

Strategy guide

This text is the electronic equivalent of a booklet created and distributed by Emmanuel Lazard and the French Othello Federation (F.F.O.). This copy is distributed with the authorization of Emmanuel and the F.F.O. The printed version of this booklet (with nice round discs) is available from the F.F.O. for 20 French Francs (shipping included) by check payable to the F.F.O.

FEDERATION FRANCAISE D'OTHELLO, BP 383 75626 Paris Cedex 13, FRANCE

(C) Emmanuel Lazard (and the entire F.F.O. team) March 1993

Translated from French into English by Colin Springer with the permission of the author. This text may not be further distributed without the explicit agreement of the author.

In this version, Gunnar Andersson has changed the layout and fixed some minor errors .

OTHELLO (r) : THE RULES OF THE GAME

Othello is a strategy game played by two players: Black and White. It is played on an 8x8 board (usually Green in colour), called the Othello board. The two players place 64 discs, each of which is black on one side and white on the other. For convenience, each player begins with 32 discs but these do not belong to him and if his opponent runs out of discs, he is obliged to give him some. A disc is black if the black side is visible and white if the white face is on top.

The Goal

The winner is the player who has more discs of his colour than his opponent at the end of the game. This will happen when neither of the two players has a legal move. Generally at this stage all 64 squares are occupied.

Starting Position

At the beginning of the game, two black discs are placed on e4 and d5 and two white discs on d4 and e5 (see fig. 1).

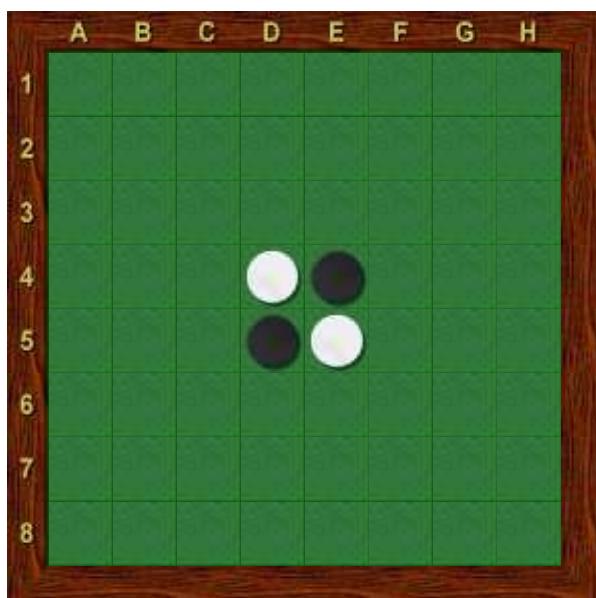


Figure 1 : the Initial Position

Black always begins, and the two players subsequently take turns moving.

Making a Move

At his turn, a player must place a disc of his colour on one of the empty squares of the othello board, adjacent to an opponent's disc. In addition, by placing his disc, he must flank one or several of his opponent's discs between the disc played and another disc of his own colour already on the board. He then flips to his colour all the discs which were flanked. The discs are neither removed from the Othello board nor moved from one square to another.

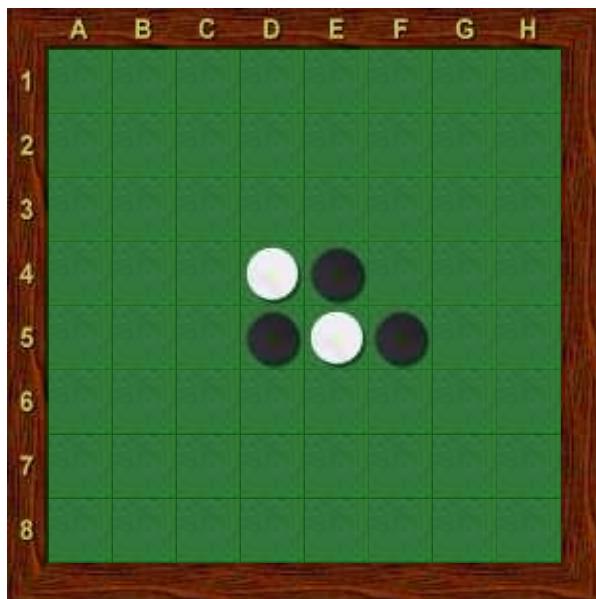


Fig. 2 : Black plays f5 ...

