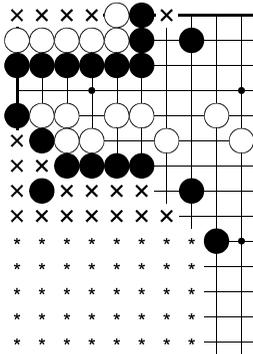
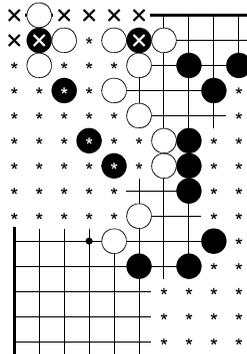


Example 8



Example 9

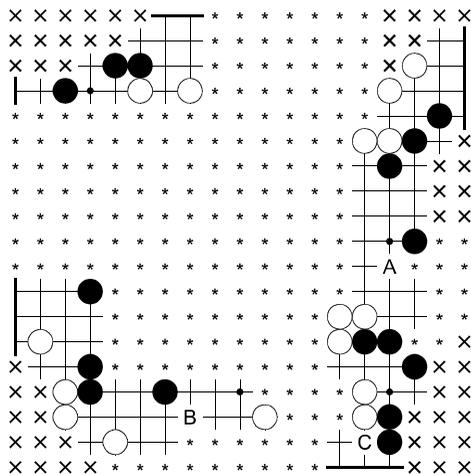


Example 10

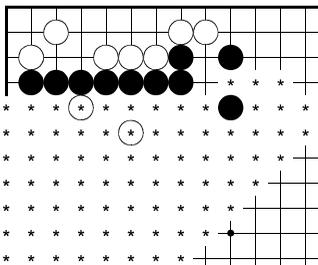
Example 8: The valuable region contains an unsettled black group and an unsettled white group. Either player threatens to capture the opposing group and so make much territory.

Example 9: Black has a moyo on the left side. Its deepest intersections are territory, but the outer intersections are valuable. Black threatens to make much more territory there; contrarily, White can reduce. The big white group's life is settled, but the nearby empty intersections are neutral because of being surrounded by alive black and white stones.

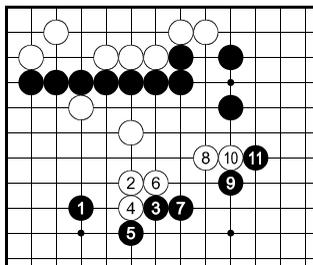
Example 10: Black controls the valuable center region and builds a moyo boundary there. The even more valuable region on the left side is dominated by White, who threatens to capture its unsettled black group.



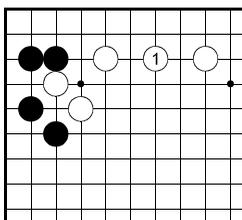
Example 11: The major valuable region covers the center and extends to the upper and left sides. Black and White threaten to construct moyos there. The comparatively small endgames Black A, White B and White C are responsible for the existence of two small valuable regions on the first, second and third lines of the right or lower sides. The latter touches the center region. Needless to say, until the early endgame, the players should mostly play in or near the major valuable region.



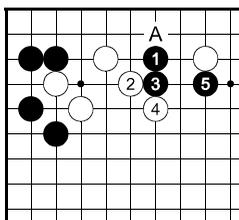
Example 7: Black's sphere of influence



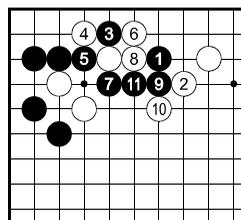
Dia. 7.1: attack



Example 8: easy connection and life



Dia. 8.1: life I



Dia. 8.2: life II

Example 8: On the upper side, White 1 is easily connected and alive.

Dia. 8.1: If Black plays there, White 2 can prevent a connection. However, the new black group is alive. Alternatively, White can play 2 at A, allow the black stone's connection and build thickness on the outside.

