# ENCLOSURE JOSEKIS 

## ATTACKING AND DEFENDING THE CORNER

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## PREFACE

There is infinite variety in middle game fighting, but I think that the most important theme is the fighting arising from invasions.

The simple term 'invasion' covers a wide range of techniques, and it would be impossible to attempt to cover them all in one book. This book restricts itself to formations based on corner enclosures (shimaris), and it covers the basic patterns that arise with the small knight and large knight enclosures, the one-space enclosure, and the star-point enclosure, with a supplementary chapter on three other common formations. All of the patterns are ones that must come up constantly in your own games.

A reader close to shodan in strength should have no trouble understanding any of the diagrams in this book, but I have tried to present the material so that it is clear and comprehensible to readers of all ranks. The important thing is to develop your ability to evaluate and compare the results of the different sequences in the context of the overall position. This is the first task for a player after he has mastered the fundamentals.

I have not always been explicit in indicating whether a certain result is favorable or unfavorable for one side. This is because in many cases the assessment of the result can change completely according to the surrounding position.

## TRANSLATOR'S PREFACE

This book comes from a different Nihon Ki-in series from the `Basic Joseki Dictionary' series, but we hope that the reader will find it a useful follow-up to that work. 'Enclosure Josekis' is presented in a dictionary format, but it is intended to be more than just a reference work. If used as a textbook in the art of invading, it should help the reader to improve his middle game fighting strength. More important than memorizing the sequences given here is to acquire the technique of invading by absorbing the concepts involved. The main theme of this book is the importance of playing lightly when invading a strong enemy position. The key concept is that of sabaki, that is, of making a light, flexible shape which makes it difficult for the opponent to launch a severe attack. `Enclosure Josekis' does not restrict itself to the viewpoint of the invader, however. An important lesson it teaches to the defender is that he should not overreact by trying to exterminate an invader. If he plays reasonably, he should get adequate compensation, either by solidifying his territory or by building up compensatory outside influence.

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John Power

## CHAPTER ONE Small Knight Enclosure Invasions

## PATTERN ONE

The first pattern we will look at is the small knight corner enclosure with a five-space extension along the side. For the purpose of our analysis, the position on the rest of the board is ignored.


Pattern One

Dia. 1 (contact play). White 1 is one vital point at which a solitary invader can attack. This is a high-level strategy in which White waits to see how Black reacts before deciding on his continuation.

Dia. 2 (life). Black 2 emphasizes the outside. White can live with 3 to 7 , but he often keeps this sequence in reserve.


Dia. 1


Dia. 2

Dia. 3 (variation for White). After Black 4, White can also crawl at 5. If next Black `a', White plays ' $b$ ' and takes more territory than in Dia. 3.

Dia. 4 (living on the side). Black 1 is a big move. In this case White lives on the side with 2 to 10.

Dia. 5 (poking out one's head). White can also play a probe at 2. If Black 3. White can poke his head out into the center with 4 to 8 .


Dia. 3


Dia. 4


Dia. 5

Dia. 6 (variation for \$lack). What happens if Black blocks on the outside at 4 ?

Dia. 7 (outward influence). White lives in the corner with 2 to 8, but Black builds up outward influence.

Dia. 8 (a fight). White can also crawl immediately at 3; if Black 'a', White ` $b$ '. Playing this way means that White is prepared to fight.


Dia. 6


Dia. 7


Dia. 8

Dia. 9 (Black blocks on the outside). The idea of Black 2 is to settle the shape.

Dia. 10 (sabaki). The crosscut at 3 is a tesuji. If Black 4, White forces with 5 and 7, then makes light shape with 9 . Playing 9 at 'a' or 'b' would be too heavy. Next -

Dia. 11 (good shape). If Black continues by cutting at 1 , White's strategy is to counter with 2 and 4 . If next Black 5, White gets perfect shape with 6 and 8 .


Dia. 9



Dia. 11

Dia. 12 (a solid answer). The aim of Black 2 is to avoid giving White any help in making shape.

Dia. 13 (light). White 3 is a light response. If Black takes the corner with 4 , White extends to 5 .

Dia. 14 (heavy). White 3 is just a little heavy. After 4 and 5, Black strikes at the vital point with 6 , forcing White into a low position with `a'.


Dia. 12


Dia. 13


Dia. 14

Dia. 15 (living in the corner). If Black plays at 4 immediately, White hanes at 5 and lives in the corner.

Dia. 16 (dangerous). Playing a hane on the inside at 3 is risky. Black blocks at 4, then takes away White's eyes with 8 and 10.

Dia. 17 (Black blocks on the inside). Black plays 2 when he wants to hang on to the corner territory.



Dia. 16


Dia. 17

Dia. 18 (standard sequence). The clamp at 3 is good style. Simply connecting at 4 is a good answer; the standard sequence to 7 follows.

Dia. 19 (comfortable shape). Blocking at 4 is not good. White forces with 5 , then extends to 7 , getting a comfortable shape.

Dia. 20 (Black pulls back). The aim of Black 2 is also to avoid helping White to make shape.


Dia. 18


Dia. 19


Dia. 20

Dia. 21 (the hane). The hane at 3 is a standard move. Black pincers at 4 , and the conventional sequence to 13 follows. White provisionally secures a base.

Dia. 22 (light). If Black goes for the corner profit with 4, White plays lightly with 5 . This is painful for Black. Instead of $4-$

Dia. 23 (life). If Black hanes on top at 1, White plays 2, then crawls into the corner at 4 . The cut at 6 is well-timed: if Black 7, White exchanges 8 for 9 , then lives with 10 and 12. Instead of $7-$


Dia. 21


Dia. 22


Dia. 23

Dia. 24 (the question of the ladder). If Black connects at 1 , the question of the ladder arises. White 2 is a strong move; if Black 3, White 4 makes miai of ' $a$ ' and ' $b$ '.

Dia. 25 (the simple jump). White can also just jump out into the center with 4 (instead of 7 in Dia. 21).

Dia. 26 (life). If Black blocks on top at 3, White answers solidly with 4 to 10 .


## PATTERN TWO

The difference from Pattern One is that White has extended right up the side towards Black's position. What effect does this have?


Dia. 1 (invasion). If White wants to make full use of his extra stone, White 1 becomes the vital point for invading.

Dia. 2 (usual). Black 2 is the usual answer. The moves to 5 form a set pattern. The choice of Black's next move is influenced by the position at the bottom.


Dia. 1


Dia. 2

Dia. 3 (the kosumi). Black 2 is frequently played. White has various responses - escaping with ` $a$ ', attaching at ' $b$ ', for example.

Dia. 4 (natural flow). If White 3, Black takes the vital point of 4. If White 5 , Black keeps attacking with 6 and 8 .

Dia. 5 (trouble for White). Pushing up at 1 is too heavy. Black makes a two-step hane, then strikes a severe blow at the vital point with 6. White is in trouble. Next -


Dia. 3


Dia. 4


Dia. 5

Dia. 6 (fearless). If White I and 3, Black counters fearlessly with 4 . If White `a', Black 'b' weakens the marked white stone. This is bad for White.

Dia. 7 (a probe). Playing a probe by attaching at 3 is another way for White to settle himself.

Dia. 8 (moving out). If Black 1, forcing once with 2 is good style. White then moves out into the center.


Dia. 6


Dia. 7


Dia. 8

Dia. 9 (submissive). Black 4 is a submissive answer to 3 . White moves out with 5 , giving Black a somewhat painful result.

Dia. 10 (sabaki shape). If Black 4, the peaceful answer is White 5. Black 6 is territory-oriented, but White jumps out at 7, aiming at `a' later. White's group is just about settled. Instead of 5 -

Dia. 11 (respectable shape). White can also make the hane at 1. If Black 2, White makes satisfactory shape up to 7 .


Dia. 9


Dia. 10


Dia. 11

Dia. 12 (success). If Black sets up a ladder with 4 and 6, White lives in the corner with 7 . This result can be considered a success for White.

Dia. 13 (a large exchange). If Black cuts at 2, the continuation from 4 is natural, and a large exchange follows up to 21 . White gets a large profit in the corner. so he is satisfied.



Dia. 13

Dia. 14 (sabaki). Countering the hane at 4 with another hane at 5 is a strong move. Black 6 is peaceful, and 7 and 9 give a similar result to Dia. 10. Instead of 6 -

Dia. 15 (sabaki). If Black gives atari at 2, White forces with 5, then blocks at 7. If Black 8, White gives atari at 9; even if the ladder is unfavorable, White 11 settles the group. Instead of $8-$

Dia. 16 (poking out one's head). The solid extension at 1 is also an excellent move. White moves out with 2.


Dia. 14


Dia. 15


Dia. 16

Dia. 17 (pushing through). Black may fight back strongly with 4 (instead of 4 in Dia. 15). Forcing with 5, then playing 7 and 9, is correct timing. White forces his way out up to 15 , and the fight comes to a pause with 16 and 17. This result is reasonable for White.

Dia. 18 (thickness). If Black 2, White builds thickness with 3 and 5 . Black can connect underneath with `a', but he gets a low position and an inferior result.


Dia. 17


Dia. 18

Dia. 19 (adequate for White). If Black plays 2 etc., White sacrifices his stone on the side and gets adequate compensation with 7 and 9 .

Dia. 20 (an alternative). When Black plays 4, switching to White 5 (instead of 11 in Dia. 17) is also conceivable. Depending on the overall position, the bamboo joint connection at 9 might work very well.

Dia. 21 (simple). White can also make the simple move at 1 instead of 5 in Dia. 17. White 3 makes Black 4 obligatory. The continuation to 13 settles the white group. Instead of $3-$


Dia. 19


Dia. 20


Dia. 21

Dia. 22 (unreasonable). Extending into the corner with 1 is tempting but unreasonable, as promptly demonstrated by Black 2.

Dia. 23 (Black hanes underneath). The variation of Black 4 is also possible.


Dia. 22


Dia. 23

Dia. 24 (an exchange). The crosscut of White 2 is the tesuji for settling oneself. If Black resists with 3, White pushes through with 4 and 6 , then regroups on the left with 8 and 10. In exchange, Black takes the right side. White has succeeded in settling himself.

Dia. 25 (light). If Black captures with 3, White forces with 4 and 6 , then switches lightly to 8 . If Black cuts at 'a', White keeps playing lightly with White ' $b$ ', Black 'c', White `d'.

Dia. 26 (Black's knight move). Black 2 is also possible, but it feels a little loose. The result is not much different from Dia. 10.


Dia. 24


Dia. 25


Dia. 26

## PATTERN THREE

Black has made a four-space extension from his corner enclosure, and White has extended right up the side towards Black's formation. What difference does Black's more narrow extension make?


Pattern Three

Dia. 1 (invasion). The presence of the white stone so close to Black's position means that once again invading at 1 is the key point.

Dia. 2 (standard result). If Black 2, White has less space in which to settle himself than in Pattern Two. First, White plays the probe at 3. If Black 4, White 5 makes good shape. Next, Black 'a' and White ' $b$ ' can be expected.


Dia. 1


Dia. 2

Dia. 3 (splitting Black into two). If Black 4, a counter-hane at 5 is the tesuji. If Black captures the white stone, White cuts at 9, then drives a wedge through the middle of the enemy forces up to 15 . Instead of 12 -

Dia. 4 (attack). Black 1 is better. If White 2, Black attacks with 3 and 5. Dia. 5 (escape). Answering Black 1 at 2 looks preferable. If Black 3, White escapes with 4.

Dia. 3

Dia. 4

Dia. 5

Dia. 6 (ko). Black may pull back at 1 instead of 6 in Dia. 3. In this case White plays 2 , then counters 3 by setting up a ko with 4 . This result is quite reasonable for White. Instead of $2-$

Dia. 7 (outward influence). If White makes the peaceful connection at 1, Black seals him in with 2 . Black is happy to let White live in return for the outward influence he builds up to 10. This result is good for Black


Dia. 6


Dia. 7

Dia. 8 (jumping out). If Black emphasizes the corner with 2, White jumps out to 3 .

Dia. 9 (bad shape). Connecting at 3 (instead of 4 in Dia. 6) is bad this makes White 1 meaningless. Permitting Black to capture with 4 is painful. White 1 and 3 make bad shape.

Dia. 10 (out into the center). Crawling into the corner with 1 also seems possible. If Black 2, White sacrifices two stones and heads for the Centre.


Dia. 11 (profit). When White hanes at 5, connecting at 6 looks solid, but it is a little slack. White takes all the corner profit with 7 to 13 , and Black still has to worry about the cut at 'a'. Instead of 7 -

Dia. 12 (ko). Depending on the position, White 1, which creates the possibility of the ko, may be a powerful move.


Dia. 11


Dia. 12

Dia. 13 (corner profit). If Black blocks on top at 2 , White naturally swallows up the corner profit with 3. This is a loss for Black.

Dia. 14 (to the center). If Black defends the corner with 2, the diagonal connection at 3 is a stylish move. If Black 4, White dodges lightly to 5, heading for the center.

Dia. 15 (life). If Black answers 3 by sealing White in with 4 and 6, White lives in sente up to 9 and should be satisfied.


Dia. 13


Dia. 14


Dia. 15

Dia. 16 (the descent). If Black descends at 4, White jumps to 5; if Black 6, White moves out lightly with 7.

Dia. 17 (Black hanes underneath). If Black 4, the crosscut at 5 is the tesuji. If Black 6, White forces with 7 and 9, then makes a resilient shape with 11 and 13.

Dia. 18 (heavy). White I is the vital point, but pushing up with 3 is heavy and not to be recommended. The continuation to 8 is unsatisfactory for White.


Dia. 16


Dia. 17


Dia. 18

## PATTERN FOUR

Black has made a narrow threespace extension, and White has extended right up close to Black's formation.


Pattern Four

Dia. 1 (invasion). With the backing of the white stone, the invasion at 1 is the vital point even with the narrow three-space black extension.

Dia. 2 (kosumi). If Black makes the kosumi at 2, White's kosumi at 3 makes correct shape. The moves to 9 form a standard pattern.


Dia. 1


Dia. 2

Dia. 3 (saved by the cut). If Black tries to capture White with 4 , he counters with 7, forestalling Black 'a' because of White `\(b\) ', Black 'c', White`d'. After 9, White aims at playing `e' later.

Dia. 4 (Black caps). Black 4 looks like a move with bad aji, but it does also look ominous for White. Next -

Dia. 5 (the hane). White exchanges 1 for Black 2, then plays the 3-5 combination. The hane of 5 is a tesuji. Next -


Dia. 3


Dia. 4


Dia. 5

Dia. 6 (breakthrough). W-'hite follows up with the 3-5 combination. Up to 15 he has no trouble breaking through Black's encircling net.

Dia. 7 (impatient). Trying to cut with 2 (instead of 2 in Dia. 5) is too impetuous. White connects at 3 , then lives in the corner by capturing a stone. This result is a little unfavorable for Black.

Dia. 8 (heavy). Pushing up with 3 is a heavy way to play. White does get out into the open, but Black gets impressive outward influence up to 18 .


Dia. 6



Dia. 9 (ponnuki). Black could play 1 here instead of 12 in Dia. 8 , but that lets White make a ponnuki with 2 . The influence of the ponnuki is considerable and makes this a satisfactory result for White.

Dia. 10 (variation). What happens if White plays 5 immediately, omitting 5 in Dia. 8?

Dia. 11 (thickness for Black). Black continues with the twostep hane at 1. White can move out with 2 to 10, but Black gets thickness on the outside.


Dia. 9


Dia. 10


Dia. 11

Dia. 12 (aji). Cutting at 5 is not good. White blocks at 8 and still has some aji (potential) left in the corner. This is even more unsatisfactory for Black than Dia. 9.

Dia. 13 (heavy). White 2 and 4 are not to be recommended. Black counters with 5 etc., and White gets a heavy shape.

Dia. 14 (connection). Black 5 is bad shape (guzumi), but here it is a strong move. White manages to connect underneath with 6 to 12, but he is forced into a low position. This result is good for Black.


Dia. 12


Dia. 13


Dia. 14

Dia. 15 (life). Black can also cut at 1 (after 5 in Dia. 10). If White 2, Black plays 3 to 9 and gets a good result.

Dia. 16 (gouging out the corner). If Black answers White 1 (5 in Dia. 8) by wedging in at 2 , White cuts at 3 , then uses his three stones as a sacrifice in order to gouge out Black's corner with 5 to 9. Instead of 7 -


Dia. 15


Dia. 16

Dia. 17 (thickness). White 1 here is bad. White connects underneath with 3 to 7 , gets one eye up to 13 , then lives with 15 , but this gives Black too much thickness. If White omits 15 -

Dia. 18 (ko). Black can set up a ko with the placement at 1, followed by 3 and 5.


Dia. 17
8: connects (right of 6 )


Dia. 18

## PATTERN FIVE

Black has made extensions in both directions from his corner enclosure. This is the ideal "double-wing" formation. White has to make a light invasion.


Pattern Five

Dia. 1 (the capping move). White 1 is the vital point for attacking the small knight enclosure. A move by Black at 1 would greatly strengthen his moyo and make it very hard for the opponent to reduce it. The two basic answers to White 1 are `a' and ' $b$ '.

Dia. 2 (standard technique). Black 2 aims at attacking White while securing the territory on the right side. Making a straightout attempt to encircle White instead would be unreasonable.

The contact play at 3 is a standard sabaki technique.


Dia. 1


Dia. 2

Dia. 3 (the crosscut). If Black 4, the crosscut at 5 is the followup to 3. When Black plays 6, White gives atari at 7. Black must now decide whether to connect at 'a' or to capture at ' $b$ '.

Dia. 4 (playing lightly). If Black connects at 1, White forces with 2 , then jumps lightly to 4 . The latter is the key move: when reducing a moyo, White must always aim at playing lightly like this to get sabaki (i.e. a light, flexible shape). There are two cutting points in White's shape, at 'a' and 'b', but there is no need to worry.


Dia. 3


Dia. 4

Dia. 5 (thickness). If Black cuts at 1, White does not connect at 3 , but instead gives a counter-atari at 2 , letting Black capture at 3 . White turns at 4, then extends to 6 if Black captures another stone with 5. This makes White thick in the center. Playing White 2 at 3 would be bad style and would only make White heavy.

Dia. 6 (heavy). White 1 is heavy: White has forgotten the importance of playing lightly, as with 4 in Dia. 4 . White's shape immediately crumbles when Black plays at the vital point of 2 . Even just escaping is going to be no easy matter for White now.


Dia. 5


Dia. 6

Dia. 7 (irritating). The diagonal connection at 1 is also a little heavy. Black's peep at 2 is an irritating forcing move.

Dia. 8 (a strong move). Black 6 is a strong counter, possible when the ladder favors Black. White extends at 7 to avoid giving Black a ponnuki, so Black captures at 8. If next White `a', Black captures at ' $b$ ', and White cannot get a ladder at 'c'. The shoulderhit at 9 then becomes White's tesuji for sabaki. Next -

Dia. 7

Dic. 8

Dia. 9 (the pressing move). If Black moves out with 1 and 3, White can now cut at 4 . After White 6 , the pressing move at 8 works perfectly.

Dia. 10 (depending on circumstances). Depending on the overall position, White could also try pushing down at 2 . Black can extend at 3 , but White can counter with 4 and 6 . White's strategy is to sacrifice his stones at the top right in exchange for building the strong wall to 14 . Black gets a lot of territory, but his solitary stone on the left is enfeebled (not to mention White's gain from playing 2).