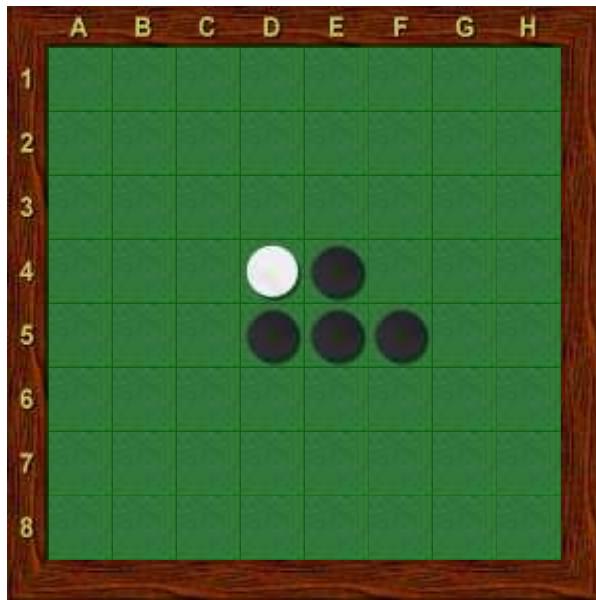


Fig. 3 : ... and flips e5 !

Black's first move may be, for example, to f5 (see figure 2). By playing f5, he flanks the white disc at e5 between the disc played and another black disc already on the board (here d5) ; he then flips this disc (see figure 3). Black could also have moved to e6, c4 or d3. However, these four black moves are perfectly symmetrical ; black needn't spend time thinking about his first move.

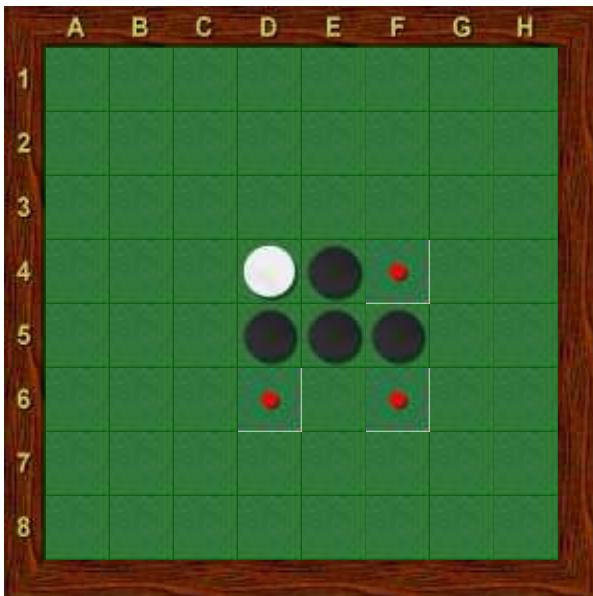


Fig. 4 : White f4, f6 or d6

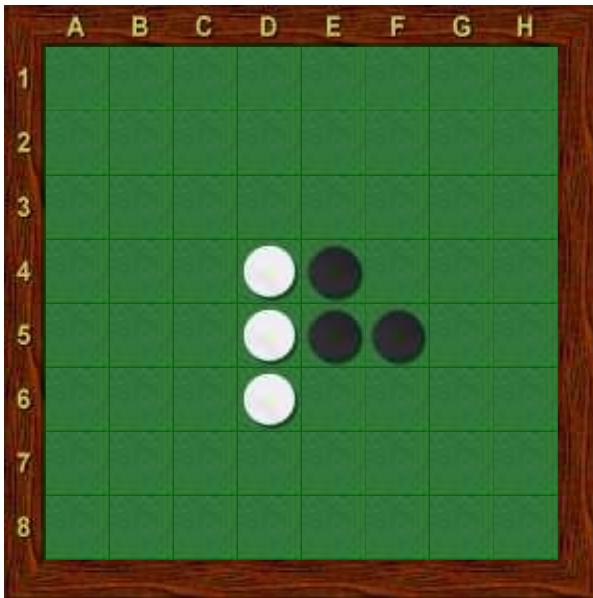


Fig. 5 : if white plays d6.

Now it's white's turn to move. He has three possible moves (see figure 4). Each possible move flips at least one opponent's disc. White may play f4, f6 or d6. Note that discs can be flanked in all eight directions. Furthermore, in each direction several discs may be flanked (see figures 6 and 7). All these flanked discs must be flipped.

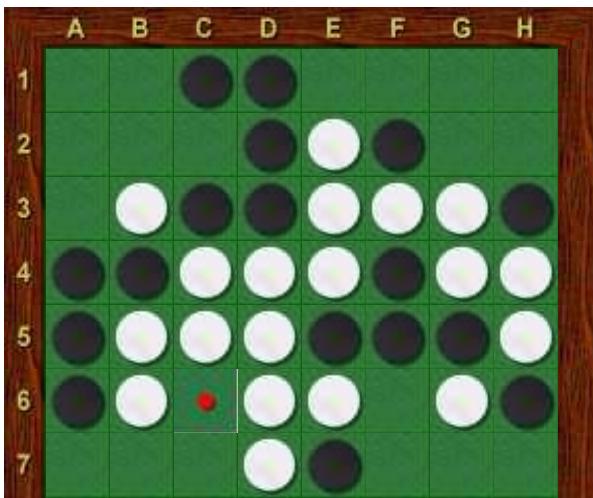




Fig. 6 : Black plays c6 ...

