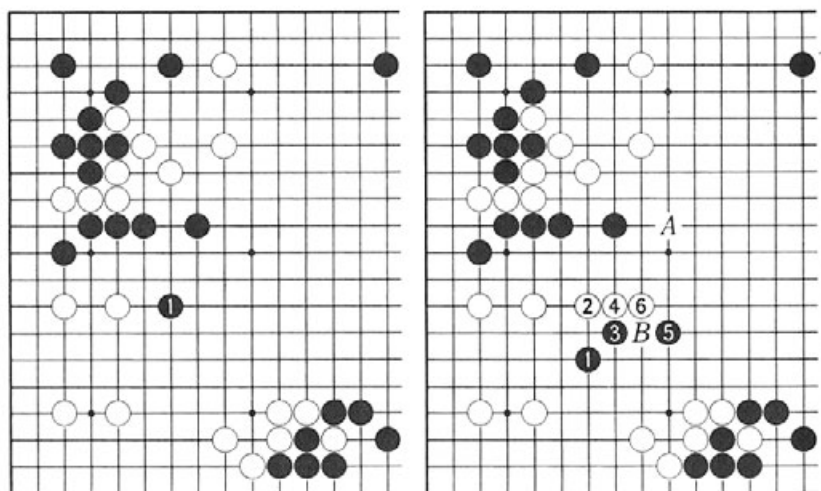


*Dia. 1*

Looking at the adjacent areas, we find no black framework, hence no junction point to occupy. On the left side, however, we find an eyeless line of black stones in urgent need of strengthening. An ideal move would be one that simultaneously strengthened it and reduced the white framework.

Some related factors to consider in thinking about this problem are:

1. Since the black and white groups in the lower right corner are roughly equal, all Black has to do in the lower left is to hold White to an amount he can match with his top left and right corners.
  2. If he invades too deeply, White will subject his invading stone and left-side group to a double attack.
  3. If he strengthens his left-side group, he can expect additional profit from attacking the white group above it.
- Black's move?



*Dia. 2*

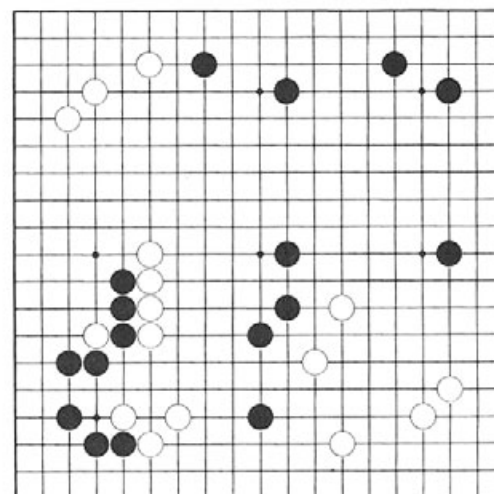
*Dia. 3*

*Dia. 2.* Black 1 is the sought-after move, and the reader already knows the reasons for it. Like the junction points on the preceding pages, it marks the intersection of two major issues in the game: the friendly weak group and the enemy framework.

*Dia. 3.* This Black 1 may not seem like a very daring invasion, but even it goes too far. White leaps onto the key point at 2 and executes a splitting attack. White 6 makes miai of A, capping the left-side group, and B, to push through and cut. By invading too deeply Black has gotten himself into deep trouble.

Someone once observed that go was a topological game because it was mainly about continuity and connectivity. Certainly in this position, where Black is suffering from a lack of power, his main concern is to stay connected.

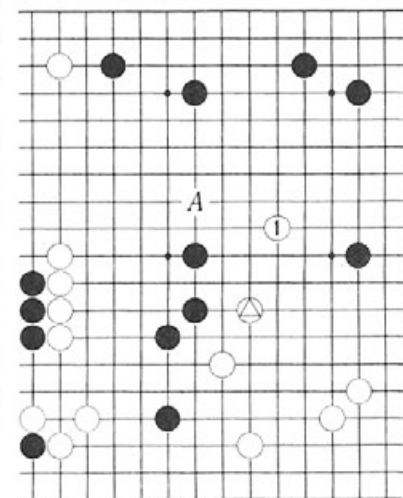
Complementing the type of move that defends a friendly weak group while reducing a framework we have the type that attacks an enemy group while reducing a framework. Leaning attacks often do this, Black 2 and 4 in *Dia. 4* on page 144 for example. For a non-leaning move—



*Dia. 4*

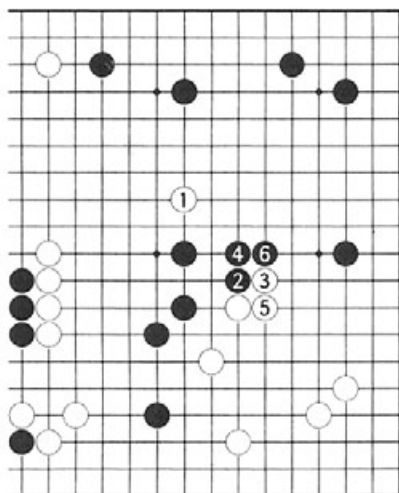
*Dia. 4.* White to play and reduce the black framework in the upper right. Need we point out that the key to this problem is the weak black group extending up from the middle of the lower side?

*Dia. 5.* White 1, a large knight's attack, is the right move. It reduces Black's framework, it threatens a capping attack at A (pushing Black against the thick white wall to the left), and it is safe, since it is more or less connected to the triangled stone. Like Black in *Dias. 2* and *3*, White wants to stay connected. After reducing the framework from the center like this, he can think about invading the right or upper side.



*Dia. 5*

*Dia. 6.* One might also think of the capping play at 1, but this is wrong for a number of reasons. To begin with, it drives Black away from the white wall instead of toward it. Black links to safety with 2, 4, and 6. Also, White 1 is disconnected from White's other positions; it looks rather forlorn after Black 4 and 6. Also, it is biased toward the well-defended upper side and away from the thinly-defended right side. It is factors like these that must be considered when reducing frameworks.



*Dia. 6*

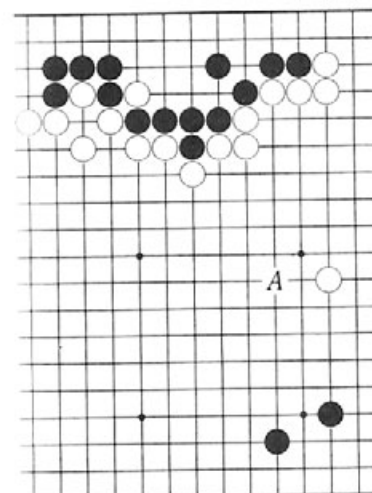
### The Shoulder Move

*Dia. 1.* (next page) Black to play against the white framework in the upper right. This time there are no adjacent frameworks or nearby weak groups to be attacked or defended, so Black must set to work from scratch, so to speak. In looking for the right move, it may help to know that the point White would like to take in this position is A.

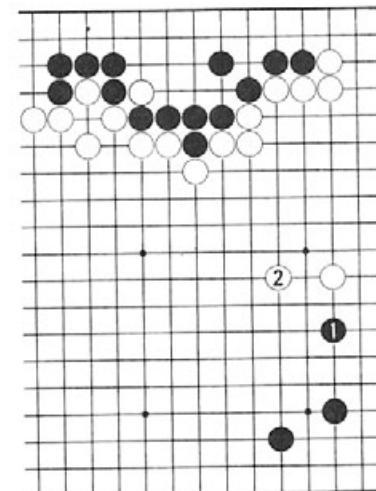
*Dia. 2.* Black 1, accordingly, would not be very good, for it would only induce the move White wanted to make to begin with.

*Dia. 3.* Should Black invade? Aside from the question of whether or not the balance of territory calls for an invasion, there is the question of whether or not he can live. The answer is doubtful. To invade and be killed would mean a decisive defeat, while to invade and live would not necessarily be a decisive success. Black would live in gote if at all, White would build another strong outer wall in the process of attacking him, and with sente he could recreate his framework on the outside.

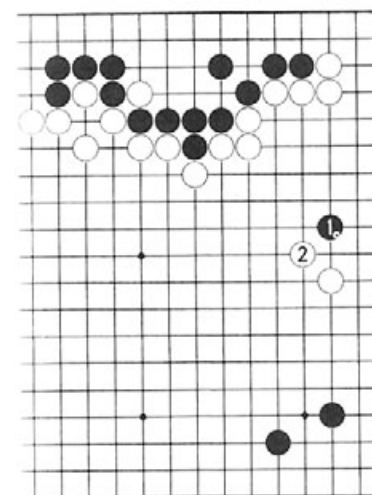
*Dia. 4.* Instead of risking an invasion, Black should reduce White's framework from above. The strongest reducing move is the shoulder move at 1, and in this position it works very well. What result



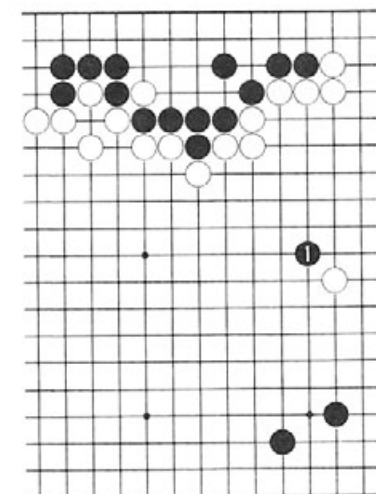
*Dia. 1*



*Dia. 2*

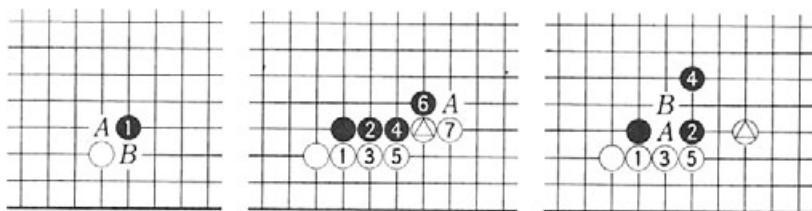


*Dia. 3*



*Dia. 4*

will it give? There are some standard patterns to know, and we shall first make a quick survey of them, then return to see which fits this particular case.



Dia. 5

Dia. 6

Dia. 7

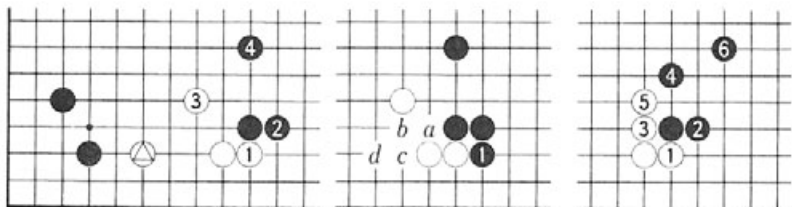
Dia. 5. White's reply to a shoulder move is usually to push at A or B. The horizontal push at B is employed mainly in two situations.

Dia. 6. The first is when White has a stone like the triangled one to push Black toward, so that he can get up off the third line with 7. (White 7 at A is also sometimes possible.)

Dia. 7. When the triangled stone is further away White 1 is still good, but Black now has the option of skipping a space with 2. If White plays 3, Black can skip toward the center with 4. After White 5 Black can turn away, and his stones have a lighter shape than in Dia. 6. If White wedges in with 3 at A, then Black B, White 3, Black 4, White 5 would be standard. If White ignores Black 2, Black 3 becomes a good move.

Dia. 8. The second situation in which White pushes horizontally is when he has a two-space extension (triangled) in the opposite direction. Black 2 to 4 are the standard continuation, and this time White keeps sente. Without the triangled stone, however, this sequence would have some disadvantages for him.

Dia. 9. One disadvantage would be that Black 1 would threaten to push through and cut (Black a, White b, Black c). Another disadvantage would be that Black could force White at d – this without having to play 1.

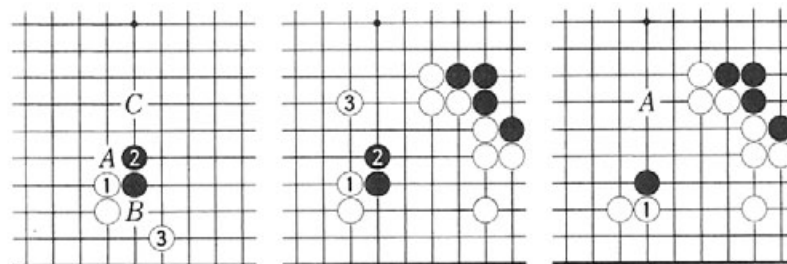


Dia. 8

Dia. 9

Dia. 10

Dia. 10. White can avoid these weaknesses by playing tightly with 3 and 5. This sequence is sometimes useful, but more often –



Dia. 11

Dia. 12

Dia. 13

Dia. 11. White pushes vertically to begin with. After Black 2, White can keep pushing at A or he can slide to 3, which is usually better than turning at B. Black's continuation after 3 might be to turn at A, or to jump toward the center with C.

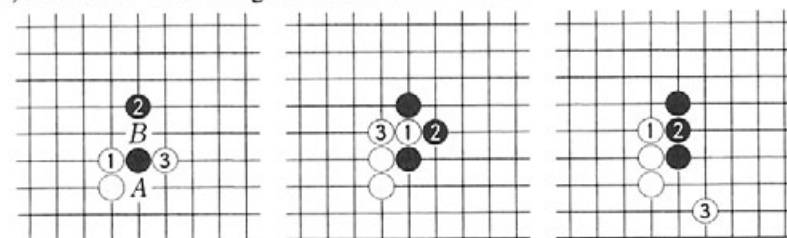
Dia. 12. White 1 can also be an attacking move. Here if Black plays 2, White 3 captures him.

Dia. 13. To play White 1 in this position would be a bit cowardly. Black could escape by jumping to A, or he could simply abandon his shoulder stone for the time being, treating it as a forcing move.

Dia. 14. When Black needs to make a lighter escape into the center (as in Dia. 12, for instance), he skips to 2. White 3 is one possible reply. Next if Black A, White B.

Dia. 15. Wedging in at 1 is another, more aggressive reply.

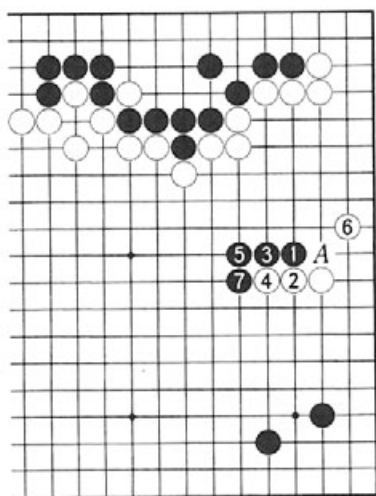
Dia. 16. Or White can simply extend at 1 and let Black connect at 2, then slide to 3 and get a result like Dia. 11.



Dia. 14

Dia. 15

Dia. 16



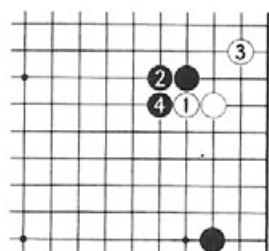
*Dia. 17*

*Dia. 17.* To return to our original position, White meets Black 1 by pushing toward the center with 2 and 4, then sliding to 6. In view of his center strength, White 2 at A would be too tame. Black defends by turning at 7. The reason White pushes twice before sliding is that —

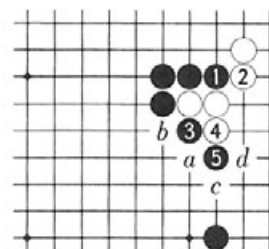
*Dia. 18.* If he pushes only once, Black can turn at the head of two stones with 4. This subjects White to a certain shortness of liberties.

*Dia. 19.* Next, for example, Black can play 1 to 5. Ordinarily Black could not get away with moves like these because White would capture 5 with *a*, Black *b*, White *c*, but here that combination does not work, since Black *d* threatens to capture three stones.

Going back to *Dia. 17*, note how sharply Black's shoulder move reduces White's framework. The reduction in the upper right is almost as large as by a successful invasion, and Black has gotten out into the center as well. Note also that the wall White builds with 2 and 4 is ineffective against Black's corner enclosure below; this is another factor making Black 1 good.



*Dia. 18*

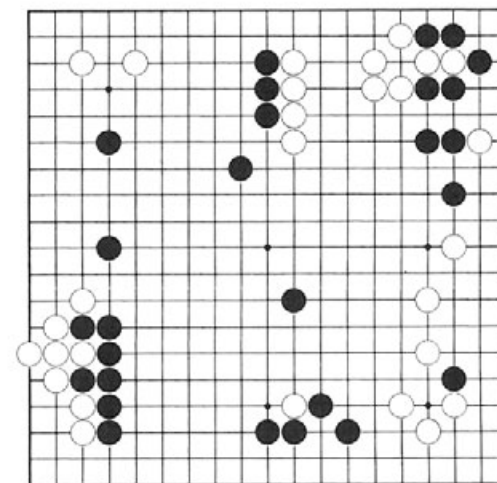


*Dia. 19*

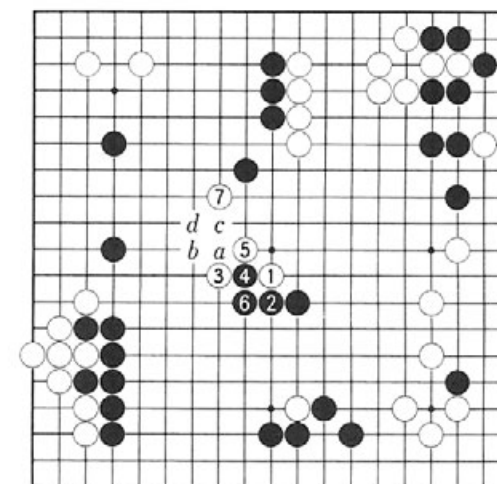
The shoulder move is not limited to use against a stone on the third line. It can be used in the same way against a stone on the fourth line, for example, although in that case the enemy keeps more territory along the side. It can also be used in the center.

*Dia. 20.* How should White reduce Black's large framework? This problem is confusing until one thinks of the shoulder move.

*Dia. 21.* White 1 is the shoulder move, and the continuation through White 7, resembling *Dia. 15*, is the sequence played when this position arose in a Honinbo title game between Sakata (white) and Takagawa. Next if Black cuts unwisely at *a*, White drives him around with *b*, Black *c*, White *d* etc., willingly discarding 1 and 5.



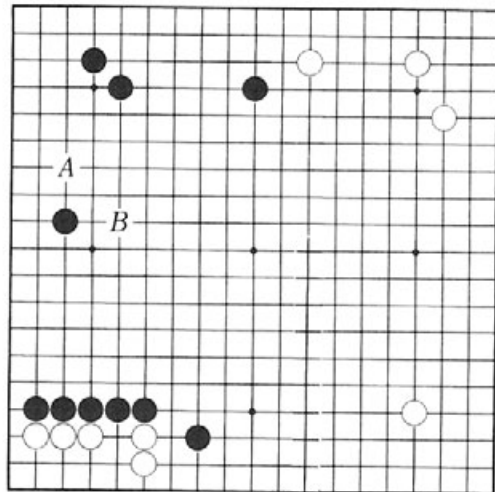
*Dia. 20*



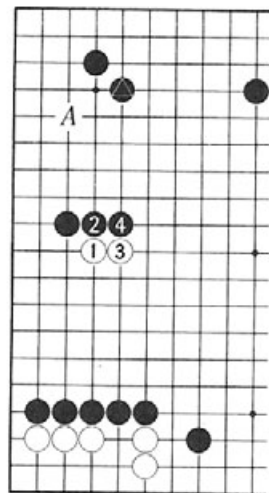
*Dia. 21*

### The Capping Play

*Dia. 1.* Here we have another large framework to invade or reduce from scratch. An invasion? There is not much point in invading the upper side because it is open at the edge. An invasion of the upper left area would serve more purpose, but picture White A, Black B. The danger is all too clear that as Black attacks the invading group he will be able to construct a huge territory in the lower left area. Does that mean White should start by invading the lower left? No, because then Black could expand his upper area while attacking.

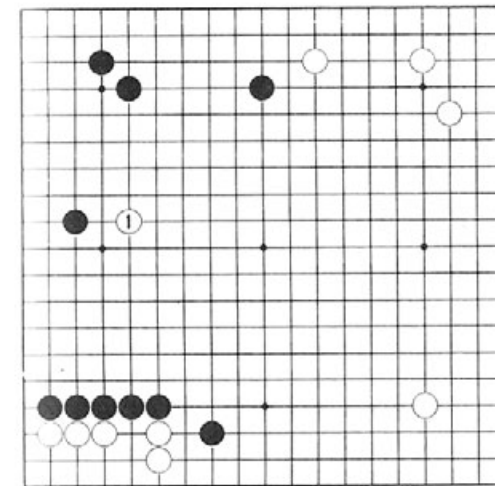


*Dia. 1*

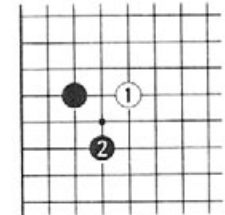


*Dia. 2*

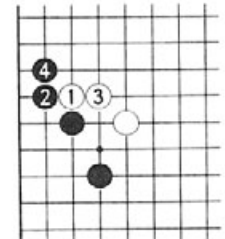
*Dia. 2.* Since an invasion is contraindicated, White tries a reducing play, but this time the shoulder move does not work well. If White hits the shoulder on one side, Black pushes toward the center and forms a very large territory on the other side. White 1 in this diagram might be worth considering if Black's triangled stone were at A, making the upper left area flatter, but not in the position as it stands. What we need is a move that avoids bias in either direction.



*Dia. 3*



*Dia. 4*



*Dia. 5*

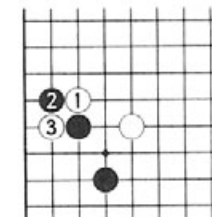
*Dia. 3.* That move is the capping play at 1. Being a standard move, it has some standard continuations, which we will look at before going on with this position.

*Dia. 4.* Perhaps the most common response to a capping play is a knight's move.

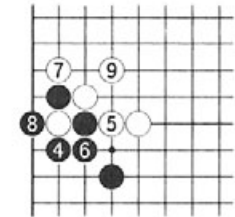
*Dia. 5.* White's strongest continuation from that is the attachment at 1. If Black hanes at 2, White can draw back at 3, pressing him down to the second line.

*Dia. 6.* Or White can crosscut with 3, a sacrifice tesuji.

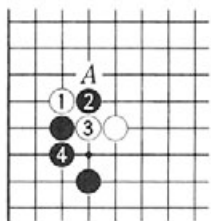
*Dia. 7.* Continuing from Dia. 6, while Black is busy capturing the sacrifice stone, White makes shape with three moves on the outside. There are several variations to this sequence - White 5 at 6, for example - which can also be played.



*Dia. 6*

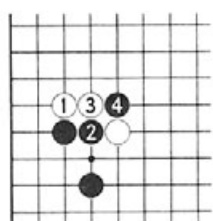


*Dia. 7*



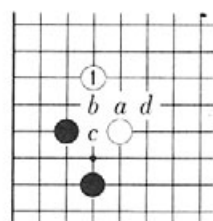
*Dia. 8*

*Dia. 8.* There are many times, however, when the attachment at 1 is unplayable. Suppose Black hanes on top with 2, then draws back with 4. If White cannot capture Black 2 in a ladder with A, he may have to surrender White 1.



*Dia. 9*

*Dia. 9.* Another risk is that Black will play this cutting combination. If White is unprepared to deal with either this or Dia. 8, he had better forget about the attachment at 1.



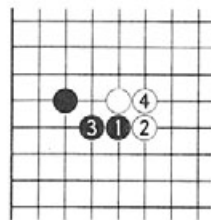
*Dia. 10*

*Dia. 10.* When the attachment does not work, White must resort to something lighter. The knight's move at 1 is a possibility, although it too depends on a ladder – Black *a*, White *b*, Black *c*, White *d*. If White cannot find any good continuation, he should just leave his capping stone as a forcing move and turn elsewhere.

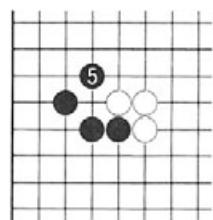
*Dia. 11.* Black has several alternatives to the knight's response. One that is used almost as frequently is the side attachment at 1. There are two situations in which this attachment is warranted.

*Dia. 12.* The first is when Black wants to defend territory on both sides, in which case he continues from the last diagram with the diagonal move at 5.

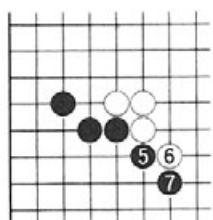
*Dia. 13.* The second is when he wants to surround a large territory on one side, in which case he continues from Dia. 11 by making the double hane at 5 and 7.



*Dia. 11*

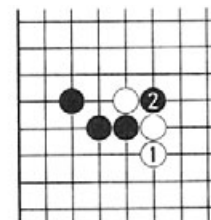


*Dia. 12*



*Dia. 13*

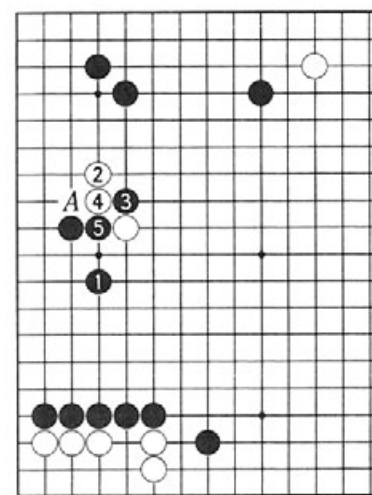
*Dia. 14.* White can thwart Black by extending at 1, but then Black cuts at 2. The possibility of this cut makes Black's original side attachment more aggressive than the knight's move, although at the same time it tends to strengthen White.



