

## 2 Classification

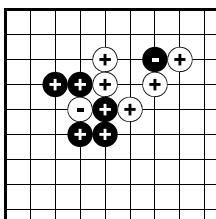
This chapter introduces a functional classification of josekis. The following chapter 3 *Evaluation* (p. 42) offers a value-orientated classification. Players can understand josekis much more easily by recognising their types and group meanings. Good strategic planning relies on foreseeing and applying the types of josekis and embedding them in the global positional context for the right reasons. A joseki can have a peaceful type such as 'finished thick settling' or a fighting type such as 'lean and attack'.

### 2.1 Finished Thick Settling

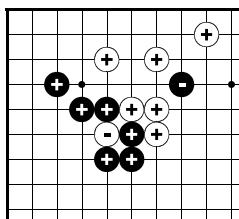
#### 2.1.1 Result

A joseki is of the type *finished thick settling* if the created shapes are thick and stable and each player gets one important group with dominating influence towards either adjacent side.

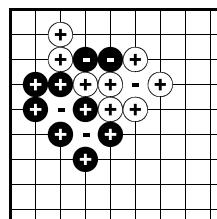
Besides either player's important group, there can be a few captured or removed sacrifice stones or light remainders. Although one player can have more territory, both players' important groups have influence to control one of the two sides adjacent to the corner.



Example 1



Example 2



Example 3

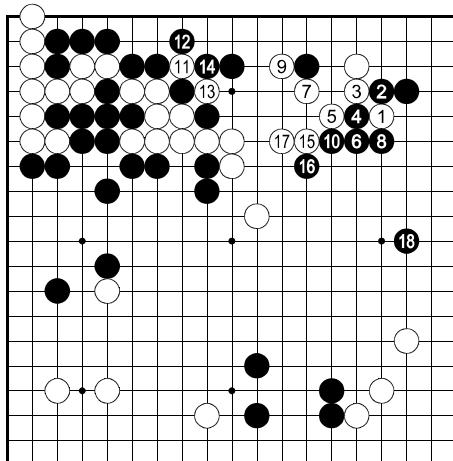
*Examples 1 - 3:* Each diagram shows the result of a 'finished thick settling' joseki. '+' denotes the stones of the thick important groups. '-' denotes intersections of captured, removed or light remainder stones. Black's or White's important group radiates much influence to control the left or upper side, respectively. The important groups' shapes are thick and stable. Therefore the players can play elsewhere for a long time.

### 2.1.3 Global Context

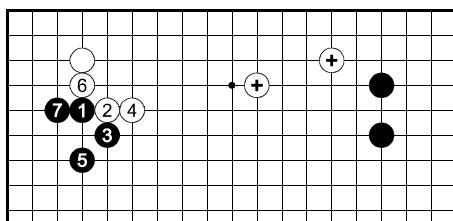
A joseki of the type 'finished thick settling' can be played if either player's thick shape meets at least one of in particular the following reasons on the adjacent side of the board and both players have equally valuable reasons:

- A side is empty or almost empty. The thicker the shapes the wider the empty spaces tend to be.
- A moyo is constructed together with earlier friendly stones.
- An opposing moyo is prevented.
- A weak friendly group is defended.
- Opposing stones are hurt.

During the middle game, a 'moyo' reason can become a 'territory' reason.



*Example 1: Black: Lin Zhihan 7p - White: Zhou Junxun 9p. Date: 2005-06-23. Komi: 6.5. Result: White won by resignation. Black's reason for playing the joseki was to conquer the still almost empty right side. White's reason was to defend his previously weak center group.*



*Example 2: Black: Mu Xiaohong - White: Chen Huifang 4p. Date: 1985-09-29. Komi: 5.5. Result: White won by 4.5 points. White chose this joseki to form a moyo on the upper side together with his marked stones.*

## 3 Evaluation

Previously josekis have been evaluated mainly by experience or tewari (see *Volume 2*). Here a very powerful third approach is used. It relies on the analysis and evaluation of each corner shape formation: the numbers of stones, amount of territory, influence, the next turn and the urgency of local continuation. While kyu players can ignore or postpone the territory and influence values and the related parts of this chapter, the stone difference, the next turn and urgency of local continuation are already important for one's first study of josekis. The ambitious and advanced reader can postpone consideration and numerical assessment of territory and influence during his first reading of this book but must not dismiss them entirely. The values are not meant for learning by heart but contribute to an understanding whether a corner result is equal or favourable for a particular player.