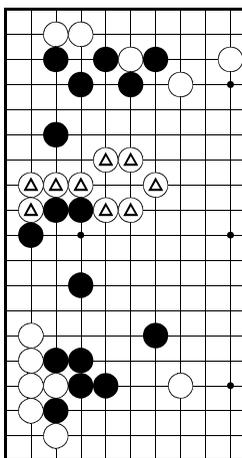
Dia. 8.2: After the sequence, Black 1 can connect and is alive.

Example 8 conclusion: Before either player's first move, White has influence on the upper side. He can play an easily connected and living stone, while a played first black stone's connection depends on White's agreement, and life is established less easily and comfortably. In summary, Black can invade White's sphere of weak influence.

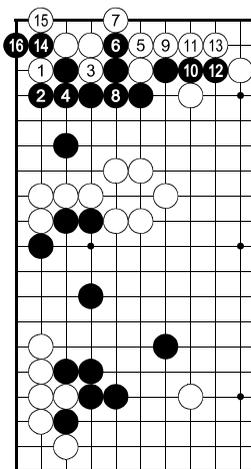
Example 9: Kim Se-tong 2p - Song T'ae-kon 9p - 2011-04-26. White has built the marked thickness, while he allowed Black to hurt the upper white group. As a compensation, White must make good use of his great thickness.

Dia. 9.1: White starts using his thickness by resurrecting his upper side group in sente and creating an almost zero territory balance near the upper left corner.

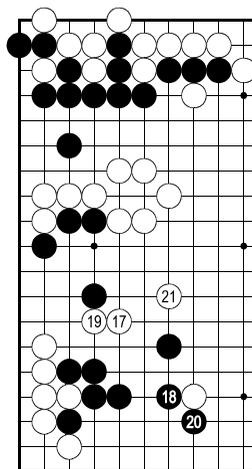
Dia. 9.2: White continues to use his thickness by attacking the lower black group, separating and capturing its tail and making much new territory there.



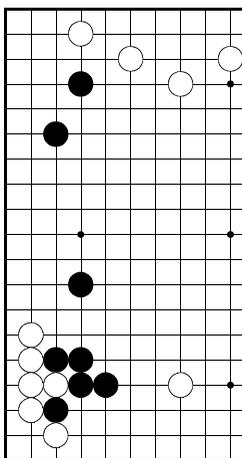
Example 9



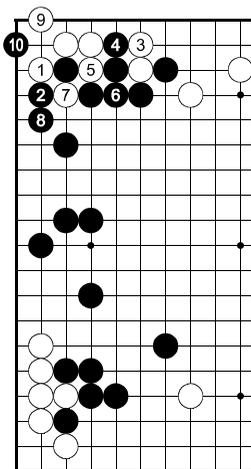
Dia. 9.1: using influence I



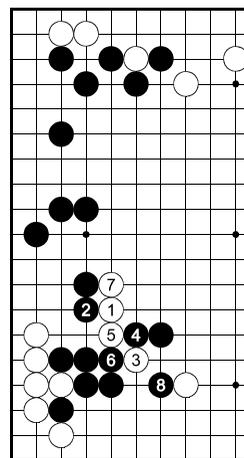
Dia. 9.2: using influence II



Dia. 9.3: earlier



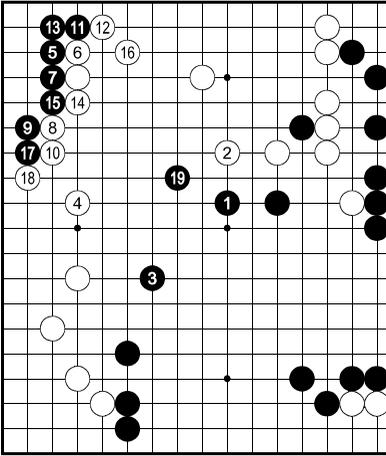
Dia. 9.4: without thickness I



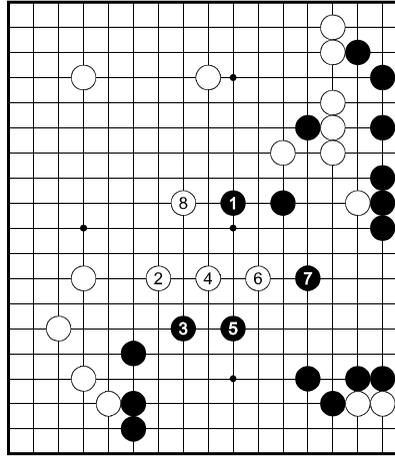
Dia. 9.5: without thickness II

Dia. 9.3: Earlier in the game, White had a well connected, pretty strong group on the upper side. This shows how much he sacrificed in order to build the thickness in Example 9.