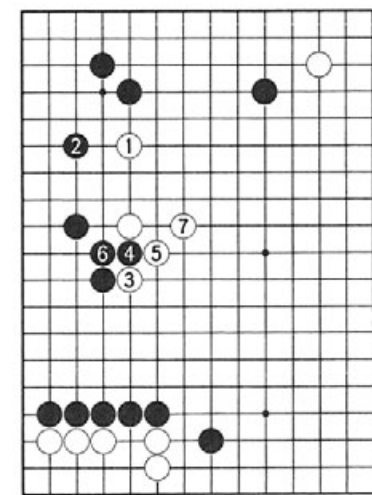
*Dia. 14*

*Dia. 15.* In the position we started the section from, there is no need for Black to strengthen White with a contact play, for even against the relatively soft knight's move at 1 White has no strong continuation. White A would be bad for the reasons shown in Dias. 8 and 9, and the knight's move at 2 gets cut by Black 3 and 5, the ladder being unfavourable. The last thing White wants is to have to defend two separated groups inside Black's framework.

*Dia. 16.* Accordingly White's proper continuation is something even lighter, like 1 to 7, which gives him a viable position in the middle of Black's framework. The amount of territory Black gets along the side is not unreasonable, considering the original size of his framework, and White is acquiring useful power in the center.



*Dia. 15*



*Dia. 16*



### Invasions

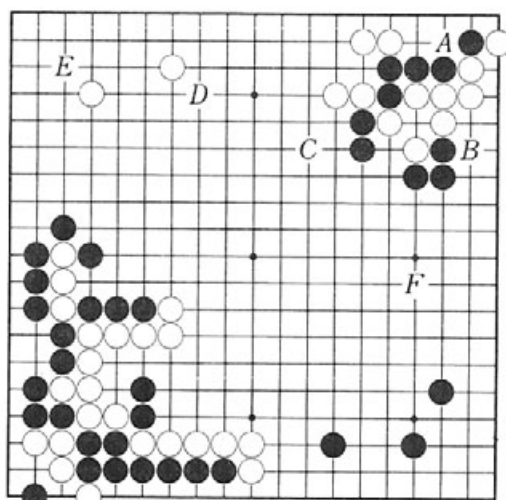
So far we have been praising reducing moves and condemning invasions. Let us now do the opposite.

*Dia. 1.* White to play. First of all, the black stones in the top right corner are dead: if Black A, White B wins the capturing race. The white stones in the bottom left corner are almost dead too. Actually they have a little indirect ko potential, but ignoring that, the game is a contest between White's upper-side framework and Black's right-side one.

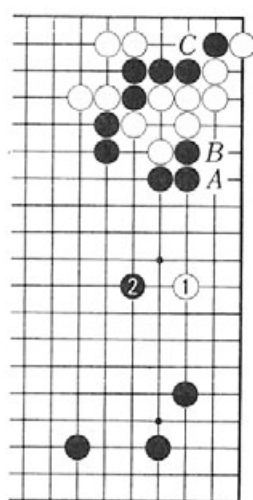
As far as just these two frameworks are concerned, the correct move is White C on the junction line between them. In this game, however, White C would be wrong for two reasons.

The first is that the growth of White's framework is already limited by Black's power in the middle of the left side. Despite White C, Black could jab in at D, E, or just about anywhere, secure in the rock-solid support behind him.

The second is White's power at bottom left. Staring down into Black's framework, it practically commands White to invade and fight – weren't those the words in Chapter One? If White plays C, Black will reply at F and White's chance to invade will be gone.



*Dia. 1*



*Dia. 2*

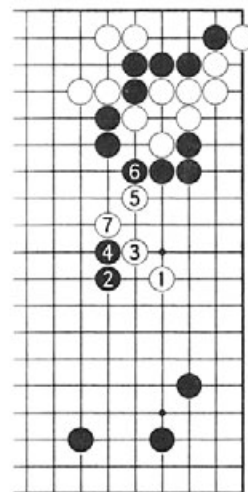
*Dia. 2.* Since an invasion is called for, White must choose the point. White 1, the midpoint on the third line? Black caps White with 2. This is a fairly strong attack, especially since Black can play A or B in sente, threatening C.

*Dia. 3.* Let's move White 1 up to the fourth line. That works much better. Now if Black caps at 2, White can get out with 3 to 7, his invading group starting to attack Black's wall above.

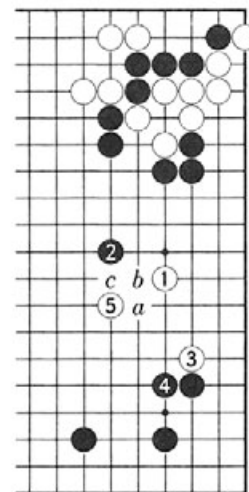
*Dia. 4.* Black cannot permit Dia. 4, so he pulls 2 back a line, and White tries the attachment at 3. If Black 4, White can safely play 5, White 3 serving to prevent Black a, White b, Black c. This position comes from one of the Japanese author's games, and White 1 to 5 were the moves actually made. Black chose 4 because –

*Dia. 5.* If he hanes at 1, he becomes induced – he helps White toward a living shape. The reader can explore the variations in which Black plays 3 at 4 on his own.

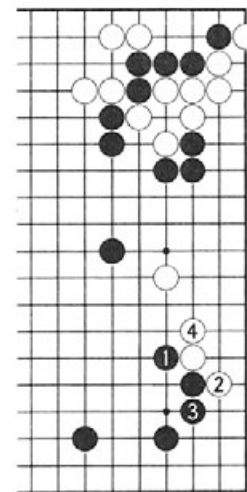
There are two general guides to choosing invasion points. One is to aim for what looks like about the middle of the enemy framework: that is what White does in Dia. 4. The other is to aim at specific weak points in the framework: the second principle given at the start of this chapter. Three cases in which the invader does



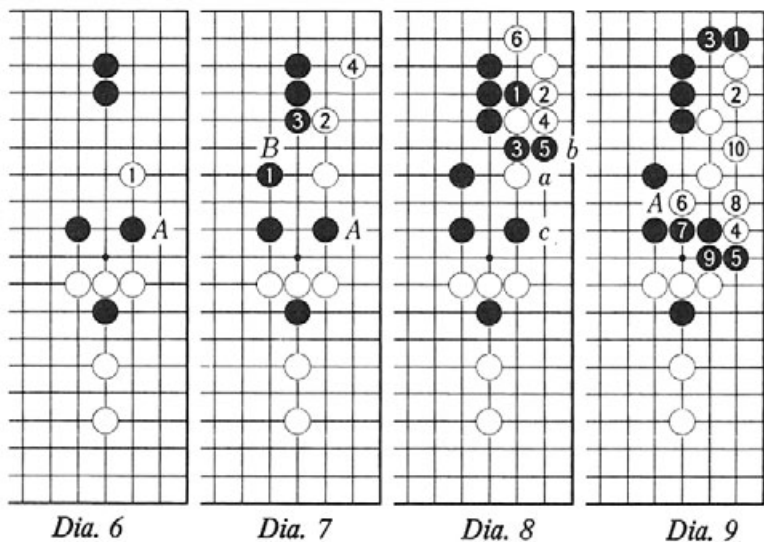
*Dia. 3*



*Dia. 4*



*Dia. 5*



that are shown next.

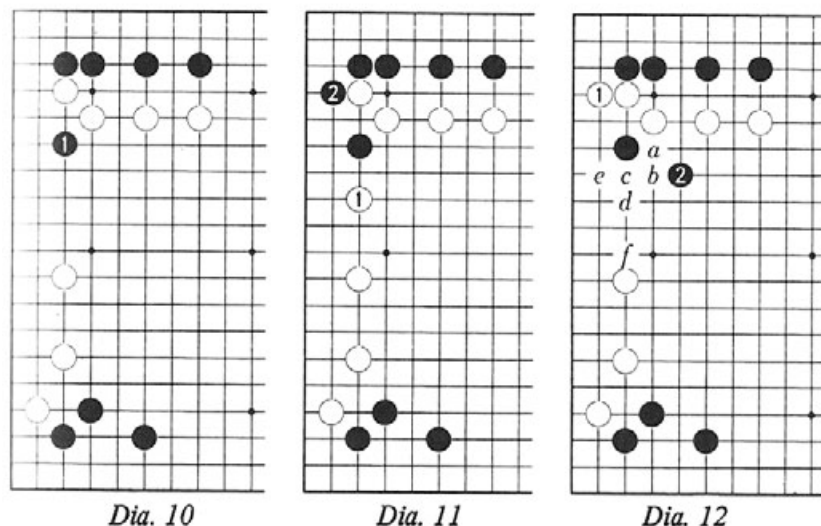
*Dia. 6.* Case I. In this position White should invade at 1, taking advantage of the fact that White 1 sandwiches two black stones against a strong white wall and aims toward A.

*Dia. 7.* Black naturally caps White at 1. White does not play A immediately, but holds this trump card in reserve and extends forward to 2, threatening B. If Black plays 3 to prevent B, White slides to 4. White 4 may look dangerous, but –

*Dia. 8.* If Black attacks with 1 to 5, White lives with 6. Since he also keeps the potential of White *a*, Black *b*, White *c*, his invasion is a big success.

*Dia. 9.* Black therefore plays 1 and 3, and now White finally strikes at 4, setting in motion a sequence studied on page 94. Since after 10 Black has to deal with the threat of White A, this is another success.

Is the reader saying that such success could never be his because he would never think of White 4 in Dia. 7? Well, the American author would not have thought of it either. There are, however, several more pedestrian moves that would still serve the purpose. As long as one invades at 1 in Dia. 6 and is dimly aware of 4 and 6 in Dia. 9, the invasion will not fail.

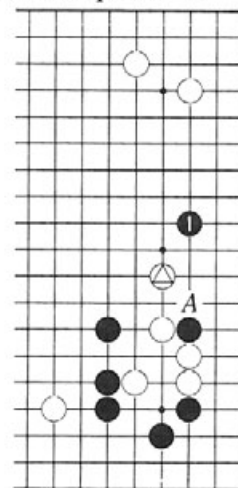


*Dia. 10.* Case II. Here Black has a good invasion at 1, the angle tesuji studied in Chapter Three. The reason it works well as an invasion is that –

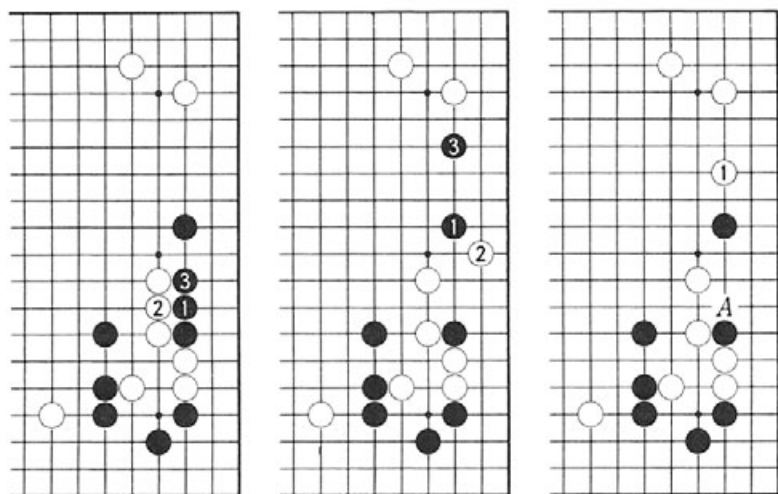
*Dia. 11.* If White attacks with 1, Black can link up with 2.

*Dia. 12.* White will normally descend at 1 to keep Black separated and insecure. (White 1 is also big with respect to the corner territory). Black has various continuations, one being Black 2. If White pushes through and cuts with White *a*, Black *b*, White *c*, which he should not do, Black gives up a stone with Black *d*, White *e*, Black *f*. Black *f* is a standard tesuji that gives Black splendid shape.

*Dia. 13.* Case III. Black 1, aiming at A, is a good invasion. This knight's approach is always a weakness of a stone (△) on the fourth line. If White ignores Black 1 –



*Dia. 13*



*Dia. 14*

*Dia. 15*

*Dia. 16*

*Dia. 14.* Black plays 1 and 3. The white group below now comes under attack.

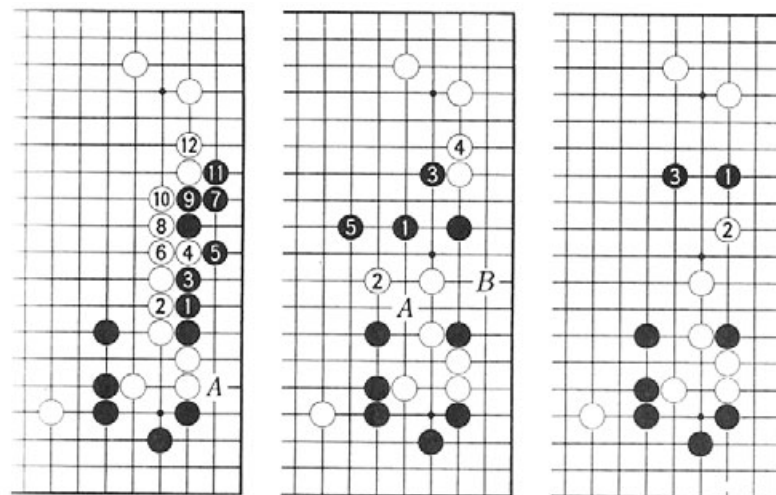
*Dia. 15.* If White defends his group with 2, Black gets an excellent result by extending to 3. Black 1 – White 2 becomes a nice forcing exchange.

*Dia. 16.* White's best reply to Black's invasion is to check from above with 1. This keeps Black from extending upward, and indirectly prevents Black A as well.

*Dia. 17.* (next page) If Black now plays 1 and 3, White can wall him in with 4 to 12. This is *not* a good result for Black. White is safely linked together, his wall radiates power, Black is confined, and White A would threaten both Black's side group and the bottom right corner. But of course Black need not play this way.

*Dia. 18.* He should seek the freedom of the center by jumping to 1, keeping White divided and weaker. After 5 Black is aiming at A and B and has a fair fight going. His invasion is a success.

*Dia. 19.* Invading here and letting White cover his weakness with 2 would earn Black less of a success. In contrast to *Dia. 18*, he would have a weak group pincered between two stable white groups, and would have to fight at a considerable disadvantage.



*Dia. 17*

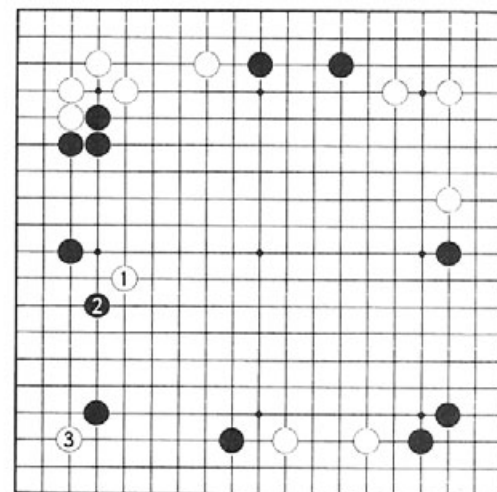
*Dia. 18*

*Dia. 19*

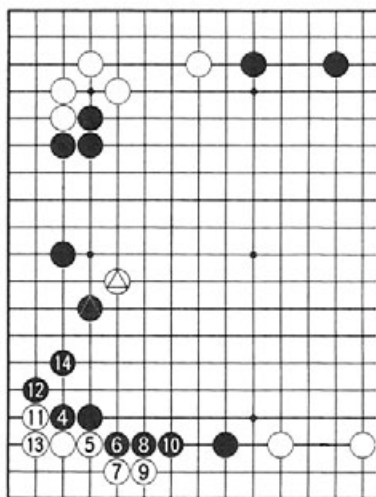
### Flexibility in Reducing and Invading

Reducing operations and invasions can often be helped along by a generous use of forcing moves, probes, and what might be called hit-and-run tactics. The idea is to take a flexible, opportunistic approach, and not tie yourself down to defending every stone you play inside the framework. For example –

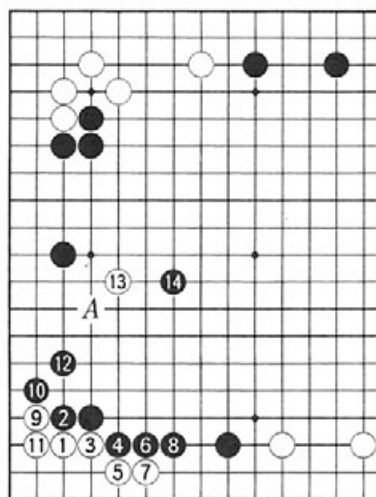
*Dia. 1.* Given this position, White might reduce from above with 1 and invade from below with 3, first taking a swipe at the outside, then dodging into the corner before Black has a chance to close it.



*Dia. 1*



*Dia. 2*

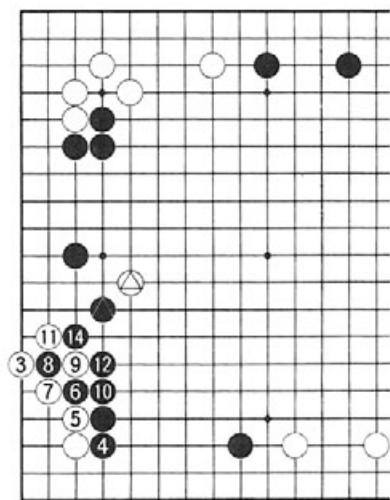


*Dia. 3*

*Dia. 2.* Continuing, Black would like to block at 4, because his framework is wider on that side, but if he does so, the two triangled stones become a horrible forcing exchange against him.

*Dia. 3.* If White invaded the corner first, then played 13, Black would not dream of answering at A. He would use his powerful wall by attacking with 14.

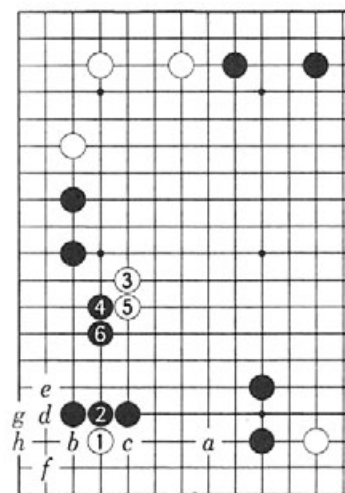
*Dia. 4.* Rather than let White get away with the forcing exchange in *Dia. 2*, Black will block on the narrow side of his framework with 4 and play the double-hane joseki at 6 and 8. In this way he can turn the triangled exchange to his advantage – it means that White has helped him connect. On the other hand, having to block on the narrow side is a major strategic setback, and White  $\triangle$  has done its job by inducing it.



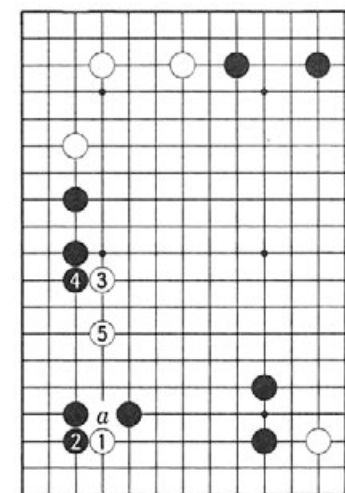
*Dia. 4*

In the preceding position White tapped the outside, then invaded the corner. In positions where the corner is less open, the opposite procedure can be effective.

*Dia. 5.* Here White starts by probing at the corner with 1. If Black connects at 2, White shifts to the outside with 3 and 5. Later he can go back and reactivate his corner stone by invading at *a*, or by playing White *b*, Black *c*, White *d* etc. up to White *h* and making the corner a ko. This ko potential is particularly annoying, and Black now wishes that he had played 2 at *b* or *c* to prevent it. Black 2 seems a little overconcentrated after 4 and 6.



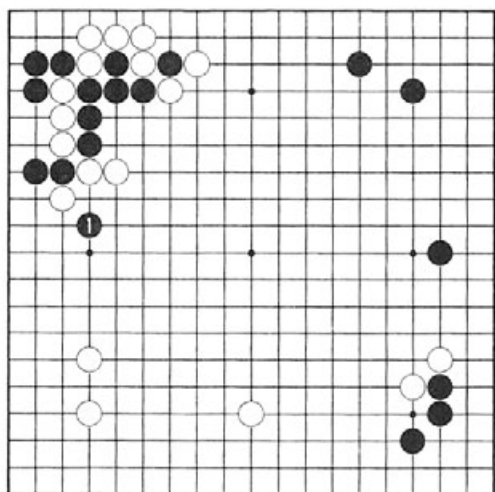
*Dia. 5*



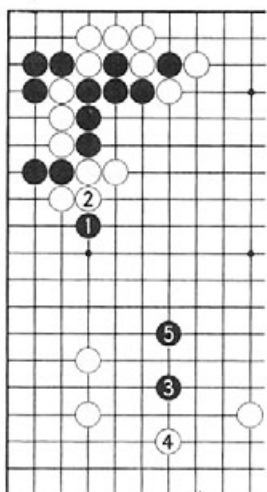
*Dia. 6*

*Dia. 6.* So Black answers 1 at 2, depriving White of the ko potential in the corner. As compensation, however, White can take a sharper approach to reducing the outside with 3 and 5. In *Dia. 5* these moves would have been a trifle deep, but now they are good because they aim at the weakness at *a*. After White 5, Black would like to shift Black 2 back to *a*.

Black is in something of a bind here. He cannot choose the best answer to White 1 because he does not know yet how White will play on the outside. That is of course the whole point of White's probing at 1 first.



*Dia. 7*



*Dia. 8*

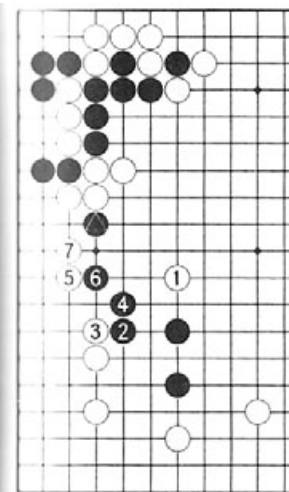
*Dia. 7.* This comes from a Honinbo title game between Rin (black) and Y. Ishida. White has a large framework in the lower left. Black sets to work on it by peeping at 1 to see how White will respond. Once again, he will determine his next move from White's response.

*Dia. 8.* White connected at 2. This made the outside the most important part of the framework, so Black shifted to reduce it with 3 and 5. Black 1 remained in a potentially useful position.

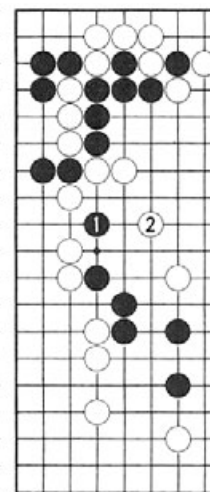
*Dia. 9.* Suppose that White pushes Black toward the left side with the capping attack at 1. (This actually happened in the game.) After 2 to 6, the triangled stone falls into place as a natural extension of Black's line. One extra stone like this often means the difference between life and death.

*Dia. 10.* It would do Black no good to try to play 1 after the moves of the last diagram. White would cap him with 2, completely shutting off his escape. This shows the necessity of playing 1 early and making White commit himself before he knows what Black will do.

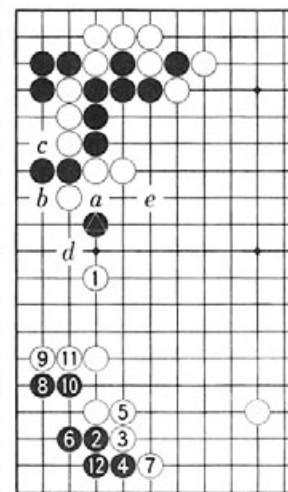
*Dia. 11.* If White commits himself differently by answering Black's triangled peeping move with 1, Black adjusts accordingly. The upper part of White's framework is not so important now, because Black



*Dia. 9*



*Dia. 10*

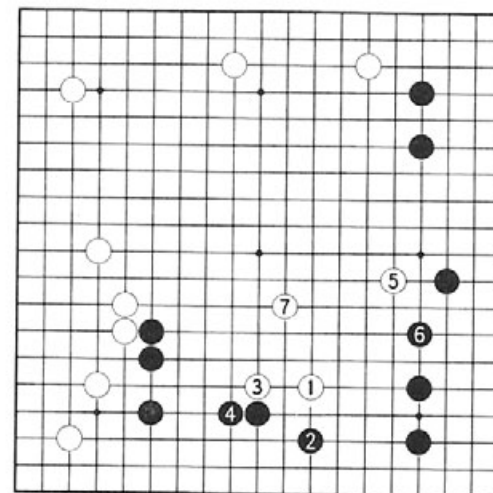


*Dia. 11*

can reduce it at will with *a*, White *b*, Black *c*, White *d*, Black *e*, so he goes to work on the lower part by making the attachment at 2. After the joseki from 3 to 12, White 1 has become a bad move, overconcentrated in relation to White 9 and 11.

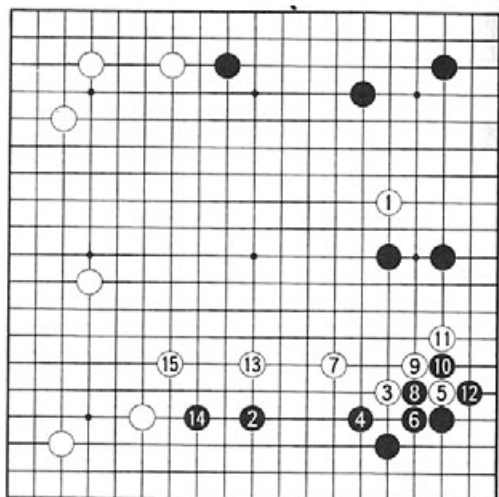
Flexible play is an art, and before we close this section the reader might like to see a few more artistic sequences from professional games to help him get the feel. Here are three.

*Dia. 12.* White begins by tapping the lower side with 1 and 3, then shifts to tap the right side with 5. Finally he joins his stones together into a coherent group with 7 — a beautiful combination.