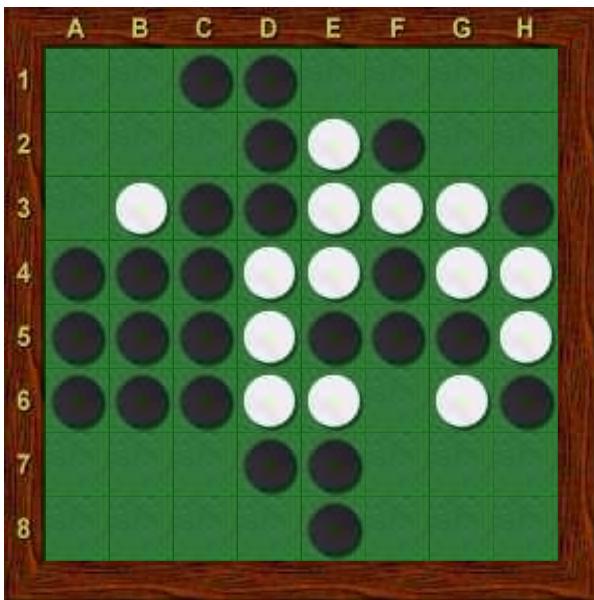


Fig. 7 : resulting in this position.

Black has played to c6. He turns the discs at b6 (flanked by the disc at a6), b5 (flanked by a4), d7 (flanked by e8), c5 and c4 (flanked by c3). Note that neither d6 nor e6 are flipped due to the empty square at f6.

There is no chain reaction : flipped discs may not be used to flip other discs on the same move. Thus, in figure 8, black moves to a5 :

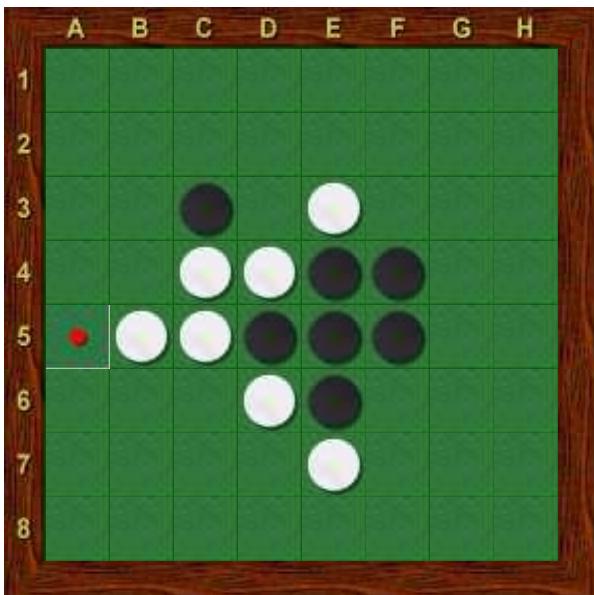
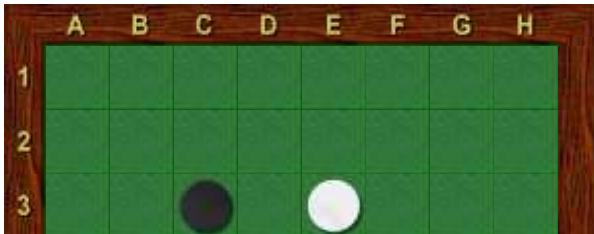


Fig. 8 : Black plays a5



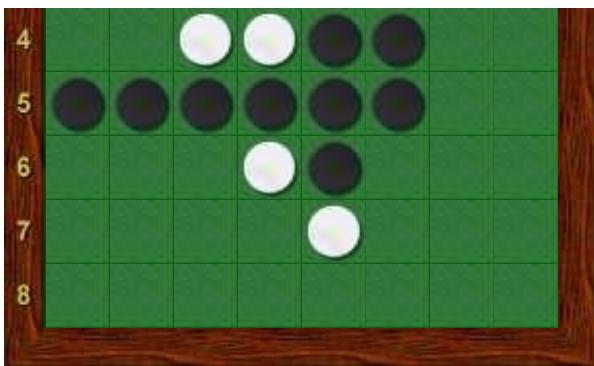


Fig. 9 : c4 remains white.

The discs at b5 and c5 are flipped since they are flanked. At this point, even though c4 is flanked, it is not flipped (see figure 9). The reason for this is that it is not flanked between the disc played and another disc.

If, at your turn, you may not make a move to flip at least one opponent's disc according to these rules, you must pass your turn and it's once again your opponent's turn to play. But if a move is possible, you must play it.

End of the Game

The game is over when neither of the two players has a legal move.

Generally, this happens when all 64 squares are occupied. However, it is possible that some empty squares will remain where neither player may move : for example, if all the discs are the same colour after a turn, or in a position such as the one below (see figure 10).