Dia. 9.4 + 9.5: If the white thickness in Example 9 were not present, White could neither rescue his string in the upper left corner, nor attack the lower black group. White would only be attacking and killing his own groups.



Dia. 2.2: good for Black



Dia. 2.3: good for White

Dia. 2.2: If White answers every black reduction move, his regions shrink, while Black's regions grow.

Dia. 2.3: If Black replies passively to White's reduction, Black's remaining territory is too small, while the size of White's moyo becomes impressive.

Example 2 conclusion: Neither player must defend only. Either player must also reduce the opponent's framework.

3.5 Invasion

An **invasion** installs a new group deep in the opponent's region.

If the opponent can block all escape routes of a player's invasion group, then the player's group must seek and achieve life locally. If necessary, the first invasion stone can be offered as a sacrifice to use a second stone in the neighbourhood for establishing life or reducing. Usually, an invasion has the following aim:

A player invades the opponent's region, if this leads to the most favourable changes of the territory and influence balances.

A player's invasion group makes territory and reduces a greater amount from the opponent's territory, but increases the opponent's outside influence. A player's reduction group can sometimes make territory on

4 Primary Aims

Although we play Go because of its fun, one must not fight just to have fun. Instead, fighting must be part of a meaningful strategic planning, which relies in particular on well chosen aims.

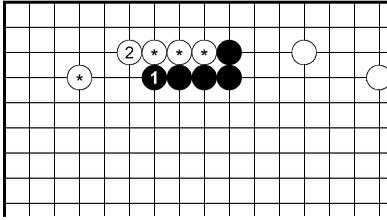
If one has not methodically studied possible aims yet, it can often be difficult to understand what is happening in a fight and why its moves are played with a particular timing. Structure is the key to easier understanding, and the basic structure distinguishes primary aims from secondary aims. This prepares the principles of general fighting strategy explained in *7.3 General Fighting Strategy* (p. 229): each player always follows at least one primary aim and at least one secondary aim. The primary aims are means to achieve the secondary aims. For example, the primary aim to defend life of a player's strings tightly surrounding a region guarantees the secondary aim to make territory there. Primary and secondary aims are equally important for strategic planning.

Primary aims are related to life or threatened life, stability or threatened stability, or offering strategic choices. Mainly, the aims concern the fighting groups, but primary aims can sometimes concern also other groups in the neighbourhood of a fight.

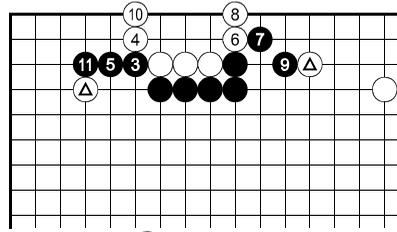
An attacked group can, but need not, be important. If it is non-essential, then secondary aims must be important nevertheless. Continuing the example above further, the territory can consist mainly of empty intersections, but there can be a couple of non-essential stones inside the territory region. While a previous fight attacking a group of such stones can have occurred, threatening their life and then capturing them would have been only a side topic. If the opponent had participated in a fight, one of his major secondary aims could have been related to reducing the size of the player's territory region. Although, in other examples, an attacked group can be important, the lesson here is that fights can be also about things other than groups and that the relevance of fights about groups increases with their greater importance.

A player sets important aims, of which he can achieve some.

As a first guideline, aims must be chosen so that they work and can be achieved. If the opponent can prevent realisation of some of a player's



Example 3: stability



② elsewhere.

Dia. 3.1: instability

Example 3: Shimamura Toshihiro 5p - Takagawa Kaku 5p - 1939-11-22 ~ 23. As the players' primary aims, Black threatens and White defends the marked group's stability and connection.