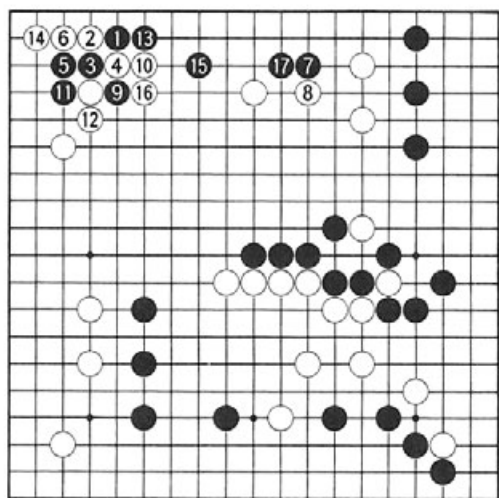
*Dia. 12 Sakata (white) v. Kano*

*Dia. 13.* White starts reducing at 1, but answers the call of Black 2 by shifting to 3. After probing with 5, he moves lightly back with 7 to 15, blandly ignoring the cutting points around 9, and what started out as a reduction of Black's framework ends up being both that and an expansion of White's left side.



*Dia. 13 Sakata (white) v. H. Fujisawa*

*Dia. 14.* Black's central power justifies a deep invasion at 1. White 4 and 6 defend the corner strongly, so Black shifts his attention to the upper side and probes at 7. Black 9 and 11 are sacrifices that make 13 and 15 sente. Black 15 confines perfectly with 17. The white stones around 8 are badly weakened; Black 3, 5, 9, and 11 retain useful potential.



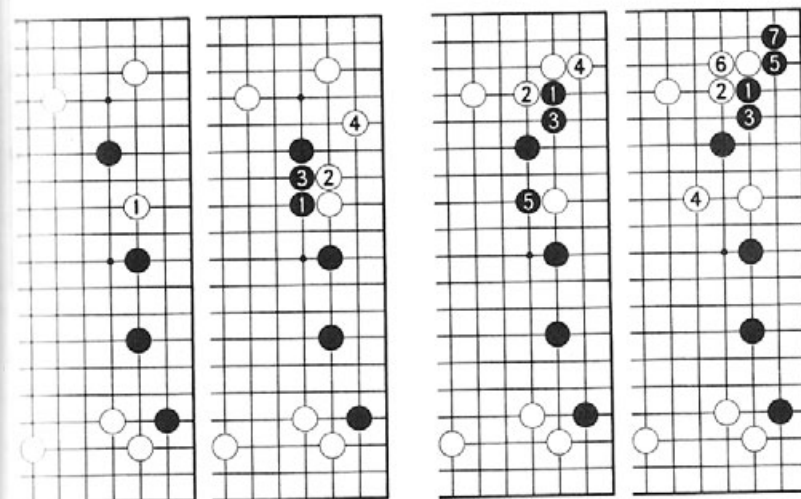
*Dia. 14. A. Ishida (black) v. Cho*

These specific sequences required careful working out, but what we are trying to communicate is the general feeling of flexibility – of shifting around – of being willing to sacrifice – of not getting tied down. That is something the reader can apply whatever his level.

### Flexibility in Responding

Flexibility is not the exclusive privilege of the side that is reducing or invading. The other side can often use the same devious methods in responding.

*Dia. 1.* White has invaded at 1. How shall Black reply?



*Dia. 1*

*Dia. 2*

*Dia. 3*

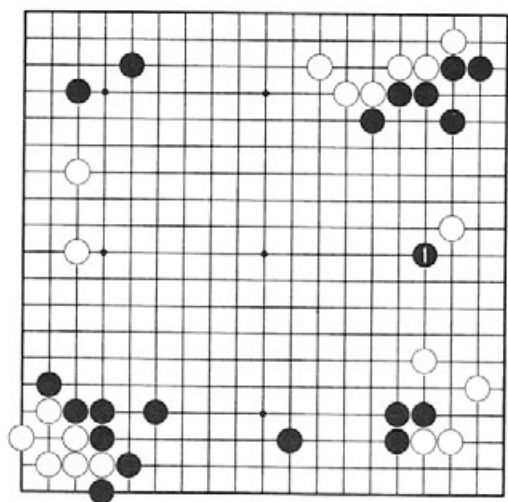
*Dia. 4*

*Dia. 2.* If he makes the straightforward moves at 1 and 3 which we shall meet in the next chapter, White can link to his corner with no problems. This is being too cooperative.

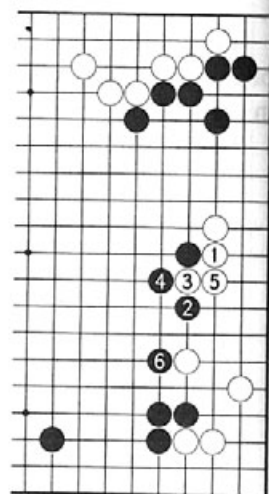
*Dia. 3.* Instead of replying directly to White's invasion, why not lean against the corner with Black 1? If White makes the standard replies at 2 and 4, Black is ready to play 5. White can no longer link up as before; his invasion is in serious trouble.

*Dia. 4.* In that case White will use 4 to escape while he has the chance, but Black takes the corner with 5 and 7, a large territorial gain. It is true that Black has been split apart, but both of his groups are strong and the white one between them is weak and still vulnerable. This is much better than Dia. 2.

In games between good players, one finds that nearly half the time the response to an invasion is some sort of indirect attack like this.



*Dia. 5*



*Dia. 6*

*Dia. 5.* The Japanese author v. Haruyama. Bearing in mind the black framework at bottom, how should White answer Black 1? Does the reader recall the standard responses on pages 152–3?

*Dia. 6.* White 1 was one, but Black will skip to 2. If White 3 and 5, 6 gives Black an ideal result. He has crossed the junction line between the two frameworks and really flattened White out.

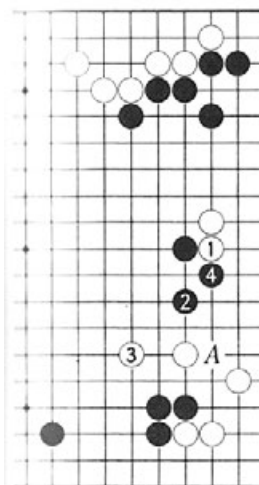
*Dia. 7.* If White shifts 3 to keep from being shut in, Black will block at 4. The two white stones above 4 are now weak and Black is threatening A, so this is no good either.

*Dia. 8.* What about pushing in this direction with 1, the other standard reply to a shoulder move? But Black 2, 4, and 6 still work perfectly with Black's framework, while the power of White 1 and 3 is nullified by the black group lying above.

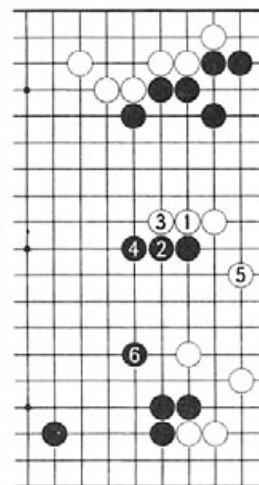
It seems that none of the standard moves succeed. Well, part of the reason for knowing the standard moves is to know when they fail and something different is required. What the author tried in this position is shown next.

*Dia. 9.* He played White 1.

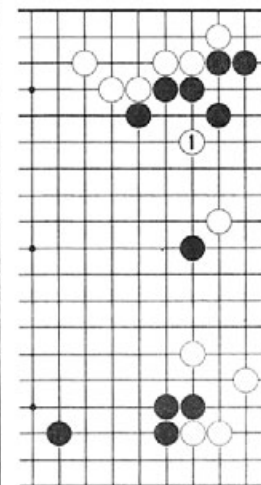
*Dia. 10.* White's aim is to induce Black 1 to White 4, attacking indirectly. Next if Black cuts between 2 and 4 –



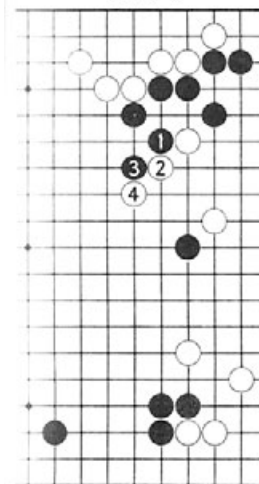
*Dia. 7*



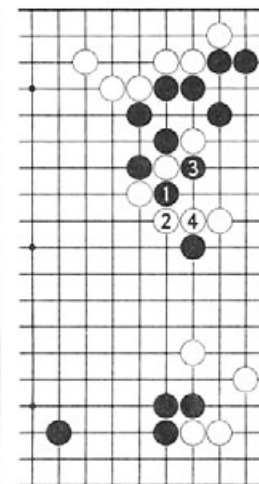
*Dia. 8*



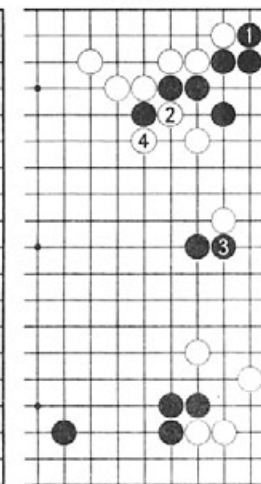
*Dia. 9*



*Dia. 10*



*Dia. 11*



*Dia. 12*

*Dia. 11.* White gets an excellent result. Black's original shoulder move becomes utterly meaningless.

*Dia. 12.* Black was able to see the trap in Dias. 10 and 11, so he steered away from it by turning at 1. The exchange through 4 followed. This was a surprising result from Black's shoulder play, but in go such surprises are normal.

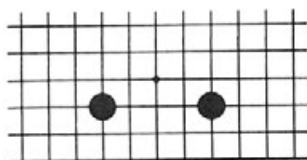
## Chapter Eight

### INVASIONS INTO THREE-SPACE EXTENSIONS

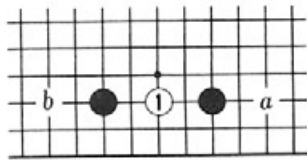
There are three general principles, covered in the previous chapter, for invading and reducing large frameworks. For small frameworks, there are actual josekis: specific moves and sequences that occur repeatedly. This chapter deals with three-space extensions along the side, which are among the smallest and most frequently encountered frameworks. Invasions of them tend to start in fairly restricted patterns. Unfortunately, they then tend to branch into more variations than we can exhaustively cover, so we plan to explain the choices for the first two moves – where to invade and how to meet the invasion – then show just one or two of the most typical continuations from each, hoping that this will give the reader a useful guide without overburdening his memory.

#### 1. The 3-Space Extension on the Third Line

*Dia. 1.* Here Black has made the simplest type of three-space extension.



*Dia. 1*

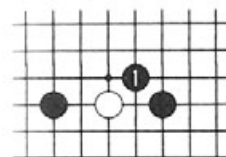


*Dia. 2*

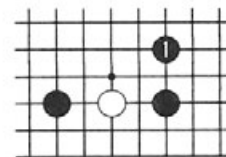
*Dia. 2.* The best place to invade it is on the third line directly between the two stones. Exceptions to this rule are so rare they do not matter. The invasion is most effective when there is a white stone out to one side, at *a* or *b* for example, so that at least one of the black stones is caught in a pincer effect.

There are three main ways, shown in the next three diagrams, for Black to respond.

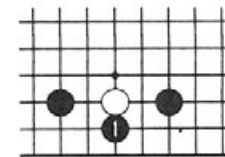
*Dia. 3.* (next page) When he is in a position to attack strongly, he will make a diagonal play.



*Dia. 3*



*Dia. 4*



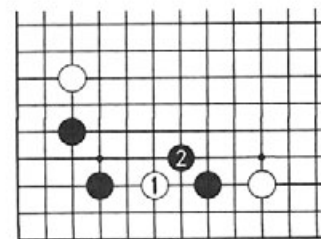
*Dia. 5*

*Dia. 4.* When he is less strong, he will choose a less direct form of attack, often a one-space jump, or a leaning contact play against some nearby white stone.

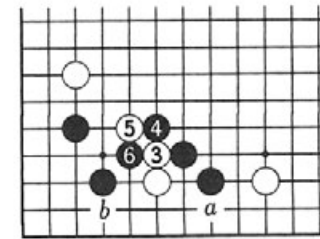
*Dia. 5.* When he is not strong at all, he will make the purely defensive lower attachment.

#### Ia. The Diagonal Play

*Dia. 1.* Here Black's three-space extension comes from a knight's-move corner enclosure. He uses his strong corner position by pushing White against it with the diagonal move at 2. White, for his part, will not usually invade at 1 without supporting stones at or near at least one of the two places shown.



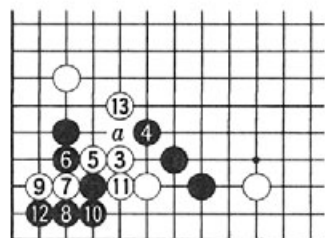
*Dia. 1*



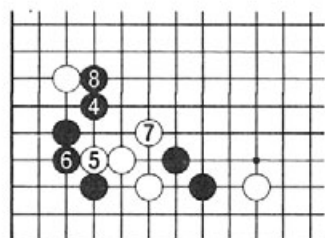
*Dia. 2*

*Dia. 2.* White would like to continue by pushing back against Black's diagonal move with 3 and bending out past 4 with 5, but then Black cuts at 6. White can live by playing *a* and drawing back, then *b* and drawing back, but a tiny life, in gote, with Black becoming very strong on the outside, was not what he had in mind when he invaded.





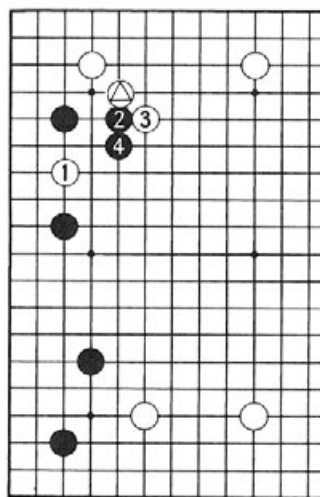
*Dia. 3*



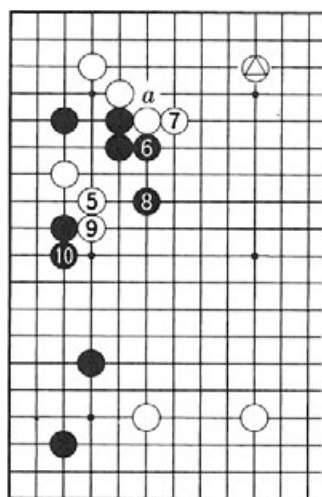
*Dia. 4*

*Dia. 3.* White's correct play is 3. If Black tries to contain him with 4, he can get out with the help of a two-stone sacrifice, White 7 and 9 serving to keep Black from pushing through at *a* and cutting. Black 4 is a failure.

*Dia. 4.* A better move for Black is 4 in this diagram, or sometimes 4 at 5. White 7 and Black 8 are the start of a running battle, which is more like what White was hoping for. He can attack the two black stones to the right, but both running groups lack eyes, so the fight is fair.



*Dia. 1*



*Dia. 2*

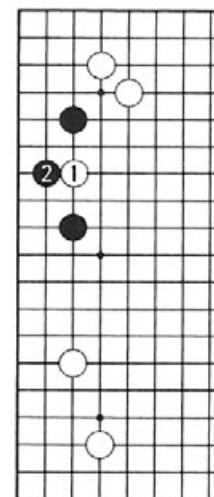
### Ib. An Indirect Attack

*Dia. 1.* (facing page) Here when White invades at 1, Black is not strong enough for the diagonal play, but he is still strong enough to make some kind of attack. One-space jumps and contact plays were mentioned as being typical in this intermediate situation, and Black 2 is both. Leaning against White  $\triangle$ , Black gains momentum for an attack on 1.

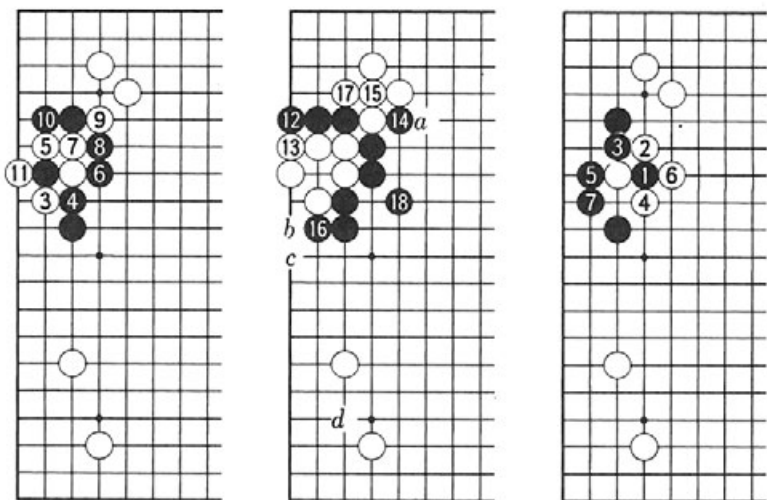
*Dia. 2.* White escapes with 5, Black turns at 6 to cap him at 8, and again a running battle develops. White must always be prepared to run when he invades. Incidentally, if it were not for the presence of the triangled stone, Black could use 6 to cut at *a*.

### Ic. The Lower Attachment

*Dia. 1.* (below) This time when White invades at 1 Black has only two stones on the left side, so he does not want to get involved in a running fight. He plays the evasive lower attachment at 2. This is not so much an attempt to link up as a sacrifice to make shape on the outside. White can, if he wishes, ignore it and leave 1 and 2 as a forcing exchange.



*Dia. 1*



*Dia. 2*

*Dia. 3*

*Dia. 4*

*Dia. 2.* White often has a good continuation, however, in the hane at 3, setting in motion the fixed sequence up to 8 in which he takes the sacrifice stone while Black plays three moves on the outside. What makes this attractive for White here is that he can cut at 9. Black 10 is not an attempt to live in the corner, but a second sacrifice.

*Dia. 3.* Black 12, which White has to answer at 13, is another part of the sacrifice maneuver. Black plays 14 and 16 in sente, then finishes the sequence with 18, or perhaps *a*. The effect of the 12–13 exchange is that later on Black can play either *b* or *c* in sente. This will prove useful if, for example, he invades the lower left corner at *d* and fighting develops on the left edge. At any rate, he has conceded territory but gained thickness in exchange.

*Dia. 4.* Black can make what looks like the opposite exchange by starting with the upper attachment at 1, but this is more an outright loss than an exchange. White can claim to have both reduced Black's territory and gained a great deal of thickness in sente by capturing Black 1. Black 1 is occasionally correct, but Black 5 is

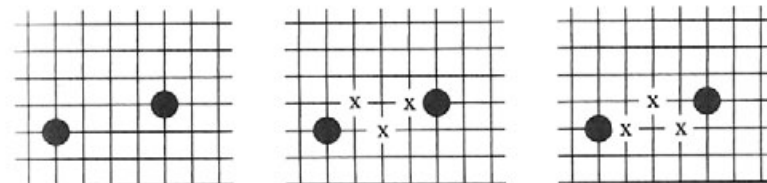
a move best forgotten.

## II. The 3-Space Extension from the Third Line to the Fourth Line

*Dia. 1.* This is probably the most common three-space extension, and the one that involves the most variations. The first problem is where to invade it.

*Dia. 2.* The best points to strike at are arranged in the shape of a V. The one on the third line, at the apex of the V, is the only true invasion. The other two are reducing moves.

*Dia. 3.* These three points – the other V – are usually inferior.

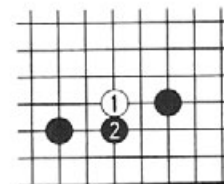


*Dia. 1*

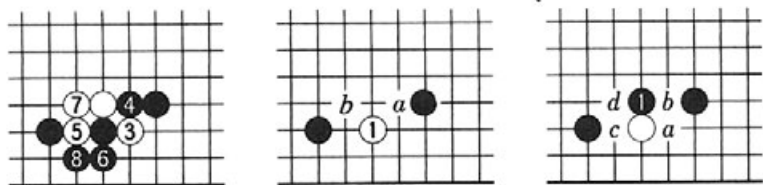
*Dia. 2*

*Dia. 3*

*Dia. 4.* In particular we would like to issue a warning against this White 1, a move which seems to appeal strongly to those who wish to invade but cannot summon the courage to invade deeply. Black can generally get a good result with the contact play at 2, especially if White falls into the trap in the next diagram.



*Dia. 4*



*Dia. 5*

*Dia. 6*

*Dia. 7*

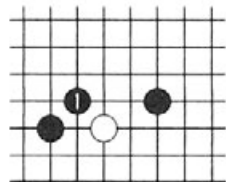
*Dia. 5.* White hanes at 3, perhaps a reasonable continuation, and Black cuts at 4. Next White spies the atari at 5 – oh boy – and Black descends at 6. Here White’s rush is checked by awareness of the threat of Black 7, so he connects at 7 and Black links under at 8. Each of White’s moves may have some justification, but they sum to a horrible result. Black’s territory has been hardened rather than invaded, and White’s stones are left weak, heavy, and short of liberties.

*Dia. 6.* The correct invasion point is 1. We shall deal with its variations first, then return briefly to consider White *a*, White *b* having been dealt with in the last chapter. Black has three main replies to White 1.

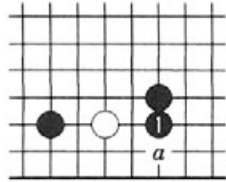
*Dia. 7.* The most natural and most often correct reply is the attachment at 1. White has several standard continuations: we shall show examples of *a*, *b*, and *c*, and White *d* is another possibility to keep in mind. White *b* is conditional on a ladder.

*Dia. 8.* Black’s second reply to White’s invasion is this diagonal move. As a non-contact play, it is a stronger attack than the attachment, so it is frequently correct.

*Dia. 9.* Occasionally it is best for Black to descend to 1, or jump down to *a*.



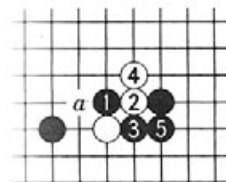
*Dia. 8*



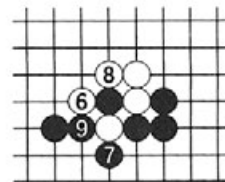
*Dia. 9*

## IIa. Attachment – Wedge

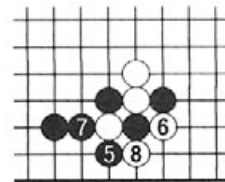
*Dia. 1.* White’s wedge at 2 is the strongest reply to the attachment at 1, but it is playable only when the ladder at *a* works. If this ladder is broken, then Black 3 and 5 place White in a difficult position. On the other hand, if the ladder works then Black 3 and 5 are rarely good.



*Dia. 1*



*Dia. 2*

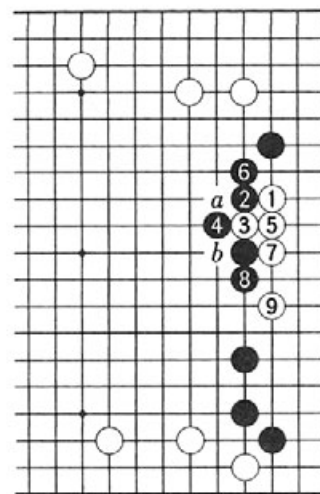


*Dia. 3*

*Dia. 2.* If the ladder works, Black’s only continuation is to link up with 7 and 9, but this gives White thickness in sente, an excellent result from his invasion. Black should look for some other way to fight back.

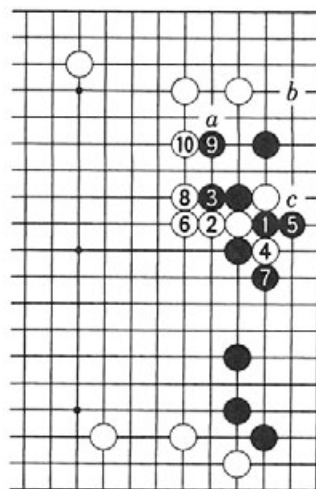
*Dia. 3.* One possibility is to play 5 here instead of connecting at 6. The question then becomes whether or not White can capture Black ▲ in a ladder.

*Dia. 4.* In this position the ladders of Dias. 1 and 3 would both work, so White unhesitatingly wedges at 3. How is Black to answer? Dias. 1 and 3 are out. In one variation he gives atari at 4 and White continues with 5 to 9, but the cutting points left at *a* and *b* make this result somewhat unfavourable.

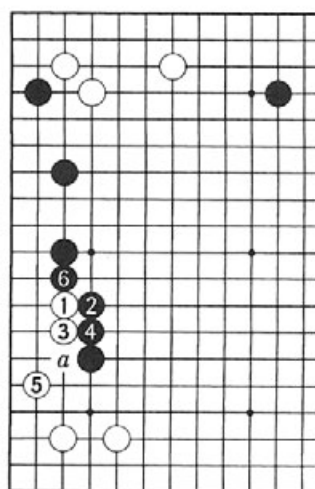


*Dia. 4*

*Dia. 5.* Perhaps he should give atari from below with 1, then push out beside White at 3. White 4 to 10 are the standard continuation, White 6 being the key move in the sequence. Black saves his side territory and ends in sente, but White's center wall is still an ample harvest from the invasion. Note that White *a* and *b* have become sente, threatening *c*.



*Dia. 5*



*Dia. 1*

### IIb. Attachment – Extension

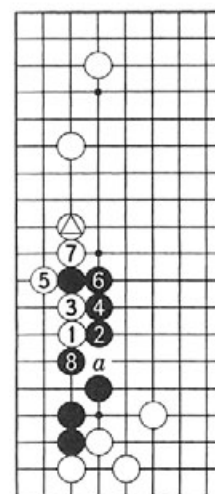
*Dia. 1.* Here is a case where the ladder is against White (Black  $\blacktriangle$  breaks it) so he cannot wedge at 4. Linking to his corner stones with 3 and 5 is the logical thing to do instead. White 5 can be at *a*, and there is a complex family of variations starting with 5 at 6, but 5 as shown makes a good linkage and assures White of sente. Both sides can be satisfied with this result; White has gained profit, but Black has gained thickness.