Dia. 11 (unreasonable). Cutting immediately at 1 instead of playing 9 in Dia. 8 is unreasonable. When White extends at 3, Black intercepts with 4 . White can cut with 7 and 9, but Black forces with 10, then takes the corner with 12 . White's group is in bits and pieces.

Dia. 12 (Black captures). If Black answers 7 by capturing at 8 , White immediately plays the forcing move at 9 . When White extends at 11 , reinforcing with 12 is the correct response. White also fixes up his shape with 13 , and the fight comes to a pause. White can be said to have achieved his objective in making the invasion.


Dia. 11
6: connects (below 2)


Dia. 12
10: connects (at 5)

Dia. 13 (resilient). If Black neglects to reinforce with 12 in Dia. 12, White has the aji of the extension at 1. If Black cuts at 2, White 3 is a resilient move which makes it hard for Black to find an answer. If White plays 3 at ' $a$ ', Black has the tesuji of attaching at 3 .

Dia. 14 (the ko aji). Another strong way for White to play is to push through and cut with 3 and 5 before making the kosumi at 7 . If Black `a' after 11, White plays `b' and fights a ko.


Dia. 13


Dia. 14

Dia. 15 (variation for Black). A feasible alternative for Black is to answer 5 by giving atari on top at 6 . Black's strategy is to build central thickness in return for giving White the corner.

Dia. 16 (taking the corner). If White plays 1, he can destroy Black's corner and secure life. Crawling at 2 is not good: White just keeps extending with 3 and 5 .


Dia. 15


Dia. 16

Dia. 17 (the nose contact play). Attaching at 2 is correct style. This move is nicknamed "the goblin's nose contact play". Capturing a stone with 3 is probably best. The sequence to 6 is standard.

Dia. 18 (unreasonable). Turning towards the center with 3 is unreasonable. When Black links up with 4, White loses his base and comes under severe pressure.


Dia. 17


Dia. 18

Dia. 19 (an impressive move). White can also turn at 1 instead of 1 in Dia. 16. This is an excellent move, and White gets impressive shape with 3.

Dia. 20 (unsatisfactory). White can also capture with 1 instead of 1 in Dia. 16. This avoids complicated variations and keeps the position simple. Black 2 is a big move, but White 3 ensures life. However, this result is just a little unsatisfactory for White.


Dia. 19


Dia 20

Dia. 21 (hane on top). In actual play Black might decide to make the hane on top at 4 . White naturally cuts. Next Black can play at 'a' or 'b'.

Dia. 22 (a strong move). Black 1 is a tough move. White is able to encroach upon the corner with 2 to 8 . Playing 5 at 6 is dangerous, as this would start a serious ko. After 8, Black has to choose between taking away White's eye-shape in the corner and blocking his way out to the center.


Dia. 21


Dia. 22

5: connects (right of I)

Dia. 23 (eye-shape). In this configuration White 1 is the key move for securing eye-shape. After Black 2, White 3 is the followup. If White plays 3 at `a', a ko cannot be avoided after Black ` $b$ ', White `c', Black `d'.

Dia. 24 (helping the opponent). Playing White 1 before 3 looks like good timing (it follows the proverb `attach across the knight's move'), but it is counterproductive, for it just helps Black to strengthen himself with 4 and 6 . White 1 loses points.


Dia. 23


Dia. 24

Dia. 25 (Black's aim). Black can also answer White 1 by taking the corner with the simple moves of 2 and 4 . Black can now still aim at attacking the four white stones.

Dia. 26 (thickness). White can also descend at 2 instead of 2 in Dia. 22. Drawing back at 3 is good enough for Black. White is able to settle his group with 4 and 6, but the thick move at 7 gives Black a satisfactory result. If White plays 6 at 8 , Black `a', White `b', Black 6 follow.


Dia. 25


Dia. 26

Dia. 27 (the problem of the ladder). Whether or not Black can simply pull back at 1 depends on the ladder. If White can get a ladder with ' $a$ ', he gets a good result here, but if the ladder is unfavorable it is quite difficult for him to get sabaki.

When the ladder is unfavorable for Black -
Dia. 28 (light). Black can answer 3 by pulling back at 4 . White plays lightly at 5 and fixes up his shape. Black's play here is a little lacking in severity.


Dia. 27


Dia. 28

Dia. 29 (stiff-necked). Black 4, permitting White 5, is bad style: it makes 1 into a hane at the head of two stones. Black is emphasizing territory and hopes to solidify the right side, but playing this way is bad.

Dia. 30 (reservations about Black's strategy). Black continues by cutting at 1 - he is concentrating solely on developing his right side territory. However, White builds nice thickness up to 8 , thanks to his forcing moves at 2 etc. Depending on the position at the top and on the left side, Black may find it hard to win playing like this.


Dia. 29


Dia. 30

Dia. 31 (Black's kosumi). The idea of Black 2 is to defend solidly at the top and to fight on the right. White usually attaches at 3, leading to Black 4 and White 5. If Black then attacks at 6, White attaches at 7. Next -

Dia. 32 (sabaki). If Black 1, White forces with 2, then calmly makes the diagonal connection at 4, White has got sabaki inside the black moyo and has restricted the amount of territory Black can make. White can regard his invasion as a success.


Dia. 31


Dia. 32

Dia. 33 (counter-atari). If Black gives atari at 3, White counters with an atari of his own at 4 . This pattern is often seen. Note that White 4 is a key sabaki technique, mastery of which is essential for all serious players. After 7, White makes another diagonal connection and gets a good, strong position. If anything, White's position is now stronger than Black's.

Dia. 34 (an alternative pattern). White 3 and 5 are light, efficient moves. Black 6 is obligatory - he cannot let White play here so White extends to 7 . This is a standard pattern


Dia. 33
7: connects (right of 3 )


Dia. 34

Dia. 35 (the 2nd line attachment). Attaching underneath at 3 is another variation. However, White has to be careful, as there are various counters available to Black. Next -

Dia. 36 (submissive). If Black is kind enough to play at 1, White happily forces with 2 and 4 , then extends to 6 . A comparison with Dia. 34 demonstrates that this is bad for Black. This is exactly what White wants, so Black has to look for a chance to counterattack.


Dia. 35


Dia. 36

Dia. 37 (a fighting game). Fighting spirit makes Black want to push through at 3 . White naturally plays 4 , but Black 5 is a thick move. Up to 11 Black does manage to stop White from getting eyes, but White has destroyed Black's corner territory, so the position is even.

Dia. 38 (the crosscut tesuji). The crosscut of 2 is a tesuji. Black answers solidly at 3 , so White uses his stone as a sacrifice to force with 4 and 6 , then defends at 8 . Black can still aim at attacking at the vital point of 'a', but White is closer to settling his group than in the previous diagram.


Dia. 37


Dia. 38

Dia. 39 (hoping to attack). Black 3 is also a feasible response to 2. White lays waste to the corner with 4 and 6 , but Black can still aim at attacking him. As in Dia. 37, the position is even.

Dia. 40 (a standard sequence). If Black blocks on the outside at 1, White still crosscuts. If Black emphasizes territory with 3, White forces with 4 and 6 , then fixes up his shape with 8 . This result is favorable for White.


Dia. 39


Dia. 40

Dia. 41 (efficient). The aim of Black 1 is to avoid helping White to make shape and to avoid giving him forcing moves. White 2 is a light response. If Black 3, White 4 makes effective use of White's original contact play. White 6 is the proper move - White is satisfied with his shape.

Dia. 42 (the vital point). White 2 may be big, but it feels heavy. Black 5 is the vital point for attack. White may not be captured, but his position is certainly cramped.


Dia. 41


Dia. 42

Dia. 43 (a special case). If Black wants to emphasize outward influence, he might try pressing at 3 . However, White crawls once at 4 , then lives in the corner with 6 . This is very big, so Black should only play this way in special circumstances.

Dia. 44 (powerful outward influence). The aim of Black 1 is to build powerful outward influence while letting White live in the corner. Black 3 continues this strategy. Connecting at 7 gives Black good aji. If White now switches elsewhere, Black is left with the atari at 'a'.


Dia. 43


Dia. 44

Dia. 45 (apparent gote). White may crawl at 2 in an attempt to live on a larger scale. Black 3 is a peaceful answer. White secures life with 4 and 6, but Black gets nice thickness with 7. This looks like gote, but appearances are deceptive (see Dia. 49). Instead of $6-$

Dia. 46 (a fight). If White crawls once more with 1, Black naturally cuts at 2 . This way a fight gets started.


Dia. 45


Dia. 46

Dia. 47 (solid). Another option for Black is to pull back into the corner with 3. This gives Black an extremely solid position. White of course hanes at 4. Next -

Dia. 48 (a set pattern). The clamp at 1 is one of the vital points for attacking White. Black forces with 3, then continues the attack with 5 . This is a set pattern.


Dia. 47


Dia. 48

Dia. 49 (the placement). If White tenukies after 7 in Dia. 45, Black can attack his eye-shape with the placement at 1 . White 2 is the only answer. Capturing a stone with 3 and 5 seems to set up yonmokunakade (a clump of four stones which reduces to only one eye), but White's resistance is not quelled so easily.

Dia. 50 (ko). White turns at 1, then throws in at 3 . The sequence to 6 gives a ko. However, the presence of this threat means that White cannot tenuki after Black 7 in Dia. 45.


Dia. 49


Dia. 50

## PATTERN SIX

The small knight enclosure is supposed to guarantee the corner territory, but what happens when White has stones close up on both sides?


Pattern Six

Dia. 1 (invasion). The contact play of 1 is the vital point. Note that attaching at 3 instead is not effective: Black answers at 1 . Black must play 2, but White 3 enables White to live in the corner.

Dia. 2 (usurping territory). Connecting solidly at 1 is the most sensible move. With 2 to 8 , White robs Black of the corner territory in sente. The two white stones on the outside play a necessary and effective role.


Dia. 1


Dia. 2

Dia. 3 (not a threat). Black 1, an attempt to capture the white invaders, looks frightening, but here the white stones on the outside prove their usefulness. White first plays 2 and 4 , then cuts at 6. Giving atari at either ' $a$ ' or ' $b$ ' is bad for Black when White extends.

Dia. 4 (the squeeze). If Black tries to capture White with 1, White sacrifices the corner stones in order to squeeze up to 14 . White builds a powerful wall in sente and gets a very favorable result.


Dia. 3


Dia. 4

Dia. 5 (a successful counter). Black 1 is a more aggressive response to the invasion. White makes the simplest answer, living with 2 to 8 ; Black then hanes at 9 and can claim some success for his strategy. Instead of $8-$

Dia. 6 (strengthening Black). If White plays at 1, Black forces with 2, then defends with 4 - this is a well-timed combination. White has to capture with 5 and 7 to live, but the result is that he has helped Black to reinforce himself up to 8 .


Dia. 5


Dia. 6

Dia. 7 (reinforcement). Even if White invades the small knight enclosure, Black gets compensation for his corner territory by building thickness on the outside, as we have seen, but all the same defending first with Black 1 is a good, solid move.

Dia. 8 (unreasonable). In most cases answering the invader with a hane on the second line is unreasonable. White builds up strength on the inside with 3 to 9 , then cuts at 11. Black cannot hope to win this fight: he will lose any semeai with the corner white group.


Dia. 7


Dia. 8

Dia. 9 (indirect counter). Switching to 2 is an interesting indirect response to the invasion. This move is one way of getting sabaki in the corner fight. White 3 is the answer Black is hoping for. He hanes at 4 and now has no worries in the corner.

Dia. 10 (trouble for Black). Ignoring Black 2 in order to continue in the corner with 3 is a much stronger move. If Black 4, White sets up the cut at 11. Black is in for a tough fight.


Dia. 9


Dia. 10

Reference Figure 1 (mimic-go style). This position looks like mimicgo (mane-go), but the white stone on the left side and the black one on the right are on different points. Both sides - White with 1 and Black with 8 play probes against the corner enclosures. The aim of 12 and 16 is to force White out into the center and then to attack him.

Reference Figure 2 (success for Black's strategy). Black moves out into the center with the cleverly timed sequence to 15, but if White tries to do the same with 'a', then after Black ' b ', White 'c', Black `d', White cannot cut at 'e'. The reason is that after Black ' f ', White ' g ', Black ' $h$ ', the marked black stone is found to be waiting in just the right place. Black's strategy has been successful.


Reference Figure 1


Reference Figure 2

## CHAPTER TWO Large Knight Enclosure Invasions

## PATTERN ONE

You can make a single-handed invasion of the large knight corner enclosure without being captured, but even if you live the result is unfavorable.


Pattern One

Dia. 1 (invasion). White 1, at the 'corner' of Black's shape, is one vital point for exploiting the thinness of the large knight enclosure. However, to state the conclusion first, invading without regard for the surrounding position will lead to an unfavorable result even if White lives. Black has two answers: 'a' and 'b'.

Dia. 2 (the key point). Black gets an adequate result by blocking at 2 , which is the key point. If White 3 , Black 4 is a severe hane. Black makes territory naturally with 8 and 10 while attacking White. Instead of 5 -


Dia. 1


Dia. 2

Dia. 3 (White jumps sideways). If White jumps to 1, Black 2 is a severe answer. White has no choice but to give atari underneath with 3 and 5, then to seek life on the edge. However, Black 12 is sente, and when Black reinforces with 14 he gets superb outward thickness. White has lived, but his result is hardly satisfactory.

Dia. 4 (hane underneath). Making a hane at 3 is also satisfactory for Black. It's hard for White to find a continuation.


Dia. 3


Dia. 4

Dia. 5 (blocking on top). Blocking on top cannot possibly be bad for Black either. If White 3, Black 4 is a very strong answer.

Dia. 6 (imposing thickness). When White tries to live, Black makes the solid reinforcement at 12 , building imposing outward thickness.


Dia. 5


Dia. 6

Dia. 7 (unreasonable). Attempting to capture White with 1 instead of 12 in Dia. 6 is of course unreasonable. White makes a cut at 2 which is difficult to deal with. Black must extend at 3, but then White has a good continuation with 4 and 6 . Black cannot cope with the double threat of White `a' and White ` $b$ '.

Dia. 8 (gote). Forcing with 6 and 8 gives almost the same result as Dia. 6, with the difference that Black ends in gote.


Dia. 7


Dia. 8

Dia. 9 (peaceful). Simply connecting at 4 is a peaceful variation. White has two continuations: 5 and 7 as here or White `a', Black `b', White 'c'. Both give White profit and Black outward influence. Considered independently of the surrounding position, the local result is equal.

Dia. 10 (perfect shape). Omitting to push through with 1 in Dia. 9 is too easygoing. Black gets flawless shape and a superior result by connecting at 6 .


Dia. 9


Dia. 10

Dia. 11 (peaceful). Answering White 3 by blocking at 4 is a conventional move, but it is just a little slack. This makes it easier for White to settle his group. If Black plays 6 at 7, he gets an inferior result after White 6, Black `a', White `b'.

Dia. 12 (the contact play). Attaching at 1 is another way of attacking this enclosure. Black answers at 'a' or 'b'.


Dia. 11


Dia. 12

Dia. 13 (blockade). Black 2 is a standard move. If White 3, connecting solidly at 4 is good enough. The diagonal connection at 8 is correct shape. White lives with 9 to 13, but Black 14 and 16 are sente. Black seals White in in sente and his thickness gives him the superior result.

Dia. 14 (a wall of steel). If White crawls at 5 , Black connects tightly at 6. Black's outward thickness is like a wall of steel. Black's sente combination of 10 and 12 is also big.


Dia. 13


Dia. 14

Dia. 15 (bad aji). All Black has to do to make White's invasion a failure is to seal him in with good aji, so there is no need for Black to be over-aggressive. Descending at 1, for example, instead of 6 in Dia. 14, creates bad aji. After 4, Black cannot omit the defense at 5, and after White lives with 6 and 8, Black is left with weak points at 'a' and ' $b$ '.

Dia. 16 (a special case). Black 2 is not to be recommended: it would only be appropriate in special circumstances. Black 8 could also be at 'a'. Next -


Dia. 15


Dia. 16

Dia. 17 (sabaki). White's continuation at 1 is a tesuji. Black must capture at 4 - if he plays 4 at 5 , then White captures with White `a', Black 4, White `b'. Blocking at 5 gets sabaki for White.

Dia. 18 (large-scale life). White must not answer 2 at 3. Black 4, though bad shape, is a good move here. Black lives on a large scale in the corner, and all his stones are working at peak efficiency.


Dia. 17


Dia. 18

Dia. 19 (the question of the ladder). If Black wants to crawl at 4 , he has to check out the ladder first. If White can get a ladder with 5 etc., the result is a disaster for Black. In any case, the result in Dia. 18 is favorable for Black, so the conclusion is that White 3 is a risky move.

Dia. 20 (capturing). Instead of 8 in Dia. 16, Black can also capture at 8 here. White gives atari at 9 and, if Black connects at 10, is satisfied to extend at 11. Playing Black 10 at 11 would start a serious ko.


Dia. 19


Dia. 20
10: connects at 5

Dia. 21 (the 3-3 contact play). Invading at 1 here also works. Black usually answers at 'a'.

Dia. 22 (solid). Black 2 is a solid, straightforward move. The counter-hane at 3 is a tesuji. In response, connecting solidly at 4 is best. White 5 is then the tesuji for creating a living shape. White succeeds in his aim up to 9, but Black builds up steady outward influence.


Dia. 21


Dia. 22

Dia. 23 (strengthening the right side). Black extends at 1 (instead of 4 in Dia. 22) when he wants to lay stress on his right side position. White 2 gives the same shape that we met with in the small knight enclosure (Pattern One, Dia. 2). White lives in the corner and Black builds a solid position.

Dia. 24 (ko). White 1 (instead of 4 in Dia. 23) is a bad move which reduces White's own liberties. After Black 6 and 8 a ko cannot be avoided: if White `a', Black `b'; if White `c', Black `a' gives a ko after White 'd'.


Dia. 23


Dia. 24

Dia. 25 (make him crawl). White can also crawl at 2. Black has nothing to lose by giving atari once at 3 . Black should then play ordinary moves, without making any unreasonable attempt to capture White. Making White crawl along the second line is good enough: Black builds up a solid position up to 9 .

Dia. 26 (a difficult variation). Cutting at Black 1 is severe, but it leads to complications. Black answers 6 by giving atari on the outside at 7 . The continuation after 9 is difficult, but Black should be able to handle the fight.


Dia. 25


Dia. 26

## PATTERN TWO

The formation here, with Black having made a three-space extension, is often seen. Where is the vital point for invading?


Dia. 1 (invasion). Invading in the middle of Black's threespace extension is correct.

Dia. 2 (a fight). Defending at 2 or 'a' is a solid response. White will probably jump out with 3 and 5, and Black will turn sideways to 6 . This is reasonable for both. Next, a fight will start.


Dia. 1


Dia. 2

Dia. 3 (sabaki). White cannot invade at 1 if he does not know how to make sabaki after Black 2. Attaching at 3 is the only move. Since Black's extension is narrow, switching to the corner is best.

Dia. 4 (the ladder). Black usually blocks at 1 . White can only continue with 2 when the ladder is favorable.

Dia. 5 (the ladder). White can only cut at 1 (4 in Dia. 4) when he can continue by cutting at 5 . The cut is unreasonable if Black can get a ladder with Black ` $a$ ', White ' $b$ ', Black 'c'.


Dia. 6 (the belly contact play). Black attaches at 2 when the ladder in Dia. 5 is unfavorable. White sacrifices his two stones and squeezes.