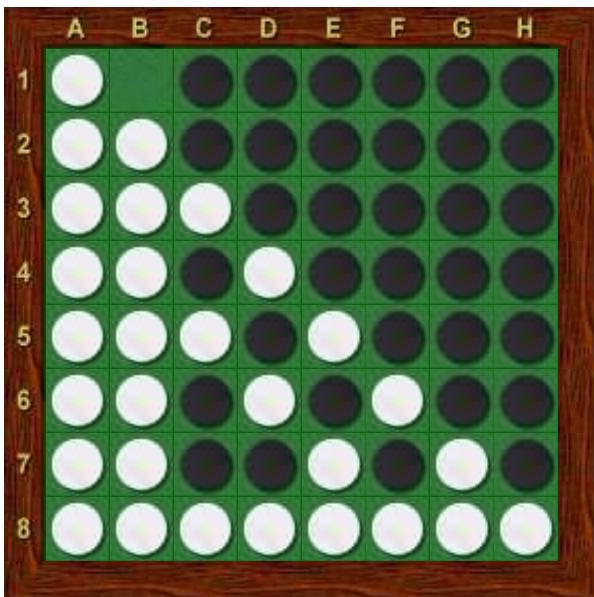


Fig. 10 : The game is over !

Neither of the two players can play to b1 since no flipped discs are possible. In this case, we count discs to determine the final score. Empty squares are given to the winner by convention. In this game, white has 29 discs and black has 34, with one empty square. Thus black wins 35-29.

NOTATION

The game of Othello takes place on a board with 64 squares. We refer to these squares by a coordinate system : the rows are numbered from top to bottom by 1 to 8 ; the columns are indicated from left to right by 'a' to 'h'.

	a	b	c	d	e	f	g	h	
1	a1	b1	c1	h1	1
2	a2	2
3	a3	3
4	4
5	5
6	6
7	7
8	a8	h8	8
	a	b	c	d	e	f	g	h	

The square at the top left is referred to as a1, the one immediately to its right as b1, and so on.

	a	b	c	d	e	f	g	h	
1	.	C	C	.	1
2	C	X	X	C	2
3	3
4	4
5	5
6	6
7	C	X	X	C	7
8	.	C	C	.	8
	a	b	c	d	e	f	g	h	

Certain types of squares have been given, for reasons of convenience, a special name. One speaks of the corners (a1, h8, a8, and h8), the X-squares, which are those squares diagonally adjacent to a corner, and of the C-squares, which are the other squares adjacent to a corner. The compass directions are often used to refer to a region of the Othello board. For example, the squares near the a1 corner make up the "north-west" region while row 8 is referred to as the "south edge".

It is not necessary, in reading this booklet, to know how to record a game. However we give the process in case you would like to read a game analysis or record your own games. A game is recorded in a diagram giving the number and location of each move.

	a	b	c	d	e	f	g	h	
1	45	32	19	18	31	24	44	43	1
2	46	36	9	11	16	15	42	56	2
3	17	8	3	4	10	22	38	51	3
4	20	13	5	o	x	6	23	40	4
5	21	14	7	x	o	1	39	41	5
6	34	30	12	2	28	29	53	52	6
7	35	47	33	26	25	37	59	55	7
8	50	49	48	27	54	60	58	57	8
	a	b	c	d	e	f	g	h	

The diagram above represents the game Penloup-Juhem game from the 1992 World Championships. The first player listed is black, here Penloup. The '1' on f5 indicates that the first move was played on this square ; then white responded with d6, followed by c3 d3 c4 ...

INTRODUCTION TO STRATEGY

The rules stipulate that the winner of an Othello games is the player who has the most discs of his colour at the end of the game. Newcomers to the game too often have the tendency to transform this long-term objective into a short-term tactic : they try to have the most discs at each stage of the game. To do this, they play at each move the move which turns the greatest number of discs possible. This is called the maximum disc strategy. Fortunately for the game's interest, after several games against an experienced player, one clearly sees that this strategy is not good, as we will try to demonstrate with an example.

MAXIMUM DISC STRATEGY

In diagram 1, black has only one disc with only four moves to go. Surely white has a certain win ?