Dia. 3.1: White must not fail to have the primary aim of defending stability, ignore Black's threat and play elsewhere with move 2. The result would be a too small white territory, the two very weak marked white stones, improved options for the black group's potential eyespace and thicker black shape. All these aspects are White's great disadvantages.

4.7 Offering a Strategic Choice

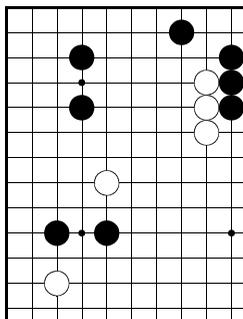
A **strategic choice** is a major decision between significantly to very different strategic developments.

In the previous chapter on the subject of stability, we have learnt that life is not the only subject of primary aims. Strategic choice is the third possible subject, and a player's primary aim can be to 'offer a strategic choice'. The player makes the offer to the opponent, and then the opponent chooses among two or several possible major developments. Why is the player so kind?

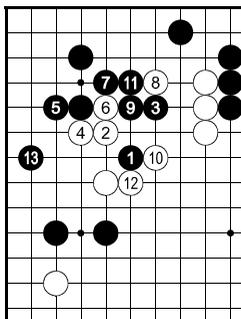
A player can offer a strategic choice, if each possible choice by the opponent leads to the player's advantage or an equal result.

This is the 'dynamic aim' principle. The player lets the opponent decide the subsequent strategic development; accordingly, the player accepts the set of his then available, good follow-up aims. The player can let the opponent have this decision power, because each subsequent development is equal or advantageous for the player himself. Otherwise, the player should not have offered the strategic choice.

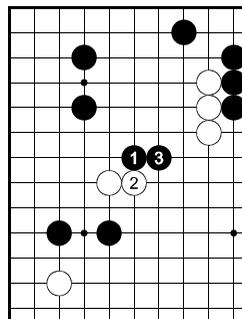
closely any longer. Greatly strengthened territory cannot be invaded, because any invasion group would die.



Example 1



Dia. 1.1: fight

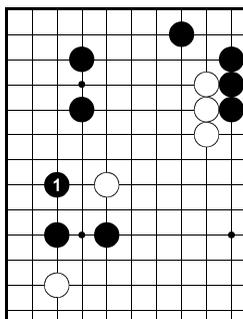


Dia. 1.2: splitting attack

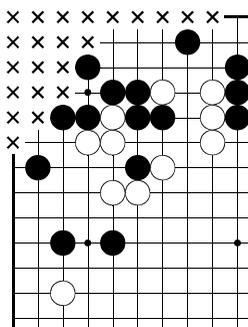
Example 1: Miyashige Genjo - Nakano Chitoku - 1800-02-12.

Dia. 1.1: Black 1 attacks to strengthen the corner or profit from a double attack.

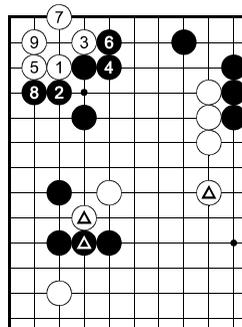
Dia. 1.2: If White is inflexible and moves out directly, then Black splits the white strings. He will profit during the continued double attack.



Dia. 1.3: peace



Dia. 1.4: territory



Dia. 1.5: invasion

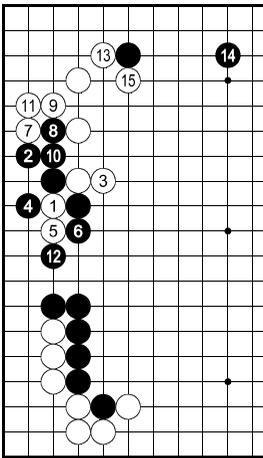
Dia. 1.4: After Dia. 1.1, the marked territory is Black's profit. During the fight, the corner has been strengthened. Now, White cannot invade it any longer.

