

Introduction: The scope of shape

What is shape?

Strong go players have in their armoury many set patterns of play. While shape (Japanese *katachi*) could mean any pattern that regularly occurs on the go board, it is useful to restrict the idea somewhat. The most immediately valuable shape ideas are those revealing the position of *vital points*. A vital point is a key location. If you occupy it, that by itself will give you a good result, not by some magic, but because of the nature of the position.

This is very important in practical play: from the point of view of reading, playing the vital point is only looking one play deep! Strong players are able to play well without much apparent thought, simply by concentrating on correct shape (which is not to say that deep reading has no part in go).

To start out, there is a small collection of go proverbs that help one to recognise those vital points of shape. (See the proverb index on p.216.) They are heuristics, not rigorous rules, and so are best studied with their exceptions: the meta-proverb says ‘beware of applying proverbs blindly’.

How do *joseki* and *tesuji* relate to shape?

In learning the basic tactics of go, one at an early stage identifies cutting points as crucial. Some time after that, the study of *tesuji* problems shows that major tactical gains may result from certain standard plays, in particular those taking advantage of lack of liberties. Good shape plays may be less extreme or dramatic than those handled under the heading of *tesuji*, and yet still offer important advantages. Opportunities to play *tesuji* occur only a few times in a game between well-matched players, but good shape is constantly required.

Before studying shape, most players will encounter a few set openings, called in Japanese *joseki*. *Joseki* are standard sequences, including the conventional corner openings. They are patterns that have been evaluated by consensus of professionals.

A given *joseki* sequence steers a way through many possible variations, some of which are discarded as obvious tactical failures. Normally many further variations are rejected as poor shape: some of the players’ stones are

inefficient or redundant, one of the groups created has inadequate eye shape or is difficult to develop further, and so on.

Objectives of this book

To explain which points are vital in given shapes.

To show how good shape is achieved, and bad shape exploited, in fighting contexts.

To integrate shape proverbs into your knowledge of go.

To look behind the proverbs to another level of more explicit mechanism, to provide supporting material, and to explain exceptions.

To break down the barrier between *tesuji* and *joseki* points of view, connecting pure intuitions with learned knowledge.

To demystify many common *tesuji*.

To help the reader to visualise how and where a *tesuji* might happen in the future, a requirement for a *dan* player.

To discuss the choice of variation at a point in a *joseki*, when tactical reasons alone aren't a sufficient guide.

To address as we go along questions about *suji*, or correct style, covering some of the content of the many texts on '*kata* and *suji*' in the Japanese literature.

To contribute to the local, critical theory of go, by attempting a systematic listing of possibilities in a pattern, with criteria for choosing amongst them.

To develop an ingrained respect in the reader for the principles of good shape (for example: connect but remain light and flexible, don't fill in your own liberties without very good reason, develop rapidly but also take into account eye shape).

To provide a reference on shape (there are an index of shapes and a proverb index at the end, to help you refer to particular patterns).

To show in action the comparative method of go study.

What should I study at my level?

From 10 *kyu* to 5 *kyu* levels, you should probably concentrate on recognising standard shapes as they come up in your own games, or play through professional games looking for them. It may be hard to understand why mistakes in shape are bad play, until you have also studied the basic shape concepts. In particular the study of *joseki* at this point may appear to be unrewarding, plain and simple memorisation.

Problem solving, first of all about basic life-and-death and then more general tactics under the heading of *tesuji*, is likely to seem more attractive to the player interested in progressing beyond 10 *kyu*. After solving enough problems from the go literature, you should begin to find the vital points in formations. This book can serve as a reference for these standard shapes.

The extended *joseki* example studied in this Introduction is suitable for players about 5 *kyu* and stronger. You can use it as a diagnostic test for what you already know. If you don't initially get much out of it you should probably read some of the simpler sections first (see below).

The approach of this book

Books on *joseki* are arranged by variation; books on *tesuji* are organised in one of two ways: by underlying shape, or by function (as in the *Fujisawa Shuko Tesuji Dictionary*, the current standard work). None of these structures makes for readability, but they are suitable for reference works. We normally adopt a combination of shape and function approaches.

Studying this book

Some people will read this work through as a book (if you are of *dan* level you might enjoy this); perhaps alternating with a book on *tesuji*. There are five main parts, each starting on a fresh area, within which the chapters generally increase in difficulty. The parts, too, become harder as the book progresses. Each chapter is broken down into short sections dealing with a specific topic. There are also three problem sets, the third being much harder than the others.

Otherwise you may find it helpful to study one of these shape 'courses'. You can use these section lists as our indications of difficulty.

First reading (10 *kyu* course):

1.1, 1.2, 1.3. 2.1 to 2.5. 3.1, 3.4, 3.5B, G and M. 4.1, 4.2, 4.4, 4.5, 4.6. 5.1, 5.3, 5.4. Problem Set 1 first half. 7.1, 7.4, 7.5, 7.6. Problem Set 2 first six problems. 11.1. 13.1, 13.2, 13.4.

Second Reading (5 *kyu* course):

Introduction. 1.4, 1.5. 2.6. 3.2, 3.3. 4.3, 4.7, 4.8, 4.9. 5.2, 5.5, 5.6. 6.1, 6.3. Rest of Problem Set 1. 7.2, 7.3, 7.7, 7.8. 8.1, 8.2, 8.3. 9.1. Rest of Problem Set 2. Chapter 10. 11.2, 11.4. 12.4. 13.3, 13.7. 14.1, 14.2.

Third Reading:

3.5. 6.2, 6.4. 8.4, 8.5. 9.2, 9.3. 11.3, 11.5. Chapter 12. 13.5, 13.6. Chapters 14 and 15. Problem Set 3.

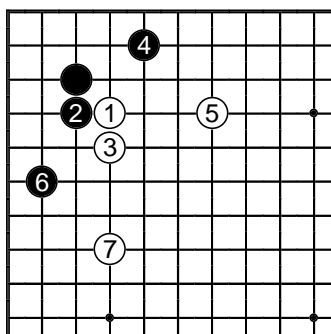
References

This book could usefully be read in parallel with *Tesuji* by James Davies (Kiseido), *Get Strong at Tesuji* by Richard Bozulich (Kiseido, this book has many examples on correct *suji*), *Tesuji and Anti-Suji of Go* by Eio Sakata (Yutopian), and *Proverbs*, Max Golem translator (Yutopian). For a general introduction to go read *Teach Yourself Go* by Charles Matthews (Hodder & Stoughton/NTC) which provides enough background to begin this book. We refer in the text to ideas of Bruce Wilcox; *EZGO – Oriental Strategy in a Nutshell* (Ki Press, ISBN 0-9652235-4-X), written with Sue Wilcox, is a representative book.

An example treated *joseki*-style

The rest of this Introduction works over a single opening pattern. This approach is typical of *joseki* books: you take a single corner opening and discuss a number of variations. You can read on to get a feel for the overall scope of shape ideas, and examples of some basic proverbs, in the context of decision-making. There's therefore the disadvantage of no single conclusion or main point. That partly explains why this isn't the way adopted in most of the rest of the book. Generally we take one pattern and look at it in various contexts. Then there is some basis for comparative reasoning, and a bit more dogmatism.

◆ Cross-references are given to the main text, in case at some point you wish to follow them up, and a number of proverbs are highlighted like *this*.



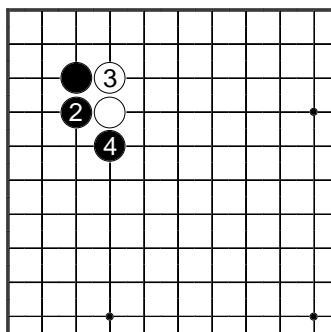
This is a regular sequence in a corner occupied first by Black, at the 3-3 point. It is relatively simple: Black's control of the corner is not contested, while White plays to avoid making a weak group. The White group then exerts influence in the centre.

It is decided early on that Black has the corner, and after that both players can be said to be 'making shape'.

Behind even such an ordinary development there may lie dozens of variations. We shall look at quite a number in the remainder of this introduction, as a way of surveying the facets of the idea of shape.

◆ Other related 3-3 patterns are to be found in 1.4, 1.5, 3.1 and 3.3.

Immediate loss of good shape

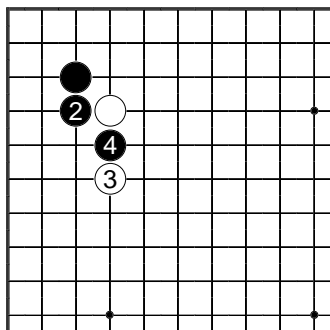


To begin with a fundamental example, White's choice of 3 here is bad shape. With 4 Black applies the proverb *play hane at the head of two stones*. After that White cannot get a good result in this part of the board.

If you commonly allow this to happen to your stones, you can probably make an instant improvement by avoiding this sort of result.

◆ This and related proverbs are studied in Chapter 4.

Playing for light shape

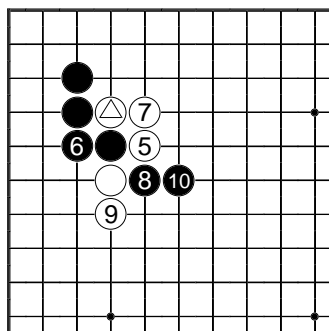
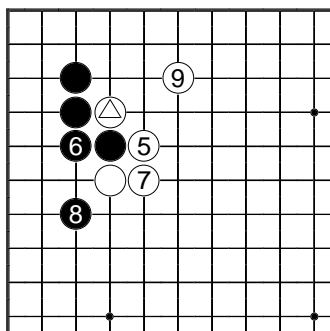


There is another recognised possibility for White 3. White can make the one-point jump played in this diagram. White must understand the purpose of this move. When Black plays 4 as shown, White will not be able to connect the two stones solidly. Therefore White 3 is a so-called *light shape*.

The main reason to prefer light shape (2.6) is that it makes defensive tasks easier. A characteristic mistake of amateur players is to make *heavy shape*: to develop groups without sufficient regard to their future defensive requirements.

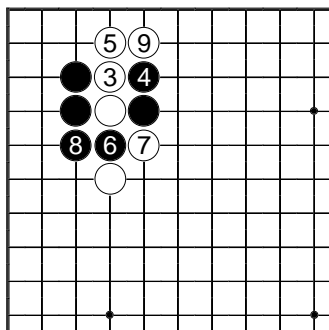
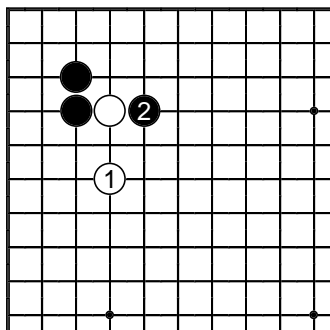
This problem manifests itself in various ways: reluctance to sacrifice stones, even those without any great strategic significance; a greedy attitude to invasions, not admitting that the opponent deserves at least some territory; reduction plays that are too deep, and which have to struggle for life; too many solid connections and groups underdeveloped because of unreasonable fear of later cuts or invasions.

Strong players are keen on sacrificing stones. They can do that successfully, for several reasons: understanding of which stones can be sacrificed, and which are essential; good technique to get the most out of a sacrifice; accurate judgement of the resulting position; and a sharp eye for later use of stones given up.

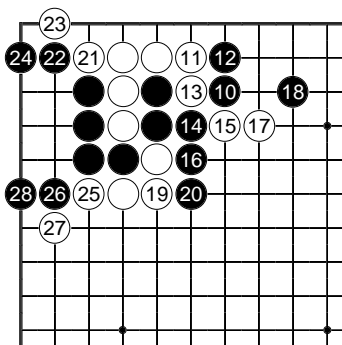
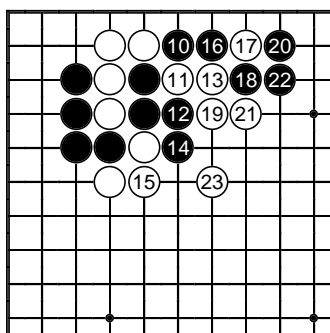


Normally White plays on 5 and 7 the outside, as in the left-hand diagram, and treats the marked white stone as a potential sacrifice. If White tried harder to save it, as in the right-hand diagram, White would immediately be involved in a difficult fight when Black cuts with 8.

Tactics for playing close



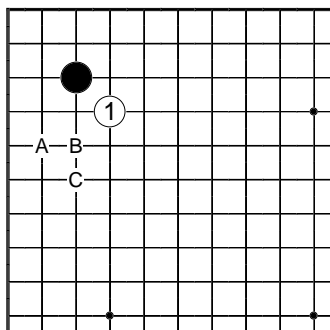
Another possibility for Black, the clamp play 2 (**left**), is not always a reliable, strong shape. (**Right**) White can try 3 and 5. What now for Black?



Black 10 in the left-hand diagram runs into immediate trouble. It is really too close. White 23 nets Black. It would be better to jump back (**right**). There the fight is more complex, but it seems White's plan is unreasonable.

◆ More about the clamp on pp.29, 31, 62.

What are my options?

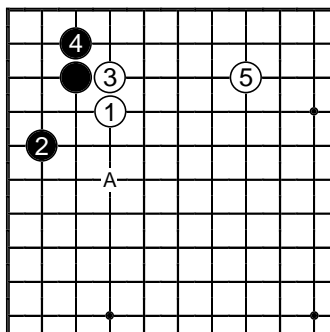


Turning back now, what choice did Black have in answering White's 'shoulder hit' play at 1? What about A, B or C instead?

These are examples of plays that are rarely considered in books. Two of them are quite bad, one of them has appeared in a top level match played by a master of the 3-3 point.

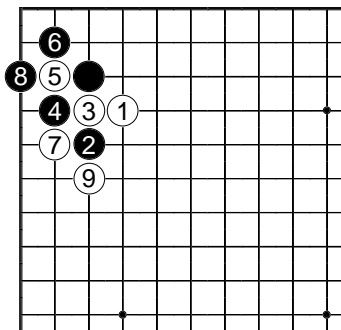
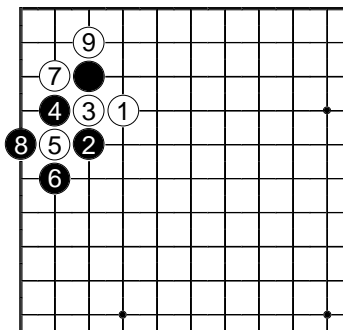
It would be an enormous task to list imaginable variants in *joseki*, or even reasonable questions to ask. One can be sure only that the plays current in professional games at a particular era have been carefully considered.

The orthodox extension



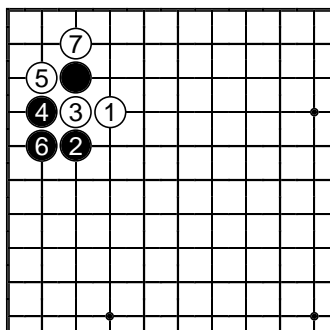
Black 2 is from professional play, though not very common. This development can be expected. White 5 *extends three from a two-stone wall*, in line with the proverb; it might also sometimes be played at A. This was Sakata 9 *dan*'s play, seen in the 1969 Judan title match against Otake. In that context White 5 wasn't possible.

Capturing a cutting stone



Choice B is bad shape. White can create two cutting points with 3. Black has no choice about playing 4, to avoid being cut cleanly in two.

White can now cut on either side, depending on the overall position. **(Left)** White can take the corner. **(Right)** With a favourable ladder White can also play for the outside. Both results are good, given that Black started here.



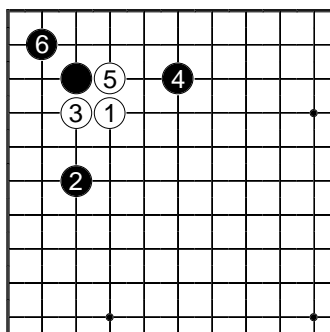
Black does well to obey the proverb *capture the cutting stone*. If Black 6 connects as shown here, the result is worse shape than capturing the stone and giving up the outside.

A single stone capture, often called *ponnuki*, may be of high value. It may build eye shape, or influence; and is normally easy to develop in more than one direction.

We have described Black's play as mistaken. So it is. Giving up the corner is a serious loss, and White's good shape is too costly.

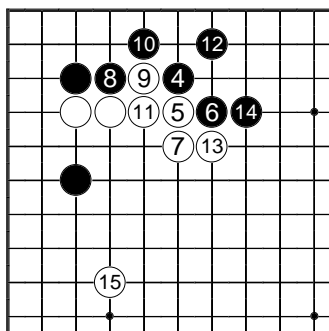
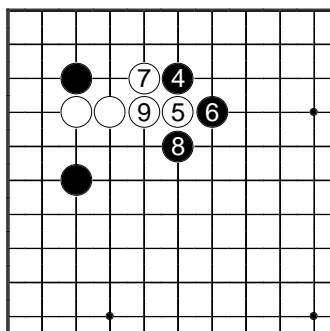
◆ The box in 1.2 discusses the proverbial value (30 points) of the *ponnuki*.

A tricky use of symmetry



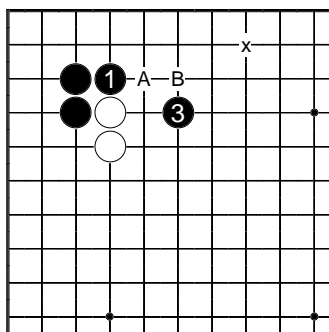
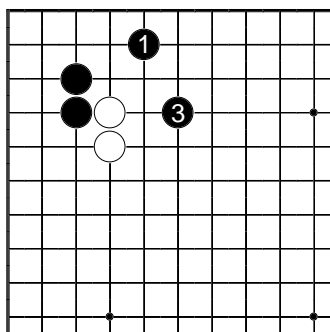
Answer C is in fact an outright trick play. It aims at this situation, in which Black 6 gains life in the corner (a case of the proverb *preserve symmetry*).

Now White cannot prevent Black's life or connection out. Black's hope is that White will get into trouble on the outside.



The *attach-block* shape (left) is good, in this case, if White wishes to play for territory. White can eventually take the corner, but must take great care about being shut in. Another way for White to deal with this trick play is to apply the *attach-extend* shape with 5 and 7 (right), and pincer with 15. However White 13 is *pushing from behind*, which is generally poor style; and Black's stone on the left side could fight back hard, at some later time.

A discussion about the future



You can't force the opponent to answer. The shape Black makes on the left with 1 and 3, when White ignores 1, is better than the shape on the right. There is an actual weak point 'x' one can see, related to White possibly playing A, which Black would like to answer solidly at B.

Part One

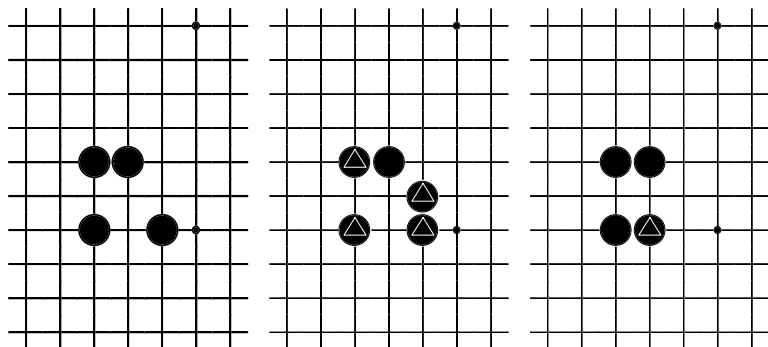
Principles of Development

Chapter One

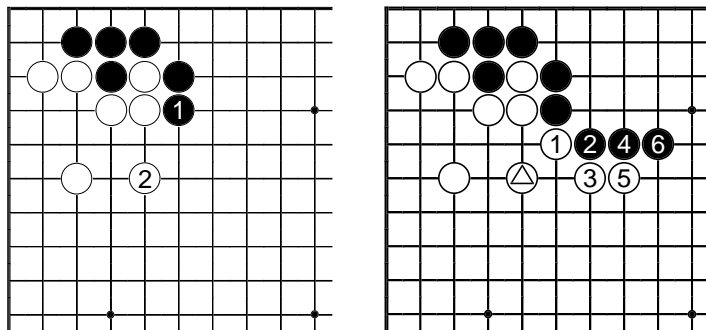
Table Shapes

1.1 Three strong shapes

This chapter introduces a number of strong shapes. Strong shape isn't the only kind of good shape, but this is a place to start.

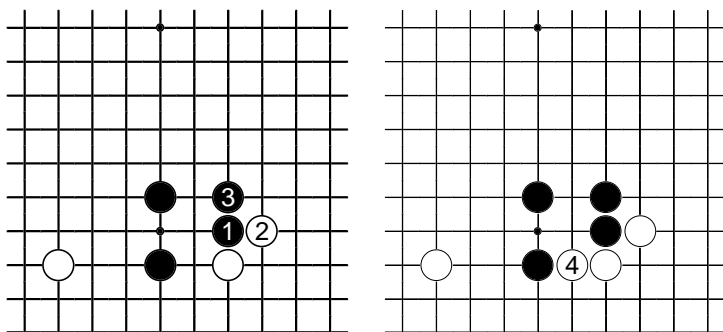


(Left) The basic *table* shape. **(Centre)** The *double table*, a perfect eye shape, and made up of two superposed table shapes, the second one marked. **(Right)** The *bamboo joint*, differing from the table shape only as marked.

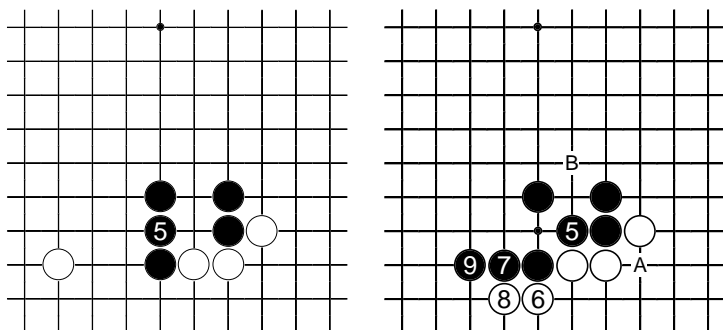


(Left) When White plays 2 here, the White group develops perfect shape. **(Right)** If White's strategy requires subsequent plays pushing in the centre, they are easy to find, and the marked stone is exactly placed.

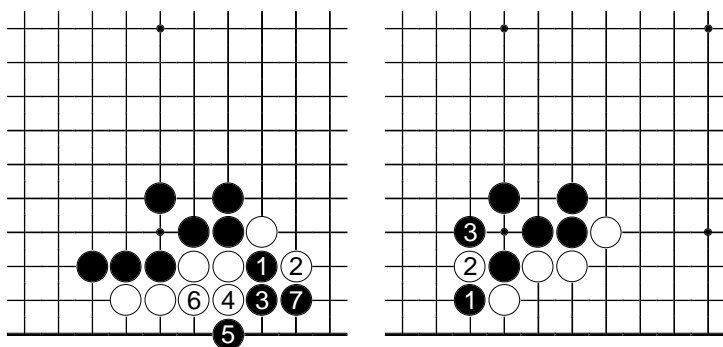
1.2 Building tables



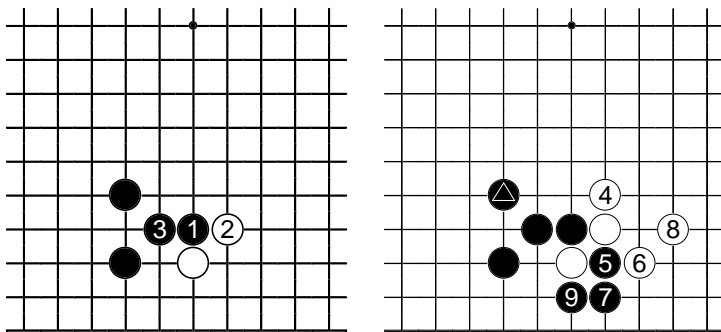
Black builds a table shape. **(Left)** Black's one-point jump emerges reinforced. **(Right)** Now White is likely to occupy the key point for eyes.



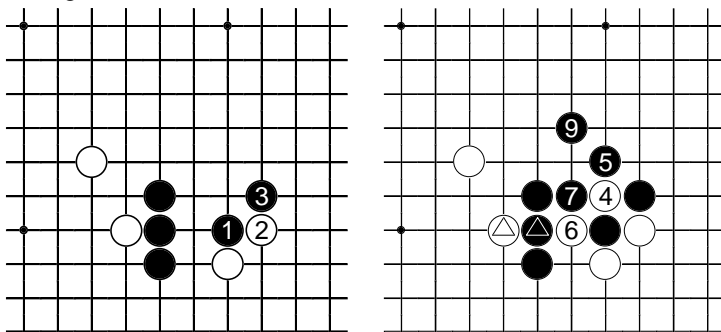
(Left) Black plays the firm bamboo joint shape with 5, to prevent White connecting along the edge. **(Right)** Without the White stone on the side, Black might instead play this way. The cutting point at A remains, Black 5 works to take one liberty off White's two-stone chain, and Black has the chance of making an eye with a play at B.



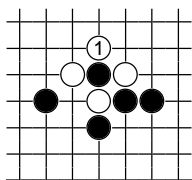
(Left) Because White has bad shape Black 1 here is hard to answer. White cannot prosper in this fight. Therefore the cutting point needs immediate defence. **(Right)** In some cases Black can even set up an obstinate *ko*.



In contrast consider what may happen if Black plays 3 as here. If White continues by sacrificing one stone (**right**), Black's result is a failure from the point of view of shape – the marked Black stone is doing little work, it is much too close to a Black group that is now strong. Efficiency is a major factor in go.



In other circumstances Black may choose a different plan (**left**). The intention is to sacrifice one stone (**right**). In that diagram White 8 connects below 4. After Black 9 the Black group has developed good shape in the centre; and the earlier exchange of the two marked stones clearly favours Black. The single stone capture with 4 and 6 is a famous shape (see box below).

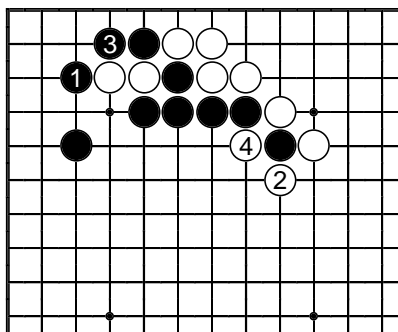


The *ponnuki*

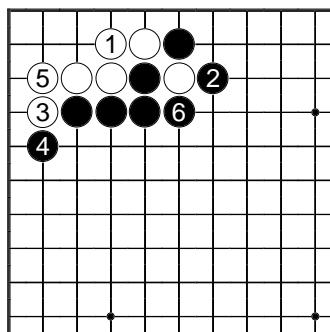
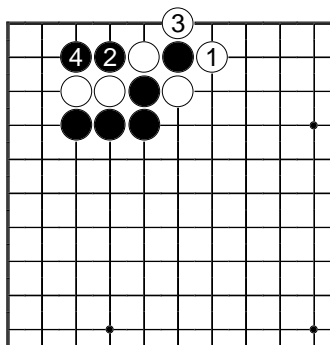
This strong shape, resulting from the capture of a single stone in the centre of the board, is called *ponnuki*. There is a proverb saying ***ponnuki is worth thirty points***.

Roughly speaking, that means the three White plays (net – Black has had a stone captured) making up the shape each have value ten points. This is normal for plays in the middle of the game. But if the *ponnuki* is confined, as in the example shown immediately above, its influence is less, and its value also.

When it occurs in the centre of the board, a *ponnuki* may have considerable influence.



This is a common position in which it may be a good exchange for White to make a *ponnuki*, at the cost of many points in the corner. The full value of White 2 and 4 will be seen in the middlegame fighting.

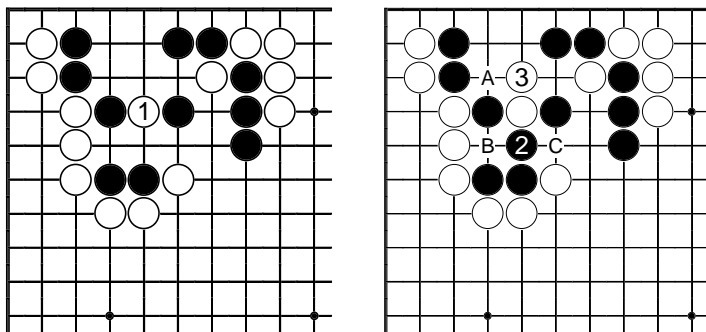


Here, after a 3-3 invasion, it should be better for White to make the capture of the single stone in the left-hand diagram, even though Black then recaptures the corner. The White group formed by the *ponnuki* is quite robust: it has good eye shape already, and White probably doesn't need to add a stone to it immediately.

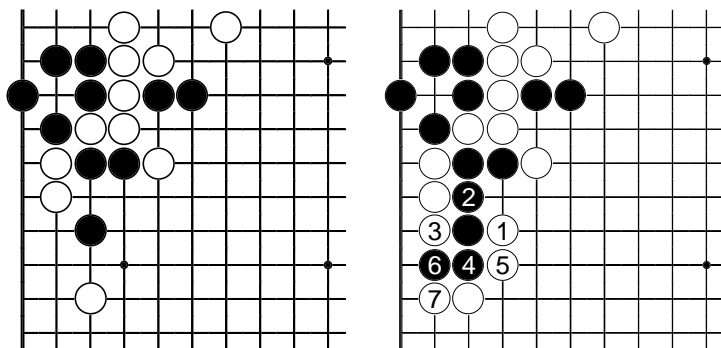
In the right-hand diagram White takes the corner, but Black has good outside influence. When Black captures with 6 it is a matter of taking off a stone caught in a ladder, before a ladder-breaker is played. It also forms a *ponnuki* shape. Black has a cutting point, but otherwise thick shape useful in fighting.

The value of 30 points put on a *ponnuki* by the proverb must be qualified, as we have seen, when it is prevented from exerting full influence; but also when too close to other influence.

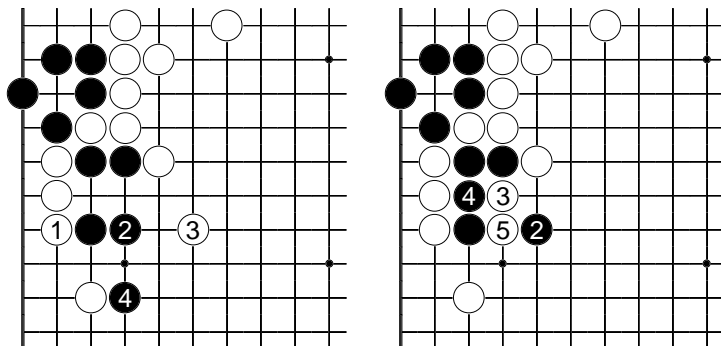
1.3 The wedge weakness



The table shape is sometimes worse than the bamboo joint would be, with a *wedge weakness*. In this case Black is powerless when White wedges in at the key point 1. There is no way to cover all three cuts A, B and C.

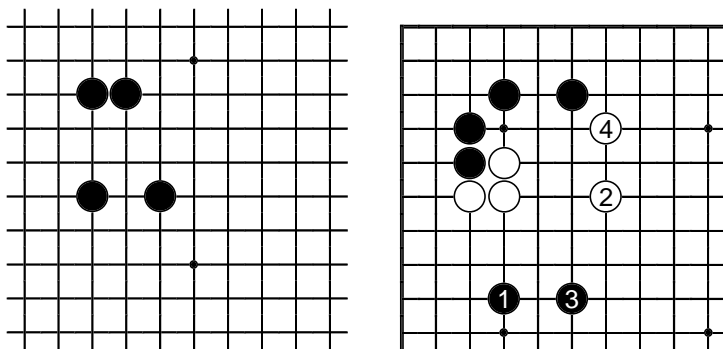


A related shape is often seen in a loose ladder tactic. White can capture Black. The placement 1 is on the point corresponding to the wedge weakness.

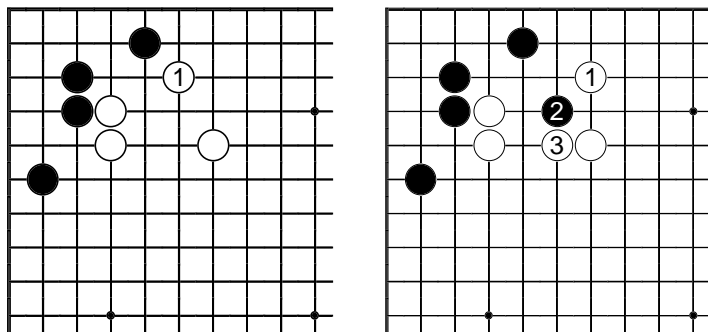


Suppose White misses the chance of the loose ladder, and crawls out at 1 instead. Black should now make a bamboo joint (**left**). The weakness of the table shape against White 5 is evident (**right**). The weak point at 5 has remained: it is just the method to exploit it that changes (White 3 at 5 is good shape but doesn't capture Black's cutting stones).

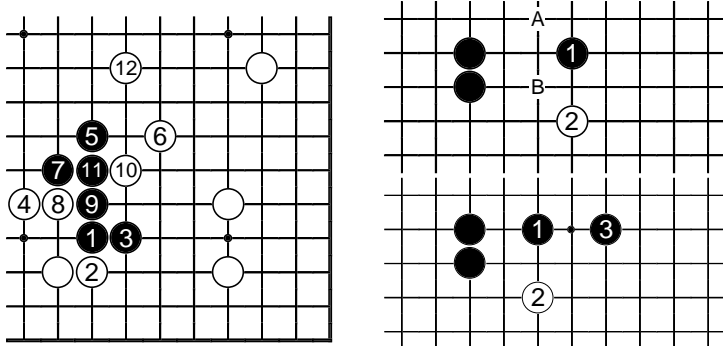
1.4 The high table



We call this more extended shape (**left**) the *high table*. (**Right**) White 4 makes good shape for the stones running out into the centre.

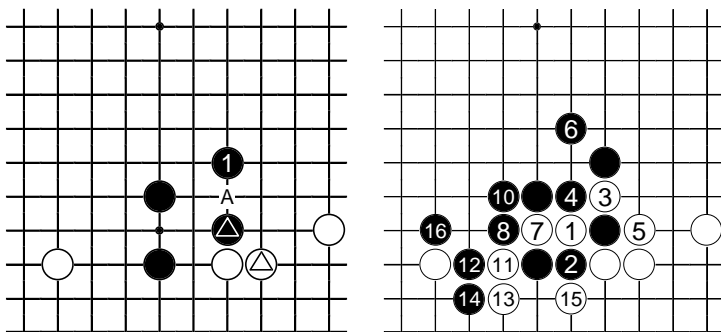


The high table may need a modification, to improve its strength from the side. When White wants to emphasise the top side, this is a good way (**left**). (**Right**) Playing 1 this way means Black 2 can expose some weak points.

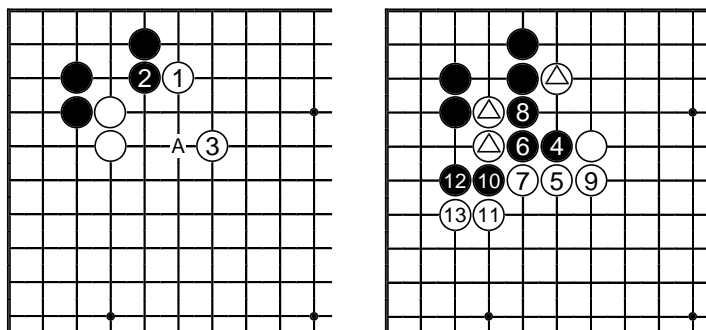


(**Left**) Here Black gets into trouble as soon as White plays the key point 6. (**Right**) When a two-stone wall in the centre is developed, the two-point jump demands more foresight than the one-point jump. (**Upper**) After White 2 Black may find it necessary to reinforce, with a play like A or B. (**Lower**) If Black jumps only to 1 here, either of 2 or 3 next makes good shape.

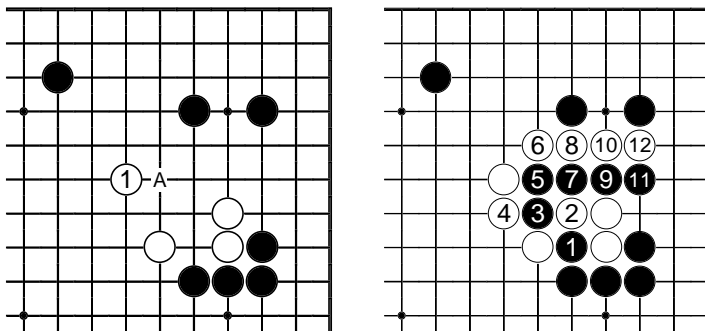
1.5 Beyond table shapes



Here Black can jump out, rather than complete the table shape at A, regarding the exchange of the two marked stones as pure gain. **(Right)** This sequence (White 9 connects), emphasising the capture of stones, is dreadful for White.



(Left) With 1, inducing 2, and then 3 rather than A, White makes a lighter shape. **(Right)** Black continues to attack at the key point, but White is ready to sacrifice all the marked stones, for outer strength.



In this case White 1 moves out more quickly into the centre than A. **(Right)** Black cannot gain by an immediate cut. There is a small gain in captures, but a large loss to come at the top.

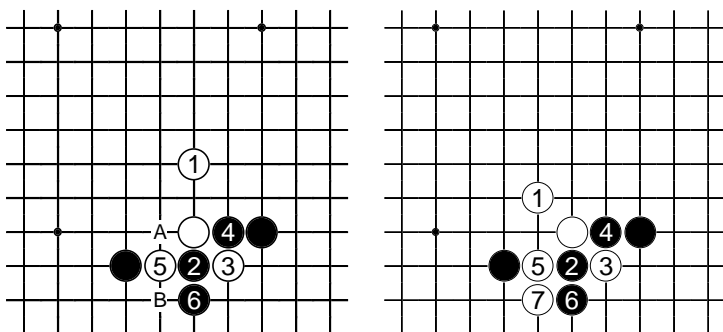
The common theme here is light play, sacrificing when it is appropriate, rather than the solid virtues of the table shape.

Chapter Two

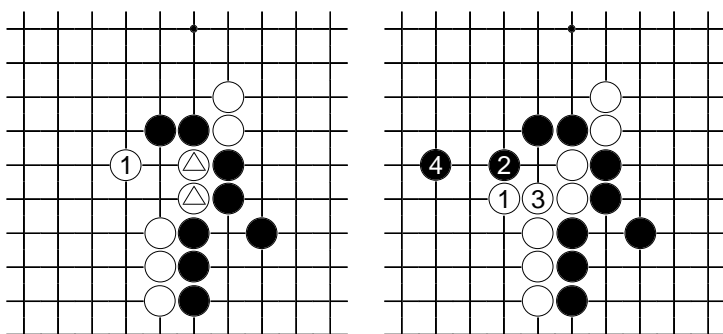
Shape Basics

2.1 Introduction: functions and comparisons

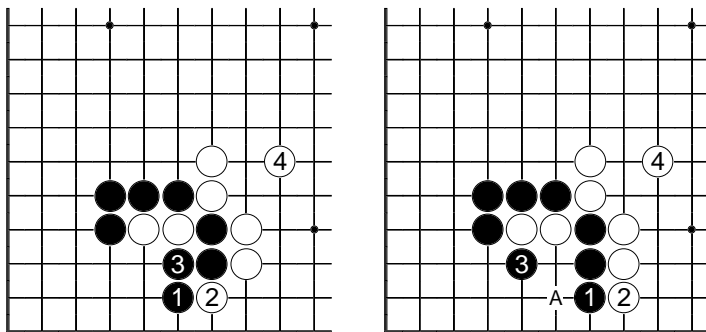
Chapter 1 showed some strong and useful shapes, but you need principles as well. The first steps in understanding shape come not with looking at specific patterns, but with the idea that certain plays work well, where others disappoint.



The one-point jump White 1 in the left-hand diagram doesn't allow White to keep the two Black stones separate: after Black 6 Black will be able to play at A or B. But the diagonal play 1 (**right**) works perfectly.

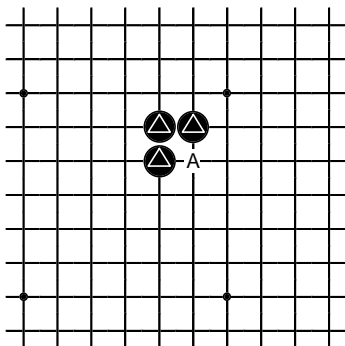


The one-point jump (**left**) is the way to defend the two marked stones, since the diagonal play (**right**) allows Black the snapback threat at 2.



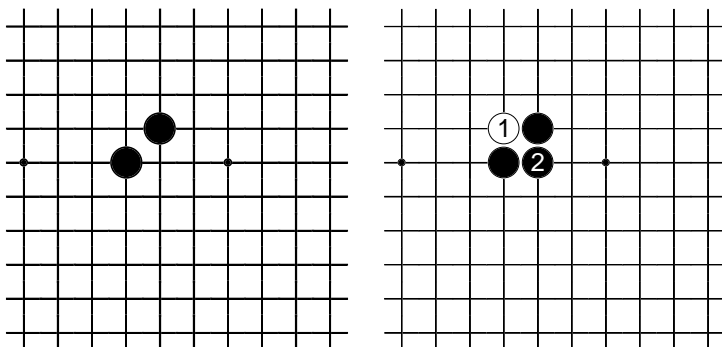
Black should use the diagonal play 1 (**left**) to capture the two White stones. Playing down towards the edge (**right**) is clumsy: Black 3 is needed because of the threat of White A. Now Black cannot capture a white stone on the edge, a big endgame play that also creates a cutting point.

2.2 Empty triangles – every dog has its day

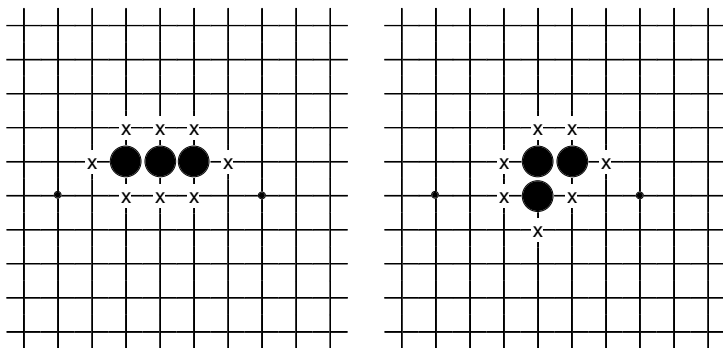


Those who have learned as axiomatic that the *empty triangle* – this marked Black shape, in which the point A isn't occupied by a White stone – is a bad shape, may be surprised later to find that it has some possible advantages. From the point of view of 2.1, that's a matter of seeing how it matches the needs of the position.

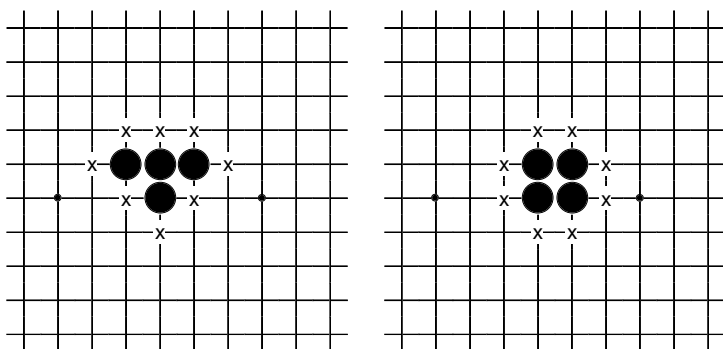
To start with, two reasons that the empty triangle is considered a bad shape.



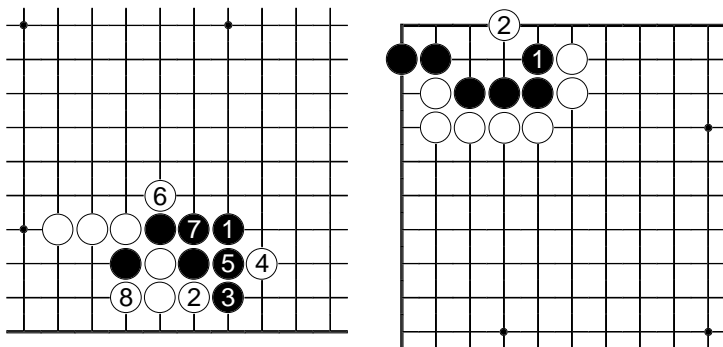
Firstly, it is inefficient. If Black makes the diagonal shape in the left-hand diagram, the two stones are already connected. If White plays 1 in the right-hand diagram Black can connect with 2; and *vice versa*.



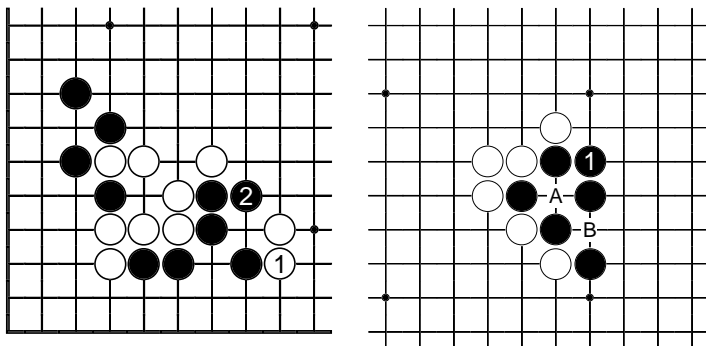
Secondly the shape formed is short of liberties. Three stones in a line (**left**) have an initial eight liberties. In the empty triangle (**right**) they have only seven. This difference may appear to be quite small, but soon makes itself felt in any close fighting.



(**Left**) This shape has two empty triangles in it, and has no extra liberties to show for the fourth stone. (**Right**) The 2x2 block is just as short of liberties, but is also very clearly an inefficient shape that uses stones badly.



Some practical cases. (**Left**) Gross inefficiency: Black should just play 1 at 7. (**Right**) Black 1 is wrong and White 2 kills the corner; Black could live by playing the key point 2 (cf. 4.6).



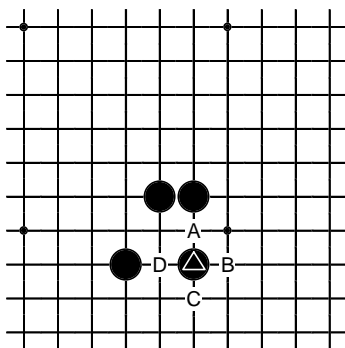
For contrast, two examples of empty triangles as fine shape. **(Left)** Black 2 avoids being shut in. **(Right)** If Black cannot fight the *ko*, this play 1 starts to look good after White A, Black B.

While an empty triangle is bad shape more often than not, it seems impossible to give an exhaustive list of cases where it may qualify as good shape. There are examples on pp. 12, 26, 49, 55, 105, 117, 171, 188, 192 and 195.

2.3 Around the table shape

The table shape from 1.1 was given without much explanation. That is typical of unadorned comments ‘it’s good shape’. This section looks at two ways forward from there.

Adjusting a single stone



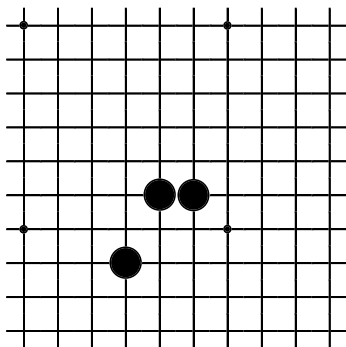
The marked Black stone is most often better placed where it is, rather than at any of A, B, C, D. Why is that? For example A makes an empty triangle shape, not intrinsically a good idea.

The shape made with D is comparable with the bamboo joint. You could say that A and D are too close to the other black stones, so they may be less efficient than the other three plays. On the other hand B and C may turn out to be too far away. If that’s the case then the marked stone achieves a kind of balance.