The calculation of values of stone difference, territory count and influence stone difference is a new method. Assessment of the latter is only a convenient approximation. Nevertheless, the nature of every variation in this book, whether an equal joseki or a one-sided failure, is identified correctly provided the values are used in conjunction with other strategic concepts (see *Volumes 1* and *2*), when they are obviously significant. The territory and influence values can often tolerate small changes because every type in *3.9 Value Types for the Stone Difference 0* (p. 52) allows a range of values. Nevertheless, discussion is encouraged so that the most accurate values can prevail.

### 3.1 Annotation of Values

Many diagram captions carry four values like  $(0 \mid 9 \mid -3 \mid B)$ , which stands for "Black and White have played equally many stones, Black's territory excess is 9, White's excess of influence stones is 3, Black has the next turn.". Positive numbers favour Black, negative numbers favour White. A reader starting to read this book needs to learn which value is which; in particular, the second value represents territory and the third value represents influence. Each of first three values is calculated by forming a difference to compare Black's value with White's value. In general, there are these values with the following meanings:

## (S | T | I | B or W)

### S = stone difference

= number of played black stones minus number of played white stones

### T = territory count

= Black's current territory minus White's current territory

### I = influence stone difference

= number of black stones with significant outside influence minus number of white stones with significant outside influence

### Next turn and local continuation:

B = Black has the next turn

W = White has the next turn

B! or W! = a local continuation is good but optional

B!! or W!! = a local continuation is mandatory

The stone difference counts numbers of played stones, regardless of whether the stones are still on the board or already removed. It is relevant how many plays the players have invested for a corner shape.

The current territory is defined as follows:

**The opponent is assumed to make all the expected endgame reductions in *sente*, i.e., the player is assumed to answer everything defensively and the most peacefully. The intersections remaining after that imagined reduction are the *current territory*.**

The sente condition means that the opponent uses possibly more cautious sente instead of gote endgames on each side of an approached group. The defender switches to a different side of his group only if that is necessary for maintaining life. If a group's current territory is not obvious, crosses denote its intersections. Since territory is being considered, area scoring can require a modification in the case of asymmetrical sekis, where one side surrounds more empty intersections.

The influence stone difference counts only alive stones and may ignore weak light remainders. Stones behind weak opposing stones but building a large scale cut to attack them can also have relevant outside influence and so are counted. Not only can stones on the very outside be relevant; rear stones strongly supporting front stones are included in the counts.

The following kinds of optional local continuations are ignored: a) an extension unnecessary for ensuring life and not protecting a weak, open side, b) an exchange helping the opponent more. Furthermore it is assumed that both players have made reasonable development direction choices so that an extension along a side is not necessary because of a mistake in direction. Exceptional global circumstances can sometimes suggest playing elsewhere despite a seemingly mandatory local continuation. Stone difference, territory count and influence stone difference are calculated after imagining any executed privileges.

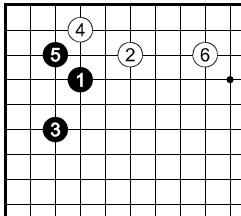
The values provide a partial characterisation of a corner sequence's result. Further aspects need to be considered, in particular relation to the positional environment, aji, group weaknesses, endgame follow-ups, stone position of the counted influence stones and how well they affect the outside, possible development directions et cetera. Equal values can be misleading if such other aspects are not equal. If unbalanced values explain such other aspects well, then the result can also be equal. Otherwise balance of both values and other criteria is missing and one player must have an advantage.

### 3.2 Stone Difference

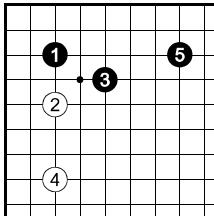
The stone difference  $S$  is

- 0 if Black and White have played equally many stones,
- 1 if Black has played one stone more than White,
- 2 if Black has played two stones more than White,
- -1 if White has played one stone more than Black,
- -2 if White has played two stones more than Black.

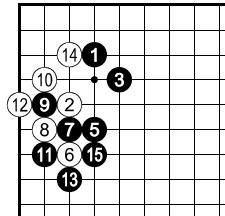
The values depend on who has started a local sequence, who ends it and any intervening plays elsewhere, which can be ordinary moves, ladder breakers or ko threats. If  $S$  is 0, then the result of a joseki sequence is equal. Otherwise one of the players has invested the greater number of local plays and must have a local advantage according to the excess number.