Dia. 1.5: If we suppose that the marked stones are played after Dia. 1.3, White can still invade the corner successfully. Although this follow-up is only an example, it demonstrates why the fight in Dia. 1.1 lets Black profit: by strengthening the corner, he gets more secure territory there, which Dia. 1.4 shows, while Black's corner region in Dia. 1.3 is still insecure.

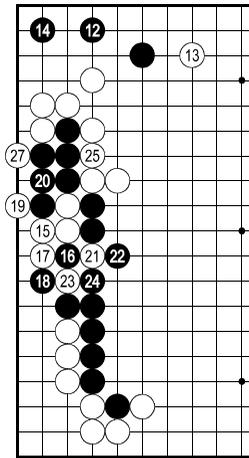
Example 1 conclusion: By choosing a fight, Black gets secure corner territory. If he chose peace, he would only get an insecure territory region.

In particular, it is still a good idea to maintain connection and life of important attacking strings. Severity is for attacking what efficiency and firmness are for defending. The attacker can often dispense with efficient or proper play, if his attack becomes more severe thereby. At the same time, he must not bend the arrow too much; his overplay would lead to failure, such as the opponent's capture of an important surrounding string. An *overplay* pretends severity but does not work and fulfil its aims if the opponent replies correctly and punishes it properly.

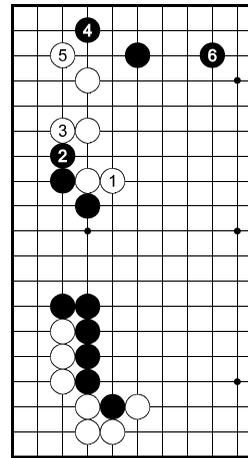
By maintaining severity, the attacker can try to generate more and more profit during a long period. In case of the opponent's mistake or too great risk, capturing can become an option.



Example 1: severe



26 at 16.
Dia. 1.1: variation

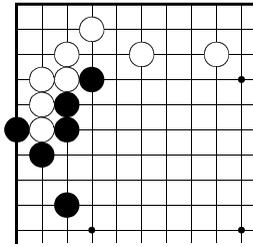


Dia. 1.2: soft

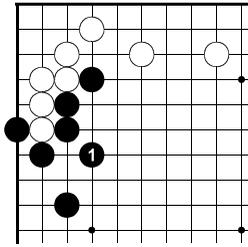
Example 1: Kong Jie 7p - Peng Quan 7p - 2009-05-28. The tactical sacrifice crosscut White 1, which is a standard technique for mutual shape settling, is the appropriately severe attacking move. Since Black 12 comes back to reinforce, White gets a big upper left corner.

Dia. 1.1: Black can choose this variation, but White captures six, while Black captures only two stones. Therefore, White is satisfied regardless of losing the upper left corner. White 21 and 23 are a tactical sacrifice to gain another liberty.

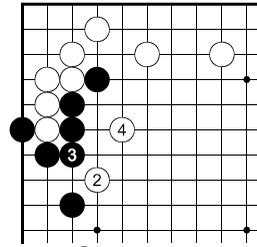
Dia. 1.2: This White 1 is so gentle that it can hardly be called an attacking move. Black makes much more new territory than White. For comparison, in Example 1, the players make roughly equal amounts of new territory.



Example 1



Dia. 1.1: reinforcement

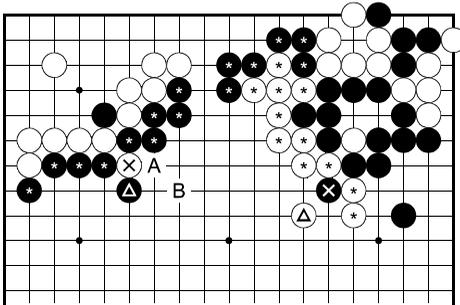


1 elsewhere.

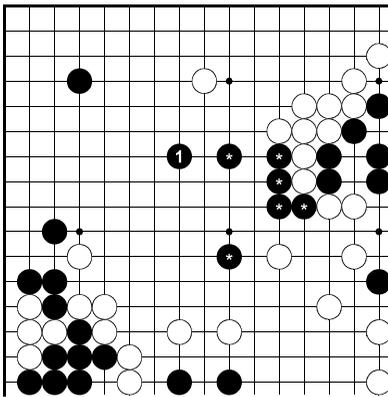
Dia. 1.2: attack

Dia. 1.1: The proper move 1 reinforces the black group by creating thick shape. Black chooses the simplicity of defense to prevent White's attack on the group.