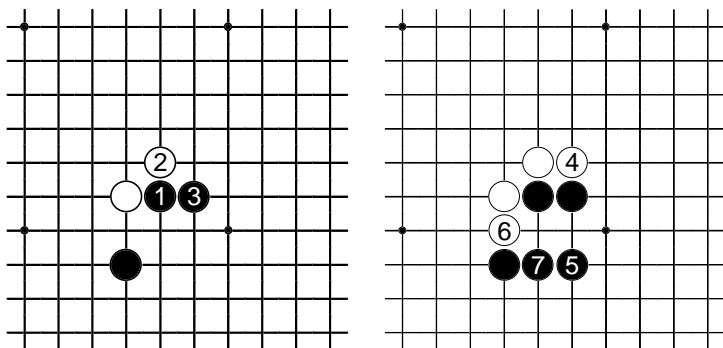
However that's not the whole story. The shape made with C turned out to be good shape when seen in 1.4 and 1.5. It occurs also in the problems, later. The shape made with A is in 3.5L, in a very particular pattern. The shape made with D is very important (for example in Chapter 8). Perhaps only the shape after B is really unusual, and relatively rare as a good shape; when it occurs on the next page it is too loose.

Development and foresight

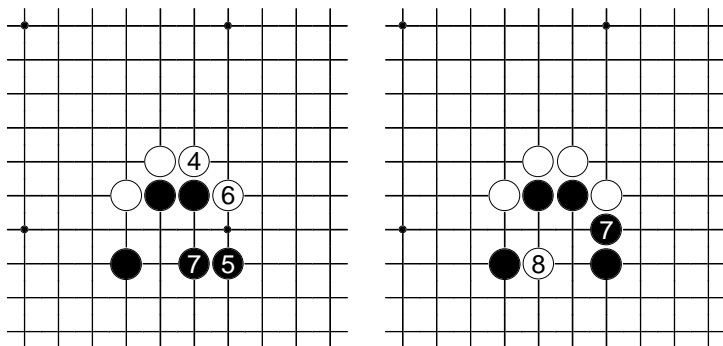
Stones are placed one by one on the board. Any shape more complex than the diagonal or jumps must be put together in full realisation that the opponent may intervene. The first ideas about shape may come from static patterns; but there is the underlying process to worry about, too.



We study this portion of the table shape. It contains three stones, but feels incomplete as it stands. It is expected to occur with some White stones, which might be distributed round it in a number of ways. The discussion of whether the Black stones are properly placed and connected becomes interesting and not too simple-minded.



Now add some White stones, to reduce the level of abstraction, and bring in possible tactical variations. The development in the left-hand diagram is quite normal (more on this in Chapter 5). Black 5 makes a very solid shape (**right**), which is only confirmed when White plays 6 and Black answers at 7 for a bamboo joint.

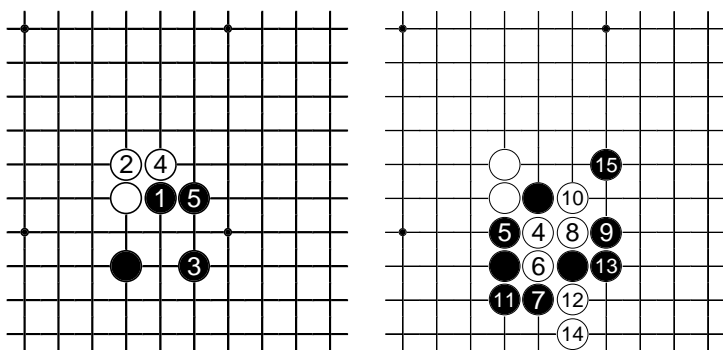


The looser choice of Black 5 here can bring some redundancy or leave future trouble. **(Left)** Here 5 and 7 are too close to each other, and Black's shape is somewhat inefficient. **(Right)** The placement play 8 leaps to the eye. It is a skilful way later for White to cut Black.

Let's ask why, though, this play White 8 is visibly on a vital point. It could be one of two reasons:

- This is the point to complete the double table shape of 1.1.
- This is the way to make an eye-stealing relationship with the white stone placed as 6.

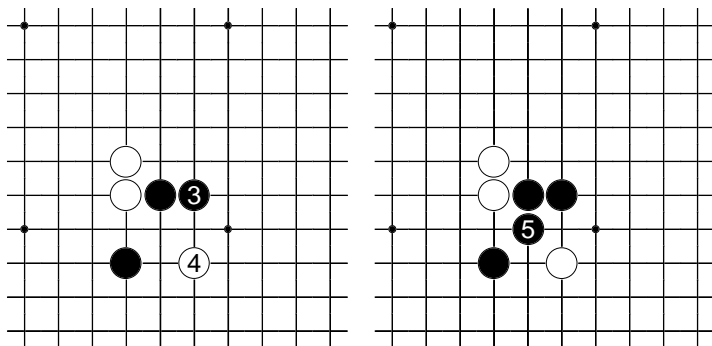
If you think about it, the first reason is related to eye shape too. So here is one way in which shape study isn't so simple: eye shape may be involved in what at first sight is mainly a question of keeping connected.



If White had reacted more passively with 2 here, Black could jump to 3. **(Left)** An efficient result for Black. How dangerous is 3?

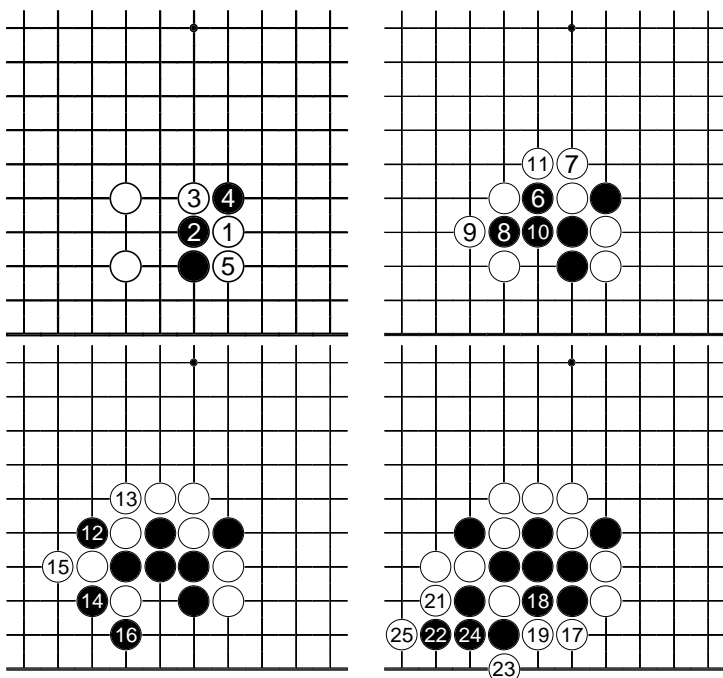
Perhaps White might resist with 4 **(right)**. The meaning of the plays up to 14 isn't hard to understand. Who has the advantage in this fight? After Black 15 it seems that the two black groups will be better developed; it isn't so important that Black has sacrificed one stone.

When there are a number of weak groups in the centre of the board, the balance of dynamic factors in the fighting is the most important thing. One of those factors is the good shape of groups, for running away or eyes.

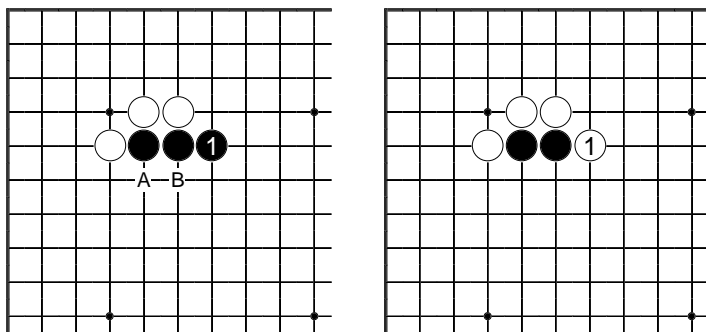


Here 3 is odd: White will take the key point 4. **(Right)** A horrible result. Although Black remains connected, this shape has an empty triangle signalling inefficiency, and also a white stone sitting on a key eye shape point, generally called an *angle* point in relation to Black 5 (4.8, 4.9).

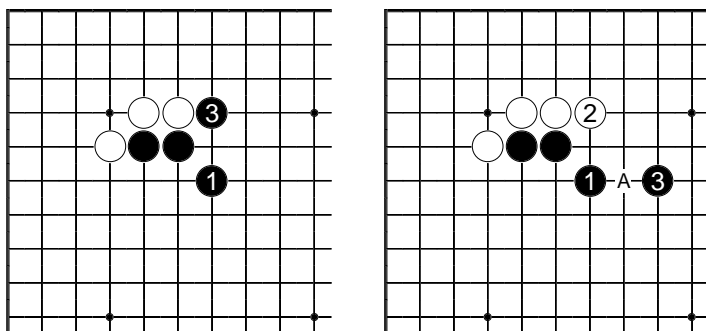
2.4 Fighting: the liberty problem



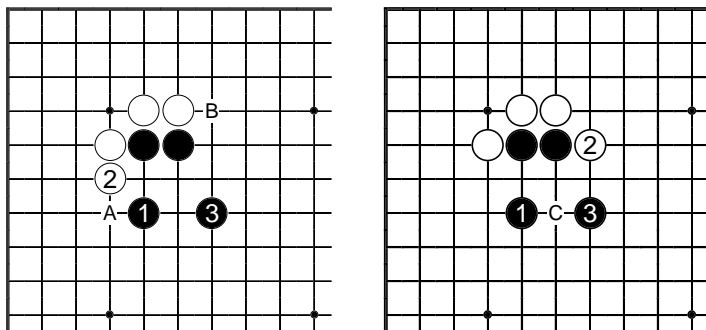
Here's a sad story in four parts. Black tries hard to break out, but simply has too few liberties. As soon as White plays 5, Black's shape is deficient in liberties. The end comes after Black 20 connects, leaving only three liberties. Capturing a single stone with 16 cannot be relied upon to gain liberties, if it only makes a false eye. In fighting even a single liberty matters.



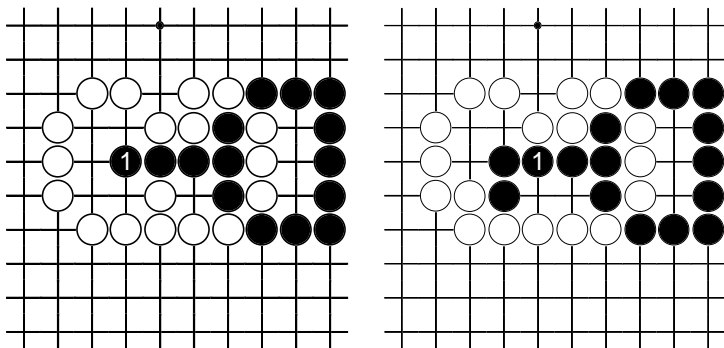
Considering liberties alone, Black 1 is the key point; it gives Black five liberties, while both Black A and Black B make empty triangles, and only four liberties. For that reason White 1 is a good way to attack.



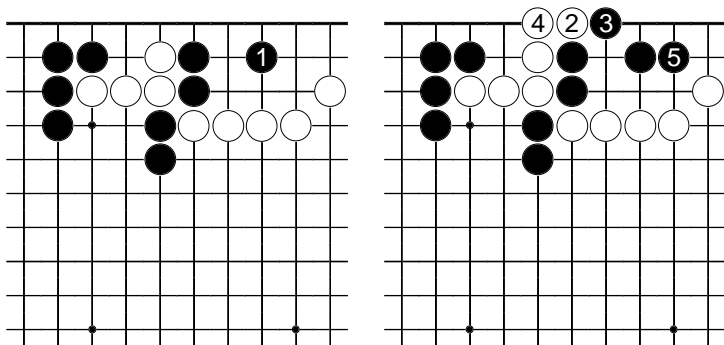
You sometimes give greater priority to adding a second dimension to a group. Black 1 here aims at playing 3 (**left**). But if White answers at 2 (**right**), Black's shape is slack, with a weak point at A. So Black 1 is poor shape.



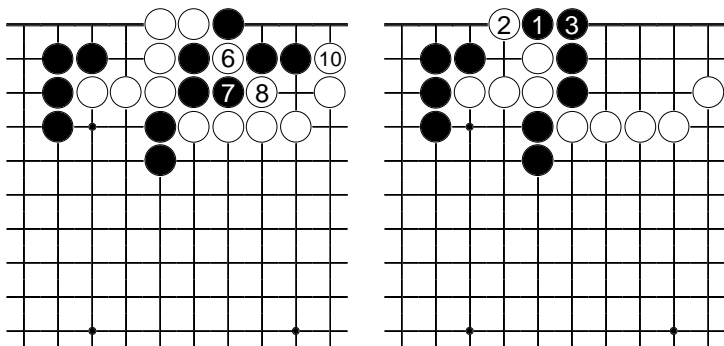
It would be better to jump at 1. If White plays the one of the key points, 2 in the left-hand diagram, Black's table shape with 3 becomes very good, leaving a choice of A or B next. (**Right**) Black 3 is still usually good, but Black will have to watch for the possible weakness at C as the game continues, because White 2 has caused a shortage of liberties. In this case Black might sometimes instead wish to play 3 at C, a bamboo joint. (Cf. 1.3).



The plays shown here are the unique ways for Black to win the capturing races. On the left Black gains two liberties by extending from a chain. (This is a nose play in the sense of 4.3). **(Right)** Black links two chains: other connecting plays, for example the bamboo joint, yield fewer liberties. Empty triangles are *what-you-see-is-what-you-get*, for counting liberties.



In this case Black is behind on a count of liberties. What about Black 1? Can Black gain enough liberties along the edge after 5?



After the throw-in 6 it becomes clear that Black is behind in the race (9 connects at 6). In fact Black should concentrate on reducing White's liberties (**right**). There Black wins because White must connect. Black 1 or 3 is the key point in this capturing race.

Summary on fighting shape

The study of shape isn't about how to avoid fights, but how to enter them only on your own, well-positioned terms.

The key factors in close fighting are liberties, eye shape, and connections. The quickest way to lose a local fight is to reduce your own liberties by clumsy play. The common patterns of liberty shortage are fairly easy to pick up. On the other hand detailed discussion of connections takes up much time in an introduction to shape.

Some principles on liberties in close fighting:

- adding a stone to a chain normally adds one or two liberties, of which your opponent can fill one next turn;
- it may hard to recover from losing a liberty; so avoid all unmotivated pushing into the opponent;
- false eyes and hanging connections can cause loss of apparent liberties, as in the last example; the same is true of bamboo joints.

At various times in games you will have to worry about:

- whether you can connect (many difficult aspects);
- whether you should connect, and how then to do it;
- whether you can cut, and how best to cut;
- cuts leading to weak groups and running fights;
- peeps, i.e. threats to cut, and how to answer them.

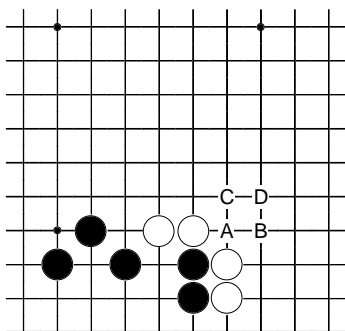
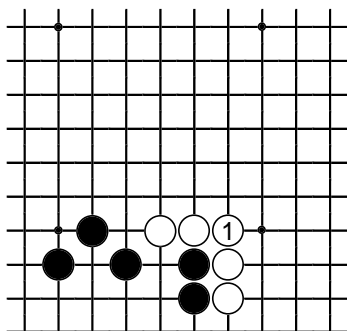
These all may involve shape reasoning. Ambition always stretches out, for extra efficiency; the usual reason for holding back is that you may be cut. (There is also fear of invasion.)

Shape that is capable of making eyes attracts the attention of all experienced players. Some reserve eye shape in groups increases the range of possibilities for fighting in a given part of the board; while taking care of a group that is only just alive may be quite constraining on your other projects.

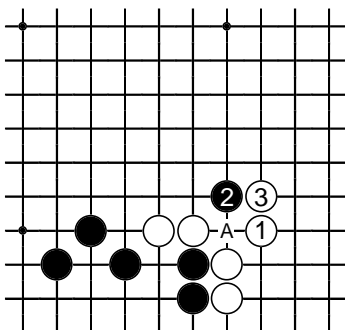
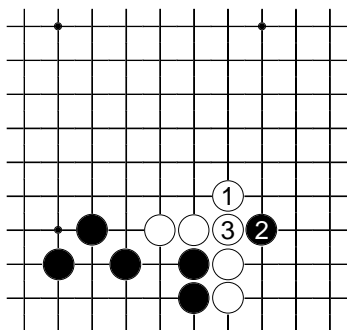
The subject of eye shape is complicated. There are good reasons why whole books are devoted to life-and-death, especially on the sides and in the corners – and in the centre context becomes crucial.

Always pay close attention to context in fights (neighbouring stones, influence, the side of the board); theoretical good shape is a big help, but isn't enough on its own.

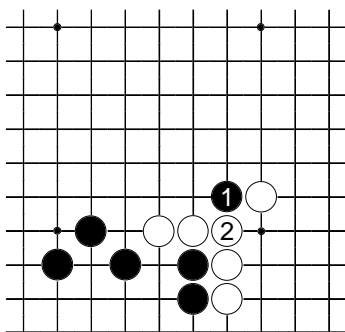
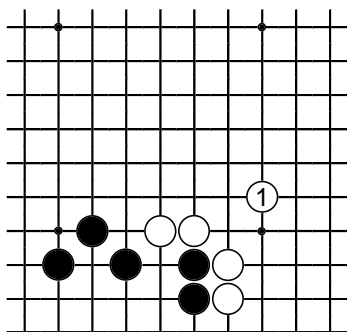
2.5 How to connect



What if anything is wrong with White 1 here? A fundamental question is: how to connect, given a range of possible plays such as A to D. White certainly ought not to get cut round here, but which is the right play? The solid connection A demonstrates no ambition to be efficient, but allows Black nothing at all in the way of later forcing moves.



The hanging connections C (**left**) and B (**right**) both allow Black a peep 2. If White is strong to the right, B may be better; the peep is a waste if it gets swallowed up. After C White has no reason to connect with 3.

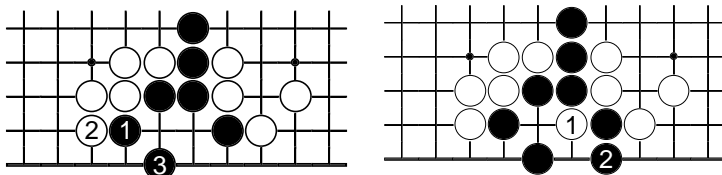


The choice D (**left**) is the normal good shape. This indirect connection is supported by two ladders (and here a net, too). The Black forcing move (**right**) is not worth very much: there isn't a good way to follow it up.

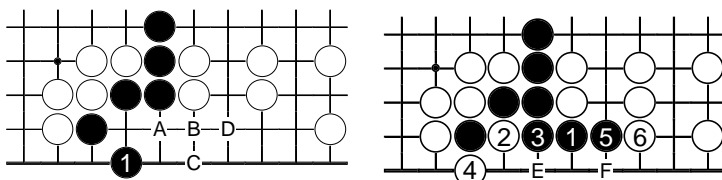
2.6 Fighting: eye shape

There are examples such as these ones on individual eyes.

Single eyes on the edge



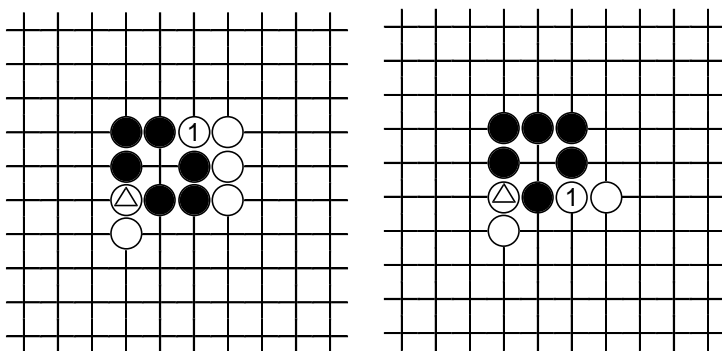
The recognition of half eyes is not as easy as you might think. Black 3 completes an eye. **(Right)** White fails.



(Left) Black 1 makes the eye: now White A is met by Black B, and after White C next, Black D is good enough. **(Right)** Black 1 here fails; Black needs both E and F to make the eye.

Life-and-death illustrates the old principle *hard cases make bad law*.

Attacking eye shape

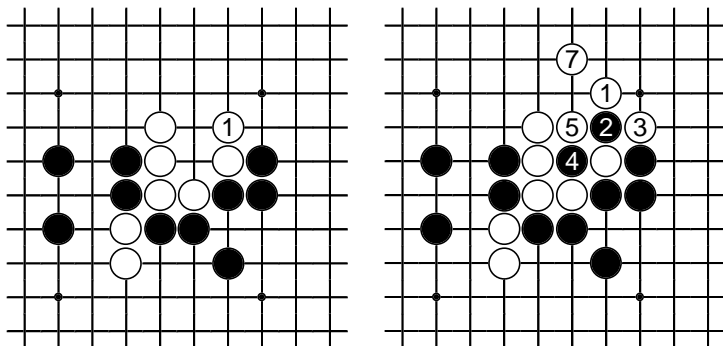


Only in the centre of the board does eye shape follow relatively simple rules. Fundamental shapes for the attacker are the *eye-stealing play* **(left)** and *clamp* **(right)**, in relation with the marked White stones.

Enthusiasm for destroying eyes or making them can go too far, as we shall see. These plays are one kind of *suji* (style of playing, basic tactic or technique). The play in the left-hand diagram is often described as the eye-stealing *tesuji*, when played in sparser positions in which the potential eye is as yet unformed.

Defending eye shape, versus running out

It is wrong to assume that the first task in defending a weak group is to build eye shape. If stones are worth saving, one's duty may be first to run out with them, making it easier to connect to another group, and also adding liberties in case of an ultimate capturing race.

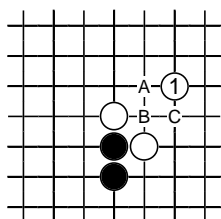


The defender has to decide how much relative weight should be given to constructing eyes, and how much to running out. **(Left)** White makes a definite eye. This play might look heavy on some occasions (see box below). **(Right)** White can develop more rapidly by allowing the eye to be destroyed. If Black plays 2, White sacrifices one stone (Black 6 connects). This is generally better play.

Light and heavy

Two of the most important ways in which shape may be qualified are as *light* or *heavy*.

To make light shape is to consider future convenience and flexibility over short-term solidity and the safety of each stone.



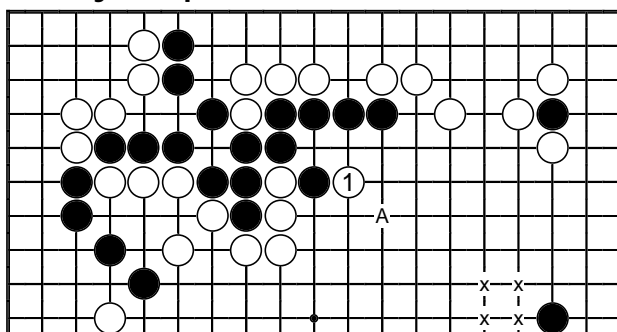
Light shape is usually to be recognised by its mobility and avoidance of solid connections. Flexibility is gained by the willingness to sacrifice stones. White 1 here "solves" the connection problem, by being prepared to sacrifice one stone if Black cuts at B, forcing with A or C.

Heavy shape on the other hand emphasises current profit and connection, over longer-term worries about defence and the possible requirement to sacrifice some of one's stones later. White's connections at A, B or C are relatively heavy plays.

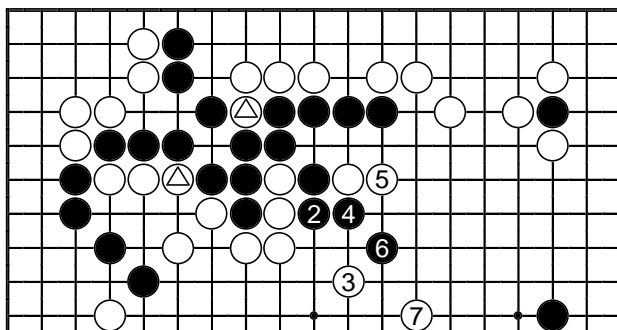
Heavy play is perhaps the mistake all *kyu* players share.

Attacks that are too ambitious, or commit a player to killing large groups, often involve the need to save every single attacking stone, in order to deny the defender eye shape. This in turn may lead to lack of liberties and too many cutting points in the attacker's shape. Two Japanese technical terms that are very important from a professional point of view, but are less well-known than they should be, are *amarigatachi* and *amashi*. *Amarigatachi* is the kind of weakened or over-extended shape that the attacker is left with, after an attack pushed too hard. *Amashi* is a high-level defensive strategy, of leaving a group weak enough to tempt the opponent to attack; if then *amarigatachi* results, the plan succeeds.

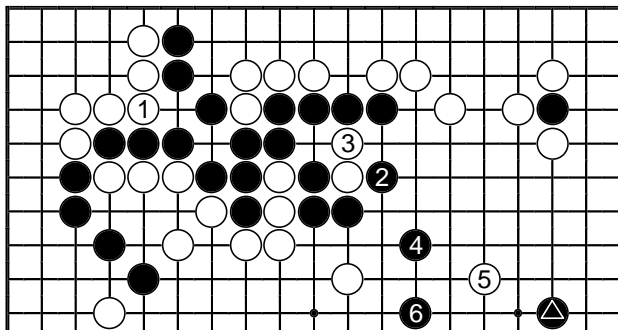
Fixation on eye shape



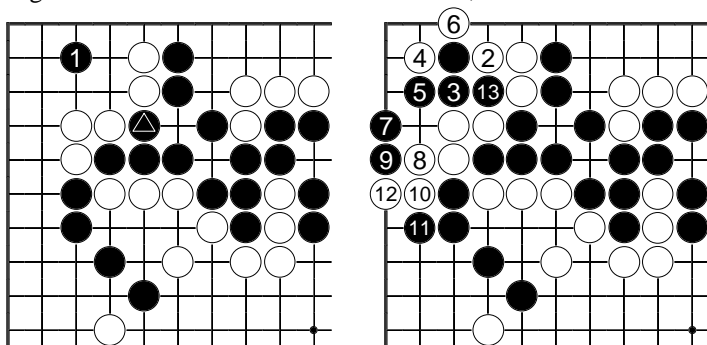
The clamp play in action. If White attacks with a more distant play such as A, Black may gain an eye in the centre with ease. That doesn't mean that White 1 is necessarily good. White really should play one of the 'x' points first, for a less direct plan of roundabout attack.



The marked stones steal an eye, so that the Black group seems to be under pressure. However when White plays 5, required for consistency, that is a heavy play: it commits White to saving these two stones. This is typical of where the natural wish to attack decisively may lead.



Now replace White 5 of the previous diagram by 1 here. Next White 3 loses points. Unless White kills Black this will be an obviously bad play. White's conception of how to fight is too direct. More advanced and appropriate thinking is to attack the marked Black stone first, in some roundabout way.



A Black play at the marked point is *sente*, against the corner, because Black 1 (another eye-stealing play) is strong. For example (**right**) White dies. But still White shouldn't rush to take away this half eye.

For flexibility attacker and defender should stay light

On the previous page and this one are shown heavy or wasteful plays used to keep up an attack.

Light shape is very important to both defender and attacker:

- the defender benefits from being able to give up a few stones while saving most of a group;
- the attacker should attack in a way that doesn't assume the target weak group will die, while retaining good shape from the point of view of building territory or influence.

Perhaps these conclusions run against the intuitions of beginners.

Chapter Three

Close Range Play 1

Imagine you move to a large city. To begin with, you go everywhere by car or on foot. After a while you discover how to use public transport, and your life becomes a little easier if less individualistic. It is part of the experience of coming to belong, in your urban environment.

This chapter and the two that follow it are at the heart of our conception of shape. After that, in Chapters 6 to 12, we look at special topics that relate to particular kinds of fight. But first we try to lay down the basic principles of close range play. In order to feel ‘at home’ as a go player, one has to learn gradually the underlying map of the way stones interact. As our metaphor suggests, this may be a slow process depending on changing some habits and conforming more to the usual patterns.

The idea of fighting used in Chapter 2 needs expansion to show how shape really works. In this chapter we concentrate on monochrome (same colour) aspects of development of stones. These are of two kinds:

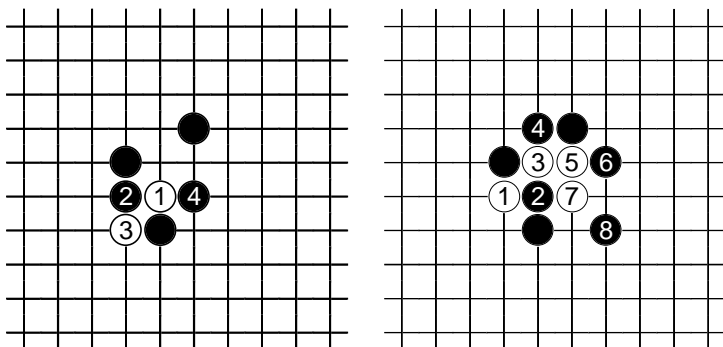
- one-dimensional, i.e. stretch further while remaining connected;
- two-dimensional development, which includes future eye shape but also shape for guarding indirectly against cuts, bends and bulges, and territory-forming shapes.

In Chapter 4 the emphasis is on plays at key points of the opponent’s shape (*hane* plays, the centre of three stones, angle plays as spoilers of eye shape). If you consistently occupy these points, or rather if your opponent allows you to have them, you will gain great advantage in local fighting without having to capture, or even cut. Unless the two players’ knowledge of these vital points is comparable, the game may quickly look like a mismatch with one player’s formations bent back on themselves, and short of liberties and eyes; in short, like a handicap game.

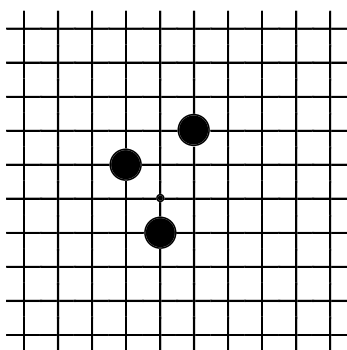
Chapter 5 picks up on shapes after the main types of contact plays. It is normal for contact fights to settle matters quickly, but there are many ways. We emphasise getting off to a good start in such fights.

3.1 Tactical aspects of connections

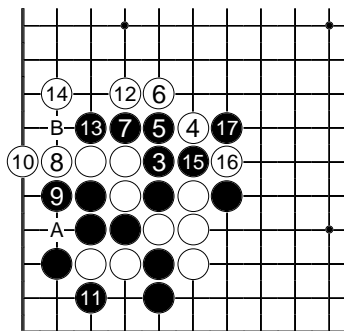
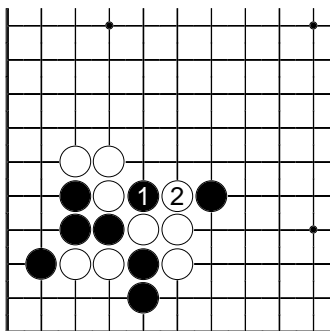
This chapter goes into problems of developing your stones, taking into account short range effects. When it comes to ladders, loose ladders or nets, 'close range' has to be taken with a pinch of salt.



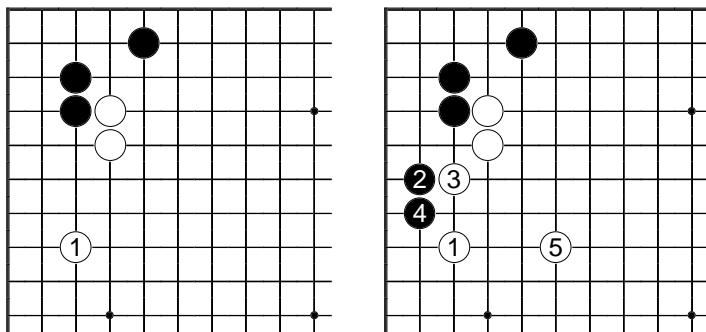
In these simple cases, attempted cutting plays fail to basic tactics.



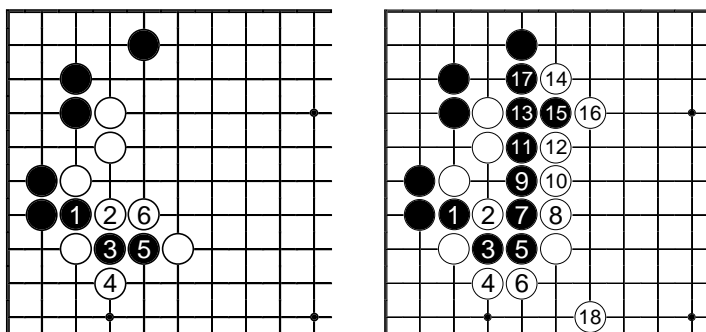
If you look, this shape is made up of two pairs of stones a knight's move apart. A single knight's move may be cut, depending on a ladder. The examples above show that the third stone in the formation is well placed for these ladders (which become a very short ladder, and a net). There are further cuts to try, of course.



Sometimes much deeper reading is required. In this example, does Black 1 work? **(Right)** There are two important variations to take into account. Black must answer White 8 at 9, not A or else White can capture in a loose ladder with 12 and B. White 10 requires a response since it threatens White A. In the end Black survives and White is indeed cut.



An example of the sort of idea professionals use to ‘work their stones harder’, to push for efficiency. This is another possible 3-3 variation, building in a different direction from sequences shown in the Introduction (White 1 jumps the other way, along the top side, in the main variation). White here has central influence and a chance to control the left-hand side. But how sound a play is 5?



There is a ladder (**left**) that White might use if Black tries to cut. White’s play, however, doesn’t strictly depend on any ladder. If Black cuts White has in mind the possible sacrifice sequence (**right**), if the ladder is bad. So much central strength for White would completely change the middlegame. This is a one-way street; it is natural for Black to push out with 15 to leave cutting points for later. Of course Black 17 can’t be omitted, and then White makes good shape with 18.

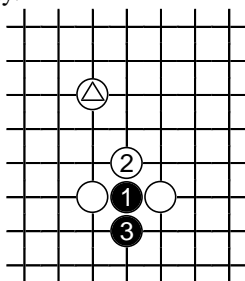
Being able to see such sequences makes for much more flexibility; for example White needn’t worry so much about a ladder-breaker. They may involve ladders, loose ladders, nets and netting plays that turn into squeezes. In that sense fundamental capture tactics interlock with the fundamental shape question of 2.5, “how do I connect?”

The next section looks at a complex example of this kind.

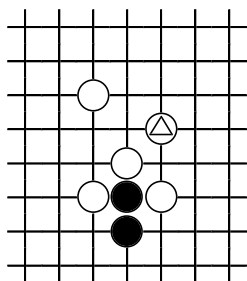
3.2 One-point jump: an extended study

Questions of breadth of choice come up, just as much as depth of reading. The complexity of go isn't all of one piece. If you find it irritating to be told 'good shape is intuitive', you may find the detailed analysis helpful.

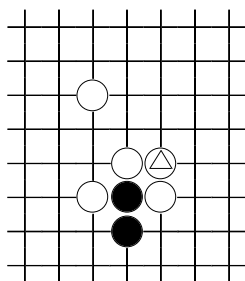
Here is fairly full discussion over three pages of a position arising from the wedge weakness in the one-point jump. Ladders, nets, squeezes and sacrifices, choice of connection, anti-squeeze tactics and questions of direction are all on display.



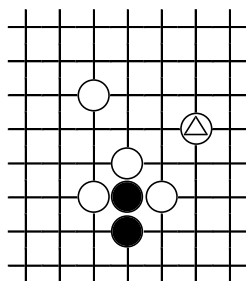
This is our text. White has the stone marked here in support, and Black tries the wedge. There is quite a range of replies to be tried for White 4. Even with the restriction we shall make to White playing *atari* from above, there are half-a-dozen to consider.



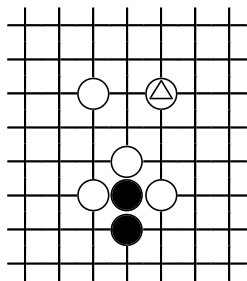
A



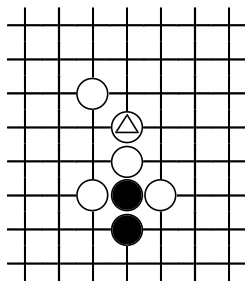
B



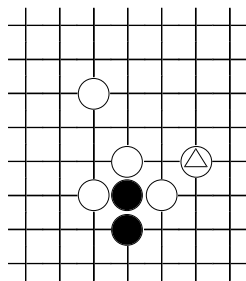
C



D

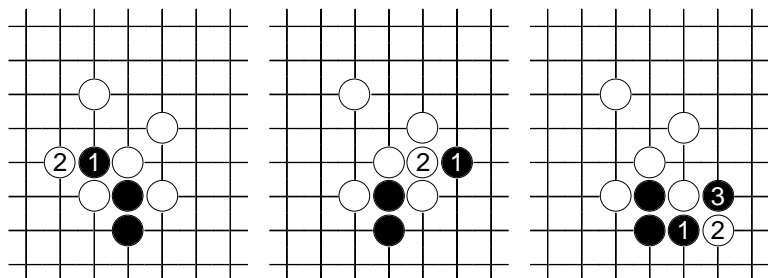


E

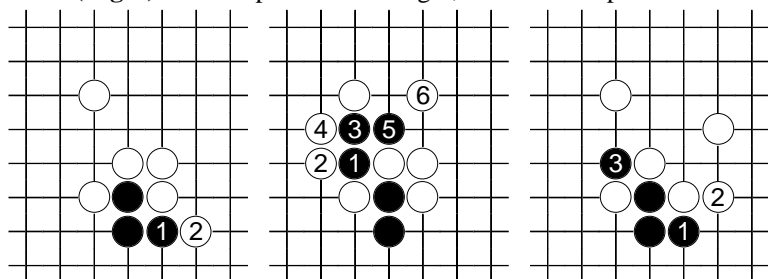


F

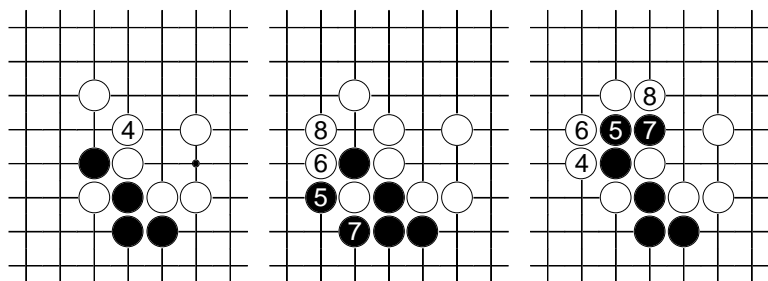
White can imagine playing any one of A to F, when it comes to covering the two cutting points.



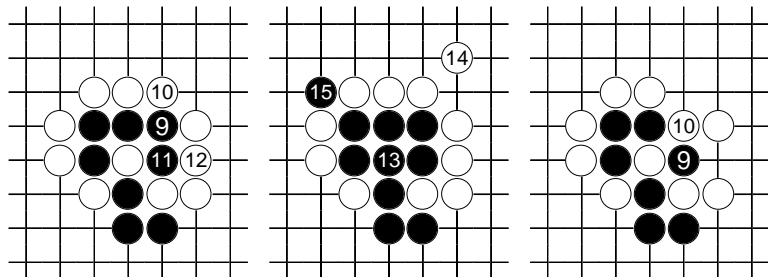
(Left) This cut fails against A. **(Centre)** However this peep is useful for Black. **(Right)** If Black pushes to the right, A is not well placed.



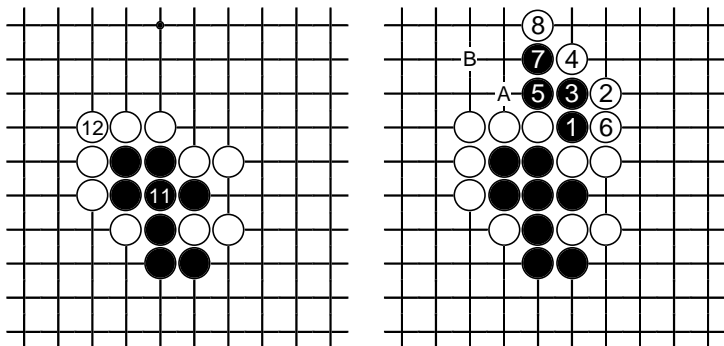
(Left) B is better placed to resist Black's push 1. **(Centre)** It also covers the cut at 1 here, with a net. **(Right)** C is an interesting study after 1 and 3.



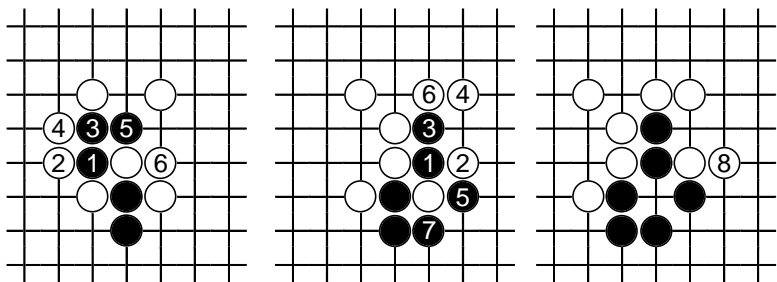
(Left) Avoiding a ladder, White can make a strong shape, aiming to sacrifice (centre). **(Right)** White can also plan to squeeze Black, for influence.



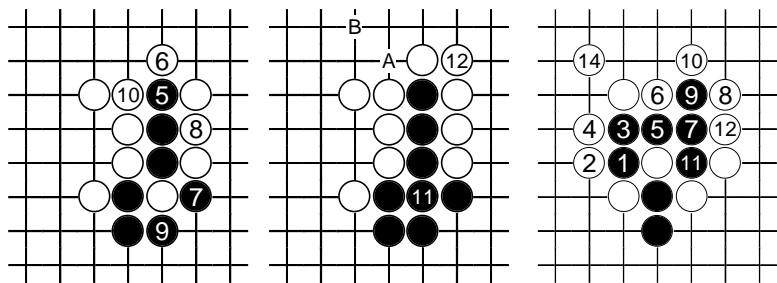
(Left, centre) Black 9 here helps White build an outside wall. **(Right)** It should be better for Black to capture with 9, considering White's defects.



White can connect at 12 in the position from the previous page. What if Black cuts at 1 in the right-hand diagram, to spoil White's influence? After 2 and 4 White can connect at 6 and fight hard. There is also White 6 at 7, Black A, White B to consider. In that variation White is able to build solid thickness by sacrificing stones, but will lose the initiative.

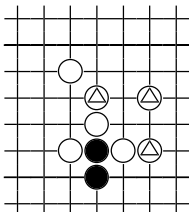
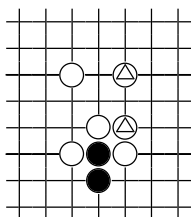


(Left) Case D: Black's cut at 1 runs into a net already seen. **(Centre)** White at E leads to a further pair of squeezes. First we look at Black 5 here. **(Right)** White gets at least an adequate result with 8. In fact capturing one white stone hasn't achieved so much for Black.



(Left) Black 5 here is required, leading **(centre)** to another position in which the cut at A is covered by a ladder or squeeze with B. **(Right)** White at F, leading to a further squeeze, but with serious cutting points for White.

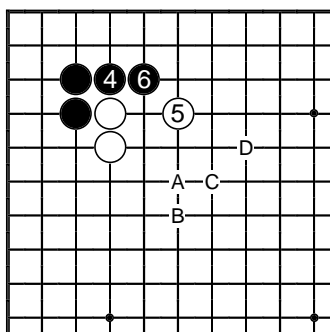
The 20 variations given do not perhaps exhaust the position. Can one give a summary? The box on the next page gives the story as seen on a purely shape basis, to compare with all this tactical analysis.



In Brief The shapes B and C have the most to recommend them. They have the potential to become the table shapes shown here.

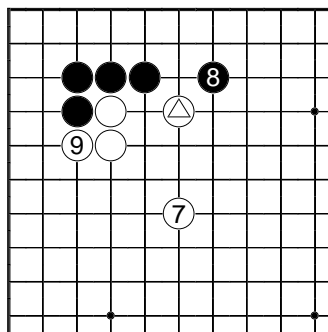
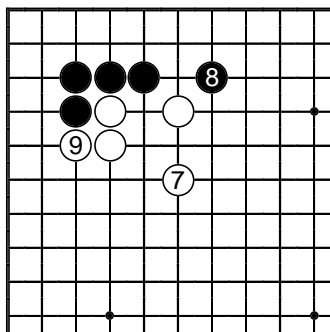
3.3 A study in direction of play

This example is in some ways similar to the one in 3.2, but this time we look at it in the broader context.

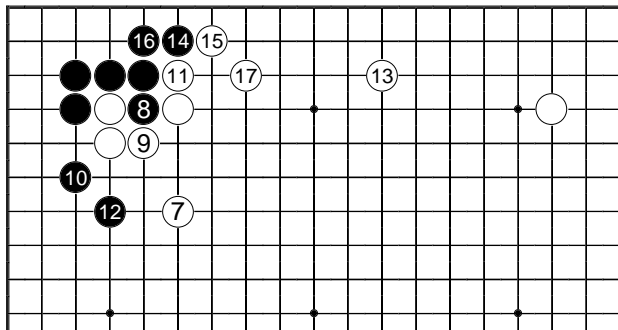


It is reasonable to assume, when Black 4 is played, that White 5 and Black 6 (a *bulge* point if White plays there) will follow: proverbially *my opponent's vital point is my vital point*. Now the ball is in White's court. An efficient play such as one of A to D is called for, before White blocks Black on either side.

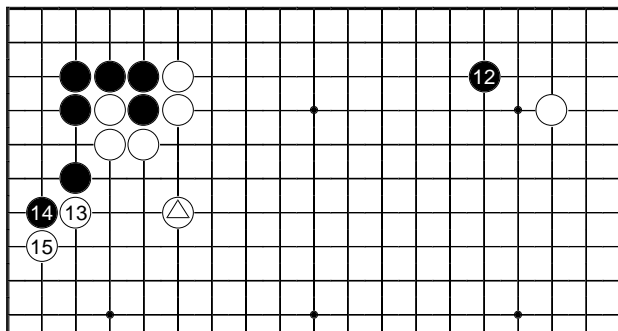
See 3.5G, 4.4 for more on the bulge.



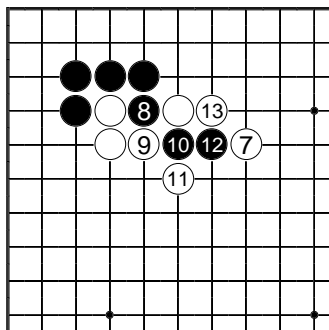
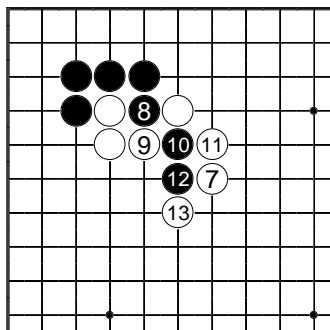
White 7 forms the table shape A (**left**), which was discussed in Chapter 1. Here it seems slightly less efficient than B (**right**), if Black continues in just the same way. There 7 is apparently less solid, but is a one-line gain in enclosing the left side, made by treating the triangle stone lightly. Black has the choice of jumping out on the left side to prevent 9, too (next page).



We've seen that B is the interesting choice. Black 8 for White 9 tests White's attachment to the two stones before playing 10 (see 13.6 for this concept). Later on White might instead sacrifice them. Black 12 is good shape on the left side, and the corner is large. Where to play 13 is tricky, taking into account the endgame play Black 14. This is an example of 'living go'.