Dia. 7 (Black descends). If Black 1, the commonplace sequence from 2 to 6 is good enough for White. He cannot be captured.

Dia. 8 (too mild). The hane at 2 is another variation. Black 3 is too mild: it makes it too easy for White.


Dia. 6


Dia. 7


Dia. 8

Dia. 9 (success for White). White 1 is the standard move here. White 5 is essential. Burrowing into the corner like this gives White a successful result.

Dia. 10 (a strong counter). Black 1 (instead of 3 in Dia. 8) is a strong move. White naturally extends at 2.

Dia. 11 (unreasonable). Black 3 is unreasonable. The continuation to 14 is forced and is bad for Black. Instead of 3


Dia. 9


Dia. 10


Dia. 11

Dia. 12 (frightening). Black can play 1 and 3. If White 4, Black can continue strongly with 5 and 7, but Black has some reason to be apprehensive.

Dia. 13 (ko). Black 1 (7 in Dia. 12) shows fighting spirit, but a ko follows if White cuts at 'a'. Playing Black 1 at ' $b$ ' would be slack.

Dia. 14 (crosscut). The crosscut at 2 can lead to some very complicated variations.

Dia. 12



Dia. 14

Dia. 15 (in trouble?). The atari at 3 strengthens White. Black 5 and 7 seem to put White on the spot, but -

Dia. 16 (White moves out). White exchanges 1 for 2, then moves out with 3 and 5 . That weakens the black stones on the side. White can also link up with 'a', so all in all this result is not very good for Black.

Dia. 17 (life). When Black plays 3, living with 4 to 8 would also be good enough for White. Next -


Dia. 15


Dia. 16


Dia. 17

Dia. 18 (sabaki). If Black ataris at 1, White settles his group nicely with 2 to 6 .

Dia. 19 (the problem of the ladder). Black 1 (instead of 3 in Dia. 15) and 3 bring up the problem of the ladder. If it is favorable for White, he can take profit by blocking at 6 in the corner.


Dia. 18
5: takes ko


Dia. 19

Dia. 20 (White's fall back plan). If the ladder is unfavorable for White, he captures a stone with 6 and 8 . A fight follows.

Dia. 21 (solid extension). Extending solidly at 2 is a bit of a loss for Black, as it gives up the corner to White.

Dia. 22 (a trade). White discards his stone on the side and lives in the corner instead. This trade seems unsatisfactory for Black, as his position is too narrow.


Dia. 20


Dia. 21


Dia. 22

## PATTERN THREE

Black has made a wide extension from his large corner enclosure. White wants to make full use of his stone next to Black's formation.


Pattern Three

Dia. 1 (close up). Invading close up to the corner enclosure at 1 is the vital point in this position.

Dia. 2 (inadequate). Invading at 1 looks plausible, but it lacks forcefulness. Permitting Black 2 is unsatisfactory.


Dia. 1


Dia. 2

Dia. 3 (moderate). Black 2 is the moderate response: Black is content to secure the corner. White 3 next is the key point.

Dia. 4 (a fight). Next Black jumps to 1, starting a fight in the center. White 2 and 'a' are the standard moves.

Dia. 5 (the knight's move). If Black 2, attaching at 3 is the tesuji.


Dia. 3


Dia. 4


Dia. 5

Dia. 6 (sabaki shape). If next Black 1, White gets sabaki with 2 to 6 . White threatens to play ' $a$ ', and the black stone on the side has also been weakened.

Dia. 7 (attacking from below). The aim of Black 2 is to stop White from making a base on the side, but White will be able to get sabaki by exploiting the thinness of the large knight enclosure. However, when White invades at 1 he has to have ready countermeasures against 2.


Dia. 6


Dia. 7

Dia. 8 (tesuji). The shoulder-hit at 1 is the vital point. The continuation from 3 to 7 is a basic tesuji. Next -

Dia. 9 (good shape). White throws in a cut at 1. If Black 2, White forces with 3 , then fixes up his shape with 5 .

Dia. 10 (forcing moves). If Black captures with 1 (instead of 4 in Dia. 8), White makes a sacrifice with 2 and 4 , then fixes up his shape with 6 and 8 . Either White 'a' or 'b' will now be sente.


Dia. 8


Dia. 9


Dia. 10

Dia. 11 (a fight). If Black plays 1 instead of connecting at 2 in Dia. 9, White jumps to 2 . This permits Black 3, but White 4 is a good connection. White looks forward to using the aji of the cut at 'a'.

Dia. 12 (Black's magari). If Black turns at 1 (magari), White makes the 2-3 exchange, then hanes at 4 . Note that 2 is essential.


Dia. 11


Dia. 12

Dia. 13 (disaster). If White omits the forcing move and plays at 1 immediately, Black makes a crude but effective cut with 2 and 4. After 6 White has cutting points in his shape at 'a' and ' $b$ ', so he suffers a terrible loss.

Dia. 14 (unsatisfactory for Black). If Black answers 5 at 6 (instead of 6 in Dia. 8), White gets a useful atari at 7. Black is not happy.

Dia. 15 (reinforcement). Black 4 tries to deny White assistance in getting sabaki. White reinforces at the vital point of 5 , making miai of 'a' and ' $b$ '. If Black does nothing -



Dia. 14


Dia. 15

Dia. 16 (life). White will wait for the right opportunity to crawl at 1 . he can live with the sequence to 7 .

Dia. 17 (blocking solidly). Black 4 is solid. White can play 5, but Black's aim is to build thickness on the outside.


Dia. 16


Dia. 17

Dia. 18 (thickness). Black forces with 1 to 5 , then builds enormous thickness up to 11 . However, White is satisfied with gouging out the corner territory.

Dia. 19 (corner invasion). White can also invade the corner directly. Black 2 agrees to let White live in the corner.

Dia. 20 (even result). The sequence to 9 is the standard continuation. The result is even, with Black getting influence and White taking territory. Black 10 can also be at 'a'.


Dia. 18


Dia. 19


Dia. 20

Dia. 21 (thickness). If Black blocks at 1 (instead of 6 in Dia. 20), White plays 2 and 4 and is satisfied.

Dia. 22 (a special case). Blocking on the other side at 2 is possible in special circumstances. Black's thickness now faces a slightly different direction from Dias. 20 and 21.


Dia. 21


Dia. 22

Dia. 23 (gote). Crawling at 1 is bad. White 3 and 5 are the same as in Dia. 20, but White ends in gote with 9.

Dia. 24 (tsuki-atari). Black's solid block (tsuki-atari) at 2 is also possible. White can live after 3, but he has to know the counter to Black 4.

Dia. 25 (life). White plays the 1-3 combination. Black gets central thickness with 4, but White's invasion is a success when he lives with 5 . The last move cannot he omitted.


Dia. 23


Dia. 24


Dia. 25

Dia. 26 (ko). If White does not play at 1, Black starts a ko with 1 and 3. If White `a', Black counters with `b'.

Dia. 27 (thickness). The hane at 2 is a strong move when the ladder is favorable for Black. White lives up to 9, but this result is not good for him. Black 8 is just right, giving Black considerable thickness.


Dia. 26


Dia. 27

Dia. 28 (living in the corner). When the ladder is unfavorable for Black, attaching at 2 is the tesuji. White lives in the corner, but Black still gets thickness with 6. Instead of $3-$

Dia. 29 (taking the outside). White can get an adequate result by giving atari at 3 . Up to 9 he makes good shape on the outside. When the ladder is favorable for Black, he plays 2 at 'a', followed by White 5, Black 3.


Dia. 28


Dia. 29

Dia. 30 (the same pattern). If White starts with 1 , then cuts at 3 , we get the same pattern, with the question of the ladder determining the play.

Dia. 31 (the ladder). Black cannot play 1 and 3 unless the ladder at 'a' after 6 is favorable for him.


Dia. 30


Dia. 31

Dia. 32 (resistance). The sequence of 1 to 5 is another way of playing when the ladder is favorable for Black. However, Black must watch out for White's counter at 6. Black 7 is the tesuji. Next -

Dia. 33 (sabaki shape). White 1 is correct shape. Black is forced to play 2 and 4 . White then forces with 5 and 7, creating aji in the corner, then jumps to around 9.

Dia. 34 (care required). Blocking immediately at 1 is bad: White is annihilated after Black 2.


Dia. 32


Dia. 33


Dia. 34

## PATTERN FOUR

Black has made good shape with a two-space extension from his enclosure. White has a stone two spaces away. Where is the vital point?


Pattern Four

Dia. 1 (the shoulder-hit). In this case the shoulder-hit at 1, which is a probe to see how Black reacts, has traditionally been considered a good move. Depending on what Black does, White may be able to use the support of his shoulder-hit to pull off something in the corner.

Dia. 2 (invasion). Black 2 is the commonsense answer to White 1. White's invasion at 3 is related to 1. If Black blocks on top at 4 , White lives in the corner with the sequence to 17 . Black of course gets corresponding outward thickness.



Dia. 2

Dia. 3 (depending on the ladder). If the ladder favors him, Black may block at 1 (instead of 12 in Dia. 2) in an attempt to capture White. After the sequence to 17, the question arises of whether White can get a ladder with 'a'. If White plays 4 at ' $b$ ', Black kills him unconditionally with the placement at 'c'.

Dia. 4 (thickness). White can also play at 1 instead of 9 in Dia. 2. He lives up to 9, but Black gets useful thickness.



Dia. 4

Dia. 5 (slightly unsatisfactory). Blocking at 6 is a little slack. If Black continues with a two-step hane at 8 , White gives up his corner stones and captures with 9 to 13 , then extends to 15 . Black's play has been submissive and the result is less than satisfactory.

Dia. 6 (profit). If Black extends at 1 instead of 8 in Dia. 5, White lives on a large scale with 2 and 4 . This result is also a little unsatisfactory for Black.


Dia. 5


Dia. 6

Dia. 7 (into the center). Black can also answer White 3 by blocking on the 3-3 point with 4 . When White plays 5 , his initial move at 1 proves its value. Things would be different if White had invaded immediately at 3 without making the preparatory move at 1. Attacking with 10 after White connects at 9 feels right. For his part, White moves lightly towards the center with 11.

Dia. 8 (heavy). If White plays the diagonal connection at 1 instead of 9 in Dia. 7, the hane at 2 immediately makes his group heavy. If 3, White gets into trouble after Black cuts at 4.


Dia. 7


Dia. 8

Dia. 9 (the contact play tesuji). Countering White 3 with 4 gives Black bad aji. White 5 is the tesuji for this situation. If Black 6, White lives up to 11, though in gote.

Dia. 10 (unreasonable). Pushing through with 1 instead of 6 in Dia. 9 is unreasonable. White's simple continuation at 2 gives him the double threat of 'a' and ' $b$ '. Black is hard put to find an answer: White's invasion is a success.


Dia. 9


Dia. 10

Dia. 11 (pushing through). Pushing through at 1 instead of 5 in Dia. 9 is also possible. White then turns at 3 and, if Black plays 4 , lives with 7 etc. Note that if White omits 13, Black will kill him with the hane at 'a'. In this result, Black is left with some bad aji.

Dia. 12 (attempting to capture). If Black attempts to capture White with 4 , White 7 is the key move for securing life.


Dia. 13 (bad style). White 3 is the wrong point for invading the corner. Black 4 is a good, calm response.

Dia. 14 (just right). Attaching at 3 is correct only when Black has answered 1 at 2 . This time cutting at 7 works well. After White forces with 9 and 11, White 13 is just right. White easily settles his group.


Dia. 13


Dia. 14

Dia. 15 (later aim). Black can also capture at 1 instead of 10 in Dia. 14. White 2 is the only move; if Black connects at 3, White extends at 4 . He dominates the center and has an efficient shape. He can also aim at attaching at `a' later; if Black ' $b$ ', he gets sabaki by making the crosscut at ' $c$ '.

Dia. 16 (good aji). Black can also answer 2 at 3 . When White takes the ko, Black defends at 5 , getting good aji in the corner and nullifying the threat of White 'a'.


Dia. 15
3: connects


Dia. 16
4: takes ko

Dia. 17 (unfavorable). The forcing moves of 9 and 11 in Dia. 14 are well-timed and White loses nothing by making them. Playing immediately at 9 here might seem good enough, but White gets an unfavorable result when Black captures at 10 .

Dia. 18 (profit). Black can also answer 3 with the hane on top at 4 . Black can secure the corner profit if he wants to by playing 8 and 10 . Black 8 is a good move.


Dia. 17


Dia. 18

Dia. 19 (playing simply). The invasion at 3 is not the best move. Black answers simply with 4 and 6 , and White gets a heavy shape.

Dia. 20 (too narrow). Playing Black 1 instead of 8 in Dia. 18 is bad style. After White 2 and 4, Black's thickness is over-concentrated as his position is too narrow. This is a bad result for him.


Dia. 19


Dia. 20

Dia. 21 (too mild). Black 1 is slack. White gets a good result with 2 and 4 , and Black is dissatisfied.

Dia. 22 (crude). The exchange of 1 for 2 is reasonable, but continuing with 3 and 5 is too crude. After White 9, Black 10 is the vital point. Up to 14 Black strengthens his corner territory, while White gets a heavy shape.


Dia. 21


Dia. 22

Dia. 23 (bad shape). Making a single-handed invasion in the corner is not recommended in this formation. Black blocks at 2, then raps White painfully on the head at 4 . White is forced to make bad shape with 5, and Black's attack gets into gear with 6.

Dia. 24 (connection). If White 1, Black 2 is good enough. Up to 12, Black docilely answers every move White makes, but White cannot be proud of the result.


Dia. 23


Dia. 24

Dia. 25 (the ladder relationship). Attaching at 1 is dangerous when the ladder is favorable for Black. In that case, Black can resist strongly with 2 and 4 , then descend at 8 . The continuation to 15 is forced. Black 16 then stops White from getting two eyes. If White cuts at 17, the continuation to 28 is a one-way street. If White cannot get a ladder with `a' now, he collapses.

Dia. 26 (aggressive). The shoulder-hit at 1 is not recommended either. White 7 is correct shape, but instead of connecting underneath with 'a' Black launches a vigorous attack with 8 and 10.


Dia. 25


Dia. 26

## PATTERN FIVE

Black's formation is the same as in Pattern Four, but this time White has played at the top.


Pattern Five

Dia. 1 (into the corner). When White's ally is lying in wait next to the corner enclosure rather than next to Black's extension, White invades the corner directly. This is the difference from Pattern Four. In certain cases, White can also play 1 at 'a'.

Dia. 2 (standard pattern). Guarding the corner with 2 is an appropriate response to 1 . In the continuation to 9 , which is a standard pattern, Black drives White out in order to attack him. Black 8 at 'a' is bad because of White `b', Black 9. White `c'. Black `d', White `e'.



Dia. 3 (unsatisfactory). Pushing up at 3 is bad even when White has an ally at the top. Black 4 is severe and forces White into bad shape; from 6 on, Black takes territory while continuing his attack. White gets a disappointing result up to 14.

Dia. 4 (unsatisfactory for Black). Blocking on top at 2 is not interesting for Black. White lives on a large scale in the corner and can be pleased with the success of his invasion.


Dia. 3


Dia. 4

Dia. 5 (unreasonable). Making a hane at 1 instead of 10 in Dia. 4 is unreasonable. Cutting at 6 after playing 2 and 4 shows nice timing: Black has no answer to 8 . If Black 5 at 8 , White plays 5 for a good result.

Dia. 6 (naive). Simply blocking with 2 and 4 is too simple. Letting White connect underneath like this is very unsatisfactory for Black.


Dia. 5


Dia. 6

Dia. 7 (bad aji). The diagonal move at 2 has bad aji. Black must play 6 and likewise has no choice about 8 and 10. Living on such a large scale looks nice for White.

Dia. 8 (the contact play). The presence of the white stone makes White 1 possible. Black 2 is a calm response. White is allowed to connect underneath, but he is not completely satisfied with this result.


Dia. 9 (extending out). If White extends towards the center with 3, Black connects underneath. If White 5, Black connects at 6 and aims at playing at 'a' later. This also looks unsatisfactory for White.

The conclusion is that in general attaching at 1 is lacking in forcefulness.

Dia. 10 (dubious). Black should think twice before answering at 2 . White pushes up once at 3 , then makes shape with 5 and 7 . White lives easily up to 15 . This is a disappointing result for Black.


Dia. 9


Dia. 10

Dia. 11 (solid connection). White can also play 7 in Dia. 10 at 3 here - his aim is the follow-up at 5. If Black 'a', White intends to play 'b'; if instead Black 'c', White plays 'a' and gets a good result.

Dia. 12 (blocking on top). Blocking on top with 2 is not very severe when White has the ally to the left. White is satisfied with living in the corner up to 13 .


Dia. 13 (Black's overplay). Black 2 and 4 are an overplay. White uses 7 as a sacrifice to secure a base in the corner.

Dia. 14 (reinforcement). As with the small knight enclosure, Black does not get a bad result even if White makes an early invasion and destroys the corner territory. However, reinforcing at 1 if you get the chance is a splendid move which takes a lot of territory.


Dia. 13


Dia. 14

## PATTERN SIX

White has a three-space extension close to Black's enclosure. Naturally White can make an invasion.


Pattern Six

Dia. 1 (a reasonable fight). White 1 is good style in this position. The sequence from 2 was given earlier. When Black blocks at 8, however, he must have a counter prepared for White's cut with 9 and 11. Black takes up position with 12, then hanes at 14: he should be able to handle the ensuing fight. At some point White must go back and defend at 'a'.

Dia. 2 (cautious). Depending on the position at the top, Black might find it advisable to answer patiently at 1. Again, some positions might make playing 3 at ${ }^{\prime}$ a' a good, thick move.



Dia. 2

## PATTERN SEVEN

Black has made the ideal doublewing formation. How should White deal with it?


Pattern Seven

Dia. 1 (the capping move). As with the small knight enclosure, capping at 1 is a good move. White waits to see how Black responds.

With the large knight enclosure, White ' a ' is also, on the face of it, a vital point, but one has reservations. See Dia. 26.

Dia. 2 (sabaki). Black 2 is good shape. White 3 is a probe; if Black 4, White switches to 5 and 7. This standard tesuji enables White to get sabaki up to 13 .


Dia. 1


Dia. 2

Dia. 3 (aji). If Black intercepts at 4, White plays once at 5 as a probe, then switches to 7. This is an adequate result for White: he can aim at the aji of 'a' later on.

Dia. 4 (a fight). If Black counters 5 with 6 , White 7 is the only move. If Black 8 and 10 next, answering with 11 to 15 is good enough. A fight follows.


Dia. 3


Dia. 4

Dia. 5 (adequate). If Black captures at 1 (instead of 10 in Dia. 2), White can force with 2 . Extending with 4 and 6 gives White an adequate result. This is painful for Black.

Dia. 6 (the knight's move). 1f Black answers with the knight's move at 2 , White exchanges 3 for 4 , then makes a good contact play at 5 . If Black 6 , White gets good shape with 7 to 13 .


3: connects


12: connects

Dia. 7 (light). Attaching immediately on the outside at 3 is a light move. If Black 4, White makes another light move at 5, and the exchange comes to a pause. The result is reasonable for both. Instead of 4 -

Dia. 8 (breakthrough). If Black plays 1, White breaks into the corner with 2 to 10 . This way White makes a satisfactory reduction of Black's territory. Instead of 8


Dia. 7


Dia. 8
7: connects

Dia. 9 (good style). White can also attach at 1, a move which is good style. Black 2 is the vital point, and 4 and 6 stop White from getting a base. This result is similar to Dia. 8.