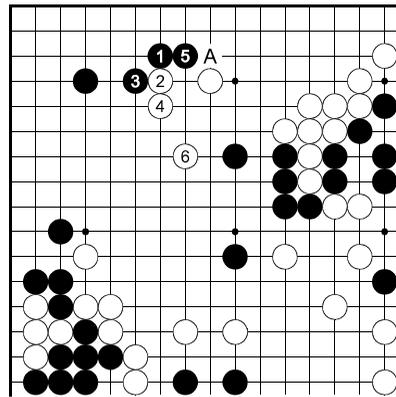
Dia. 1.2: If Black 1 plays elsewhere, White has this strong attack on the black group's shape, eye shape and life.



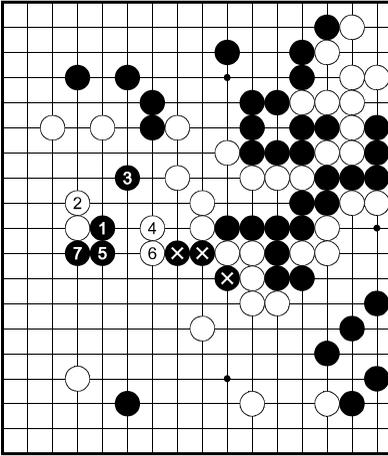
Example 2: Pak Seung-ch'eol 1p - Cho Sonjin 9p - 2000-08-30. The players have defended their marked groups by capturing the marked stones marked with crosses in nets set up by the stones marked with triangles. They simplify things by preventing attacks on these groups. White A is refuted by Black B.



