# Opening Strategy

**(Parts 1 + 2 written for OZthello)**
*by George Ortiz*

The opening phase in Othello (roughly the first 20 moves) has a very strong influence on the rest of the game. Indeed one just has to look at a few tournament games to see that expert players often gain an irreversible advantage straight out of the opening against less experienced players. The opening phase is not only important for the outcome of the game, but also tends to govern the style of play in the mid-game.

There is enough knowledge on Othello openings these days, to build a substantial "opening book". Most champion players have a repertoire of at least a dozen openings, which they know in depth (up to 25 moves, including variations). However as much as I believe it's very useful to know a few openings well, I also think it's even more important to understand the basic principles of opening strategy.

## The "classic" opening principles:

- *Try to have fewer discs than your opponent.*
- *Try to occupy the center of the position (the 4 center-squares in the first few moves).*
- *Avoid flipping too many frontier discs (those located on the outside boundaries of the position, i.e. avoid building walls).*
- *Try to group your discs into one connected cluster rather than having several scattered isolated discs.*
- *Avoid taking edges too soon (before the mid-game).*

All these principles can also be applied well into the mid-game. However the game of Othello is full of contradictions and we will see later on, that there are many different types of openings which disobey some of the above principles and still "work"quite well. But right now, I'd like to introduce the most important concept in opening strategy and probably in the game of Othello: *mobility*.

Mobility is the essence of all the above opening principles and can simply be defined as a measure of the number of options (legal moves) a player has at any one turn.

## The battle for mobility

The opening phase of Othello can be described as a "battle for mobility" often referred to as *mobility optimization*. Each player tries at each turn to have greater mobility (more moves) than the opponent. To do so, one must ideally try to increase his own mobility while decreasing the opponent's mobility. If one player can manage to reduce the opponent's mobility to zero (or near zero) then that player will be able to "force" his opponent into making undesirable moves and follow through with an easy win. In any case greater mobility in the mid-game most often translates to a winning position in the endgame. But how can this theoretical concept be applied in practice?

One technique which is very powerful is the *evaporation* technique. This technique consists in trying to force your opponent to flip as many of your discs as possible, in an attempt to

quickly run him out of safe moves (while making sure you're not under the risk of being wiped-out!). To successfully force the "evaporation" you should always play in areas in which your opponent already has access while keeping your discs in a connected cluster (a method sometimes referred to as "curling into a ball"). While this technique can provide dramatic results it is very unlikely you will be able to apply it unless you are playing a beginner. Indeed this technique requires a fair amount of "cooperation" from your opponent making many "bad" moves which flip lots of *frontier* discs. To describe the slightly more standard technique of mobility optimization we need to define a key concept in opening strategy, the *quiet move*.

Because of the nature of the rules of Othello, most moves you make tend to increase your opponent's mobility and decrease your own (there are suddenly more discs for your opponent to flip and less for yourself). However there is one type of move which doesn't follow this trend: the *quiet move.*

A quiet move can be defined as a move that doesn't flip any frontier discs (typically it will only flip one or two discs and only "interior" ones).

When there are no "outstanding" moves to make players will want to play a quiet move to maintain their mobility (neither increase it, or decrease it). This means that it is a good idea to always have quiet moves in reserve. Therefore players should always try to "set-up" new quiet moves in the opening phase and by the same principle try to reduce the opponent's quiet moves.

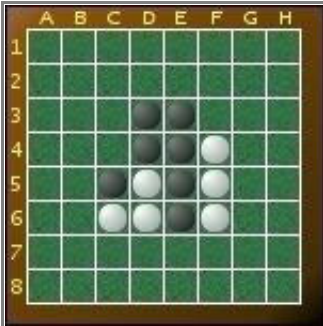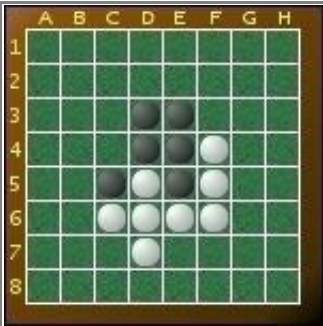We'll see how this is done using "classic" openings as examples.

## The Set-up



The Inoue Opening: 1.f5, 2.d6, 3.c5, 4.f4, 5.e3, 6.c6...