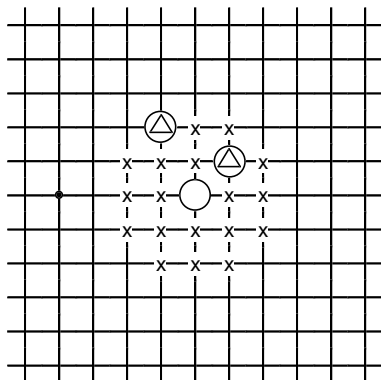


This is another lively variation, with Black 12 a challenge to White. With 13 and 15 White will be able to close off the left-hand side. The marked stone in the centre makes this strong tactic possible for White.



The other choices, C and D, have in common that they protect against the cut by means of ladders, one short range and the other long. They look to block on one side or the other. The choice between them cannot be made on local considerations alone.

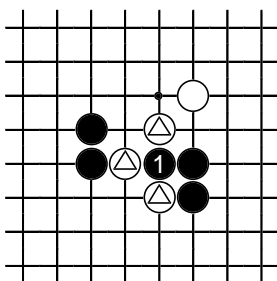
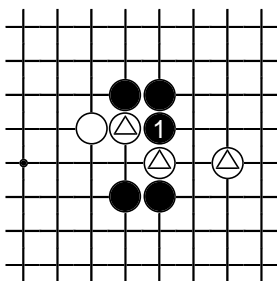
3.4 Compound shapes



Imagine a single stone sitting in the middle of the board somewhere. The most important friendly and enemy stones as far as it is concerned are those as close as the two marked ones, or on the other 'x' points.

What we call a *compound shape* is a shape of three stones of the same colour, not containing any solid connection, that can be made by adding two plays such as the marked ones to the central stone. All 15 types are listed in the next section, to refer to at need.

Rote learning disasters

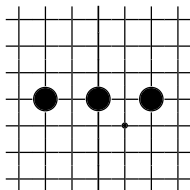


There are some elementary tactical hazards involved in learning compound shapes as connected or not.

In these examples, an underlying White shape (the marked stones) is properly connected, unless Black is strong nearby. White presumably made them when that was true, and simply failed to check that later developments hadn't changed the tactical position.

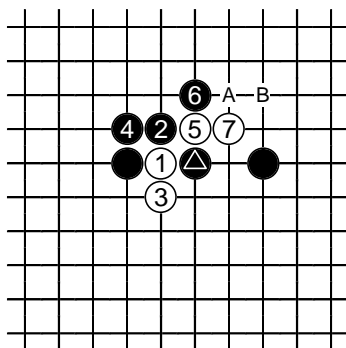
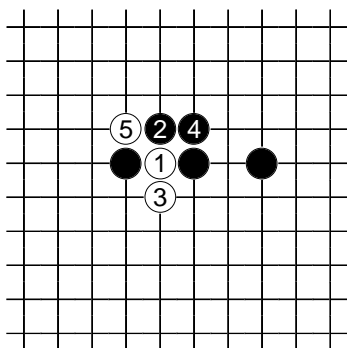
In fact the plays Black 1, when put in place, clearly do cut White. This sort of mistake by White is quite common.

3.5 Compound shapes reference collection

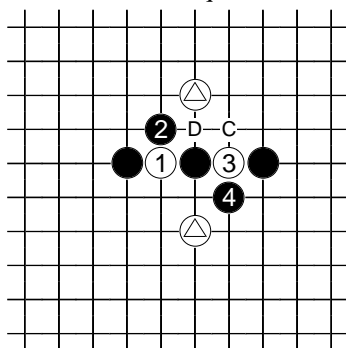
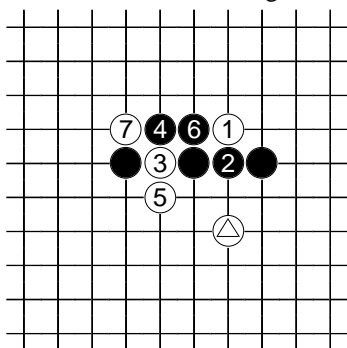


A: Two one-point jumps

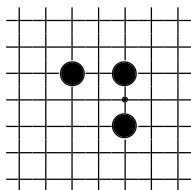
This is the most common shape for running out into the centre. The formation has hidden depths.



There are quite a number of cutting tactics to consider in this shape. Generally White can hope to succeed with one of them only if supported by other stones in this area. **(Left)** Black can respond to the wedge play White 1 with 2 and 4, on the side of Black's choice. Normally one way to play 2 works well for Black. Therefore White has to examine both cross-cut fights started by a play 5. **(Right)** Black has the further option of sacrificing the marked stone and continuing with A, or B for a net and squeeze.

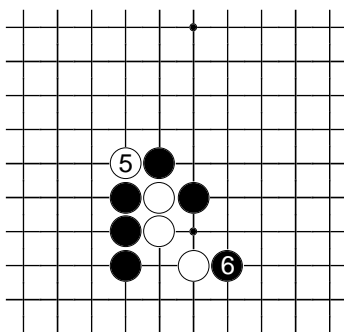
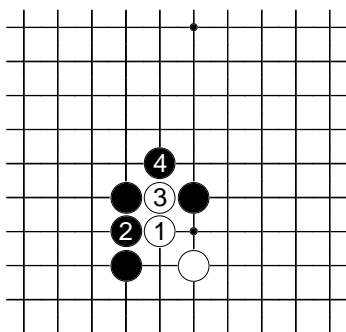


If we add stones for White the range of possible strong-arm tactics expands. **(Left)** With this extra marked stone, White will be able to cut somewhere with more support. **(Right)** The double wedge 1 and 3 may be severe, provided cutting Black is worth a trade for a *ponnuki*. In this case White's two marked stones mean White can plan for Black 4 (if Black plays on the other side with C, White D is a spectacular cut).

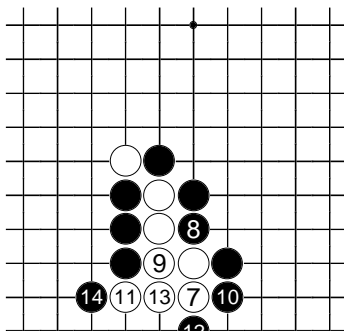
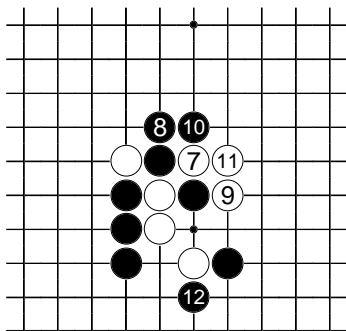


B: The big bend

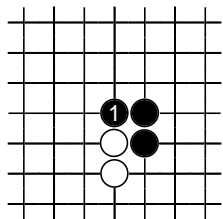
The other way to combine two one-point jumps. It is very often seen with a White stone at the fourth corner of the square.



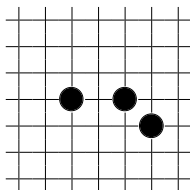
The obvious flaw in this shape is the double peeping play White 1. When this position occurs on the side of the board, Black has the tactical resource at 6. White then may find it impossible to gain from the cut at 5.



(Left) If White moves out in the centre with 7 and 9, Black can bridge under with 12. Normally this fight will go well for Black. **(Right)** Outright resistance with White 7 in this diagram is a simple failure.

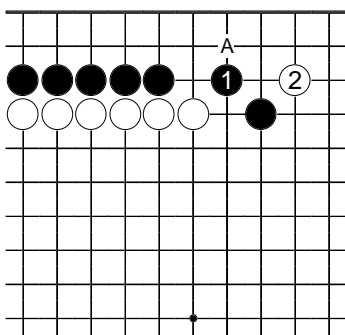
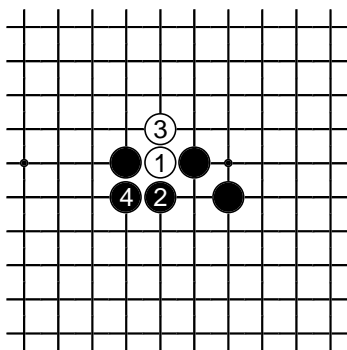


The bend itself, such as Black 1 in this diagram, is a basic shape learned early in everyone's go career. It can make a large change both in territorial terms, and in the balance of influence.

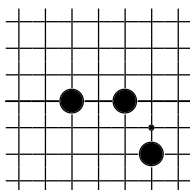


C: The diagonal play protection against the wedge

Adding a diagonal play normally covers the wedge weakness in the one-point jump, and also allows a switch of direction. But this shape isn't always good.

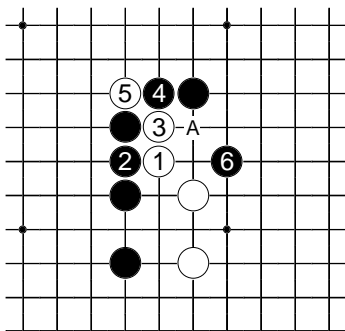
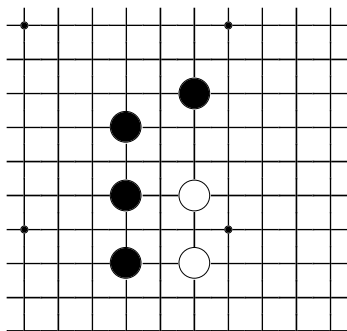


(Left) This is the fundamental pattern behind the addition of a diagonal play to a one-point jump. Black remains connected up to 4. **(Right)** However in this case Black 1 is inferior to Black at A (see shape J). White can play at 2, on the key *angle* point. Next White at A is good, or peep one to the left.

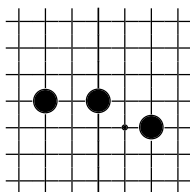


D: Adding the knight's move cover

This is not a shape generally recommended; but it has a special use as an alternative to the big bend (B).

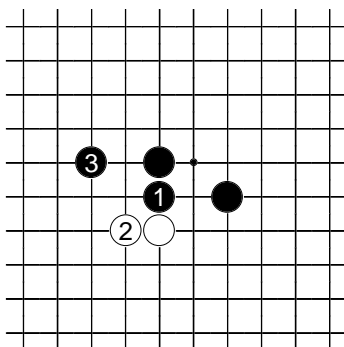
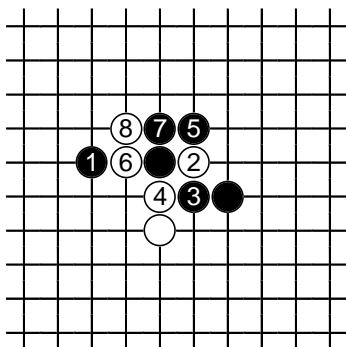


Here is a useful point about fighting in the centre. White can peep, and then cut Black. However Black's knight's move has the advantage that Black 4 is connected to the stone next to it, which is therefore better placed where it stands rather than at A. After Black 6 it is a hard fight, but Black is doing well. White cannot immediately expect to push through at A and cut.

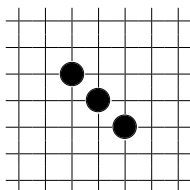


E: The light knight's move extension

This shape is easily cut. Whether it is a success or not will depend on foresight about that happening.

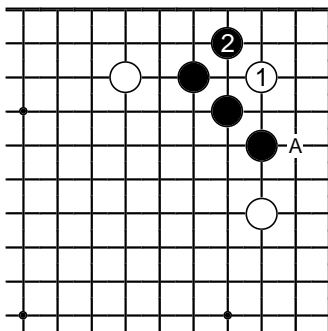
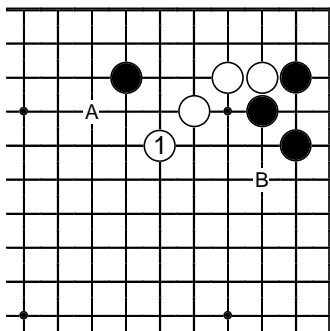


It is usually disastrous for Black to be cut as in the left-hand diagram. White 2 follows the proverb of 7.5, striking at the waist of the knight's move. Black can reinforce (**right**), but the exchange of 1 for 2 there is a loss (see 5.4). Compare with shape I.

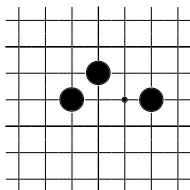


F: Two diagonal plays for running out

This is a conservative play for running in the centre.

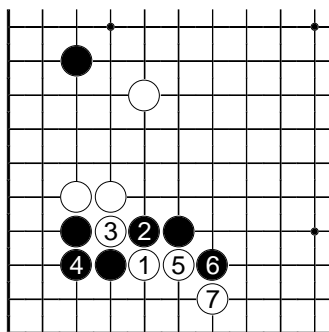
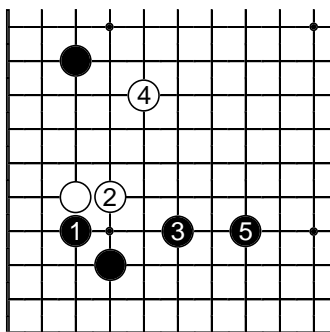


(**Left**) White 1 comes out into the centre. Black has developed on both sides, but White will be able to play next at A or B. (**Right**) This *three crows* formation in the corner has a weak point at the 3-3 point. After Black 2 White A is a big *sente* endgame play; Black finds it hard to resist. This is an example of a large corner that may be slightly too large for comfort.



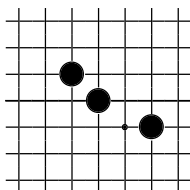
H: Maximum shape

This is a thin but efficient shape that may be used for a maximum attack based on the diagonal attachment.



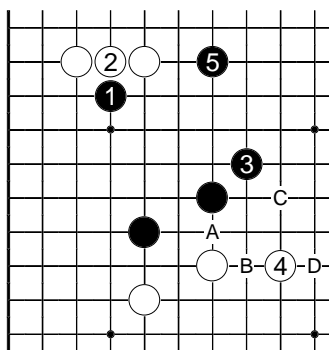
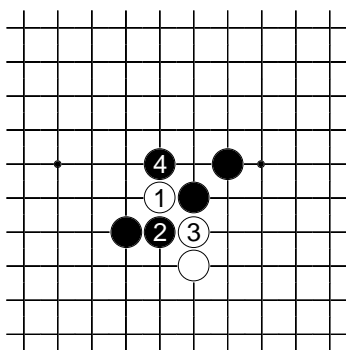
Black attacks White, making use of the pincer stone on the left side. The reinforcement at 5 prevents the cut White 1 in the right-hand diagram.

NB: 'Maximum' means best for taking territory while attacking, not to kill.

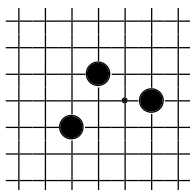


I: Diagonal connection to the running knight's move

This shape has a common use in running fights, as a corrected version of shape E.

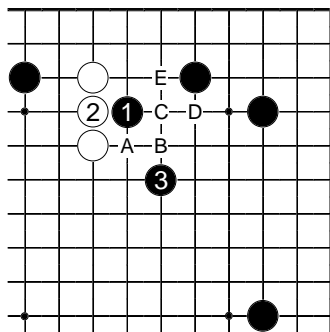
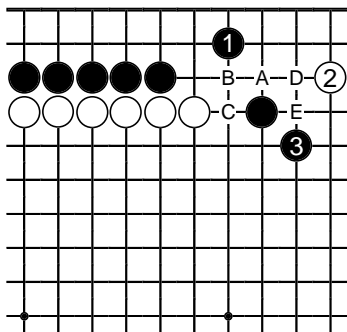


The left-hand diagram shows that the cut is defended by a ladder. The diagonal play is advantageous here, compared to shape E. **(Right)** Black plays 1 to set up a ladder covering the cut shown in the left-hand diagram. This shape works well in such a context, provided Black can attack on the left side. It is better than the sequence Black A, White B, Black C, White D to cover the cut, that was mentioned under shape E.



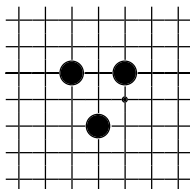
J: The big bulge

Of the patterns formed from two knight's moves, this is the only one that is a versatile good shape.



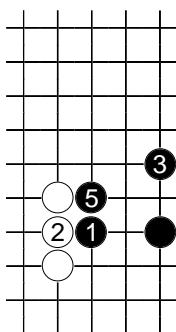
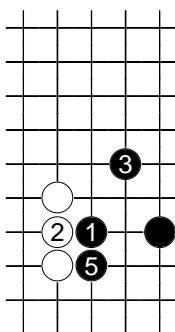
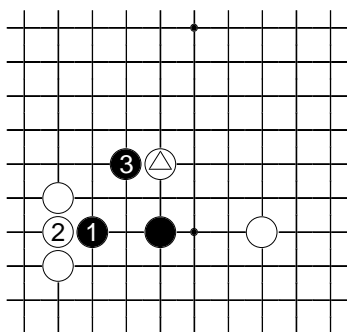
(Left) The correct way to connect under here. White 2 may threaten White A to Black E, but Black 3 (just seen under I) is good. Compare with C.

(Right) A good way to take territory while attacking. Black can sacrifice one stone with B and then D after White A.

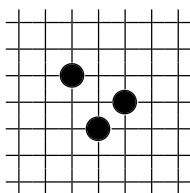


K: The dog's face

Known also as the sake bottle, looked at the other way up. It is well connected but worse than the big bend for eye shape. (By the way the progression of faces goes cat, dog, horse, Loch Ness monster ...)

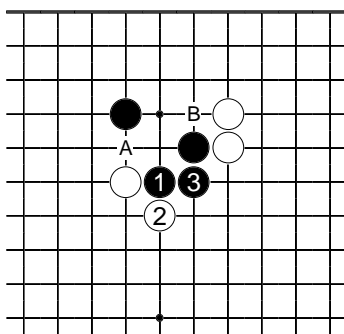
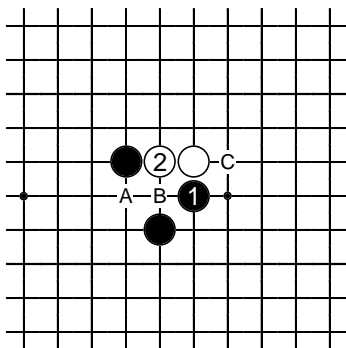


(Left) When Black is capped by White's marked stone, the combination of the peep at 1 and the contact play at 3 is a good way to fight. More material of this kind in 9.2. **(Right pair)** How to play when Black isn't capped? An interesting shape issue. After 1, playing 3 as the dog's face will become good shape if Black plays 5 on the third line; jumping out if Black 5 is on the fifth line. Usually though Black should omit the peep, jumping out first.

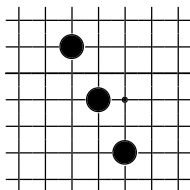


L: The odd diagonal

A special purpose shape. It tends to concede something in the way of key points, so requires a local justification.

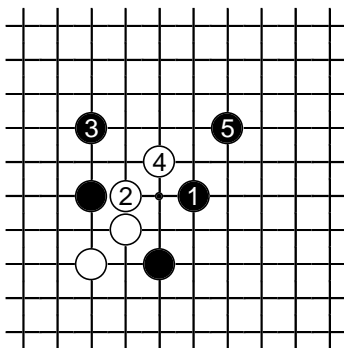
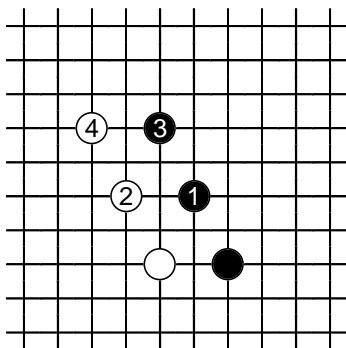


The reason for the name is shown in the left-hand diagram. After White 2 none of A, B, or C is a perfect shape for Black. **(Right)** A very common example. Black emerges into the centre with the *arrowhead* shape 3. If White 2 is at A instead, Black B is good.



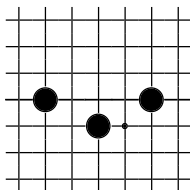
M: Attack with the knight's move

This is the classic attacking pattern, in cases when the opponent has no time to cut through.



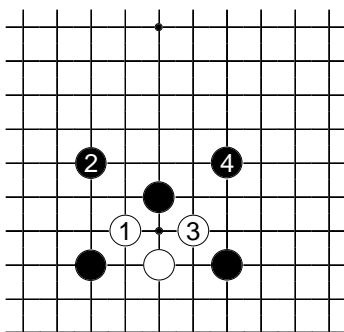
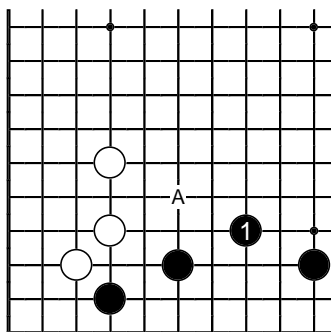
There are in fact two ways of leaning in such an attack. **(Left)** Black builds a framework to the right by direct pressure. **(Right)** Black may appear to be falling back, but is actually attacking by keeping ahead of White (cf. 4.9).

Rapid attacks like these naturally leave behind some weaknesses for Black.

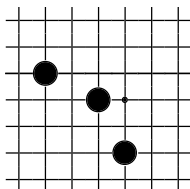


N: The flying V

Normally this is just a territorial shape in the bulge family, but it has an attacking reputation based on Bruce Wilcox's teachings.

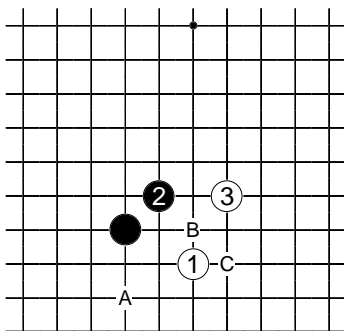
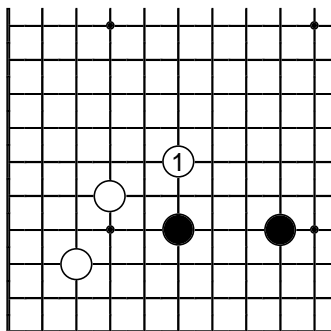


(Left) Here 1, not A, is correct shape – it completes territory and stabilises a group. **(Right)** The start of the flying V, which may later be extended on both sides as in pattern M.



O: The anonymous shape

This one completes the list; it isn't much seen in fighting.



(Left) This is a play at a key point, the focus of two frameworks. **(Right)** A common development on the side during a running fight. White's next play round here would be at A, rather than anything else. This shape can be cut by Black B. But normally it is good enough for White to run back at C in reply.

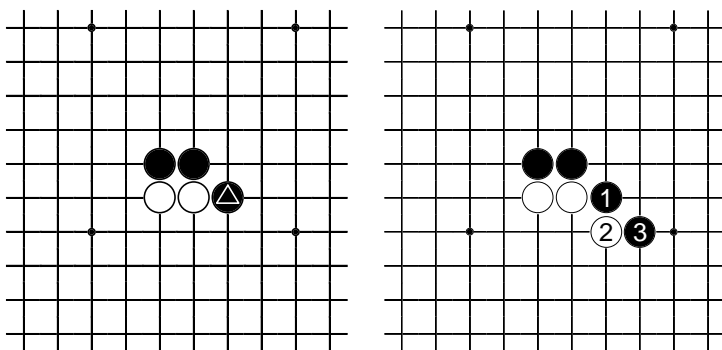
Part Two

Principles of Engagement

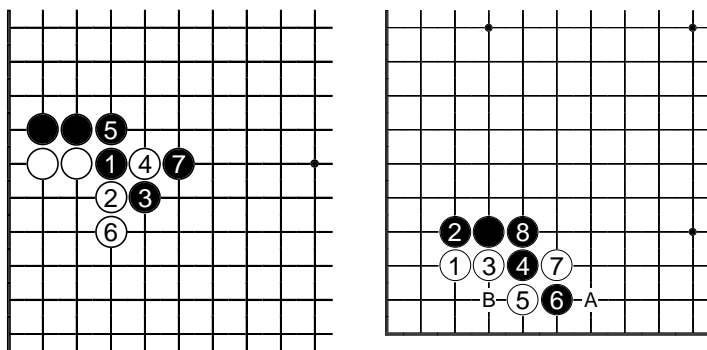
Chapter Four

Starting from hane

4.1 Play *hane* at the head of two stones

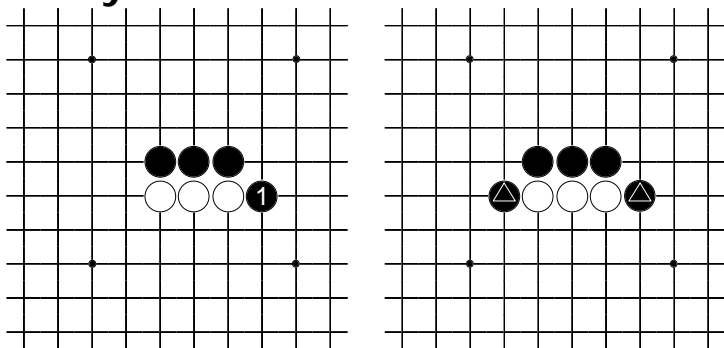


The Black stone marked with a triangle is an example of the *hane* ('hah-nay') play, round the end of your opponent's stones, leaving a cutting point. **(Right)** Black 1 is *hane* at the head of two White stones, and Black 3 is a second *hane*. When it works, this double *hane* is a powerful way to play.

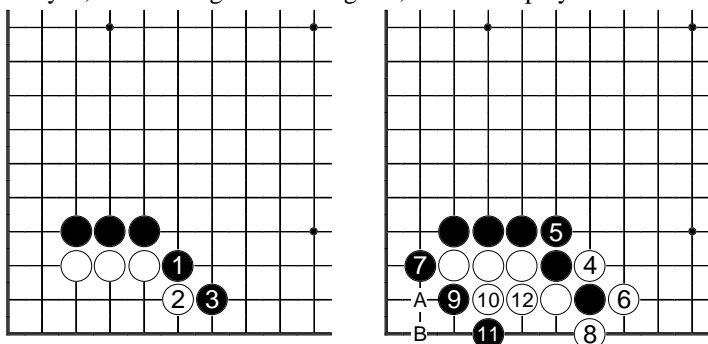


(Left) White must defend at 6, so Black succeeds, bending White back through 90 degrees. **(Right)** After a 3-3 invasion, Black may play double *hane* with 4 and 6, since Black B retakes the corner if White now plays A.

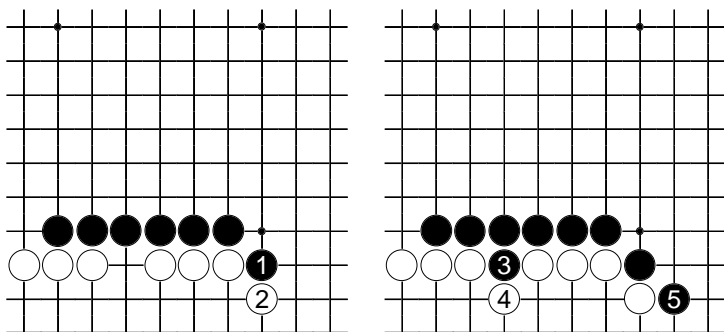
4.2 Play *hane* at the head of three stones



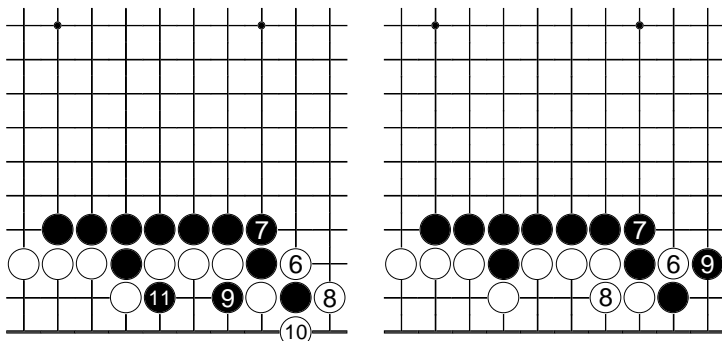
The *hane* play Black 1 also works to put the White stones into bad shape, especially if, as in the right-hand diagram, Black can play at both ends.



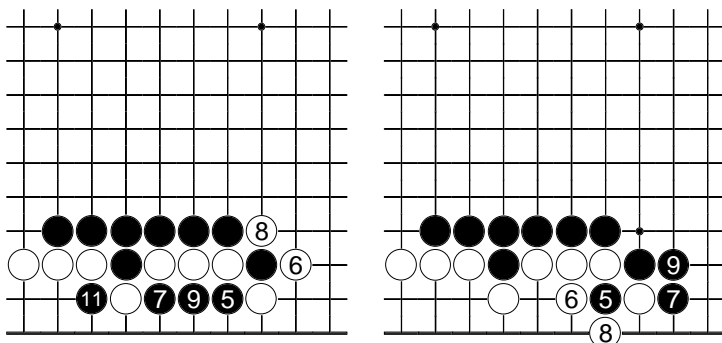
Let's look at the effect of the double *hane* play in the left-hand diagram. While less forceful than the example in 4.1, it still makes White experience some discomfort. **(Right)** White can capture with 4 and 6, but 7 infiltrates the corner. After 12, Black leaves this area for later. White A may be met with Black B for a *ko* fight, but normally Black would play *atari* the other way, sacrificing without serious regrets.



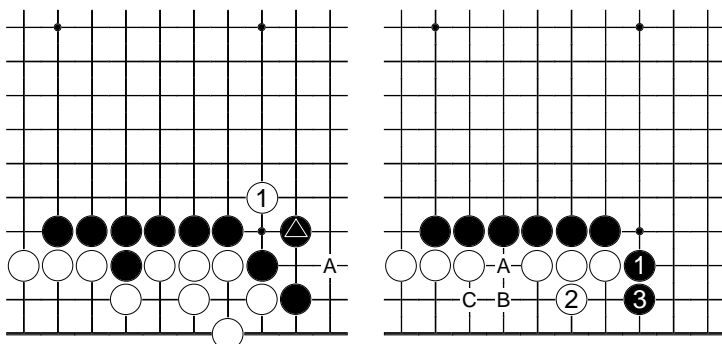
Here is a typical use of *hane* to seal off the lower edge. Up to 5 Black sets White a problem.



(Left) It will usually be out of the question for White to go down this road, losing three stones and being cut. **(Right)** White can choose this way of sacrificing 6, depending on the usefulness of a ladder-breaker.

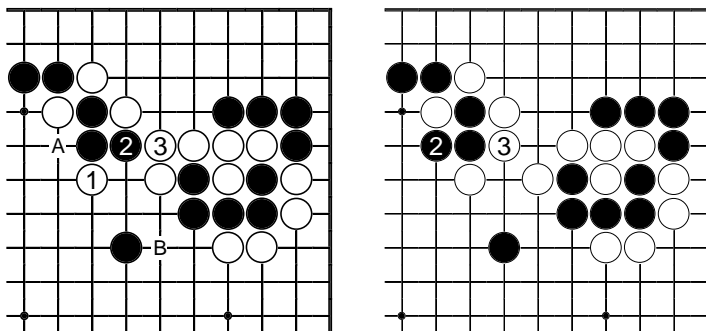


(Left) If the ladder is bad or awkward for Black, there is another play to try. Black 5 here is sharp: White 6 to resist (White 10 connects) will normally look poor after Black 11. **(Right)** Therefore Black may succeed in sealing off the edge with 7, at the cost of White's improved eye shape.



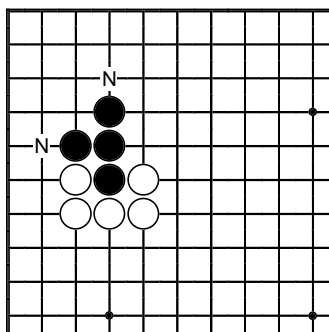
(Left) Black 9 in the previous diagram is generally preferred to a hanging connection, to minimise White's peeping plays such as 1 and A here. **(Right)** Sometimes White may play 2 this way, an empty triangle but not so bad, to take *sente* and guard against the cutting sequence Black A, White B, Black C on the other side.

4.3 Nose plays and adding liberties

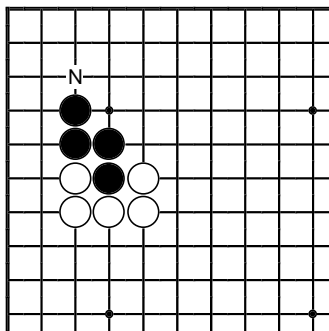


Here 1 is a key *nose* play in some wild fighting. If Black resists by playing 2 (**left**), White will capture at A or B. (**Right**) White connects out.

There is a good reason why beginners often try nose plays; but you have to be quite strong to employ them properly. There is a worthwhile general idea here.

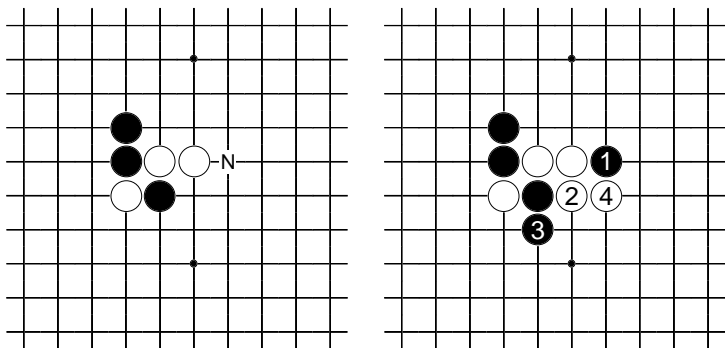


The two liberties marked N (for nose) of Black's chain have a special role. A black play at either of them increases the number of liberties to seven, from the current number five. If Black adds a stone on the other liberties, the chain will end up with six or only five liberties. The points N are the directions in which liberties grow fastest.



Another example, in which the point N is the unique 'nose': only by playing there can Black build up seven liberties on this chain. Clearly enough it is a simple matter of counting to find the nose points. It is, however, a matter of considerable skill to attack successfully at them. The *hane* proverbs help here.

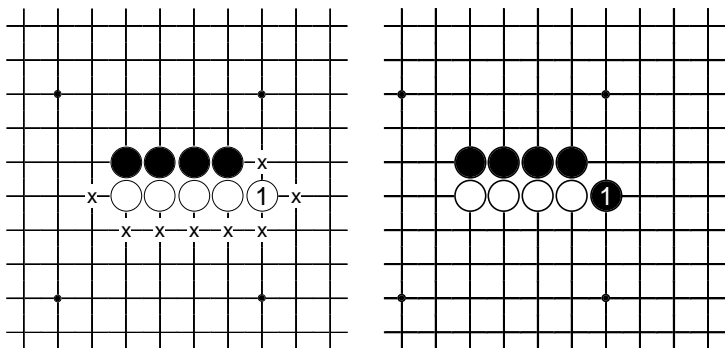
A computer would be able to identify nose plays much faster than a human could. Human go players have the advantages of looking further, at the overall fighting context, and of great selectivity in the kinds of patterns and heuristics they apply. This does seem to matter more.



Here in a cross-cut fight White's chain has a nose point at N. It is a novice's mistake, in general, for Black to attack there immediately. After Black 1 White 2 is a very good play. Now Black suddenly has an extra (third) group to handle. At 4 White may play as shown, if Black has no ladder to capture the single white stone. In any case White will get a good result.

'Be wise; generalise' they say, but there is no proverb 'play *hane* at the head of four stones'. One can see that this is related to the idea 'five liberties on a chain is enough for tactical viability', together with the nose play concept.

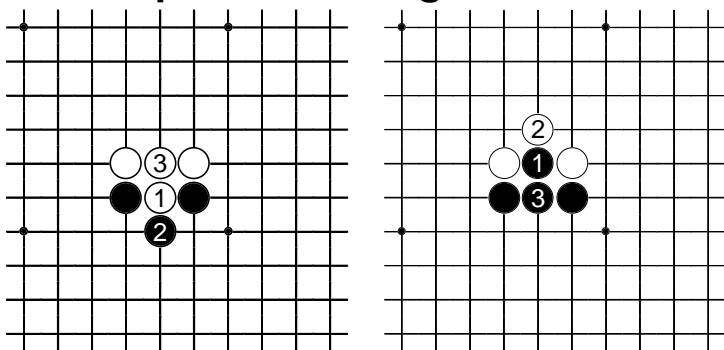
We may assess the power of *hane* at the head of four stones by simple counting.



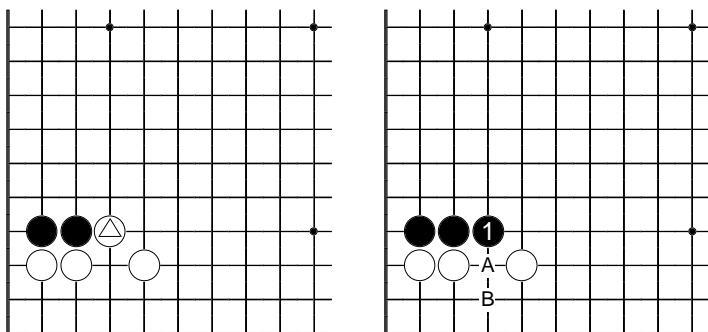
(Left) Note that White 1 makes eight liberties. The white chain will undoubtedly then be safe from shortage of liberties.

(Right) The black *hane* play here reduces White from six liberties to five. Probably White will answer Black 1, but for the sake of territory and influence. Against chains with five liberties one doesn't expect sharp tactics; it is hard enough to find those against chains with four liberties, as the example at the top of the page illustrates. Reducing a chain from six liberties to five isn't always quick enough.

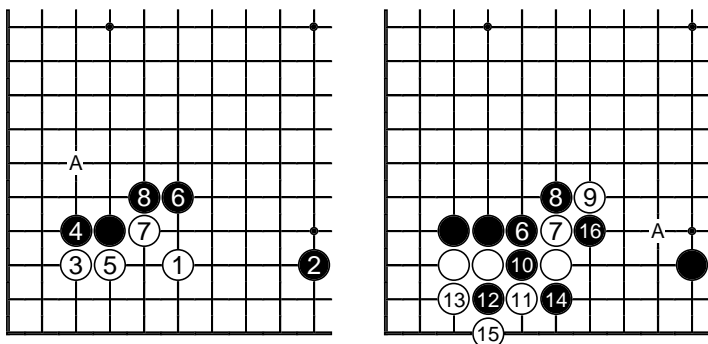
4.4 Don't permit the bulge



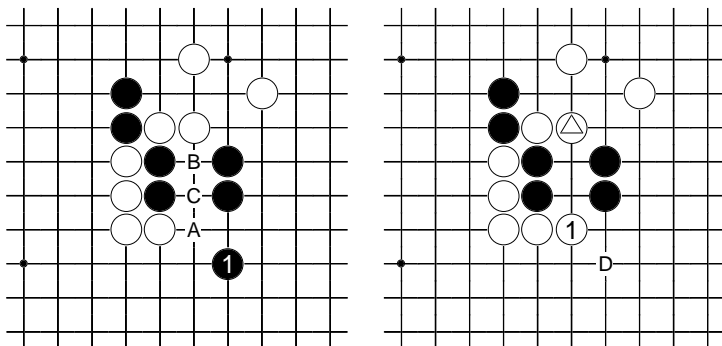
This formation, which may occur anywhere on the board, is explosive in shape terms. The plays 1 make a net difference of four cutting points.



The bulge of 3.5G, that is, the marked White stone, is a key point in many shapes. If Black 1 is played there, Black A, White B, will saddle White with two dangerous cutting points. Compare with the previous diagrams.

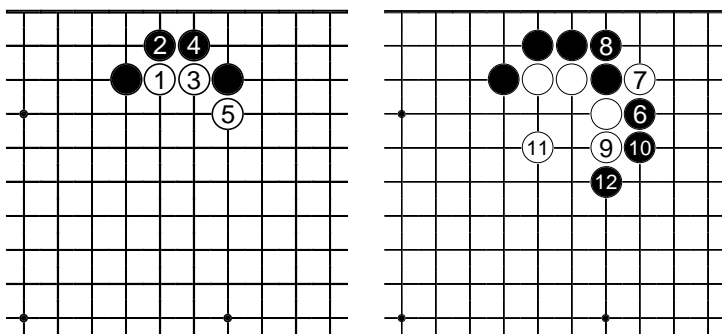


(Left) Black 4 should really be at 5 in this case, but Black 6 is a serious shape error. White 7 sets up a White play at A, to which Black has no very good reply. This is the sort of bulge one shouldn't permit to the opponent. **(Right)** Black 6 played at the bulge point guards Black's shape and attacks White's. If White plays 7 and 9, Black sets White a problem up to 16. Black's pincer would now be better at A, which is why Black 4 is wrong.

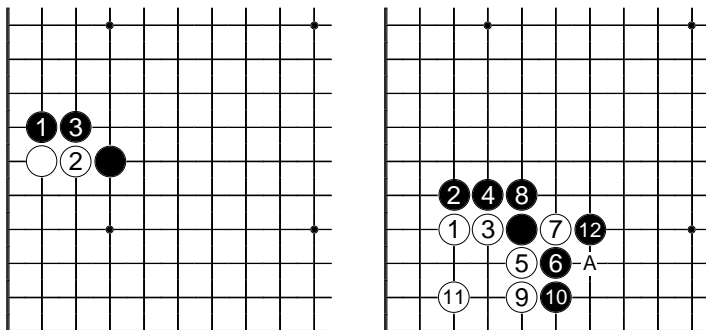


However in this position the bulge point A isn't important for either player. Black should play at 1 as shown; Black A, White B, Black C reveals an empty triangle. **(Right)** White 1 overlaps in effect with the triangle stone, and violates another proverb: *don't peep both sides of a bamboo joint*. It would be better placed at D, since Black has no interest in playing at 1.

4.5 Don't butt towards the centre

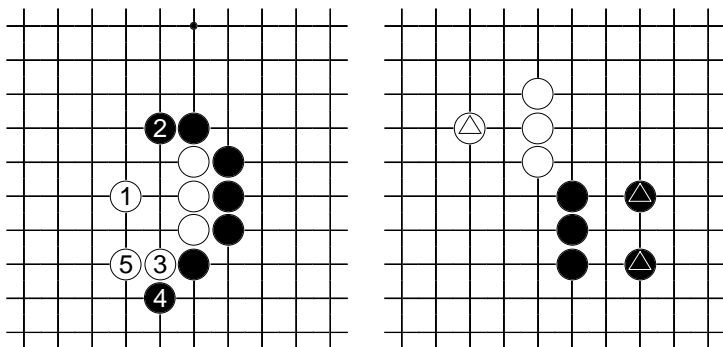


White 3 is a *butting* play, hitting a black stone head on. Up to 12, White's shape is very bad. White has made the same type of mistake twice.

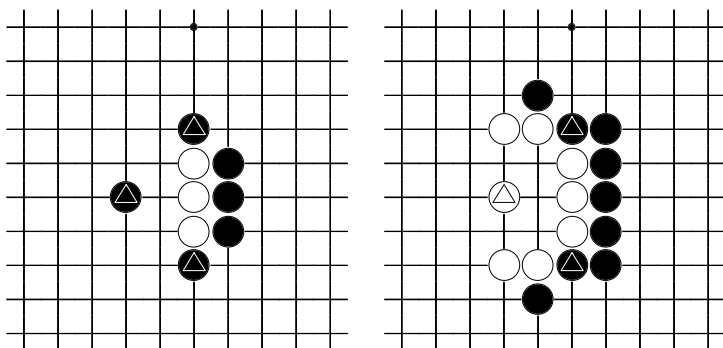


(Left) In general White 2, butting towards the centre, is a pattern of bad shape. **(Right)** White's shape here is poor. After Black's double *hane* with 6, White must defend, rather than play 9 at A.

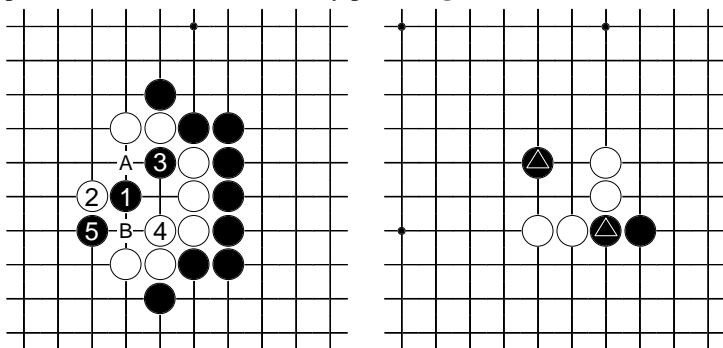
4.6 Play at the centre of three stones



These next sections are pivotal, and integrate ideas from all the first four chapters. White 1 is good shape for moving out. It anticipates the double *hane*, and prepares a table shape. This stone symmetrically placed at the centre of three stones defends a vital point. **(Right)** The single marked White stone is also more efficient than the two marked Black stones.

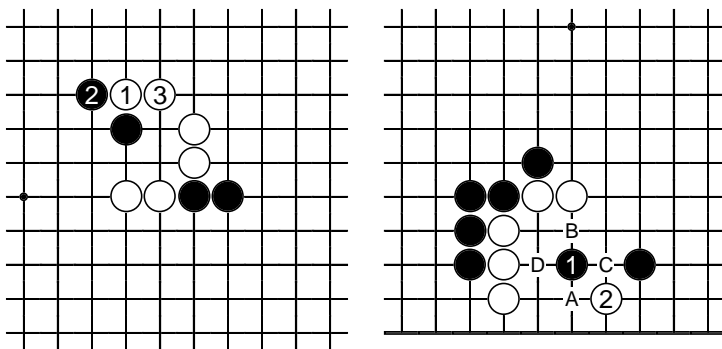


The triangles formed by these marked stones are ideal examples of attacking shape **(left)**, and defence at the key point **(right)**.

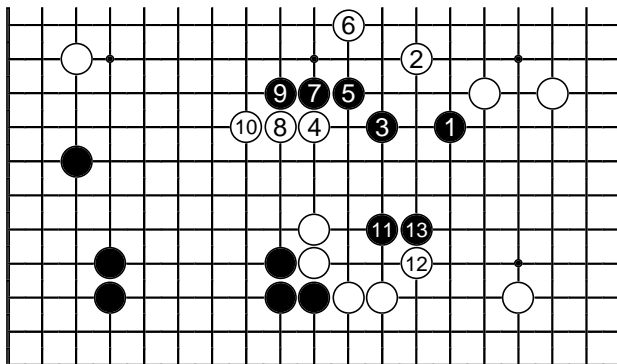


(Left) Black takes the key point, and White's eye shape is gone (White A, Black B leaves a false eye, Black 3 could be omitted). **(Right)** Compare with this basic eye-stealing pattern and the double table (1.1).

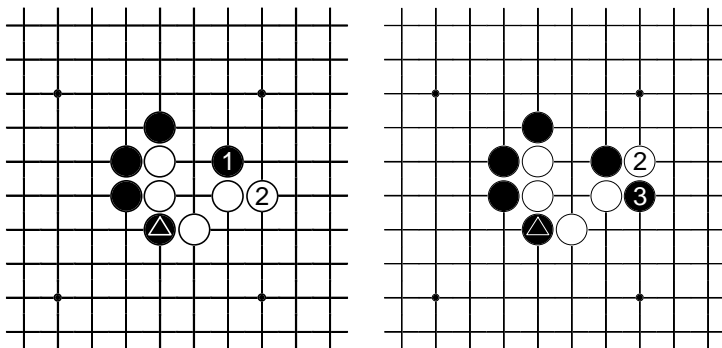
4.7 Eye-stealing patterns



After 4.6 we look again ideas brought up in 2.6. Here are two ways to resist an eye-stealing play. Black A is met by White B, Black C by White D.