### IIc. Attachment – Thrust

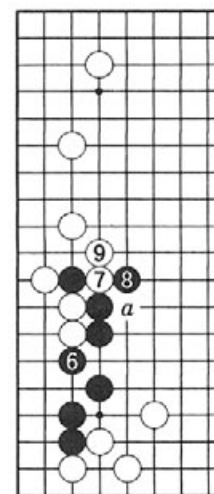
*Dia. 1.* In this case White's escape route lies up the side instead of down it, so he thrusts upward with 3 and links to  $\triangle$ . If he played 3 at 8, he would risk losing his whole invading force, and there is a simple refutation to the wedging move (3 at *a*) which you should have no trouble finding. The sequence to 8 is standard, although there is one possible variation at Black 6.

*Dia. 2.* If Black wants sente badly enough, he can play 6 here instead of connecting at 7, but his position is left much thinner, and White's much thicker, than in *Dia. 1*. Note the cut possible at *a*.

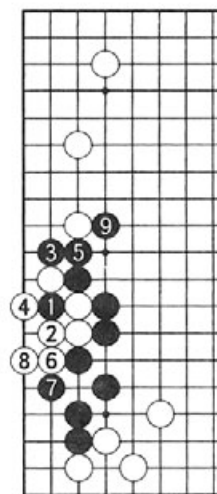
*Dia. 3.* The reason Black 6 in *Dia. 2* is sente is that if White ignores it, Black can play 1 to 9 here. White would be better off not invading in the first place than allowing this to happen.



*Dia. 1*



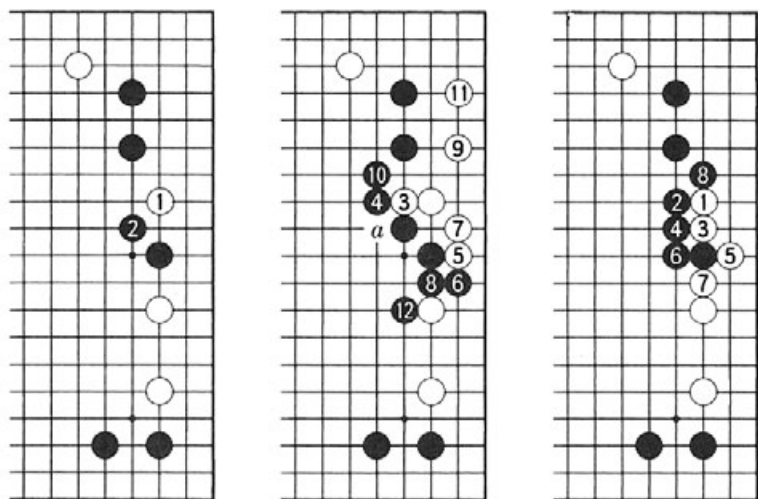
*Dia. 2*



*Dia. 3*

## II d. Diagonal Move

*Dia. 1.* Here when White invades at 1 Black is in a good position to attack, for not only is White 1 weak, but so are the two white stones in the lower right. Black chooses, accordingly, the diagonal move at 2.



*Dia. 1*

*Dia. 2*

*Dia. 3*

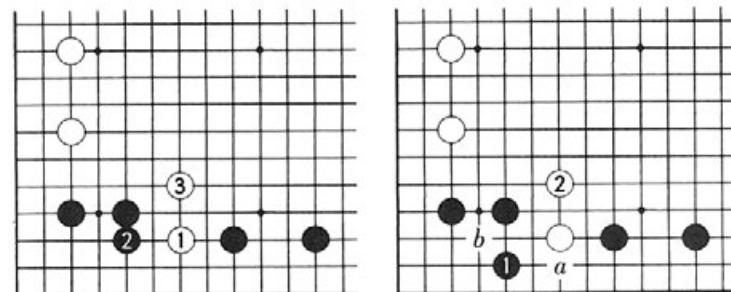
*Dia. 2.* White's usual continuation is to push at 3, then hit under at 5. Black cannot play 6 at 7 – that would run into a double atari – so White lives with 7 to 11. Black, however, then devastates the lower right with 12. White 1 in *Dia. 1* turns out to have been an overplay.

The main risk Black runs in making the diagonal play is that sometime during the sequence White will cut at *a*. When Black is prepared to cope with this cut, however, the diagonal play is stronger than the attachment.

*Dia. 3.* The attachment at 2 would be a mistake in this situation. White would link up with 3 to 7, and his invasion would end up actually strengthening his two stones in the lower right.

## II e. Descent

*Dia. 1.* In this position, Black should descend at 2 to keep White out of the corner.



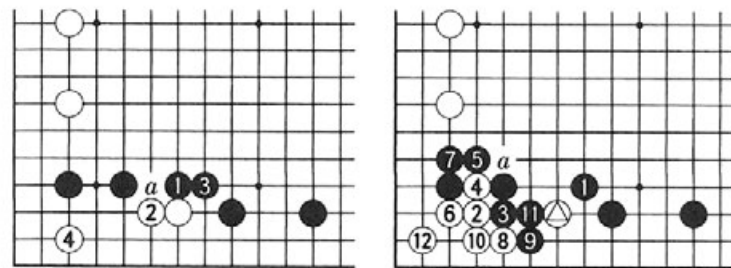
*Dia. 1*

*Dia. 2*

*Dia. 2.* This Black 1 is also correct. Compared with *Dia. 1*, it makes crossing under at *a* easier, but leaves a slight weakness at *b*.

*Dia. 3.* If Black made the attachment at 1, White would take the corner territory with 2 and 4, and the outer wall Black got in compensation would be neutralized by the two white stones on the left side. White 2 at *a* might also be effective.

*Dia. 4.* If Black made the diagonal play, White would dodge into the corner with 2. If cut off by Black 3, he would abandon  $\triangle$  and live with 4 to 12. In contrast to *Dias. 1* and 2, he would have no weak group to worry about, while Black would have the serious cutting point at *a*.

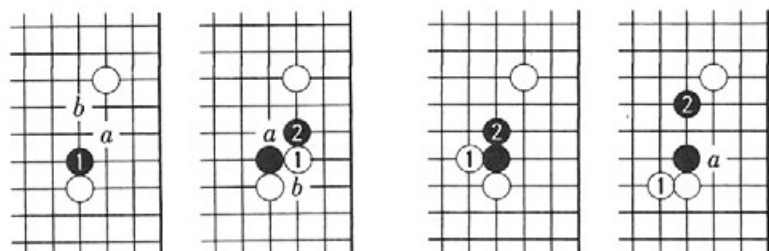


*Dia. 3*

*Dia. 4*

## II. Attaching Instead of Invading

*Dia. 1.* The attachment at Black 1 looks like a stronger move than the invasion at *a*, but actually the reverse is true. For all its coming in contact with the white stone, it is a lighter, shallower penetration of White's three-space extension than Black *a*. Generally speaking, Black considers playing 1 in cases where White would attack Black *a* with *b*.



*Dia. 1*

*Dia. 2*

*Dia. 3*

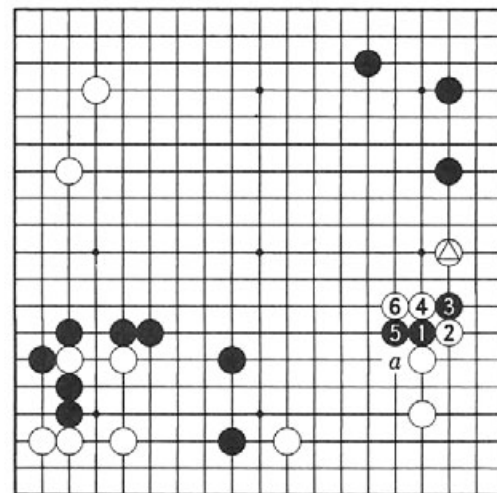
*Dia. 4*

*Dia. 2.* White has three main answers to Black's attachment. In the first he hane underneath it at 1. Black also hane, at 2, and White cuts at *a*, or sometimes connects at *b*. Black expects to use 2 as a sacrifice to gain power in the center. He must be able to capture White *a* in a ladder if White cuts there, then connects at *b*.

*Dia. 3.* If White wants to be more aggressive he can hane on top of the black stone with 1. Black 2 starts a running battle.

*Dia. 4.* A third possibility is for White to stand straight out with 1. Black replies with 2 or *a* and again starts a running battle.

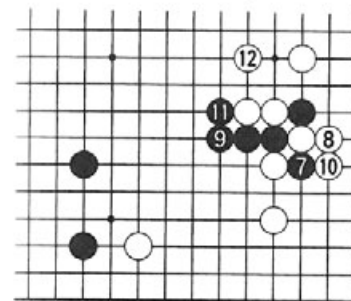
*Dia. 5.* (next page) This is an example from professional play. Black uses 1 to reduce White's four-stone framework in the lower right. Considering the blackness of the upper right corner, White does not want to get  $\Delta$  involved in a running battle, so he answers with 2 and 4, and the sequence reverts to the one encountered on page 182. White pushes at 6, rather than *a*, so as to develop his cutting stone.



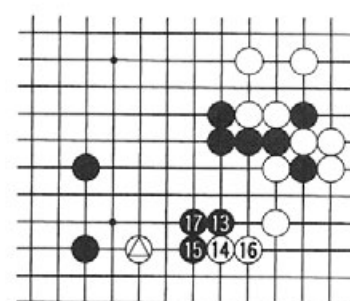
*Dia. 5.*

*Dia. 6.* The joseki ends with White 12. Black builds center thickness in sente.

*Dia. 7.* His next move takes a large bite out of White's framework. Rather than challenge Black's center thickness, White gives up  $\Delta$  and plays 14 and 16. As far as the right side is concerned Black has not done very much – that was to be expected since he made the shallow move at 1 in Dia. 5 – but as far as the center and lower side are concerned he has done excellently. Incidentally, we have now reached the position discussed from White's point of view on pages 115–117 in Chapter 5.



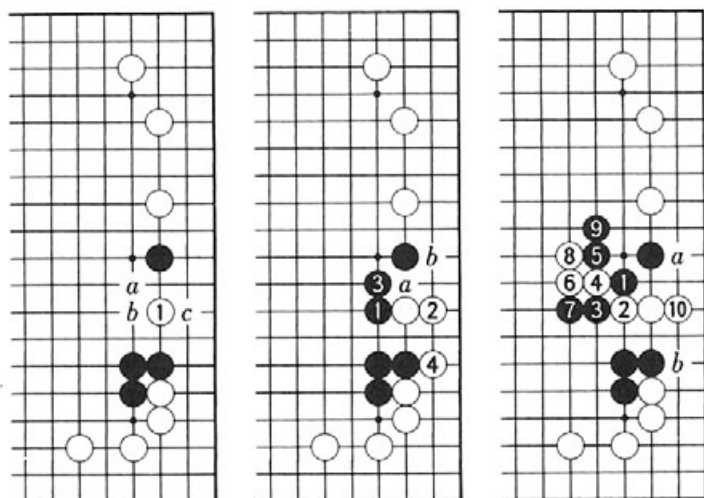
*Dia. 6*



*Dia. 7*

### III. The 3-Space Extension from a 2-Stone Wall

*Dia. 1.* The three-space extension from a two-stone wall shares features of both of the other three-space extensions studied so far. White 1 is the only invasion point, and Black can choose his reply from among *a*, *b*, and *c*. Black *a* is the strongest move, the one Black would use if he thought he could actually capture White's invading stone. Black *b* is more defensive, and Black *c* is most defensive of all, an emergency measure.



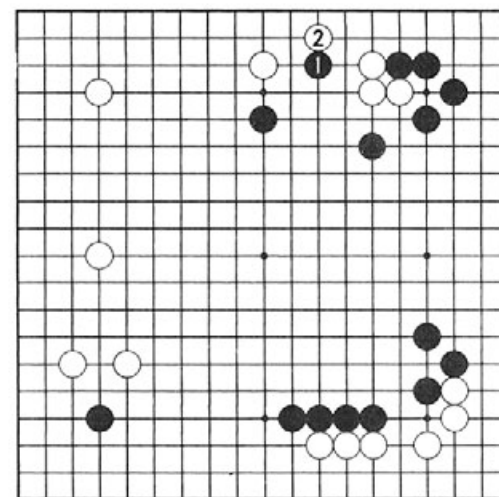
*Dia. 1*

*Dia. 2*

*Dia. 3*

*Dia. 2.* Here Black 1 is correct. White can play 2 at *a*, followed by Black 3, White *b*, etc., and link up to his stone above, or he can, as shown, descend to 2, from where he can link up at either *b* or 4. Black 3 and White 4 bring the operation to a close.

*Dia. 3.* The diagonal move at 1 would be dangerous here. White pushes at 2, cuts at 4, plays 6 and 8 in sente, then descends to 10, to link up at *a* or *b*. Black is divided into two weak groups and is in trouble.

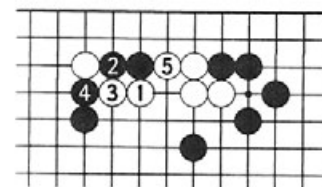


*Dia. 4*

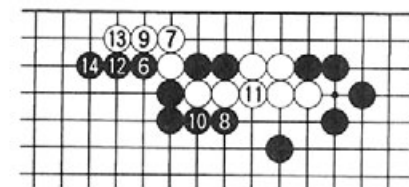
*Dia. 4.* Here is another example from professional play. White is quite weak this time because of the two triangled stones, hence the defensive reply at 2.

*Dia. 5.* If White makes the upper attachment at 1, Black thrusts sideways with 2 and cuts at 4. White can and must capture Black's two stones with 5, but —

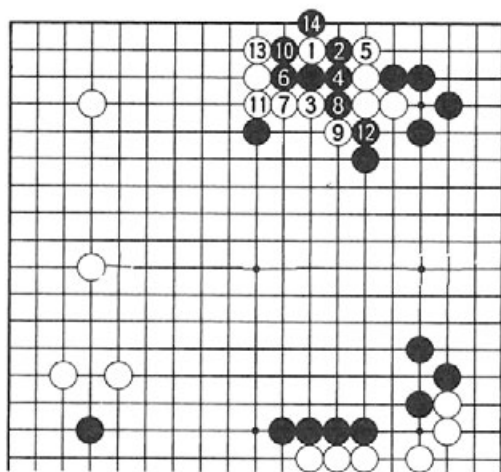
*Dia. 6.* Black scores a huge success by sacrificing them. He solidifies his own territorial framework with 8 and 10 and destroys White's with 12 and 14. This result is unthinkable for White.



*Dia. 5*



*Dia. 6*



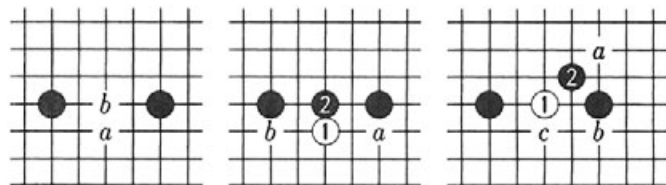
*Dia. 7*

*Dia. 7.* Accordingly White plays 1 underneath. The 1–2 exchange keeps Black from thrusting and cutting as he did in *Dia. 5*. The rest of the sequence is rather complex, but it fits the general pattern of White's sacrificing 1 (and here four other stones) to make shape on the outside. Black gets somewhat the better end of the deal with his large capture, but White is not too badly off because he ends in sente.

These variations give just a sample of the complications that can arise from an invasion into this extension.

#### IV. The 3-Space Extension on the Fourth Line

*Dia. 1.* When the three-space extension is on the fourth line, there are two invasion points to choose from, at *a* and *b*.



*Dia. 1*

*Dia. 2*

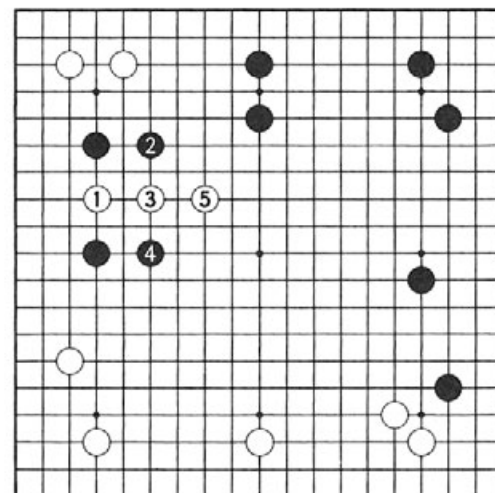
*Dia. 3*

*Dia. 2.* The low invasion is the simpler of the two. Nine times out of ten Black should answer it with the attachment at 2 and build an outer wall while White lives along the side. When Black feels he has to defend the side he can play 2 at *a* or *b*, but then White jumps out into the center.

*Dia. 3.* The high invasion creates difficulties for both sides – for Black because he cannot link his two stones together and for White because he cannot easily gain eye space along the side. Black often replies with a diagonal play like 2 or a one-point jump like *a*, inviting a running fight. Another frequent response is Black *b*, which prepares to cross under at *c*. Black 2 at *c* is also seen, in cases where Black intends to give up one of his stones.

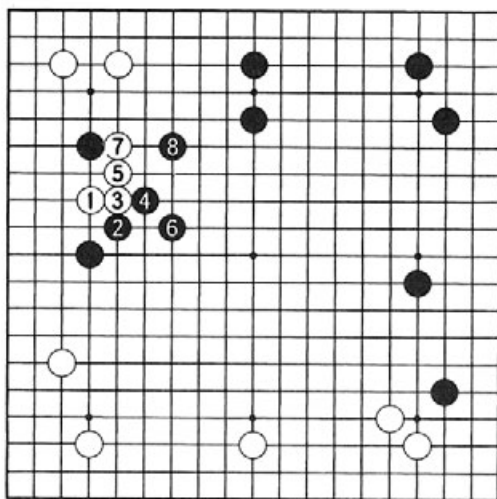
#### IV a. The High Invasion

*Dia. 1.* Here the high invasion at 1 is best. If Black runs out with 2 and 4. White gladly runs out in tandem, heading toward the framework in the upper right. White's enclosure in the lower left corner works as a pincer against the pair of black stones including 4.



*Dia. 1*





*Dia. 2*

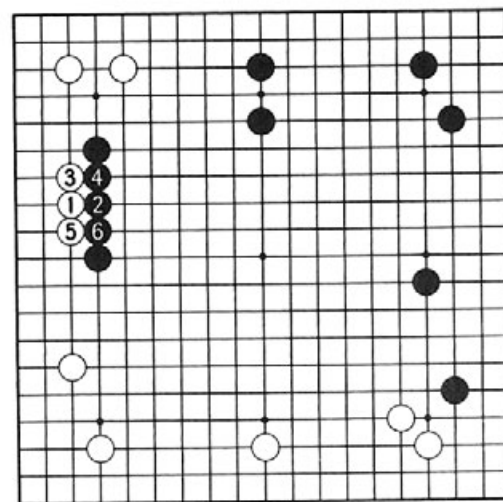
*Dia. 2.* It might actually be better for Black to play the diagonal move at 2 and abandon ▲ in order to build up his framework to the right with 4, 6, and 8.

*Dia. 3.* (next page) For White, the low invasion would be a mistake here. Black replies with 2, and gains added center thickness with 4 and 6. White's position on the left side is low and redundant.

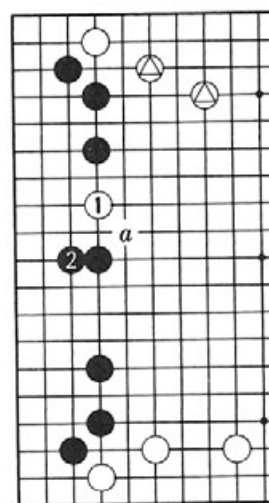
*Dia. 4.* This is the type of situation where if White makes the high invasion at 1, Black should descend at 2. Besides indirectly attacking White 1 (it prevents White 2), this descent strengthens Black's hold on the lower half of the left side. Ordinarily Black would consider attacking more aggressively with *a*, but White has strong stones at △ towards which it will not do any good to push him.

*Dia. 5.* If White jumps out to 1, Black can cross under at 2.

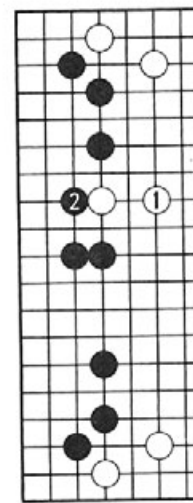
*Dia. 6.* If White jumps down to 1 he can keep Black separated, but the exchange of ▲ for 1 has been in Black's favor.



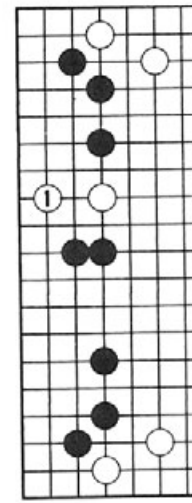
*Dia. 3*



*Dia. 4*



*Dia. 5*

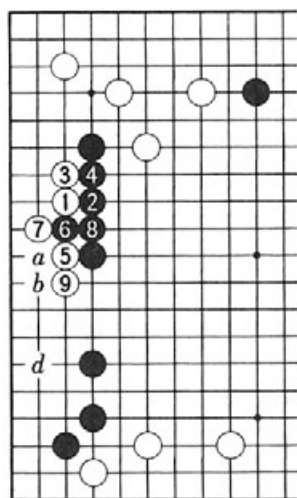


*Dia. 6*

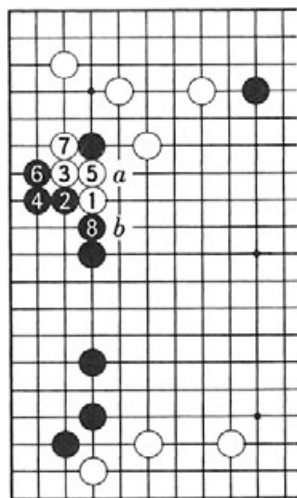
#### IVb. The Low Invasion

*Dia. 1.* Here White's strength in the upper left makes the low invasion at 1 ideal. Black plays 2 and White exchanges 3 for 4, then heads for the open space below with 5 to 9. If Black plays 10 at *a*, White grips him with *b*, and if Black then captures 1 and 3, White extends to *d*. Whatever happens, the thick wall Black makes in the center is neatly cancelled by the white stones above.

*Dia. 2.* The high invasion at 1 turns out badly in this position. Black hits under White 1 with 2, descends to 4, and solidifies his territory with 6 and 8, leaving White badly overconcentrated with no profit to speak of. If Black tried to save ▲ by playing 2 at *a*, White would come out at *b*, catching ▲ and Black *a* in a beautiful pincer attack and getting a very good result, but if Black sacrifices ▲ as shown, White's result is grotesque.



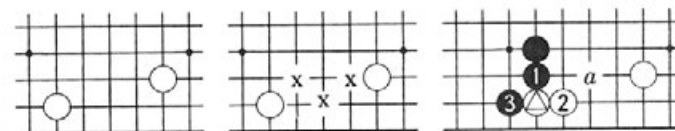
*Dia. 1*



*Dia. 2*

#### V. The 3-space Extension from the Third Line to the Second Line

*Dia. 1.* The last pattern we shall examine is the three-space extension from the third line down to the second. It has some of the same properties as the extension from the fourth line down to the third, but is less common.



*Dia. 1*

*Dia. 2*

*Dia. 3*

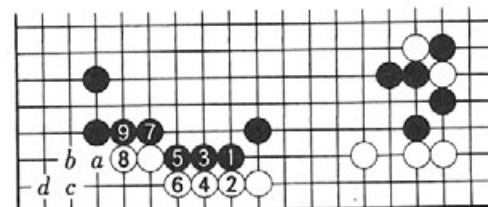
*Dia. 2.* The best points to attack are again arranged in a V, but there is now a fourth point to keep in mind.

*Dia. 3.* When ▲ is played on the second line, it is usually because there is an enemy stone above it on the fourth line, and it is then sometimes correct for Black to thrust down at 1, and hane at 3 if White draws back to 2. If White plays 2 at 3, the idea is for Black to play 2 if the ladder works so that White cannot cut, or *a* otherwise.

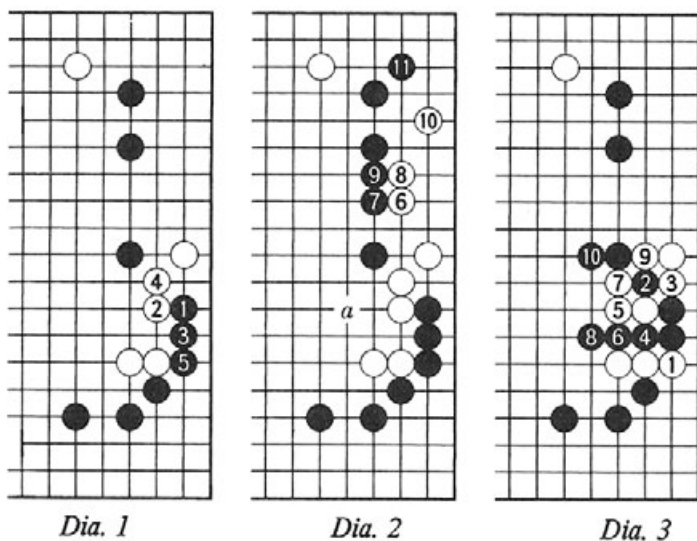
The three moves suggested in *Dia. 2*, however, are more vigorous and interesting, and we shall show one example of each.

#### Va. The Shoulder Play

*Dia. 1.* The shoulder play at 1 is effective in this handicap-game position. Driving White along the bottom, Black gets a thick wall and a good result. Black 9 is a key play. If Black blocks at *a* and lets White play 9, cracks appear in his wall. Black 9 indirectly defends the corner by placing White in a shortage of liberties: White *a*, Black *b*, White *c*, Black *d* for example.