$S = 0$



$S = 1$



(4) elsewhere.

$S = 2$

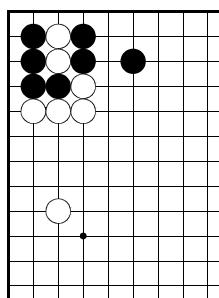
$S = 0$ : Each player has played three stones. The joseki position is equal.

$S = 1$ : Black has played three while White has played two stones. Locally Black has the better position because he has invested one extra stone.

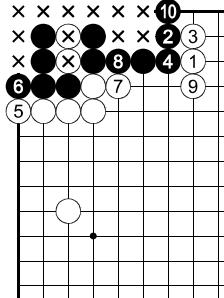
$S = 2$ : White has played elsewhere once. Black has played the first and last local stone. Black has made eight local plays while White has made only six. Their difference is two. Black's thickness in comparison to White's small territory is as superior as it should be according to the stone difference.

### 3.3 Territory Count

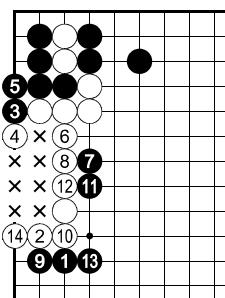
A joseki need not have the territory count 0; indeed, non-zero values occur more frequently. A player's territorial advantage is balanced by the opponent's greater influence, superior attacking potential or superior aji exploitation options.



*Local position*



*Black's current territory*

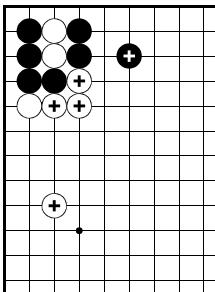


*White's current territory*

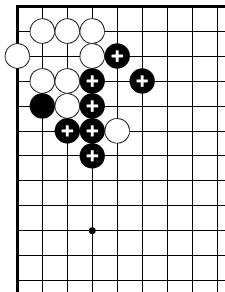
The given position's territory count is determined. White's sente plays and Black's peaceful answers assess 14 points as his current territory. Captured stones count 2 points each. With reversed roles, White's 7 points of current territory become apparent. The local position's territory count is the difference  $14 - 7 = 7$  points. While this positive number favours Black, later White can expect to get another 7 points of territory due to his greater outside influence.

### 3.4 Influence Stone Difference

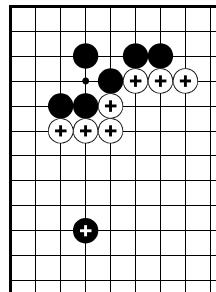
The influence stone difference compares the players' numbers of stones with significant impact on the outside. It is not always clear exactly which stones have or do not have significant impact; then one needs to apply some, for example, visual heuristic to make the distinction. A player's thick stones behind the opponent's proto-group can also contribute to the influence stone difference.



*Example 1*



*Example 2*



*Example 3*

*Example 1:* Black has 1, White has 4 influence stones significantly relevant for the outside. The difference is  $1 - 4 = -3$ , which favours White.

*Example 2:* Black has the 7 marked important influence stones. White's stone on the outside is a weak light remainder and therefore should be ignored; White has 0 significant influence stones. The difference is  $7 - 0 = 7$  in Black's favour. The value's size is appropriate in view of his missing territory.

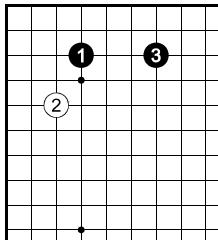
*Example 3:* Black has 1 influence stone while White has 7 relevant outside influence stones. The resulting difference is  $1 - 7 = -6$  and favours White. This compensates Black's remarkable corner territory.

### 3.5 Turn and Local Continuation

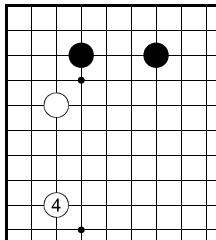
Although having the turn is a requirement for taking sente, a local continuation can sometimes be a possible alternative or even mandatory. The end of a joseki's sequence does not automatically imply a duty to play elsewhere, but denotes the moment where a choice from a variety of paths can be made.

### 4.5.1 Low Two-space Extension

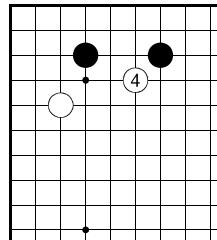
The low two-space extension prepares construction of a moyo in its direction or restricts construction of an opposing moyo there. The opponent may develop the other side.