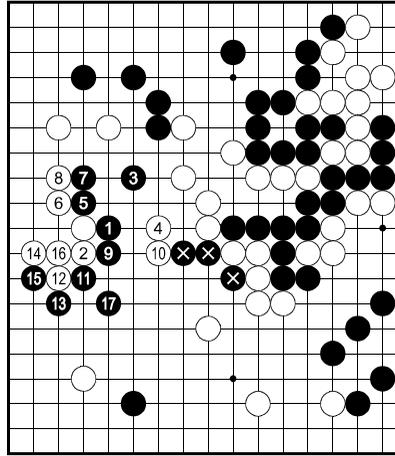
Example 3: simplicity



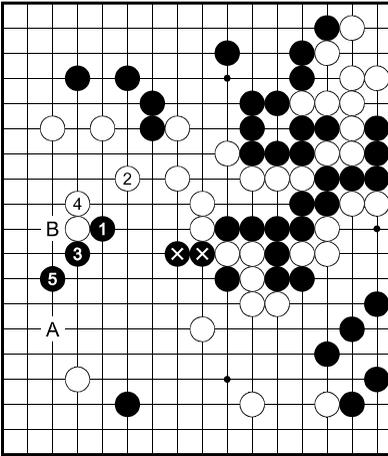
Dia. 3.1: risk



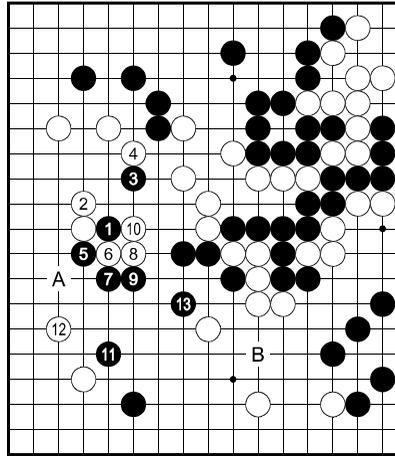
Example 3: flexibility I



Dia. 3.1: flexibility II



Dia. 3.2: flexibility III

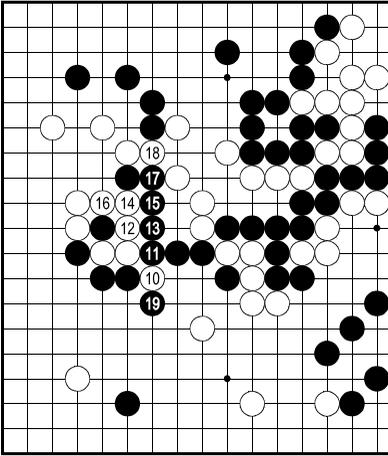


Dia. 3.3: flexibility IV

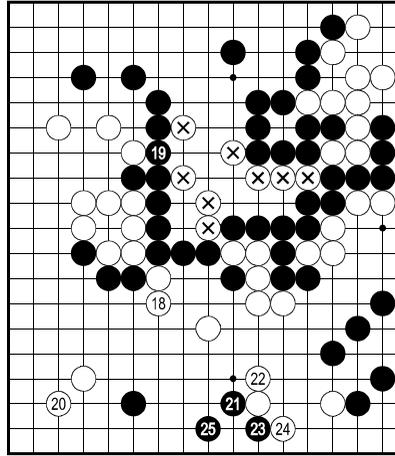
Dia. 3.2: After the sequence, Black has good options at A and B for constructing eyespace. He is not in a hurry to connect the marked string, which is offered as a temporary sacrifice.

Dia. 3.3: If White attacks all the black stones, Black can flexibly sacrifice two other stones to build a well connected group of the important strings. Next, the territory move White A is too greedy, because it allows Black B to attack the white group on the lower side.

Dia. 3.4: As a variation to *Dia. 3.3*, White's killing attempt 10 does not succeed, because he needs to come back with move 18.

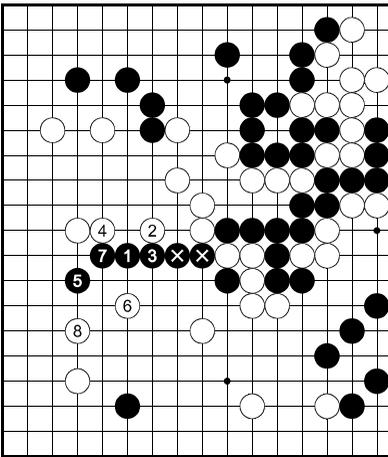


Dia. 3.4: flexibility V

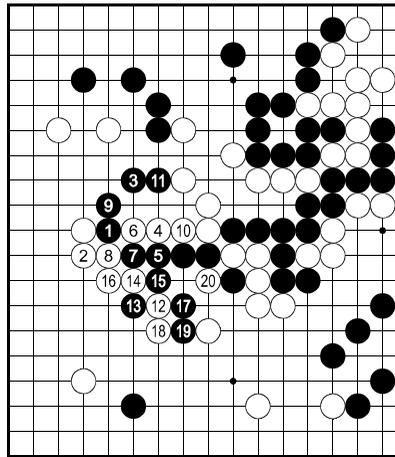


Dia. 3.5: flexibility VI

Dia. 3.5: White chooses a large scale exchange and sacrifices the marked group in the hope of controlling all the left and lower side. However, he cannot kill everything there. If Black can just maintain a flexible spirit, he can establish a comfortable living group easily.



Dia. 3.6: failure I



Dia. 3.7: failure II

Dia. 3.6: If by all means Black wants to defend the marked string, his group becomes very heavy and inflexible. White profits a lot from attacking it.

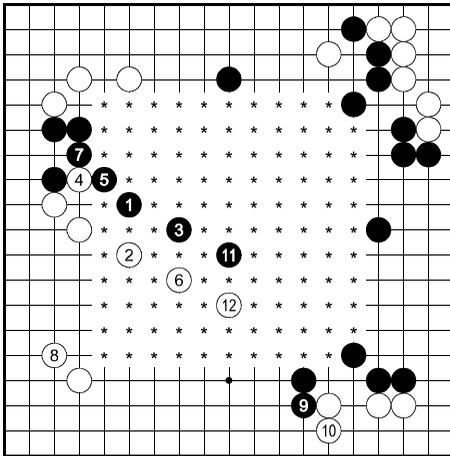
Dia. 3.7: Black's own group dies if he insists on capturing the white group in the upper center.

important reason concerns the combination of size and value of a region, which has empty intersections and can contain unsettled stones. Since every surrounded intersection counts one point and every captured stone counts two points, many unsettled stones can significantly increase a region's value. The region's value is determined by the region's size, numbers of unsettled stones and the region's adjacent or surrounding stones.

