3.8 Stability

The concepts 'stability', 'urgency' and 'investment' prepare the concept 'playing elsewhere'. Stable groups allow playing elsewhere - remaining urgent moves and unfulfilled investments discourage it.

Stability is a so fundamental strategic concept that it is often forgotten in teaching and overlooked by kyu players, who play elsewhere too early or too late. The standard moment for playing elsewhere from a previous fight like creating a joseki is the first moment when the set of involved important groups has just become stable. Playing and profiting elsewhere too early allows the opponent to come back with a local sente play or an attack to profit more. Continuing too long locally profits less than the opponent takes elsewhere.

A set of nearby groups is *stable* if all these properties apply:

- Each group is alive unless it is a proto-group or a sacrifice.
- At the boundaries of live or unsettled black and white stones, neither player has any local play that is currently sente and does not just waste aji or that would make a huge difference compared to the opponent playing there first. Similarly, putting helping stones in front of a wall in sente is impossible.
- The stones of each live group are connected.
- None of the live groups can take another major development direction.
- Both players have either no or about equal options.

A group is *semi-stable* if it is almost stable and for one of the players playing elsewhere and later answering the opponent's local attack is better than making the group stable and letting the opponent play elsewhere first.

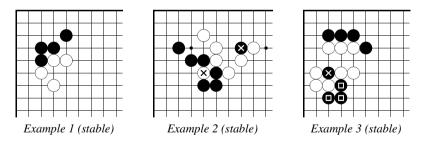
A set of nearby groups can consist of black and white groups such as in a corner joseki. Those involved groups that shall become alive need eyespace or sufficient options for eyespace and need to run to the outside

or to connect to other live groups. Not all strings need to be saved; sacrificed groups will be dead and a proto-group will be temporarily unsettled and wait for a suitable global context to become either alive or sacrificed later.

Each part including the ends of mutual boundary shapes is checked for having or not having local sente plays. Another kind of a not qualifying play is pure endgame while wasting liberties, ko threats or alternative aji options; such plays are not made to keep such potential for later. Thick shapes prevent sente plays the most easily. A ko shape with later ko potential is a special case: Whether the shape is being threatened also depends on availability of ko threats.

Options can be development directions (corner, edge, side, center, moving away from a crosscut) and big mutual endgame-like boundary plays (like completing a capture, enclosing a sphere of influence to turn it into noteworthy territory or taking a still unclaimed empty corner with at least a space of about 3x3 empty intersections).

The process of reaching stability is also called quiescence and the important defending, stability-seeking moves are called urgent moves, see 3.9 Urgency (p. 99). Some thickness and stability creating moves are called proper moves, see 3.5.4 Proper Moves (p. 48). When a joseki fight creates running groups, then instead of reaching stability a middle game fight might evolve.

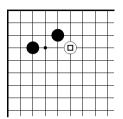


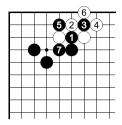
Example 1: Each group is alive. Black's group is alive by protecting eyespace in the corner. White's group is alive by having free development potential towards the open left side and the open center.

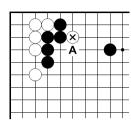
Example 2: Except for the marked sacrifices, each group is alive.

Example 3: Except for the sacrificed stone (cross) and the unsettled proto-group (squares), each group is alive. The proto-group has already made all sente moves against the white group.

Examples 1-3: The other criteria of stable are fulfilled.







Example 4 (semi-stable)

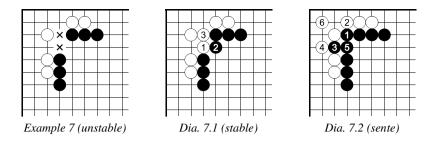
Example 5 (semi-stable)

Example 6 (semi-stable)

Example 4: Except for the marked proto-group consisting of the one white stone, the only important group is Black's and it is alive. Since that group could get an extension along the upper edge, it could take the upper side as another major development direction, which otherwise White could block. This option is the only noteworthy unfulfilled aspect. Therefore the black corner group can be called semi-stable. If White does not consider the stone to be a proto-group but an already essential group requiring immediate life, then the 'stable' definition's condition related to the boundary between live or unsettled black and white stones would be violated. As a consequence, White would defend his stone now and consider it unstable rather than semi-stable.

Example 5: Before the sequence, White's group is semi-stable: White is prepared to sacrifice one stone and get life for the other. Since Black cannot kill both stones, it is often more attractive to play elsewhere than to attack immediately as shown.

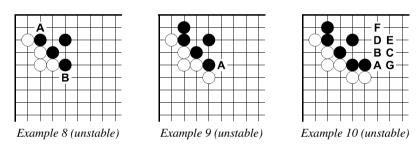
Example 6: Except for the temporarily sacrificed marked stone, the groups are more or less settled. Playing versus not playing A makes the last significant difference to stability. With it, Black's strings are connected and protect eyespace and territory. Without it, White can attack now or later but the fight might be equal for both players, especially since Black would have played a stone elsewhere on the board. For these reasons, the black group is semi-stable.