*Dia. 1*



### Vb. The Invasion

*Dia. 1.* Here the invasion at 1 is an interesting idea. If White plays 2, Black links to his corner with 3 and 5. That gives him a large profit, and Black ▲ is left in just the right place to attack White's group.

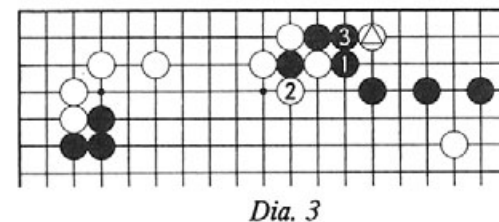
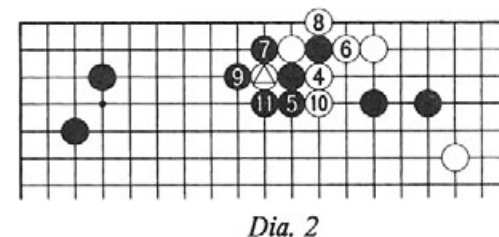
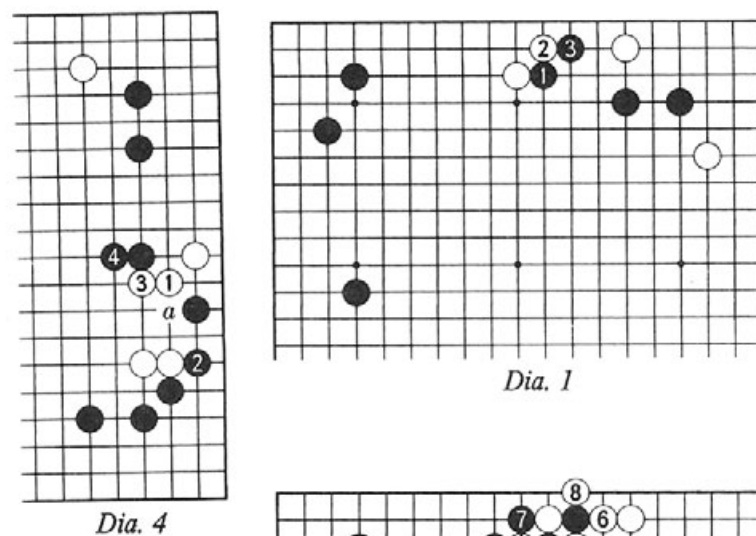
*Dia. 2.* White might continue with 6 to 10, but he still lacks clear eye shape and Black is getting a nice wall. Note the forcing move Black has at *a*.

*Dia. 3.* White would like to intercept Black by playing 1 here instead of 4 in Dia. 1, but Black has a crushing reply in 2 to 10.

*Dia. 4.* (next page) If White plays 1 diagonally, Black 2 gives the same kind of result as in Dias. 1–2. Note that Black would not want to play 2 at *a*; that would only help White to play 3.

### Vc. The Attachment

*Dia. 1.* (next page) Finally, this is a position where the attachment at 1 works well. White hanes at 2 and Black counter-hanes at 3, a pattern that we have seen before.



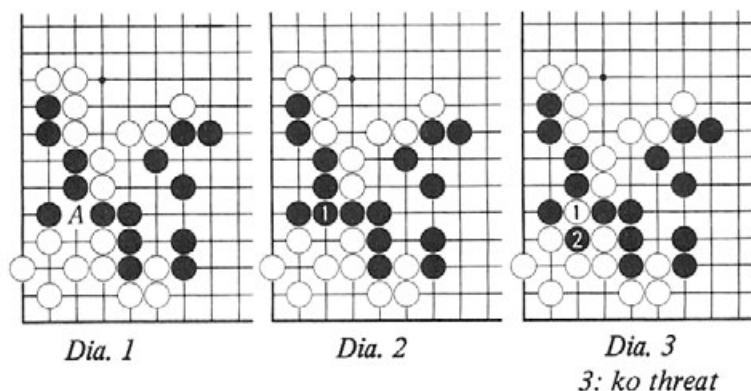
*Dia. 2.* When White gives atari with 4, Black comes out at 5, then captures White △ in a ladder. This capture works beautifully with his stones on the left side.

*Dia. 3.* Black 1 and 3, to capture White △, are another variation, which would be suitable in a position like this.

## Chapter Nine KO FIGHTS

One complication that we have so far avoided is that of ko fighting. There are many thorny problems here, e. g. how to choose ko threats, and these we intend to keep on avoiding, but perhaps we should at least meet the main varieties of ko fights. This chapter introduces them, and also discusses two comparatively easy questions: when (or whether) to start a ko and when to end one.

*Dia. 1.* White can start a ko at A. Should he? The first step in answering this question is to compare three results.



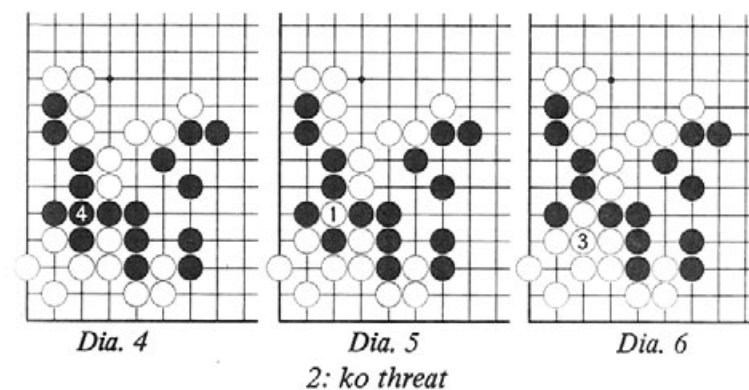
*Dia. 2.* Result number one is when White does not start the ko and Black connects at 1.

*Dia. 3.* Result number two is when White starts the ko and loses it.

*Dia. 4.* (next page) In that case the position looks like this. Compared with *Dia. 2*, White has lost exactly one prisoner, i. e. one point.

*Dia. 5.* Result number three is when White wins the ko.

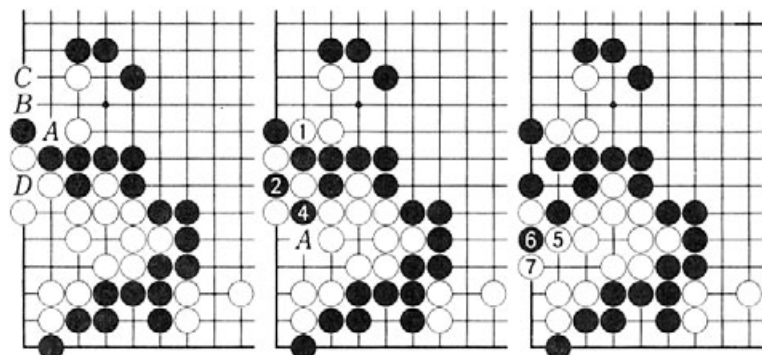
*Dia. 6.* The five black stones on the left edge are dead, and White's gain amounts to twenty-one or twenty-two points.



Obviously White has the advantage here, for he only risks losing one point while Black risks losing over twenty. This one-sided type of ko is called a *hanami* ko in Japanese – literally a ‘flower-viewing’ ko. The literal translation may suggest an elderly lady quietly contemplating a rose, but in Japan *hanami* tends more often to mean a group of people gathered under the spring cherry blossoms, eating, drinking, singing, and generally making merry – in other words, a picnic – and the above ko could indeed be called a picnic for White, who has everything to gain from it and practically nothing to lose.

Does this mean that White should rush to start the ko? Perhaps, but there is another question to be asked, namely whether or not the ko is large enough to be worth fighting. That depends on various factors – the sizes of moves elsewhere on the board, the security or insecurity of the black group and upper white group in the diagram, the nature of the ko threats available – but at any rate White does not want to start the ko, see Black make an ordinary move elsewhere as a ko threat, connect the ko, see Black make another ordinary move, and have Black gain more from his two ordinary moves than the ko is worth. Since the ko is worth only slightly over twenty points, that is a real danger. This ko would seem to be best left until the endgame. When the time comes, however, White need not hesitate to start it, for he risks nothing; that is the nice feature of a one-sided ko.

*Dia. 7.* A second example: White to play. Should he cut at A and fight the ko (if Black B, White C) or should he connect at D? If he wins the ko, he gains a good fifteen points as compared with White D, Black A.



*Dia. 7*

*Dia. 8*

3: ko threat

*Dia. 9*

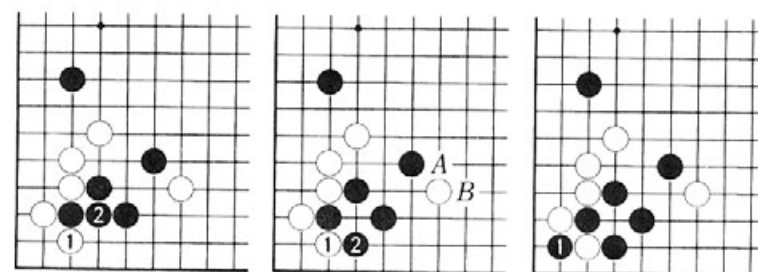
8 answer White 3

*Dia. 8.* But what if he loses it? If he carries out his ko threat after Black 4, Black A kills his entire group, and that costs him over forty-five points. To profit from this ko, then, White has to make ko threats worth over forty-five points, while Black need only make ko threats worth over fifteen points. The situation is not completely one-sided, but the advantage is clearly Black's. Under normal conditions, White should not play 1 in Dia. 8, but connect at D in Dia. 7.

*Dia. 9.* The most likely result, if White starts the ko, is that he will discover that he cannot afford to give up his group and will defend it with 5 and 7. Then Black will have sente to go back and answer White 3, and White will have lost about seven points (compared with White D in Dia. 7) to no purpose.

A White player who considered only the possible gain and ignored the possible loss would probably fall right into Dia. 9. Both sides' risks have to be evaluated fairly.

*Dia. 10.* (next page) There are times when one starts a ko because there is no other choice. If Black answers White 1 in this diagram by connecting at 2, for example, he is completely forced. White gains



*Dia. 10*

*Dia. 11*

*Dia. 12*

territory and secure eye space; Black gets nothing but a heavy, bad shape.

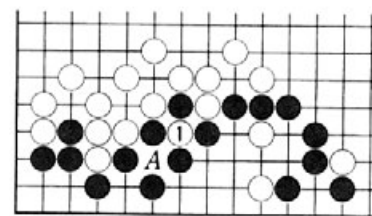
*Dia. 11.* The only alternatives Black has when White plays 1 are to ignore it or to answer in ko with 2. One may feel uneasy about playing a move like 2 but anything is better than Dia. 10. If Black gets to play, for example, A and B while White captures and connects the ko, he should be perfectly happy.

*Dia. 12.* Nor is this ko a one-sided one in White's favor. If Black has the more ko threats, he will not connect the ko but enlarge it with 1. Now if White loses it, his group will be under strong attack.

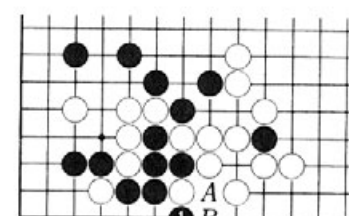
Here are two problems.

*Dia. 13.* White has played 1. Should Black fight this ko, or should he give in and connect at A?

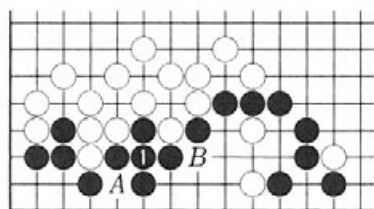
*Dia. 14.* Should White answer Black 1 at A or B?



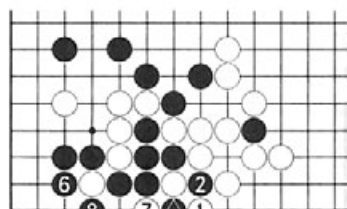
*Dia. 13*



*Dia. 14*



*Dia. 15*



*Dia. 16*

*3: ko threat  
4: answers it  
5: retakes the ko*

*Dia. 15.* Black has practically nothing to gain and everything to lose, so he should connect at 1. White 1 would start a very serious ko, threatening both a further capture at A and a double atari at B.

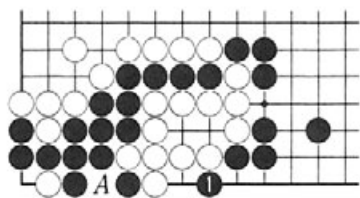
*Dia. 16.* White would be a coward to connect at 2. All he needs is one moderate ko threat, and when he recaptures at 5 the stakes are too high (the whole corner) for Black to do anything but play 6. White 7 is also sente, and Black's triangled move turns out to have been a mistake.

Both of the kos in these problems were one-sided in favor of White.

### Very Indirect Kos

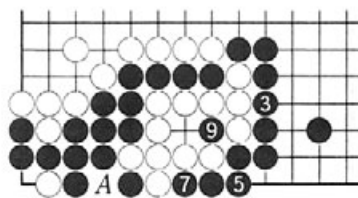
We have seen that it does not pay to start an adversely one-sided ko, where the risk is high and the gain is low. Another kind of ko to avoid is a very indirect ko, in which one has to make a large number of extra approach moves.

*Dia. 1.* This is an example. If Black plays 1, White's group is down



*Dia. 1*

*2 elsewhere*



*Dia. 2*

*4, 6, and 8 elsewhere*

to one eye and a ko between it and the black group in the corner is unavoidable. Before the ko becomes direct, however, Black has to make four more approach moves to fill White's liberties, so this is a five-step ko and the wisdom of playing 1 is highly questionable. White can answer by capturing at A and forcing Black to make a ko threat, or he can simply ignore Black 1 and play 2 elsewhere.

*Dia. 2.* Suppose Black continues with 3, 5, and 7 and White ignores him at 4, 6, and 8. Black 9 puts the white group into atari, but White has two attractive choices. One is to let Black capture his group and take two more moves in a row elsewhere. Black will then have used six stones to win a fight which was worth about sixty-five points. White has countered with six plays elsewhere. Even if White's plays have been worth only eleven points apiece, he has broken even. More likely his moves have been worth a great deal more — one can imagine two or three black groups dying during the time it takes Black to win this corner — and White has come out far ahead.

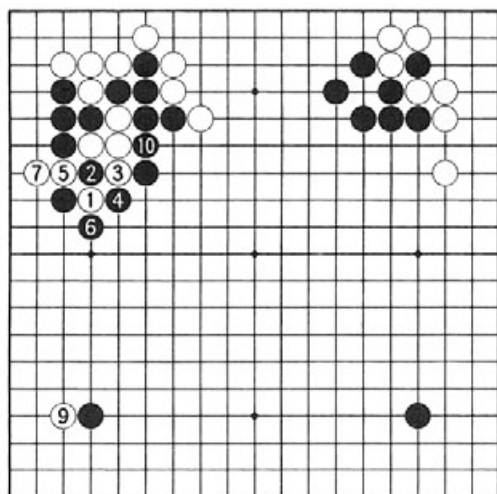
White's other choice is to answer Black 9 at A, ignore whatever ko threat Black makes, and capture the corner. White has ignored one black move; Black has ignored four white moves. Again it is hard to imagine White not coming out ahead.

Black, therefore, is wasting his time when he starts in on Dias. 1 and 2. Even if White has no ko threats at the beginning, he has time while Black is filling liberties to play moves that create ko threats. Given four or six white moves in a row, Black's position is bound to collapse somewhere. Black's best policy is to leave this fight alone, at least until well into the endgame. Eventually White will have to make one move to secure the position, and Black can ignore that move for a few points of profit. A few points are all one can hope for in a very indirect ko.

How indirect is very indirect? A two-step ko (one approach move) is usually immediate enough to pose the enemy some threat, but with a three-step ko we are beginning to cross the border, and with a four-step ko we are fully into the kingdom of never-never land.

### All-Dominating Kos

From the question of when to start, and when not to start, ko fights, let's move on to the question of when to end them. This question is simplest when the ko is an all-dominating ko, one so large that it dominates everything else on the board. Ko fights that arise early in the game are often of this variety.

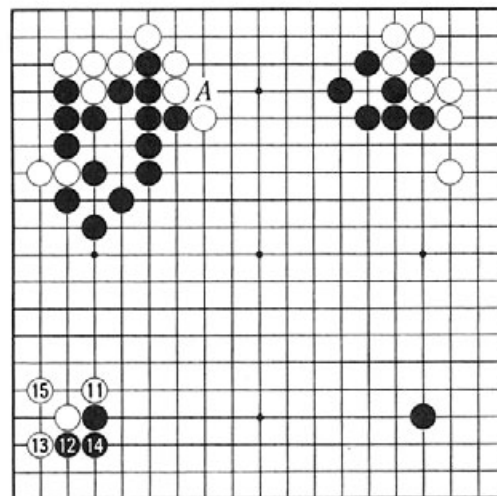


*Dia. 1* 8 at 2

*Dia. 1.* White has made a mistake in the taisha joseki, and when he tries to escape at 1, Black 2, 4, and 6 form a ko. The descent at 7 is White's only move, but when Black captures with 8 White has not a single adequate ko threat anywhere. The question of when to end this ko then requires no thought. Black ignores whatever move White makes next and captures at 10.

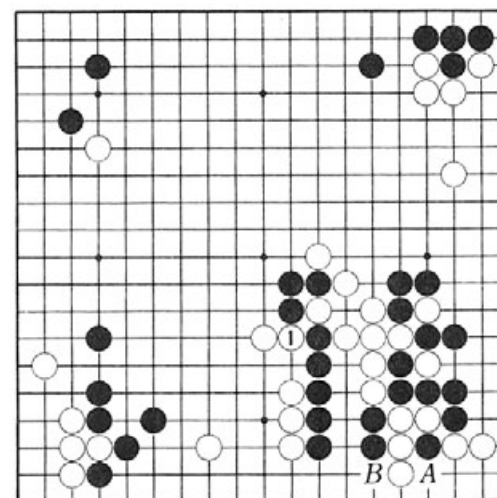
*Dia. 2.* Continuing, White is able to gain some advantage in the lower left corner, but not enough to compensate for his massive loss above. Note that Black is threatening to cut at A.

There is a saying that no one has any ko threats in the opening, and this position is a typical illustration of it. The rule in an all-dominating ko is to ignore the very first ko threat and end the ko at once, as Black does with 10.

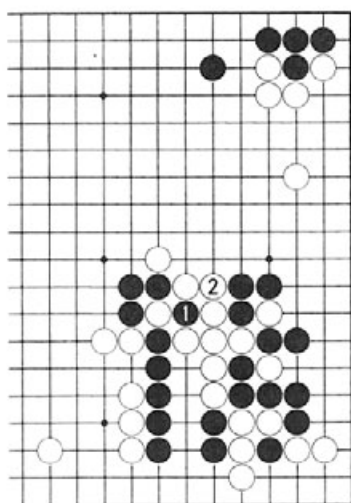


*Dia. 2*

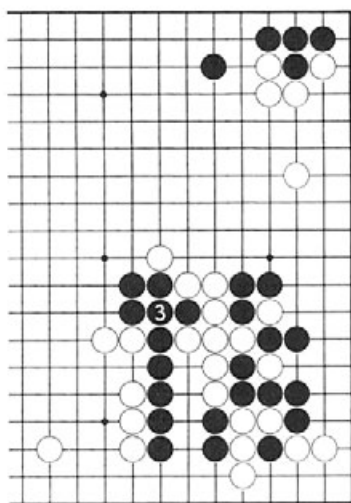
*Dia. 3.* Let's look at one last example from a game between Go Seigen and Kitani. White's (Go's) cut at 1 starts a ko that dominates everything on the board. Here Black has some local ko threats at A



*Dia. 3*



*Dia. 4*



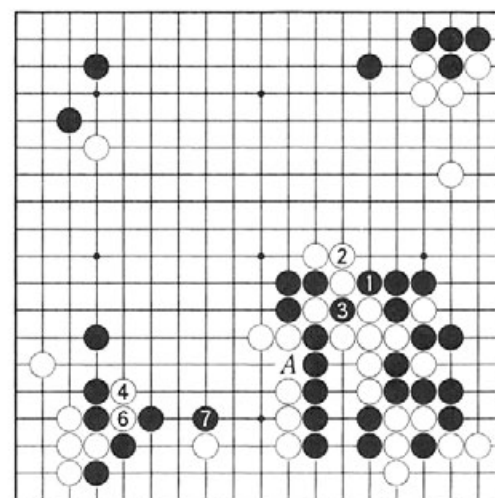
*Dia. 5*

and B that White cannot ignore, while White has no such local ko threats, but ko threats have little to do with this problem. How should Black play?

*Dia. 4.* To begin with, Black could take the ko with 1 and White, lacking ko threats, would have to connect at 2.

*Dia. 5.* After 2, however, the ko becomes one-sided in White's favor – he no longer risks anything – so Black has to connect at 3. Although his group has escaped, it does not possess particularly good shape. White is out in the clear, too, and has sente. Black may have won the ko, but with a little more foresight he could have won it in a much better way.

*Dia. 6.* (next page) Since White has no ko threats, Black can capture him by playing 1. White's best reply is 2 (if White 2 at 3, Black 2), and now Black takes the ko with 3. This is an all-dominating ko so he ignores White's first ko threat and connects with 5. White 6 is somewhat damaging, but Black has a nice defense at 7, which aims toward Black A, and his group cannot be destroyed. This sequence was the one actually followed in the game, and it gave Black an advantage which led to his victory by resignation.



*Dia. 6*

*5 connects*

'Never hesitate to finish an all-dominating ko' is a simple rule that takes care of a large number of cases, including the majority of the serious ones. Kos that arise in the opening and middle game tend to be either all-dominating or else not worth fighting in the first place. It is mainly in the endgame that one sees drawn-out ko fights of the non-all-dominating variety, and the question of when to finish them lies outside the scope of this book. 'End the ko when doing so enables you to win the game' is the best single piece of advice for such cases.

And with that, we shall take our leave of the prickly subject of ko fights, so that this already drawn-out and non-all-dominating book can get on to its last chapter.



## Chapter Ten PROBLEMS

The reader of these words has now borne with us through nine discursive chapters, so before we send him onward to do battle with the last, a pause may be in order to survey the ground covered thus far. The main signposts we have tried to plant along the way have been:

Chapter 1. Take account of the balances of territory and power. If you are behind in territory but ahead in power, play aggressively: invade, cut, attack, and fight. If you are ahead in territory but behind in power, play defensively: play safe.

Chapter 2. When attacking, instead of just trying to kill one enemy group, look for dual purpose moves: moves that gain territory or power while attacking, leaning moves, or moves that attack two groups at once.

Chapter 3. Attack with non-contact plays. Don't touch what you are attacking. Know the eye-stealing and angle tesujis and the capping, peeping, and knight's attacks.

Chapter 4. For defense, use ordinary moves if possible before you are attacked. If you find yourself in trouble, use contact plays and shoulder moves to extricate yourself.

Chapter 5. Play forcing moves, then leave them; treat forcing stones as expendable. Look for ways to resist your opponent's forcing moves.

Chapter 6. Use inducing moves to raise the efficiency of your stones.

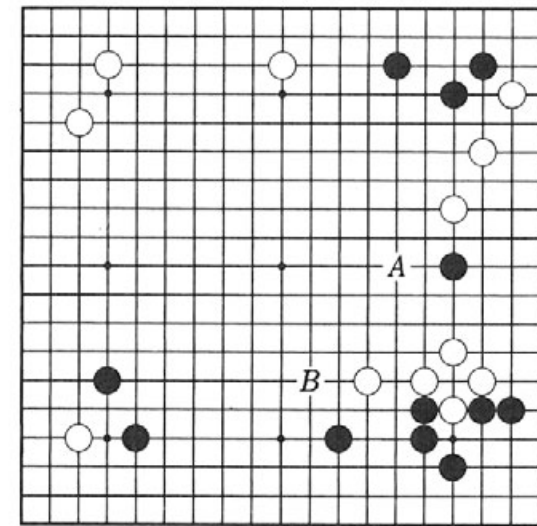
Chapter 7. In dealing with enemy frameworks, play lightly and flexibly, taking advantage of weaknesses. Consider relations with surrounding areas (junction points, weak groups, etc.).

Chapter 8. Even within the confines of a three-space extension there are many invasion josekis. Know the meaning of the first two moves, at least, so you can choose among them.

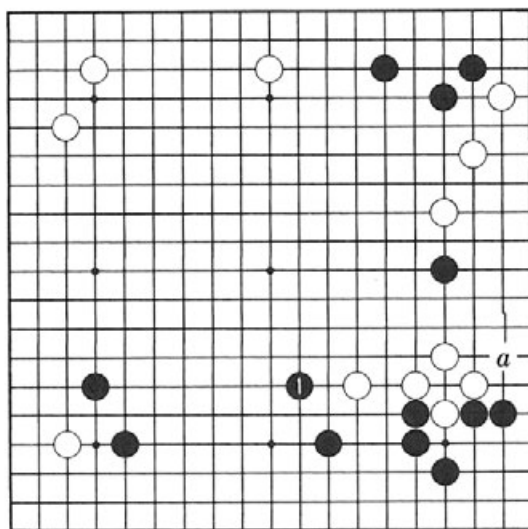
Chapter 9. Avoid adversely one-sided and very indirect kos. In an all-dominating ko, ignore any (non-local) ko threat.

In this final chapter we have collected twenty problems concerning attack, defense, and the middle game in general. All come from Japanese professional games. Most call for application of the ideas in the nine chapters above, and are for review, but a few branch out to include topics that somehow evaded our attention previously. Two possible moves are shown in each: one good, and one indifferent or bad. The problem is to decide which is which. Since this may not be too difficult – guessing gives you half a chance – the reader who wants to make the problems more meaningful should try, before turning the page, to think of as many reasons as he can why the good move is good and the bad move is bad. If he can get the right answers for the right reasons, he has a good grasp of the workings of the middle game.