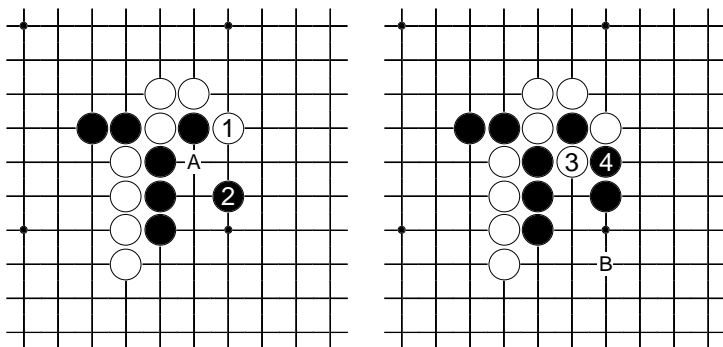


In this fight White should have played at 13 with 12. As soon as Black plays 13 for a hane shape, Black is strong and White is in trouble.

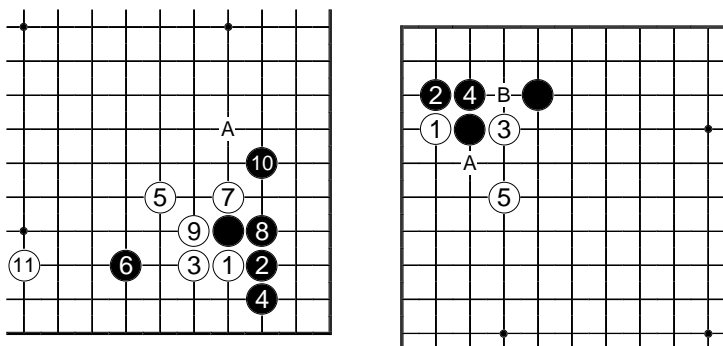


The simple play at White 2 (**left**), related to the nose plays of 4.3, is perhaps easy to miss in a game. It corrects White's bad shape based on the position of the marked Black stone. (**Right**) White 2 here runs into trouble, since Black can safely cut at 3 without losing the stone played as 1. The marked Black stone causes White a shortage of liberties.

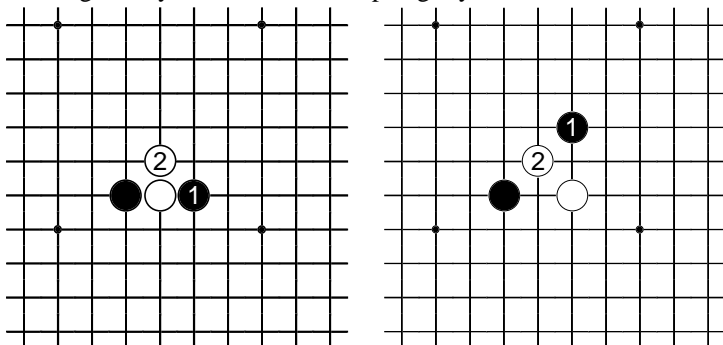
4.8 Choosing the clamp



Black's connection at A, an empty triangle, is worse than 2, at the centre of three stones. After 3, the clamp at 4 is good shape, as would be a play at B.

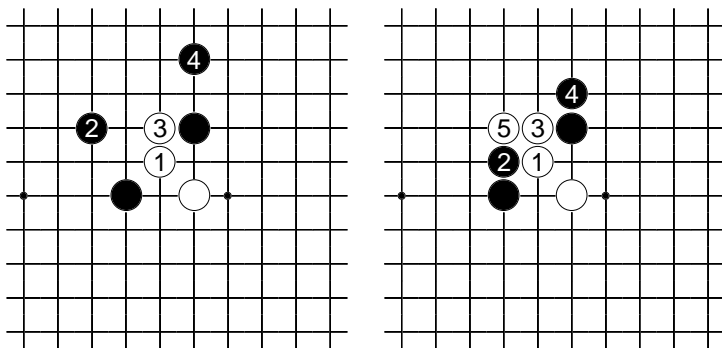


(Left) Here White 7, a table clamp as you could call it, is very good shape. White plays 11, anticipating a running fight in which White A will be useful. **(Right)** White 3 is a good clamp, aiming at both A and B. Black 4 is an answer in good style. White 5 develops lightly.

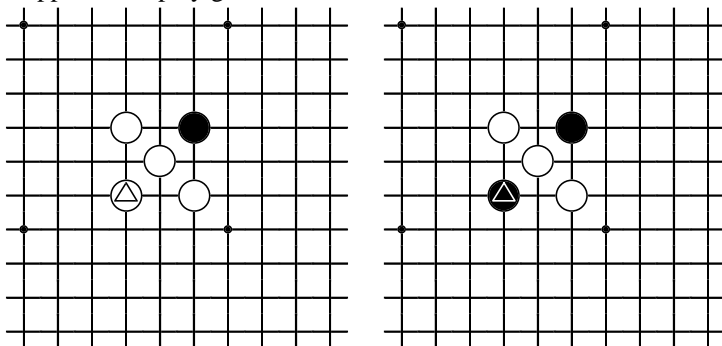


The more violent clamp compares unfavourably with the diagonal jump, when White cuts through. **(Left)** Black's stones are weakened by 2. Black must have a good reason to play this way. **(Right)** The Black stones are on key angle points of White's eye shape, and don't lose liberties after 2.

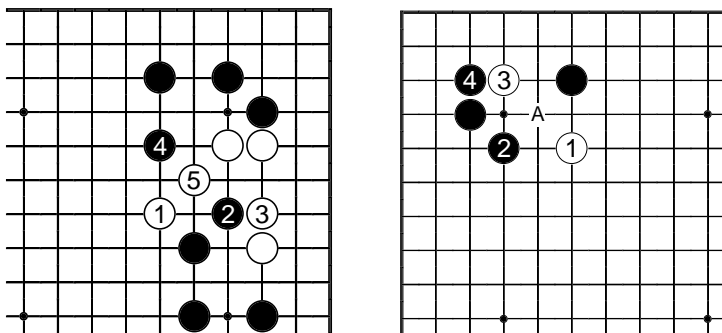
4.9 Diagonal jump : attacking perspectives



When White comes through the diagonal jump, the left-hand diagram is good play by Black. Black 4 is a light play, to sustain the attack. **(Right)** Black 2 here is a bad idea, since White will anyway play 3. Avoid forcing your opponent to play good moves!



To emphasise again: the marked stones are on vital angle points for White's eye shape. If Black is attacking White this makes a huge difference.



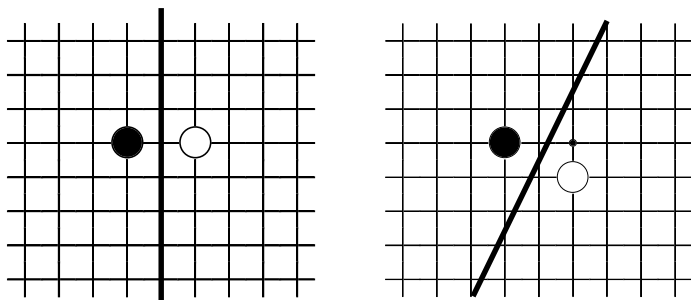
In both these practical cases Black lets White connect (at 5, A) but only with poor eye shape. People say the angle plays *compromise* the diagonal connection of the diagonal jump. More can be found on the diagonal jump in 11.2 and 14.3.

Chapter Five

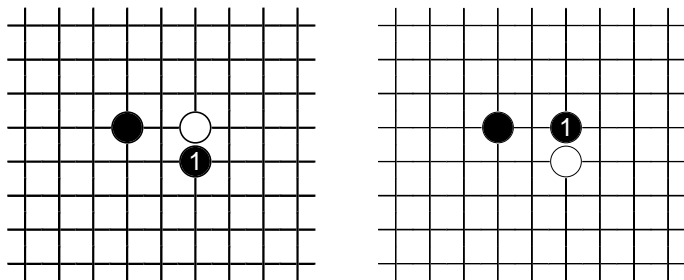
Close Range Play 2

5.1 Approach plays and gain lines

Approach plays (*kakari* in Japanese) are the first elements learned in opening play. They can happen anywhere on the board.

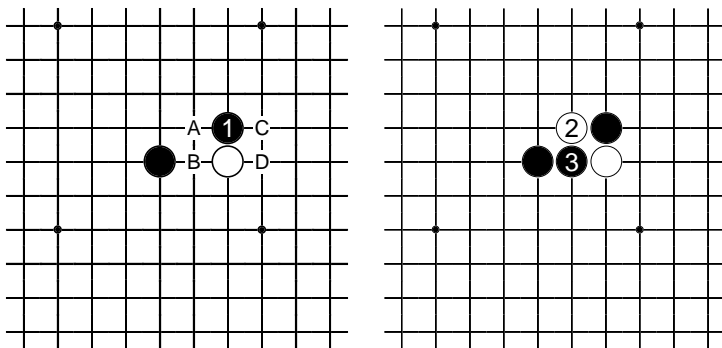


Where they do occur, there is a confrontation, across a *gain line*, marked in these diagrams. One way to get a local advantage is to push your opponent back, relative to these lines.

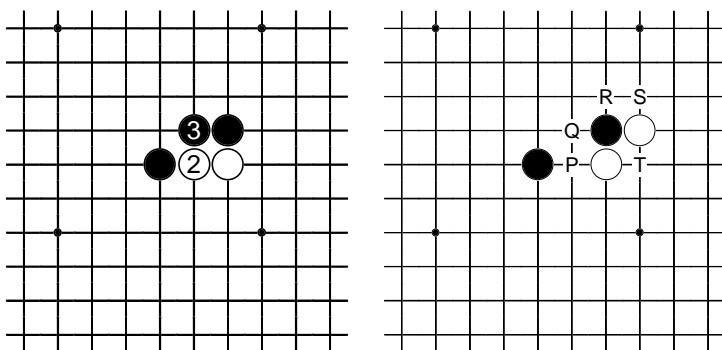


These plays, which are the conventional *supported contact plays*, are then of primary interest. In each case Black 1 tries for the maximum advantage, measured by getting over the gain line, while remaining close enough to the initial Black stone to see some benefit from its proximity. Because of their importance, and the variety of possible outcomes, we devote two pages to each of them.

5.2 Answering the outside attachment

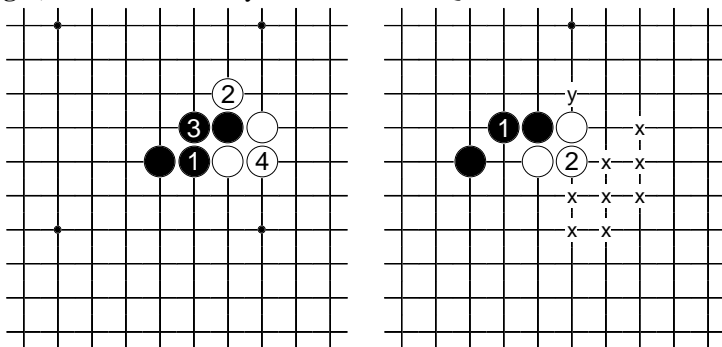


When Black plays 1, White has a choice of answers A to D. The right-hand diagram, after White plays A, leads to a cross-cut fight (7.1).

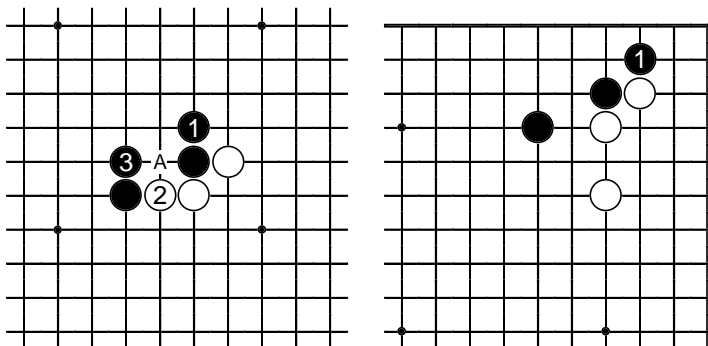


(Left) Answer B is a butting play (4.5) and therefore usually bad shape.

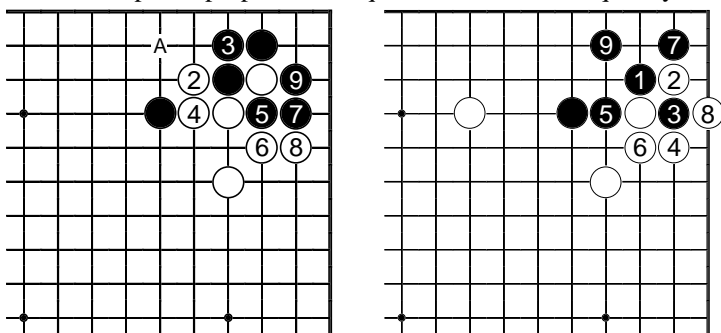
(Right) After C Black may continue with P, Q, R, S or T.



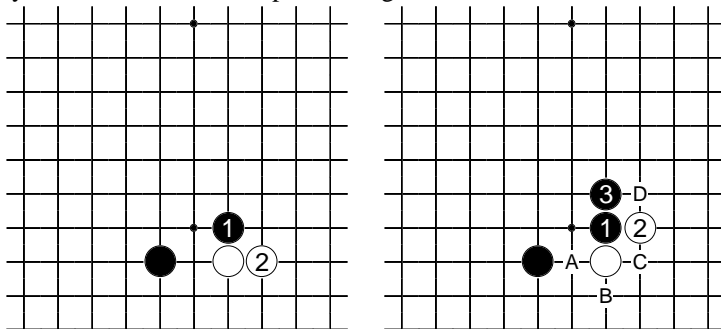
Answer P allows White to give Black an empty triangle (**left**), but does consolidate over the gain line. This pattern is sometimes seen, when both the initial stones are on the third line. After Q, which is a more normal idea, White can connect solidly (**right**); but might also play any of the 'x' points instead to cover the cut indirectly, or stick out at 'y'.



(Left) A normal idea is for Black to extend at 1, one way into the basic attach-extend pattern. Black 3 at A causes bad shape for both. (Right) Answer S is a special purpose technique, used here to live quickly.

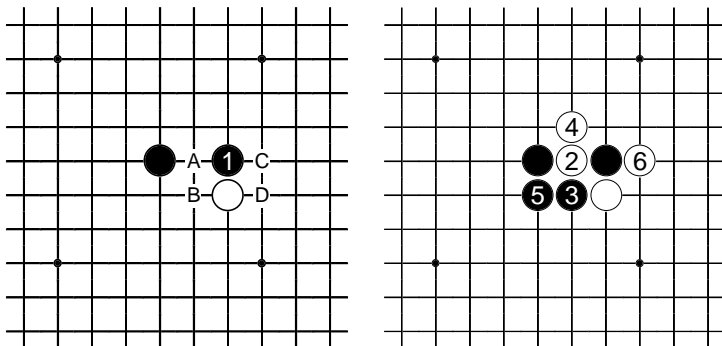


(Left) White should play *atari* at 2, and let Black live small and in *gote*. Black A later will be big. (Right) This is a typical case of response T. White 4 seems to allow Black life too easily, considering that Black played away here. These two examples belong with the material of 12.1.

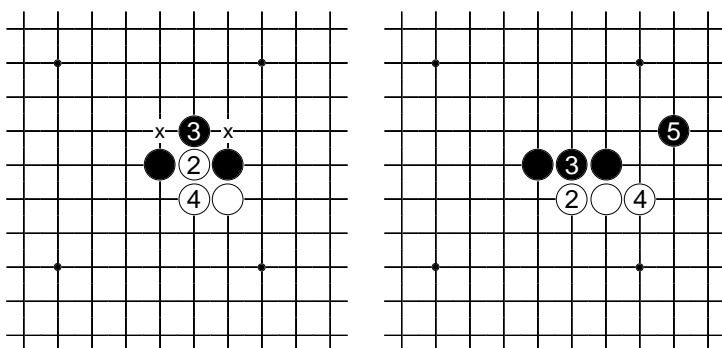


There remains to look at White 2 in the left-hand diagram here, answer D from the original list. When White is attacking, and Black defending, White may choose this way to give Black the minimum of help. If White needs the point 2 anyway, this is theoretically sound (cf. 13.2). (Right) White may now continue with 4 at any one of A to D in this diagram; but Black has been helped towards good shape with 3, and White's cutting point remains.

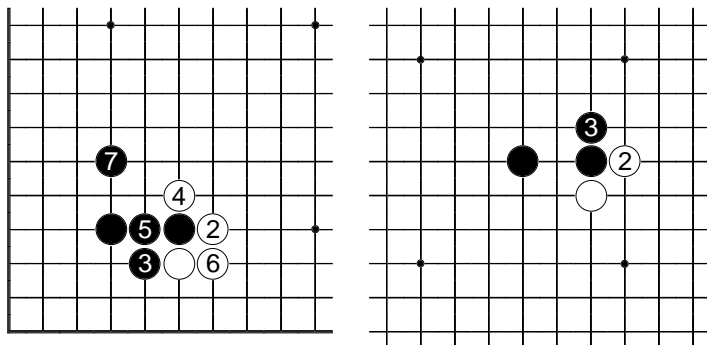
5.3 Answering the attachment on top



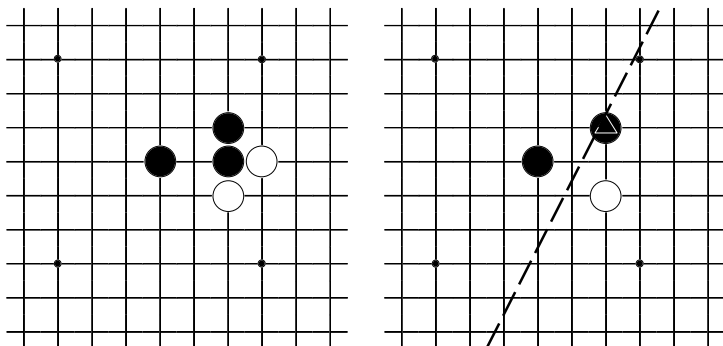
White's normal answers are A to D here. (Cf. also 4.4, for a shape to avoid.) White at A can be said to depend on the ladder in the right-hand diagram.



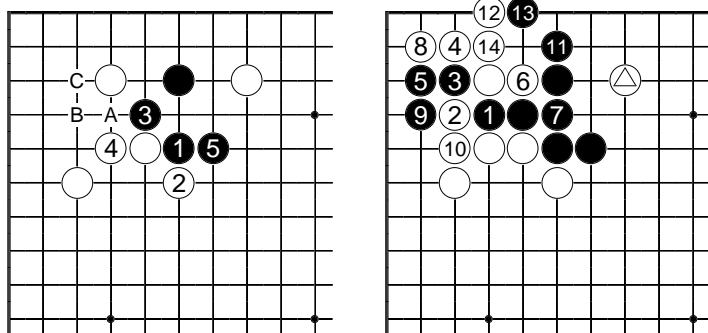
If that ladder is good for White, and Black has to play *atari* on top (**left**), White is doing well because of the cutting points marked 'x'. (**Right**) White at B simplifies the development to a trade of influence.



When White answers at C, two standard patterns may occur. (**Left**) The attach-block shape made by Black 3 is a corner opening, in which Black 7 is important to guard the 'nose' weakness in the corner (see 4.3). (**Right**) The attach-extend pattern again, which was met in 5.2 in another form.

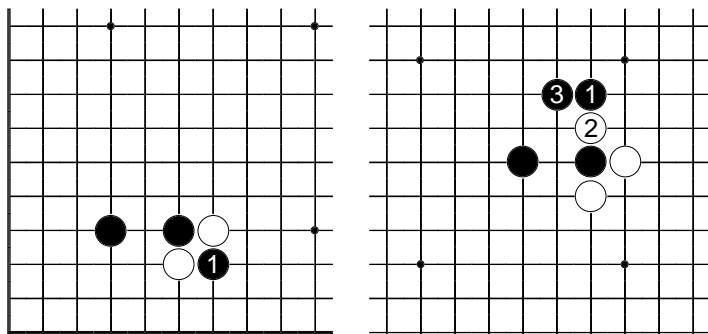


To understand the attach-extend pattern in gain line terms, compare it with the capping play (marked stone). You can say Black has moved over the gain line, but has also made stronger shape, and given White a cutting point.



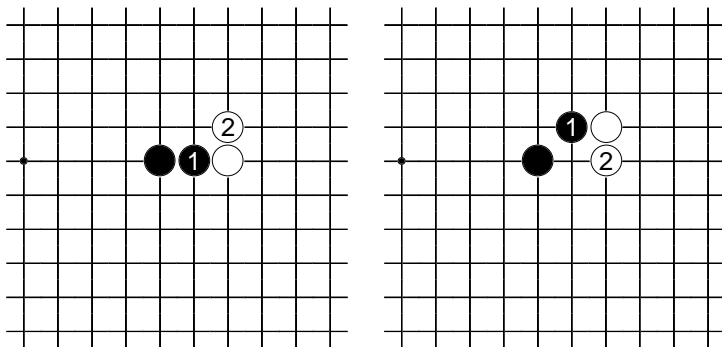
Before extending in the attach-extend pattern, one can play the bulge point (3 in the left-hand diagram). In this case, Black leaves behind the useful cutting sequence Black A, White B, Black C. **(Right)** There is this possible capturing race in prospect. White 6 saves the corner, but Black is able to play useful moves on the outside affecting the marked White stone.

White's answer D makes it easy for Black to take the bulge point.

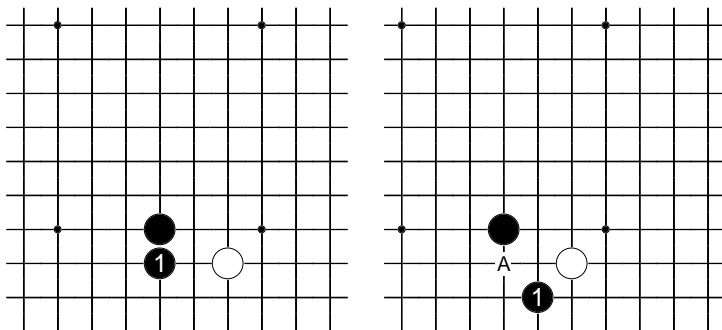


(Left) Black 1 here is a recognised play when Black is trying to make White overconcentrated on the lower edge (more on this in 7.2). **(Right)** Black 1 is a light idea, suitable for some defensive fights.

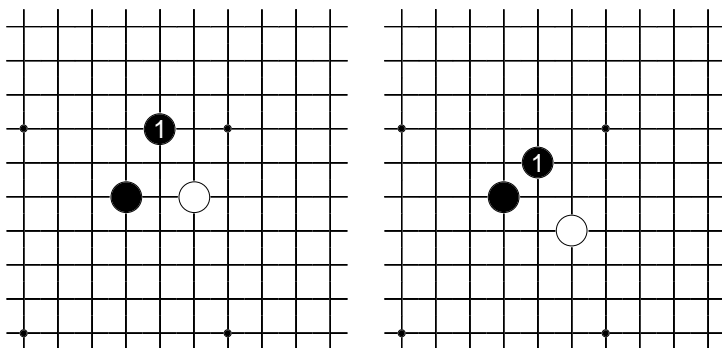
5.4 Restrained shapes



This butting play (**left**) is for special purposes only. It doesn't aim to get over the gain line. It loses out on influence, because Black 1 ends up so close to White. The diagonal attachment (**right**) is still something of a loss, and should be used to attack. In each case Black 1 is a local concession.

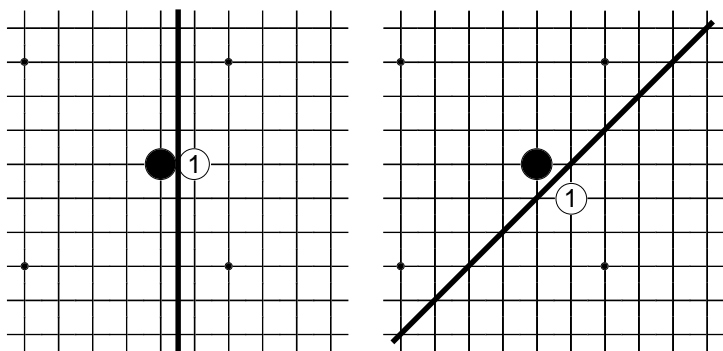


The *steel post* (**left**) works well sometimes, when Black can defend territory to the left and also attack to the right. The *footsweep* (**right**) is a harder-working play, but has a weakness at A (see 7.5).

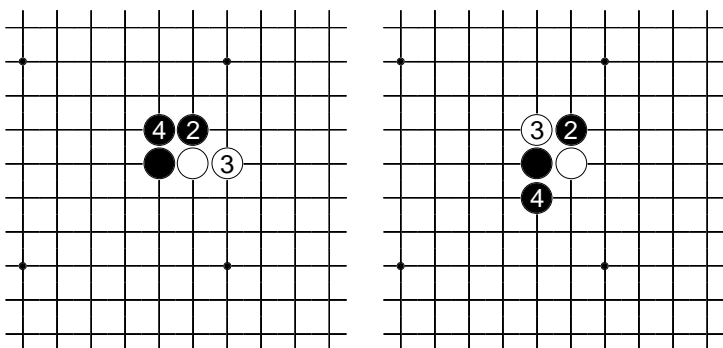


These are constructive plays for influence or central territory. They aim only for a reasonable result, pushing back the opponent. In fact there are real virtues in plays that leave the opponent wondering how to build power.

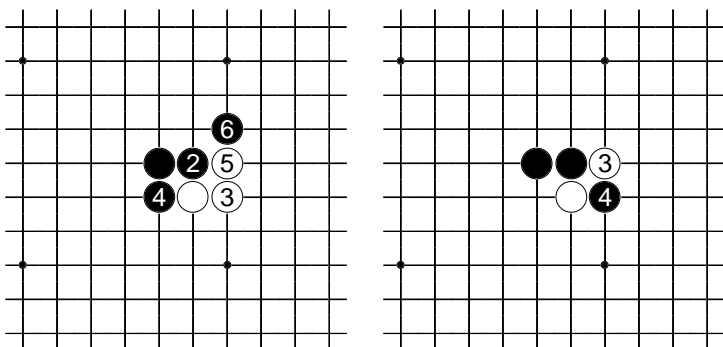
5.5 Unsupported contact and angle plays



These two kinds of immediate approaches have in common that an answer is very urgent, and the gain lines marked should in most cases be contested. Such very close plays should in general neither be feared, nor ignored when they are played.

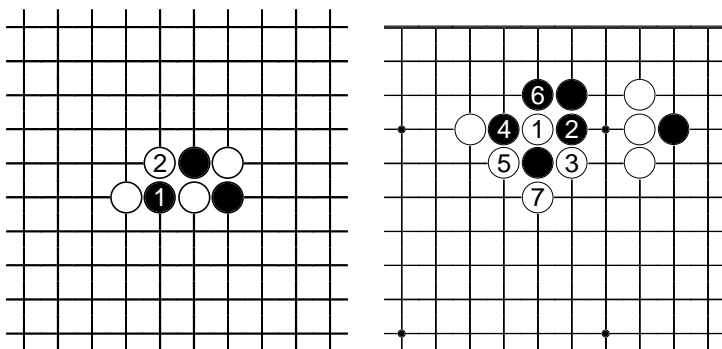


(Left) Black 2 *hane* is the competitive way to reply. Then Black 4 is the way to consolidate territorial gain. **(Right)** White may well cross-cut. Fighting after a cross-cut is addressed in 7.1 and 7.2.

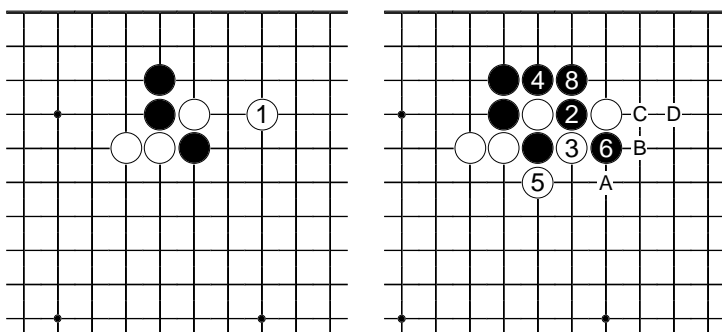


(Left) In the case of the angle play, Black can once more push across the gain line. **(Right)** A cross-cut again; normally White 3 looks unreasonable.

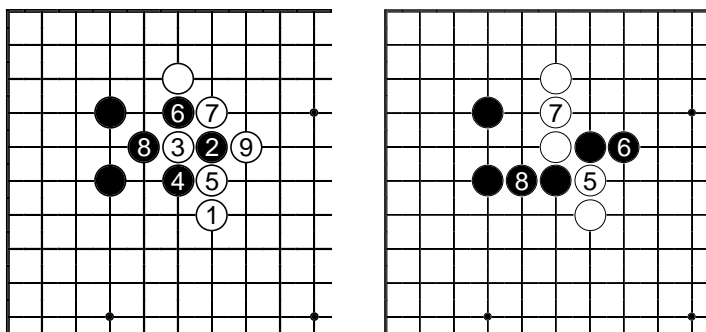
5.6 Ko lock



This is a new name, from China via South Africa, for an old idea. **(Left)** The basic pattern. White 2 double *atari* will usually leave Black little choice about capturing the White stone; and then White can block Black's progress upwards. **(Right)** White 7 completes the pattern, shutting Black in.



What is effectively the same shape can arise with a different order of plays. White 1 is a *tesuji* for some cross-cut fights. White 7 takes in the *ko*. Black 8 leaves White pondering whether to: play for influence with A, Black B; to fight with C; or to repeat the idea with White D.



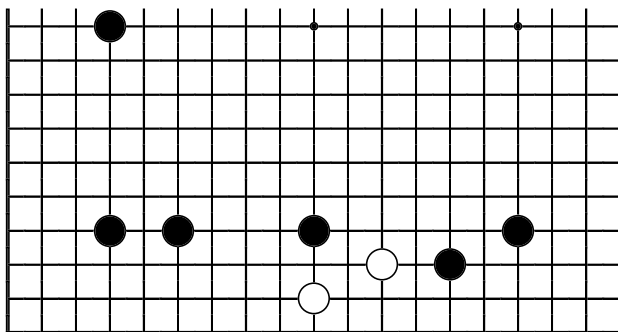
White 1 here is almost a trick play. With 6 Black falls for the *ko* lock **(left)**. Black should instead cut resolutely and fight **(right)**. (See also p.106.)

Chapter Six

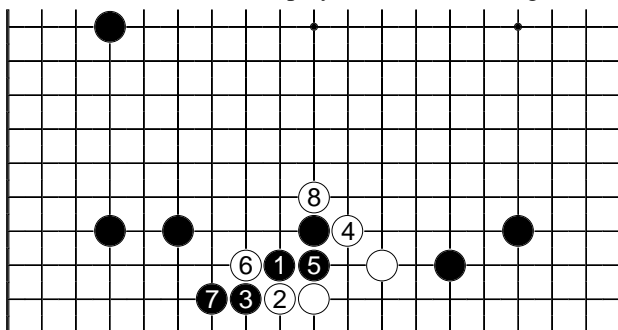
Blocking Off

6.1 Open skirts and crawling plays

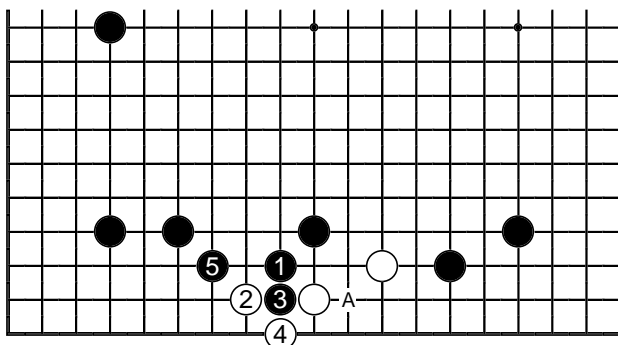
Plays on the fourth line are much used in modern go, despite the *open skirt* they leave on the second line. They emphasise influence over territory. Proper shape to block off is essential, since attacking play alone isn't enough.



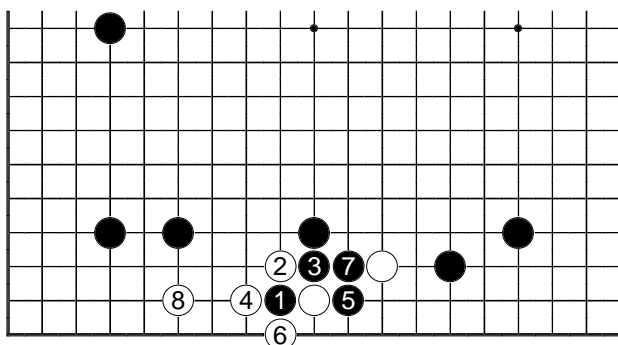
White has slid under a fourth line play. How should the game continue?



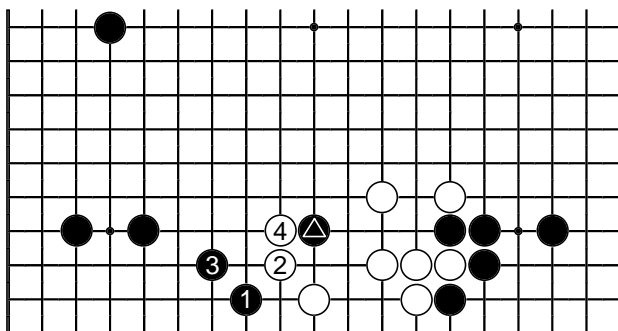
Black normally plays back with a diagonal at 1. Then the onus is on White to make good shape. The 'odd diagonal' at 4 is appropriate, once Black has answered 2 with 3. It looks to make good eye shape at 5. If Black denies White the chance as shown, White 6 and 8 ensure White reasonable shape.



It is a novice's mistake to jump in at 2 in this sort of position. The territory on the edge is less important than eye shape, until the endgame. Black 5 is strong, and White is left with a weakness at A.

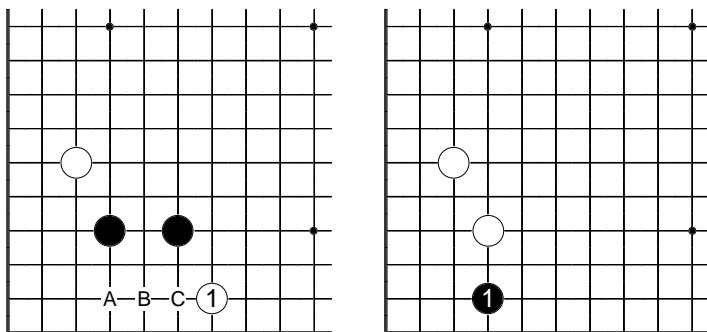


Another mistake is to take violent action with Black 1, to shut off the edge. White will normally be quite happy to sacrifice on the right, to gain a *ponnuki* and safety for a group on the left inside Black's former framework.

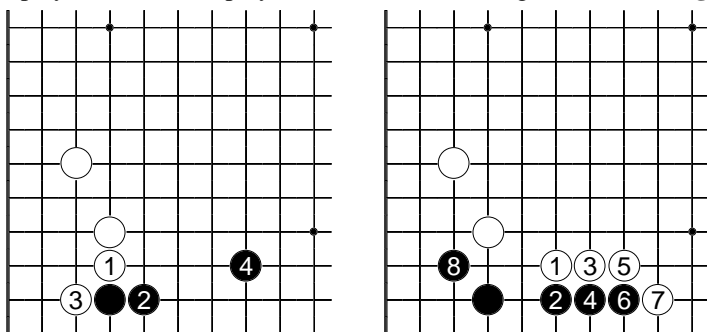


If the situation demands it, Black can block White's progress on the second line. As shown here, Black has little chance of attacking White's group, which has strengthened itself by plays on the right. It therefore makes sense to treat the marked stone lightly with 1 and 3. Black is content with securing the left-hand corner, in *sente*.

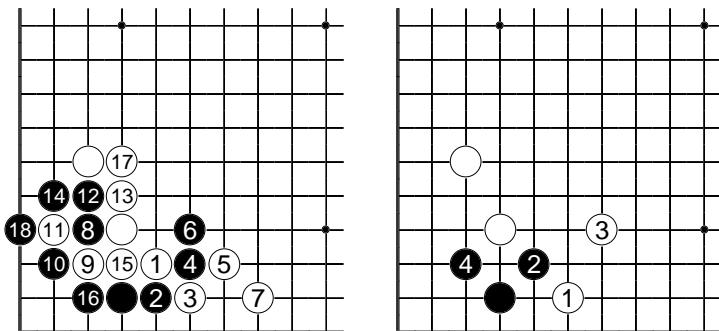
6.2 Moles and submarines



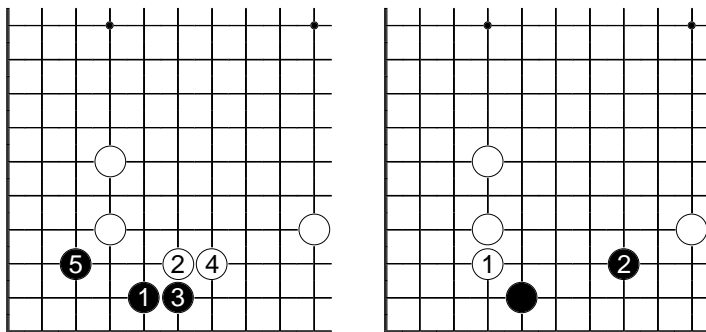
Unsupported plays on the second line, such as White 1, A, B or C in the left-hand diagram, have been called ‘submarine plays’ in English. They range from trick plays to proper invasion techniques. The Japanese say ‘mole’ or ‘hem’ plays, the latter for plays like Black 1 on the edge of the skirt (**right**).



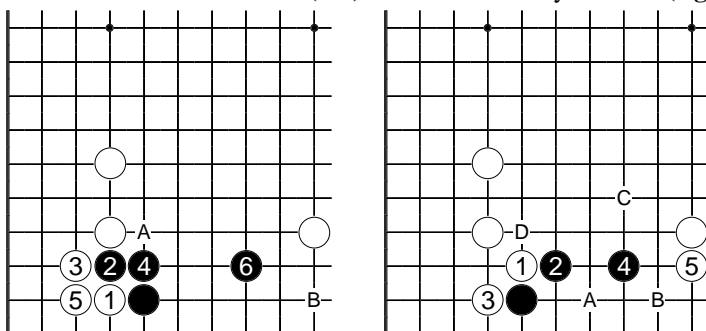
(**Left**) Playing from above builds strong shape, and keeps Black low. (**Right**) Running back with a knight’s move constructs influence, but costs territory.



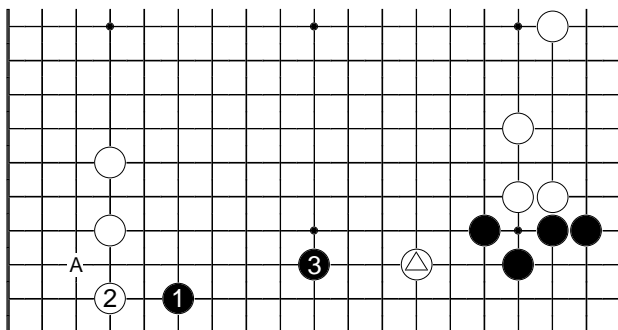
The diagonal play (**left**) can lead to sharp tactics. Black could escape with 10 at 15, having only a false eye from capturing White 1; Black 10 here is a novel idea. Note the play 7, reaching further than a solid connection would. (**Right**) Confrontation with White 1 relies on 2 being a failure. When White 3 is a good idea Black presumably plays 2 at 4 immediately. (Cf. 4.9.)



With this other play aiming at the open skirt of a 4-4 point, Black has room for a comfortable life in the corner (**left**). White will usually defend it (**right**).

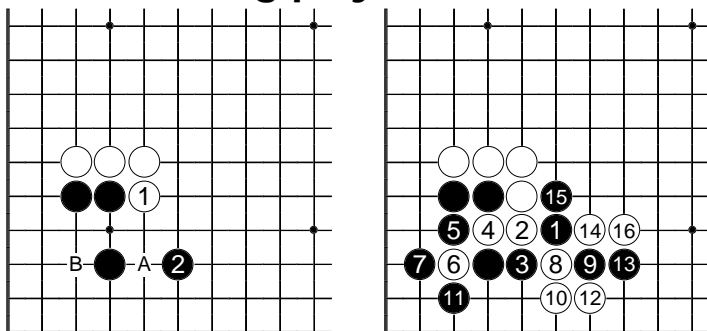


White can also play in contact. (**Left**) Black is close to life, next playing A or B. White has an option to play 3 at 4 in this line (cf.15.1). (**Right**) White tries to make Black heavy with the diagonal attachment at 1. Black's proper move here is to play 2 at 3; taking the outside risks a heavy group. After 5 Black chooses between A, B and C. *Atari* at D is to be avoided, for the sake of possibilities in the corner.

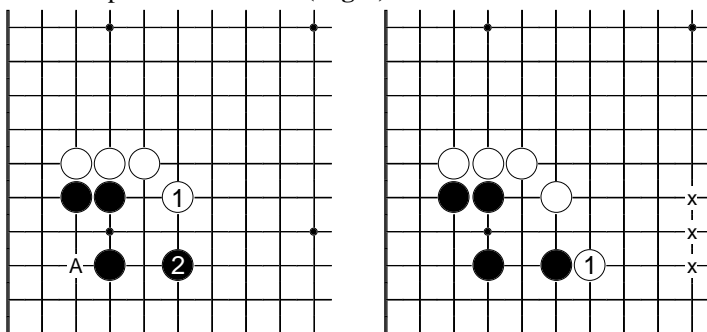


It is rare for the approach 1 in this diagram to be good; but in this context it seems to be right. After Black 1, Black at A in the corner would be efficient, so White 2 blocks the way. But then Black 3 combines attack and defence perfectly, putting the marked White stone's safety in question.

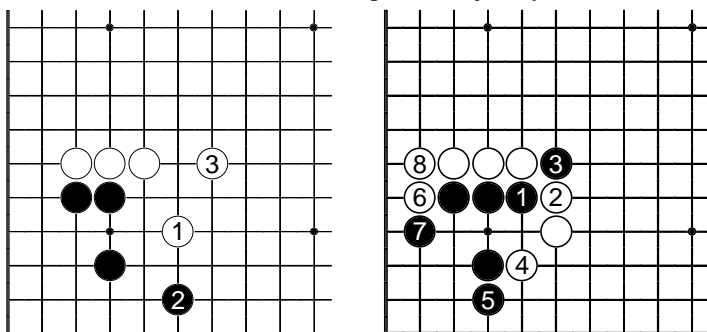
6.3 Half-blocking plays



Threats to block off are an important class of practical plays. They often count as *almost sente*: having a major follow-up. In the position shown on the left, White 1 aims firstly at A, and then when Black responds at 2, leaves some residual possibilities at B. **(Right)** This Black 1 is a mistake.

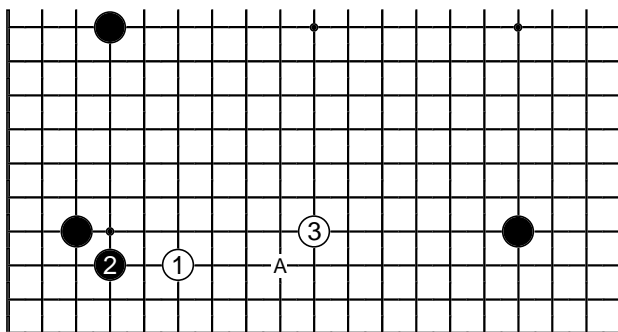


Sometimes the diagonal White 1 (**left**) gains more influence than the simple bend, one point to the left. But in this case White gives up most of the chances of a later play at A. The follow-up at 1 (**right**) would have to combine with other stones near the 'x' points, to justify this choice.

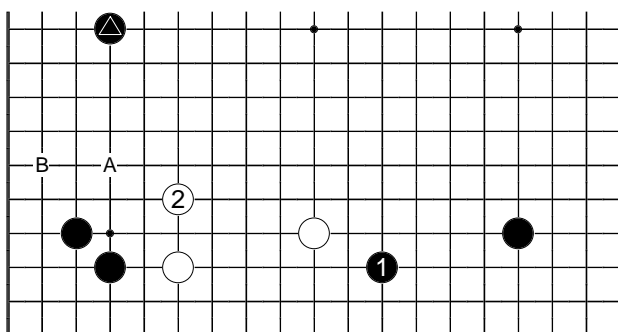


The knight's move White 1 here can be thought of as a central strategy. Black probably slides to 2 (**left**). Cutting (**right**) should turn out to be an overplay, since after 4, 6 and 8 Black has to take good care of the corner.

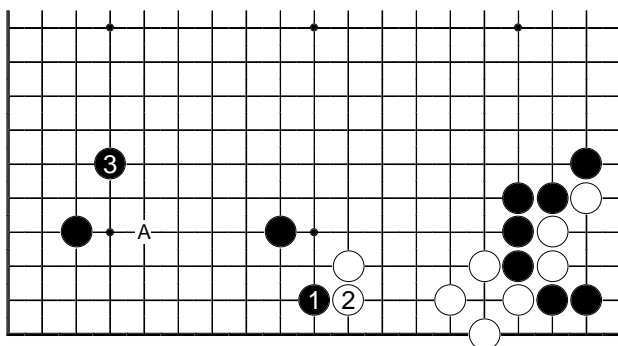
6.4 Using the fourth line



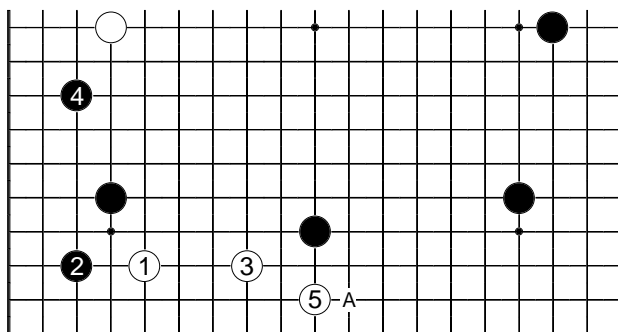
This sequence has occurred often in professional play. What is the meaning of White 3? The normal idea here is to play at A, to secure a definite base for the White group; and this is also common.



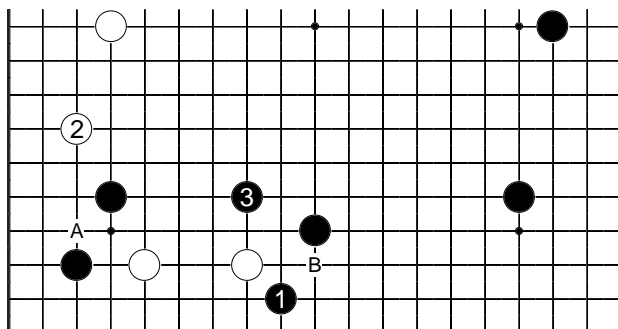
The idea is to jump at 2 in answer to Black 1. Then White at A is a half-blocking play, which Black will almost certainly answer at B. That exchange would do much to neutralise the influence of the marked Black stone. Black normally defends the left side, and White takes the initiative. In any case, White isn't here so concerned about points on the lower edge.



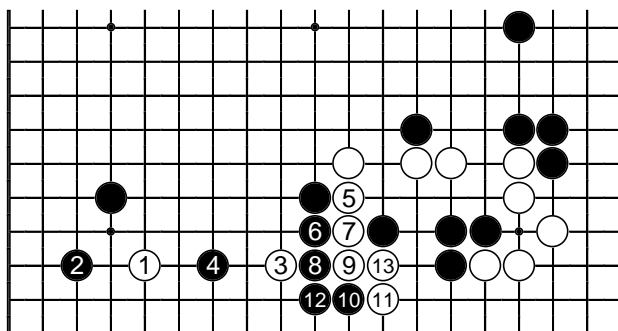
The logic of playing on the fourth line includes the use of the footsweep of 5.4, like Black 1 here, to seal the edge, before playing for a framework with 3. As soon as White invades at A, the difference will be noticeable.