*White's Strategic Choice 1*

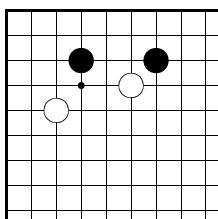


(0 | 3 | 0 | B)  
*Dia. 1.1: left side*

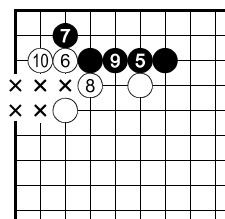


*Dia. 1.2: offering Black Strategic Choice 2*

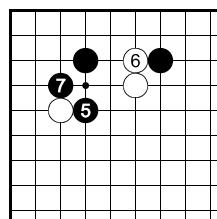
*White's Strategic Choice 1:* White chooses the left side (*Dia. 1.1*) or plays as in *Dia. 1.2* to offer Black *Strategic Choice 2*.



*Black's Strategic Choice 2*

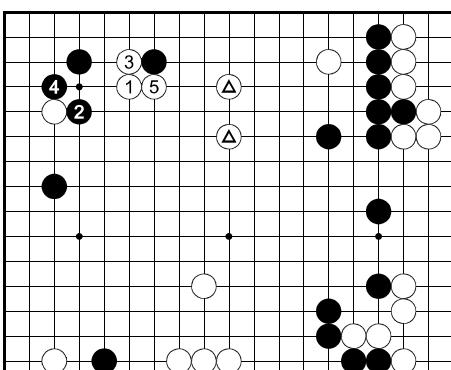


(0 | 2 | 1-2 | B)  
*Dia. 2.1: upper side*



(1 | 8 | 0 | W!!)  
*Dia. 2.2: corner*

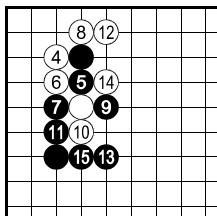
*Black's Strategic Choice 2:* Black decides whether to keep the upper side (*Dia. 2.1*) or take the corner and let White get the upper side (*Dia. 2.2*).



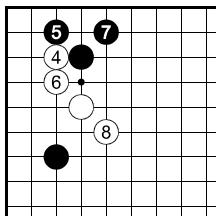
*Dia. 2.3: Black: Kim In 9p - White: Seo Bongsoo 9p. Date: 1992-09-07. Komi: 5.5. Result: White won by 0.5 points.* Black could not easily attack the marked stones even if he played 2 at 3. Therefore the major decision criterion was greater width of space. The left side was wider than the upper side; therefore Black chose the left side.

### 4.12.1 Corner Attachment

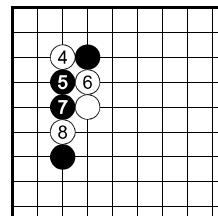
Since the corner attachment allows Black the strategic choice of where White's group will be situated - upper side, center or left side - White plays the corner attachment only if each of these cases suits the global positional context. Usually this presumes a situation early in the game when neither adjacent corner suggests a clear preference and also the center can still be conquered.



(1 | -6 | 2 | W)  
Black's Strategic Choice 1,  
left side thickness

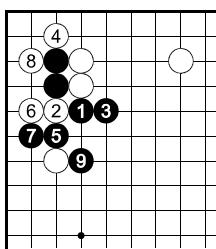


(0 | 4 | -1 | B!)  
Dia. 1.1: two groups,  
Black's Strategic Choice 2

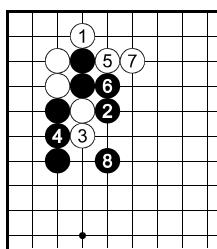


Dia. 1.2: Black's  
Strategic Choice 3

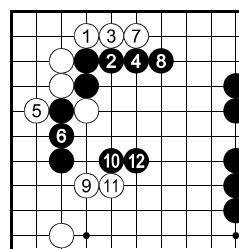
*Black's Strategic Choice 1:* Black has three starting moves. In the left diagram, he chooses thickness facing the left side. In *Dia. 1.1*, he gets a group on the upper side near the corner and a second group on the left side. White 8 is the correct move, which makes a thick shape and creates miai of continuing on either side. After *Dia. 1.1* or *Dia. 1.2*, Black makes the next follow-up choices.