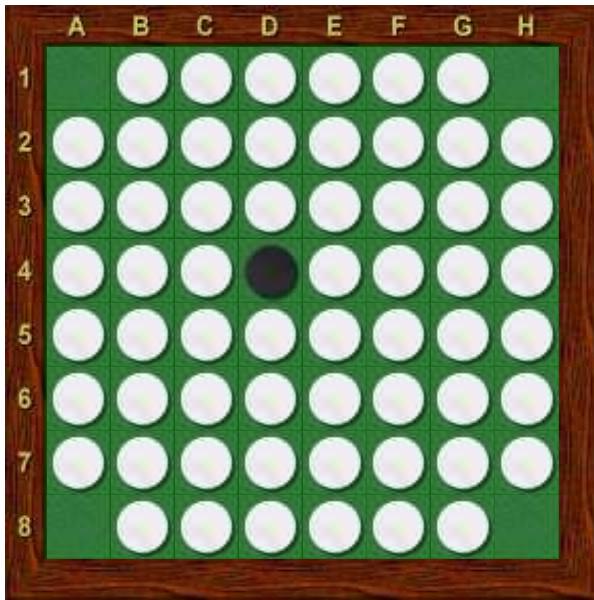


Diagram 1. Black to play

Black may play a1 or h8, and in this manner, he may play all the remaining moves (since white must pass after each move), for a final score of 40-24 for black ! It's therefore clear that having lots of discs, even very close to the end of the game, does not absolutely guarantee an ultimate victory. In the example of diagram 1, white indeed has many discs, but they are vulnerable : they can be flipped back by the opponent. What's important is therefore not to have many discs but rather to have many discs which can not be flipped back by the opponent, no matter what happens for the rest of the game. Such discs are called "stable discs". Of course, it's often very difficult to acquire stable discs before the last few moves of the game ; but first let's see some examples of stable discs.

STABLE DISCS - POSITIONAL STRATEGY

It is impossible to flip a disc placed in a corner since it can never be flanked between two opponent's discs. A disc played in a corner is therefore the most simple example of a stable disc. In addition, once a corner is occupied by a disc, adjacent discs of the same colour often also become stable discs.

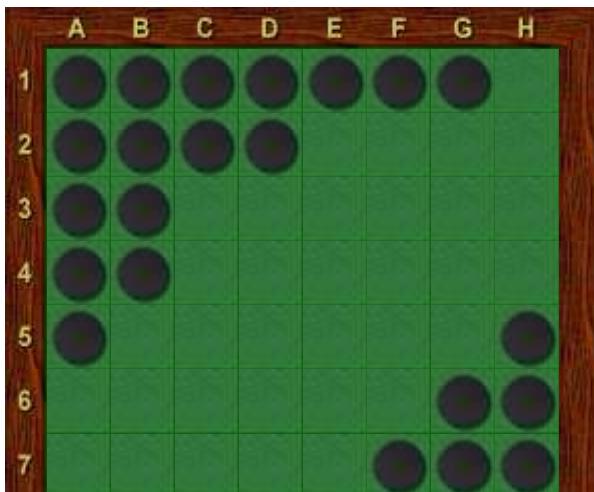




Diagram 2 : Stable discs

In the example of diagram 2, the 26 black discs are stable, independent of the colour of the other discs on the board, and black is assured to keep at least 26 discs at the end of the game.

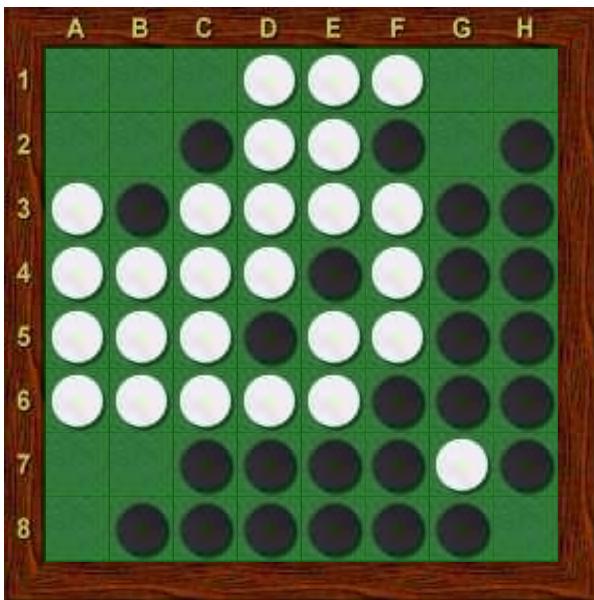


Diagram 3 : Black to play

In diagram 3, black may play to h8, creating 23 stable discs (the g and h columns, rows 7 and 8, and the disc f6) (see diagram 4).

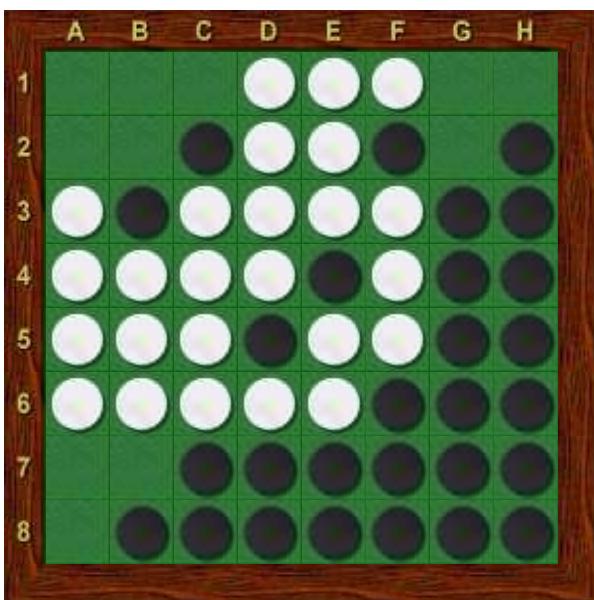


Diagram 4 : After a black move to H8

Black is now in a very good position to win this game. Indeed, he already has 23 stable discs ; if he can hold just 10 more discs at the end of the game he will be assured at least 33 discs, and victory. In Othello, discs played in the corners are therefore extremely important : they permit subsequent edge moves which lead to even more stable discs. However, this rule has exceptions (as we shall see later), but remember never to give a corner to your opponent without compensation (unless of course you have no better moves...). The simplest way to avoid giving up a corner is to avoid playing to the squares adjacent to a corner, that is to the weaker X and C squares (see diagram on page 2). You may only move to a square which is adjacent to an opponent's disc (which you will