White plays 1 to live inside Black's framework. After White 3 Black extends to 4 for good shape, but this loses an opportunity. White 5 calmly devalues Black's position, though a chance for Black to play at A remains.



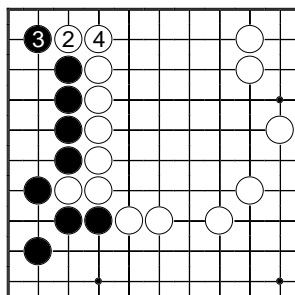
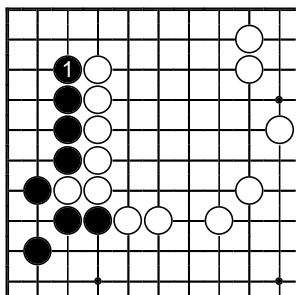
Black could have played the footsweep 1 here. If White resists with 2, Black 3 puts White in trouble. There are tactical chances for White at A and B; but White can't expect a good result with such weak stones appearing at an early stage of the game.



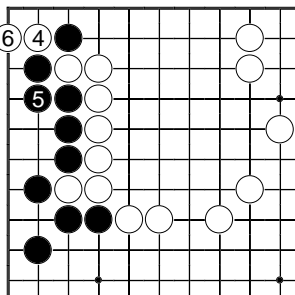
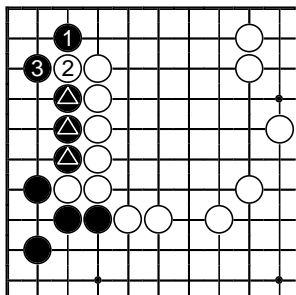
A story about the previous position, from the 1997 match Macfadyen-Matthews. Matthews had seen White 1 in a game Macfadyen-Janssen, commended by Miyamoto Naoki 9 *dan*. This variation is given by him as good for White (so Black's immediate invasion 4 isn't sensible). Noting novel shape ideas is one way to prepare against strong players.

Problem Set 1

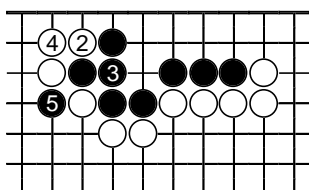
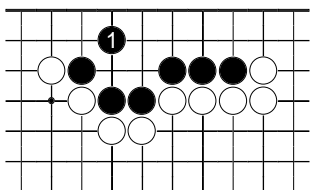
Creating Good Shape



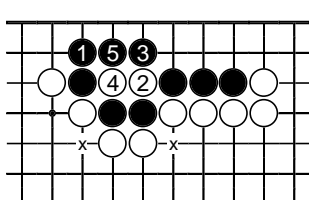
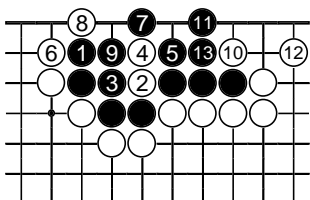
Answer B is correct. Black should simply extend the three-stone chain. Then the strongest play available to White is *hane* at 2, an endgame play worth about 13 points.



If Black jumps into the corner (answer A) White 2 is in the *hane-at-the-head-of-three-stones* position relative to the marked stones. White can capture the corner with 4, threatening 5.

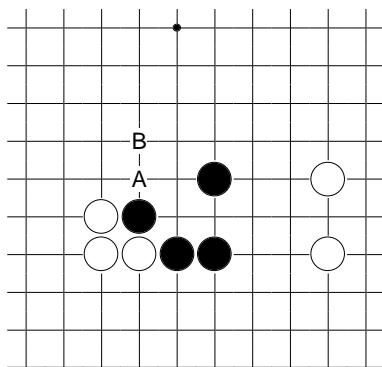
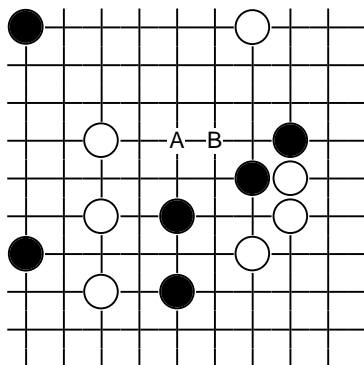


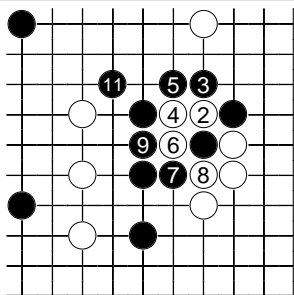
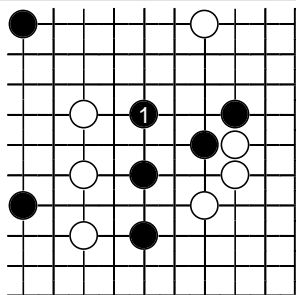
Black should play the hanging connection (answer B). Then Black has a chance to play the cut on the outside at 5, before worrying about the safety of the group.



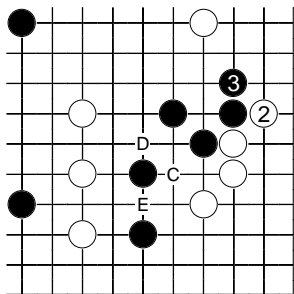
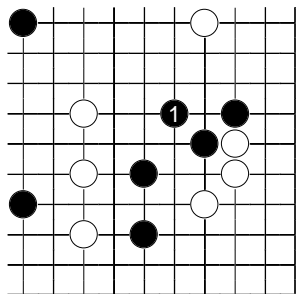
Descending (answer A) is bad shape. If White attacks immediately Black only just survives and White gains influence (**left**). Black's plan of giving up two stones (**right**) is bad, since the cutting points 'x' disappear.

Both problems Black to play at A or B

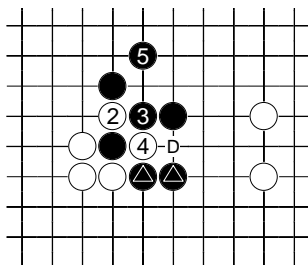
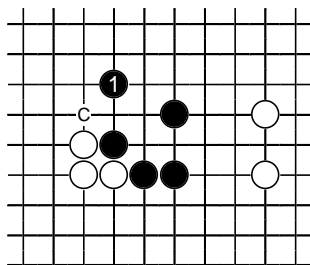




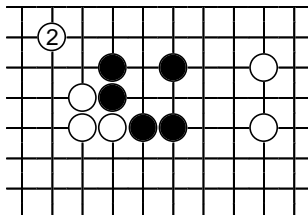
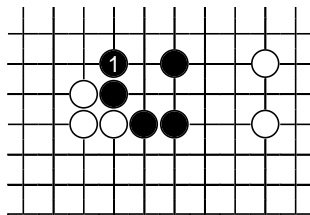
Black should jump to 1 (answer A). This is an example of light shape. If White cuts at 2, independently of any ladder Black can give up one stone and squeeze with 3 and so on.



Answer B, the hanging connection, is a heavy shape. White can play 2, and then wait for a chance to cut with C, Black D, White E.

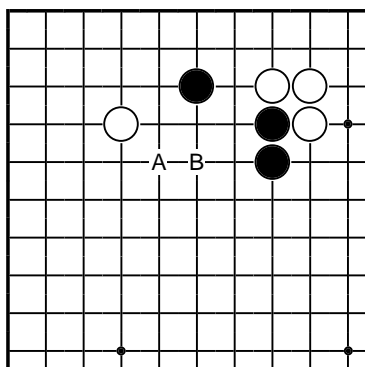
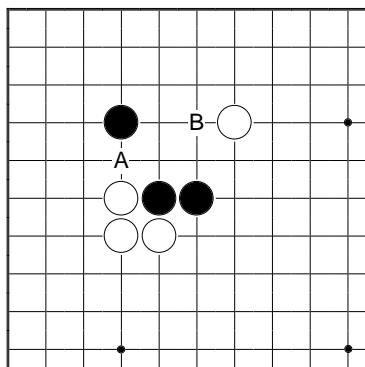


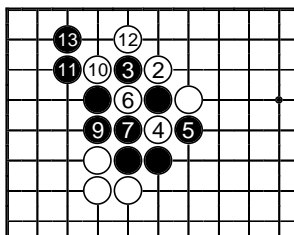
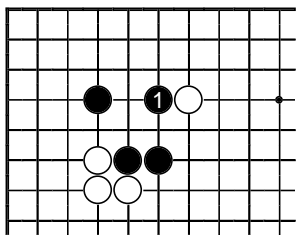
Here again the right answer is B, the one-point jump. Black should play lightly, aiming at the point C, and not worrying about 2 and 4. The weak point left at D isn't so serious.



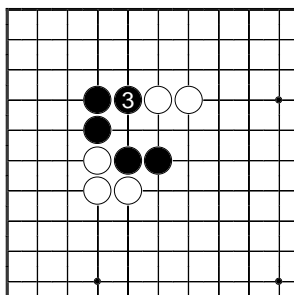
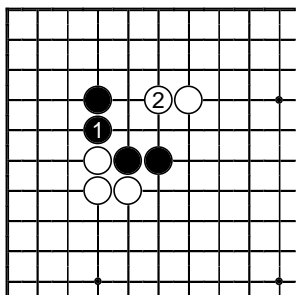
Extending (answer A) is heavy shape. It is easy for White to jump ahead of Black in the running fight.

Both problems Black to play at A or B

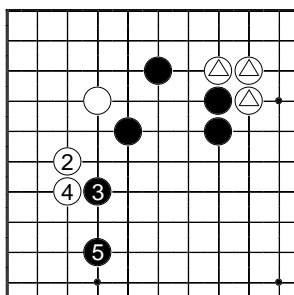
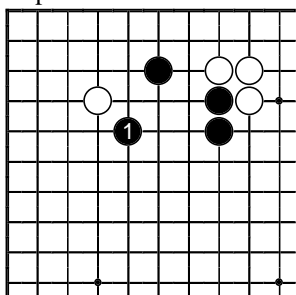




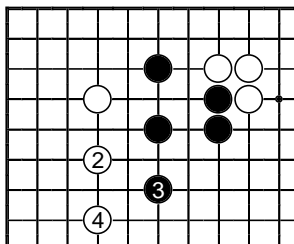
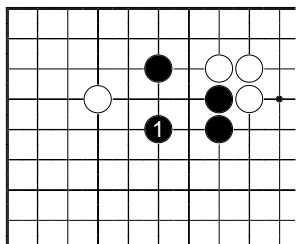
Black should make the table shape (answer B). This is good shape. In this position Black should think first about moving out into the centre. **(Right)** This result would be good for Black (8 connects).



Black A leaves an incomplete shape. **(Left)** White 2 is obvious and best. **(Right)** Then 3 is the proper play for Black, but naturally this isn't very good shape.

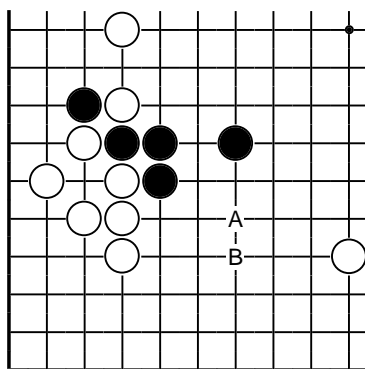
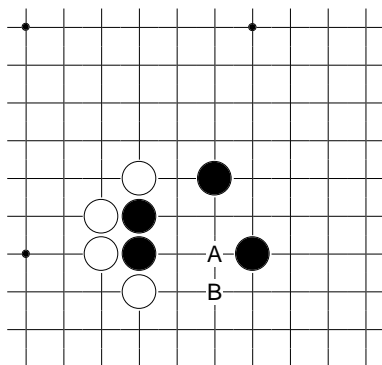


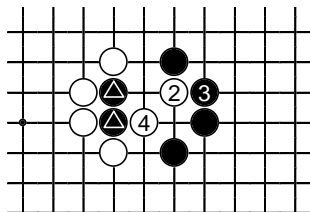
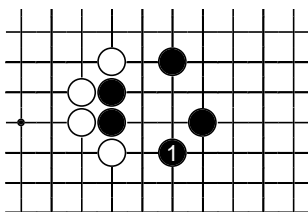
Correct in this case is the knight's move press (answer A). Black moves out quickly, and can soon attack the marked white stones.



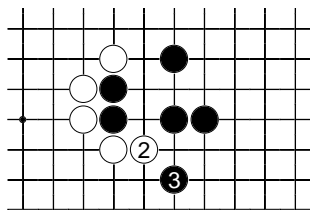
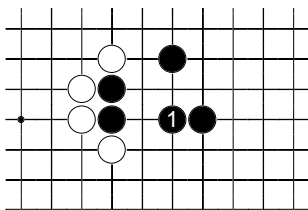
In this case the table shape A is slow. White jumps ahead of Black and takes territory.

Both problems Black to play at A or B

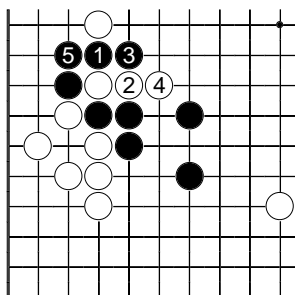
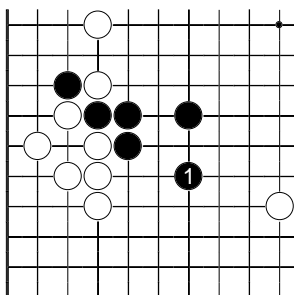




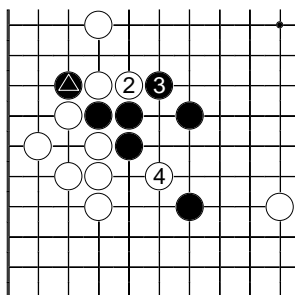
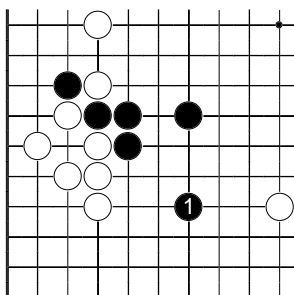
Black should play the diagonal move (answer B). This defends territory. If White spends time taking two black stones with 2 and 4, Black takes profit elsewhere.



The table shape (answer A) is a poor move here. Black's shape is inefficient. White can exchange 2 for 3 and be content.

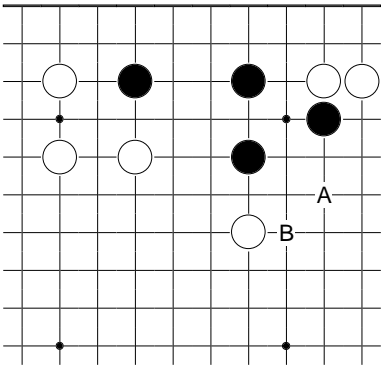
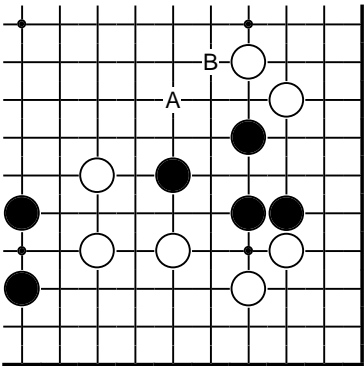


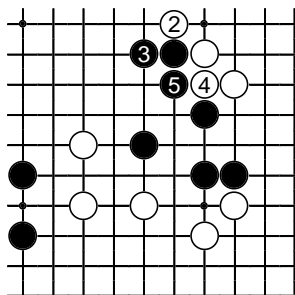
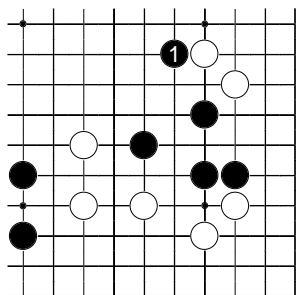
In this problem the table shape (answer A) is best. It prepares for the rescue of the isolated black stone shown in the right-hand diagram.



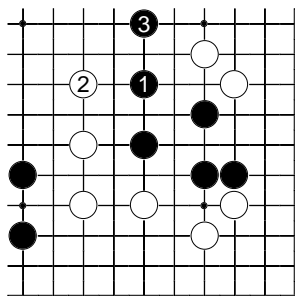
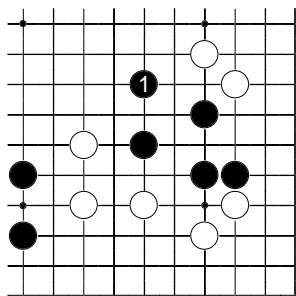
Jumping to B is a loose shape in this case. White pushes up at 2 and then plays 4: Black is in trouble. Therefore Black 3 is bad, though on a bulge point. Since the marked cutting stone also now looks like being swallowed up, it seems that Black has chosen the wrong direction to emphasise.

Both problems Black to play at A or B

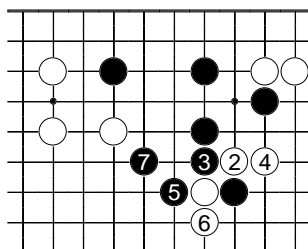
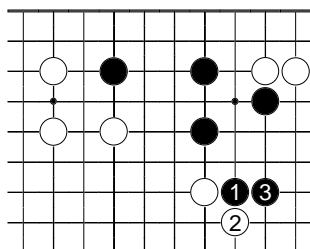




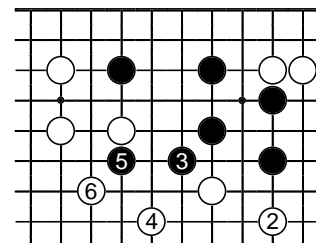
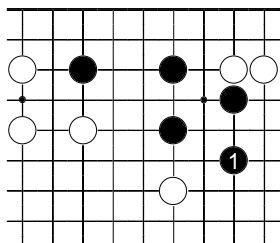
The contact play (answer B) is the way for Black to make good shape here. In the continuation shown Black is out into the centre, and White has a cutting point to handle.



Simply jumping out (answer A) is slow. Black runs out into the centre but is subject to further sustained attack.

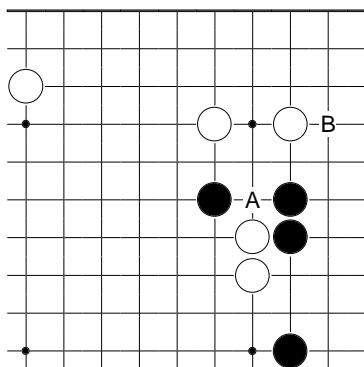
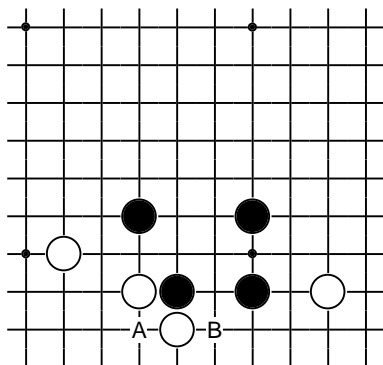


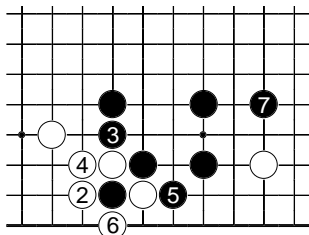
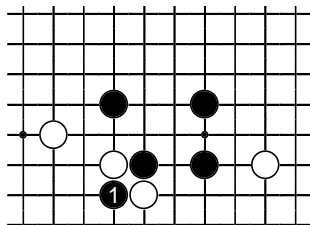
The contact play (answer B) is again correct here (the contact play on the other side of the same stone is also good). White 2 (**right**) isn't a problem as Black comes out into the centre with good shape.



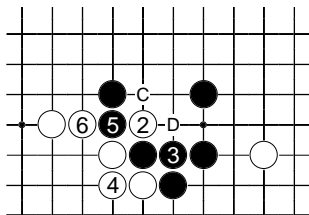
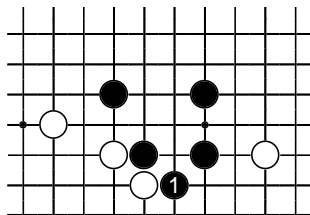
If Black answers at A, it is easy for White to find further attacking plays.

Both problems Black to play at A or B

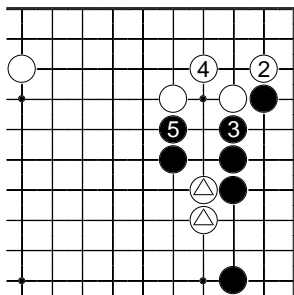
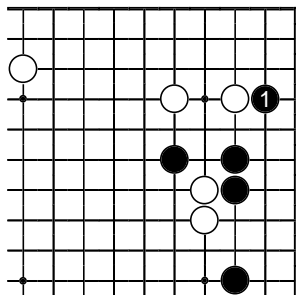




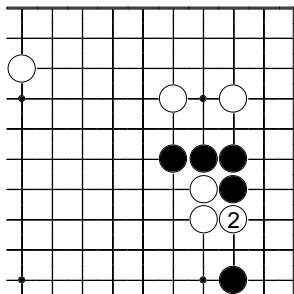
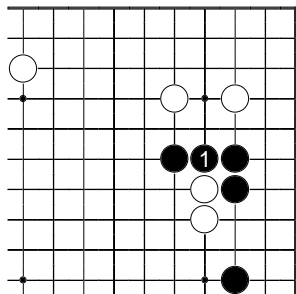
Black does better here with the cross-cut (answer A). By giving up one stone Black can secure some shape on the left and then play 7.



The problem with answer B, the bulge here, is that Black finishes with rigid shape. No longer does Black have the options to answer 2 at C or D. White also has the option to connect at 5 with 4, for central strength.

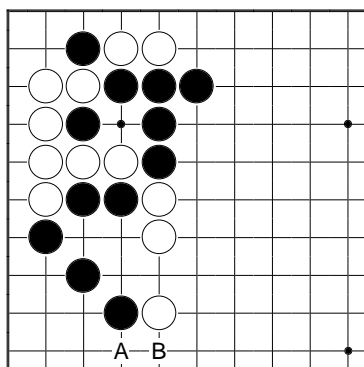
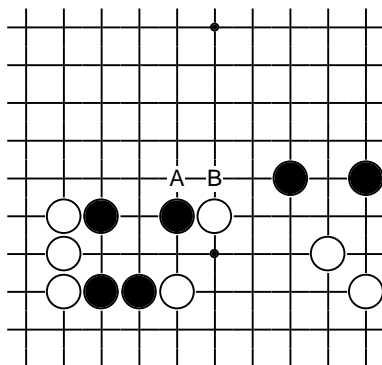


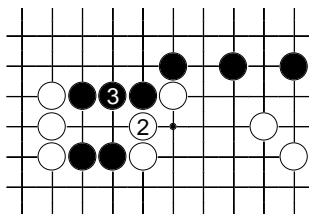
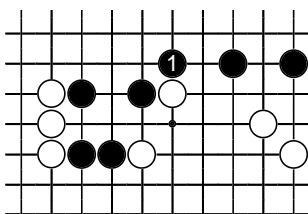
Correct is answer B, the contact play under White's enclosure. With the result shown White's two marked stones have become a target for attack.



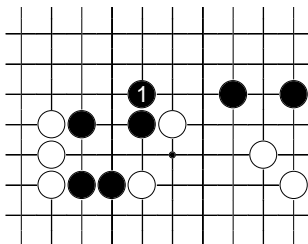
Simply connecting (answer A) is heavy and shapeless. When White plays 2 Black is in for a difficult fight.

Both problems Black to play at A or B

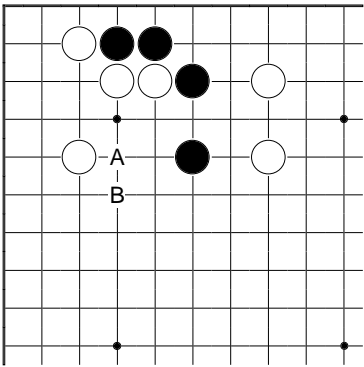
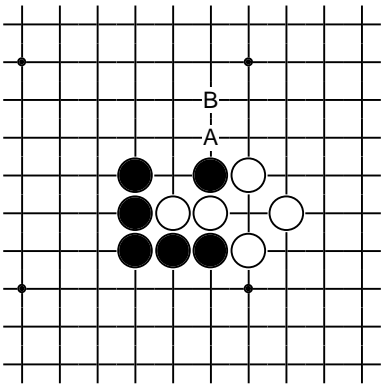


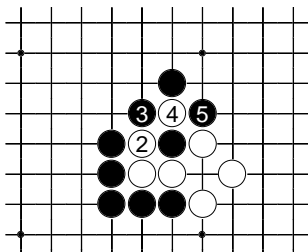
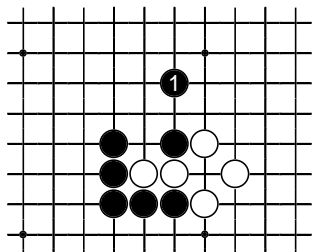


Correct is answer B, blocking White's direct path out into the centre. Black has nothing to fear in the right-hand diagram, or if White 2 is played one to the left.

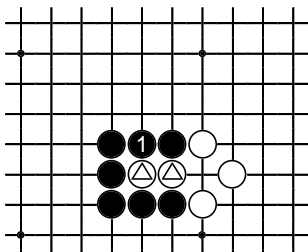
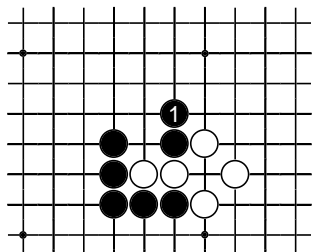


Both problems Black to play at A or B

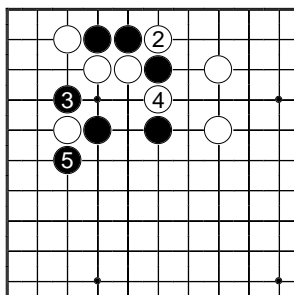
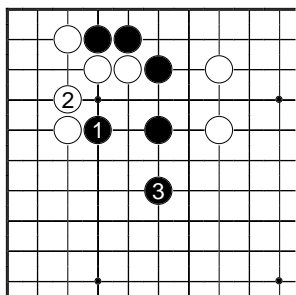




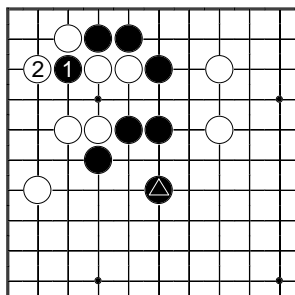
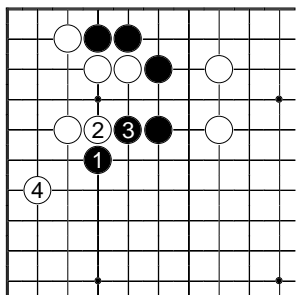
Answer B, with a sacrificial intention, is correct here from the point of view of shape. In the right-hand diagram White is already in bad shape.



Simply extending (**left**) is less efficient. Playing *atari* (**right**) is a novice's mistake: there is no reason for White to save the two marked stones.

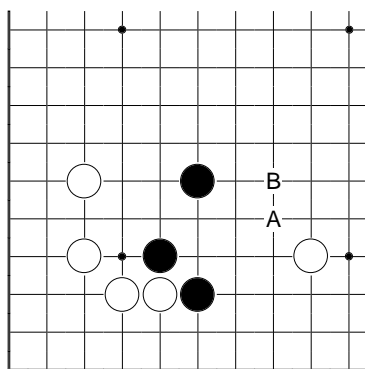
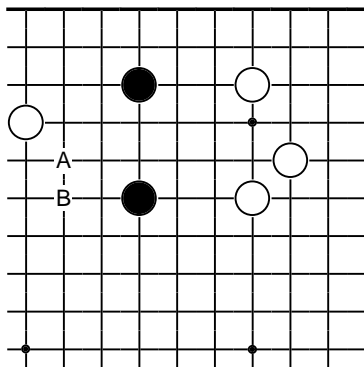


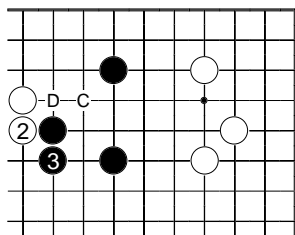
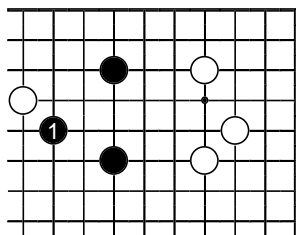
In this case the jump to A lands on the key point of White's enclosure. If White immediately tries to cut Black (**right**), Black will be happy with an exchange.



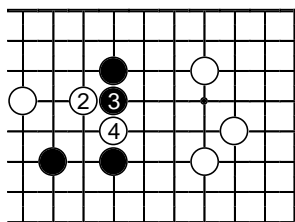
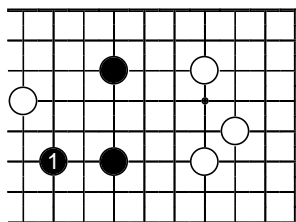
The shoulderhit Black 1 in this diagram isn't so good. White takes the key point 2. (**Right**) Once Black has made shape as shown, Black 1 patches up.

Both problems Black to play at A or B

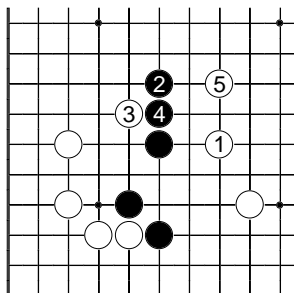
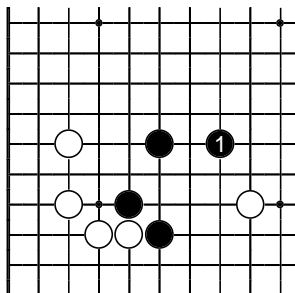




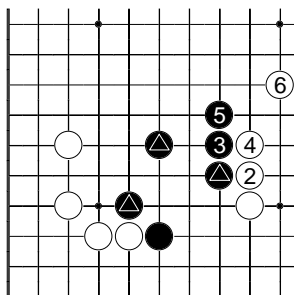
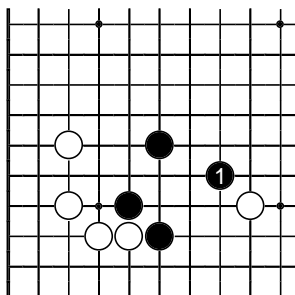
Here the shoulderhit A is best for Black. It is natural for White to push with 2; but then Black develops good shape with 3. Black is now comfortable answering White C with Black D.



The one-point jump is here loose shape. With 2 White can leave Black an eyeless and heavy floating group. The sharp play 4 is even possible.

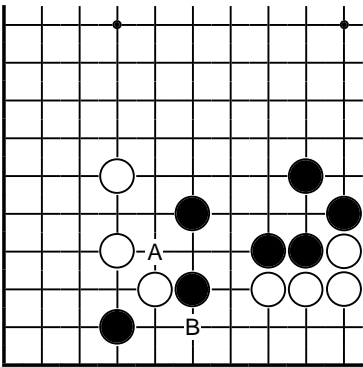
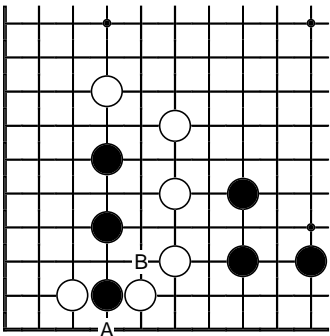


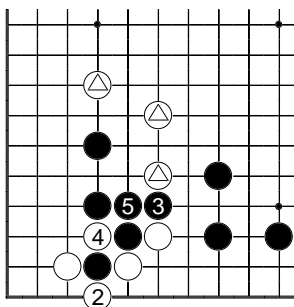
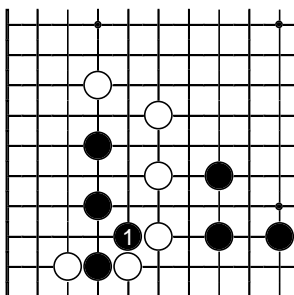
Answer B is the key point of this shape. As the right-hand diagram shows, it would also be the best place for White to occupy to attack it.



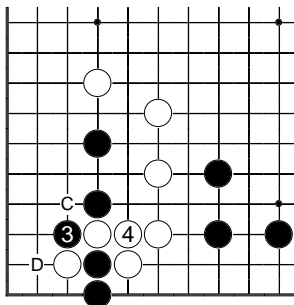
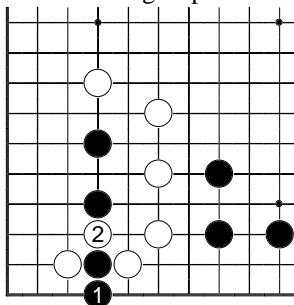
Here the shoulderhit Black 1 isn't a good idea. Simply by pushing up White can make Black's shape look redundant: the three marked stones are too close together.

Both problems Black to play at A or B

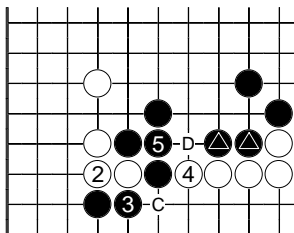
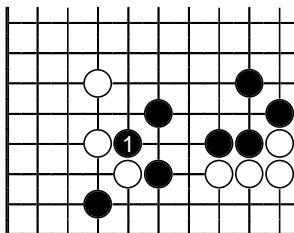




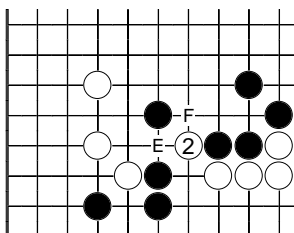
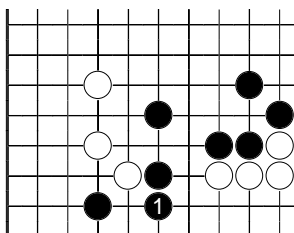
The bulge play B is good shape here. By sacrificing one stone Black can break out of confinement, and at the same time make the marked white stones into a weak group.



If Black descends to A to stop White's connection along the edge, the wedge White 2 causes immediate trouble. Black cannot defend both C and D.



Black should immediately play A. If White plays 2 Black can answer at 3 and 5. Since the marked Black stones aren't very important, Black has good shape: White has no good way to combine the cuts C and D.



Descending at B is short-sighted. White 2 can cause trouble now or in the future, at E or F.

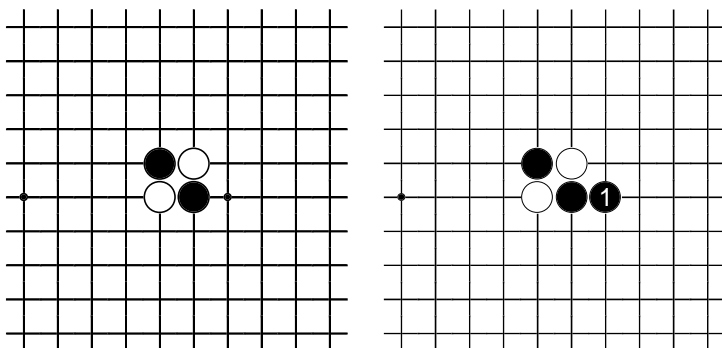
Part Three

Practical Fighting

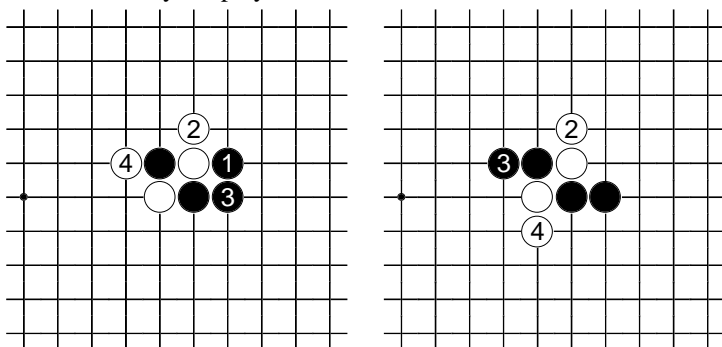
Chapter Seven

Eight Faces of Cutting

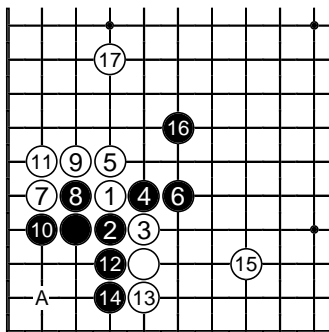
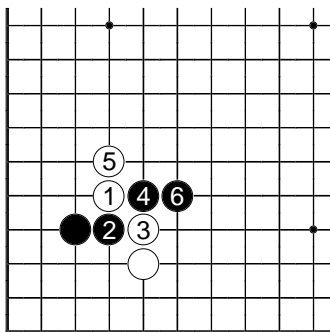
7.1 Windmills to pancakes



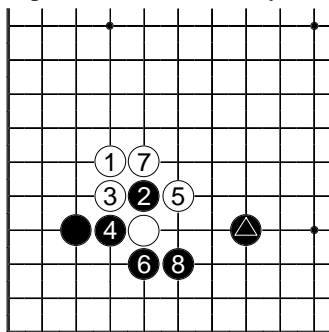
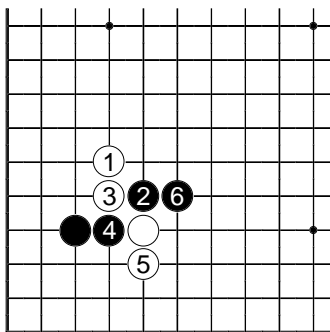
There are a number of fundamental patterns in cross-cut fights. The first is the plain extension Black 1 here. Proverbially, it is better from Black than any of the four ways to play *atari*: **Cross-cut? Extend!**



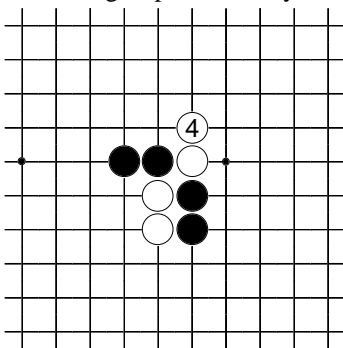
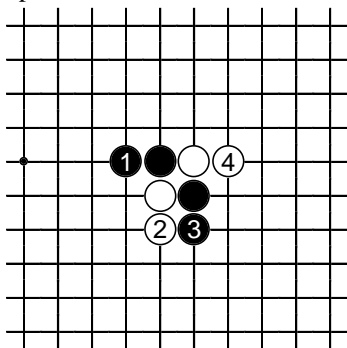
The point is that Black 1 in the left-hand diagram turns out badly, if Black needs 3 also, and White can capture in a ladder. **(Right)** The *windmill*.



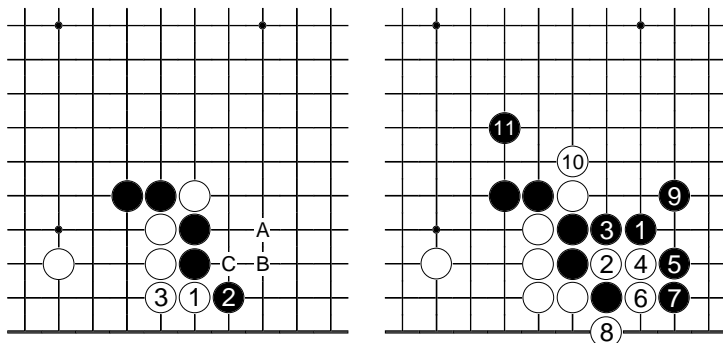
(Left) Black 2 is an overplay, unless Black is already strong locally. Black 6 completes the windmill shape, which gives each of the struggling groups four liberties. (Right) White gains the advantage simply by developing on each side. Black 14 leaves the Black corner small and vulnerable (White at A is *ko*), while Black also has a weak group in the centre to worry about.



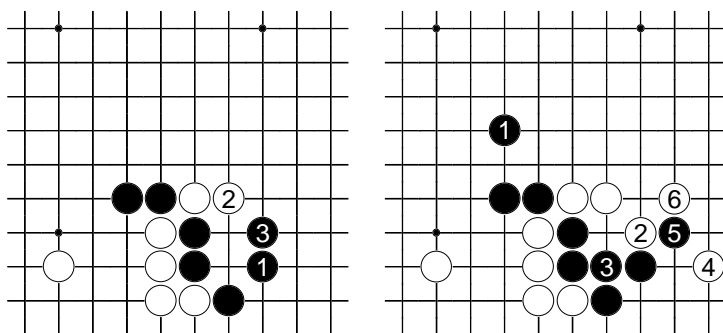
(Left) Black 2 here is also normally an overplay. (Right) With the marked pincer stone in place, though, White 1 is questionable. The *ponnuki* plus one stone isn't efficient. If White played 5 at 6, and Black played 6 at 5, the windmill development would be assessed in Black's favour (the lower White group has to work hard for life, the central Black group is relatively strong).



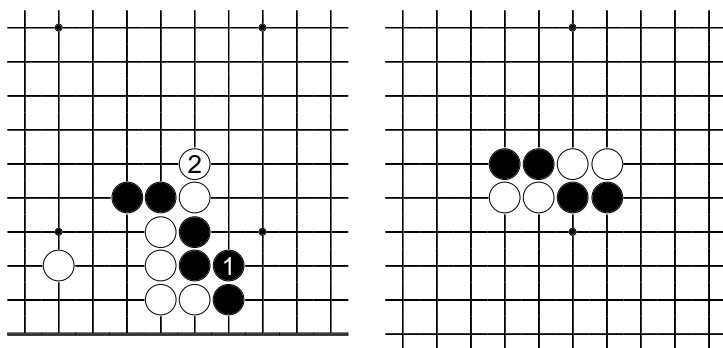
This T-shape (left) and asymmetric shape (right) also come up, in close fighting. Naturally Black 3 creates a shortage of liberties, for both sides.



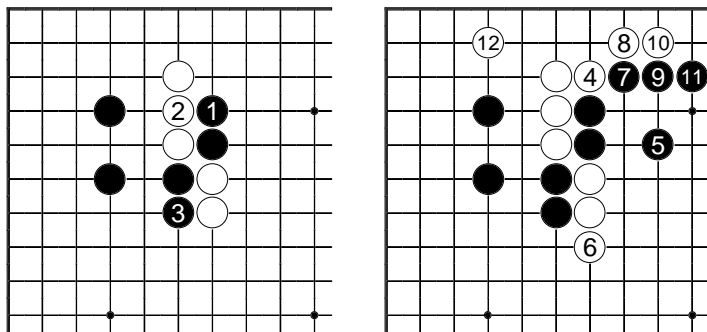
Here (**left**) White 1 is clearly better than allowing Black to play at 3. Next should Black play A, B, or C? (**Right**) The idea of Black at A: sacrifice one stone and attack in the centre. White 2 is bad when White is already alive.



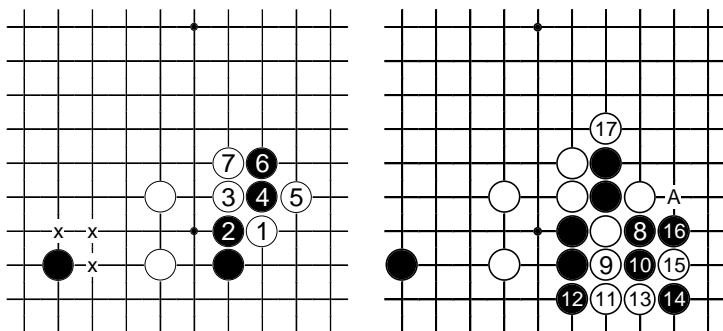
The problem with the hanging connection at B is that Black may need also to play at A, anyway (**left**). If Black omits 3 in the left-hand diagram, White 2 and 4 (**right**) are powerful. (See 9.1 for more on this pattern.)



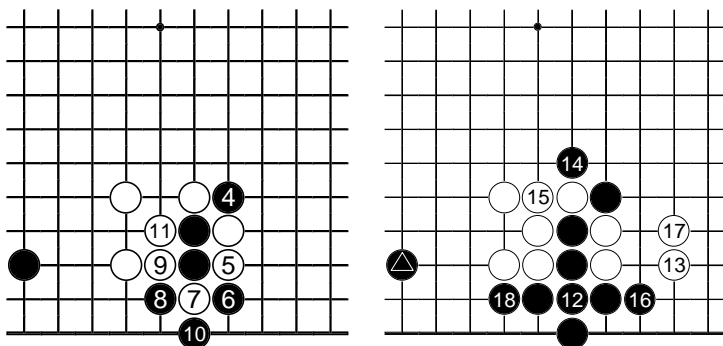
Therefore in some cases (though not this particular one, where White is strong already on the edge), the solid connection C (**left**) may be best. It keeps White weak on both sides, even though it is not intrinsically good shape. (**Right**) We call this extreme example of shortage of liberties a *pancake*. The next page has some cases leading towards it. Naturally enough the fighting can become most difficult.



This might happen in the example from 5.6. However White finds it easy to exploit Black's lack of liberties, so Black 1 is the wrong way to fight.

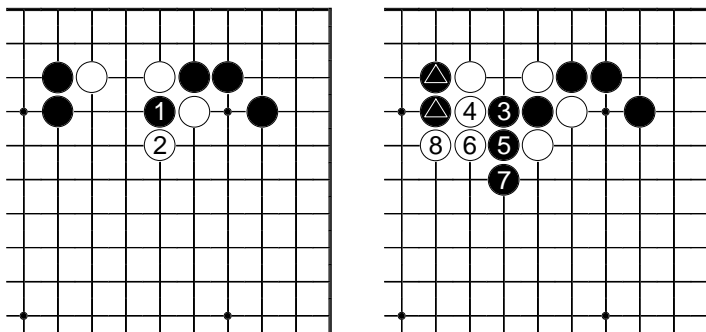


Fighting along these lines can break out in several different openings, leading to pancake-like continuations. To play the cut at 2, Black really needs a stone in support as shown, or on one of the 'x' points, and also a favourable ladder. White's plan with 5 and 7, up to 17 (and relying on A) must fail. If Black has to play 8 at 9 to move out, no good can come of it.

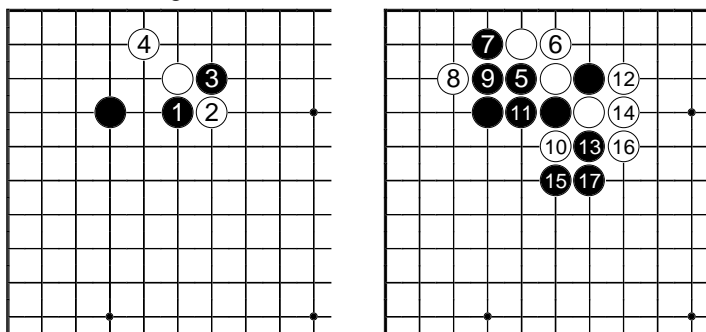


When White plays 5 in this way, it has the intention of forcing Black into a low position. The marked Black stone ends up on a good point after 18; if it had been on the fourth line instead, this variation would be questionable for Black. This is an example of a fight highly dependent on context, with a ladder running north-east and stones to the west mattering greatly.

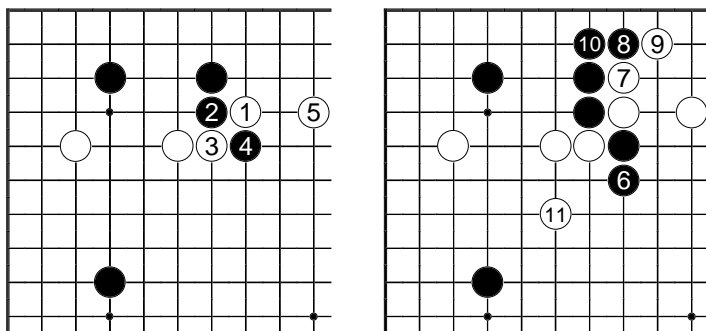
7.2 Cross-cuts: exceptions



Atari after a cross-cut is common, in the presence of other nearby stones. When it takes the form of a ‘driving’ sequence, a kind of short broken ladder, or loose ladder, that succeeds in weakening the opponent’s other stones, it may be very good. In this case Black 1 falls into a trap: White 2 is strong. White is able to bring the two marked black stones under attack.