... 7.e6 (sets up a quiet move in c4)
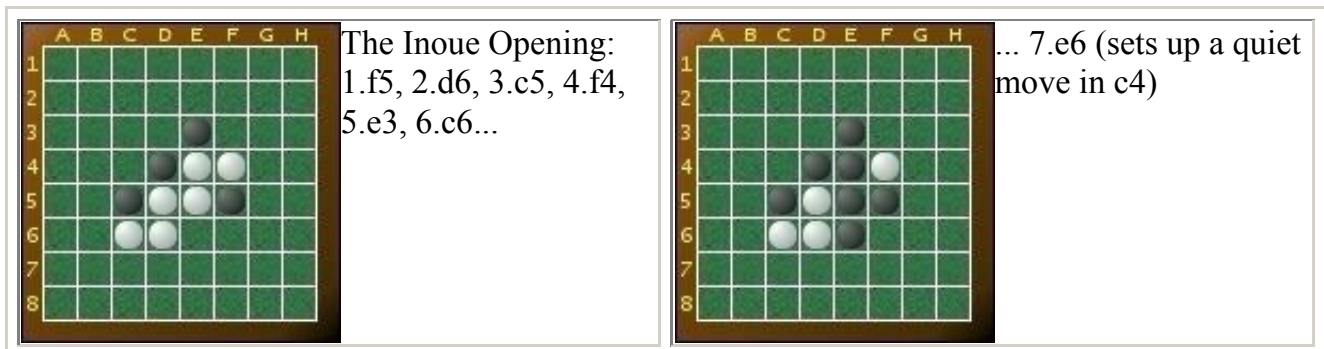
The Inoue (Hiroshi Inoue was the first World Champion in 1977) is one of the oldest *perpendicular* openings. The idea behind move 7.e6 is that it "reconnects" Black's position and also allows access to the quiet move in c4.

White could deny Black's access to c4 by playing either 8.f7 or 8.f6 (called a *block*).

## The block

| | |
|---|---|
|  | The Rose opening: 1.f5, 2.d6, 3.c5, 4.f4, 5.e3, 7.d3, 8.f6, 9. e6,... |
|  | ... 10.d7 (blocks Black's access to c4) |

The Rose (named after US champion Brian Rose) is the second most popular *perpendicular* opening played in recent years (the first being the Tiger opening).

Notice how Black sets up a quiet move in c4 with move 9.e6 and White then denies Black's access to c4 with 10.d7 flipping back the disc in e6 (10.f7 is less desirable as it extends the eastern wall in column f).

There are 3 ways of blocking moves: denying access (like 10.d7), *poisoning* moves and actually taking the move yourself. Which technique to use depends entirely on the position. For example in the Rose position described above if White wanted to take Black's move c4 away by playing there (10.c4), White would end up flipping three discs in a very "uneconomical" way and setting up a new quiet move in c3 for Black, this would therefore be a very bad choice. Actually some players believe that "taking the move", as a blocking technique, should have last priority as the prime objective should be reducing the opponent's mobility while saving your own quiet moves for later, promoting an "aggressive" opening strategy.

## Summary of the "classic" opening strategy

The main objective is to play *offensive* moves which provide access to critical squares or set up new quiet moves therefore increasing mobility and *defensive* moves which deny your opponent's access to critical squares or quiet moves therefore decreasing his mobility.

If no offensive or defensive moves are viable then a *quiet move* will conserve the current state of mobility. However it is important to realise that not all quiet moves are good moves. For instance it is not desirable to take a quiet move if it sets up a new quiet move for your opponent. Therefore as in all phases of the game, looking a few moves ahead is essential.

| **Opening trends** | Following is a list of the most popular openings played in 1995's World Championships in Melbourne (the percentage indicates how often these openings occurred relative to the total number of games played). | |
|---|---|---|
| the *Tiger* | (1.f5, 2.d6, 3.c3, 4.d3, 5.c4) | 47% |
| the *Rose* | (1.f5, 2.d6, 3.c5, 4.f4, 5.e3, 6.c6, 7.d3, 8.f6, 9.e6, 10.d7) | 13% |
| the *Buffalo* | (1.f5, 2.f6, 3.e6, 4.f4, 5.c3) | 8% |

| the *Heath* | (1.f5, 2.f6, 3.e6, 4.f4, 5.g5) | 6% |
| the *Inoue* | (1.f5, 2.d6, 3.c5, 4.f4, 5.e3, 6.c6, 7.e6) | 5% |
| the *Shaman* | (1.f5, 2.d6, 3.c5, 4.f4, 5.e3, 6.c6, 7.f3) | 3% |

Under these circumstances if there are no "mobility optimizing" moves or quiet moves to play, then the last resource can be playing a *waiting* move (a move which only flips 1 or 2 frontier discs without decreasing your own mobility, i.e. move 6.f6 of the Rose).

Although these principles are worth applying in most cases, we will now see that there are a few other popular opening strategies which disobey at least one of those "classic" principles and yet can be very effective.

# Double-walling

One should usually avoid forming "walls" in Othello, since they tend to dramatically limit mobility. However a wall can be desirable if it pressures the opponent to form one as well and/or if it is likely he will have to "break through" first. This is known as double-walling or the "wall strategy".