### Problem 1: Black to play



*Sugano (black) v. A. Ishida*

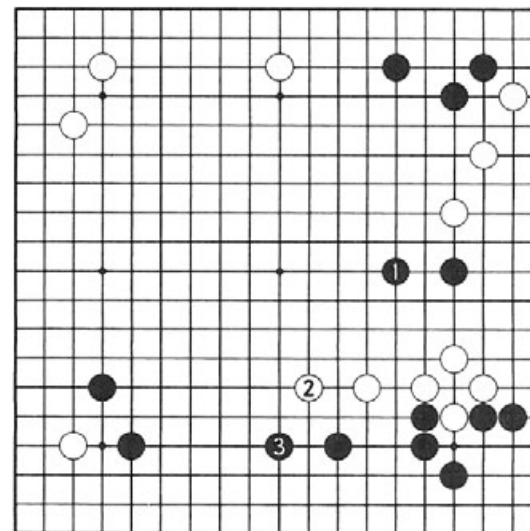


*Dia. 1*

*Dia. 1.* (correct) Black 1 creates a tall and wide territorial framework on the lower side, and also stops the growth of White's position on the right side. This is a type of junction move, at the point where two opposing frameworks both want to develop, and is very large.

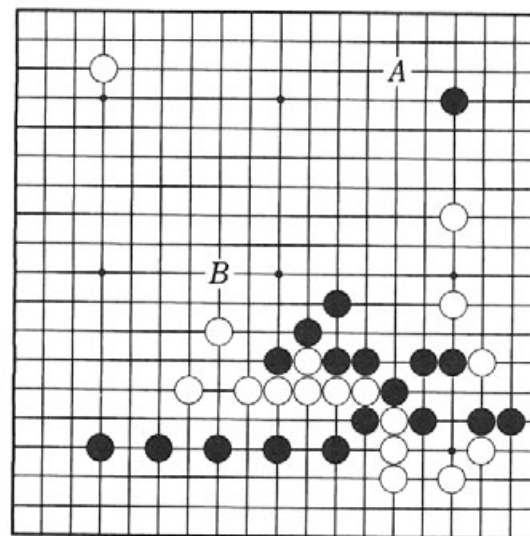
As for Black ▲, Black 1 reinforces it indirectly by capping the white group in the lower right, shifting the power balance between it and the white group a little nearer equality. Indirect reinforcement is enough because White cannot capture ▲ with just one more move anyway. Besides, the right side is open at *a*.

*Dia. 2.* (next page) If Black runs out at 1, he gives White the key point at 2. True, he can then step off some fourth-line territory with 3, but even fourth-line territory is inadequate here. White has an ideal formation in the upper left and superior power on the right side. Black has to counter by making the utmost of his lower side, as in *Dia. 1*.

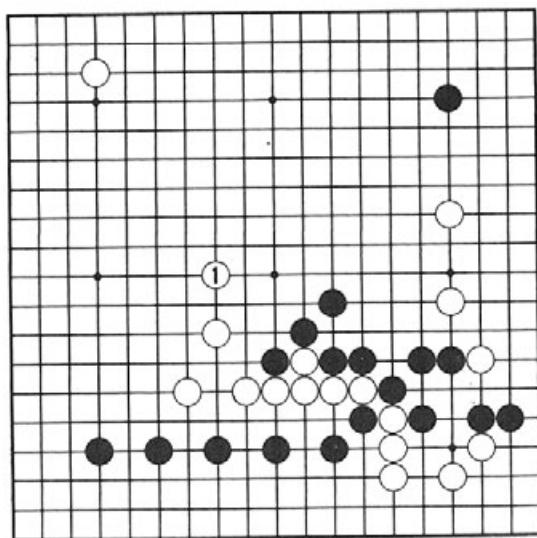


*Dia. 2*

**Problem 2: White to play**



*S. Tono (white) v. S. Fujisawa*

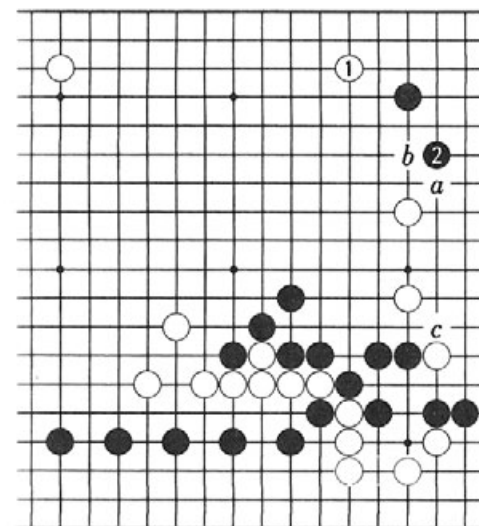


*Dia. 1*

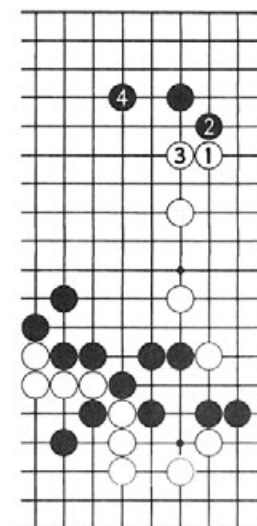
*Dia. 1.* (correct) White's center group is floating without eye shape. The best thing to do with such a group, when there is no other convenient way to protect it, is to run it out of the enemy's reach with a move like 1. If White failed to defend, Black could attack at 1 and scissor him against the row of black stones on the lower side. White 1 is therefore an extension that prevents a pincer attack. It also exerts a positive influence, by weakening Black's center group, for example, and thus indirectly strengthening the white stones on the right side.

*Dia. 2.* (next page) White is wrong to approach the corner from this direction because Black 2 weakens his right side position. White has no good continuation. White *a*, Black *b*, White *c*, the standard idea, still leaves him somewhat thin. White 1 was meant to attack Black's corner, but it is White's right side that comes under pressure instead.

*Dia. 3.* The correct move in this area is White 1. Black wants to occupy this point too, even without the provocation in *Dia. 2*.

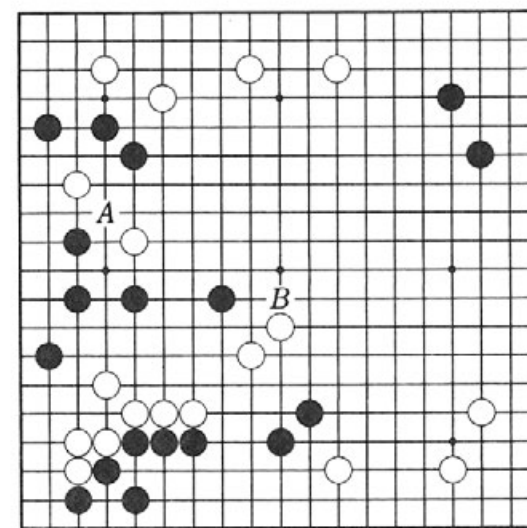


*Dia. 2*

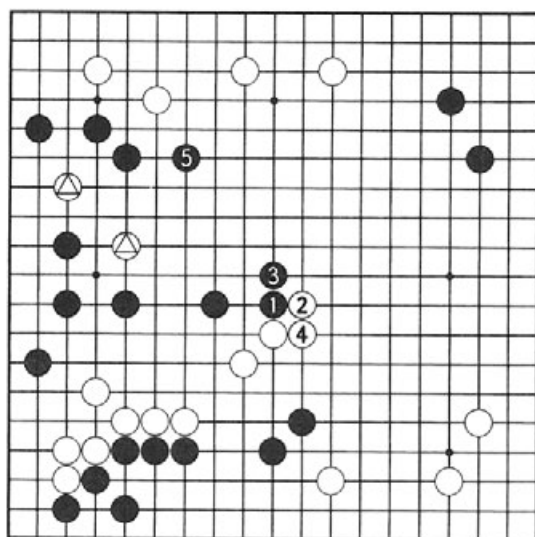


*Dia. 3*

**Problem 3: Black to play**



*K. Kobayashi (black) v. S. Sato*



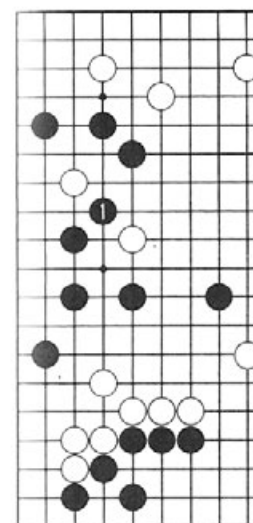
*Dia. 1*

*Dia. 1.* (correct) Black 1, 3, and 5 swallow up the two triangled stones entire, giving Black a large territory with good prospects for further growth. What makes this operation work is the fact that the white group in the lower left is not definitely alive yet. If White ignored Black 1 and let Black extend to 2, or omitted 4 and let Black cut there, he would find himself strongly attacked.

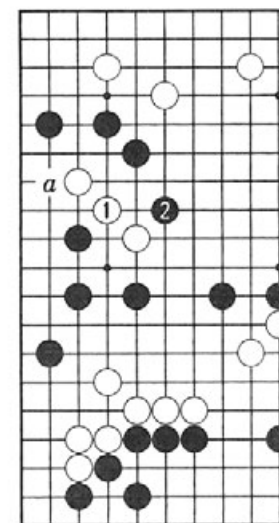
*Dia. 2.* (next page) By contrast, White need not answer this Black 1, and the territory Black takes is not enough to justify the nine stones played to get it.

*Dia. 3.* Besides, if White played 1, he would only be consigning three stones, instead of just two, to a likely capture, especially now that Black has played ▲. It is rarely good to make a move that your opponent would not deprive you of anyway. Note that if fighting develops, Black can link up underneath at *a*.

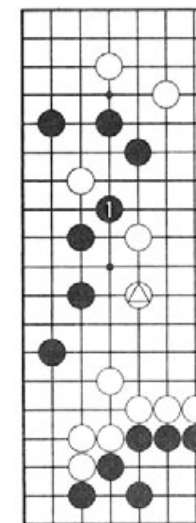
*Dia. 4.* If the triangled stone were white, Black 1 would be excellent, but since it is black, 1 is redundant.



*Dia. 2*

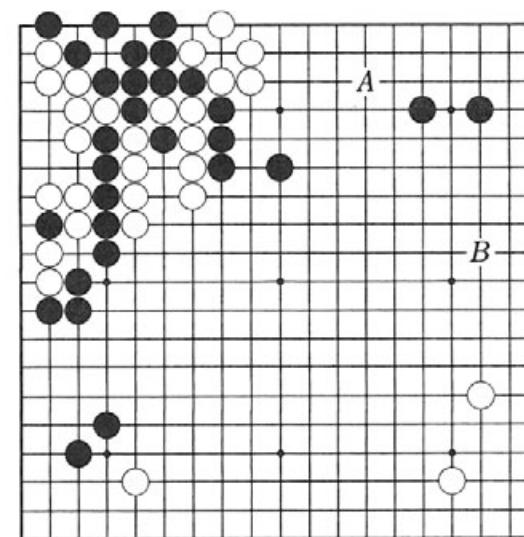


*Dia. 3*

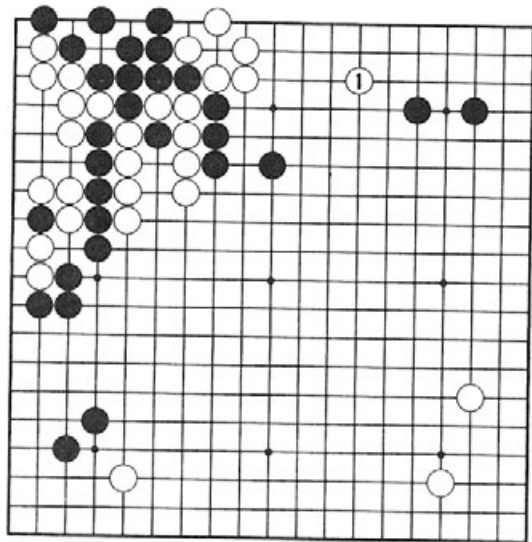


*Dia. 4*

**Problem 4: White to play**



*Gennan Inseki (white) v. Shusaku*

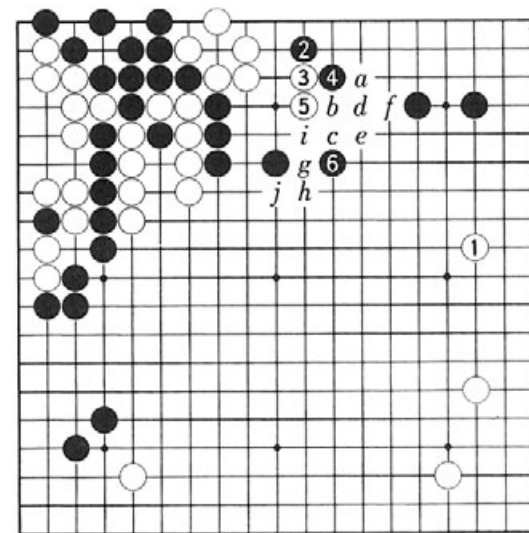


*Dia. 1*

*Dia. 1.* (correct) White 1 absolutely must be played to defend the white group on the upper side. In addition, it lands on the vulnerable point of Black's corner enclosure, and has an indirect effect on the floating black group in the center.

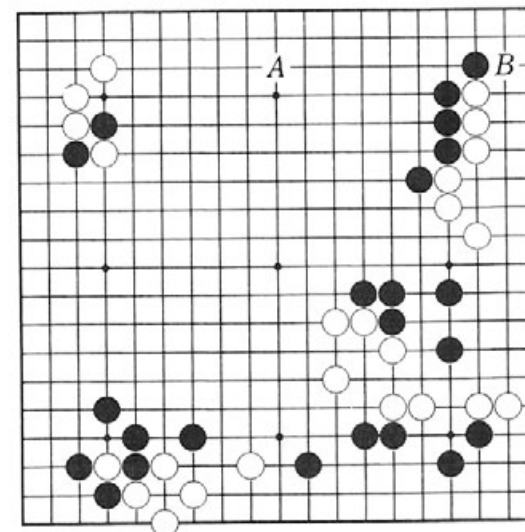
*Dia. 2.* (next page) This White 1 is, by comparison, a non-urgent extension. Black jumps at the chance to attack with 2, (or with 2 at 3, but Black 2 is more severe). After 6 White may not be dead, in fact he has several ways to live or escape,\* but there is no way he is magically going to turn this mess into a favourable result. Black will get a large corner and a strengthened outside position at the very least.

\* The simplest way to escape would be to turn at *b*. A fancier way would be to play White *a*, an inducing clamp, followed by Black *b*, White *c*, etc. up to Black *j*, but White is still not completely out of the woods and Black is gaining both territory and power.

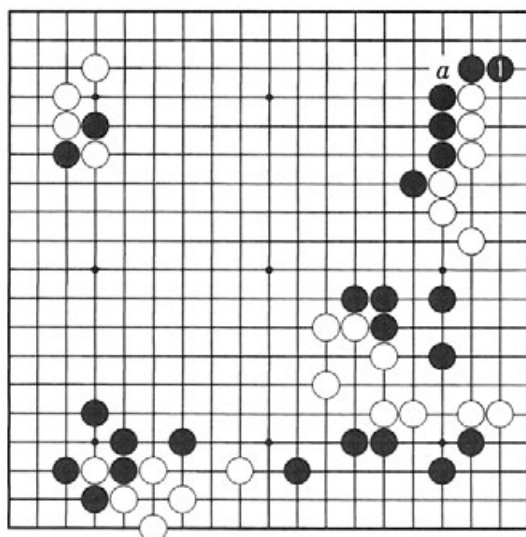


*Dia. 2*

**Problem 5: Black to play**



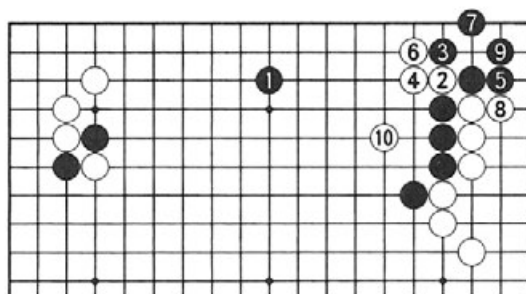
*Takagawa (black) v. Go Seigen*



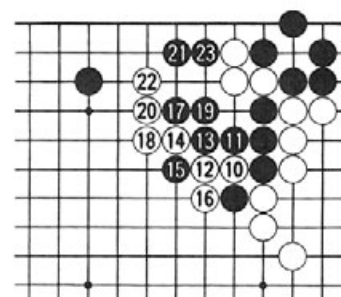
*Dia. 1*

*Dia. 1.* (correct) Black 1 is the larger move. It has considerable territorial value in that it prevents a white cut at *a*, and it undermines the eye space of the white group on the right side, which indirectly helps the black group stationed below.

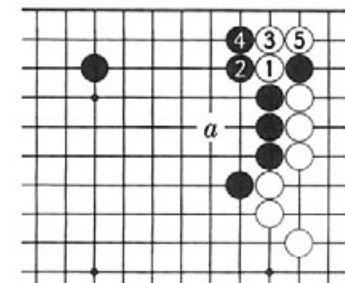
*Dia. 2.* If Black extends to 1, White cuts at 2 and Black's position crumbles. He can live in the corner with 3 to 9, but then White 10 destroys his shape in the center. For White, being able to play 8 in sente is also significant.



*Dia. 2*



*Dia. 3*

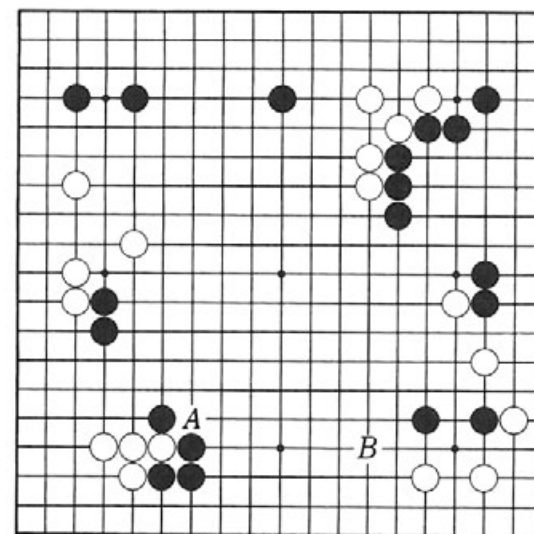


*Dia. 4*

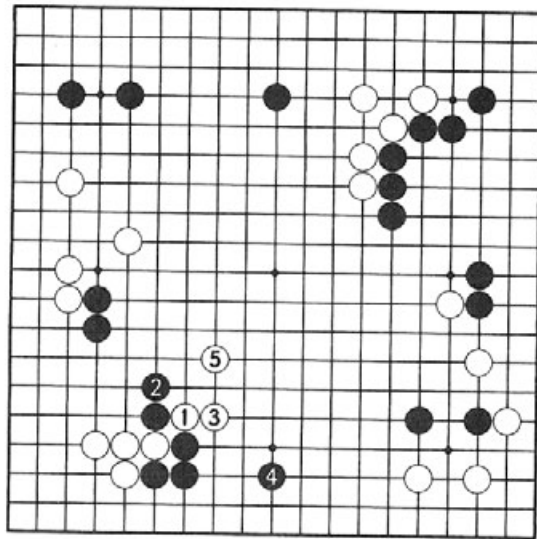
*Dia. 3.* A simpler way for White to play 10 is actually to cut here and force Black to make a territorially insignificant capture of three stones, taking overpowering outer thickness in return.

*Dia. 4.* The preceding diagrams make it clear that when White cuts at 1, Black must sacrifice the corner with 2 and 4, but the territorial loss is large and the three triangled stones are left short of liberties. White next threatens *a*.

**Problem 6: White to play**



*K. Honda (white) v. Y. Ishida*



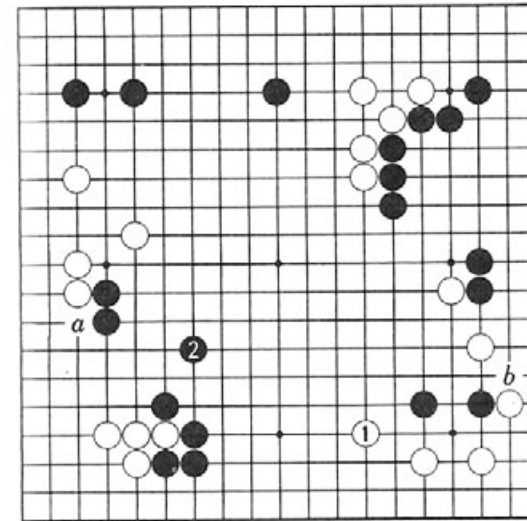
*Dia. 1*

*Dia. 1.* (correct) White 1 is a powerful cut, dividing Black into two weak groups. After Black's automatic response at 2, White can extend to 3, attacking the three black stones below, then jump to 5, attacking the four stones to the left. Black is on the defensive and White is in command.

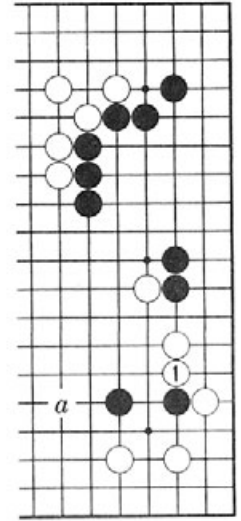
*Dia. 2.* (next page) If White plays 1, Black will link his weak groups together with 2. White's chance to attack is largely gone, and he will next have to look out for Black *a*, a move that would threaten the lower left corner while weakening the white stones on the side above.

White 1 is also bad in relation to the right side. It does not profit White to attack the two triangled stones from this direction because his own position is so thin in the opposite direction. Consider Black *b*, for example.

*Dia. 3.* The proper way for White to play in the lower right would be first to mend his thin spot with 1, then aim for an all-out attack at *a*.

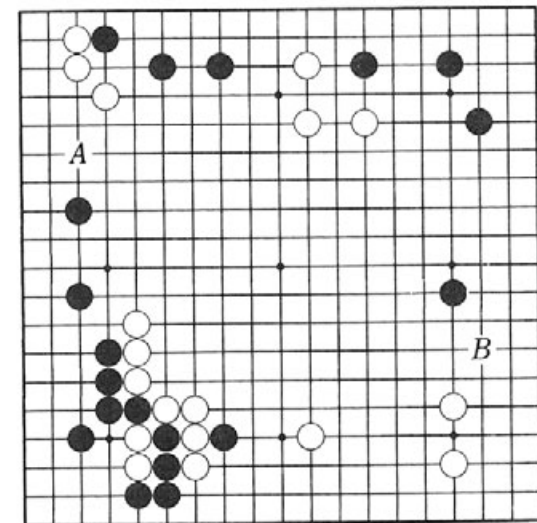


*Dia. 2*

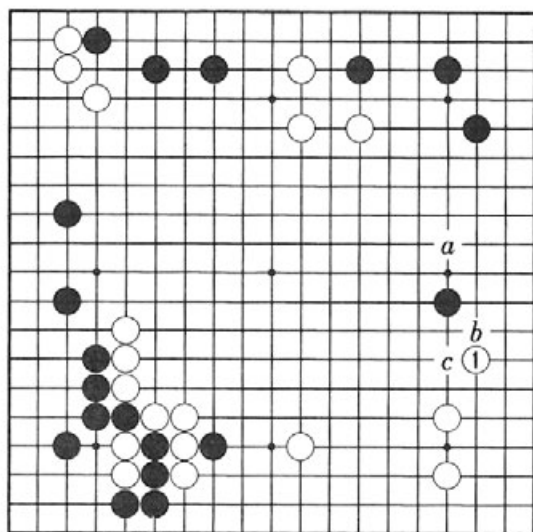


*Dia. 3*

**Problem 7: White to play**



*Shimamura (white) v. Handa*

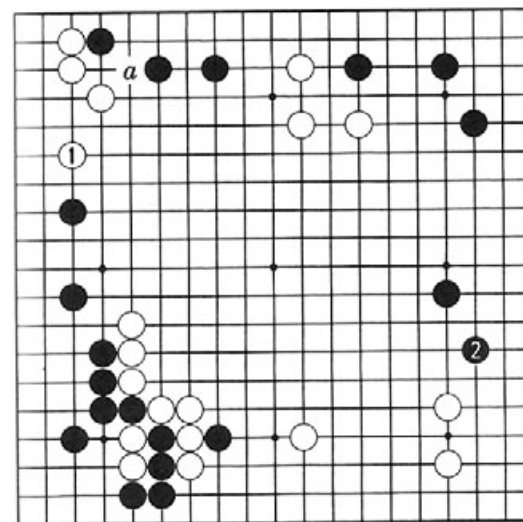


*Dia. 1*

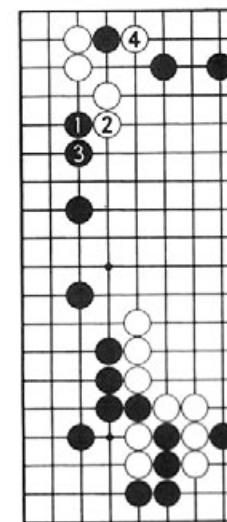
*Dia. 1.* (correct) White 1 is a big move. First, it makes a good formation with White's corner enclosure. Second, it threatens White *a*, a pincer attack against ▲ that White's power in the center would make very effective. Finally, it is hard for Black to answer. He does not want to exchange *b* for *c* because that would increase White's dominance of the lower side.

*Dia. 2.* (next page) This White 1 resembles the correct answer in being a knight's-move extension, but is nearly worthless. It does not threaten the triangled stone, nor is it needed to defend White's corner. Black takes the important point at 2. The time for White to play 1 would be in response to Black *a*.

*Dia. 3.* If Black extends to 1, White welcomes the opportunity to capture ▲. This harms the two black stones to the right.