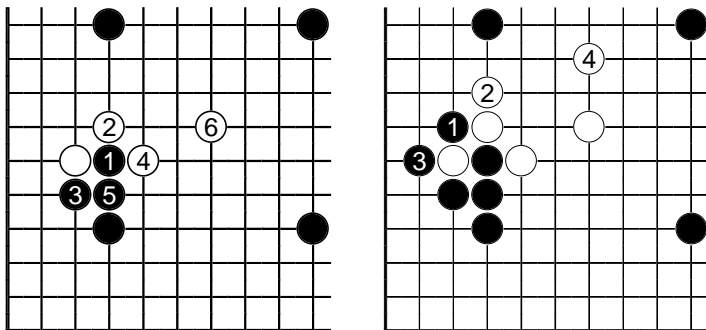


Diagonal play after cross-cut. This special-purpose opening play by Black was noted in 5.3. White makes the most of Black’s stretched shape.

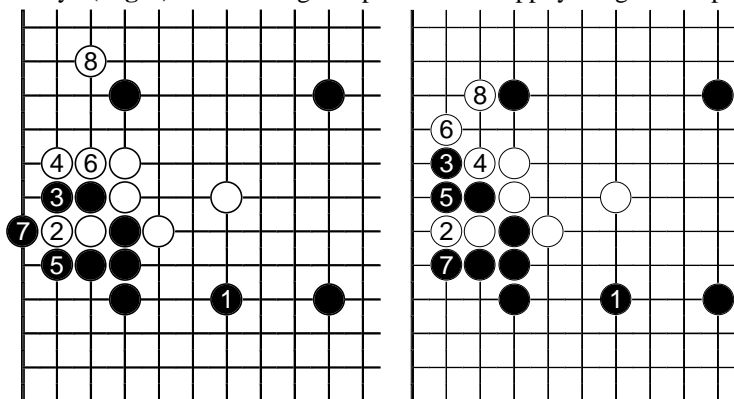


One-point jump after cross-cut: a very useful *tesuji*. White’s idea is to set up a *ko* lock (5.6). Black 6 resists, but White 5 ends up on a good point anyway (cf. 7.1).

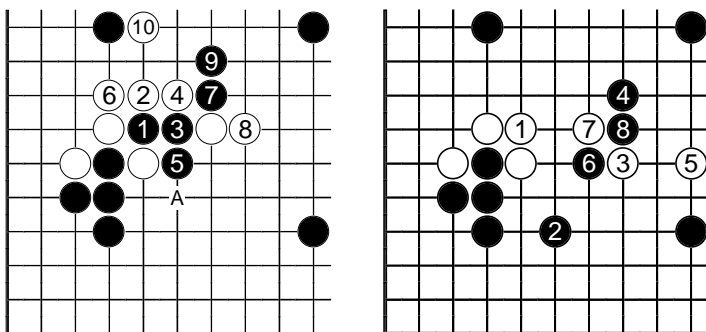
7.3 Play lightly to counter influence



The apparent meaning of light play is often that you leave cutting points. White 6 is a suitable idea for high-handicap go. Connecting solidly would be heavy. **(Right)** White will give up one stone happily for good shape.

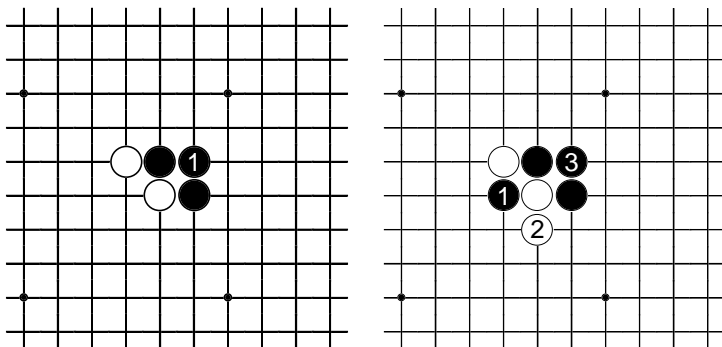


If Black simply defends territory, White can sacrifice two stones **(left)**, opening up the left side. **(Right)** This is the wrong occasion for Black 3.

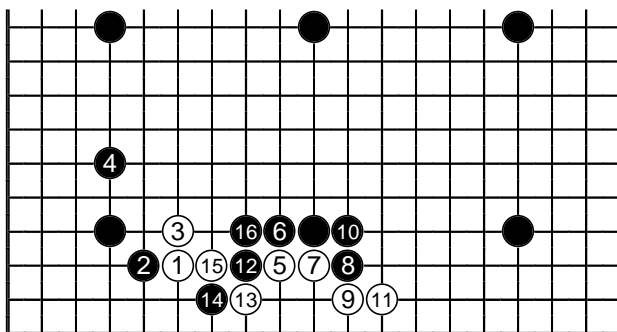


(Left) If Black cuts on the other side, White can fight back with 8 (aiming at A later on), and then 10 to move out. **(Right)** White 1 is heavy. Black 4 and 6 are a good way to attack White's shape. After 8 White is in trouble.

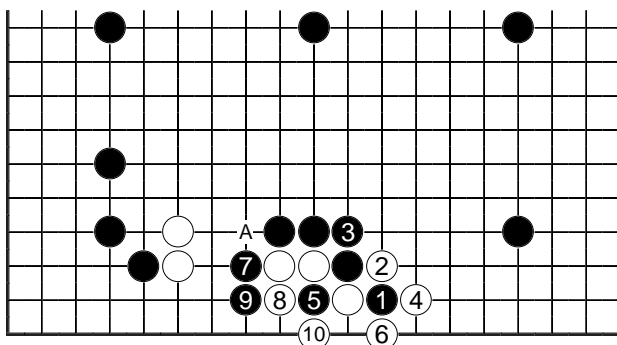
7.4 Staircase connections



Connecting solidly to leave no weakness is usually the prerogative of the attacker. We call the shape in the left-hand diagram a *staircase connection*. (Right) The result here is one seen in 7.1 The idea is therefore related to extending after a cross-cut (see 13.2 also): depending on the ladder Black 1 here may turn out to be superfluous, or better played as *atari* at 2.

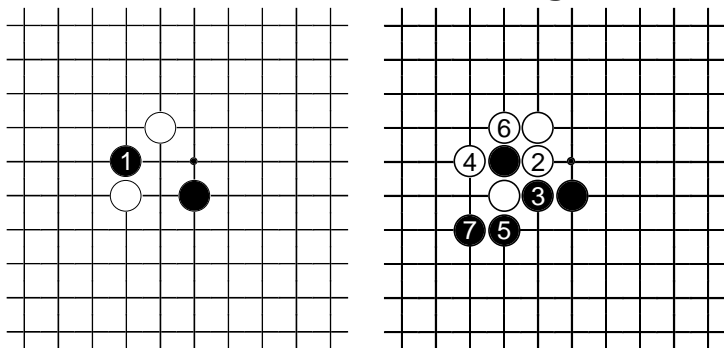


Let's compare Black 10 here, which may seem slow, to double *hane* at 11 (next diagram). In fact White is in a mess after Black 16, and Black solid.

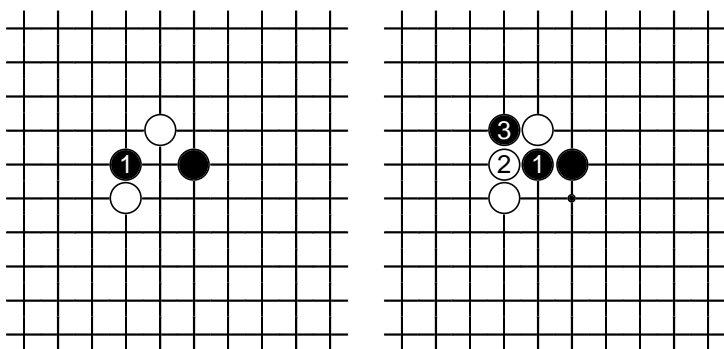


Following 4.1 blindly in this case isn't as good. After 10 White is alive, and has the cut at A to aim at. If Black wants to play double *hane*, a second *hane* play at 7, at the other end of White's two-stone chain, must come first.

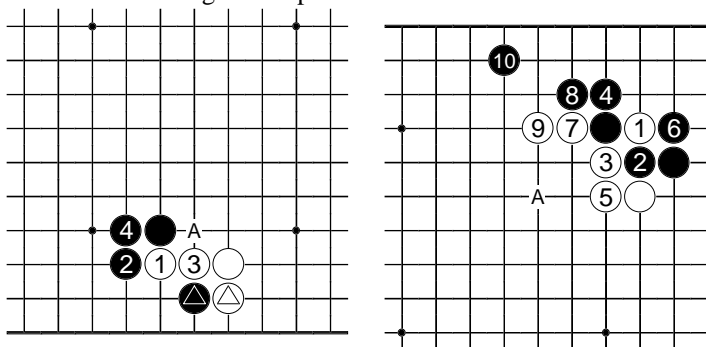
7.5 Strike at the waist of a knight's move



This is a single proverb, with a pair of recommendations. With a choice of how to cut White's knight's move, Black is urged to make the cutting play shown at the 'waist'. This does depend on the ladder (**right**): Black needs to have a good ladder, or be happy to sacrifice the stone played (e.g p.104).

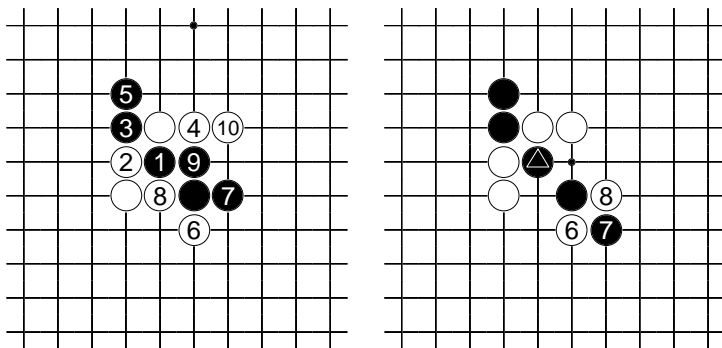


(**Left**) This is the other cut at a 'waist' (a mistranslated Japanese term that has stuck); again a ladder may matter. (**Right**) In this case however the alternative cut is also good shape.

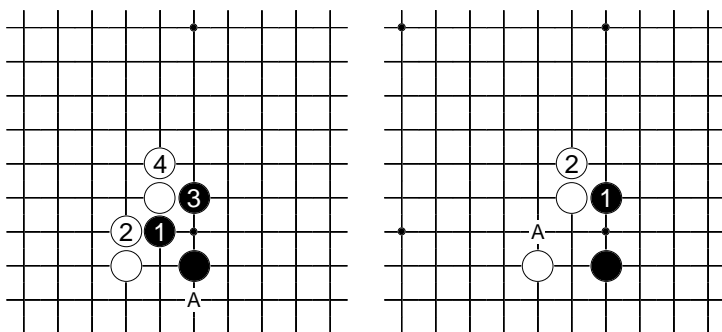


The footsweep, seen in 5.4 and 6.4, is often the occasion for this pattern. (**Left**) In this case Black 2 at 3, White at A is dangerous for Black. (**Right**) A set pattern in the Chinese-style opening. Now A is the key point for both.

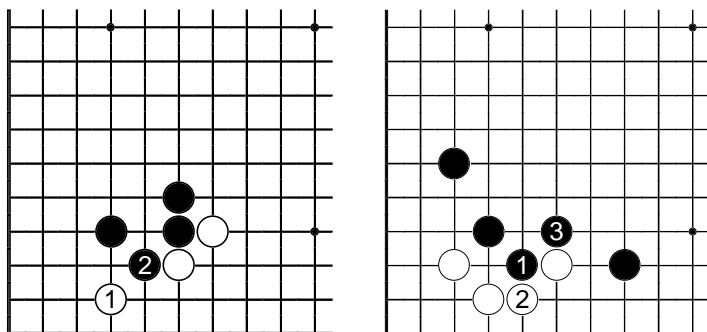
7.6 Pushing into a knight's move



A necessary comment about 7.5 is that White's way of cutting in the left-hand diagram, with 1 and 3, is bad shape. White 8 (**left**) creates an empty triangle. (**Right**) However Black 7 here loses the marked stone after 8.

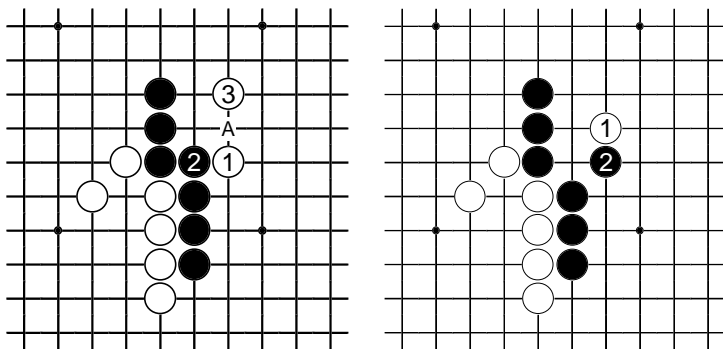


In general, pushing into the knight's move, without cutting, makes ugly shape. Black 1 (**left**) should be omitted; White A has become a possible good play. (**Right**) Simply playing this way is normally better for Black. There is a chance left of cutting at A, later.

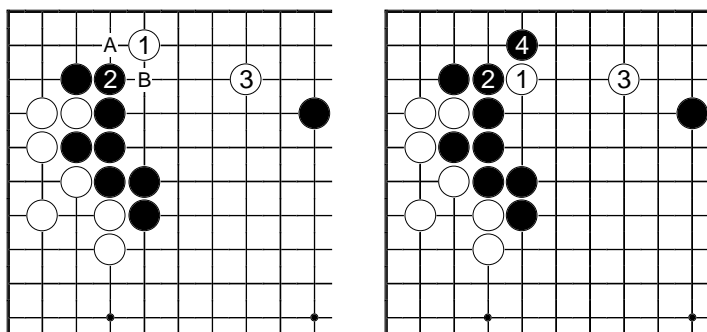


In these cases pushing into the knight's move is acceptable. (**Left**) White 1 is bad shape, and Black 2 is appropriate. White has no good answer. (**Right**) In this opening normally Black plays 1 before 3, fixing the shape here.

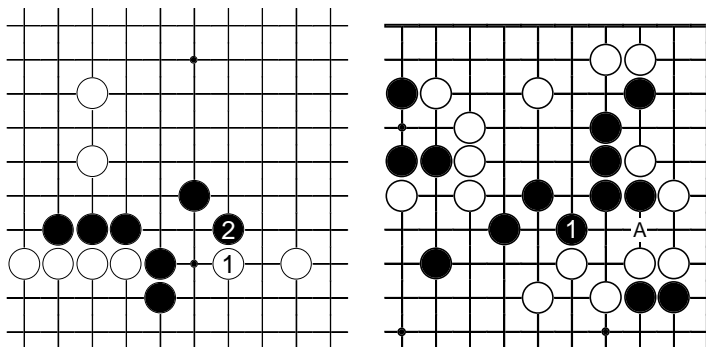
7.7 Peeping directly and diagonally



In the normal course of fighting, peeps should be played directly against the cutting point. **(Left)** White 1 is correct, and then 3 rather than the heavier A. **(Right)** It is a loss to allow Black the point 2 here.

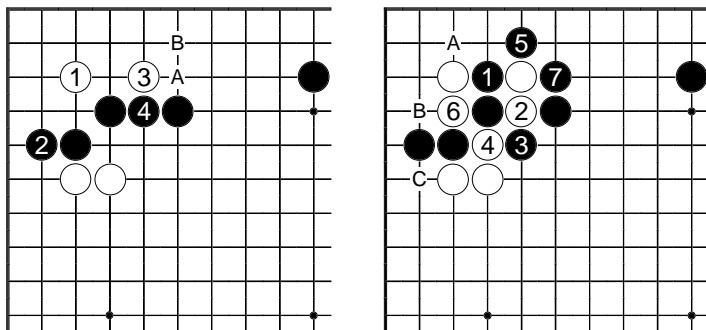


A cutting point on the third line is exceptional. **(Left)** White 1 here is good; if Black 2 is at A, White plays B, and *vice versa*. **(Right)** If White peeps this way, Black plays one out of 3 and 4. This is clearly worse for White.

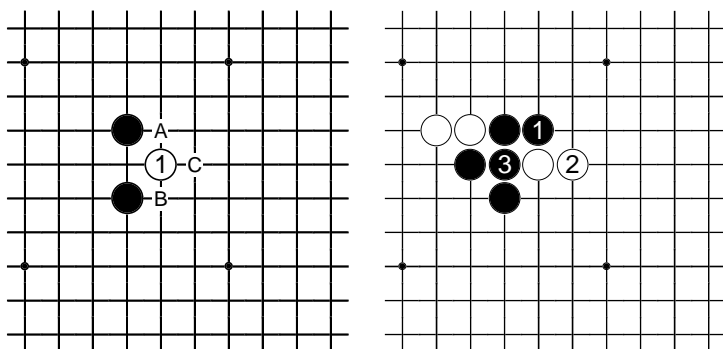


(Left) White 1 is the right way to threaten to cut Black, and Black 2 the correct shape in answer. **(Right)** In this fight Black 1 is good bulging shape. It sets up the play at A, which gives Black a ko to cut White, and also a follow-up on the right edge.

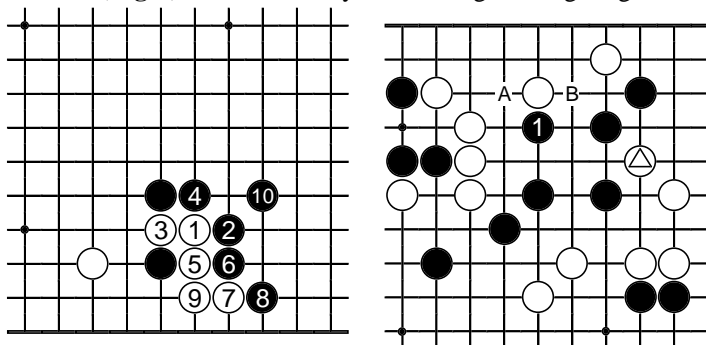
7.8 Any fool can connect against a peep



(Left) Black can connect at 4 here almost without thinking, and White will continue with A or B depending on the outside situation. **(Right)** If Black plays at 1 here instead, White takes the corner and is quite content. White A now is greedy (Black plays C), so White chooses 8 from B and C.



Connection should not be automatic. Black plays at A, B, or C can be considered. **(Right)** White 2 is heavy; Black has gained fighting momentum.

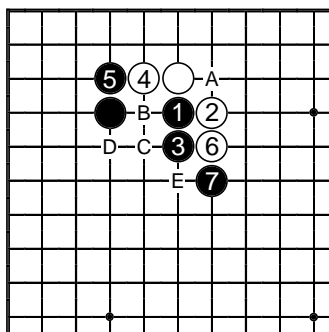


(Left) This idea isn't so much a standard pattern as a repertoire addition, something to keep at the back of one's mind for a good occasion. **(Right)** Black 1, with the threats of A or B, is a good answer to the marked stone.

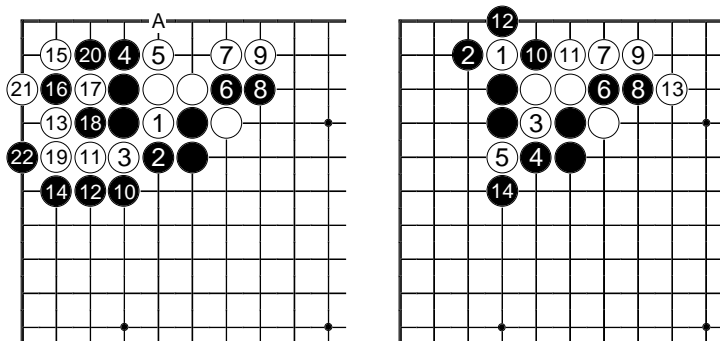
Chapter Eight

Attach-Extend Mysteries

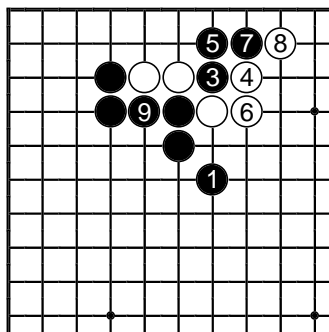
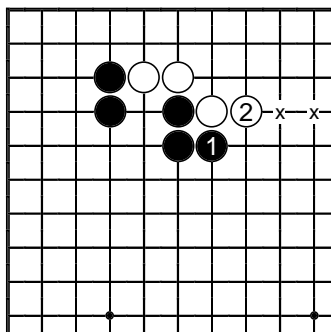
8.1 The common cutting points



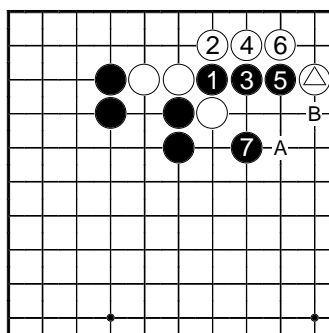
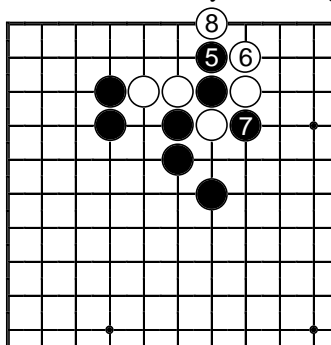
This attach-extend pattern is played by Black to become solid, and move across the gain line. But in fact it leaves a number of cutting points (A for White, D after White B, Black C, and E for Black).



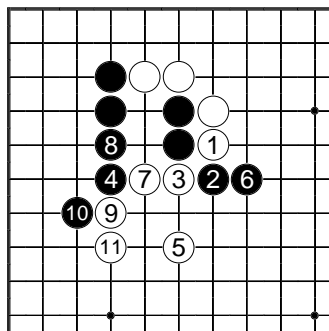
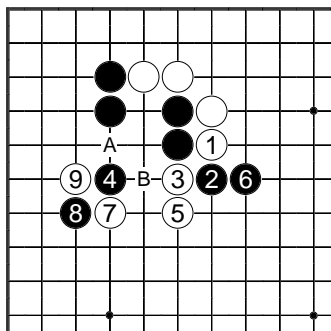
Trick plays (White's cutting point matters greatly). **(Left)** A ko fight, and Black has a threat at A. **(Right)** After Black 14, White is in trouble here.



Bluntly pushing along (**left**) is usually bad for Black (unless White suffers *hane*-related bad shape from a Black stone at an 'x' point). (**Right**) The more subtle and normally better diagonal play 1 here threatens to cut at 3.

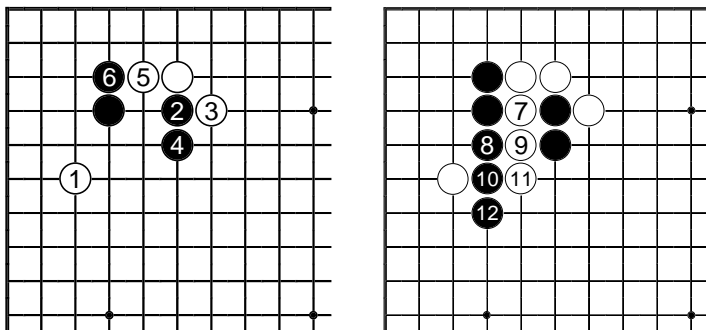


(**Left**) A tactical trick for White in this shape. (**Right**) When White has the extension with the marked stone in place, White should play 2 rather than 3 when cut at 1 to avoid overconcentration, and give Black bad shape. White now has forcing plays at A or B.

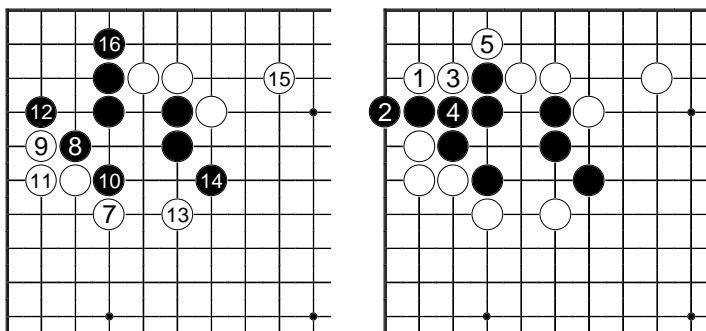


If White pushes up into the centre, Black must play 2 as a point of pride. Now White cuts with 3, and Black defends in good shape with 4. (**Left**) White 9 is a possible idea, aiming at A and B. (**Right**) White 5 sets up a *ko* lock tactic (5,6), but Black avoids it. Black now must attack forcefully on the top side, since White has made fine shape on the left.

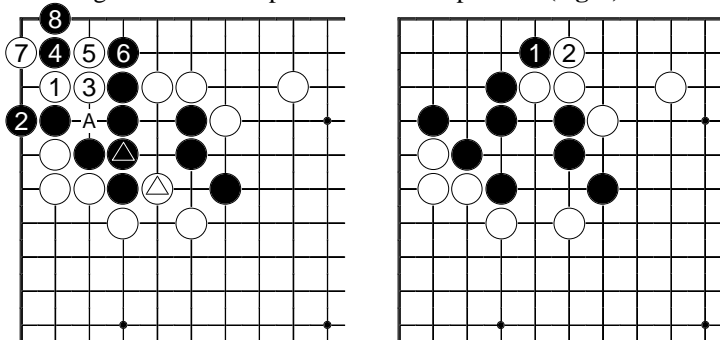
8.2 The double approach



Black 2 in response to White's second approach at 1 is a venerable opening. Black 6 is quite safe, since White 1 is on the third line. In most cases the cutting sequence (**right**) is a loss for White.

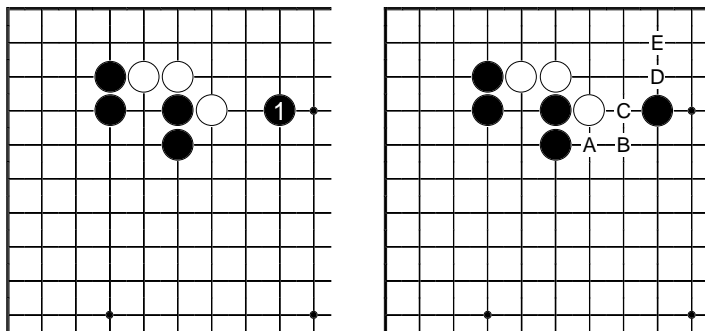


(**Left**) The standard sequence, with a number of plays that could easily be missed; for example Black 10 in answer to Black 9 avoids a possible cut. The meaning of 16 is that it prevents the clamp attack (**right**).

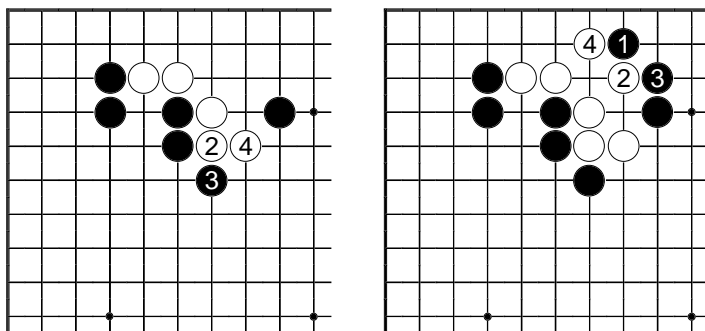


(**Left**) White should not play *atari* (marked stone), or the clamp fails: Black 4 prevents White A. (**Right**) Black may play 1 instead to cover the weak point in the corner. White at 2, therefore, allows Black to take *sente*. It is perhaps hard to call White 2 a mistake, in isolation from the rest of the board.

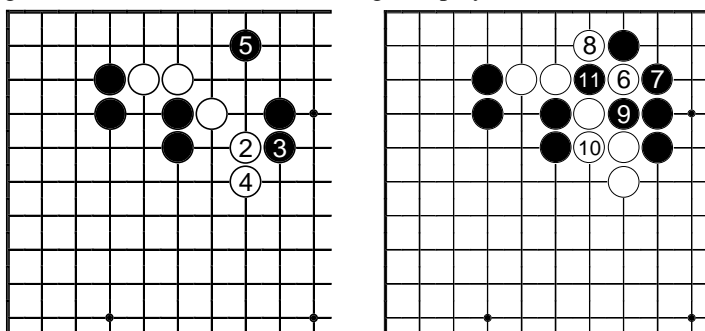
8.3 The high pincer attack



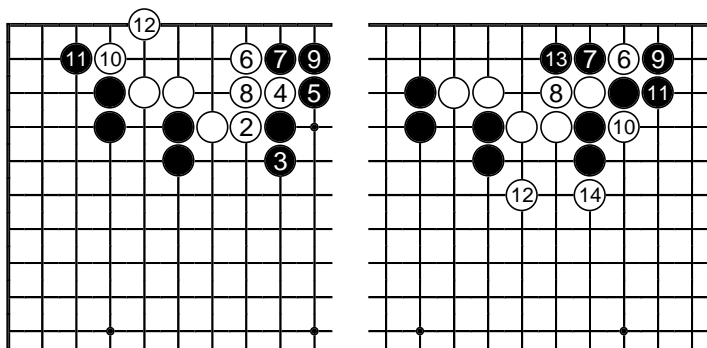
Black 1 here is a fundamental attacking shape, when for some reason White neglects to extend along the top side. White has to decide whether life on the side or running out is more important. Any of A to E in reply may be suitable on occasion.



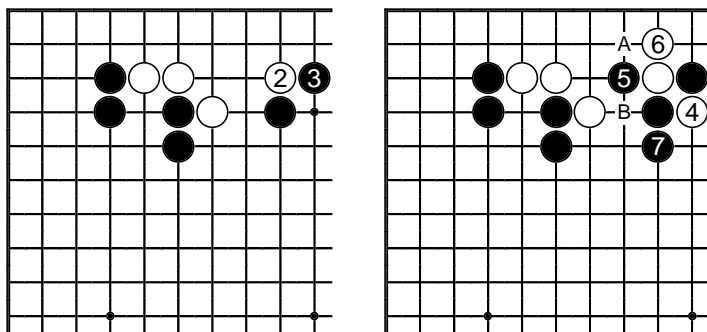
Most usual is to run out with 2 and 4 in the left-hand diagram. This requires some explanation, though. **(Right)** It can be found in the peep, played in line with 7.7. White's resource of 2 and 4, to take *sente* , is the reason White submits to making an empty triangle. Here is another case for pushing into a knight's move (7.6). In fact Black ought to play 3 at 4, to resist.



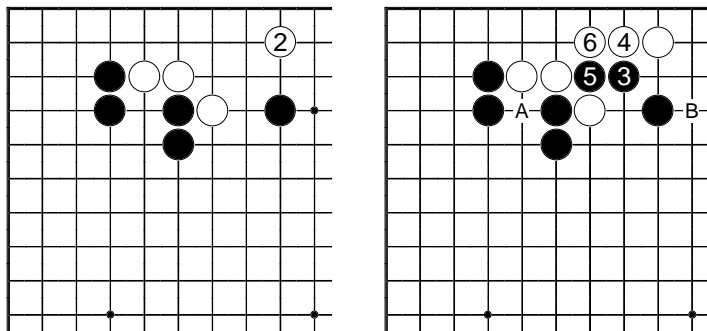
Response B implies White will have to react passively to 5 here, since the same idea **(right)** runs into bad shape with 10 and a desperate *ko* fight.



Amongst ways to seek life, White C is easy to understand (**left**). White makes space for eyes, while leaving Black some cutting points. (**Right**) Another option is double *hane* with 6 here, emerging into the centre.

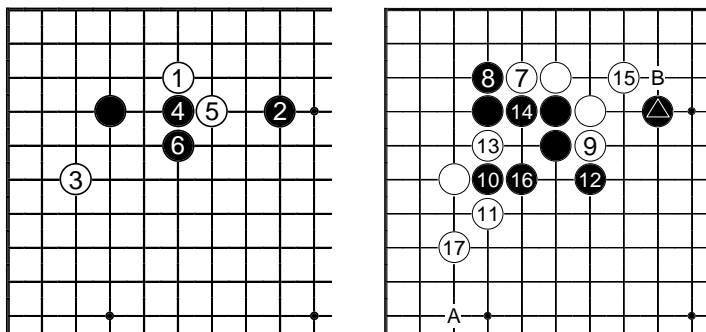


White D looks to cross-cut and then live on the edge. Since Black 7 at A is a tactical failure, and 7 at B leads Black into poor, rather heavy shape after White A, this is a reasonable tactic; Black 7 should calmly extend as shown, and leave the decisions to White.

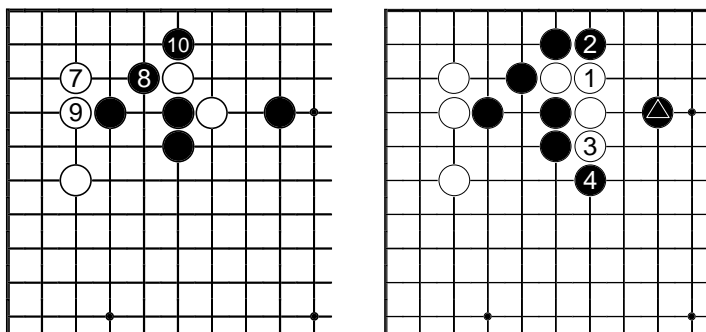


Sliding all the way to E is perhaps the simplest way for White to play. It anticipates Black 3 and 5, cutting off one stone. White has conceded central influence to Black, but the points A and B are now useful ways for White to attack Black's shape. This final way of playing comes closest to the idea of calculated risk, to be introduced at the start of Chapter 12. White should in any case think twice before allowing Black to attack in this fashion.

8.4 The high pincer as good shape

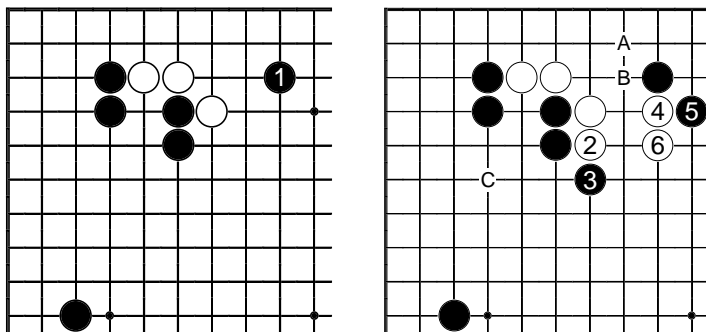


The high pincer is versatile, turning up in other openings. Black 2 here allows Black 4 and 6, which leave it perfectly placed. **(Right)** This variation is recent research; Black will continue at A or B.

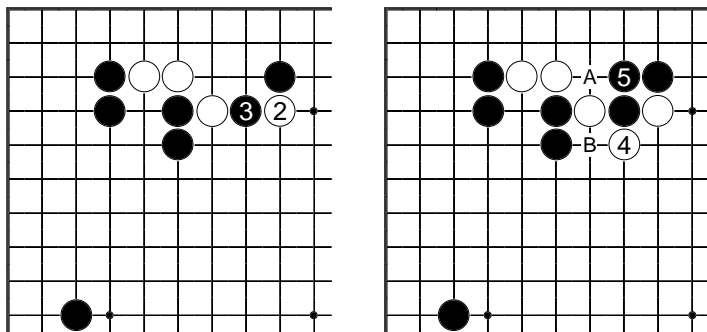


When White 7 invades the corner instead, after Black 10 the pincer is on a 'centre of three stones' point (4.6), as the right-hand diagram reveals.

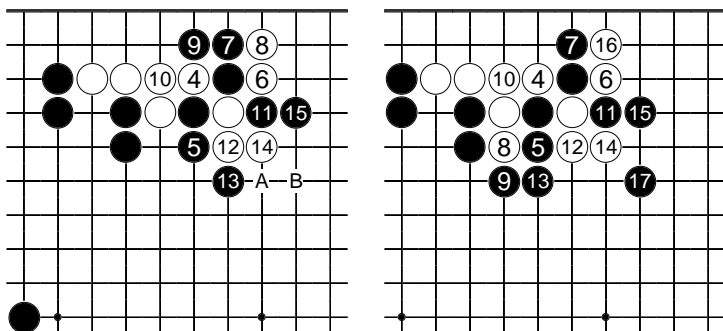
8.5 The low pincer attack



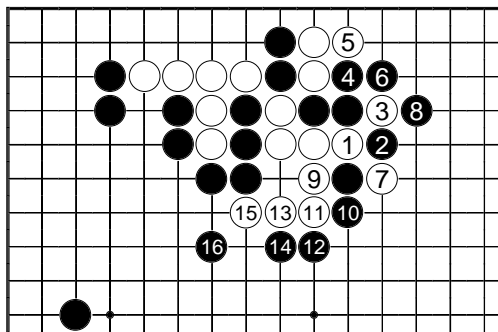
Black could also play 1 on the third line, perhaps when somewhat stronger locally. **(Right)** The standard way. Black could now peep at A or B, but seems to need a play at C quite urgently.



White shouldn't fall into the trap of playing 2 this way. Black's wedge at 3 is strong here. **(Right)** White 4 played this way means Black cuts at A or B.



Therefore White 4 must be on the other side, leading to complexities. **(Left)** After 15 Black has a ladder (A) or net and squeeze (B). **(Right)** In this other variation White cannot reasonably break out.



Doesn't work: White is simply creating more and more influence for Black. The low pincer is more severe on White, but is worse shape and potentially an overplay, since the pincer stone may be subject to counter-attack.

These tactical variations are possibly misleading, therefore. In professional play either of the pincers may be employed, depending on the requirements of the whole board position.

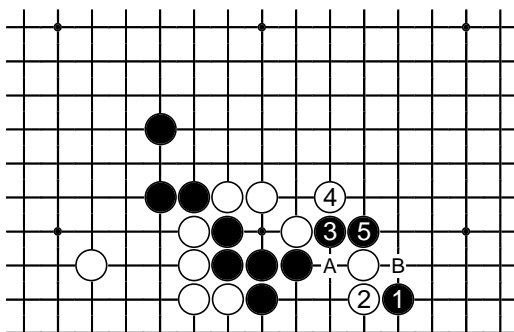
Chapter Nine Escapology

Making an exit

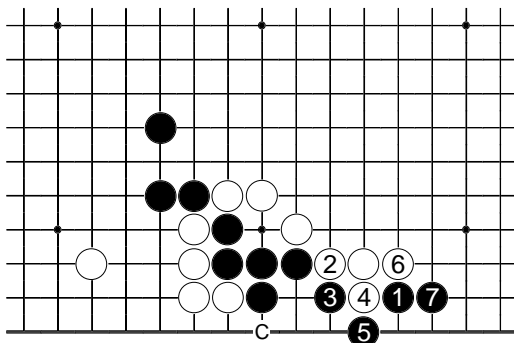
The point of view in Chapter 6 was simply to describe good shape for blocking off, and for preventing it happening to you. In the middlegame the need to escape will add another dimension.

There is more to escape than just avoiding being shut in. Escaping is about finding a way out to the centre with a weak group. If your weak group cannot escape, it may actually die. But that's not all. Being shut in normally causes at the very least a loss in endgame terms: the opponent will be able to play some moves in *sente*, since ignoring plays threatening the eye space of a group that has become shut in is normally not an option. Escaping in good style, rather than just anyhow, is a prime defensive skill.

9.1 Escape tactics

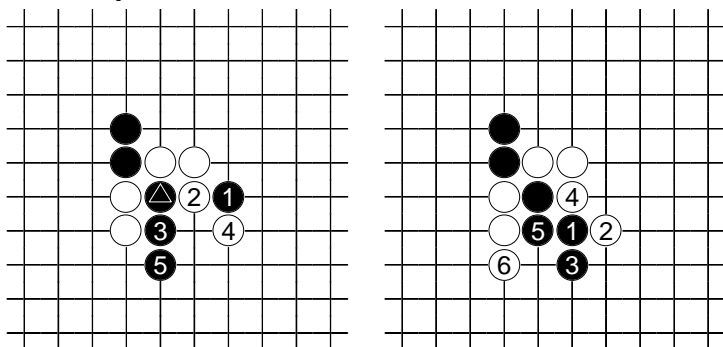


In this tight corner from 7.1, Black has an unexpected resource at 1, setting up plays at A or B to follow on from 5. There is nothing much tactical and new under the go-playing sun: this idea is in the *Guanzi Pu* (Japanese reading *Kanzufu*) published four centuries ago in China.

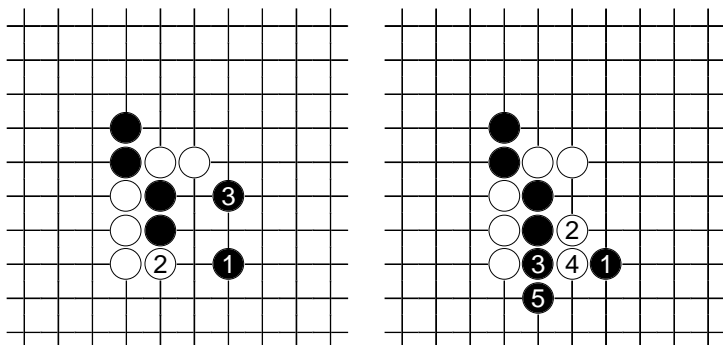


However White can let Black escape in a very low position instead. Without C Black has no eye shape. Therefore Black has little to be proud of here.

Great escapes

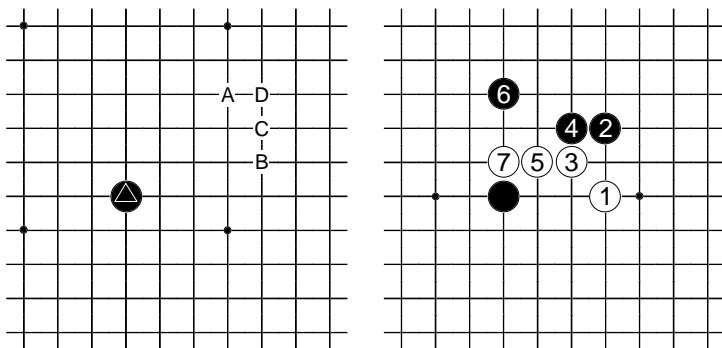


There are some stylish ideas for avoiding a net. Black 1 (**left**) is good when Black anyway is interested in moving out towards 5, weakening the stones to the left. The escape with the diagonal play (**right**) is just as bad shape, as when exactly this pattern arose in 7.6 from a push into a knight's move.

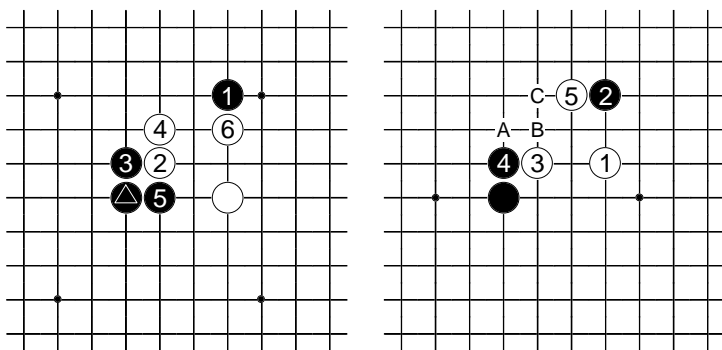


For two stones about to be netted, there is Black 1 here. (**Left**) If White 2 is the bend, Black 3 is good shape. (**Right**) As before, assume Black has taken into account White 2, and is happy with the effect of this fight. See 13.3 for some theory about this position.

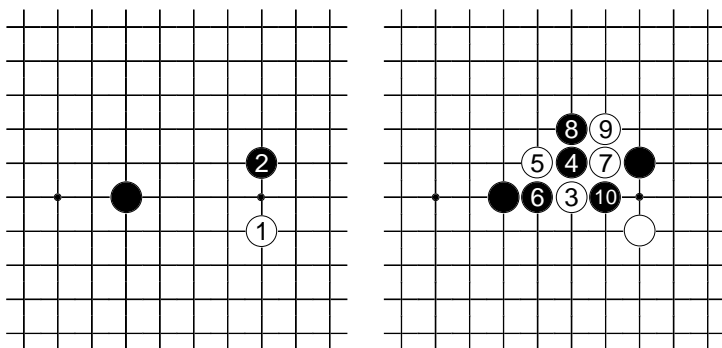
9.2 Capping plays and radius-five shapes



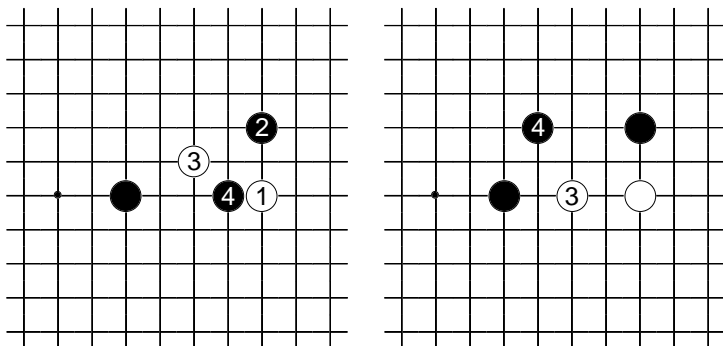
A *radius-five shape* is the combination of the marked Black stone and a play at A, B, C or D (between four and five units away). One of the standard ways to attack is to drive your opponent through a gap of this gauge. **(Right)** Narrower gaps, such as this one, invite simple plays to push out, since the Black stones on one side will end up too close.



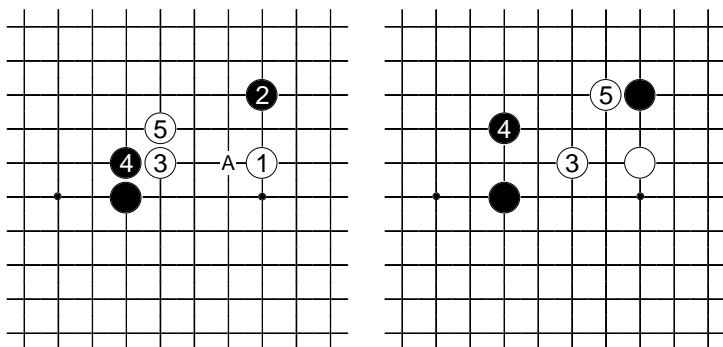
Type A. **(Left)** White emerges with good shape. **(Right)** White has no real problems with this capping play: A, B or C may do as well as 5. In these cases White's task seems easy.



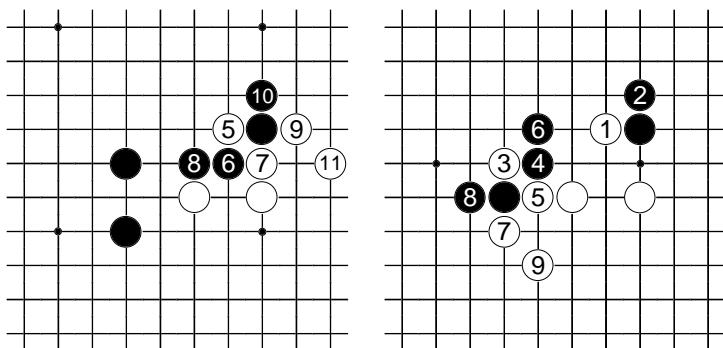
Type B. **(Left)** Maybe White came in too deep. **(Right)** White is in trouble, if this is the best that can be hoped for.



Type C fights. Black seems to have the shape advantage.