Example 7: The joseki is not finished yet but still unstable because there is too much aji in the middle of the boundary between the black and the white groups.

Dia. 7.1: This reverse sente boundary play sequence completes the joseki and stabilises it.

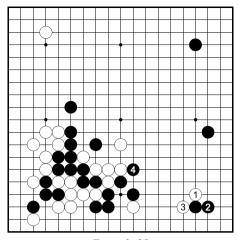
Dia. 7.2: If Black may start fixing the boundary, then he can do so in sente and afterwards his wall's shape will not have any aji.



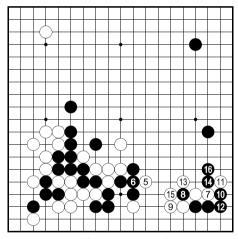
Example 8: A is at the corner end and B is at the center end of the boundary between the black and white stones. White A or B is sente against the black group because its life is endangered. Black needs to protect himself at A by making eye shape. Besides there are huge differences between Black A versus White A and Black B versus White B.

Example 9: The difference between Black A and White A is huge: Black A protects potential for a second eye, creates thickness and takes the center development direction. White A would prevent that and create great white center thickness.

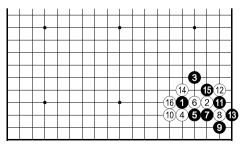
Example 10: Continuing Example 9, the difference between Black A and the sequence White A to G is still huge.



Example 28



Dia. 28.1 (using aji to live)



Dia. 28.2 (joseki)

28. Example Black: Yoda Norimoto -White: O Rissei. Komi: 5.5. White 1 is a special Black approach move. has supporting stones in the surroundings and hence White follows the principle of making the opponent even stronger by attaching. This forceful strategem gains something out of seemingly nothing. The really noteworthy move here is Black 4. After having obtained some stability with 2. Black plays elsewhere to take the key point 4 and to prevent a white attack on Black's middle group, which White has prepared with 1 and 3.

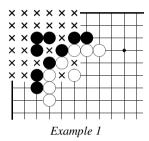
Dia. 28.1: When having decided on 2 and 4, Black has already foreseen the sequence here. White 5 prepares the ladder of 13. Black 8 is a sacrifice to enable the cut at 14. Black is happy with his corner territory while White enjoys thick shape within a previously black sphere of influence. This shape provides White with eye potential. With his sente, life is ensured.

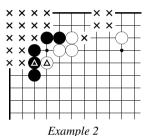
Dia. 28.2: For comparison, this is joseki. In the actual game, Black has no very thick corner ponnuki but a thick extension 16 in the previous diagram, which leaves less aji for White than the joseki stone 3. As you can see, joseki knowledge allows one to create equal corner sequences even under unusual circumstances.

4.4.2 Territory versus Influence

In the special case of a finished, stable joseki that fits fairly into a global positional context, has an equal number of black and white stones and in that one player has a group with T points of current territory but without noteworthy outside influence, the total territorial value of the involved opposing groups' current territory and influence is simply assumed to be T. This can be summarised as a principle:

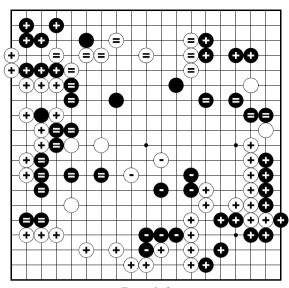
In a joseki that is stable, fair and of the kind 'territory versus influence' and has an equal number of played black and white stones, a player's current territory equals the opponent's influence.



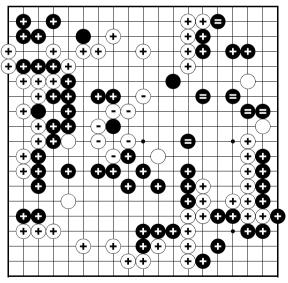


Example 1: Black's current territory T consisting of 23 empty intersections and 1 prisoner is 24 points. The joseki is finished and reasonably stable. Including the prisoner stone, each player has played the same number of 9 stones. If we assume that White's thickness works well in the global context, then its territorial value can be estimated as T = 24 points. Since his current territory is only 2 points, the excess territorial value of his influence equals 22 points.

Example 2: We assume that the marked privilege exchange is made as a later follow-up to the finished and stable joseki. It has an equal number of played stones. Black's current territory T is 15 points. Since White has about 5 points of territory, the territorial value of his influence exceeds Black's by T - 5 = 10 points. White's influence could be used in favour of White on the upper side or the center, reduce Black's territorial potential elsewhere on the board or be a combination of both aspects.