Dia. 10 (another fight). Playing 4 in Dia. 8 at 1 here leads to a similar fight to that in Dia. 4.


Dia. 9


Dia. 10

Dia. 11 (bad for Black). Playing 2 in Dia. 10 at 1 here is bad: it is an overplay. White forces his way into the corner up to 10 . This result is probably favorable for White.

Dia. 12 (a special case). Black has to check the ladder before pulling back at 6 . The side whom the ladder favors gets a good result.


Dia. 13 (equal). Black 2 is solid. White 3 etc. are a standard pattern, and White 7 is the key point for making shape. The result looks even.

Dia. 14 (light). If Black plays 1 instead of 4 in Dia. 13, White should play lightly at 2 . Black 1 at 2 is not recommended, as that leaves the corner looking thin.


Dia. 13


Dia. 14

Dia. 15 (the reverse extension). Extending the other way with 3 is feasible. Black makes the same kind of response on the other side with 4 and 6 . White 7 next is an interesting move: White is aiming at ${ }^{\circ} \mathrm{a}$ '. If Black defends at 8 , White makes shape with 9 .

Dia. 16 (White's threat). Black 4 is a thin move. For the time being White will jump to 5 , but he can aim at invading at 'a' later.


Dia. 15


Dia. 16

Dia. 17 (an alternative strategy). Attaching at 1 instead of 7 in Dia. 15 is a straightforward way of playing. If Black 2, White plays 3 and 5. This strategy looks feasible.

Dia. 18 (good shape). If Black 2, White promptly crosscuts at 3. The crosscut is the star player in the sabaki game. It works well here, getting White good shape up to 9 .


Dia. 17


Dia. 18

Dia. 19 (resistance). Resisting with 4 is unreasonable. White's atari at 5 is a sacrifice tesuji to set up the breakthrough with 7 to 11. This result is favorable for White.

Dia. 20 (jumping lightly). White can also play lightly with 3 and 5 . For his part, Black has no reason to be dissatisfied with this result. The problem is how the players continue after this.



Dia. 20

Dia. 21 (a base). Answering 1 with a knight's move at the top at 2 is feasible. With 3 White occupies the vital point for attacking the large knight enclosure. If Black reinforces the corner with 4, White secures a base on the side with 5 .

Dia. 22 (heavy). If White attaches at 3 immediately, Black counterattacks with 4 . White breaks through to the top edge with 5 to 11, but Black 12 next is the vital point, making White's group heavy.


Dia. 21


Dia. 22

Dia. 23 (slack). Pulling back at 6 is slack: it lets White take a large corner up to 17. This result is a little unsatisfactory for Black.

Dia. 24 (a joseki). The shoulder-hit at 1 is a move which may prove effective in actual play. Black 6 is the proper move (honte). White then makes shape with 7.


Dia. 25 (good shape for White). Cutting at 1 instead of 6 in Dia. 24 is too impetuous. White forces with 2 , then secures a base with 4 and 6 . He is satisfied with his position.

Dia. 26 (not enough). White 1 is the vital point, but in this case it is not good. Black 2 is a solid answer. The exchange ends with White securing a base with 3 .


Dia. 25


Dia. 26

## CHAPTER THREE

## One-Space Enclosure Invasions

## PATTERN ONE

White wants to make a singlehanded invasion of the one-space corner enclosure. This is one of the fundamental techniques of go.


Pattern One

Dia. 1 (invasion). White almost always invades at 1 . Black has three answers: 'a', `b' and 'c'.

Dia. 2 (basic pattern). If Black 2, White lives in the corner up to 15. This is a basic pattern, but Black gets nice thickness.

Dia. 3 (attempting to capture). If Black attempts to capture White with 1 here instead of 10 in Dia. 2, White counters with 2 to 8. White's corner group is quite resilient and cannot be captured unconditionally.


Dia. 4 (efficient). Black can also descend at 1 instead of 6 in Dia. 2. When Black defends at 7, he seems to have got a more efficient shape.

Dia. 5 (troublesome). If Black tries to capture White with 1 instead of 7 in Dia. 4, White has a very troublesome cut at 6 . After the sequence to 15 , White attaches at 16. Black's attempt to capture is unreasonable.

Dia. 6 (ko). Black can get a ko if he plays inside at 1, but since White has local ko threats, beginning at 'a', this is an easy ko for White.


Dia. 7 (life in sente). If White is prepared to fight a ko, he can play 1 here instead of 4 in Dia. 4. If Black 2, White lives in sente with 3 and 5 .

Dia. 8 (ko). If Black accepts the challenge with 2, White throws in a cut at 3 before starting the ko. White gets the ko threat at 7 , so this ko is unreasonable for Black.

Dia. 9 (a special case). Black only plays 4 in special circumstances. This leads to an exchange of the right side for the top.


Dia. 7


Dia. 8


Dia. 9

Dia. 10 (thickness). If Black plays at 1 instead of 8 in Dia. 9, White concentrates on building central thickness with 2 and 4.

Dia. 11 (playing down). If White plays down at 1 instead of 5 in Dia. 9, Black 2 starts a difficult fight. White must play 3 and 5, then cut at 7, but Black resists strongly with 8 and 10. Next -

Dia. 12 (continuation). White cuts at 1 , intending this as a sacrifice, but the fight does not develop favorably for him. When Black connects at 12, he is satisfied.


Dia. 10


Dia. 11


Dia. 12

Dia. 13 (tight). Instead of the hane at 6 in Dia. 11, Black can connect tightly at 6 . White lives in sente with the 7-9 combination, but Black builds nice thickness up to 12 .

Dia. 14 (solid connection). If Black answers 1 at 2, White plays 3 to 7. If Black chooses to play simply, he can let White live in gote up to 13 .


Dia. 13


Dia. 14

Dia. 15 (ko). If Black 1, White of course challenges him to a ko with 2. White may choose to keep this ko in reserve until the best time to play it. If Black answers 2 at ' $a$ ', White lives with ' $b$ '.

Dia. 16 (not recommended). If White 3, countering with 4 and 6 is not recommended. Capturing a stone with 7 to 11 is good for White. Dia. 17 (thick). If White connects at 1 instead of 9 in Dia. 16, Black sets up a ladder with 2. After White lives up to 7, Black 8 gives Black a strong position.


Dia. 15


Dia. 16


Dia. 17

Dia. 18 (slack). Extending at 1 instead of 6 in Dia. 16 is also slack. White is satisfied with living with 2 and 4.

Dia. 19 (solid connection). Black can connect solidly at 1. If White 2, Black defends the corner territory with 3. White will probably extend to 4.

Dia. 20 (White's hane). White's hane at 2 is feasible. Black cuts at 3 , and White follows the proverb by capturing the cutting stone. Black then sets up a ladder with 5 and 7. This result is a division of profit and influence.


Dia. 18


Dia. 19


Dia. 20

Dia. 21 (tight). Black 4 is a tight, territory-oriented move. If White 5, Black takes the key point of 6 (White would get excellent shape if allowed to hane at 6). White plays 7 and is satisfied with his sabaki.

Dia. 22 (heavy). The heavy move of 1 is inferior to the light extension to 7 in Dia. 21. Black 2 becomes a severe attacking move.

Dia. 23 (a standard joseki). Black 2 emphasizes the corner. The continuation to 18 is a standard joseki which gives White territory and Black thickness.


Dia. 21


Dia. 22


Dia. 23

Dia. 24 (eye-shape). Black can also extend at 1 instead of 4 in Dia. 23. Black 7 blocks White's path to the center, so he secures his eye shape with 8 and 10.

Dia. 25 (the corner). If Black wants to guard the corner, he can force with 7 to 11 , then defend at 13 . This way White is able to move out into the center with 14 .

Dia. 26 (good shape). If Black 1, we get the same shape as in Dias. 21 and 22. In some cases Black might want to attack at 3 because of his position at the top. However, letting White get good shape with 4 is annoying.


## PATTERN TWO

The presence of a white approach move means that White's invasion becomes much more severe.


Pattern Two

Dia. 1 (the peep). When White has an approach move, it may not seem appropriate to call White 1 an invasion, but the objective and the technique are the same. This is a very common move in actual play.

Dia. 2 (standard pattern). Intercepting at 2 is the standard approach. The continuation to 7 is a joseki. The question of what happens around 'a' on the right side will determine whether or not Black's thickness works effectively.


Dia. 1


Dia. 2

Dia. 3 (the ladder). If Black blocks at 4, White will counter with 5 to 9 . Black 10 is the strongest answer, but if Black cannot get a ladder with Black `a' - White `b' - Black 'c' after White 21 he gets a bad result.

Dia. 4 (profit). Playing 1 (instead of 10 in Dia. 3) and 3 is peaceful. Black does get a solid shape, but White takes considerable corner profit. The result is a success for White.


Dia. 3


Dia. 4

Dia. 5 (set pattern). White can also play the 3-5 combination. White lives up to 15 , and Black puts the finishing touch to his outward influence with 16.

Dia. 6 (a special case). Black has to watch out when White has the marked stone in place, as White can make the aggressive cut at 1 instead of 11 in Dia. 5. This lets Black in for a difficult fight, which means that his initial choice of joseki here was mistaken.


Dia. 5


Dia. 6

Dia. 7 (solid connection). Black 2 is the most solid move. If White 3, Black takes a firm grip on the corner territory with 4. However, White 5 is such a good point that this result is a little unsatisfactory for Black. Instead of $4-$

Dia. 8 (even). Extending at 1 is the key move. If White crawls into the corner with 2, Black settles the shape with 3 to 11 . White jumps out at 12, and the result is even.


Dia. 7


Dia. 8

Dia. 9 (focus on the right side). White 2 is a peaceful answer to 1. Black 3 and White 4 will probably follow. Black 'a' now becomes a very good follow-up on the right side.

Dia. 10 (the diagonal move). White 3 is also possible. Defending the corner with 4 is best for Black. Black 4 at 'a' reverts to Dia. 2 with White 4, Black `b', White `c'.


Dia. 9


Dia. 10

Dia. 11 (thin). Playing a diagonal move in the opposite direction with 3 might look efficient, but it makes White's position thin. Black can aim at 'a' and 'b'.

Dia. 12 (a solid corner). Blocking at 2 is a tight move. If 3, Black defends the corner again with 4 . Black gets a solid position.


Dia. 11


Dia. 12

Dia. 13 (captured). White 3 is a bad move, as White has no answer to Black 4. If White connects at 5, Black plays 6 to 20 and kills White's group unconditionally.

Dia. 14 (good for Black). White will probably push through at 1 instead of 5 in Dia. 13, but capturing a stone with 2 and 4 gives Black a satisfactory result. Black has secured the corner, while White has a heavy, eyeless group.


Dia. 13


Dia. 14

Dia. 15 (even). White can also answer 2 with the 3-5 combination. Black 6 is a key point. The result to 9 is even. If White plays 7 at ${ }^{\prime}$ ', defending at 8 is essential for Black.

Dia. 16 (a special case). On occasion Black 4 might be an interesting counter to 3. In general, however, permitting White to thrust his way through at 7 is unsatisfactory.


Dia. 15


Dia. 16

Dia. 17 (another special case). When White has a two-space extension on the right side, Black can counter 1 with the tesuji of 2. If White 3, Black attempts to take the corner with 4.

Dia. 18 (continuation). White 1 and 3 are not a threat. Likewise the cut at 7: Black fills in a liberty with 8 and wins the fight by one move. The marked black stone works very effectively.


Dia. 17


Dia. 18

Dia. 19 (variation). If White ignores 2, Black forces with 4, then secures the corner with 6. This is an example of how one varies one's response to White's invasion in accordance with the surrounding position.

Dia. 20 (ko). Resisting with 3 to 7 is an obstinate way of playing. Black connects tightly at 8 , then counters 9 by playing a ko.


Dia. 19


Dia. 20

Dia. 21 (flexible shape). If White plays 3, Black forces with 4, then dips down at 6 . This makes flexible shape, obviating any fears about eye-shape, and is a subtle way of playing.

Dia. 22 (miai). Even when the marked stone is only one space away, Black 2 is still good style. The point is to make miai of 'a' and ' b '.


Dia. 21


Dia. 22

## PATTERN THREE

Black has made a small knight extension from his enclosure. How does the presence of the white stone close up affect the corner? Where is the vital point?


Pattern Three

Dia. 1 (invasion). In this formation White 1 becomes the vital point. The presence of an ally so close makes an invasion possible even in as tight a corner as here.

Dia. 2 (forcing moves). Black 2 is a strong answer. Attaching at 3 next is good style. If 4 , White forces with 5 to 7 , bringing the exchange here to a close.


Dia. 1


Dia. 2

Dia. 3 (White dies). If White extends at 3, Black counters with 4. White struggles to live in the corner with 5 etc., but he is quelled by the placement at 12.

Dia. 4 (White dies). White might try 5 here, but it is no more successful. Black's clamp at 10 is the tesuji that dashes his hopes.

Dia. 5 (slack). Blocking at 4 looks slack. After 5, White can aim at attaching at 'a' later, so Black is dissatisfied.


Dia. 3


Dia. 4


Dia. 5

Dia. 6 (order of moves). We mentioned earlier that White 3 was good style. If Black 4, White extends at 5; Black more or less has to play 6 , so White links up with 7 and is satisfied. Instead of $6-$

Dia. 7 (satisfactory for White). If Black plays 1 to prevent White from linking up, White cuts once with 2 to 6 , forcing Black 7 , then cuts again with 8 and 10 . The continuation should be satisfactory for White.

Dia. 8 (heavy shape). If White simply cuts with 4 and 6 here, Black squeezes with 7 and 9 . This result is unsatisfactory for White as he gets heavy shape. The order of moves in Dia. 7 is important.


Dia. 6


Dia. 7


Dia. 8

10: connects

Dia. 9 (a wall). Black 3 is a peaceful move which lets White live with 4 etc. Cutting at 7 makes 9 sente, so Black builds a strong wall.

Dia. 10 (ko). Attaching at 2 is also possible of course. After 3, jumping to 5 is a good continuation for White. Even if Black attacks with 6 and 8 , White can get a ko.

Dia. 11 (slack). Answering 1 at 2 gives Black a slack, inert shape. White jumps to 3 , then answers 4 at 5 . The invasion is a success. Instead of $4-$


Dia. 12 (White escapes). If Black counters with 4 and 6, White plays 5 and 7. Black can cut off White 1, but White escapes to the outside with 13. Instead of $4-$

Dia. 13 (trade). If Black tries the placement at 1, White cuts with 2 and 4 . Black can capture two stones, but in exchange White develops his position on the right side.

Dia. 14 (slack). Black 2 is tight, but it gives White a free hand. White is satisfied with linking up with 3 and 5.


Dia. 12


Dia. 13


Dia. 14

## PATTERN FOUR

Black has made the large knight extension from his corner enclosure. Where does White invade?


Pattern Four

Dia. 1 (invasion). When White has an ally close by, White 1 is the only move. Black can answer at 'a', 'b' or 'c'.

Dia. 2 (blocking on top). If Black 2, White 3 and 5 are a good combination. Answering at 6 and 8 is correct for Black. White lives up to 15 , and Black gets outside influence.



Dia. 2

Dia. 3 (solid connection). If Black connects tightly at 6, White forces with 7 , then lives up to 13 . Black is satisfied with the outward influence that he has built up. Instead of $8-$

Dia. 4 (unreasonable). Black 1 and 3 are unreasonable: White will just give up his two stones and cut with 4 and 6 . He should be able to live. Dia. 5 (the atekomi). If Black 1 (an atekomi), White counters with 2 to 6 . Black 1 originally aimed at the peep at 'a', but the result to 6 is similar to Dia. 3.


Dia. 3


Dia. 4


Dia. 5

Dia. 6 (too mild). Black 2 is reasonable, but Black 4, permitting White to link up with 5 and 7, is much too mild. This result makes it too easy for White.

Dia. 7 (feasible for Black). Black can also block at 2. White 3 is heavy and gives Black the effective hane at 4 . Black 8 is an aggressive move which looks for a fight. Black keeps White separated with 12 and 14 and his prospects in the fight look reasonable.

Dia. 8 (slack). Extending at 8 is too heavy. Linking up with 9 makes White's invasion a success. Black still has a defect in his shape at 'a'.



Dia. 7


Dia. 8

Dia. 9 (heavy). Turning at 5 is a heavy move which makes the inefficient „empty triangle" shape. Black continues the attack by "leaning" on the stone to the left with 6 and 8 . White now has a heavy group to look after.

Dia. 10 (standard pattern). Countering Black 2 with the probe at 3 is a very clever strategy. If Black makes the strong answer at 4, White plays 5 to 9 , then links up with 11 . Instead of 10

Dia. 11 (variation). Black 10 is a strong move. White must cut at 11. The continuation is long but all forced. White lives and Black captures four stones.


Dia. 9


Dia. 10


Dia. 11

Dia. 12 (forcing moves). If Black 4, White forces with 5 and 7 and is satisfied.

Dia. 13 (not recommended). Descending at 2 is not recommended. After 5 and 7, Black 8 does not work. White cuts at 9, starting a fight which is unreasonable for Black.

Dia. 14 (sabaki). If Black hanes at 2, White answers with the crosscut tesuji at 3. If Black 4, White plays 5 and 7 and should be able to settle his group.


Dia. 12


Dia. 13


Dia. 14

Dia. 15 (connection). If Black hanes at 1 instead of 6 in Dia. 14, White hanes at 2. Black is forced to answer by making awkward shape with 3 . White then connects underneath with 4 to 12.

Dia. 16 (a fight). If White plays 3 and 5 immediately, Black 6 is possible. If White 7, Black plays 8 , and the fight moves into the center.


Dia. 15


Dia. 16 11: connects

Dia. 17 (unreasonable). Cutting with 1 and 3 instead of 8 in Dia. 16 is unreasonable. White forces with 4 , then cuts with 8 and 10. This fight is bad for Black.

Dia. 18 (slack). Blocking at 6 is slack, as White is satisfied with linkir,g up with 7 and 9 . White's invasion has been a success.


Dia. 17


Dia. 18

Dia. 19 (a running fight). White 3 is a little heavy. After Black 4, White hanes at 5 and 7 as preparation for jumping out to 9 . Black defends at 10, then both sides fight their way out into the center.

Dia. 20 (White lives). If Black 2, White 3 next is good style. If Black 4, White plays 5 and lives in sente up to 15 .


Dia. 19


Dia. 20

Dia. 21 (living on the side). If Black makes the two-step hane at 8 , White gives up his stones in the corner in exchange for a base on the right side.

Dia. 22 (living at the top). Playing 6 in an attempt to capture White is hoping for too much. White easily lives on the top edge with 7 to 15 . If Black 12 at 13, White lives with `a', Black 12, White 15.


Dia. 21


Dia. 22

## PATTERN FIVE

Black has made the extra-large knight extension from his corner enclosure. White can make a singlehanded invasion.


Pattern Five

Dia. 1 (invasion). When Black has made the wide extension, the single-handed invasion at 1 is possible. Black answers at ${ }^{\prime} \mathrm{a}^{\prime},{ }^{\prime} \mathrm{b}^{\prime}$ or 'c'.

Dia. 2 (corner profit). Black 2 makes sure of the corner profit. White heads for the center with 3 and 5 . This is a straightforward joseki.


Dia. I


Dia. 2

Dia. 3 (sealing White in). The aim of Black 2 is to seal White in and force him to live on the side. Black gets outward thickness as compensation.