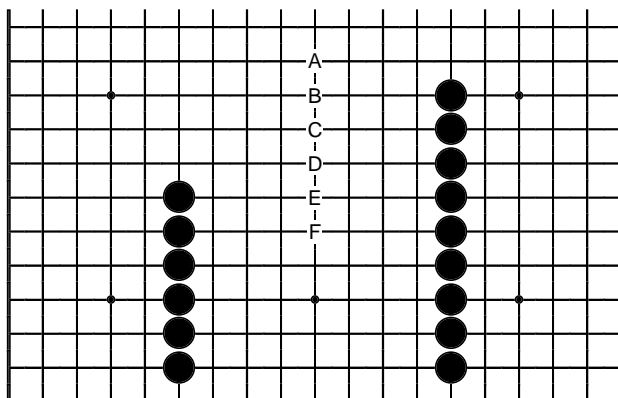


Type D fights, in which White does well, covering the cutting weakness at A in the left-hand diagram. **(Right)** Can Black resist White 5?

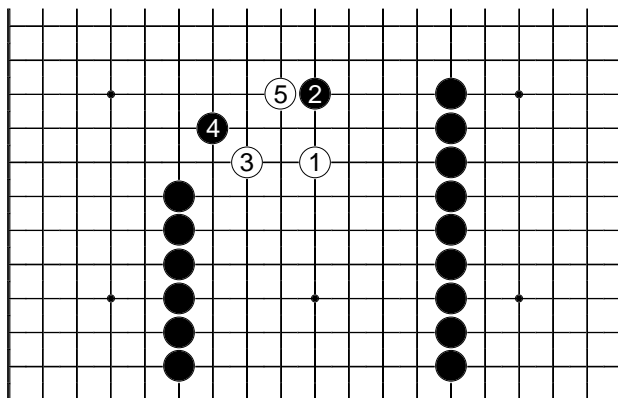


(Left) Black can indeed try the *hane* inside at 6, but it generally doesn't prevent White from developing good shape. **(Right)** In this related formation, White can usually make the two contact plays 1 and 3, to emerge in good shape (see also problems p.89). Black 4 leads to a position where White's shape is better than Black's, which has the kind of weaknesses associated with attacking too hard. These two last diagrams are examples for the *amarigatachi* concept mentioned on p.31. Black should refrain from aggressive gestures when they don't work out well.

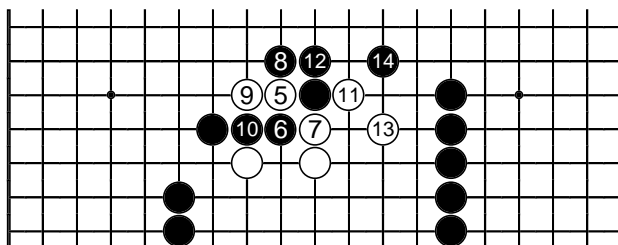
9.3 About sector lines and the mid-point



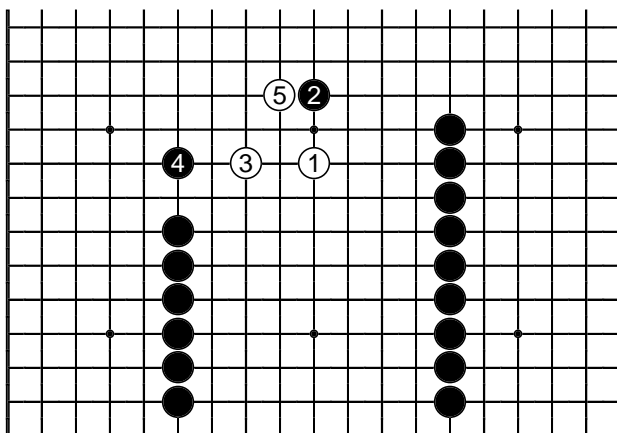
An aspect of the middlegame in which escape is very important is reduction play. This is a schematic example. Black has two perfect walls. Where should White play to reduce Black's framework? The line with the letters on is equidistant from the walls; this makes sense in terms of the proverb *stay away from thickness*. Experience shows that point C is deep enough.



The immediate problem with D is the capping play. Here it seems that White may make an escape with 3 and 5.

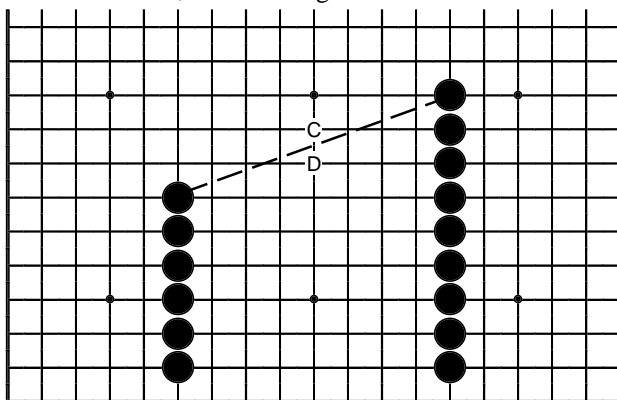


Black brings the strength of the wall on the right to bear. The combination of 8 and 10 is powerful, and it seems likely that White will die.



White's play at C is much more comfortable, when Black caps. White 1 played this deep cannot be shut in by force.

That doesn't mean that C is correct; a play at B might be sensible, with Black's walls being so perfect. There is some discussion at the end of Chapter 13 about these decisions, and counting.



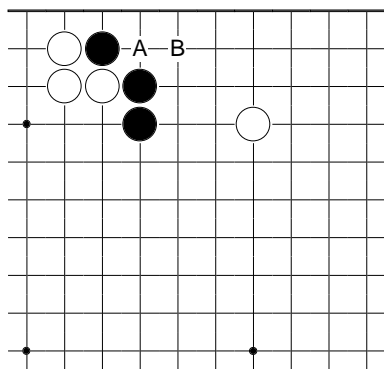
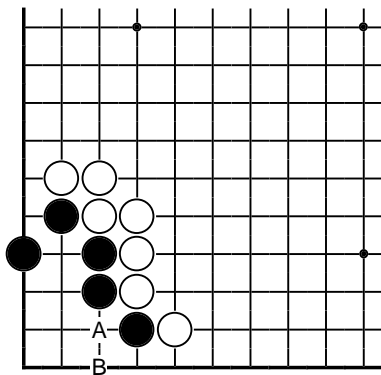
Now we have drawn in the sector line (in the sense of Bruce Wilcox), joining the tops of Black's walls. It passes between points C and D. Very often the play at or just outside the mid-point of the sector line is the correct one for reduction. There are rather too many configurations to study, so this sort of rule-of-thumb may be helpful. It complements the variations listed in 9.2.

A sector line, being a line drawn between stones of the same colour, differs from the gain lines of Chapter 5. Bold escapes must cut across sector lines. There are two parts of the rule to explain. One aspect of the mid-point rule is respect for the existing lines, so when capped you need only cross freshly created ones. Looking at the central point assumes, until told otherwise, that Black's walls are equally strong. If there is a noticeable weakness in one of the walls, common sense (converse to 'stay away from thickness') says you should bias your play more to that side. (Example on p.197.)

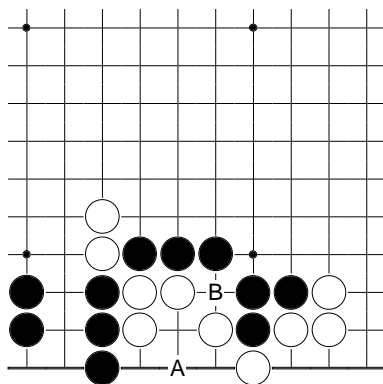
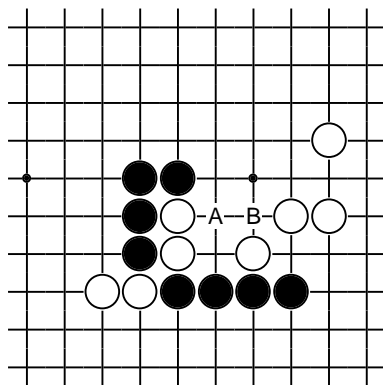
Problem Set 2

Cutting Points

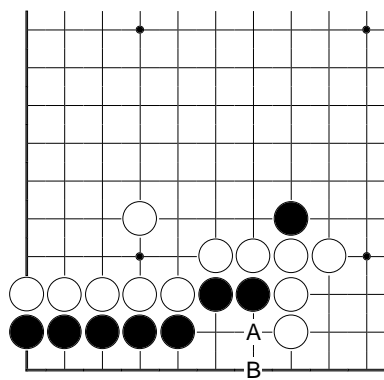
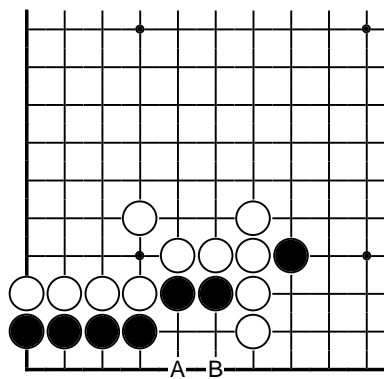
Both problems Black to play at A or B

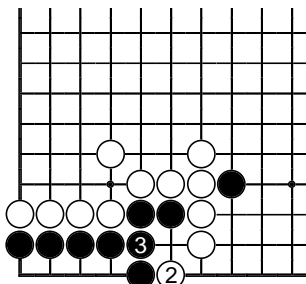
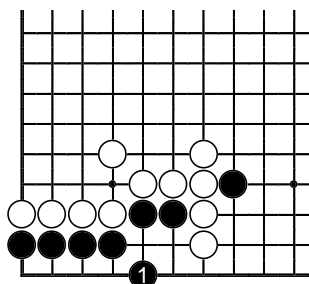


Both problems Black to play at A or B

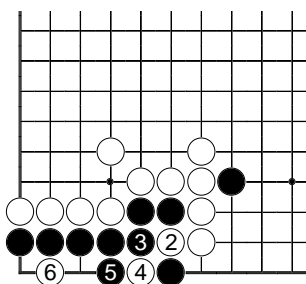
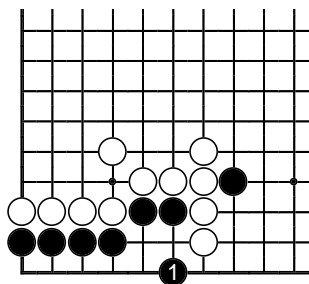


Both problems Black to play at A or B

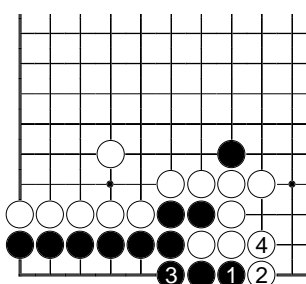
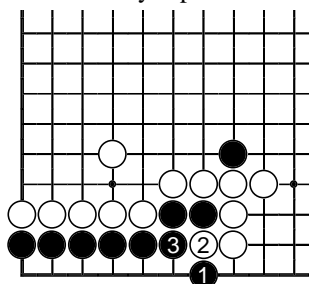




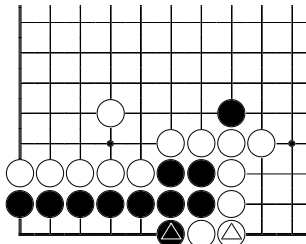
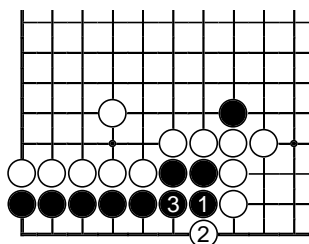
The hanging connection (answer A) is the way for Black to live here, and save two stones. When White plays 2 Black plays 3 to avoid the snapback.



The one-point jump to the edge fails. Black doesn't have room for two eyes after White plays 2. Of the four ways to defend the two stones, answer A makes the most eye space.

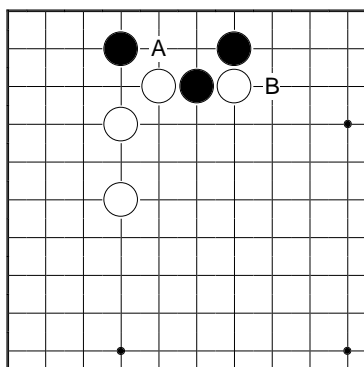
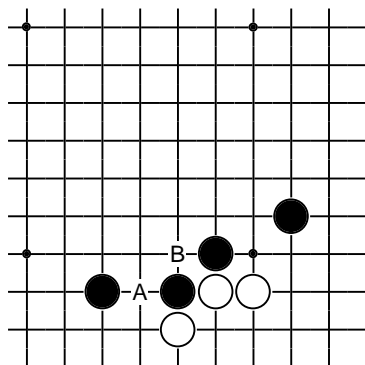


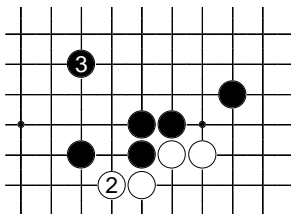
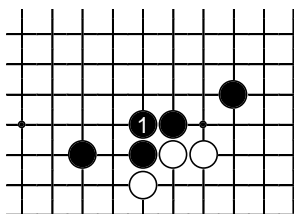
This problem is about correct endgame play, not life-and-death. In this case answer B, the one-point jump, takes most points. **(Right)** Black expects to play here in *sente*.



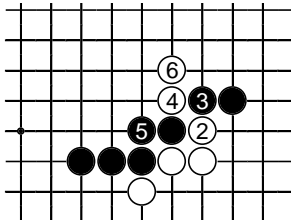
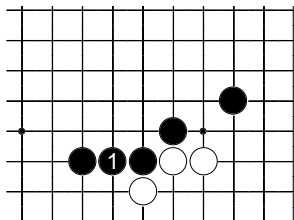
Blocking at 1 allows White 2. White will have two extra points of territory, compared to Black's correct answer.

Both problems Black to play at A or B

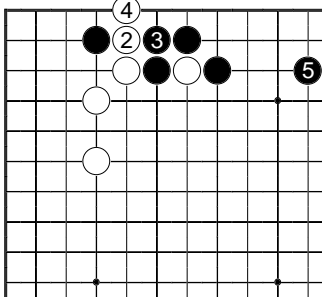
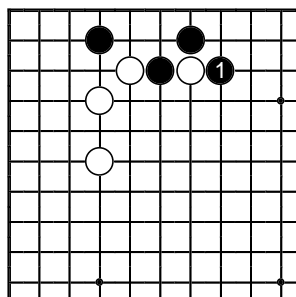




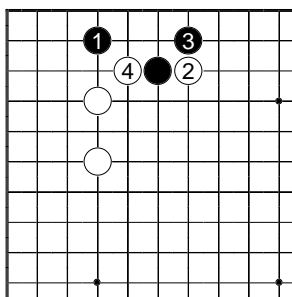
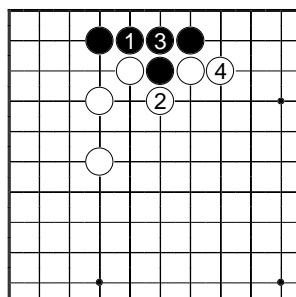
With answer B Black obeys the pattern of 7.4. That is best in this case. White 2 occupies the bulge point, but Black 3 makes good shape in the centre and prepares to block the lower side.



Connecting in this way is poor. The Black shape is inefficient. Even worse, White can cut at once and start a tough fight; the White corner is resilient.

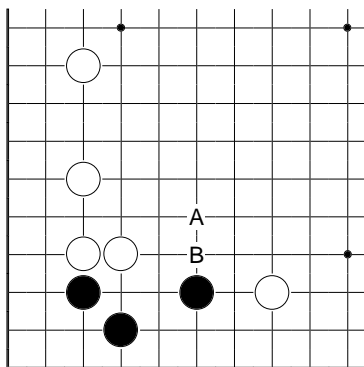
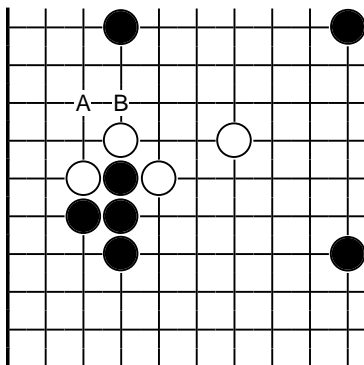


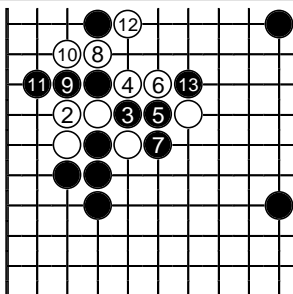
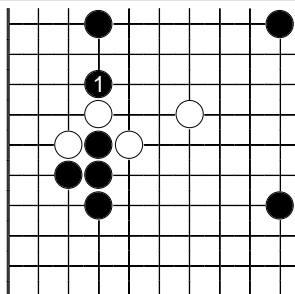
Here Black should allow disconnection (answer B). White takes the corner with 2 and 4, and then Black extends with 5. (This line is accepted in Korea; Japanese professional opinion may differ...)



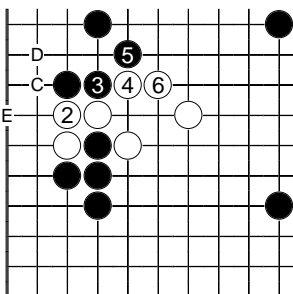
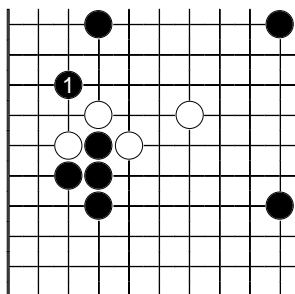
To play 1 in this fashion, hanging onto the stone in the corner, invites being pressed low. **(Right)** The position arises in this corner opening.

Both problems Black to play at A or B

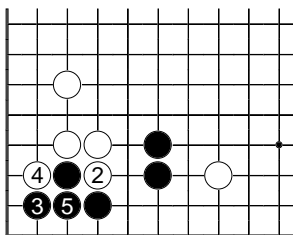
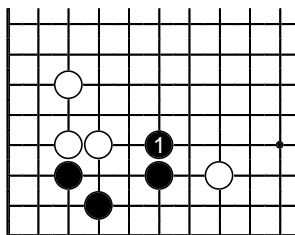




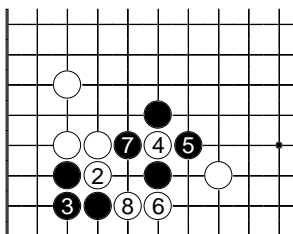
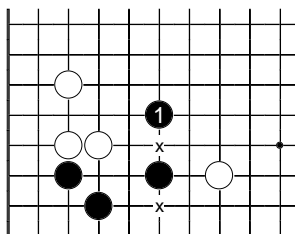
The correct way to play here is the clamp (answer B). If White 2, the cut at 3 is more painful for White and Black can pile on the pressure.



To peep with 1 here is a mistake of principle. Black's stones up to 5 aren't in good shape, and White C, Black D, White E is an attractive way to make an eye. Black is playing too close. (White 6 is a patient play.)

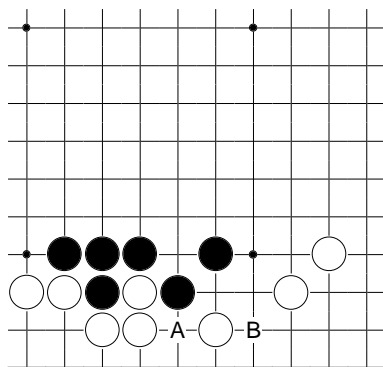
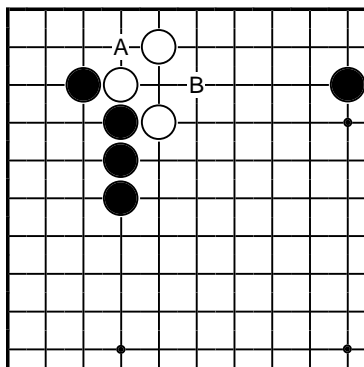


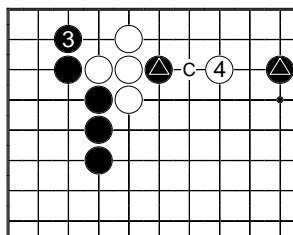
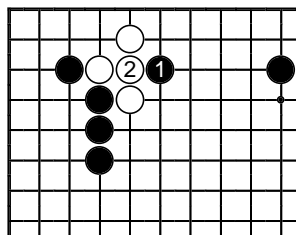
The correct way for Black to move out is with the solid connection (answer B). Then Black's shape is proof against White 2 and 4.



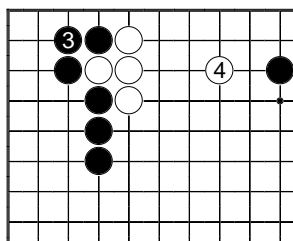
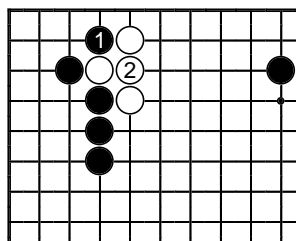
If Black uses the one-point jump instead, the two 'x' points combined create a weakness. White can cut as in the right-hand diagram.

Both problems Black to play at A or B

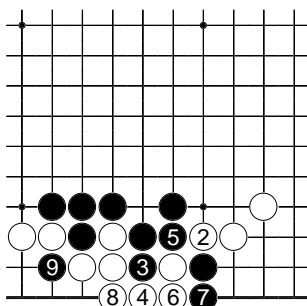
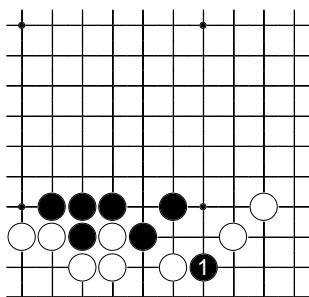




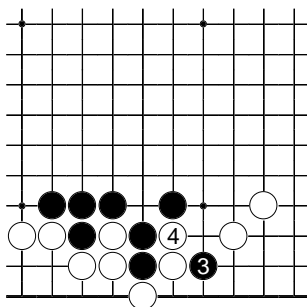
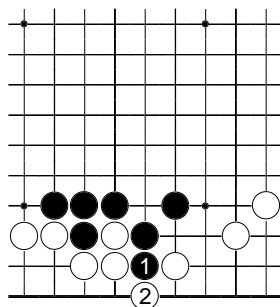
Black should peep first (answer B), and then defend the corner with 3. The marked stones then are well placed, while White has an inefficient shape, and has to worry about Black C later.



Playing *atari* with 1 is slack. After Black connects with 3, Black 1 doesn't look like an urgent play: Black would prefer to move this stone for the fighting to come. White certainly wouldn't play at 1.

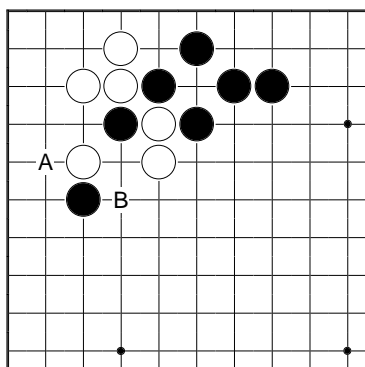
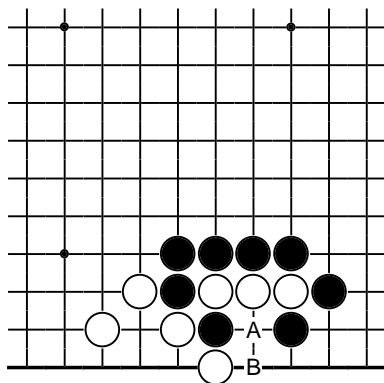


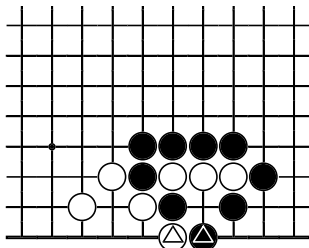
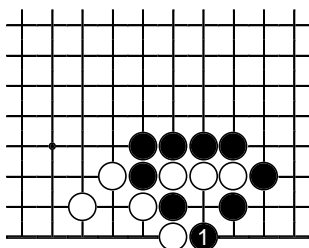
The correct answer is B, to cut successfully. **(Right)** White is caught in a typical shortage of liberties.



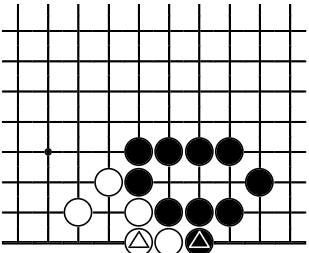
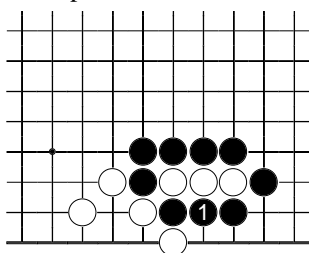
If Black pushes down with 1 immediately, White has a way to resist with 4.

Both problems Black to play at A or B

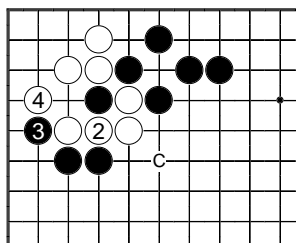
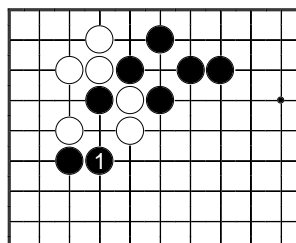




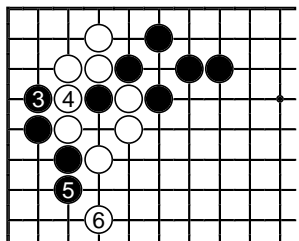
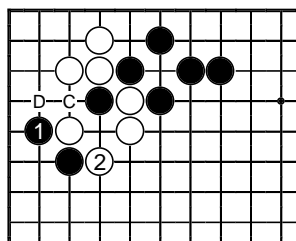
Since answer B sets up a snapback to capture the three white stones, it is clearly the better way to play in endgame terms. The exchange of marked stones is a plus for Black.



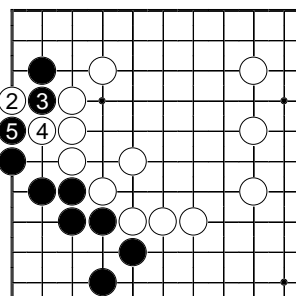
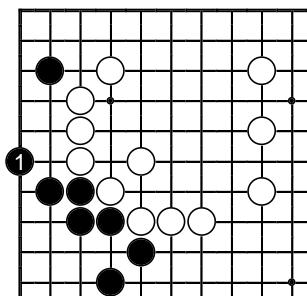
To take the white stones off is feeble: it loses the initiative, and also points. **(Right)** This expected final result shows Black having played a redundant stone losing a point.



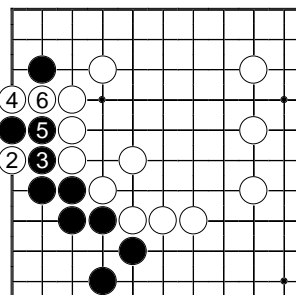
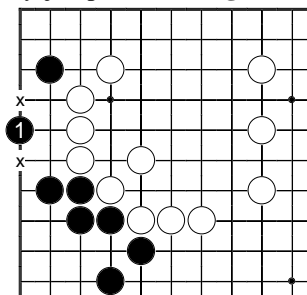
It is correct for Black to peep first (answer B). Then Black 3 is a preparation for a play at C, fencing White in.



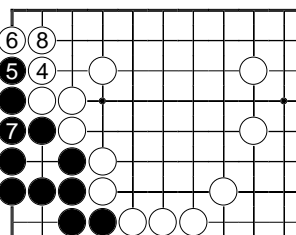
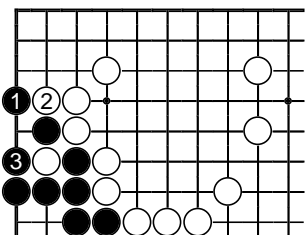
It is a mistake in order to play first on the second line. White can answer at 2, relying on the snapback Black C, White D. White can break out and prevent Black's central dominance.



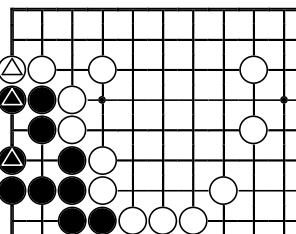
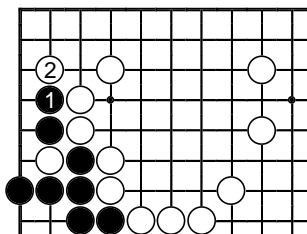
It is correct for Black to connect with B. White has no chance of cutting the monkey-jump relation **(right)**.



The problem with answer A is that White can cut by combining plays at the 'x' points. **(Right)** This is the wrong order, though it works; White should play at 4 to give fewer points away.

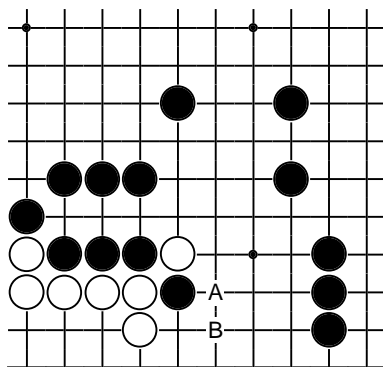
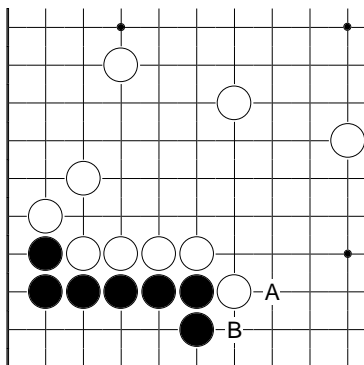


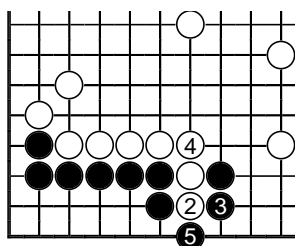
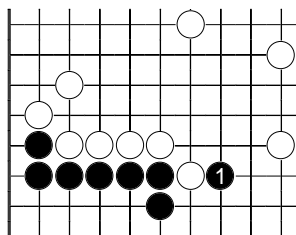
The quiet diagonal play A is worth more here, because White is left with a cutting point on the second line. **(Right)** White 4 is advisable, to avoid a ko.



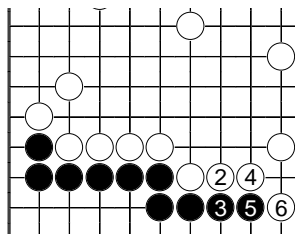
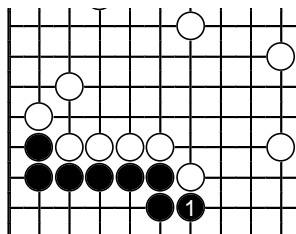
The other way to play will only be better if White ignores it. By replying to it White makes sure Black's result is one or two points worse than in the case of answer A.

Both problems Black to play at A or B

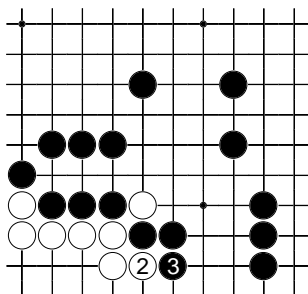
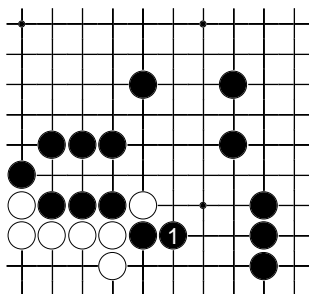




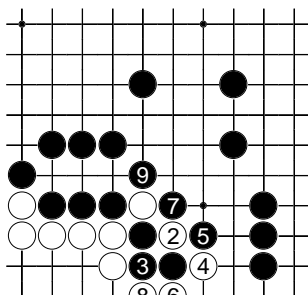
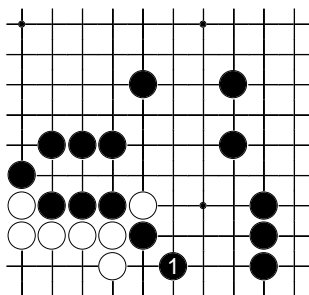
The clamp at A enables Black to break into the White territory. White cannot cut Black by pushing down at 2 (if White 4 at 5, Black cuts at 4).



The other choice of way to play will only be better when it is important to retain *sente*. White defends much more territory.

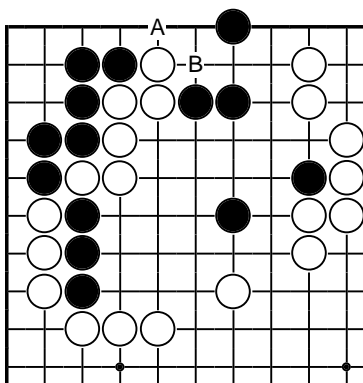
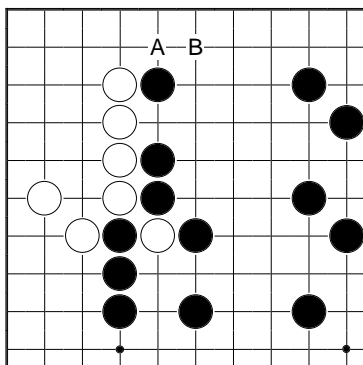


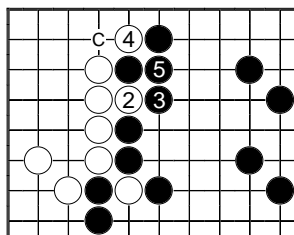
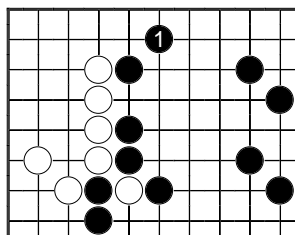
The best shape here is answer A, the solid extension. White will probably answer it by playing 2 a little later.



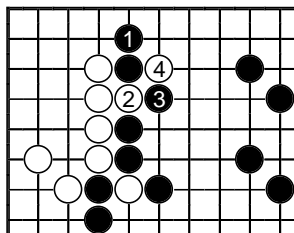
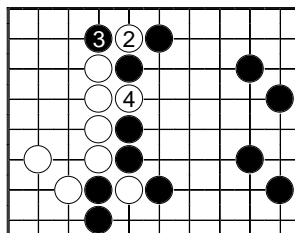
The diagonal play 1 is a flawed shape. White can reduce Black's territory in *sente* by a sacrifice trick.

Both problems Black to play at A or B

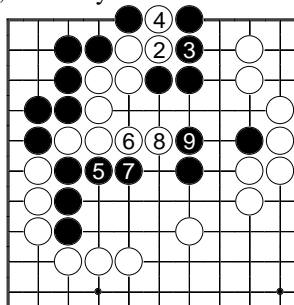
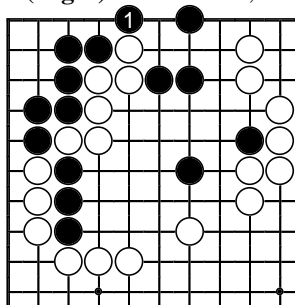




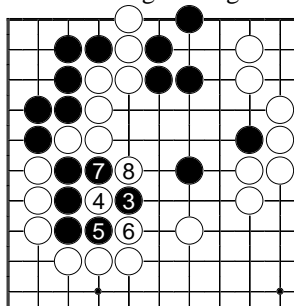
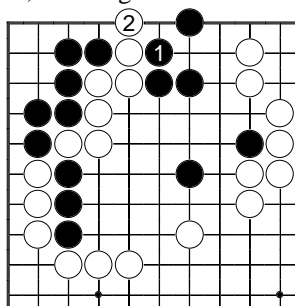
The diagonal play at B is the way to repair Black's shape. White can play 2 and 4 in *sente*, but Black is left the capture at C (worth 10 points).



(Left) White 2 is an interesting tactic in positions of this type; but Black shouldn't play at 3 as shown here, rather at 4, when it is a little worse for White. **(Right)** Black 1 here, answer A, is clearly bad.



Black can play at A to connect out. White has a problem with shortage of liberties, meaning White can't disconnect Black along the edge.



This way of playing is a failure. Black's shape is too thin to surround White.

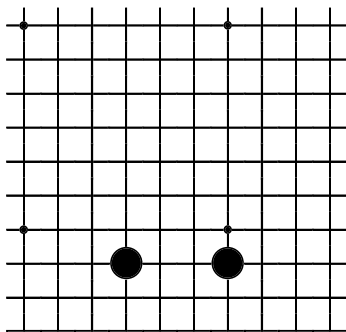
Part Four

Vital Points and Shape in the Opening

Chapter Ten

Extensions and Invasion Points

10.1 The two-point extension is stable



This extension with a two-point gap is the fundamental building block for play on the sides. Much of the ordinary reasoning about finding a base for groups in the opening centres on extending in this way.

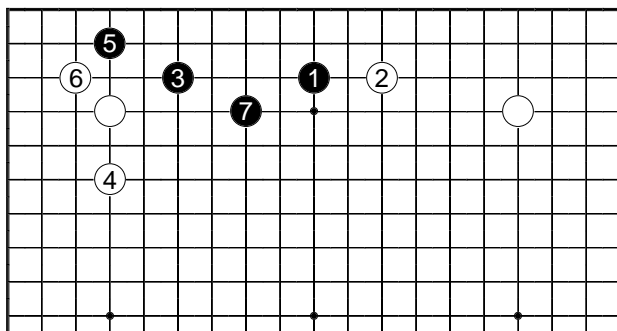
Of all the ways to construct a two-stone group on the side, this one is the most stable. We shall see in the rest of this chapter how each of the other members of the family of common extensions has some drawback.

That by no means says that the two-point extension is the only shape you need to know. In some cases you can play low moves, with an eye to getting immediate life. On other occasions overall strategy dictates the use of plays on the fourth line, climbing quickly to pivotal or focal points.

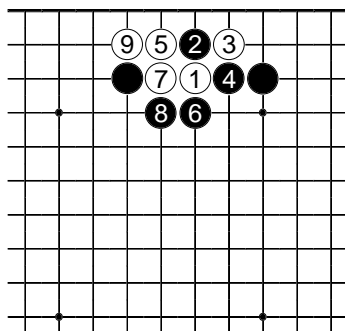
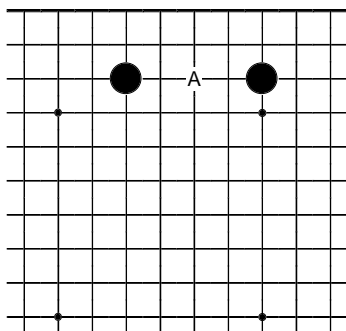
The feature that we bring out in this chapter is the existence of *invasion points*, vital points of shape where an invasion is possible (or may become possible later). There is some discussion in 13.7 of the question of whether such invasions in small spaces are worthwhile.

The two-point extension is not exempt from attack itself. We consider this topic in Chapter 11.

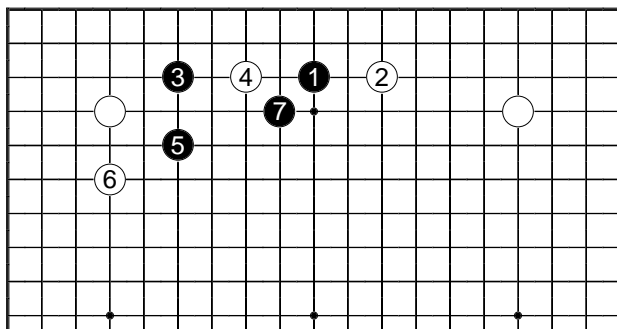
10.2 The three-point extension



The three-point extension on the third line is useful in this sort of situation. Black builds a secure group.

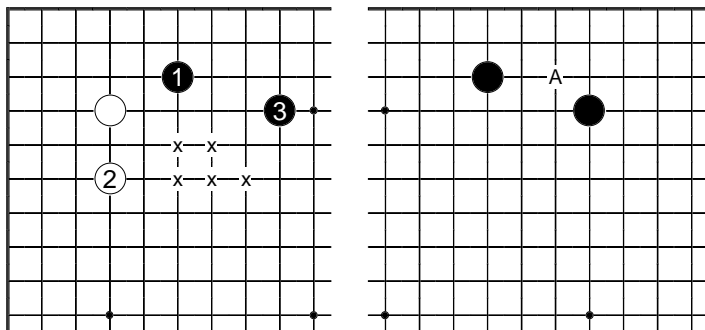


Considered on its own, the three-point extension is a light shape, that is, one that may be defended by sacrificial means. There is an invasion point at A. **(Right)** Depending on the context, Black can usually cope this way, giving up one stone.

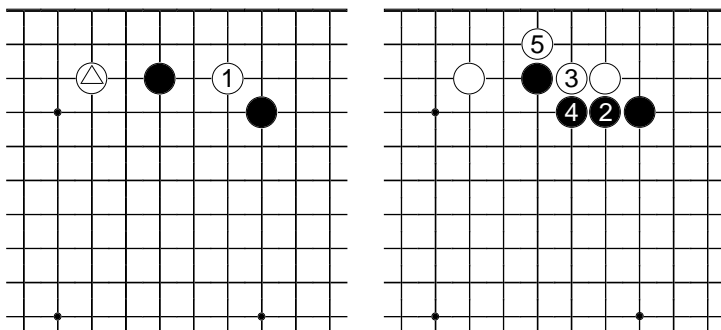


In professional go, the sequence at the top of the page would be thought to lack severity by White. Instead one expects to see White invade at once, and then give up the invasion stone for the moment, as here. It has very good chances of later revival, unless Black plays once more to suppress it.

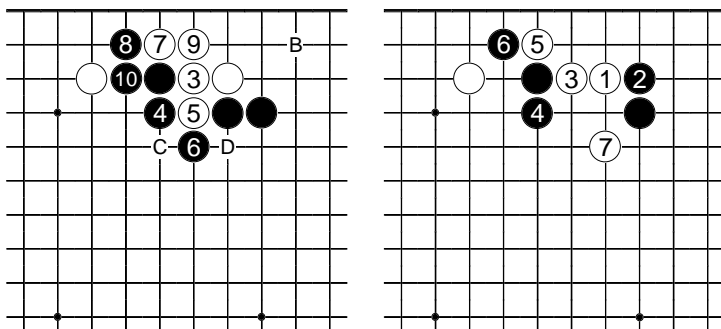
10.3 On the third and fourth lines



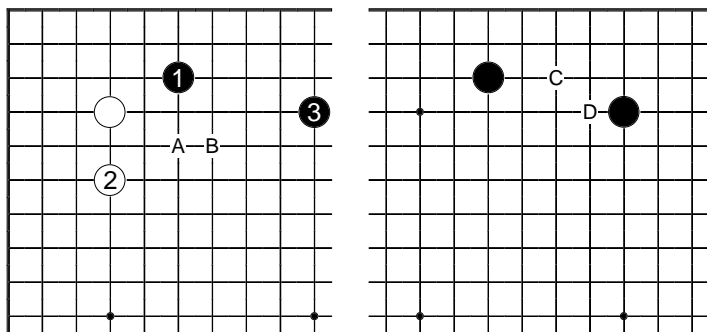
In strategic terms (**left**), Black 3 has the meaning of making the plays at the 'x' points less important. That is, it works against central strategy. Considered in isolation, the shape has an invasion point at A.



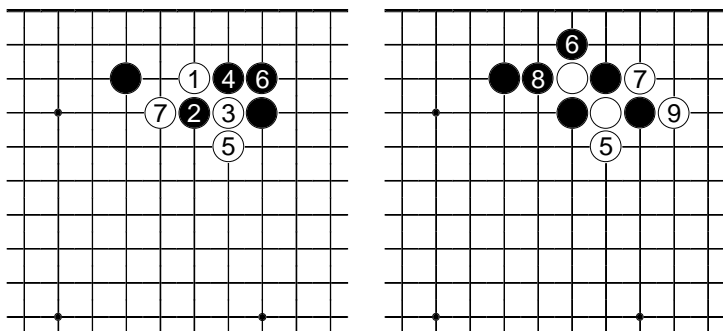
When the marked White stone is present, it is normally possible to invade. The tactics can be difficult. (**Right**) This way is simple, but Black loses territory with little in return.



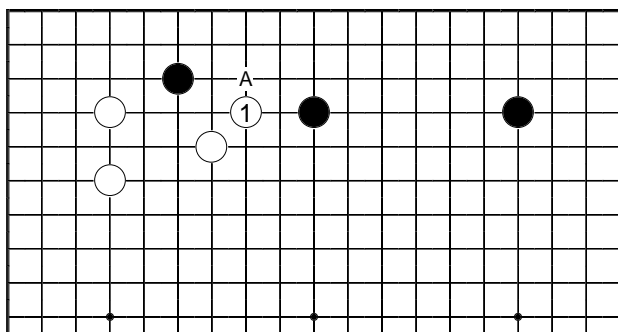
(**Left**) If Black resists at 4, the fight becomes complex, with White having to take into account eye space (play at B) and the cuts C and D. (**Right**) Black may also try 2 and 4. White can escape with 5 and 7, but must worry about the timing.



In contrast, Black 3 here leaves Black a good play at A, and White one at B. In a game of large-scale frameworks both players would be keen to play in this focal area. **(Right)** White can invade at C, or play contact at D.

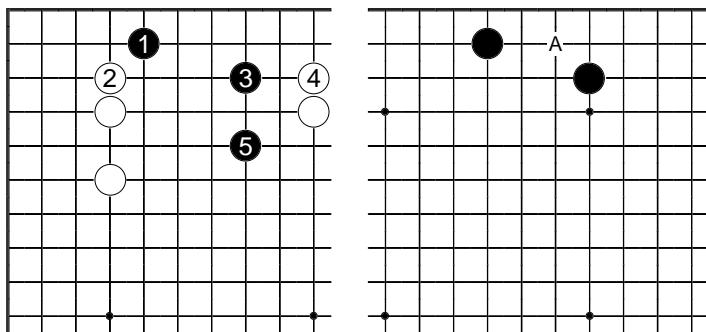


White can get a good result invading on the third line, if both these ladders are favourable. As in 5.3, if Black 4 is at 5 White gets good shape. When White starts at 3, Black 4, White 1, we can have the same results.

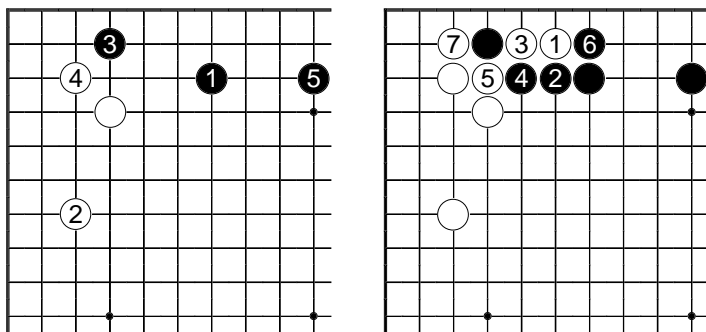


An example of shape-based thinking in a large-scale position. Black has ignored a focal play by White. White 1 here prevents Black's connection at A (cf. 2.1). Black can make a 3-3 invasion in the top left corner, to handle that local situation. However White will develop a very solid position, and Black's influence over the top side will be much diminished. White can have confidence in future fighting.