(flip) ; thus your opponent will not be able to take a corner unless at least one of the three adjacent squares are occupied. In diagram 5, black has unwisely played to the X-square b7, believing that white cannot take the corner a8 since there is no white disc along the diagonal. However, white may play d8 (see diagram 6), which flips (among others) d5 and allows him to take the corner a8 on his next move, black having no method to flip back the disc on d5.

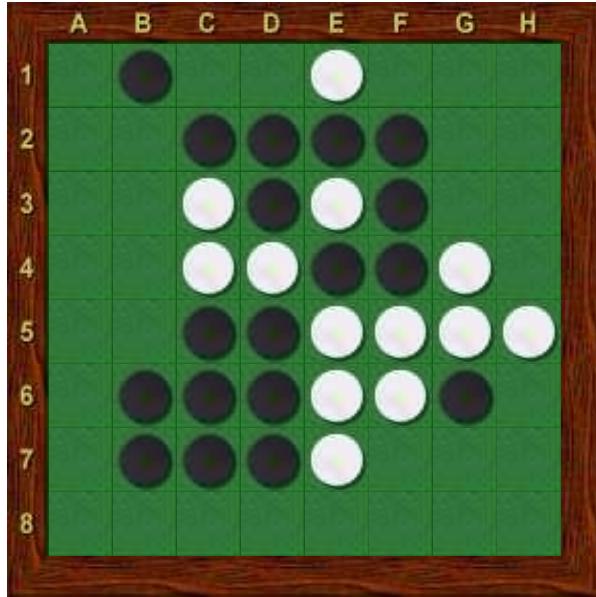


Diagram 5 : White to play

Indeed, the isolated disc on b1 will permit white to take the a1 corner : white plays c1, threatening to play a1 on the next move. To prevent this, black has only one possibility : he must flip back the disc by playing d1. However, thanks to the disc at e1, white may still play a1. Black has made a terrible error by playing the C-square b1. To be more precise, the danger of playing a C-square is greatest when it is an isolated C-square, that is to say not connected to other discs along the edge. Thus in diagram 3, black has played several C-squares but he risks nothing since black discs occupy the entire edge.

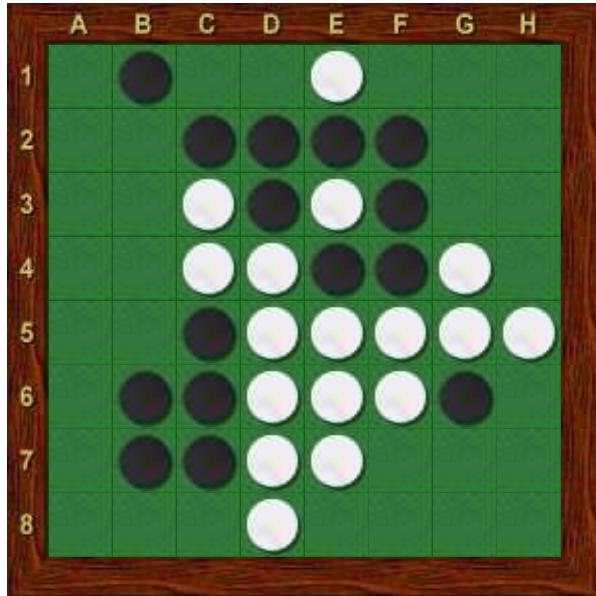


Diagram 6 : After a white move to D8

WEDGES

We have already seen that the corners are very important. This immediately translates into a method by which edges must be played. Consider for example the south edge in diagram 7. If black plays c8, he can take the corner a8 no matter what white does. The reason is that the disc at c8 cannot be flipped back, since it is flanked by two white discs. One says that the black disk is wedged. What about the east edge? If black plays h6, he cannot wedge because white takes back with h5 (and similarly, if black plays h5, white will respond h6). Now consider the north edge. If black plays c1, white may take back with d1 to avoid losing the a1 corner. However black may now wedge with e1, winning despite everything the corner on his next move.

It seems clear therefore that whenever there are an odd number of empty squares between two discs of the same colour (here white), the other player may get a wedge (as in the south and north edges), while when there are an even number of empty squares, the wedge may be avoided (as in the east edge).