A player prefers to choose the most valuable development direction or movement direction of an unsettled group of his, and to develop valuable regions. Walls must face the most valuable development direction.

Prefer to fight about valuable regions and important stones.

Although it is not always possible to choose about what to fight, a player must strive to fight about valuable regions instead of neutral regions and about important unsettled stones instead of non-essential stones. Ideally, a player conquers the valuable regions by converting them into his spheres of influence, moyos and territories, while the opponent plays in neutral regions of no, or small, value. Alternatively, a player can strive to play fewer stones in neutral regions than the opponent. While non-essential stones can be sacrificed, it is worth defending or attacking important stones.



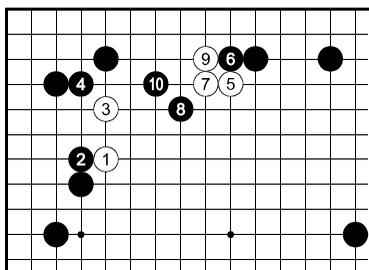
Example 1: Takemiya Masaki 9p - Chang Hao 9p - 2000-05-02. The marked center is the most valuable region, because its surrounding stone formations allow huge moyo expansions. Therefore, the players' major concern is a fight about dividing the center. They do, however, not neglect or abandon adjacent parts of the position: White 4 threatens and Black 5 and 7 maintain life of Black's left group, White 8 takes territory, whose creation has just been prepared, and

Black 9 intervenes with a forcing move to prepare subsequent reduction of the white moyo.

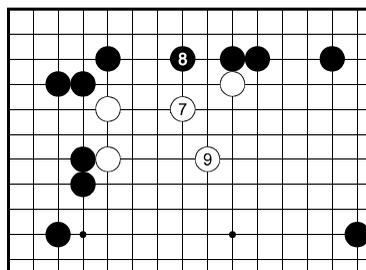
Reduce lightly and flexibly in a strong opposing influence sphere.

Stones are **light** if there are a lot of empty intersections around them and a sacrifice of some or all of them due to an opposing attack would still allow a flexible development and realisation of their major initial intentions.

Light stones are a preliminary form of thick shape, move quickly within the opponent's sphere of influence and are flexible. If necessary, some of the stones can be sacrificed.



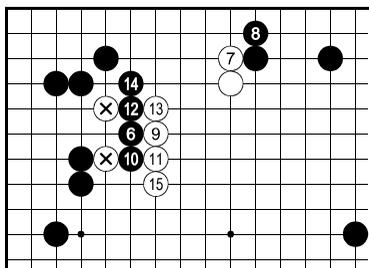
Example 15: White's mistake



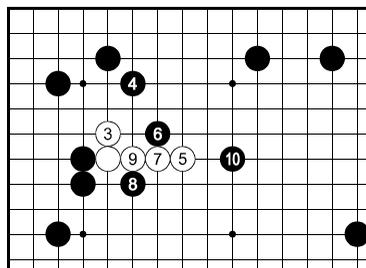
Dia. 15.1: light

Example 15: Ishida Atsushi 8p - Sonoda Yuichi 9p - 2000-02-03. White 1, 3 and 5 are good moves creating a light and flexible shape. However, White 7 is a mistake: its slow and heavy movement allows the strong splitting attack by Black 8 and 10.

Dia. 15.1: White's correct plays continue with light and flexible moves, and connect the white group on a large scale. Black cannot attack it well.



Dia. 15.2: sacrifice



Dia. 15.3: heavy

Dia. 15.2: If Black wants to capture a few non-essential stones, such as those marked, White happily sacrifices them, declares his other strings to be important