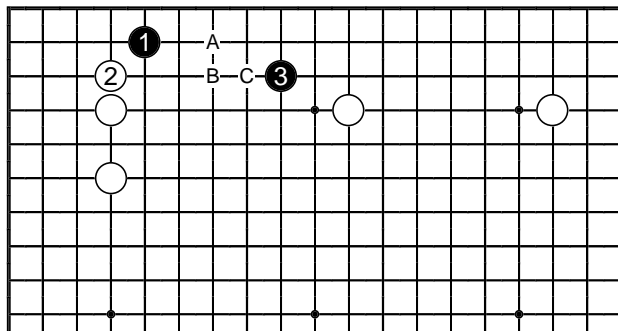
10.4 On the second and third lines



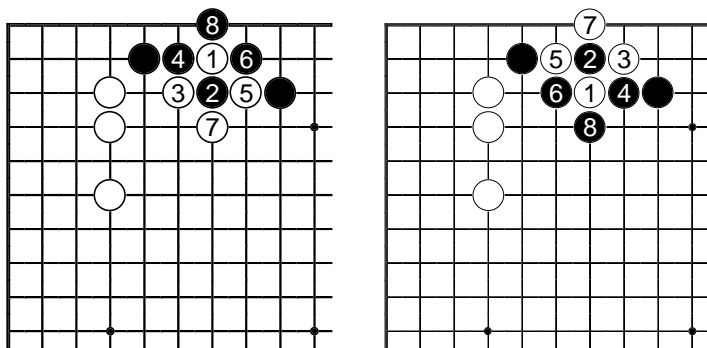
You can say that a play on the second line early in the game always has some strategic purpose, to compensate for its low position. Here Black 1 is a ‘mole’ play (6.2), trying to live in a White framework. **(Right)** A marks the normal invasion point in this shape.



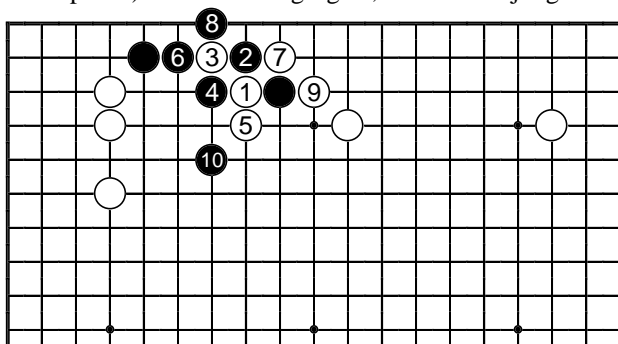
This is an opening pattern with efficient shape for both sides. **(Right)** White can take a profit by invading here later; but Black ends up strengthened.



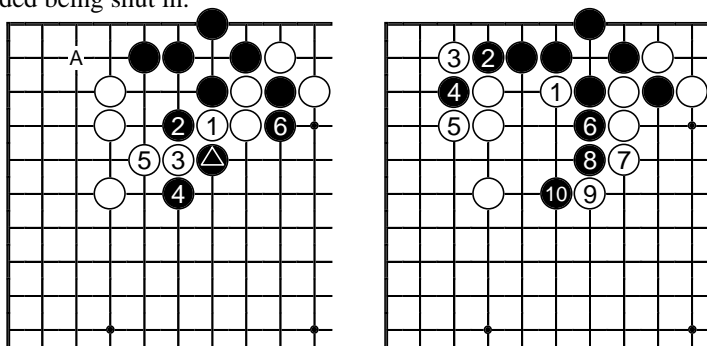
This is one idea for invading White’s framework, set up in the revised or high Chinese opening style. There is room for Black to extend to 3. The resulting position is complex; White has plays at A, B or C to consider. Why would Black play this way? With another play at B, Black is settled. But White may intervene, a point already made in 2.3.



There are these potential *ko* fights (both of them examples of the *ko* lock idea from Chapter 5). These are big fights, and hard to judge.

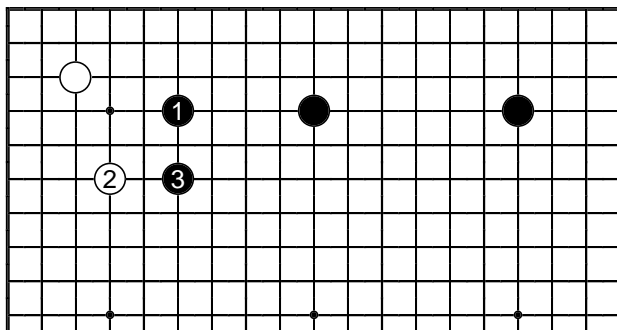


There is also this attack for White. Up to 10 Black has lived, and also avoided being shut in.

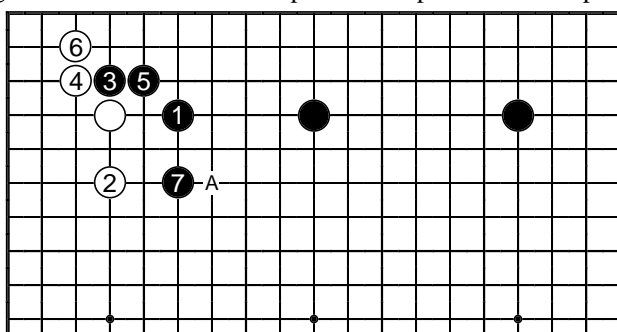


Black would probably not die without Black 10 of the last diagram. But it is still important to play it, to retain access to the centre and preserve a big endgame play in the corner at A. **(Left)** Unreasonable for White to cut Black now the marked stone is played. **(Right)** The immediate clamp play White 1 is too simple-minded to kill Black (cf. 2.6), and is a loss. Black could play as shown, cutting at 4 to set up a liberty shortage, or hold back 2 and 4 for later, since Black 2 here is normally worse in endgame terms than jumping in to 3. But Black cannot rely on White attacking so bluntly: White will wait for an inconvenient moment.

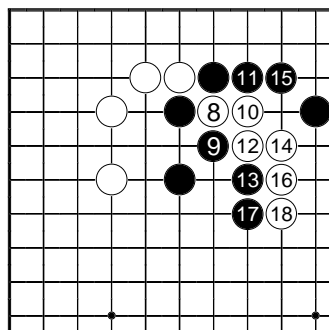
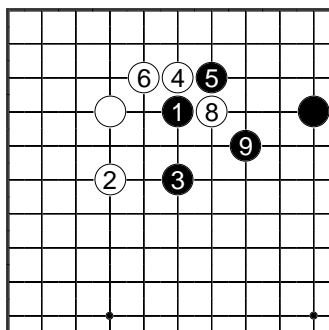
10.5 On the fourth line



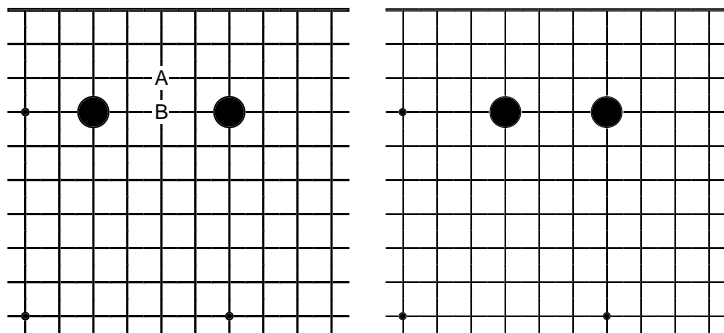
When a game is being played on a very large scale, one sees fourth line plays such as 1, to be followed up by 3 at a key point. In this case Black is thinking more about central development than points on the top side.



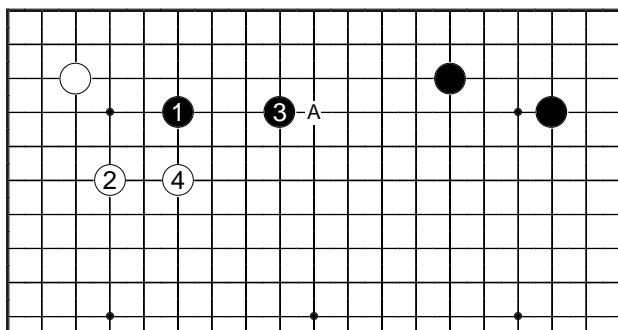
Playing 3 and so on before jumping to 7 is big, but there is some risk that White will play at A rather than 6, a plan tried out by top pros.



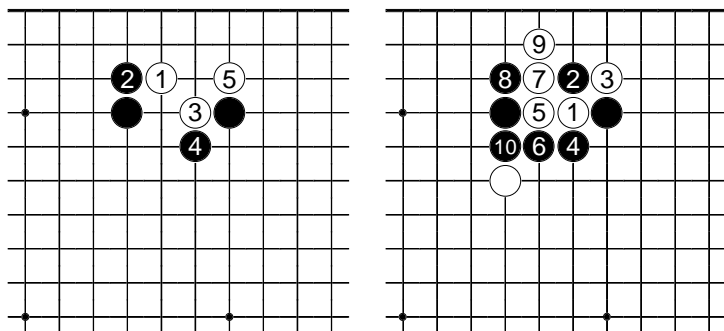
(Left) If Black jumps to 3 immediately White could play 4 and 6, to which Black has no very good answer (connecting at 8 is overconcentrated). If Black plays away with 7, White can cut at 8. Black 9 looks to sacrifice Black 5 to build up outer strength. **(Right)** A rare example (in this book, rather than in games) of playing into very bad shape. Black 9 is terrible. Black gains only a weak group.



The three-point extension (**left**) may be invaded at A or B. It is a loose extension, so that unless Black is strong locally, these invasions probably live. (**Right**) There is no definite invasion point in the two-space extension on the fourth line. However it doesn't hold any territory firmly.



On the top side, Black 1 and 3 may suggest themselves. White 4, sooner or later, is a focal point. The normal way of thinking for Black is to hold back, with 3 not A. If Black 3 were at A, White 4 would have more effect on Black; the invasions suggested above would be more severe.

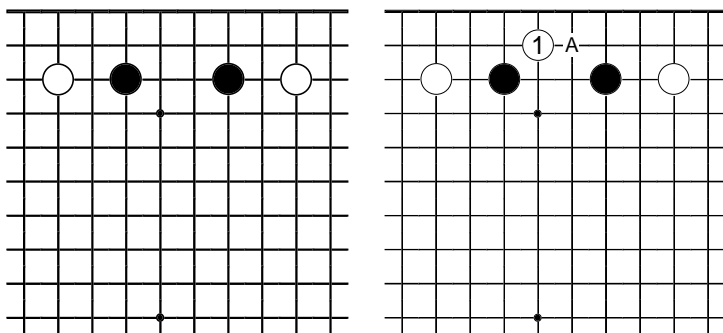


It has to be understood that Black is aiming for influence first, in placing two stones on the fourth line. The number of possible later tactical sequences, such as these, is quite large. Adding to the discussion in 10.1: we can say in this case the Black formation on the fourth line isn't inherently stable.

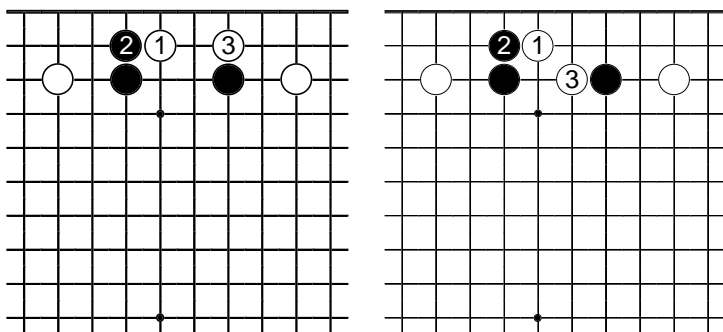
Chapter Eleven

Cramp

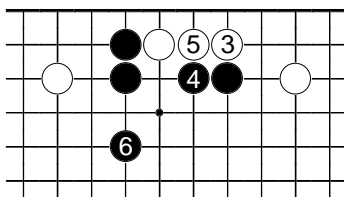
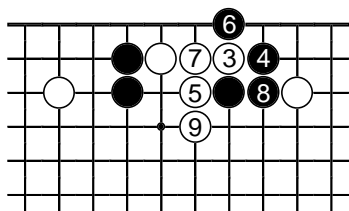
11.1 Two-point extension: the placement



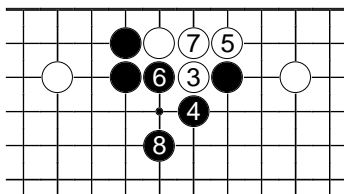
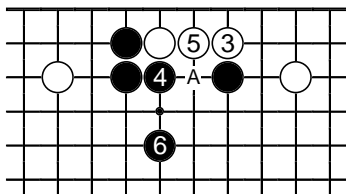
This chapter gives the other side of the story on the two-point extension. When it is cramped by two White stones, as shown in the left-hand diagram, it can be attacked in many ways. The placement (**right**) at 1 or A is something of a revelation, when you first discover it.



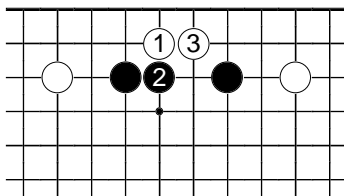
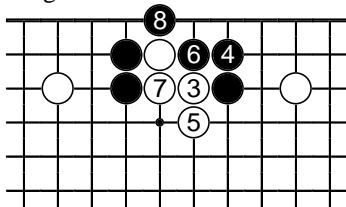
Next if Black blocks at 2, White should play 3 in the left-hand diagram; the other choice (**right**) can be criticised.



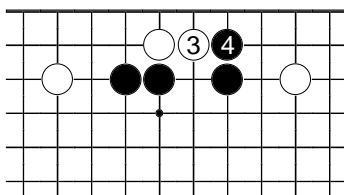
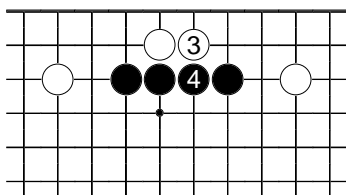
Black can't hope to resist as in the left-hand diagram. What about the right-hand way?



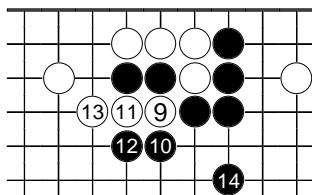
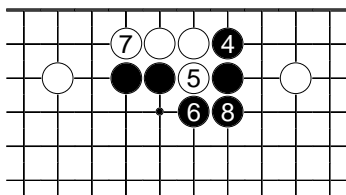
(Left) Black makes better shape with this choice of 4. White should just play 5, rather than A. **(Right)** This way of playing 3 is a little vulgar; the exchange of 3 and 4 benefits Black.



There is also a chance Black will resist **(left)**, leading to a wild position, both having bad shape. **(Right)** If Black plays 2 White 3 is inevitable.

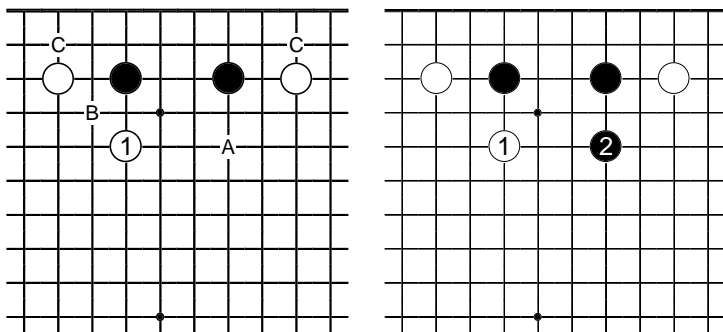


(Left) White can connect out either side, but is thin. **(Right)** Black blocks with the intention of sacrificing if necessary.

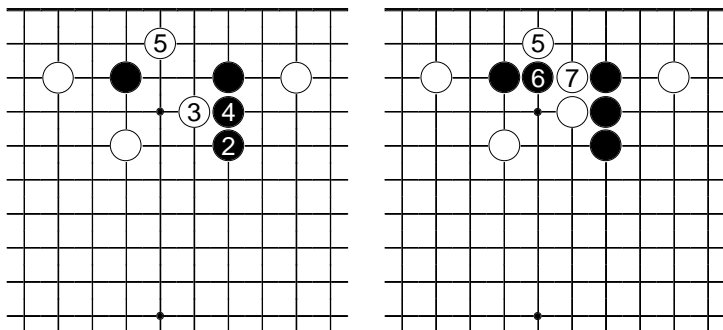


White 5 here is reasonable. But cutting at 9 just helps Black make good shape up to 14. White should attack on a larger scale than this.

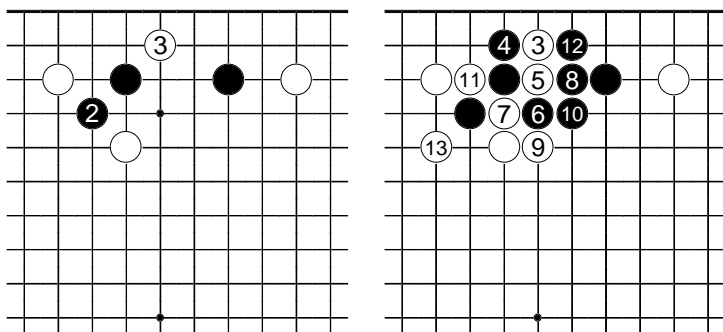
11.2 Two-point extension: capping attack



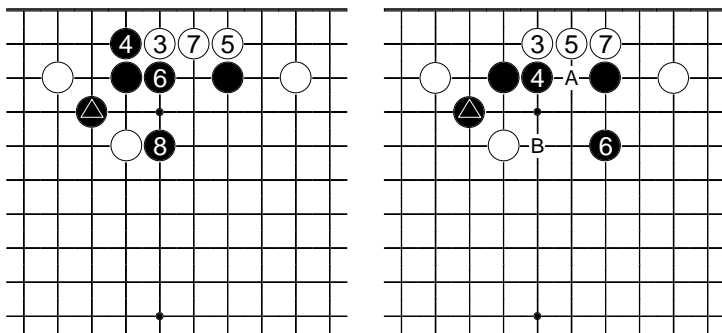
The attack with the capping play White 1 is flexible, and normally better balanced than the placement. Black may move out with A or B, or try to build shape on the edge with one of the contact plays C. **(Right)** Black jumps out at 2. This is a common sense approach: avoid being shut in.



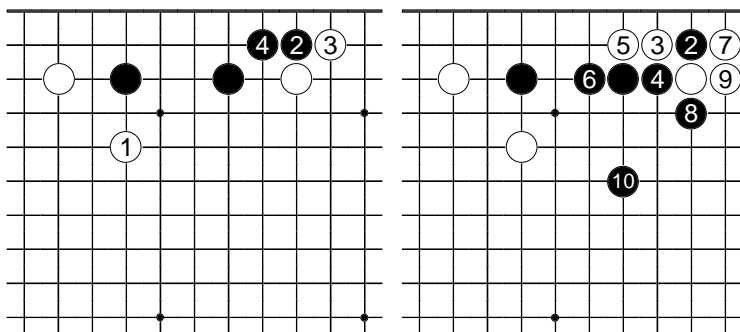
Now White has an improved placement tactic at 5 if Black connects solidly in response to the peep at 3. **(Right)** The Black group has lost its base, and care is required. White 7 is strong if Black plays 6, so Black may play at 7.



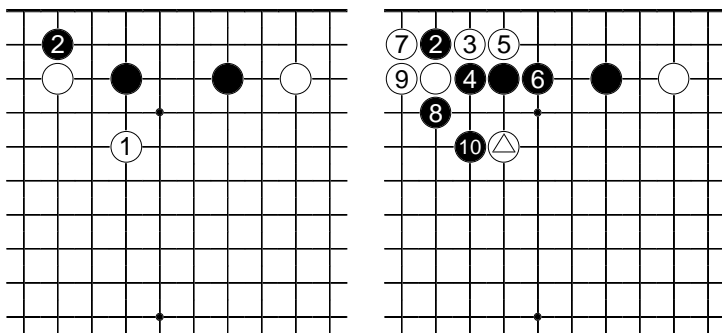
The capping attack stands or fails by White's response when Black plays through at 2 here (cf. 4.9). The placement at 3 is excellent. In the continuation up to 13 White builds central strength, while Black still only has one eye.



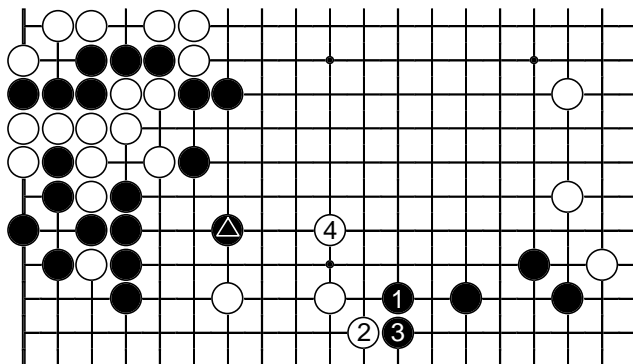
Besides the sacrifice option just seen, White can attack Black's base. **(Left)** Black's marked stone ends up as a compromised diagonal (cf. 4.9). **(Right)** This is possible for Black (White A, Black B), but Black has poor eye shape because the capping stone is well placed relative to the marked stone.



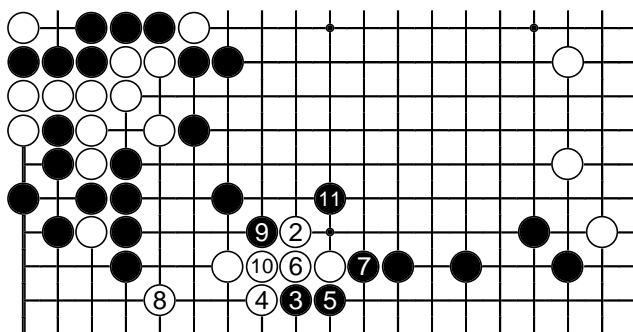
In practice Black will often play one of the contact moves in order to settle quickly. In the right-hand diagram White takes some profit, but Black emerges with good shape for running out.



The variations on the other side are similar, but there is one significant difference. White is less likely to follow the right-hand diagram, because the marked White capping stone ends up too close to Black's strength. Since Black 10 is good shape and has an adverse effect on the marked White stone, Black should play contact in this fashion; and White 3 here isn't best.

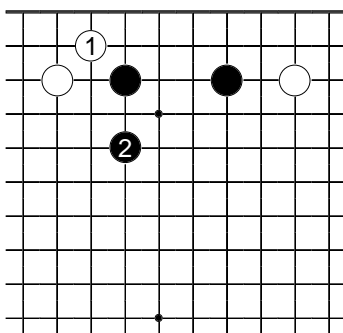
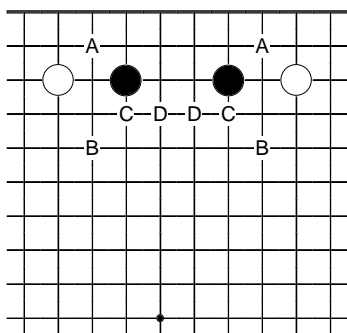


In this game White has ignored the capping play (marked Black stone) and started a fight on the left, in which Black lost some stones but gained in influence. When Black played 1 to cramp White, simply defending with 2 and 4 here would have been good.

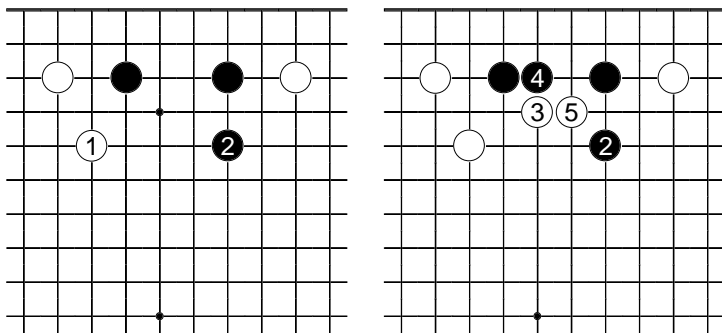


White 2 here, from the game, led to the placement attack 3. White overestimated the chance of eyes on the edge, and Black's blunt attacking moves succeeded in killing this group.

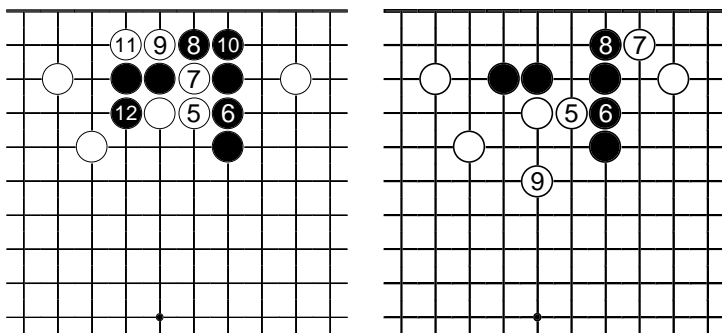
11.3 Other ways to attack



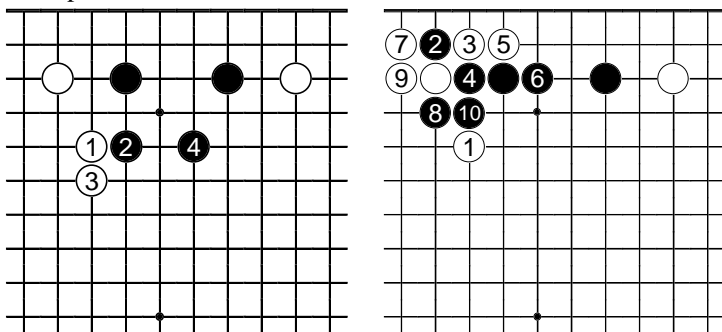
White plays at A, B, C or D may be useful in other contexts. **(Right)** White 1 here looks more to territorial gain than to the balance of power.



The knight's move (choice B) would be indicated if White wishes to build territory or framework. White C is similar in terms of direction, but is a contact play, and so is probably employed more as a defensive play. White D emphasises the centre. **(Right)** Both Black 2 to jump out, and White 3 to explore defects in Black's shape, are natural. White should not expect too much from the double peep at 5.

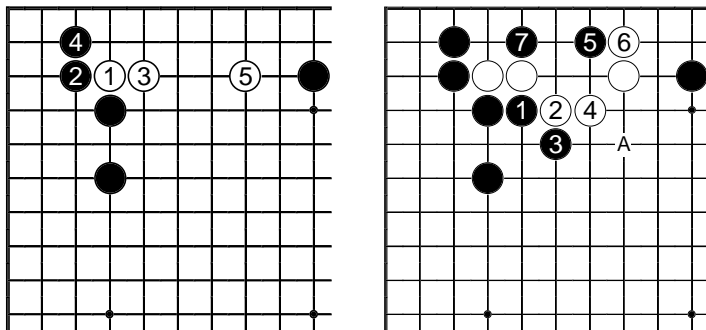


As White's attack continues, the immediate attempt to cut Black **(left)** fails for White, because of shortage of liberties: after Black 12 White will lose some stones. **(Right)** White 7 followed by 9 is a more reasonable way to sustain a profitable attack.

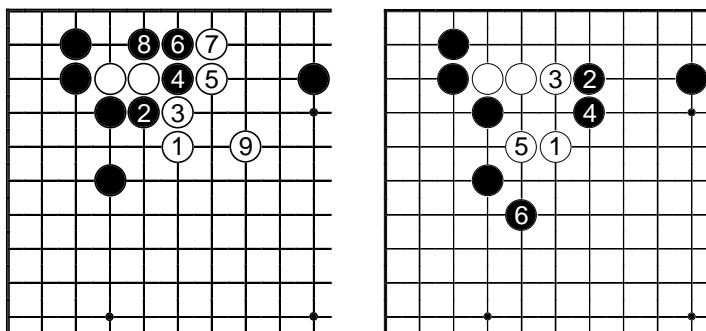


Black can play contact moves to defend. **(Left)** Black 2 and 4 are good shape (14.5), but White has succeeded in developing to the left. **(Right)** White can be satisfied here to have taken profit, since Black 10 is bad shape.

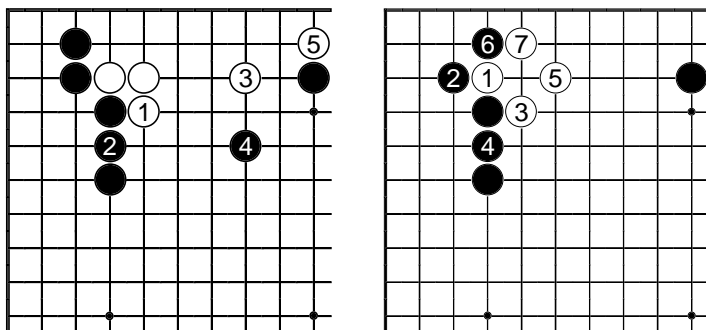
11.4 Another cramped group



The principles of attack and defence are the same with other examples of groups on the side subject to cramp, though the details naturally vary. Here White plays into trouble with 3 and 5. **(Right)** There is a telling placement at 5, prepared by 1 and 3 here. White should have nothing to do with this, playing 2 directly at A.



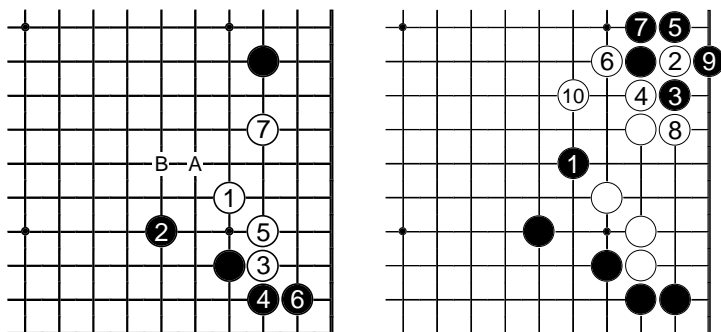
White could play out with the knight's move first. **(Left)** White does well if Black takes the bait. **(Right)** Black should peep with 2 and 4, and attack.



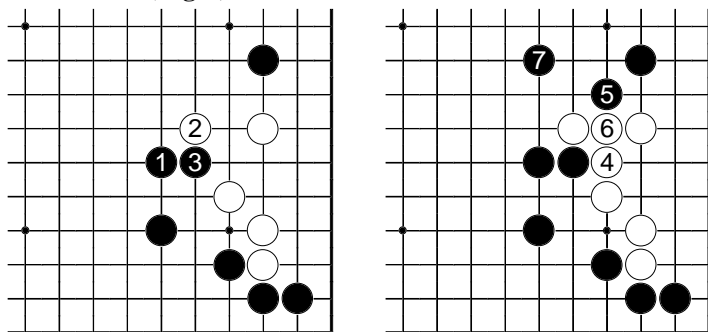
(Left) Therefore best is for White to play 1 here before extending; the variations seen above reveal this as a key point. The cap at 4 is properly answered by 5, as in 11.2. **(Right)** Setting up a *ko* is a lighter way to deal with Black's framework; White 3 is again the vital point, threatening 4.

11.5 Chinoiserie

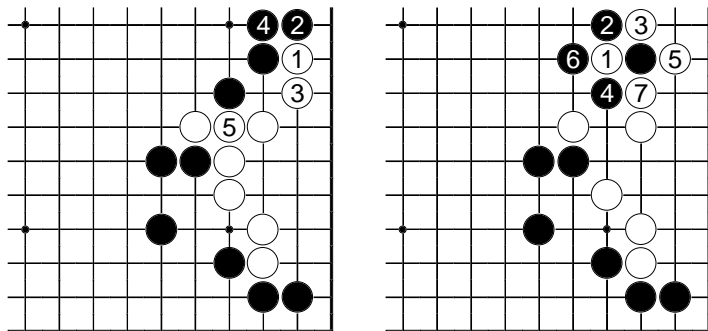
Exploiting a cramped group is at the heart of the Chinese-style opening.



White tries to settle here, but Black at A or B next makes White uncomfortable. **(Right)** White moves out with a sacrifice.



When Black jumps up, White 2 can be met by Black 3. **(Right)** Black's plan. White has been confined, and has to worry about eye shape.



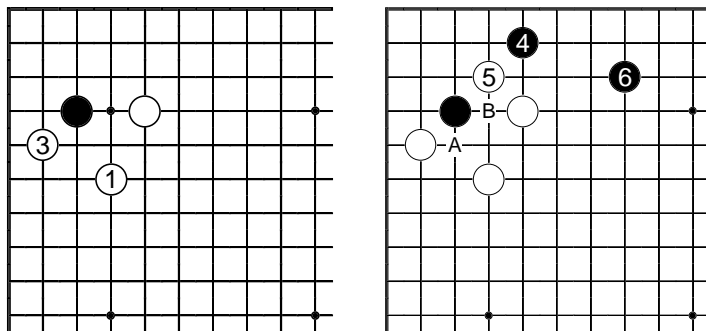
Therefore it is natural for White to ignore the peep, at least for a moment **(left)**. **(Right)** This choice of 1 is an interesting alternate way to respond, when Black pushes down. It has appeared in professional play. The unusual cut at 3 works well here. By challenging Black to a *ko* on the edge, White has avoided passive play.

Chapter Twelve Outnumbered

12.1 Calculated risks

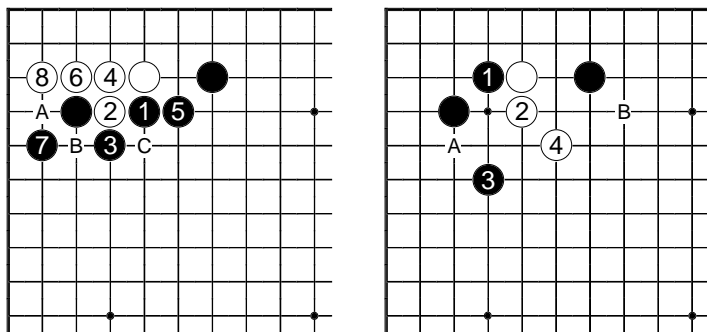
There are several good reasons why you may want to leave a situation on the board, and play away. In the realm of tactics, you may wish to ignore a *ko* threat, or ladder-breaker. That is, you expect a greater advantage by playing elsewhere. There can also be good strategic reasons. Opening strategies from hundreds of years ago showed both players ignoring the plays of the other. In fact the vast development of corner opening theory has probably adversely affected amateur play, in the particular way that players are reluctant to ignore the other's moves. This can result in the failing of *following the opponent round the board*.

Naturally it is much easier to employ the strategy of leaving situations unfinished, if one can calculate in advance the risks involved.

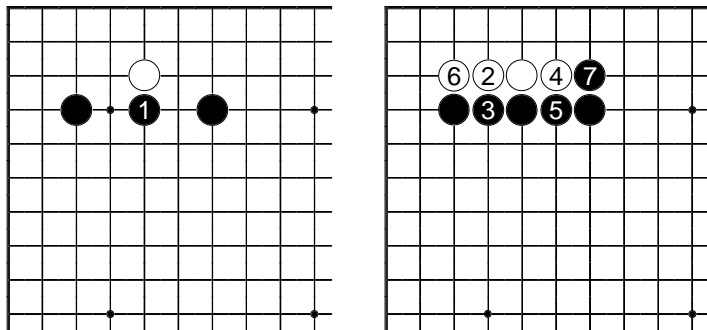


When Black ignores White 1, White normally plays next at 3. Then Black can slip out of the corner at 4, to establish a group on the side with 6. The Black corner stone may still be useful. White has another option for attack, namely to play 3 at A. However Black at B is a normal answer (cf. 3.5L) and Black will survive unless White is very strong locally.

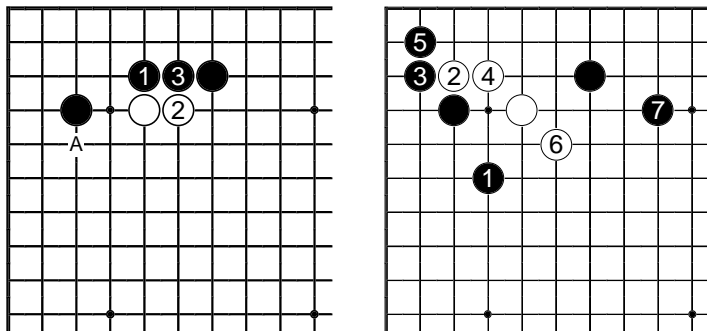
12.2 Ignoring a one-point pincer



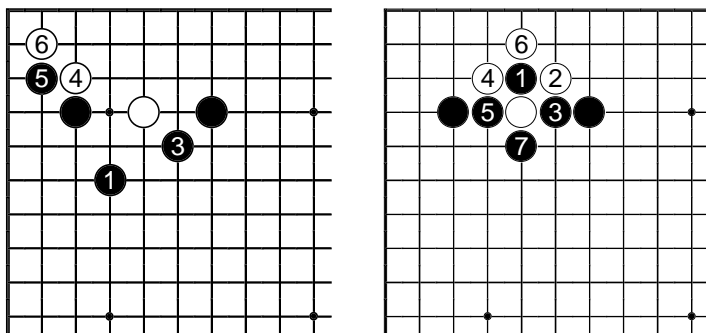
The examples in this section have a common theme: the consequences of ignoring a one-point pincer. **(Left)** White can live by wedging in at 2. White at 8 is correct; playing at A lives as well, but after Black B the cutting point at C becomes unimportant. **(Right)** White 4 threatens both A and B.



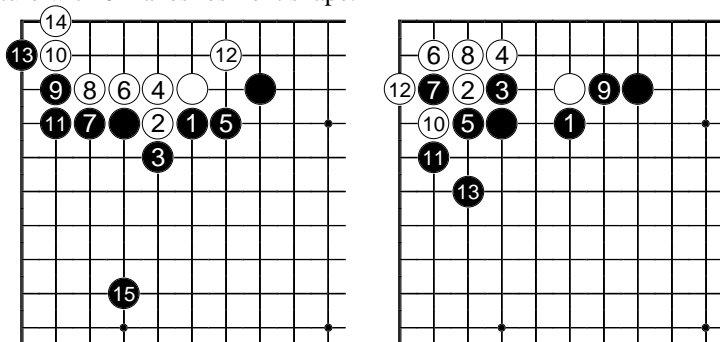
White should avoid ignoring the high pincer. Black becomes very thick. This sort of exchange early in the game will make fighting hard for White.



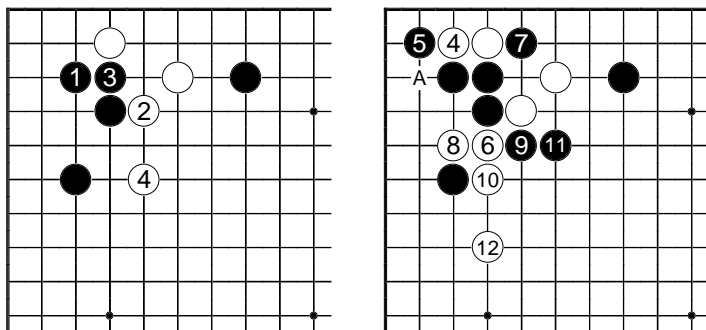
In the case of a high approach, it is the low pincer that most needs an answer. **(Left)** Black does well with 1, since White can't prevent connection. White plays the bulge point 2, then waits for a moment to play at A. **(Right)** Another way for Black to play, leaving the White stones rather heavy.



When the pincer stone is on the fourth line, White can ignore another play (**left**), and then seek life in the corner with 4 and 6. This is an example of *sabaki* (Chapter 15) (**right**) Black 1 here is a bad idea. White's *ponnuki* capture with 6 makes resilient shape.

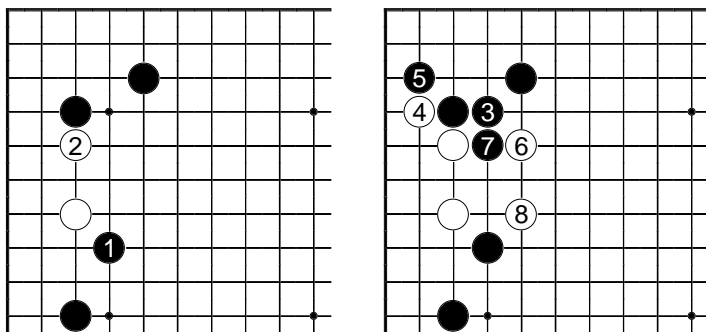


The one point pincer after the 4-4 point is frequent in modern professional go. (**Left**) The usual continuation is based on 5.3. The 3-3 invasion (**right**) is another simple way to answer Black 1. Black becomes thick, but in *gote*; Black 9 could be at 10 also.



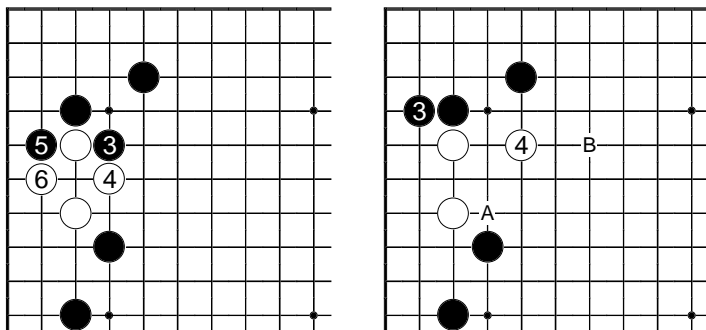
When White has played the slide into the corner and then ignored the pincer, the odd diagonal 2 is the way to make shape after Black 1. Both of these variations are reasonable for White, in the local position. (**Right**) Black 7 at 8 would be passive, and White would make good shape easily using the threat of A.

12.3 Around enclosures

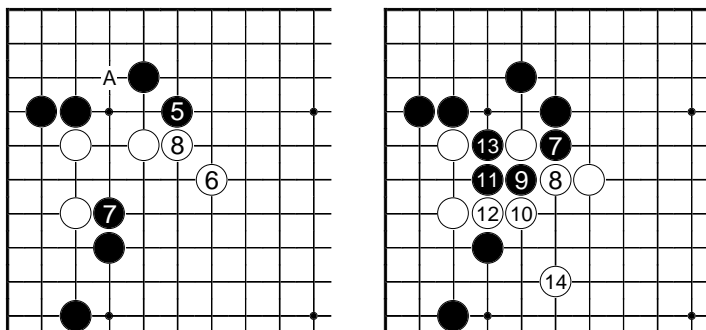


It is inevitable to feel some local disadvantage in playing near a well-fortified enclosure. These examples are about building viable shape.

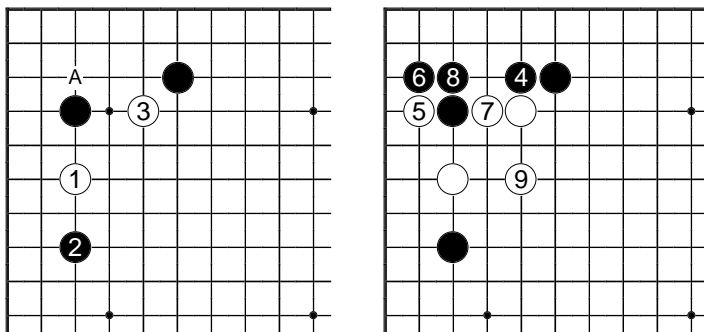
The contact play White 2 is a good defensive resource. Black 3 in the right-hand diagram is a little passive. White 6 and 8 are light.



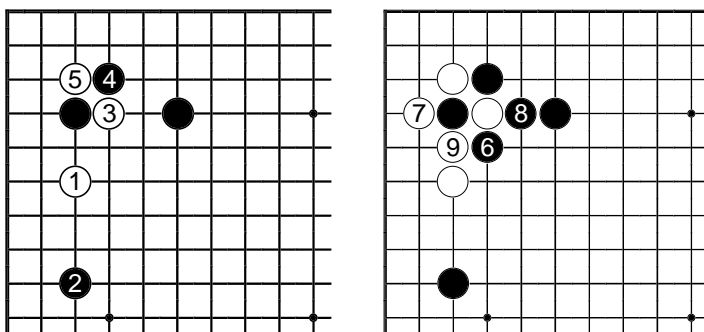
(Left) If Black plays 3 as *hane* on top, White can resort to a *ko*. **(Right)** Another passive reply by Black. White jumps out, aiming at A and B.



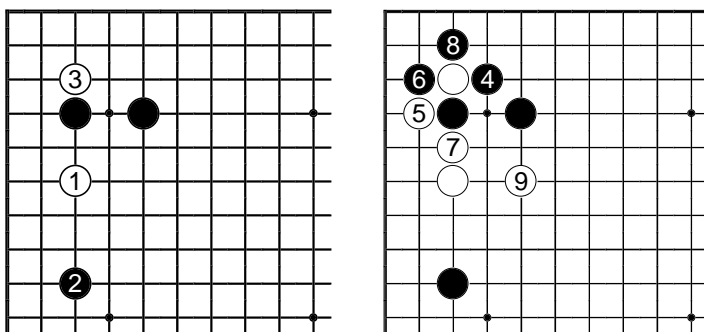
When Black replies at 5 here, White 6 is good. Black 7 and White 8 in the left-hand diagram are natural; White retains some hope of playing later at A. White is happy to be jumping ahead out into the centre. **(Right)** This immediate cut by Black is a big failure.



This page looks at direct, frontal approaches to other enclosures. In this case White 3 is a vital point to make shape (outside, cf. 10.3; White can also play at A for life in the corner, depending on the overall position.) White can be satisfied with the good shape built in the right-hand diagram.



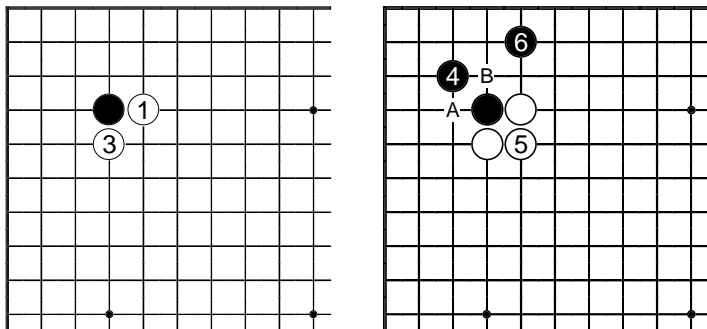
With the two-point enclosure, White can take immediate action with 3 and 5. White will live, though Black becomes thick.



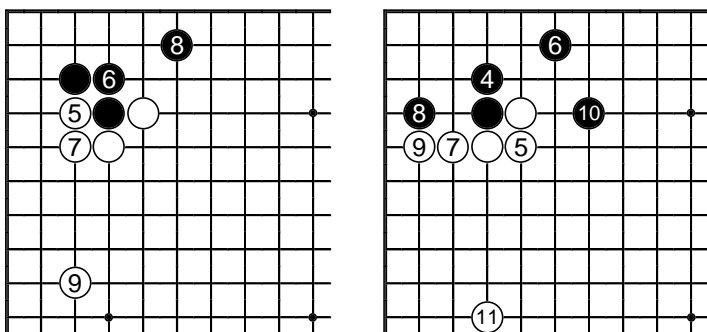
In the case of the one-point enclosure, White 1 isn't a good idea. White 3 at the 3-3 point looks interesting, but White shouldn't expect a good result. Black can secure the corner, and take *sente* to deal with the left side. Comparing with the two-point enclosure variation just given, White has done poorly. In any case, White must be acutely aware of the key points of the particular enclosure in planning a defence.

12.4 Two plays against the star point

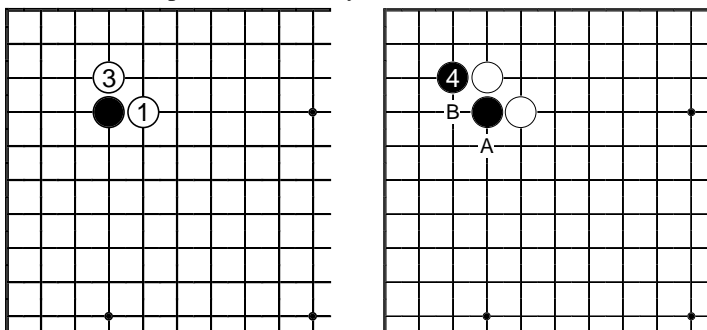
The normal reasons for the appearance of these shapes would be *ko* threats or ladder-breakers ignored.



After 1 and 3, Black can make shape by playing to preserve symmetry at 4. Then White simply connects with 5. The point is that neither *atari* play at A or B is very good. Black takes advantage of this by sliding out to 6.



If White does play *atari* we can expect a result like in the left-hand diagram. White hasn't made the most of this position. If Black had descended (**right**) White would develop in a similar way, but with much more influence.



That means also that White 3 here is questionable. Black can answer with 4. White A, Black B returns us to a previous variation. But White B, Black A is a tough fight, when White wants a clear advantage.