Dia. 1.3: left side



Dia. 1.4: aji



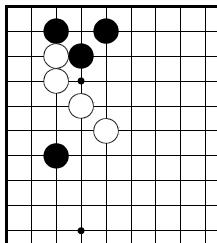
Dia. 1.5: overconcentrated,  
Black inferior

*Dia. 1.3 - 1.5:* The reference joseki in *Strategic Choice 1* is rare in professional games but the sequences which do occur in professional games are best understood as its variations.

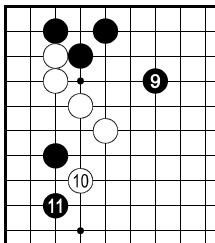
*Dia. 1.3: Black: Yamada Takuji 7p - White: O Meien 9p. Date: 2010-12-16. Komi: 6.5. Result: White won by resignation.* Black chose the left side.

*Dia. 1.4: Black: Cho Chikun 9p - White: Yu Bin 9p. Date: 2004-05-13. Komi: 6.5. Result: White won by resignation.* In comparison to the reference joseki, here both groups had aji: Either player could threaten to cut the opposing group.

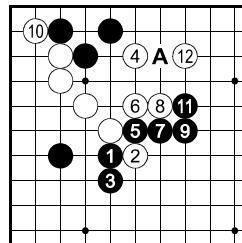
*Dia. 1.5: Black: An Yeong-kil 2p - White: Yu Bin 9p. Date: 1998-08-04. Komi: 5.5. Result: White won by resignation.* Black became overconcentrated.



*Black's Strategic Choice 2*

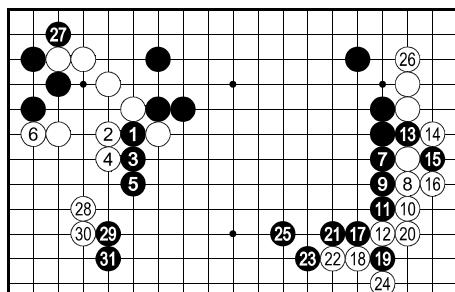


(1 16 10 | W!)  
*Dia. 2.1: emphasising upper side*

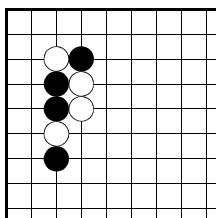


(0 1 -23 16 | B)  
*Dia. 2.2: emphasising left side and center*

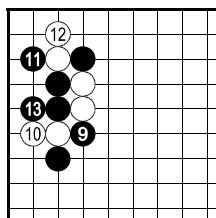
*Black's Strategic Choice 2:* Usually, Black emphasises the upper side (*Dia. 2.1*). He sacrifices it to build the thickness in *Dia. 2.2*. Since 1990, in professional play the latter has quickly surpassed the popularity of Black 5 at A.



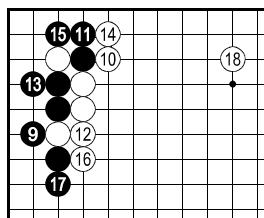
*Dia. 2.3: Black: Baba Shigeru 7p - White: Sakai Isao 5p. Date: 1979-12-20. Komi: 5.5. Black won by 0.5 points.* This could be the first professional occurrence of the moves 1 to 5. Black's joseki choices cooperated well.



*Black's Strategic Choice 3*

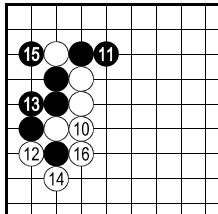


*Dia. 3.1: offering White Strategic Choice 4*

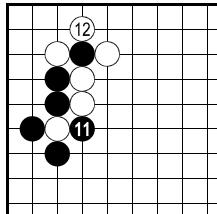


(0 17 1 -5 | B)  
*Dia. 3.2: corner and access to left side*

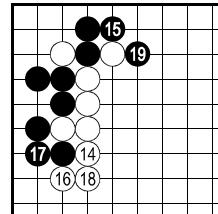
*Black's Strategic Choice 3:* In Dia. 3.1, Black offers White *Strategic Choice 4* of direction and Black must be happy with either possible follow-up. In Dia. 3.2, Black chooses the corner territory with access to the left side as his preferred development direction. Black 13 defends against the double cutting aji above and below the stone 9. Dia. 3.3 - 3.5 discuss some tactical difficulties.