Dia. 4 (semeai). If Black blocks at 1 instead of 6 in Dia. 3, White naturally cuts with 4 and 6 . If Black attempts to capture White with 7, a capturing race follows. After 18 -

Dia. 5 (ko). A ko results. White connects at 8 and 10 before fighting this ko. His prospects seem reasonable.


Dia. 3


Dia. 4


Dia. 5

7, 9: take ko
Dia. 6 (living in the corner). White might push up with 5 (instead of 5 in Dia. 3), then turn at 7. If so, he is able to live solidly in the corner and can aim at cutting at 'a' later.

Dia. 7 (unreasonable). Attempting to capture the corner white group with 1 here instead of 8 in Dia. 6 is unreasonable. White cuts at 2 and the continuation to 20 is forced. Next -

Dia. 8 (ko). Black gets an approach-move ko (yose-ko) in the corner. Usually White would be able to fight this ko, but it depends on whether there are any big ko threats. If White plays 6 at 'a', Black still plays 7 .


Dia. 6


Dia. 7


Dia. 8

Dia. 9 (the same result). Black can also connect at 1 instead of 4 in Dia. 6. If White goes into the corner with 2 , he lives in the same way as in Dia. 6, though Black's shape is a little different. Instead of $2-$

Dia. 10 (variation). White can also pull back at 2 . If Black blocks at 3, White lives up to 14 . Black is satisfied with his outward influence. Dia. 11 (similar result). What if Black blocks at 1 in the corner?

White plays the same tesuji at 4 and gets solid living shape up to 12. This is similar to Dia. 10.


Dia. 12 (ko). White attaches at 3 when he is confident that he can win a ko fight. After 5 extending at 6 is essential, so a ko follows with 7and 9.

Dia. 13 (life). If Black simply blocks at 1 instead of 8 in Dia. 12, White makes a diagonal connection at 2. Black 3 and 5 are solid; White lives with 6 and 8.

Dia. 14 (switching to the right side). Black can also make the extension at 4 . White plays 5 to 9 as a sacrifice to let him squeeze up to 19. With 21 White secures his position on the right side. Note that playing 12 at 15 gets Black into trouble when White pushes through at 12 .


Dia. 15 (life). If Black prefers to play 12 and 14 as here, White connects at 15 and lives at the top. Black's ponnuki with 16 and 18 gives him nice outward thickness.

Dia. 16 (not recommended). Escaping with 1 instead of 17 in Dia. 15 is dangerous. Black 2 is a good counter. After 7, Black forces with 8 , then attaches at 10 . White's position is hopeless.


Dia. 15


Dia. 16

Dia. 17 (jumping into the corner). White 5 is an interesting variation. If 6 , the solid connection at 7 is best. If Black then fixes up his shape with 8 , White lives with 9 .

Dia. 18 (a wall of steel). Attaching at 2 is a straightforward move. White can live in sente with 3 to 9 , but 8 and 10 complete an impressively solid wall. Black's thickness gives him a favorable result.


Dia. 17


Dia. 18

## PATTERN SIX

Black's formation at the top faces a white formation to the left. What is the best invasion point for White?


Dia. 1 (the only move). With this formation White 1 is the only move. It works well in conjunction with the back-up white stone to the left. Black answers at `a', `b' or 'c'.

Dia. 2 (standard pattern). Defending the corner with 2 is the standard move. White jumps lightly to 3, then keeps moving out into the center one step ahead of Black with 5. A fight in the center follows.


Dia. 3 (joseki). Pressing at 2 is also a standard move in this formation. White should push up at 3 before turning at 5 . He then plays the peep at 7 as a probe. If Black 8 , White lives with 9 to 15 , while Black builds thickness.

Dia. 4 (outward influence). If instead Black blocks at 8, White lives with 9 to 19. Black reinforces at 20 and is satisfied with his outward influence.


Dia. 3


Dia. 4

Dia. 5 (a large corner). If Black blocks at 1 instead of 10 in Dia. 4 , White cuts with 4 and 6 and takes the corner. The size of his corner is adequate compensation for giving up the three stones to the left, so White is satisfied.

Dia. 6 (outward influence). If Black connects at 8 , White answers at 9 . If Black attacks with 10, White forces with 11 and 13, then lives with 15 and 17. Black is still satisfied with his outward influence.


Dia. 5


Dia. 6

Dia. 7 (White's hane). White can also make the hane at 5. If Black cuts immediately at 6, White breaks through with 7 to 13 . The result seems to be equal.

Dia. 8 (aggressive). Black 6 is aggressive. If White 7, Black seizes the vital point of White's shape with 8 . A difficult fight follows after White 9.


Dia. 9 (sabaki). If White wants to settle his group, he attaches at 1 instead of 7 in Dia. 8. Black 2 is just what White wants. After 5 and 7, White has got sabaki shape.

Dia. 10 (counterattack). Black can counterattack by cutting at 2. White 3 is a tesuji. Black gives atari on the outside at 4 and the sequence to 12 follows. This is a reasonable result for both.


Dia. 11 (easy sabaki). If Black ataris at 4, White extends at 5, then gives a counter-atari at 7 . The continuation to 13 is likely. White's ponnuki gives him a flexible shape and, since `a' and ' $b$ ' are miai, he has no worries about his group.

Dia. 12 (variation). White can also cut at 5 instead of making a hane at 7. Black 6 is a severe move, so White has to content himself with escaping to the center with 7 to 13.



Dia. 12

Dia. 13 (later aji). Pulling back at 6 is a little bit too mild. White makes an exchange with 7 to 13, but he still has various kinds of aji in the corner. This is not satisfactory for Black.

Dia. 14 (set pattern). White can also switch to the corner with 3. He lives up to 17, and Black has to worry about the threat of the cut at `a' later.


Dia. 15 (set pattern). Attaching on top at 2 is also a joseki. After Black 4, White 5 and 7 are an effective combination. The usual answer is Black 8. If next White `a', Black answers with 'b', White 'c', Black `d'.

Dia. 16 (breakthrough). Connecting underneath with 1 instead of 8 in Dia. 15 is questionable. White breaks through with 2 to 6 and lays waste to the corner. This result looks good for White.


Dia. 17 (counter-atari). Giving a counter-atari at 3 is feasible, but after 5 Black has to worry about the possibility of White `a'.

Dia. 18 (set pattern). If White immediately jumps into the corner at 3, the sequence transposes to the joseki in Dia. 14.


Dia. 17


Dia. 18

Dia. 19 (escape). If White 3, Black pushes along at 4. Playing a probe next at 5 is correct timing. If Black blocks at 6 , White cuts with 7 and 9 , then extricates himself with 11.

Dia. 20 (blocking in the corner). If Black blocks at 6, White 7, 9 and 11 are the correct order of moves. Black defends at 12 , and White lives up to 21. Black is satisfied with his thickness.


Dia. 19


Dia. 20

Dia. 21 (risky). Changing the order by playing 1 and 3 first is risky. Once Black has reinforced at 4 , he may attempt to capture White with 8 instead of defending at 'a'. This is quite dangerous for White.

Dia. 22 (equal). Extending at 5 is a straightforward move. If Black strengthens the corner with 6 , White connects underneath with 7 etc.


Dia. 21


Dia. 22

Dia. 23 (variation). White can also extend at 3. If Black 4, White hanes at 5 and pushes into the center. He aims at attacking the black stone to the left.

Dia. 24 (building up influence). Blocking at 1 instead of 4 in Dia. 23 enables Black to build up powerful thickness. White abandons hope of getting out to the center and instead links up along the side.


Dia. 23


Dia. 24

Dia. 25 (blockade). The aim of 3 is to seal White in. White lives up to 10 and Black gets his outside influence.

Dia. 26 (blockade). White can also extend at 2; if 3, he lives with 4 to 8 . Black can also emphasize the corner by playing 3 at 'a', in which case White moves out with 'b'.


Dia. 25


Dia. 26

## PATTERNSEVEN

White's extension is one space closer to Black's formation. This position often comes up in actual play.


Dia. 1 (the correct invasion). When White has made the closeup extension, the correct invasion point is White 1. If Black 2, White jumps out with 3 and 5. Black plays `a' or `b' next.

Dia. 2 (the strongest counter). Black 2 is the strongest answer to 1 . After 3 to 7 , Black 8 is the tesuji.


Dia. 3 (continuation). Next White hanes at 1, and the moves to 7 follow. The cuts at 5 and 7 create aji for White to aim at later. Next -

Dia. 4 (standard pattern). Black connects at 1 . The standard sequence to 13 , in which every move is carefully timed, follows. White lives, but Black gets satisfactory thickness.


Dia. 5 (losing the corner). Extending at 8 (instead of 8 in Dia. 2) is bad. White pushes through at 9 and Black suffers a bad loss in the corner. Capturing two stones is no compensation.

Dia. 6 (getting it easy). If Black extends to 4 to avoid complications, White 5 relieves the pressure on his group. Black can force with 8 , but White makes good shape with 9 . He has achieved his objective in invading.


Dia. 5


Dia. 6

Dia. 7 (the clamp). The clamp at 6 is bad style. White extends at 7 and captures three stones in the sequence to 17 . This is a profitable result for White.

Dia. 8 (also profitable). Simply playing 7 to 11 also looks good enough. Swallowing up Black's stones at the top is big.


Dia. 7


Dia. 8

Dia. 9 (a fight). If White plays 3, the key point for Black is 4; it both defends the corner and spoils White's shape. In the center fight which follows, both sides have equal chances.

Dia. 10 (a wedge). Driving a wedge into White with 4 is a strong move. The continuation reverts to Dia. 2.


Dia. 11 (forcing move). If White can get Black to answer the forcing move of 3 at 4, he gets a much more comfortable position with 5, but -

Dia. 12 (sealed in). He has to expect Black to counter at 1 instead of 4 in Dia. 11. White can live, but Black blocks off his access to the center, so White is dissatisfied.


Dia. 11


Dia. 12

Dia. 13 (set pattern). Playing the probe at 3 is a possible strategy. If Black blocks at 4, the continuation from 5 is a joseki. White takes the corner, but Black builds a solid wall on the outside.

Dia. 14 (profit). In certain positions Black might play at 1 instead of 6 in Dia. 13. Black secures the corner profit with 3, but White skilfully uses the cut at 6 to build up influence on the right side.


Dia. 13


Dia. 14

Dia. 15 (Black's defect). Black can also block at 4, then cut across White's knight's move with 6 . White lives and Black builds influence, but Black is dissatisfied with the defect in his shape at 'a'.

Dia. 16 (going White's way). Connecting at 1 instead of 14 in Dia. 15 is a mistake. White 2 is a severe cut which enables White to dictate the subsequent flow of play.


Dia. 15
18:takes ko (at 6 )


Dia. 16
9: connects (under 3)

Dia. 17 (efficient for White). Playing at 1 instead of 6 in Dia. 15 gives White an effective move at 2. This makes good use of White's probe, setting up the hane at 'a'.

Dia. 18 (conventional). Black can also jump to 1. If White 2, Black takes a firm grip on the white stone with 3 and aims at the aji of 'a'. However, there is no guarantee that White will play so peacefully.


Dia. 19 (spirited). Instead of the conventional answer at 2 in Dia. 18, White may make the more vigorous response at 2 . The continuation to 11 is probable. The threat of White 'a' is quite severe. Instead of 5 -

Dia. 20 (good aji). Black might extend at 5 . The result to 13 gives Black good aji, but getting in the extension to 14 means that White has no cause for dissatisfaction.


Dia. 21 (aggressive). Black 7 is aggressive. White naturally cuts at 12, starting a difficult fight. After 22, a semeai follows in the corner.

Dia. 22 (the squeeze). With 1 etc., Black wins the fight, but White squeezes up to 20 and builds up outward influence in sente. This result looks satisfactory for White.


Dia. 23 (into the center). Black 4 is peaceful. White exchanges 5 for 6 , then moves into the center, erasing Black's moyo. He also secures a base with 15 and 17. Instead of $8-$

Dia. 24 (fighting spirit). Black 1 is a fighting move, but Black gets into trouble after White 2 to 6 .


Dia. 23


Dia. 24

Dia. 25 (a difficult fight). If Black plays 3, White still plays 4 and 6 . As in the previous diagram, Black is in for a difficult fight.

Dia. 26 (large profit). The aim of the 7-9 combination is to take control in the center. White builds thickness, but Black takes considerable profit up to 22.


Dia. 25


Dia. 26

## PATTERN EIGHT

With this formation there are a number of invasion points, but White still has to choose his move carefully.


Pattern Eight


Dia. 1


Dia. 2

Dia. 1 (wrong strategy). In this case, attaching at 1 is not very interesting. All the same, White gets a fair result with the sequence to 11 here. Instead of $8-$

Dia. 2 (complications). If Black hanes at 8 , White makes shape with 9 and 11. If Black 12 and 14, White gives atari at 'a'. The position has become a little complicated.

Dia. 3 (White caps). Black 1 (instead of 6 in Dias. 1 and 2) is thick, but White creates complications by capping at 2 .

Dia. 4 (jumping out). Jumping out at 1 before White caps is better. If White 2, Black takes territory with 3 and aims at continuing his attack.


Dia. 3


Dia. 4

Dia. 5 (a special case). An alternative strategy is to press at 4. This loses territory when White plays 5 and 7 , so it is recommended only when Black's thickness up to 16 works effectively.

Dia. 6 (inappropriate). Black 4 and 6 are dubious when White has the marked stone at the top. The reason is that after 10 White can gouge out the corner with 11 and 13.


Dia. 5


Dia. 6

Dia. 7 (calm response). Black 4 is a calm move which nips in the bud White's attack in Dia. 6 and White's hane at 'a'. White must move out with 5 and 7.

Dia. 8 (light). Black is reluctant to answer at 2 as White can continue lightly with 3 and 5 . White could also play 7 at 'a'.

Dia. 9 (similar). Black can also descend at 2, but the continuation is much the same as in Dia. 8.


Dia. 7


Dia. 8


Dia. 9

Dia. 10 (sabaki). If Black attacks at 2 , White 3 is the tesuji for sabaki. Up to 11, White erases Black's territory and settles his group.

Dia. 11 (bad for Black). Descending at 4 is unreasonable. Whatever happens, White gets a good result after 5 .

Dia. 12 (the invasion). Invading at 1 is just a little bit unreasonable. Black answers at 'a' or 'b'.

Dia. 13 (moving out). Black 2 is severe. If 3, Black forces with 4. Both sides then move out into the center.


Dia. 14 (bad style). Cutting with 4 and 6 is bad style. White makes good shape up to 13 .

Dia. 15 (initiative to Black). White plays 3 because he dislikes Black's forcing move at 4 in Dia. 13. However, this way Black takes the lead in moving out into the center.

Dia. 13

Dia. 14

Dia. 15

Dia. 16 (correct shape). If White 1 instead of 7 in Dia. 15, Black 2 is correct shape. White moves out with 3 to 7 .

Dia. 17 (breakthrough). White can also push up at 3. If Black 6, White breaks through into the center with 7 to 13.

Dia. 18 (unreasonable). Attempting to capture Black with 1 instead of 9 in Dia. 17 is unreasonable. Black lives up to 10: he threatens to cut at `\(a\) ', so White cannot play` $b$ '.


Dia. 16


Dia. 17


Dia. 18

Dia. 19 (wrong strategy). Playing 7 and 9 is a mistake when Black has the one-space enclosure. Black takes territory while attacking White.

Dia. 20 (influence). Going for profit with 1 (instead of 10 in Dia. 19) and 3 is bad. White's ponnuki gives him strong influence.

Dia. 21 (peaceful). Black 2 takes the pressure off White. Jumping to 3 is good enough. Black plays 'a' or ' $b$ ' next.

Dia. 22 (the contact play). If Black continues with 1, White attaches at 2 . If Black 3, White 4 and 6 make the invasion a success.

Dia. 23 (connection). White can link up even if Black hanes at

3. The result to 8 is a great success for White.

Dia. 24 (the squeeze). Attaching at 3 immediately is also possible. Black takes a lot of profit, but White gets an excellent squeeze and is satisfied.


Dia. 22


Dia. 23


Dia. 24

Dia. 25 (unreasonable). Attempting to capture Black with 1 in-
stead of 11 in Dia. 24 is unreasonable. Black 4 makes miai of 'a' and ' $b$ '.

Dia. 26 (the knight's move). Black 2 is possible in certain positions. Black uses the sacrifice at 4 to wall off the center.


Dia. 25


Dia. 26

## PATTERN NINE

This is another common formation. The key is the location of the white stone at the top.


Pattern Nine

Dia. 1 (a high-level strategy).
Playing the probe at 1 is a high-level strategy. Black can answer at 2 or 'a' or ' $b$ '. Judging which is best is very difficult.

Dia. 2 (light sabaki). White 3 is a light follow-up. If Black 4, White can make the effective forcing move at 5 . Up to 7, White succeeds in his aim of reducing Black's moyo.



Dia. 2

Dia. 3 (White lives immediately). White can also play at 3 if he wants to live immediately. Black builds thickness, but he is a little dissatisfied because of the narrowness of his position at the top.

Dia. 4 (White lives). Playing at 4 instead of 7 makes little difference. White lives in almost exactly the same way as in Dia. 3. Black is still dissatisfied with the narrowness of his position.


Dia. 3


Dia. 4

Dia. 5 (no worries). Black 4 is a vital point, but White can cope with it with 5 . White forces once with 9 , then secures his base up to 15 . If Black plays in at 'a', White is safe with ' $b$ '.

Dia. 6 (White fights back). If Black extends at 2, White resists with 3 and 5 . Black naturally cuts at 6 , but 7 and 9 are a well-timed combination. White lives with 11 to 17 and his invasion is a success.


Dia. 5


Dia. 6

Dia. 7 (the contact play). If Black blocks on the outside at 2 , the white stone at the top proves its usefulness. After White 3, White has the stylish move at 5 , which looks both ways. If Black 6, White continues with the contact play tesuji of 7. Next -

Dia. 8 (White squeezes). If Black 1, White sacrifices his corner stones and squeezes on the outside with 2 etc.


Dia. 7


Dia. 8

7: connects (under 5)
Dia. 9 (resilient shape). If Black plays 1 to prevent White from linking up at the top, the diagonal connection at 2 gives White a resilient shape. If Black 'a', White fights a ko with ' $b$ '.

Dia. 10 (thickness). Black 1 also looks possible. If White 2, Black builds thickness with 3.


Dia. 9


Dia. 10

## PATTERN TEN

Black has a double-wing formation and White has an extension up the right side. This pattern also often comes up in actual play.


Pattem Ten


Dia. 1


Dia. 2

Dia. 1 (the shoulder-hit). The shoulder-hit at 1 is perfect. After 2 and 3, Black 4 is essential. The joseki concludes with 5. Instead of 5 -

Dia. 2 (leaning attack). If White turns at 1, Black builds up strength by "leaning" on the white stone on the side with 2 and 4. White is in danger of being subjected to a large-scale attack.

Dia. 3 (White must turn). Black may push up once more at 4 before playing 6 . In this case, turning at 7 is essential for White.

Dia. 4 (a strong attack). If White omits 7 in Dia. 3, Black makes a very strong attack with 1 . This would be unbearable for White.

Dia. 5 (an ineffective attack). 1f Black continues after Dia. 3 by trying to split White with 1, White counters with 2 etc., and Black's attack has little effect.


Dia. 3


Dia. 4


Dia. 5

Dia. 6 (dubious). Black 4 and 6 are dubious moves. White makes good shape and can aim at blocking at 'a' or exploiting the thinness of Black's position at the top.