This can be an attractive opening strategy, especially if you can force your opponent to "break" first which will usually open up obvious new quiet moves. However if it becomes quickly apparent that you will have to break your opponent's wall first, it might be wise to immediately revert to a more classic strategy such as controlling the center of the position (easier said than done!).
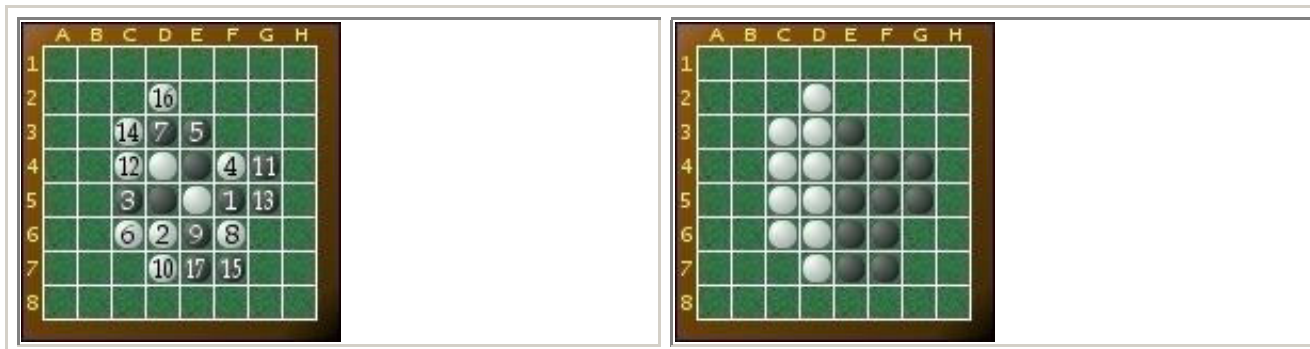


The "*rotating flat*" is a very popular continuation of the Rose opening. After Black's "flat" move 11.g4, both players make a series of waiting moves in an attempt to contain each other's mobility on opposite sides of the position. This leads to a double-wall formation. After 17.e7 both players will typically continue with waiting moves (18.f2, 19.c8, 20.f3, 21.c7,…) to avoid "breaking through" the opponent's wall which results in slowly rotating the position in a clockwise direction around the center.

Black will then usually try to run White out of safe moves by taking edges in the South and East. Experience has shown however that the rotating flat is slightly better for White, as Black will often fail to run White out of moves and will eventually have to break through the Western White wall. Perhaps this is why the Tamenori-Rose variation (11.g3, 12.c4, 13.b4) is now more in favour.
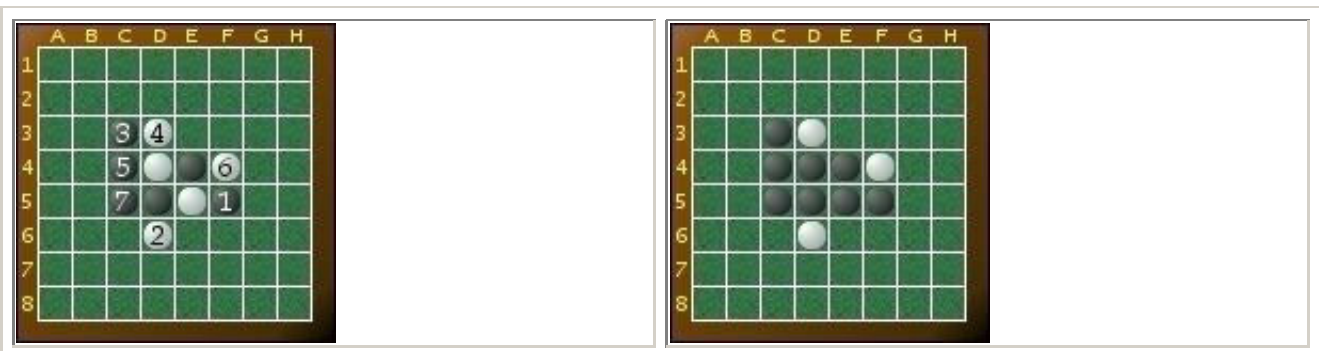
# Checkerboarding

It is generally accepted that it is a lot easier to control the game if you have fewer discs than your opponent. But in some cases the best way to minimize your opponent's mobility is by controlling the center of the position with a majority of discs leaving the opponent's discs scattered along the periphery; this is known as checkerboarding.

The "checkerboarded" player will typically be left with only a few scattered frontier discs which will tend to block out each other's moves. That player will then usually have to chose between two options: either "regroup" early at all cost or make a few waiting moves delaying "reconnection" to when the opponent's position is more vulnerable (due to the large number of discs).

The main goal of checkerboarding is to secure a firm control of the center and try to force the opponent to make "bad" moves (which flip many frontier discs) before he can regain center control.