Dia. 3.3: Black's option



Dia. 3.4: fair exchange

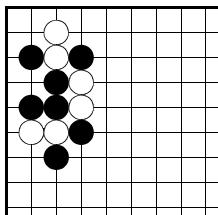


Dia. 3.5: White inferior

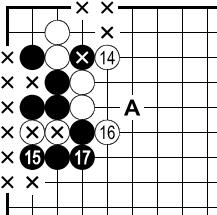
*Dia. 3.3:* Usually, White does not play 10 before 11 because Black 11 is in a very efficient position. If, however, White's left side thickness worked too well, Black could revert to *Dia. 3.2*.

*Dia. 3.4:* If Black plays this move 11, then the exchange creates equal shapes. Black can choose this result if his left side potential compensates White's slightly bigger territory.

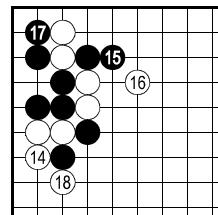
*Dia. 3.5:* White does not play at 14 first, or Black would get the superior result.



White's Strategic Choice 4

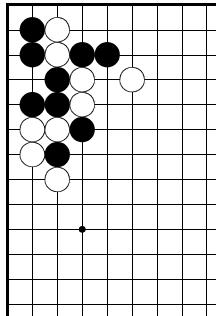


(1 | 7 | -1 | W!)  
Dia. 4.1: upper side

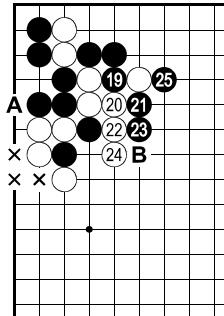


Dia. 4.2: left side, offering  
Black Strategic Choice 5

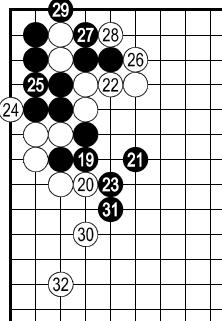
*White's Strategic Choice 4:* Usually White chooses *Dia. 4.1* to get thick shape facing the upper side. Now or later, White A completes the wall of thickness, makes a black checking extension less attractive and prevents Black's cut. If the black thickness on the left side works well for Black, then White foils this plan, chooses *Dia. 4.2*, establishes a white group on the left side and offers Black *Strategic Choice 5*. Black 15 and 17 keep the central black cutting string alive. White 16 is the efficient shape preparation for the squeeze in *Dia. 5.2*. Since Black is busy, White gets the desired move 18.



Black's Strategic Choice 5

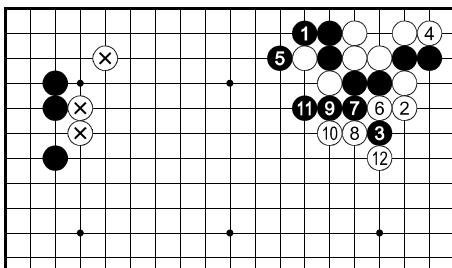


(1|9|0|W!)



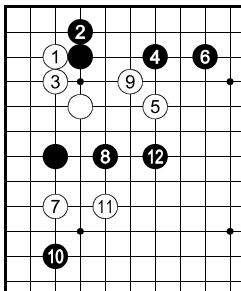
(0 | 1 | -2 | B!!)  
*Dia. 5.2: cut and fight*

*Black's Strategic Choice 5:* Black can choose between thickness on the upper side (*Dia. 5.1*) and a large scale cut and fight (*Dia. 5.2*). In both variations, he gets the corner territory. Until the late endgame, White keeps A in *Dia. 5.1* as a ko threat but already plays the early endgame-like forcing move 24 in *Dia. 5.2* because this is the last possible moment before his sacrifice string is removed. In *Dia. 5.1*, B is a good next move for either player. Locally Black gets a good amount of territory in *Dia. 5.1* and can attack White's upper group in *Dia. 5.2*; therefore White offers *Strategic Choice 5* only if he can defend that group well and really needs to prevent black thickness on the left side or if he builds a big moyo with a white group on the left side.

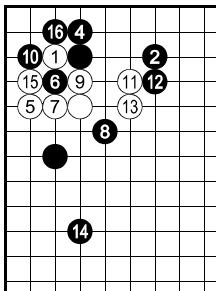


*Dia. 5.3: Black: Seo Pong-su  
9p - White: Hong Chong-hyeon  
6p. Date: 1987-04-01. Komi:  
5.5. Black won by resignation.*  
This was one of the infrequent positions where Black 1 was right. It contradicted the marked white group's intention of building a moyo on the upper side.