Dia. 7 (the jump). White can also jump to 3 . Wedging in at 4 is correct style. Black is satisfied with connecting underneath with 8, while White builds thickness with 9.


Dia. 6


Dia. 7

Dia. 8 (set pattern). Black 2 and 4 are also a joseki. Black attacks by encircling White with 8 .

Dia. 9 (the deep invasion). White 1 invades too deeply: it is unreasonable. White gets into trouble after Black 2. When Black seals him in up to 10, he cannot connect underneath with 'a'.

Dia. 10 (wrong position). When White has made the close-up ( $\Delta$ extension, the shoulder-hit at 1 is bad, as Black is happy to push up with 2 and 4.


Dia. 8


Dia. 9


Dia. 10

## PATTERN ELEVEN

Black has made a one-space jump from his extension. How does White make use of his close-up extension?


Pattern Eleven


Dia. 1


Dia. 2

Dia. 1 (standard move). In this kind of position, the light reducing moves of 1 and 3 are standard.

Dia. 2 (invasion). White can invade at 1, but Black will then try to punish him for his unreasonable play. The sequence to 13 is one set pattern. Instead of 8 -

Dia. 3 (a strong move). Black 8 is a strong move. White has to be careful about his continuation after 12 .

Dia. 4 (White's tesuji). White ataris at 1, then plays in at 3 , which in this position is a tesuji. This enables White to break through Black's encircling net.

Dia. 5 (collapse). White collapses if he plays at 1 instead of 1 in Dia. 4. After the forced sequence to 8 , ' $a$ ' and ' $b$ ' are miai for Black.


Dia. 3


Dia. 4


Dia. 5

Dia. 6 (sabaki). Black 2 is a severe move. White seeks sabaki by attaching at 3. If Black 4 and 6 , White settles his group up to 11 .

Dia. 7 (trade). If Black resists with 6, White switches to the corner with 7 and 9. White lives up to 17 and does not regret having strengthened Black's position on the outside.

Dia. 8 (cramped). White 3 and 5 are not recommended, as Black 6 cramps White's position. If White 7 , Black presses at 8 , making life uncomfortable for White.


## PATTERN TWELVE

Black's corner formation is very solid, but White has played stones close-up on both sides.


Pattern Twelve

Dia. 1 (the contact play). Attaching at 1 is the most interesting move. If Black 2 and 4, White lives with 5, following the familiar invasion joseki. Living like this, with no adverse effects on the outside, is satisfactory for White.

Dia. 2 (useful forcing move). Black usually cuts at 4 . White then plays 5 and 7, a combination related to his forcing moves in the corner. Black is compelled to defend at 10, giving White an efficient result.


Dia. I


Dia. 2

Dia. 3 (White lands a punch). If Black omits 10 in Dia. 2, White rocks him with the 1-3 combination (though he may leave it for later on). Neither of the ataris at 'a' and 'b' works well for Black.

Dia. 4 (overpowering influence). If Black simply pulls back at 2 (instead of 6 in Dia. 2), White makes a solid thrust at 3, then builds up powerful influence in the center with 5 and 7 . Once again White has made effective use of his forcing moves in the corner.


Dia. 3


Dia. 4

Dia. 5 (unbearable for Black). If Black neglects to turn at 4 in Dia. 4, White forces with 1, then steam-rollers his way through with 3 and 5 . White not only forces with 9 but also squeezes with 11 - a miserable result for Black.

Dia. 6 (changing course). If Black resists with 2 , White switches to 3 . The probe at 1 proves its usefulness in enabling White to live at the top.


Dia. 5


Dia. 6

Dia. 7 (the peep). White can also try the peep at 1 . If Black blocks at 2, White cleverly switches to 3. Black has to connect at 4, then answer submissively with 6 and 8 . White has succeeded in reducing Black's moyo.

Dia. 8 (ko). White can also try gouging out the top with 3 . The sequence to 17 follows, after which Black has the option of starting a ko (with Black 'a', White `b', Black `c'). However, there are some defects in Black's wall, so this approach has a drawback and an advantage compared with reducing from on top as in Dia. 7.


Dia. 7


Dia. 8

## PATTERN THIRTEEN

Black's formation is the same as in Pattern Twelve, except that he has made a wider extension at the top. What difference does this make?


Pattern Thirteen

Dia. 1 (the contact play). The combination of 1 and 3 is a tesuji applicable in a wide range of positions. Attaching at 'a' after Black 4 is the same idea as in Dia. 2 in Pattern Twelve. Because of Black's wide position at the top, however, a direct invasion also looks possible.

Dia. 2 (the invasion). Plunging in at 1 is possible. If Black 2, White prepares to play a ko with 3 to 7 .


Dia. 1


Dia. 2

Dia. 3 (slack). Descending at 4 is not good: it makes life too easy for White. Black will be dissatisfied with the result to 11.

Dia. 4 (sacrifice). White can also cut at 1 instead of 7 in Dia. 3. He gives up the corner stones but captures the black stone on the side. White is looking good.


Dia. 3


Dia. 4

Dia. 5 (bad aji). If Black descends at 4, White prepares to fight a ko with 5 to 9. Actually, Black can destroy White's eye-shape by playing in at 'a', but Black gets bad aji.

Dia. 6 (sabaki). The submarine invasion at 1 is an interesting variation. If Black 2, White plays the probe at 3 ; if Black 4, White makes light sabaki shape with 5 and 7.


Dia. 5


Dia. 6

Dia. 7 (reducing from the top). If Black answers at 4, White changes his strategy. Instead of burrowing into the corner, he plays light reducing moves on top. First, he presses Black down with 7 and 9, then switches to 11 and 13.

Dia. 8 (life). If Black tries to seal White in with 2, White gouges out the corner. White 11 is sente, so White lives with 13.



Dia. 8

Dia. 9 (variation). White can also answer at 3. Black now has to defend with 4 as the sequence in Dia. 8 would give White too big a life in the corner. The moves from 5 are forced. White lives, but Black builds a solid wall. Note that White 15 is a crucial move.

Dia. 10 (into the center). Black 2 is a peaceful move. White lightly jumps out into the center, satisfied with Black's submissive response at 2 and 4.



Dia. 10

## PATTERN FOURTEEN

Black's formation is so solid that White has to be very careful about how he invades it. Where is Black's weak point?


Pattern Fourteen

Dia. 1 (making full use of the probe). White begins with the probe at 1. If Black 2, White probes again with 3. White makes maximum use of this corner exchange. He continues by reducing from above with 5 and 7; if Black then takes the good point of 8 , White 9 to 13 are an effective follow-up.


Dia. 1

Dia. 2 (successful forcing moves). Black might defend at 8 to prevent White from playing the 9-13 sequence in Dia. 1. In that case, White extends at 9 so that he can force with 11, then attaches at 13. White has played a string of tesujis with perfect timing,


Dia. 2 and the result to 19 is a success for him.

Dia. 3 (White is satisfied). If Black makes the solid extension at 8, White can be satisfied with depressing Black's position with 9. He is happy with the result to 11.


Dia. 3
Dia. 4 (remaining aji). If Black plays 4 , White can live in the corner by extending at 'a' later, so he does not mind strengthening Black by forcing with 5 and 7 . He then expands his moyo with 9 .


## PATTERN FIFTEEN

What to do about the black moyo? There are no allies in the vicinity, so White has to be careful. Going in deep is taboo.


Dia. 1 (the weakest point). Striking at Black's weakest point with the shoulder-hit of 1 is correct. If Black 2 , White keeps pushing with 3 and 5 . Next -

Dia. 2 (sacrifice). Continuing with a probe at 1 shows good timing. Crawling along the third line in Dia. 1 becomes meaningless if Black doesn't keep the corner, so he will answer at 2. White sacrifices two more stones so that he can force with 7. With 9, White has pulled off a deep invasion of Black's moyo.



Dia. 3 (pulling back). White can also continue after Dia. 1 by making the light reducing move at 1. If Black 2 and 4, White gets good sente moves at 5 and 7, making effective use of the earlier exchange at the top. After 8, White discreetly pulls back to 9 , his mission accomplished.

Dia. 4 (solid). Pulling back to the center with 3 immediately is a solid way to play. White aims at exploiting the thinness of the corner by attaching at 'a' in the future. If Black then answers at ' $b$ ', White will crosscut at 'c'.


Dia. 5 (swift-moving). White 3 is light and speedy. Black counters by building thickness with 4 (a warikomi) and 6 . White answers just once at 5 , then switches to 7 and 9 on the right. This light play feels right here. Starting a head-on fight would be unprofitable.

Dia. 6 (White's ally). When White has an ally lying in wait around $\otimes$ Black pushes up with 2 and 4 to keep White separated. After 5, Black 6 is essential.


Dia. 5


Dia. 6

## PATTERN SIXTEEN

Black's position is just about ideal. In a game you shouldn't really let him make such a good formation, but nonetheless there is still scope for action on White's part.


Pattern Sixteen

Dia. 1 (the invasion). White 1 is the standard invasion, but since he is so strong here Black will attempt to capture White with 2 to 6 . White fights back with 7 to 11 , but he cannot get unconditional life.

Dia. 2 (success). The aim of 10 here is to capture the corner outright, but White has a counter. He sacrifices his corner stones and squeezes with the sequence from 15 on. He then retreats rapidly with the shoulder-hit at 25 and is satisfied.



Dia. 2

24: connects (at 15)

Dia. 3 (life). White 1 is a subtle move with many implications. Depending on Black's response, White may commence operations immediately. If Black pulls back at 4, living promptly with 5 is good enough.

Dia. 4 (reduction). If Black cuts at 4 , White switches to the light reducing move at 5 . He gives atari once at 7 before retreating with 9 . This leaves White with the option of playing ' $a$ ', but if Black plays 'a', White gets sente.


Dia. 3


Dia. 4


Reference Figure 1

Reference Figure 1 (starting a fight). When Black made the allout extension to $\triangle$, White promptly invaded at 1 . In this position White `a' would be dubious. Instead White 1 seizes the opportunity to start a fight. When Black attaches at 4, White answers at 5, his strategy being to build thickness.


Reference Figure 2 (profit and influence). Black 1 is a severe move. The conventional idea here would be Black 'a' or 'b'. If White plays 2 at 12 , Black extends to 'c', simplifying the game. White 2 shows natural fighting spirit; the set pattern to 14 follows. Black takes profit and White secures influence.


Reference Figure 3 (forming a moyo). In this position the forthright invasion at 1 was a severe move. Black's aim with 2 was to seal White in and to build strength in the center. White gouged out the side up to 13, but Black built up a center moyo, continuing with Black `a', White `b', Black `c', White `d', Black `e'.


Reference Diagram (a special joseki). This position is taken from a professional game, but the shape has been changed a little. Here the probe at 1 is a good move; if Black 2, switching to 3 is an interesting strategy which works well in some positions. Up to 7 White succeeds in isolating Black's center bottom star-point stone. If White 3 at 4, Black 'a' makes the position difficult for White.

## CHAPTER FOUR

## Invasions Under and Near the Star-Point

## PATTERN ONE

When we learn go, we first run into the star-point. It provides us with the basic invasion techniques.


Pattern One


Dia. 1


Dia. 2


13: connects (at 6 )


Dia. 4

Dia. 1 (joseki). The pattern to 12 is a standard invasion joseki. White secures profit in the corner and Black secures compensating influence.

Dia. 2 (a little slack). Black can also make the two-step hane at 6. If White captures a stone with 7 to 11, Black takes back the corner territory with 10 and 12. The joseki ends with White's extension to 13, but the result seems a little slack for Black.

Dia. 3 (thickness). The aim of giving atari on top at 10 is to build up thickness for Black. If White connects at 13, Black extends at 14; if instead White plays 11 at 12, Black takes the corner with Black 'a', White 11, Black ' $b$ ', and Black has gained by playing 10.

Dia. 4 (variation). White 7 and 9 are an alternative pattern. Black connects at 10, then takes the corner while White gets a ponnuki.

## PATTERN TWO

Black has made a one-space extension from the star-point stone. A single-handed invasion is unusual, but it is of course possible.


Pattern Two

Dia. 1 (3-3 invasion). Invading at 1 is the usual approach: it is the vital point. If Black 2, White 3 makes good shape; if 4, White lives up to 11.

Dis. 2 (losing points). Giving atari at 6 before blocking at 8 is bad. White captures the stone and Black gets no compensation for his loss.


Dia. 1


Dia. 2

Dia. 3 (emphasizing the right side). It's different, however, if Black connects at 1 instead of 8 in Dia. 2. Emphasizing the right side like this is possible. If Black 3 and 5, White lives up to 6 .

Dia. 4 (unreasonable). Black can also jump down towards the edge with 4 . White will seek a base with 5 to 9 and attempting to take away his eye-shape immediately with 10 is unreasonable. Black collapses after the forced continuation to 19.


Dia. 3


Dia. 4

Dia. 5 (unsuccessful). Attaching at 4 is a short-tempered response to White 3. Black's attempt to kill White with 10 is unlikely to succeed. White counters with the carefully timed sequence to 23 and is virtually alive. Black has to worry about his weak point at 'a'.

Dia. 6 (alternative strategy). Blocking on the inside at 2 is feasible in some positions. White lives in the corner and Black builds up outward influence.


Dia. 5


Dia. 6

## PATTERN THREE

Black has made an extension along the top and White has made an approach move. Invading should be easy.


Pattem Three

Dia. 1 (the 3-3 invasion). Invading at 1 is the simplest and most effective move. However, invading at other points, such as 'a' and ` $b$ ', is also possible.

Dia. 2 (joseki). Black usually blocks at 2, whereupon White makes life with 3 and 7 . Black attaches at 8 to settle the shape, and the joseki concludes with his reinforcement at 14 . Both sides are satisfied


Dia. 1


Dia. 2

Dia. 3 (variation). White can also make the diagonal connection at 5 . After 7 he can leap to 9 . This is a division of profit and influence, but White's shape is just a little thin.

Dia. 4 (sente). Blocking at 4 is possible on occasion, especially when one is concerned to secure sente in order to switch to another large point. Black contents himself with the forcing move at 6 , but White is satisfied with his invasion.


Dia. 3


Dia. 4

Dia. 5 (set pattern). Depending on the position at the top and on the right side, White may prefer to invade at 1. Black usually answers at 2 , whereupon White plays the probe at 3 . White lives up to 17 and Black completes his center blockade with 18. This is a standard pattern.

Dia. 6 (slack). Black 6, attempting to catch the white stone, is slack. White gets a larger corner than before with 7 etc. Note that White 11 is a tesuji for connection.


Dia. 5


Dia. 6

Dia. 7 (variation). If Black plays 1 instead of 8 in Dia. 5, White extends at 2. Black captures a stone with 3 and 5 and White lives in the corner. Later White 'a' will be sente.

Dia. 8 (variation). If White backtracks with 5 instead of 5 in Dia. 5, Black blocks at 6 . White lives in sente up to 13. Black next defends at `a' or plays Black `b', White `c', Black `d'.


Dia. 7


Dia. 8

Dia. 9 (bad aji). Blocking at 4 gives Black bad aji. White pushes through at 5, then turns back at 7. If Black 8, White lives with 9 to 19, while Black builds outward influence. Next, playing around 'a' becomes urgent.

Dia. 10 (risky). Extending at 1 instead of connecting at 8 in Dia. 9 gives Black even worse aji. When White cuts at 2, Black has to play 3. After 4 and 6, White has the follow-up tesuji at 8 . Next -


Dia. 9


Dia. 10

Dia. 11 (sente). If Black 1, White forces with 2 and 4, then makes a sacrifice with 6 . Black 7 to 11 are all forced. White next forces with 12 , then lives in sente with 14 . He is satisfied.

Dia. 12 (little difference). Descending at 1 makes little difference to the result. White 6 is a clever move. White forces with 8 and 10, then again lives in sente with 12 .


Dia. 11


Dia. 12

Dia. 13 (tesuji). If Black connects solidly at 8 , the tesuji of 9 works perfectly. White easily escapes into the center.

Dia. 14 (not the same). Giving atari at 1 , then pushing through with 3 and 5, looks like a tesuji and achieves the same aim of getting into the center, but it is not the same. This way Black keeps one step ahead and White gets heavy shape. White 1 is not recommended.


Dia. 13


Dia. 14

Dia. 15 (sabaki rhythm). White can also attach at 3. Black 6 is a good move. The two-step hane at 7 builds momentum for sabaki. If Black 8, White intends to fight a ko.

Dia. 16 (heavy). Pushing out with 7 and 9 is bad. Black 10 takes away White's base and makes his group vulnerable to attack.

Dia. 17 (Black attaches on top). Attaching at 2 is a standard response. White gouges out the top with 3 to 11, but Black builds outward influence, then secures his corner with 12. Black is satisfied.


Dia. 15


Dia. 16


Dia. 17

Dia. 18 (outward influence). Black can also extend at 8 in answer to 7 . White crawls once more before living with 11 . Black 12 is correct shape in this kind of position. The result is a division between profit and influence.

Dia. 19 (sealing White in). Black 1 instead of 6 in Dia. 18 is a strong move. White lives with 2 to 8 , but Black seals him in tightly, though in gote.


Dia. 18


Dia. 19


Dia. 20

Dia. 20 (reckless). Answering Black 3 by cutting with 4 and 6 is reckless. Black smartly forces with 7 and 9 , then captures with 13. His outward influence is even more impressive than before.


Dia. 21


Dia. 22

Dia. 21 (fighting spirit). Fighting spirit would probably lead White to hane at 4 . White lives in the corner, but Black is satisfied with capturing the three white stones. White plays this way where. he is dissatisfied with the result in Dia. 19.

Dia. 22 (good for Black). Pulling back at 4 is also possible. White 5 is the tesuji for sabaki. If Black 6, White pulls back at 7 and lives in the corner, but capturing the two stones gives Black a good result.


Dia. 23


Dia. 24

Dia. 23 (blockade). Black could also answer White 5 by blocking at 6 . White 7 is a tesuji. If Black 8 , White lives up to 13 . Black completes his blockade by connecting solidly at 14 .

Dia. 24 (crude). Black 1 (instead of 8 in Dia. 23) and 3 here are a crude combination. White 6 puts Black on the spot. If he blocks at ' $a$ ', he is left with a weakness at ' $b$ '.

Dia. 25 (switching to the 3-3 point). White could also play for an exchange by invading at the 3-3 point with 5 . White forces with 9, then pushes up at 11. As in Dia. 22, the result is good for Black.

Dia. 26 (collapse). Intercepting at 1 (instead of 6 in Dia. 25) is bad. When White plays 2, Black cannot block at 3, as he collapses after White 4 to 8.

Dia. 27 (a large corner). However, if Black blocks at 3, White connects underneath with 4 . Connecting solidly at 5 gives Black good aji, but White gouges out a large corner territory up to 6 . This is unsatisfactory for Black.


Dia. 25


Dia. 26


Dia. 27

Dia. 28 (the hanekomi). The hanekomi of White 3 is also possible. Giving atari on the outside at 4 is the peaceful answer. Black next pulls back at 6 .

Dia. 29 (thickness for Black). Making the hane at 5 is not recommended. Black gets excellent thickness with the ponnuki. White may have broken through Black's net, but his group is heavy.


Dia. 28


Dia. 29

Dia. 30 (the tortoise shell). White 3,5 and 7 are bad style. White uses his sacrifice to take the corner, but Black makes the ideal "tortoise shell" shape (worth 60 points, according to the proverb, which makes it twice as strong as a ponnuki) with 16. Black gets superb thickness, while White's corner is not yet secure.