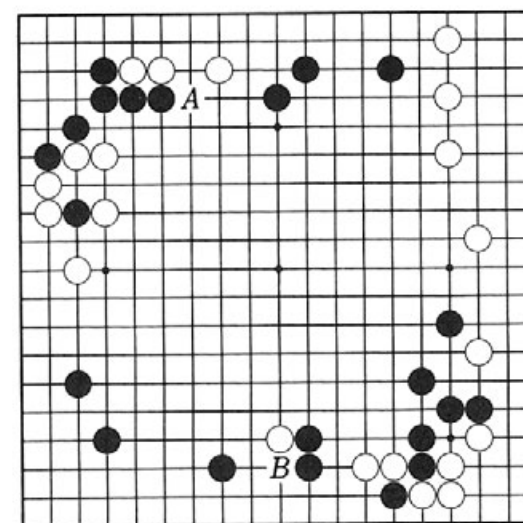


*Dia. 2*



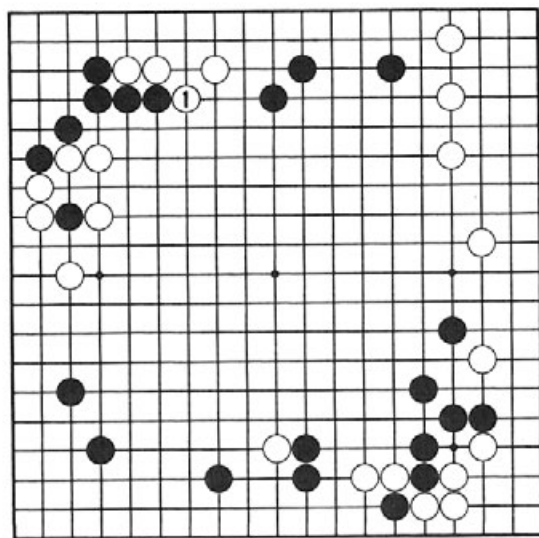
*Dia. 3*

**Problem 8: White to play**



*Takagawa (white) v. Shimamura*





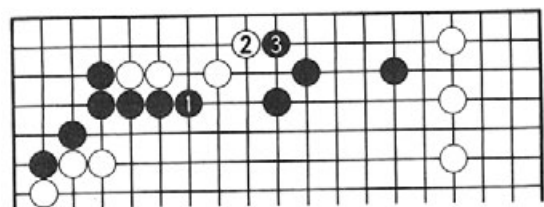
*Dia. 1*

*Dia. 1.* (correct) White 1 is both necessary, for the defense of the white group, and desirable, because it makes good shape and attacks the black group to the right.

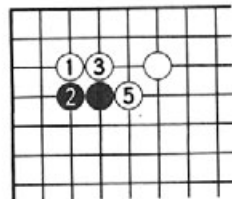
*Dia. 2.* If Black were to play at the same point, White would die, as the reader may verify. Black 1 is a common key point.

*Dia. 3.* The same key point arises in this joseki when Black blocks at 2. If he dares to ignore White 3, White 5 (the head of two stones) has crushing power.

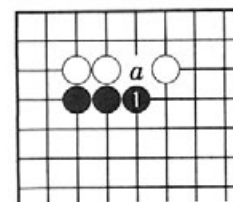
*Dia. 4.* (next page) Black 1 is therefore mandatory, and a strong move since it threatens to push through at *a* and cut.



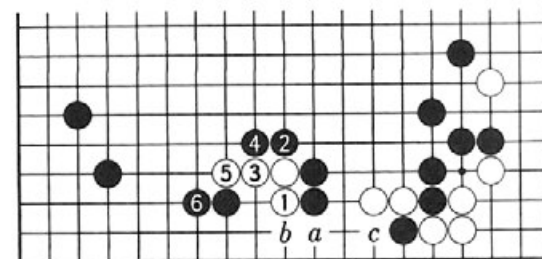
*Dia. 2*



*Dia. 3*  
4 elsewhere



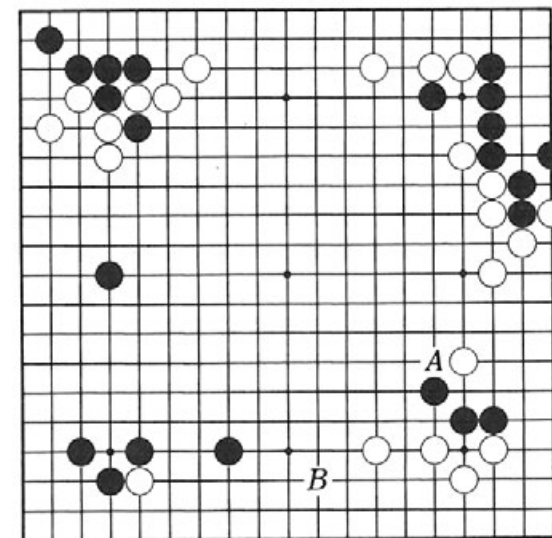
*Dia. 4*



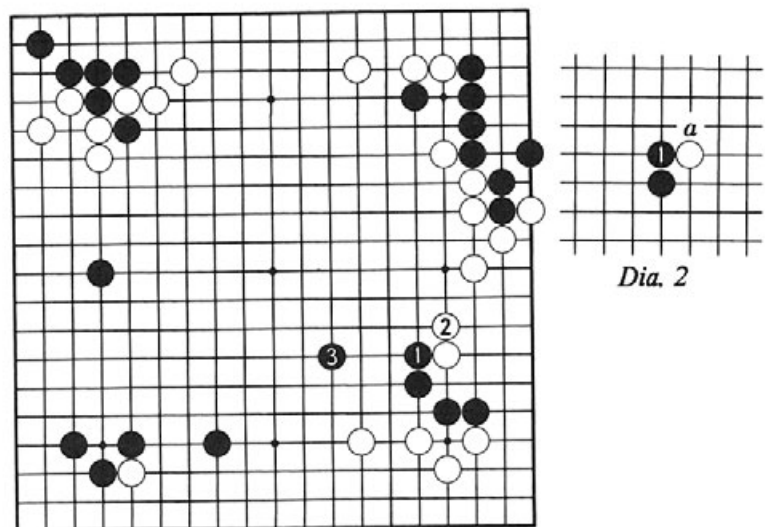
*Dia. 5*

*Dia. 5.* White's second choice, 1 in this diagram, is perhaps the worst move to appear in this book. It burdens White with a heavy, misshapen group to defend while Black develops his positions by attacking. The fact that Black can descend to *a*, threatening *b* and *c*, makes matters even worse.

**Problem 9: Black to play**



*Magari (black) v. Ohira*

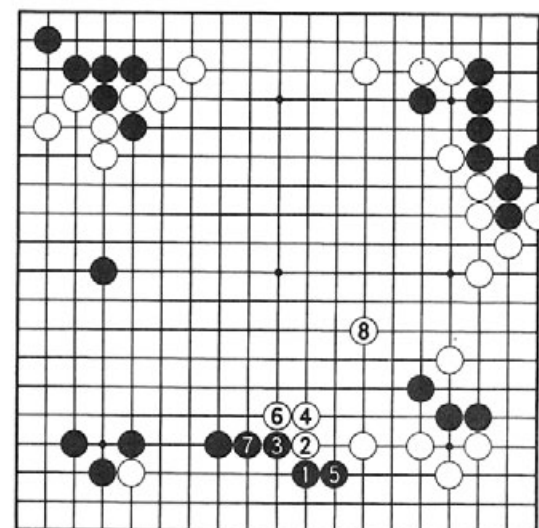


*Dia. 1*

*Dia. 1.* (correct) The black group in the lower right is in need of attention. Black 1 and 3 defend it, and 3 also helps to develop Black's framework in the lower left quarter of the board. Black 1 follows the dictum about defending with contact plays.

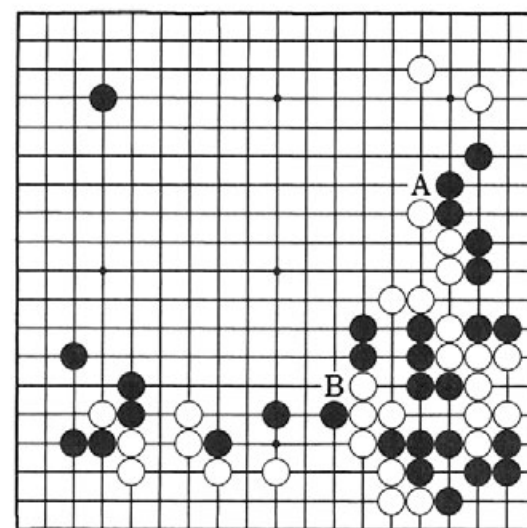
*Dia. 2.* In general, when two hostile stones oppose each other diagonally it is good for either side to push as Black did in Dia. 1 and does here. There are exceptions, but pushing once is rarely bad. If White does not answer, Black *a* is usually big next.

*Dia. 3.* (next page) Black is more than holding his own in the balance of territory, so there is no need for him to grab for more with 1. This indirectly hurts, not helps, his group in the lower right. White can attach at 2, extend to 4, turn at 6 in sente, then surround Black with 8. This could easily mean the end of the game.

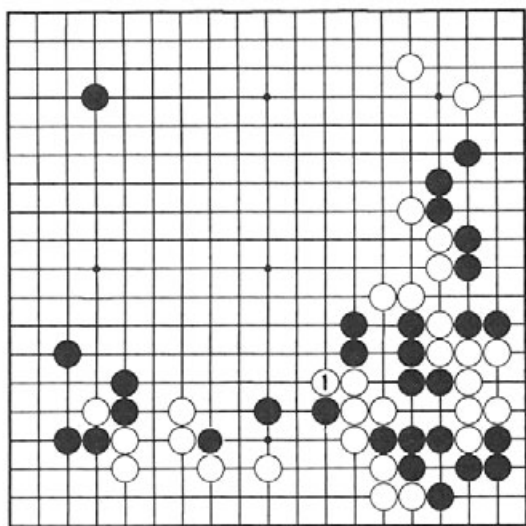


*Dia. 3*

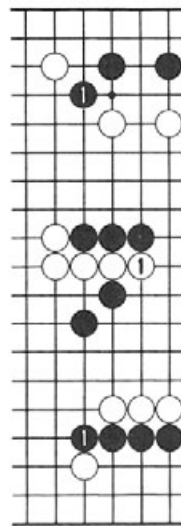
**Problem 10: White to play**



*U. Hashimoto (white) v. Iwata*



*Dia. 1*



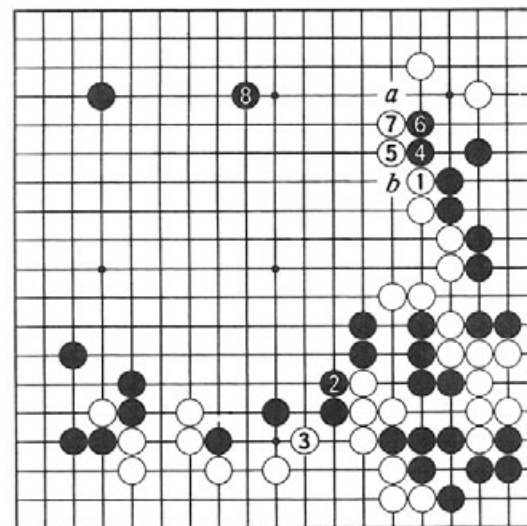
*Dia. 2*

*Dia. 1.* (correct) White should break out into the center with 1. In doing so, he attacks the three triangled stones, simultaneously covers the weak point shown in Dia. 4, and also puts himself in a position to attack the black group to the right, which has yet to attain a living shape in the corner.

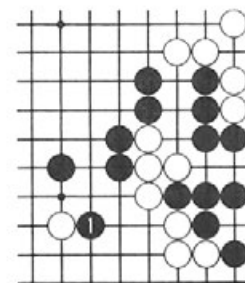
*Dia. 2.* Pushing through a narrow opening in the enemy's position as White did in Dia. 1 is always effective. Here are three more such moves, each almost automatically correct.

*Dia. 3.* (next page) This White 1 is ineffective. Black's group on the right side is not threatened by it, so he has time to close the gap at 2, forcing White 3, before he responds at 4 and 6. Next he extends to 8, cancelling White's wall and aiming to play first the hane at *a*, then the cut at *b*. White's gain in the upper half of the board is marginal and his loss in the lower half, as compared with Dia. 1, is large.

*Dia. 4.* If White does not defend at 3 in Dia. 3, Black strikes at 1, with dire results.

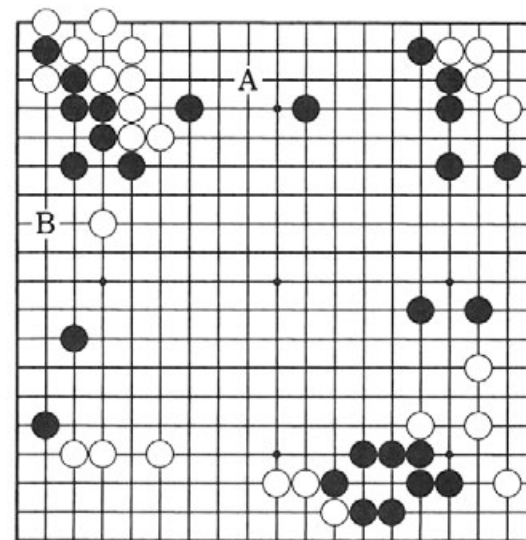


*Dia. 3*

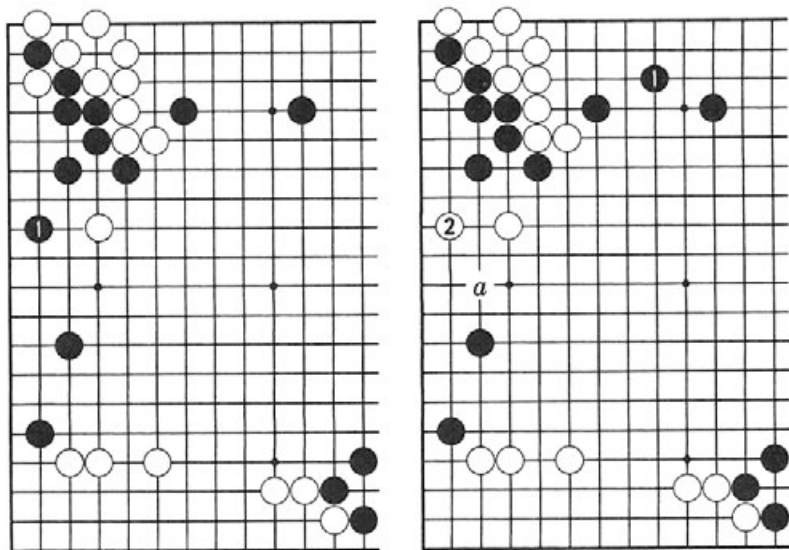


*Dia. 4*

**Problem 11: Black to play**



*K. Kobayashi (black) v. Rin*



*Dia. 1*

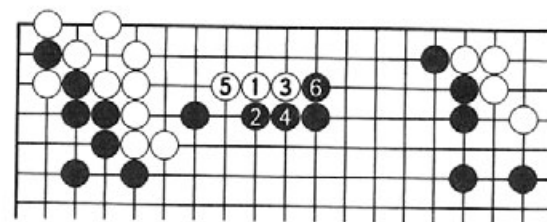
*Dia. 2*

*Dia. 1.* (correct) Black has two weak groups on the left side, and this is not the time for him to display his bravery by daring White to make a splitting attack. He must play 1 and deprive White of the opportunity. Even on the second line Black 1 is a large move because it is a vital defensive point.

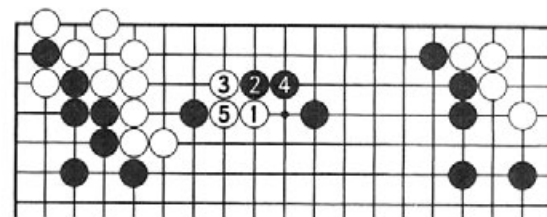
*Dia. 2.* There is no real need for Black to defend at 1, as Dias. 3 and 4 will show. White will probably seize 2, the point Black should have taken, or perhaps extend to *a*. Either white move splits the black groups above and below, and since neither of them has adequate eye shape, Black is in trouble.

*Dia. 3.* (next page) Black need not fear this invasion. Responding with 2, 4, and 6, he gains more in thickness than White gains in territory.

*Dia. 4.* If White chooses the high invasion, Black can sacrifice ▲ and take sente with 2 and 4. White's gain is less than ten points, and his upper right corner was independently alive without 1–5 anyway.

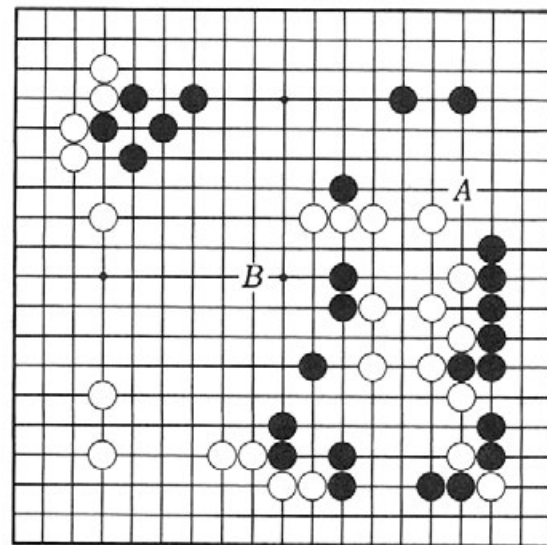


*Dia. 3*

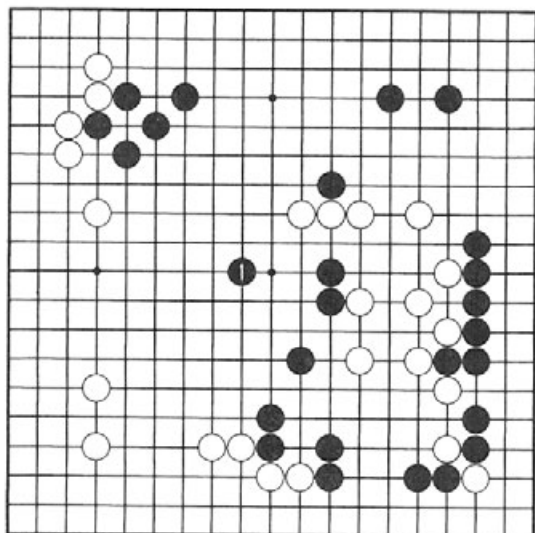


*Dia. 4*

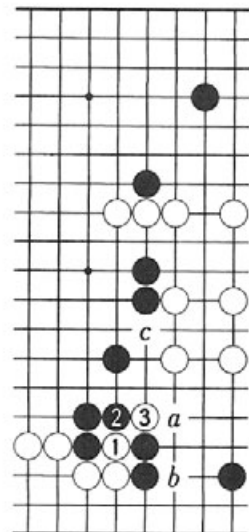
**Problem 12: Black to play**



*Cho (black) v. Miyashita*



*Dia. 1*

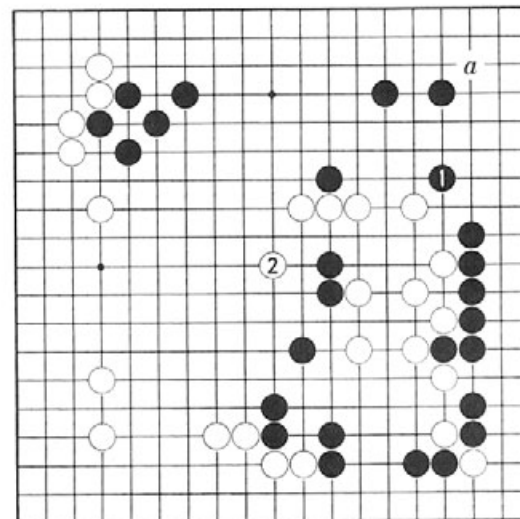


*Dia. 2*

*Dia. 1.* (correct) Black 1 is the key point regarding the balance of power. It strengthens Black's center stones and weakens White's. It also diminishes White's prospects on the left and indirectly enhances Black's prospects on the upper side.

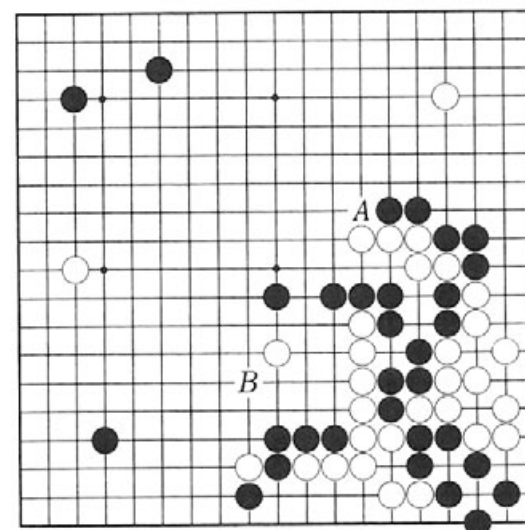
*Dia. 2.* Black's center stones may not seem to need any defense, but they are less safe than they look. White can cut them off with 1 and 3. White 3 cannot be captured because White *a* threatens *b*. White can also push through and cut at *c*.

*Dia. 3.* (next page) Black 1 makes a pleasing shape, but that is all. Its territorial value is small because White can still invade the corner at *a*, and the black stones on the right side were perfectly secure without it. White 2 reverses the balance of power in the center, threatening the cuts shown in *Dia. 2*, and builds toward a huge territorial framework on the left side.

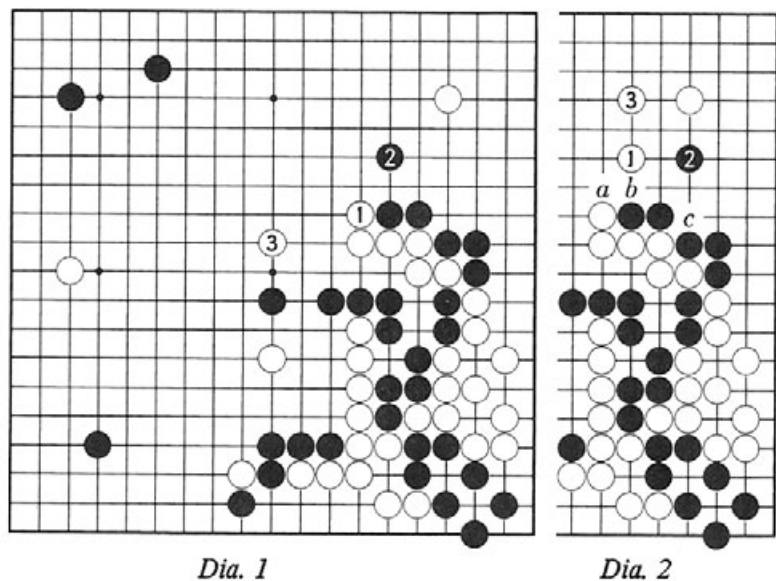


*Dia. 3*

**Problem 13: White to play**



*S. Hashimoto (white) v. Takagawa*



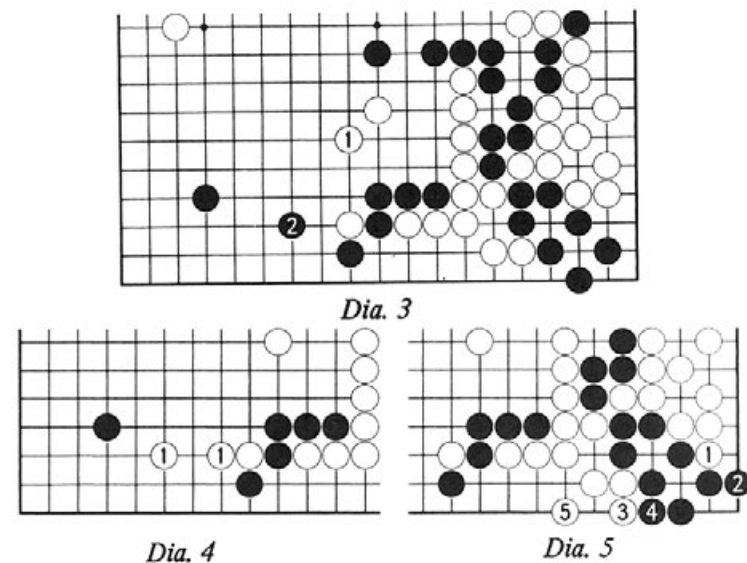
*Dia. 1.* (correct) White turns at 1 to defend his running group. If Black replies at 2, White starts attacking his center with 3; White 1 makes this two-space jump possible. If Black fails to play 2 –

*Dia. 2.* White attacks the side with 1 and 3. Black cannot cut through at *a* because White *b* threatens *c*. Of course he can live, but he does not like being shut in like this.

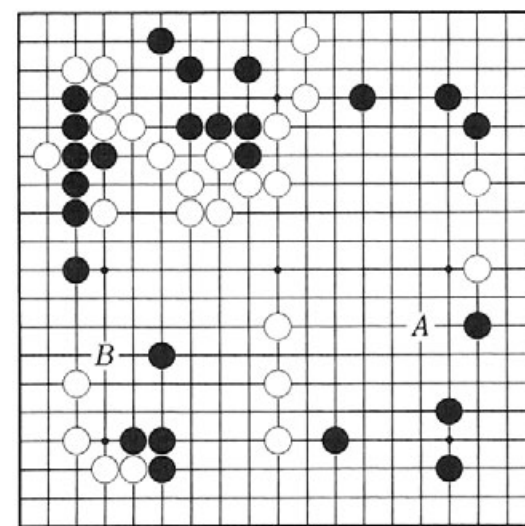
*Dia. 3.* (next page) White 1 here also defends a weak group, but there are two things wrong with it. The first is that it induces Black 2, helping Black to protect the lower side.

*Dia. 4.* White would prefer to wait till attacking the center had made him a little stronger, then strike at one of these two points.