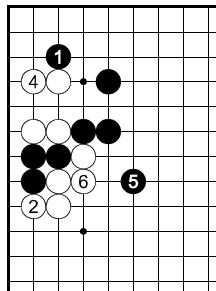
*Example 6: Black: Murai Mariko - White: Yamamori Maki. Event: 8th Japan High Schools Championships, Girls Final. Date: 1984-08-01. Komi: 5.5. Result: Black won by resignation.* Black 2 is considered a 'new move' in early corner sequences. Amateurs in Japan, Europe and other parts of the world have had their difficulties with understanding the move and finding good replies. White 3 followed the thinking "Don't sacrifice a stone you normally don't sacrifice!" but was a mistake because Black could easily prevent two white eyes in the corner. This was the hidden meaning. White became heavy and got two weak running groups. Black's dream became true.



*Example 6: White's failure*



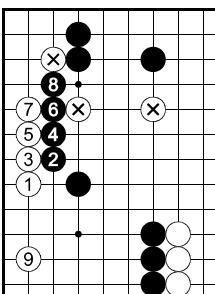
*Dia. 6.1: White's failure*



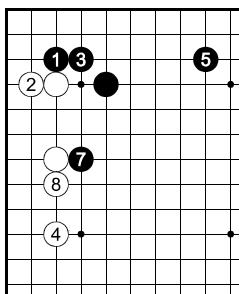
*Dia. 6.2: light*

*Dia. 6.1: Black: Qiu Jun 8p - White: O Meien 9p. Date: 2011-08-10. Komi: 6.5. Black won by resignation.* White realised Black's aim of making the white group inefficient and so played elsewhere once. From the next moment on, White forgot everything and created the model of a heavy group.

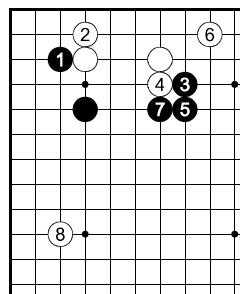
*Dia. 6.2: Black: Song Tae-kon 8p - White: Yi Yeong-ku 6p. Date: 2006-10-15. Komi: 6.5. Result: White won by 2.5 points.* Black 1 wanted to construct eyespace. When White 4 denied Black an additional forcing move in the corner, Black 5 changed his plan, treated the stone 1 lightly and then played elsewhere.



*Dia. 6.3: sacrifice*



*Dia. 6.4: simplicity*



*Dia. 6.5: changed direction*

*Dia. 6.3: Black: Fujisawa Hideyuki 9p - White: Kajiwara Takeo 9p. Date: 1975-06-12. Komi: 5.5. Result: White won by 3.5 points.* White did not try the impossible to save his marked stones very heavily. Instead he sacrificed them and lived in Black's moyo.

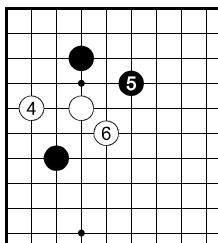
*Dia. 6.4: Black: Liu Xiaoguang 9p - White: Hua Yigang 8p. Date: 2000-12-16. Komi: 5.5. Result: Black won by resignation.* Early in the game, also the white group still needed to seek sufficient eyespace. Therefore Black did not need to fear a pincer and sacrificing the stone 1 was not necessary. Both players constructed their groups calmly.

*Dia. 6.5: Black: Wang Qun 8p - White: Hua Xueming 8p. Date: 2000-11-25. Komi: 5.5. Result: Black won by resignation.* Black changed the direction: he developed the center instead of the corner. Since capturing the light stone 1 would have been too small, White had to alter the plan she had had for move 2.

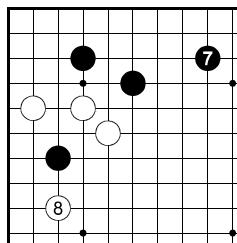
*Example 6 conclusion:* Great flexibility leads to success - inflexibility leads to failure. Usually, the degree of flexibility distinguishes professionals from amateurs. One must not develop stones at moments when they can only become heavy and the opponent profits from attacking.

#### 4.12.2 Cut

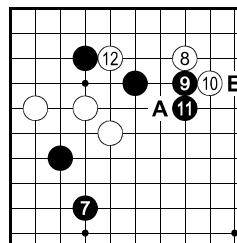
In the left diagram, White cuts to attack and needs strong support on the left side or more preferably in both adjacent corners.