Dia. 31 (corner aji). Black can aim at playing 1 to 5 in the corner after the result in Dia. 30. If White plays 2 at 3, Black attaches at 'a'. There are also various other moves Black can aim at. White can hardly count this corner as his territory.


Dia. 30


Dia. 31

12: connects (at 1)
Dia. 32 (straightforward). If White plays 3, Black's simplest answer is to block on top at 4 , then defend the corner with 6 . He could also build outward influence by extending at 7 with 6 .

Dia. 33 (driving White out). Black guards the corner with 2 and 4 and drives White out into the center, but his strategy is a little unnatural. If White 5, Black chases White out with 6 to 10, but this way of playing is not recommended for Black.


Dia. 32


Dia. 33

Dia. 34 (negative). If White jumps lightly out to 5, Black keeps White separated by jumping to 6 . This pattern often comes up in handicap games, but Black's approach here is negative. Reinforcing with 7 is an important point.

Dia. 35 (set pattern). Attaching at 1 is sometimes a powerful move. Black 2 is the peaceful answer. A running fight develops and moves into the center. White has more or less achieved his objective in attaching at 1.

Dia. 36 (alternative for White). White can also jump to 5. If Black 6, White makes good shape with 7. Black plays 8 to make White heavy, then drives him out into the center with 10 and 1 ?


Dia. 34


Dia. 35


Dia. 36

Dia. 37 (natural rhythm). If White descends at 3, Black blocks at 4 . White pushes up at 5 , gaining the momentum to make the shoulder-hit at 7 . Black secures the corner territory with 8 .

Dia. 38 (hane on top). Black 2 is a strong move. White counters with 3 to 7 . Since he has driven a wedge through Black's sphere of influence, he is satisfied.


Dia. 37


Dia. 38

Dia. 39 (variation for White). White can also attach at 5, then extend at 7 in order to settle his stones. If Black 8, White 9 is correct shape, but Black is satisfied, as his connecting move at 10 works perfectly.

Dia. 40 (a trade). Jumping into the center one step ahead of White with 4 (instead of connecting immediately at 6) is also feasible. If White 5, Black 6 is correct shape. A trade follows, with White taking the corner.

Dia. 41 (complications). If Black blocks at 1 instead of 8 in Dia. 40, complications ensue when White pushes through and cuts. Black 5 is correct shape, but Black must jump to 7 when White plays 6 . This is a slightly disagreeable result for Black.


Dia. 39


Dia. 40


Dia. 41

Dia. 42 (breakthrough). Blocking at 1 instead of 6 in Dia. 40 is bad style. Black suffers a setback when White breaks through into the center with 2 etc.

Dia. 43 (Black connects). Black 1 is also possible. White can answer simply, pushing out with 2 to 6 , then capping at 8 . This should take care of his group.


Dia. 42


Dia. 43

Dia. 44 (variation). Countering immediately with a hane at 3 is possible. Black will resist with 4 and 6 . In the continuation from 7, Black is happy to follow orders and capture the three white stones. This is good enough for him.

Dia. 45 (trade). The counter-atari at 5 is another variation. Making ponnukis with 6 and 10 is good enough for Black, but connecting with 12 is slack. The result to 13 gives White quite good shape.


Dia. 44


Dia. 45
12: connects (at 3)

Dia. 46 (ko). Instead of connecting with 12 in Dia. 45, Black should aim at starting a ko with 1 . This is the fighting move.

Dia. 47 (target for attack). White can also switch to the shoul-der-hit at 3. If Black gives atari at 4, White descends at 5 and makes the solitary black stone at the top his target for attack.


Dia. 46


Dia. 47

Dia. 48 (set pattern). Black can also make the hane on the third line at 2 . If White 3 , he cuts at 4 and the set pattern to 12 follows. Black gets profit and White outside thickness.

Dia. 49 (variation). In special circumstances White might extend at 9 here instead of 9 in Dia. 48. Black counters with 10 to 14 to set up the tesuji at 16. White secures a base in the corner and Black builds thickness.


Dia. 48


Dia. 49

20: plays atari (at 2)
Dia. 50 (an exception). Connecting at 1 here instead of 6 in Dia. 49 is usually bad for Black. The reason is that White builds thickness with 2 and 4 . Black does secure the top area by connecting underneath, but he should only play like this in a position in which White's thickness is ineffective.


## PATTERN FOUR

This pattern also comes up constantly in both even and handicap games. What is the most effective invasion point for White?


Pattern Four

Dia. 1 (3-3 invasion). In this pattern also the vital point for invading is the 3-3 point. Black has four answers: 'a' to 'd'.

Dia. 2 (set pattern). Black 2 is a positive response. Black is prepared to let White live in the corner; in return, he cuts off the two outside stones and prepares to attack them. The sequence to 14 is a joseki.



Dia. 2

Dia. 3 (variation). White plays 9 when he is prepared to give up the corner to Black in return for a base on the top edge. When White plays this hane, Black naturally cuts at 10.

Dia. 4 (standard pattern). White continues by connecting at 1 , then playing 3 and 5 . The pattern concludes with 6 . The question now is how useful Black's outside thickness will prove to be.


Dia. 3


Dia. 4

Dia. 5 (variation). Instead of giving atari at 2 White can try attaching at 1. Black answers simply, building up his outside thickness with 2 to 6 . White forces with 7, then crawls at 9 .

Dia. 6 (slack). Extending at 10 (instead of cutting at 10 in Dia. 3) looks a little slack. In Dias. 3 and 4, Black got some corner territory, but here he gets nothing but outside influence.


Dia. 5


Dia. 6

Dia. 7 (the knight's move). White can also run along the top with 3. In response, Black 4 is correct shape. If White 5, Black blocks his way out with 6 , and White is forced to make a small life in the corner.

Dia. 8 (exception). In some positions, Black might menace White with the diagonal move at 2 . Both 3 and 4 are good shape. White plays 5 to live, then drops back to 7 in response to Black 6.

Dia. 9 (a plus and a minus). Black can also attach at 4 instead of 4 in Dia. 8. White blocks at 5, then extends at 7, but Black takes the key point of 8 . Compared to Dia. 8, Black makes a gain on the right side but he suffers at the top.


Dia. 7


Dia. 8


Dia. 9

Dia. 10 (guzumi). Black's strongest counter is Black 2. This move is called guzumi, the name for the bad-shape empty triangle when it is an effective move. It is a move for special cases and it has appeared in the games of high-dan professional players. White usually leaves the corner as it is and waits for a good opportunity to continue play here.

Dia. 11 (continuation). If White continues immediately in the corner, the diagonal move at 1 is correct style. If Black 2, White extends at 3 . White lives up to 17, but this result is not good for him.


Dia. 10


Dia. 11

Dia. 12 (corner life). White plays 1 if he wants to live in the corner. He succeeds up to 7, but this result is not good for him either. Doing something in the corner immediately is not advisable.

Dia. 13 (a loss for Black). Blocking on the inside at 2 is negative and slack. Black plays 4 next when he wants to settle the shape. White has been given a comfortable position.

Dia. 14 (aggressive). The aim of the guzumi at 4 is to leave scope to attack White. In many cases White keeps 5 in reserve.


Dia. 12


Dia. 13


Dia. 14

Dia. 15 (later aji). White usually leaves the corner as it is after 4. His strategy then revolves around the aji of the diagonal connection at 'a'. If he gets a chance to play there, he continues in the corner with 'c', not with 'b'.

Dia. 16 (corner territory). When Black really wants to keep the corner territory, he can play the 2-4 combination. For his part, White is satisfied with making a ponnuki in sente.


Dia. 15


Dia. 16

## PATTERN FIVE

Black has made an extension down the right side from his star-point shimari. Where does White invade?


Pattern Five

Dia. 1 (outside block). Attaching at 1 is an interesting move in this position. Black can block on the outside at 2 or on the inside at 'a'. If Black 2, White 3 to 7 follow.

Dia. 2 (correct timing). Black continues by attaching at 1 . If White 2 , making a probe at 3 is a clever strategic move. If White 4 , Black takes sente with 5.


Dia. 1


Dia. 2

Dia. 3 (ko aji). If White connects at 4, Black plays 5 . This is different from the previous diagram. Later Black can aim at setting up a ko with Black `a', White `b', Black `c', White `d', Black `e'.

Dia. 4 (good for White). If Black cuts at 4, White counters with 5 etc. After 11, Black plays 12, so White briskly moves out into the center with 13 to 17.


Dia. 3


Dia. 4

Dia. 5 (ko counter). Black can also extend at 1 instead of 12 in Dia. 4 , since he can get a ko in the corner. If White 2, Black 3 is the vital point. A ko follows with 4 to 9 . If Black 3 at 6 , he loses the fight after White makes the placement at 4.

Dia. 6 (blocking on the outside). Black can also block on the outside at 6 . White moves into the center with 7 etc., but Black plays 12 and aims at attacking the whole group. However, this result feels a little bad for Black.


Dia. 5


Dia. 6

Dia. 7 (profit for White). Black can seal White in by playing 10 here instead of 10 in Dia. 6. White settles himself in the corner by capturing two black stones. Note that connecting at 18 is essential for Black to complete his outside influence: Black cannot tenuki. White gets considerable profit in this result.

Dia. 8 (the solid connection). Connecting solidly at 4 is a good move. White is not as happy with this result as with the previous diagram.


Dia. 7


Dia. 8

Dia. 9 (a little heavy). Extending at 3 is a little heavy as a sabaki move. When White plays 5, Black 6 looks like correct shape. White can exchange 7 for 8 , but he cannot tenuki next.

Dia. 10 (settling the shape). Black can attach at 6 if he wants to settle the shape immediately. After White lives with 7 to 13, Black connects solidly at 14. He is satisfied with his outward influence.


Dia. 9


Dia. 10

Dia. 11 (life). The counter-hane at 3 is a tesuji White can play here. If Black 4, White extends at 5, then lives up to 11 .

Dia. 12 (life). Black may counterattack with the 4-6 combination. In this case, White 7 is a clever sacrifice. White increases the sacrifice to two stones so that he can make forcing moves at 11, 13 and 15 . He then crawls at 17 and 19 before securing life with 21.


Dia. 11


Dia. 12

Dia. 13 (blocking on the inside). If Black blocks on the inside at 2, White finds it easier to get sabaki, beginning with the hane at 3 . Cutting at 4 is a strong move; the standard sequence to 11 follows. Next, ‘a' and ' $b$ ' are miai for White.

Dia. 14 (sabaki). In certain positions Black may want to jump to 10 . White forces with 11 , then wrenches off a black stone with 13 to 17. This settles the white group. For his part, Black has no worries about his right side position.


Dia. 13


Dia. 14

Dia. 15 (the squeeze). If Black connects underneath with 10 , White squeezes with 11 and 13 , then makes shape with 15 . White gets a comfortable shape and Black's stone on the right side has been isolated.

Dia. 16 (a base). Connecting at 4 is peaceful, but it lets White secure a base with 5 and 7 . The result looks even.


Dia. 15


Dia. 16

Dia. 17 (White's diagonal connection). If Black connects solidly at 1 instead of 4 in Dia. 16, the diagonal connection of 2 makes good shape. Black may attack with 3 and 5, but White counters with 6 and 8 and has no worries. White 2 at 4 would be too heavy and would make Black 'a' into a severe attacking move.

Dia. 18 (variation). If Black switches to 3, White naturally hanes at 4 . If he played 4 at 5 , Black 'a' would ruin his shape. Next, White has no choice about connecting at 6 .


Dia. 17


Dia. 18

Dia. 19 (crawling along the second line). The counter-hane on the second line at 3 is another technique for sabaki and is often seen in actual play. Black gives atari at 4 , then connects at 6 with the intention of forcing White to crawl along the second line. White lives up to 13 and Black builds outside influence.

Dia. 20 (corner life). If Black connects on the outside at 6, White cuts at 7. He is satisfied with living in the corner. If White simply plays 9 at 11, Black will give atari at 9 and aim at fighting the ko.


Dia. 19


Dia. 20

## PATTERN SIX

This time Black has made a small knight enclosure. What difference does. this make from the one-space enclosure . in the previous pattern?

Dia. 1 (blocking on the outside).


Pattern Six Attaching at 1 is still the vital point. Invading at the 3-3 point would give Black too much help in building up his moyo. If Black 2, White 3 is the sabaki tesuji. Securing life up to 13 means that White has succeeded in limiting the breadth of Black's moyo, so he is satisfied.

Dia. 2 (aji). If White descends at 9, Black will make the placement at 10, forcing White to answer at 11. Later Black can get an approachmove ko.

Dia. 3 (ko aji). This is the ko referred to.


Dia. 4 (complicated variation). Cutting at 1 instead of connecting at 4 in Dia. 2 leads to a difficult variation. Connecting at 5 is solid. White forces with 6 and 8 , then lives up to 14 . Black builds up outside thickness.

Dia. 5 (taking the corner). Black extends at 5 when he wants to be sure of taking the corner. White must give up his three stones, so he extends at 6 . He then attaches at 8 to get sabaki. This move exploits the threat of cutting at 'a'.


Dia. 4


Dia. 5

Dia. 6 (dangerous). Pulling back at 3 is dangerous, as Black has the frightening move of 4 . White runs at 5 , but it is not going to be easy to live. If Black answers 13 at 14, White can live with 15, but it is quite possible that Black will attempt to capture White by playing at 15. In that case, White has to be able to put up a good fight by cutting at 14 or he should not play 3 in the first place.

Dia. 7 (life). The hane at 3 is also possible. Black answers simply with 4 , and White lives in the corner.


Dia. 6


Dia. 7

Dia. 8 (blocking on the inside). Black blocks on the inside at 2 when he wants to keep the corner territory. If White 3, descending at 4 is a good move. White turns once at 5 before securing his base with 7. This is a joseki.

Dia. 9 (forcing moves). White could probably also simply extend to 5 , but there is a danger that Black will immediately force with 6 and 8 and build up thickness.


Dia. 8


Dia 9

Dia. 10 (aggressive). Black might attack with 6, preventing White from extending along the side. White jumps to 7, then connects at 9 . Black secures territory while attacking with 10, but White erases Black's moyo with 11.

Dia. 11 (low attack). If Black attacks on the third line with 1 instead of 6 in Dia. 10, White finds it easier to settle his group. He forces with 2 , then attaches at 4 , then moves out smartly into the center with 6 and 8 .


Dia. 10


Dia. 11

Dia. 12 (submarine invasion). The low invasion at 1 is an interesting move. Black usually answers at 2 , as White `a' next would eat up the substance of his corner. White extends to 3, then ignores Black 4 to jump to 5 . White does not crawl at ' $b$ ' immediately.

Dia. 13 (thickness). The reason that White does not crawl at 1 instead of 5 in Dia. 12 is that Black gets a perfect continuation with 2 etc., applying pressure to White and building up excellent thickness.


Dia. 14 (strengthening White). Attaching at 2 is another standard move, but this has the effect of strengthening White. The warikomi (wedge) at 3 is a tesuji, and the sequence to 9 is the standard continuation. Compared to Dia. 12, however, this is a little unsatisfactory for Black.

Dia. 15 (trick move). White 3 is a trick move. Black 4 is correct, but then White is hoping for Black 6 and 8, which give him the sente move at 9 . This is an efficient result for White, so Black must not be so submissive.



Dia. 15

Dia. 16 (refutation). Black has to counter with 6 on the outside, sealing White into the corner. This is a satisfactory result for Black.

Dia. 17 (a strong counter). Black 4 is a strong counter to White 3. When White wedges in at 5 , Black gives atari on the outside, then captures at 8 . White lives in the corner, and Black builds outside influence. The only point is that this result differs from Black's original aim in attaching at 2.

Dia. 18 (corner profit). Black can take a large corner profit by giving atari on the inside at 1 instead of 6 in Dia. 17. White has no choice but to force with 6 and 8 .


Dia. 16


Dia. 17


## PATTERNSEVEN

Black has made the large knight corner enclosure. What difference does this make from the more narrow enclosures in the previous two patterns?


Pattern Seven

Dia. 1 (joseki). Yet again the contact play at 1 is the vital point. Black goes for outward influence with 2 . The sequence to 11 is a joseki. White could also play the forcing sequence White `a', Black ` $b$ ', White `\(c\) ', Black`d' before defending at 11.

Dia. 2 (a free ko for Black). If White omits 11 in Dia. 1, Black can immediately make the placement at 1 . The continuation to 13 here is the best for both, and the result is an approach-move ko. This is a free ko for Black: he stands to lose nothing.


Dia. 1


Dia. 2

Dia. 3 (developing on the right). If Black descends at 6 instead of 6 in Dia. 1, White moves down the right side with 7. If White played at `a' instead of 5, Black would give atari at 'b', leading to White 5, Black 'c'. White could then go one step closer to the black stone with `d'.

Dia. 4 (sabaki). Just as with the small knight enclosure, Black can cut at 4 . White sacrifices three stones in the corner, then attaches at 11 to get sabaki.


Dia. 3


Dia. 4

Dia. 5 (the two-step hane). White is not afraid of Black's twostep hane at 4 . He counters by capturing a stone with 5 to 9 . Black gets large corner profit with 8 , but White gets a secure position with 11 . The problem now is what happens to the solitary black stone on the right side.

Dia. 6 (blocking on the inside). Black blocks at 2 to be sure of taking the corner. The sequence to 7 is a joseki. Instead of $6-$


Dia. 5


Dia. 6

Dia. 7 (making good shape). Black may attack at 6 in order to prevent White from extending down the side. White counters by attaching at 7, the threat implied in White 5. White uses his forcing moves to make good shape up to 11 .

Dia. 8 (sacrifice). If Black pushes through with 1 instead of 6 in Dia. 6 or Dia. 7, White lets him cut at 3. In most cases, Black's strategy here is not good. White sacrifices two stones and makes good shape up to 10 .


Dia. 7


Dia. 8

Dia. 9 (solid connection). If Black 4, White extends to 5. Compared to Dia. 6, Black's strategy has an advantage and a drawback. In this result, 'a' will be quite a thick move for either side.

Dia. 10 (the crosscut). The crosscut of 3 is a standard sabaki tesuji. Black 4 is a solid answer. White gives atari at 5 , then settles his group with 7 and 9 .


Dia. 9


Dia. 10

Dia. 11 (too narrow). White can also make a counter-hane at 3. If Black gives atari at 4, he will probably connect at 6 next. However, White lives easily with 7 to 13 . Black builds thickness, but White is satisfied, as Black's large knight enclosure stone is now a narrow extension from Black's wall.

Dia. 12 (joseki). If Black connects solidly at 4, White 5 and 7 are the joseki. If White plays 5 at 'a', the sequence reverts to the previous diagram with Black 5, White `b', Black `c'.


Dia. 11


Dia. 12

Dia. 13 (trouble for White). If White hanes on the fourth line at 3, Black 4 is a good, solid answer. Next, White 5 is correct shape, but the 6-8 combination makes it a little difficult for White to get sabaki. White 'a' next is probably the standard move.

Dia. 14 (joseki). Extending at 4 is a straightforward move. White gets a comfortable shape with 5 and 7 .


Dia. 13


Dia. 14

Dia. 15 (strengthening White). The two-step hane of 5 is another sabaki technique. Capturing a stone with 6 and 8 has the slightly regrettable effect of helping White to solidify his position. White forces with 9 and 11, then secures his base with 13. Note that White might choose not to play 13 immediately.

Dia. 16 (counterattack). Black could launch a counterattack by cutting with 1 instead of 6 in Dia. 15. White switches to the top with 4 to 10.