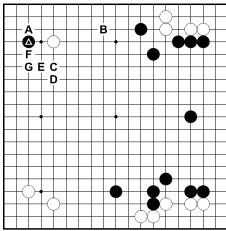
Example 2



Dia. 2.1 (White weak)

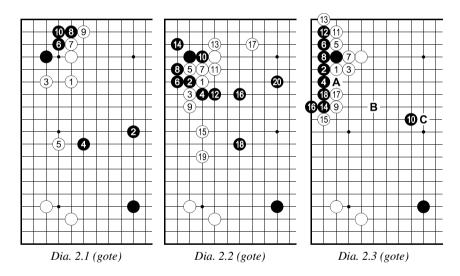
Example 2: Black: Lee Changho 9p - White: Lee Sedol 9p. Date: 2008-09-25. Komi: 8. Result: Black wins by resignation. Black to move. The most important part of a positional iudgement shown: '+' stones are very thick because they unconditionally are alive and very well connected. '=' stones have the potential of becoming very thick. '-' stones form the weak but important groups. Currently the fight is about attacking and defending the center groups.

Dia. 2.1: Later in the game. the thickness and weakness statuses have changed. Black has become much thicker while only White has to defend a weak, important group. Therefore Black can start the endgame to decide the game in his favour.



Example 2 (White's decision)

Example 2: Black's huge movo is the major topic of the game. How should White reply to the marked approach move? White black would like to build center influence in sente so that then he can use it for reducing the moyo. A or B do not aim for the center. What about White's other major alternatives from C to G? D puts too little pressure on the black stone and so is not a guaranteed sente.



Dia. 2.1: White 1 is not sente because 3 does not kill and expanding the huge moyo is more important for Black than denying White territory on the left side. 1 and 3 can also be played in reversed order.

Dia. 2.2: White cannot gain sente by playing at 1. Black develops the center before White can start to reduce it. White 3 at 4 would become gote, too.

Dia. 2.3: After 1 - 7, the move 9 is White's best attempt to get sente. However, Black is unimpressed and plays elsewhere with 10. If White plays 9 at 17, then Black 11 activates the threat of cutting at A so that White is obliged to continue with White B, leave the corner in gote again and allow Black C.

Example 2 conclusion: White cannot build good center influence while leaving the upper left corner in sente. Therefore White must choose a short cut to his major strategic plan and play elsewhere immediately to reduce Black's moyo. Since White's initial strategic plan was too ambitious, White follows a simpler strategic plan that can be realised.

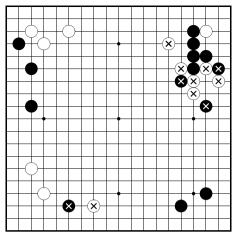
6.3 Choosing Directions

All decisions related to directions use these principles:

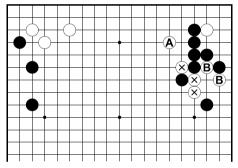
- Urgency has to be taken into account.
- Wider space is more valuable than narrower space.
- Additional space is the more valuable the more influence stones of either player are adjacent to it, unless the space is a small neutral area.
- Get more additional space than the opponent.

Examples for urgency are found in 3.9 Urgency (p. 99). Application of the principles is straightforward if only one of them is relevant or if all relevant principles yield the same answer. Otherwise, choosing the right direction can be difficult and more sophisticated means might also have to be applied. An example of such means would consider different representative variations and then compare them using analysis methods, see 4 Analysis Methods (p. 161) and 8 Strategic Planning (p. 251). In the following examples, urgency, analysis methods and high level strategic planning do not play a decisive role, although one must be aware that in other cases, these might override the principles under discussion. Now we apply the basic principles stated above to each of these questions:

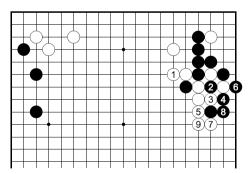
- Which global direction to take?
- Which group to develop?
- Which side of a group to develop?
- Which direction to move from a group?



Example 3 (unstable stones)



Dia. 3.1 (important strings)



Dia. 3.2 (White thickness)

Example 3: Black: Xie He 7p - White: Lee Heesung 8p. Date: 2010-04-23. Komi: 6.5. Result: White wins by 2.5 points. White to move. A positional assessment can restrict itself to a determination of the marked unstable stones. While the lower left corner has 2, the upper right corner has 9 unstable stones. Therefore the upper right is the important board area and the next move has to increase stability significantly.

Dia. 3.1: The central cutting strings marked by crosses are the most important. The string A is more important than the strings B. Therefore White develops the strategic plan to sacrifice B and to create thickness at the crosses and at A.

Dia. 3.2: The game continuation fulfils White's plan. White's thickness increment is so great that one should verify whether Black's moderate territory increment is the best choice. Does Black have a stronger reply?