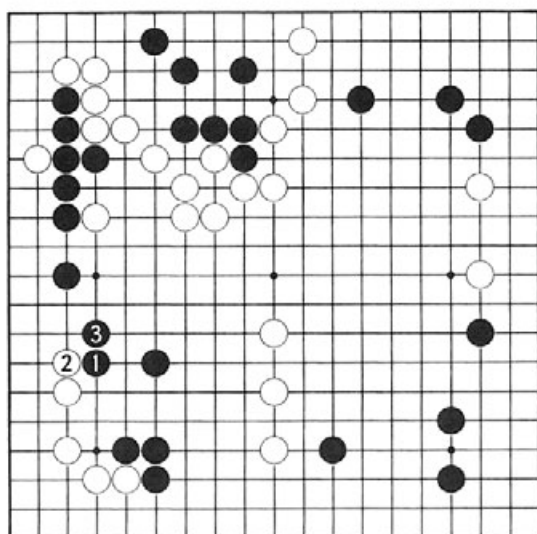
*Dia. 5.* The second thing wrong with the move in Dia. 3 is that it is unnecessary. If attacked, White can as a last resort play 1 and 3 in sente, then live with 5.



**Problem 14: Black to play**



*Sakata (black) v. M. Sato*

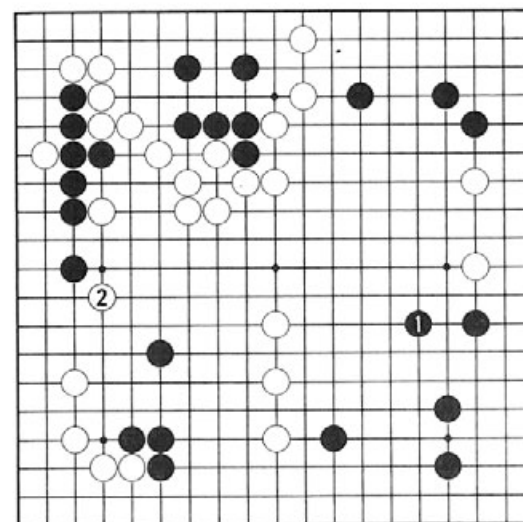


*Dia. 1*

*Dia. 1* (correct) Black has territory in four places, including a large framework in the lower right, while White's only significant territory so far is about fifteen points in the lower left corner. The balance of territory thus favors Black, but the balance of power favors White. The greatest danger to Black's territorial lead is that White will use his strength in the center to attack Black's unbased group in the lower left, so Black's best move is to link it to safety with 1.

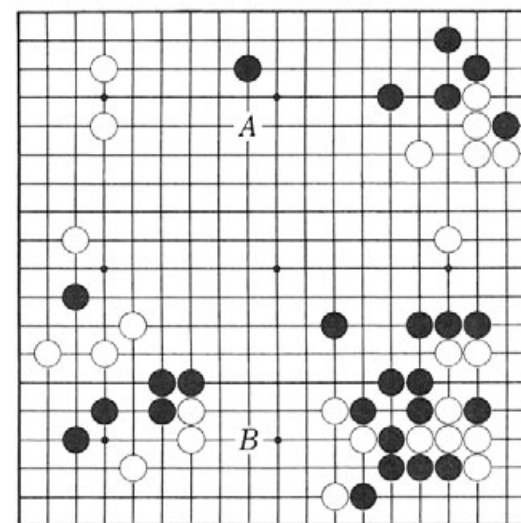
*Dia. 2.* (next page) If Black jumps to 1, White will isolate his weak group with 2. It will have a hard struggle to live, and the black group on the left side does not have completely definite eye shape yet either.

Besides that, Black 1 itself is only lukewarm. It is too close to the rest of Black's position in the lower right to be really big in terms of territory, and Black cannot hope for a fruitful attack on the two white stones on the right side because of White's thickness in the center.

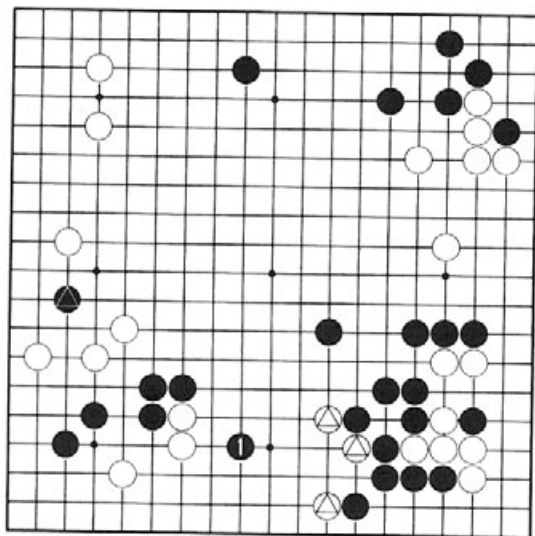


*Dia. 2*

**Problem 15: Black to play**



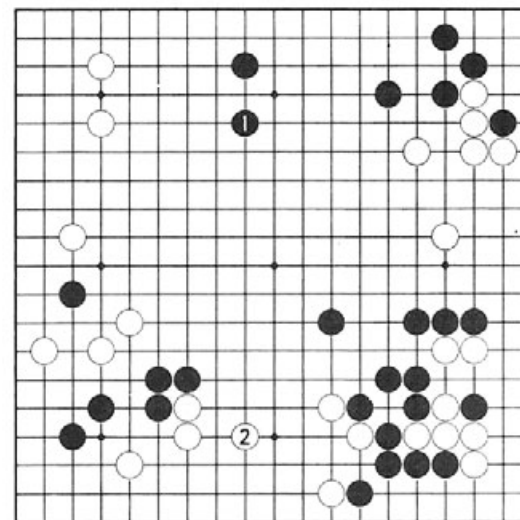
*A. Ishida (black) v. U. Hashimoto*



*Dia. 1*

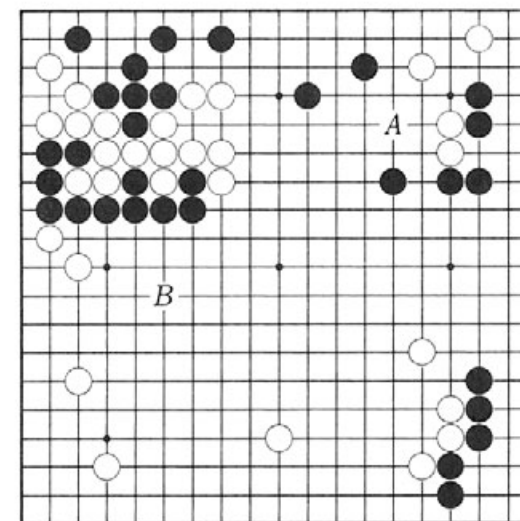
*Dia. 1.* (correct) This time the balance of territory favors White. Black's best chance to catch up is to put his thickness in the lower right to work by attacking at 1. White will have to abandon his three triangled stones and concentrate on saving the three to the left of 1. In the course of the fighting, Black hopes both to make profit and to develop his lower-left-corner group. Once that group is stronger, he can begin to think about drawing out ▲ or otherwise invading White's framework on the left side.

*Dia. 2.* (next page) This is a defense-only move, having little effect on the left side and still less on the live white group in the upper right. White defends the lower side and holds a big lead. Black's thickness in the lower right goes to waste, for there is now no way he can use it to invade or attack.



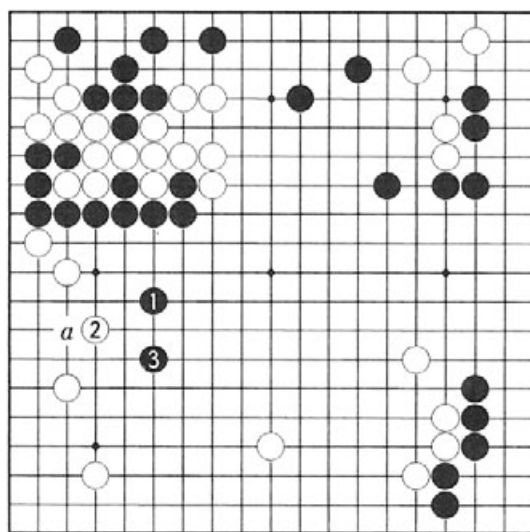
*Dia. 2*

**Problem 16: Black to play**



*Miyashita (black) v. U. Hashimoto*





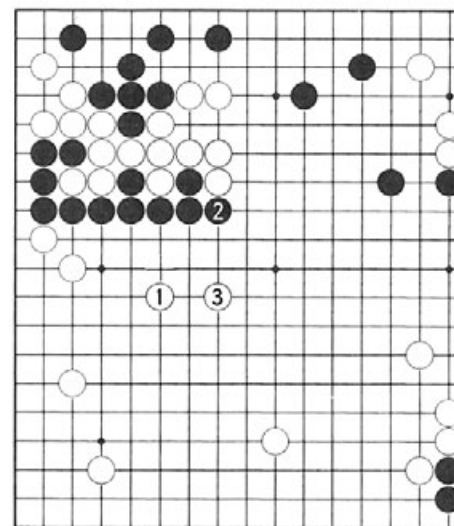
*Dia. 1*

*Dia. 1.* (correct) This is somewhat like problem 12. Black 1 serves the dual purposes of defending the eyeless black group above and reducing the white framework in the lower left. It also threatens an invasion at *a*. If White plays 2 to prevent that, Black can keep coming on in with 3.

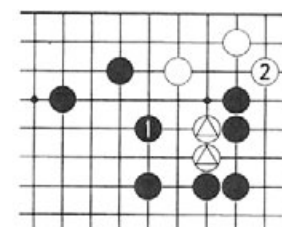
*Dia. 2.* (next page) Black may as well resign if he lets White have 1. This is building territory while attacking on a stupendous scale. The difference to *Dia. 1* is probably over fifty points.

*Dia. 3.* Black 1 here is not so good. Aside from the clear danger that White will reply with the previous diagram, the exchange of 1 for 2 should be avoided because it makes White definitely alive. True, Black can pick up the triangled stones, but that would hardly be worth more than five points, and the wall made by 1 is rendered ineffective by the white group (not shown in this diagram) facing it from the left.

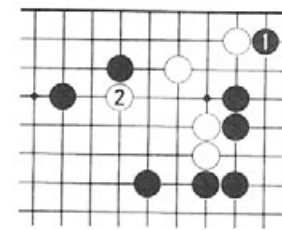
*Dia. 4.* Black would prefer to attack in the corner with 1, an exception to the rule about not using contact plays. This would force White to scramble out at 2.



*Dia. 2*

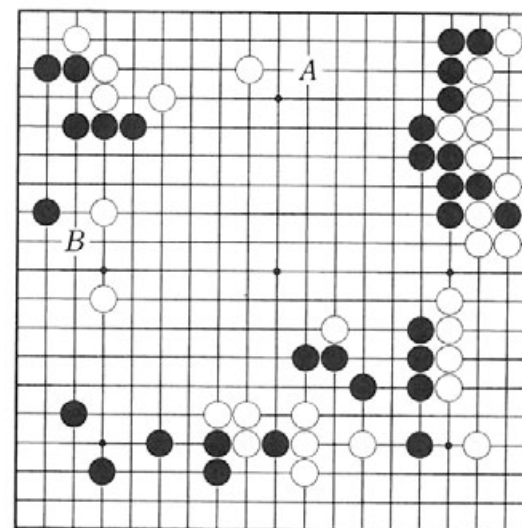


*Dia. 3*

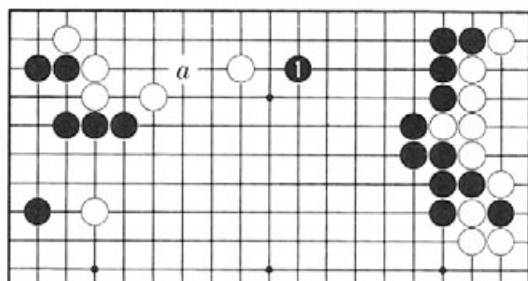


*Dia. 4*

**Problem 17: Black to play**

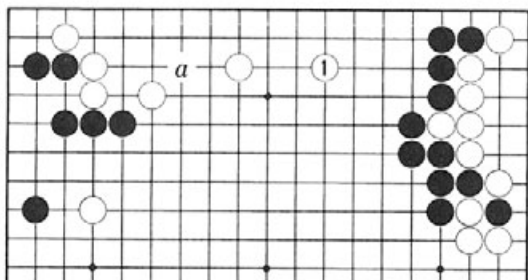


*Okubo (black) v. K. Kobayashi*



*Dia. 1*

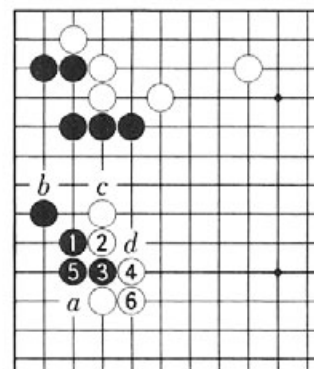
*Dia. 1.* (correct) Black 1 is a big extension. It gives Black territory in front of his wall and at the same time threatens an invasion at *a*.



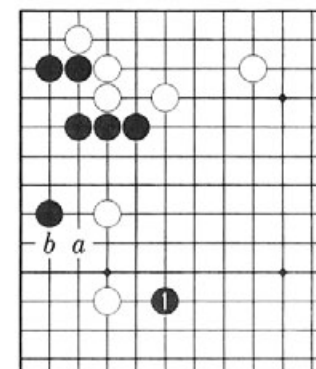
*Dia. 2*

*Dia. 2.* Consider what happens if White extends to 1. Not only does Black lose his chances to make territory and to invade at *a*; his wall itself begins to come under attack. Both the balance of territory and the balance of power are at stake here.

*Dia. 3.* (next page) This Black 1 is simply a bad move. It would turn out well only if White ignored it, allowing Black to continue at 4. The sequence through 6 actually strengthens White, while Black's territory grows by just four points. Next White can play *a* in sente, threatening *b*, and White *c* also threatens *b*, which means that Black cannot expect to cut at *d*.



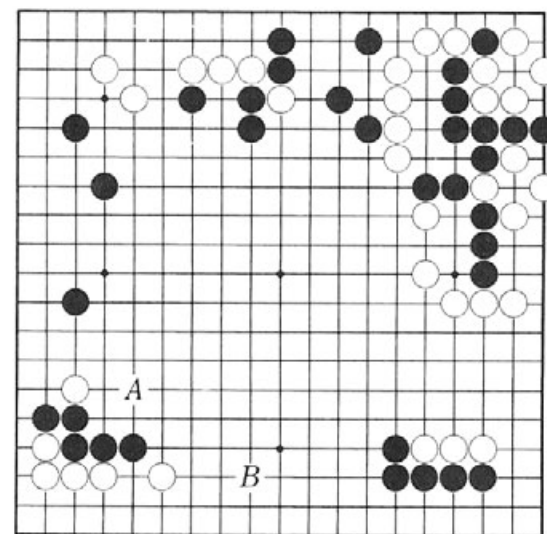
*Dia. 3*



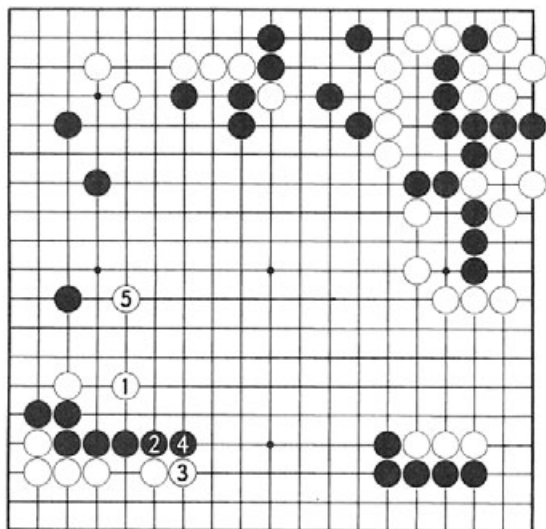
*Dia. 4*

*Dia. 4.* If Black is going to play here, he should attack White's two stones from above with 1. There is no reason for him to make any move on the edge. If White plays *a*, Black can play *b* and vice versa.

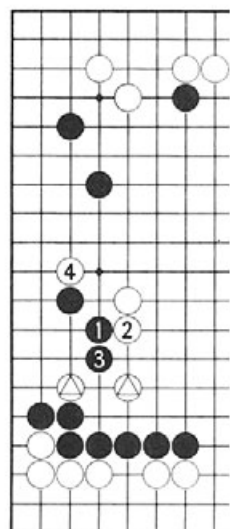
**Problem 18: White to play**



*Rin (white) v. Kudo*



*Dia. 1*

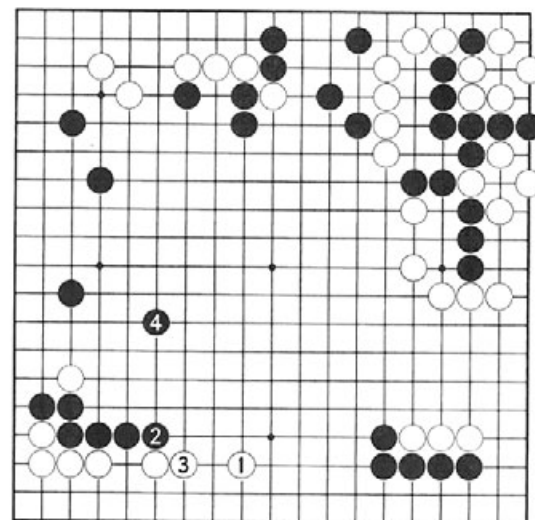


*Dia. 2*

*Dia. 1.* (correct) White 1 is a good way to start reducing the large framework Black has on the left side. Black can be expected to fight back with 2 and 4, following which White caps the center of his framework at 5. This play may look loose, but —

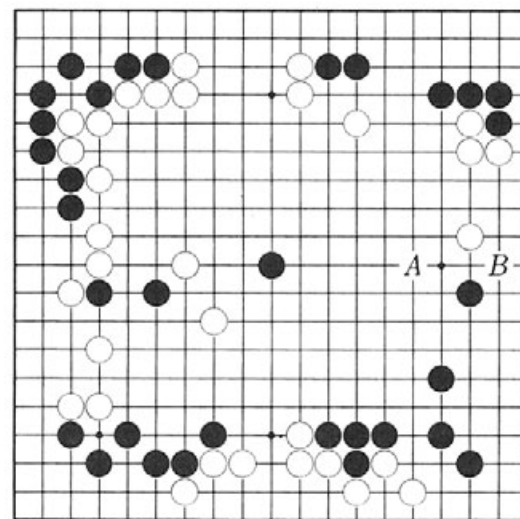
*Dia. 2.* Next if Black plays 1, White can push at 2, then cut into the left side with 4. Black may be able to capture the two triangled stones, but White 4 more than makes up for that. Black 1 is not a good move.

*Dia. 3.* (next page) Neither is White 1 in this diagram. In fact White 1 is never correct in this joseki position, because Black can always force the 2–3 exchange, after which 1 becomes redundant. White 1 at 3 would be better. Neither move, however, has any effect on the rock-solid black group in the lower right, so this is a questionable direction for White to play in.

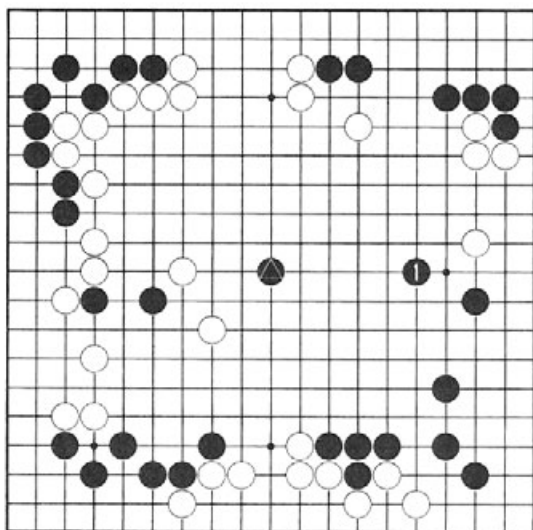


*Dia. 3*

**Problem 19: Black to play**



*S. Fujisawa (black) v. Y. Miyamoto*

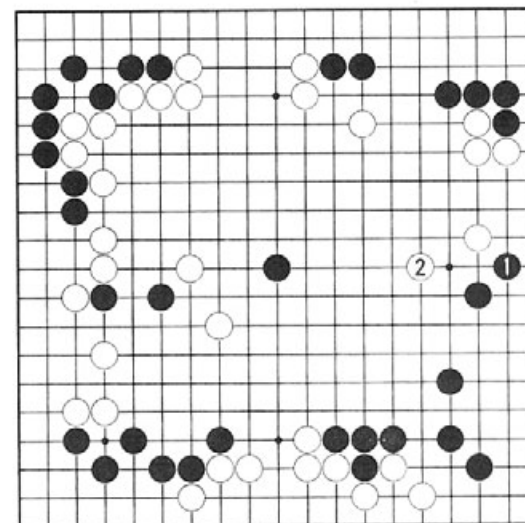


*Dia. 1*

*Dia. 1.* (correct) This is a center-oriented game, so it makes sense for Black to play toward the center, and Black 1 is a beautiful move. Besides reaching a helping hand toward Black's outpost at ▲, it attacks the white group on the right side and gives Black a nice framework in the lower right quarter of the board. That plus Black's territory in the other three corners is more than enough to counter White's center.

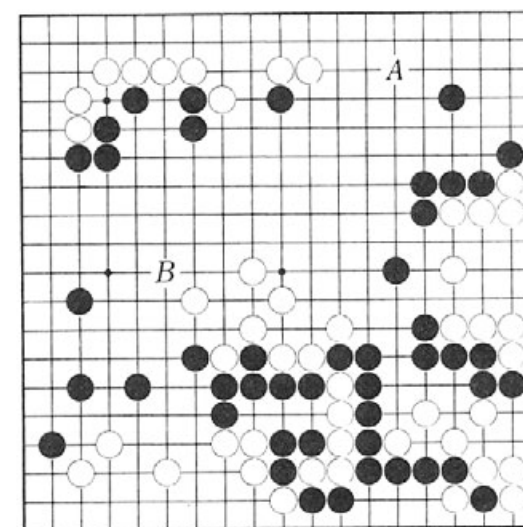
*Dia. 2.* (next page) This Black 1 goes in exactly the wrong direction. White ignores it and takes the key point at 2. His center is beginning to look dangerously large.

There are times, not only in the endgame but in the middle game as well, when a diagonal move like 1 is extremely good. In a center-oriented game like this one, however, such a move is irrelevant.

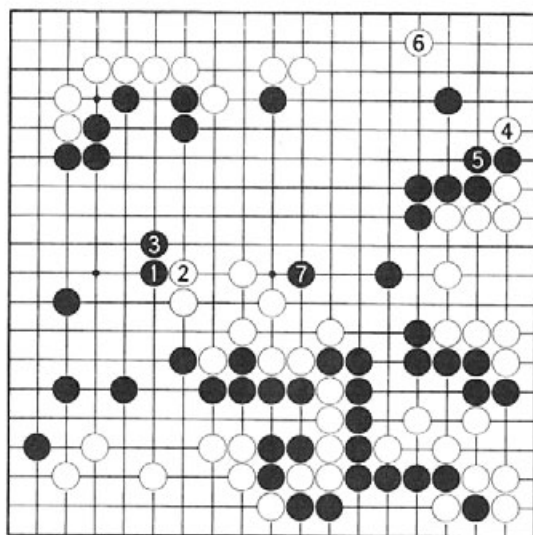


*Dia. 2*

**Problem 20: Black to play**



*Takemiya (black) v. Rin*



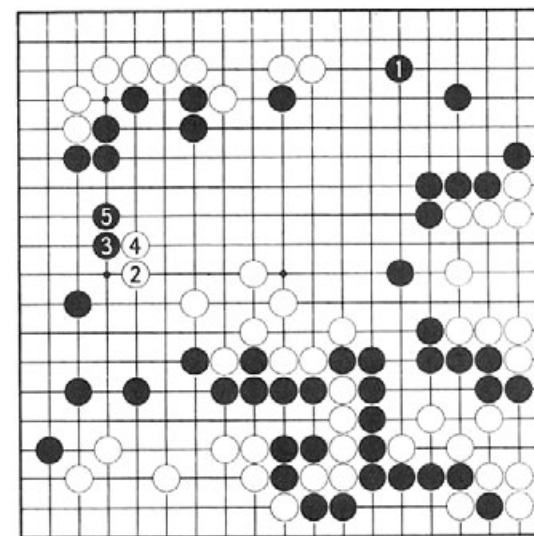
*Dia. 1*

*Dia. 1.* (correct) Besides taking sixth-line territory on the left side, Black 1 attacks the weak white group in the center. If Black next closes the upper right corner, he will have a big territorial lead, but if White plays there with, say, 4 and 6, Black can renew his attack at 7.

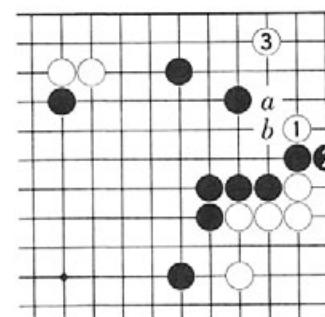
*Dia. 2.* (next page) The upper right corner is big, but White will play 2 and 4 and beat Black down to the fourth line in sente while giving his center group some needed eye space. The difference this makes in territory alone is over ten points, and the safety White gains is worth as much again. Besides all that, Black 1 does not close the corner properly.

*Dia. 3.* White still has room to invade with 1 and 3. Black will find it hard to capture him because White *a* and *b* are sente.

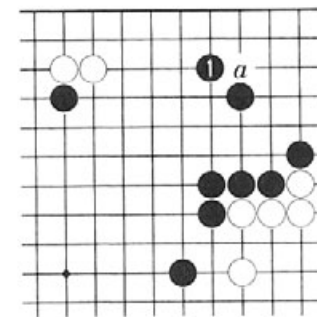
*Dia. 4.* Because of this, if Black wants to close the corner he should hold himself to 1, or even *a*.



*Dia. 2*



*Dia. 3*



*Dia. 4*