Dia. 16

Dia. 17 (the problem of the ladder). Blocking at 1 instead of 7 in Dia. 16 involves a ladder. White 2 is a good move which makes miai of 'a' and ' $b$ '. If, however, the ladder is unfavorable for White, he should not hane at 5 in Dia. 15 to begin with.

Dia. 18 ( the stone-tower squeeze). White cannot extend at 9 instead of 4 in Dia. 16. Black captures White with the famous `stone-tower' squeeze.


Dia. 17


Dia. 18

18: throws in (at 10). 19: takes (at 14)

## PATTERN EIGHT

White has made a large knight and a small knight move from his starpoint stone. Even with this narrow position, there is some invasion aji.


Pattern Eight


Dia. 1 (ko). The first move that occurs to one is the standard 3-3 point invasion. Blocking at 2 is common sense. White crawls at 3, then creates a flexible shape with 5 and 7. If next Black `a', White will fight a ko with `b'.

Dia. 2 (life). Descending at 4 is a variation for Black. White seeks life with the tesuji of 5 and 7 . Black 8 is necessary, so White can block at 9 . If Black 10, White secures life with 11.


Dia. 1


Dia. 2

Dia. 3 (slack). What about running head-on into Black with 5 ? Black 6 is the standard response, so White sets about making eyeshape with 7 and 9. Black 10 is a thick move, but then White lives on a large scale with 11. This feels a little slack for Black.

Dia. 4 (kill!) Black 1 is a frightening attempt to kill White. He is able to break through with 2 to 12 , but there is no telling what will happen after this.


Dia. 3


Dia. 4

Dia. 5 (eye-shape). What if Black tries to kill White by playing 4? White pushes in at 5 , then blocks at 7 . White 9 is then the vital point for making eye-shape. When Black plays 10, White lives with 11. If Black 'a', White ' $b$ ' maintains the eye in the corner.

Dia. 6 (seki). If Black plays in at 1 instead of 10 in Dia. 5, White gets a seki with 2 to 8 . If Black 5 at 6 , White lives with 5.


Dia. 5


Dia. 6

Dia. 7 (life). If White plays at 3, he lives unconditionally. If Black 4, then White 5 to 9 - the idea is the same as in Dia. 5. One cannot say definitely whether this result or Dia. 1 is better, but fighting the ko in Dia. 1 seems to be more common in actual play.

Dia. 8 (life). Black 4 and 6 are an alternative strategy for Black. White lives up to 13.

Dia. 9 (a thin move). Black 2 is a thin move. White pushes through at 3 before turning at 5: this is correct timing. Black 6 is probably natural. White lives easily with 7 and 9 .


Dia. 7


Dia. 8


Dia. 9

Dia. 10 (ko). Black can also block on the other side at 2 . If White 3 and 5, Black 6 is a strong move. White throws in a cut at 7, then resists with 9 and 11. If Black ' $a$ ', he will fight a ko with ' $b$ '.

Dia. 11 (life). If White just wants to live, avoiding the ko in Dia. 10, he can answer 2 at 3. Black 4 is the vital point in this shape; the standard moves to 8 follow. After 9, White 11 is the tesuji for getting two eyes.



Dia. 11

Dia. 12 (the contact play). White has the alternative of attaching at 1. If Black 2, White lives with 3 to 7 . This shape came up before (Dia. 7, Pattern Six).

Dia. 13 (resorting to force). Cutting at 4 is a tough move. White extends once at 5 , following the proverb increase the sacrifice to two stones'. This enables him to force with 7 to 11 and cut off the black stone. Black takes a lot of profit, but playing 13 seems to give White a reasonable result.


Dia. 12


Dia. 13

Dia. 14 (thickness). Black could also counter-cut with 1 instead of 10 in Dia. 13. This way Black builds thickness, and White takes the corner profit.

Dia. 15 (sabaki). Blocking on the inside at 2 is of course also possible. White 3 is the tesuji for sabaki. If Black goes for thickness with 4, White extends up with 5 ; if then 6 , White cuts at 7, making miai of `a' and ' $b^{\prime}$


Dia. 14


Dia. 15

Dia. 16 (influence). If instead Black blocks on top at 4, he can seal White in. White lives up to 17, and Black builds up influence.

Dia. 17 (flexible). The aim of Black 1 (instead of 4 in Dia. 16) is to make it difficult for White to settle his group. White answers by making a flexible shape with 2 : he is prepared to fight a ko.


Dia. 16


Dia. 17

Dia. 18 (heavy). Pulling back at 3 is much too heavy. Connecting at 4 is a good, steady move. White moves out with 5 and 7 , but Black builds up nice momentum chasing him out. Instead of $4-$

Dia. 19 (trade). If Black plays at 1, White attaches at 2; if then Black 3, White switches to 4.


Dia. 18


Dia. 19

## CHAPTER FIVE <br> Other Invasions

## PATTERN ONE

This pattern often appears in the fuseki. When White has the stone in place at the top left, he can make an immediate invasion.


Pattern One

Dia. 1 (peaceful joseki). When White has the ally close up on the left, White 1 is a severe invasion. Black 2 is a peaceful answer. White takes profit, and Black builds thickness.

Dia. 2 (White sacrifices). Black can respond by playing the probe at 2. If White jumps out at 3, Black cuts off the three corner stones. White 9 ends the exchange.


Dia. 1


Dia. 2

Dia. 3 (disagreeable aji). After the result in Dia. 2, White has the unsettling sequence to 9 in the corner. Black stops him from getting two eyes with 10, but if White has become strong on the outside, this may be disagreeable for Black. At the least, moves like White `a' will be sente.

Dia. 4 (ko). If Black blocks at 2, White 3 secures a ko (Black `a', White ' $b$ '), which is ominous for Black.


Dia 3


Dia. 4

Dia. 5 (White saves the corner stones). White can also answer at 3 , in which case the sequence from 4 to 10 follows. Next -

Dia. 6 (semeai). White hanes out at 1 and a capturing race follows. After 11 -


Dia. 5


Dia. 6

Dia. 7 (favorable for White). Black destroys White's eye-shape with 1 . The placement at 2 is then the vital point. To give the conclusion in advance, White gains from this fight.

Dia. 8 (seki or ko). After Black 1, the moves to 11 are forced. If White captures two stones with `a' next, a ko follows; if instead White connects at ' $b$ ', the result is a seki.


Dia. 7


Dia. 8

Dia. 9 (attempting to capture White). Black 14, attempting to capture the group, is conceivable. White naturally cuts at 15 . Black plays 18 when White can't get a ladder with White `a', Black `b', White 'c'. Black does succeed in capturing White up to 24 , but White can squeeze with 'd'.

Dia. 10 (failure). Playing 1 and 3 instead of 24 in Dia. 9 does not succeed. Black may push through at 7, but White counters with 8 to 14 .


Dia. 11 (living in the corner). If Black extends at 1 instead of 18 in Dia. 9, White connects underneath with 2 and 4 . Black exchanges 5 for 6 before living in the corner with 7 and 9 . White jumps to 10 and has the sente move at 'a' - the result looks favorable for him.

Dia. 12 (changing the order). If White descends at 11 first (before the hane at 11 in Dia. 9), Black plays 12 to stop him from linking up. White then cuts at 13, and the sequence to 20 follows naturally. Next -


Dia. 13 (corner semeai). White continues by forcing with 1 and 3 , then plays the 5-7 tesuji. After 9, we have the problem of the capturing race in the corner.

Dia. 14 (approach-move ko). Black 1 starts the fight. White 8 is a clever move. After 14, Black must fill in the liberties on the outside. The result after 16 is an approach-move ko for Black.


Dia. 13


Dia. 14

Dia. 15 (giving up the corner). If Black gives up hope of saving the corner after the result in Dia. 13, he can make the ponnuki at 1. White secures the corner with 2 , and Black takes control of the center with 3.

Dia. 16 (fighting on a large scale). White can also give atari at 1 here instead of 7 in Dia. 13. This leads to a difficult fight in the corner. After 15 -


Dia. 15


Dia. 16

Dia. 17 (ko). The placement at 1 stops White from getting two eyes. All that leaves is for both sides to fill in the liberties. Black ends the ko with 13, and White takes two stones with 14 , getting outside influence.

Dia. 18 (ponnuki). If Black tries to capture White with 1 here instead of 2 in Dia. 13, White makes a ponnuki at 2. Black 3 is then necessary.


Dia. 17
8,11: ko


Dia. 18

Dia. 19 (the ladder). If White immediately attempts to capture Black with 19 (instead of 19 in Dia. 12) and 21, the question of the ladder comes up with 22 and 24 . The premise for 19 is that this ladder doesn't work.

Dia. 20 (less pressure on Black). If White attempts to capture Black with 1 instead of 17 in Dia. 19, the pressure on Black is eased a little. After 7 and 9, Black can take control of the center with 8 and 10.


Dia. 19


Dia. 20

## PATTERN TWO

When Black has made the irregular enclosure here, there are various things that White can do in the corner.


Pattem Two

Dia. 1 (3-3 invasion). Entering at the 3-3 point is the standard approach. If Black 2, White 3 is a good answer which spoils Black's shape. If Black 4, White 5 is the tesuji for life. White 9 is the follow up tesuji.

Dia. 2 (variation). If Black plays 6 here, White lives with 9 and 11. Dia. 3 (thickness for Black). The hane at 5 is bad, as it helps Black to strengthen himself. White lives up to 15 , but at the expense of giving Black excellent thickness.


Dia. 3

Dia. 4 (over-aggressive). Descending at 4 might get Black into trouble. If White 5, Black continues to answer aggressively with 6 to 10, but then he has to worry about the possibility of White's starting a ko with 13 at 'a'.

Dia. 5 (White escapes). After the result in Dia. 4, Black aims at the placement at 1. Black 3 reduces White to one eye, but White succeeds in escaping with the 4-6 combination.

Dia. 6 (dangerous for White). If White simply plays in at 5 and cuts at 7. Black 8 is scary. After the forced continuation to $14-$


Dia. 4


Dia. 5


Dia. 6

## 7: connects

Dia. 7 (ko). White cuts at 1, and a large-scale fight follows. The continuation here is best for both, but the result is a ko in which it is Black's turn to capture.

Dia. 8 (the knight's move). If Black attacks with 2, White lives with 3 to 11.



Dia. 8

Dia. 9 (sabaki). The crosscut of 5 is a sabaki tesuji. Black 6 and 8 are a strong counter, but White forces with 9 and 11, then captures a stone. This is reasonable for White.

Dia. 10 (ko). White 1 (instead of 11 in Dia. 9) is a makeshift move. After 2 to 9, Black can get a ko with 'a'.

Dia. 11 (life). Black might try to capture the white group by blocking at 2 . White forces with 5 , then plays 7 and 9 , aiming at starting a ko by throwing in at 10. If Black prevents that by playing at 10 himself, White lived with 11.



Dia. 10


Dia 11

Dia. 12 (ko). If Black resists with 6, White gets a ko with 7 to 21
Dia. 13 (good for White). Pulling back at 6 is a slack move. White makes a ponnuki, letting Black take the corner. This result is good for White.


Dia. 12
21: takes ko


Dia. 13

Dia. 14 (a special case). In certain positions White might choose to attach on the outside at 3 . Answering at 2 is solid. White gets outside influence with 3 and 5, but Black gets a large territory at the top up to 6.

Dia. 15 (slack). Black 2 is slack. White makes good shape with 3 and 5. If Black `a', he will fight the ko with ' $b$ '.

Dia. 16 (switching course). Black 2 completely subdues the white stone in the corner. White switches course, forcing with 3, then extending down the right side with 5 .


Dia. 14


Dia. 15


Dia. 16

Dia. 17 (outward influence). The hane at 2 emphasizes influence. White counters with the crosscut tesuji and lives up to 11.

Dia. 18 (outward influence). Black 4 prevents White from connecting underneath. White lives in the corner with 5 to 13.


Dia. 17


Dia. 18

Dia. 19 (heavy). Extending at 3 is heavy. Black takes solid profit with 4 . White can push up with 5 and 7, but Black takes large profit.

Dia. 20 (variation for Black). Black 2 is an excellent move. White lives in the corner, but Black builds thickness. Playing 4 at 5 is bad for Black.

Dia. 21 (the contact play). Attaching at 1 is another possibility. Black can answer at 'a', `b' or 'c'.


Dia. 19


Dia. 20


Dia. 21

Dia. 22 (straightforward). Black 2 is a simple answer. If White 3, Black 4 threatens White's eye-space, but White can live with 5 to 9 .

Dia. 23 (trade). If White hanes at 7, a trade naturally follows.

White settles his group, but Black takes a firm grip on the corner and is satisfied.


Dia. 22


Dia. 23

Dia. 24 (blockade). The hane at 2 is a severe move, but White can live with 3 to 11 . Black builds up a solid outside wall.

Dia. 25 (alternative for White). White can also live with the diagonal connection at 9 . If he omits 13, Black kills him with the placement at 'a'.

Dia. 26 (too mild). Pulling back at 2 is too mild. White easily lives with 3 to 7 . White 5 at 'a' gives a similar result after Black `b', White `c'.


Dia. 24


Dia. 25


Dia. 26

Dia. 27 (Black's descent). If Black descends at 2, White throws in a cut at 7 before living. White could also crawl once more at 12 with 11, but Black might switch to `a', White 15, Black 'b'.

Dia. 28 (submarine invasion). White can also make the submarine invasion at 1.

Dia. 27

Dia. 28

Dia. 29 (sabaki). White 1 makes miai of settling himself in the corner and on the side. If Black 2 and 4, White develops along the top side with 5.

Dia. 30 (a flexible strategy). Black's aim with 2 is to avoid settling the shape. Developing along the top with 3 is still good for White. Later Black will probably make a pincer around 'a'.


Dia. 31 (passing the buck). Black 2 puts the onus on White to
choose whether he wants to enter the corner or stay on the outside. If White 3, Black defends the corner.

Dia. 32 (aji). Black 4 may look like sente, but if Black does nothing after 5, White has the aji of a clamp at `a'. If Black `b', White plays 'c' next, and Black is in trouble.


Dia. 31


Dia. 32

Dia. 33 (opting for the corner). If White decides to go into the corner, he can live, but Black builds good outside influence. This result is bad for White. Trying to capture White with 8 at 'a' is too aggressive: White saves himself with ' $b$ '.

Dia. 34 (Black's kosumi). The aim of 2 is to build outside influence. Playing 3 before 5 is correct timing for White. Black continues with 6 to settle the shape. White gets a reasonable result up to 13.


Dia. 33


Dia. 34

Dia. 35 (counterattack). Black can attack with 6 here, but he must bear in mind that White might counterattack with 7. If Black captures with 8 , White hanes out with 9.

Dia. 36 (White lives). If White answers at 7, he gets a low position on the second line. He lives, but after 1 I, Black can aim at a ko with Black `a', White ` ${ }^{\prime}$ ', Black ` $c$ '.


Dia. 35


Dia. 36

## PATTERN THREE

This pattern comes up very often. When Black has made the close-up extension down the side from his corner enclosure, he can immediately invade White's position.


Pattern Three


Dia. 1


Dia. 2

Dia. 1 (a blow on the jaw). Black 1, the 'jaw' of White's position, is the vital point. White cannot hope to capture this stone.

Dia. 2 (too mild). Blocking on top at 2 makes it too easy for Black. This is not good enough.

Dia. 3 (wrong continuation). White 2 is a strong answer to the invasion. Black then plays the tesuji of 3 . Blocking at 4 next is bad, as Black pushes through with 5.

Dia. 4 (another wrong continuation). If White 4 here, Black blocks at 5 , making miai of 'a' and ' $b$ '.

Dia. 5 (the correct counter). When Black plays 3, the correct answer is pressing at 4 . If next Black ' $a$ ', White is satisfied with pushing down at ' $b$ ' and capturing the black invader. After $4-$


Dia. 3


Dia. 4


Dia. 5

Dia. 6 (crude). Pushing up with 1 is crude. White counters by pushing down with 2, putting Black on the spot. If Black 3, White 4.

Dia. 7 (disaster). If Black answers 2 by descending at 3, White counters with 4 and 6 . Black connects underneath with 7 , but he cannot save his three stones after White 8.


Dia. 6


Dia. 7

Dia. 8 (joseki). Black 1, cutting across the knight's move, is the tesuji. The continuation here is a joseki. White plays 6 to defend against the cut after Black 'a'.

Dia. 9 (the shoulder-hit). Black 3 is a good move. Black plays it when he wants to reverse the result in Dia. 8, where White built influence and he took profit. If next White `a', Black blocks at ' $b$ '.

Dia. 10 (thickness for Black). If White connects underneath with 1 and 3, Black builds up a strong central position.


Dia. 8


Dia. 9


Dia. 10

Dia. 11 (ko). Black 3 is an aggressive move aimed at splitting White into two. A ko fight follows.

Dia. 12 (mistake in style). Black 1 is the wrong invasion. Black is in for a tough time after White attacks with 2.


Dia. 11


Dia. 12

Dia. 13 (slack). Attaching at 2 lets Black off the hook. White loses points when Black links up with 3 and 5 . This is the same result as Dia. 2.

Dia. 14 (reinforcement). If White wants to defend, White 1 is the proper move. This makes splendid shape.


Dia. 13


Dia. 14

## Japanese terms

aji: potential
aki-sankaku: empty triangle (model bad shape)
atsui: thick, strong
degiri: pushing through and cutting
furikawari: trade, swap
gaisei: outward influence
gukei: bad shape
guzumi: empty triangle (the term used when it is an effective move despite being bad shape)
hasamitsuke: clamp
hiraki: extension
kakari: an approach move against a corner stone
kake: a pressing move
karami: a splitting attack; a move which attacks two groups simultaneously.
karui: light, i.e. stones with a light, flexible shape which can easily be looked after of stones which have served their purpose and can be discarded.
kata-tsuki: shoulder-hit
keima: (small) knight's move
kikashi: a forcing move which requires an answer
kogeima: small knight's move
komoku: the 3-4 point
kosumi: diagonal move
kyusho: the vital point
mane-go: mimic-go
magari: a tuming move
miai: points of exchange of approximately equal value - if the opponent takes one, one can always (and often must) take the other mokuhazushi: the 5-3 point
moyo: a territorial framework - potential, not actual territory nozoki: peep
ogeima: large knight's move
sabaki: settling a group by getting a flexible and resilient shape
semeai: a capturing race or fight to the death between two groups
shimari: corner enclosure
shinogi: saving a group under attack
takamoku: the 5-4 point
yose-ko: an approach-move ko (one side has to fill in a liberty or liberties before it's a direct ko for him)

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Masaki Takemiya was born on 1 January 1951. He became a disciple of Tanaka Minaichi 6-dan, then entered the Kitani school in 1965 . He became a shodan in the same year, then rose a dan a year, reaching 6-dan in 1970. He made 7-dan in 1972, 8-dan in 1975 and 9-dan in 1977. Takemiya early attracted attention as a member of the 'Kitani school trio', of which Ishida and Kato were the other members. As a 2-dan he acquired the nickname the 9dan killer' for his precocious success against top-ranked players. In 1969 he took 8th place in the Pro Best Ten, then in 1970 unsuccessfully challenged Ishida for the Nihon Ki-in Championship. In 1971 and 1973 he won the Kodansha (high dan players) tournament. In 1976 he won the 3lst Honinbo title, then the 35th Honinbo title in 1980. He has also won two TV haya-go tournaments.

Takemiya is best known for his bold and adventurous go style: he plays on the grand scale, building large moyos and emphasizing the center.