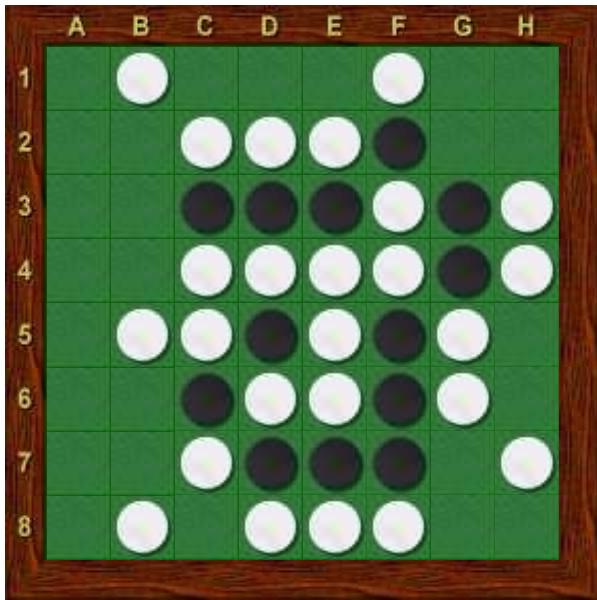


Diagram 7 : Black to play

From the principal that one should avoid playing C and X-squares, many beginning players deduce an incorrect strategy which consists of assigning to each square a fixed value in advance which does not take into consideration the position on the board. In this method, corners are the best squares, followed by edge squares other than C-squares, the central squares are given a neutral value, while the C-squares and especially X-squares are considered to be bad. At each move, they play to the square with the greatest value (assuming it is a legal move of course).

Unfortunately, this strategy is badly flawed for reasons which will soon become apparent.

MOBILITY

We have already said that to avoid giving up corners to your opponent, you should avoid playing to squares adjacent to a corner. There is however one case where you may be obliged to do this : if it is your only legal move. Consider the position in diagram 8.



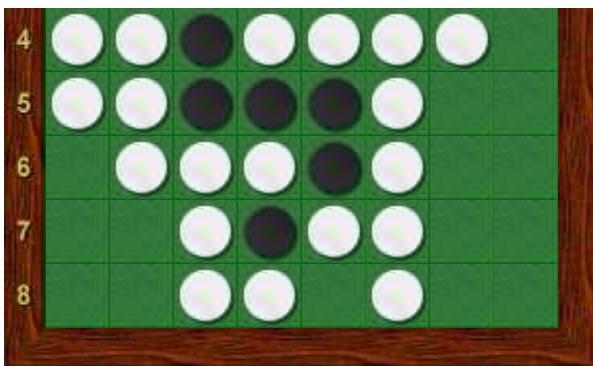


Diagram 8 : Black to play

White has very few possible moves. If black plays to e8, there will be only two remaining moves for white, b2 and g2 (see diagram 9).

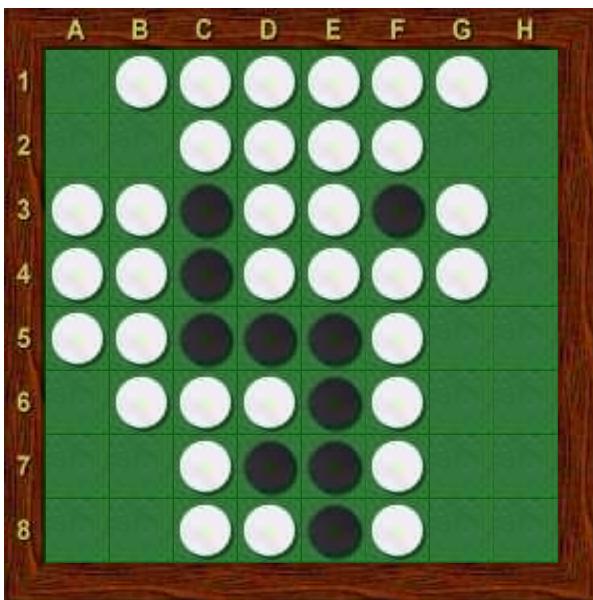
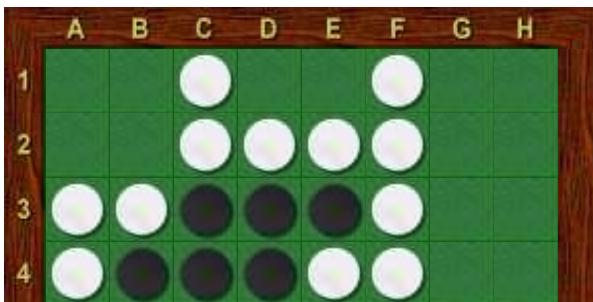


Diagram 9 : After black's move to E8

Now, according to the rules of the game, white is forced to play one of these two moves. If he plays b2, black may take the a1 corner and if white plays g2, black may take the h1 corner. Furthermore, because of the six black discs on the north edge, as soon as black takes one of the corners a1 or h1, he will be able to take the other on his next move.