It is however extremely risky to extend this strategy into the mid-game as it will become increasingly difficult to prevent the opponent from "re-grouping" and so checkerboarding should really only be used to gain a positional advantage in the opening phase.



The *central Tiger* (also known as the Rose-Bill in the US) is the oldest and still among the most popular variations of the Tiger opening (moves 1 to 5). The position reached after the "central" move 7.c5 is quite typical of checkerboarding. Notice that although Black has more than twice as many discs as White, Black has much greater mobility. This is because Black controls the center-position and White's discs are strongly "checkerboarded" (scattered and blocking each other).

White has two options in this position:
- 8.b4, a fairly "loud" move but which reconnects White's position immediately.
- 8.b3, a waiting move, encouraging further checkerboarding by Black (typically 9.c2) but which prepares for a more effective "reconnection" later on (the most common variation these days is the Tamenori, 8.b3, 9.c2, 10.e6).

# Edge-grabbing

The "classic" Othello strategy preaches against taking edges early in the game. However those of you who have been wiped-out by a player who was "creeping along the edges" will know that in some cases, early edges can pay off! Although most openings present opportunities for resolving edges early in the game, some openings are almost custom-made for edge-grabbing,

because of their ability to quickly "pull" the game towards an edge. This strategy, known as "hiparri" (pulling) in Japan is however a very risky one. The gamble is that if you can run your opponent out of safe moves early enough you should have an easy win, otherwise if the opponent can hold on and force you to "open" (move away from the edges) you will most probably lose as your early edges become liabilities.
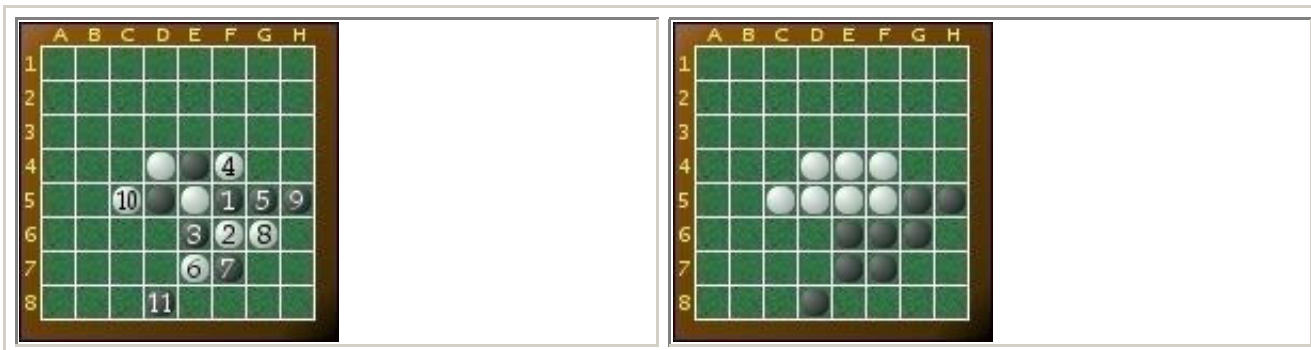


The Heath opening (moves 1 to 5) is known in Japan as "Tobidashi" which means "jumping out" because move 5.g5 jumps out of the "sweet sixteen" (central square). The next 6 moves are taken from a game in which Takeshi Murakami, a "tobidashi" expert, defeated two-times World Champion Masaki Takizawa. Although these lines are quite uncommon (8.c5 or 8.h5 is the preferred response to 7.f7) they serve as a good example of a dangerous "hiparri".

Note how Black's initial "edge-grabbing" move 9.h5 wins a tempo by guaranteeing the last move on that edge (unless White moves to h7 which is far from safe). This would not have been the case if Black played 9.h6 since White could then play "opposition" with 10.h4. Gaining early tempos is crucial to successfully run the opponent out of moves and is what "hiparri" is all about.

After 11.d8 (see above diagram) the position is dangerously turning into what Ted Landau refers as an "edge double wall" (Othello: Brief & Basic). Here White has to be very careful not to unnecessarily "feed" Black with free tempos along the edges (for instance 12.e8 would be suicidal!) and instead try to pull the game back to the center (12.d7 is probably the best option).

White's choices are limited but fairly obvious and the real challenge is for Black to successfully run White out of safe moves before it's too late (if Black is forced to play to the West or North, his position will quickly deteriorate). This is why "creeping along the edges" is such a risky strategy: once initiated there is no going back!

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This article is written by George Ortiz (President of the Australian Othello Federation), this article looks at opening books and gives useful hints to the beginner (and reminders to intermediate) players. A combination of Parts 1 and 2 of the article first published in the Australian Othello Federation's Newsletter, OZthello.