*Black's Strategic Choice 1*

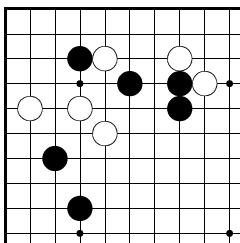


(0 | 1 | 0 | 1 | B)  
*Dia. 1.1: upper side*

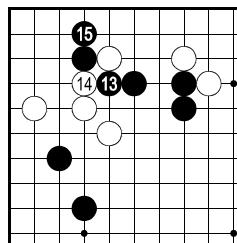


*Dia. 1.2: two groups,  
Black's Strategic Choice 2*

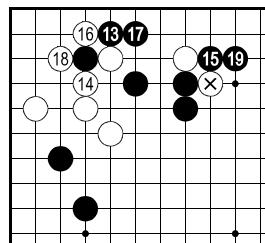
*Black's Strategic Choice 1:* In Dia. 1.1, Black simply takes the upper side and lets White have the left side; just one stone can be sacrificed easily. Black 9 in Dia. 1.2 allows Black to make *Strategic Choice 2*. Instead the old Black A allowed White to make the subsequent strategic choice of playing B to get a running fight or 12 to settle his corner group.



*Black's Strategic Choice 2*



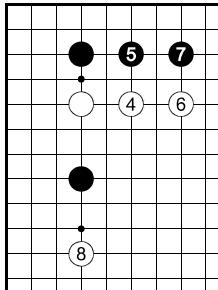
(1 | 0 | 0 | 1 | W!!)  
*Dia. 2.1: running fight*



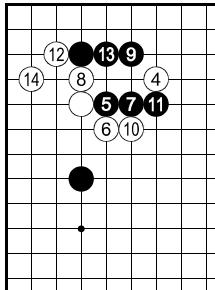
(1 | 1 | -1 | 3 | W!!)  
*Dia. 2.2: settling,  
upper side territory*

## 4.15 3-4 then 5-4 then High and Far Pincer

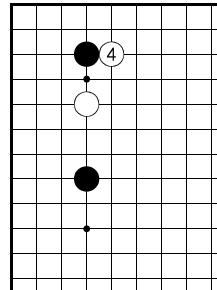
With the high and far pincer, Black needs to await White's answer to decide whether to treat the stone lightly or develop center influence. If the pincer becomes a temporary sacrifice, it serves at least as a foothold for a later reduction on the left side. The sacrifice becomes permanent if White captures the pincer stone before Black revives it.



(0 | 11 | -3 | B!)  
White's Strategic Choice 1,  
preference for  
lean and attack

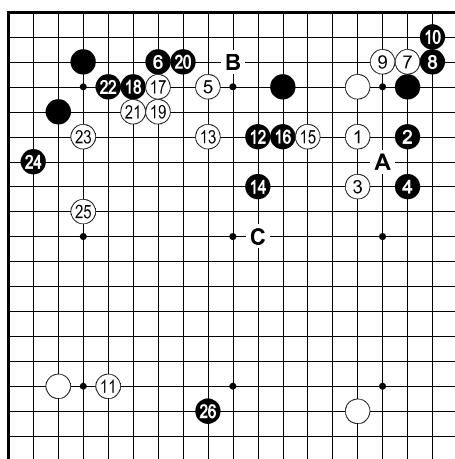


(0 | 0 | 0 | B!)  
Dia. 1.1: corner  
with center access



Dia. 1.2: offering Black  
Strategic Choice 2

*White's Strategic Choice 1:* White chooses between showing a preference for leaning and attacking (left diagram), taking the corner territory and gaining access to the center (*Dia. 1.1*) and offering Black *Strategic Choice 2*. In the left diagram, Black 7 at 8 can foil White's plan A and White must have a plan B for a strategy using some extension from White 6. See also *Problems 4 - 6*.



*Dia. 1.3:* Black: Komatsu Hideki 9p - White: Otake Hideo 9p. Date: 2006-05-11. Komi: 6.5. Result: Black won by 5.5 points. White leaned on the right side to attack the pinceried black stone. This choice was a mistake because he did not have any support in the upper left corner. Instead of attacking Black, White attacked himself by allowing Black to create a large scale cut. White 1 at A would have been better. Black 26 played elsewhere because B and C are miai for defense.