At this stage we can begin to develop a good strategy for playing Othello. Your opponent will not play to a C-square or an X-square if he may play elsewhere. Your objective is therefore to force him to play there. To this end, you must reduce his different move choices to the point where he only has poor moves remaining, as is the case for white in diagram 8. Now he will be obliged to play one of these (bad) moves and you will be well on your way to a final victory.

Diagram 10 gives another example.



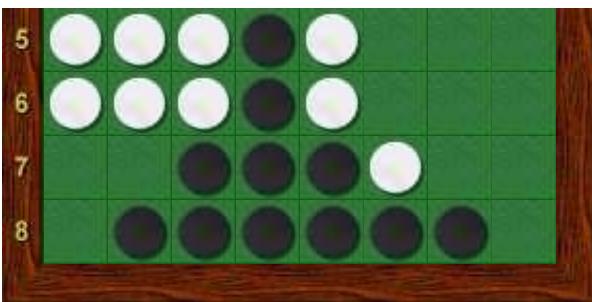


Diagram 10 : Black to play

If black plays to g6, there is only one legal move for white : b2. Of course, as black has no disc on the b2-e5 diagonal, he cannot immediately take the a1 corner, but he will have no trouble in recovering this diagonal, for example with e1 which flips c3 (see diagram 11).

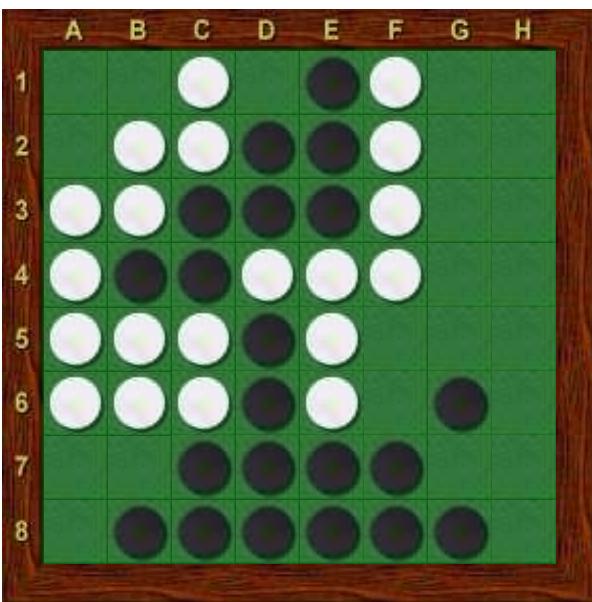


Diagram 11 : after G6-B2-E1

In diagrams 8 and 10, black has very good mobility as he has the choice between numerous (good) moves, while white has few options and all these moves are mediocre : he has very bad mobility.

As a general rule, your objective is to limit the number of liberties (that is, the number of moves) available to your opponent, while at the same time increasing yours. This is what we call the mobility strategy. When this objective is attained, one is said to have control of the game. However, don't forget that you must force your opponent to make a bad move : it's not enough if he has even one non-disastrous choice at each move ; he must have no good moves at all.

FRONTIERS

Each move is played to an empty square adjacent to an opponent's disc. This is the principal which will guide us in the choice of a good move.

At each move you must flip at least one of your opponent's discs. It is therefore clear that the more opponent's discs there are neighbouring empty squares, the more possible moves you will have, and hence the better your mobility will be. Conversely, if very few of your discs are adjacent to an empty square, your opponent will have very few possible moves. A disc adjacent to an empty square is called a frontier disc ; the others are called internal discs. The set of frontier discs is called the frontier. From what we just said, it seems natural to try and minimize your number of frontier discs.

In diagrams 12, 13 and 14, we show three positions which appear similar. What can we say about a black move to a6 in each of these three positions?

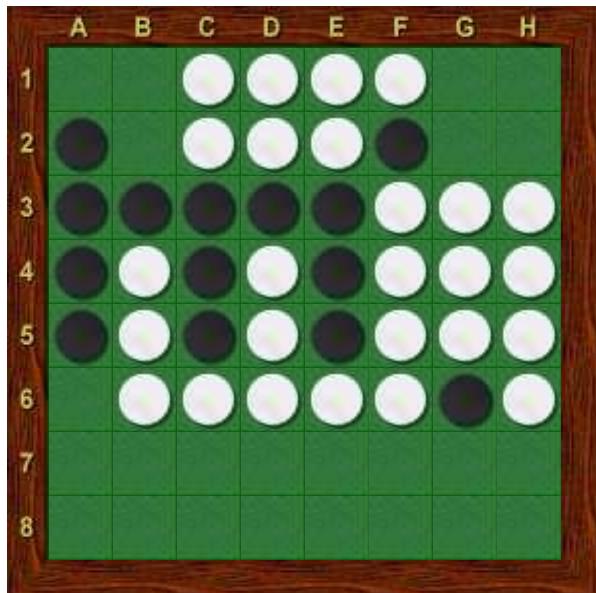


Diagram 12 : Should black play A6 ?

In diagram 12, a move to a6 seems disastrous : after white responds with g1, black will be forced to give up a corner to white (since his only remaining legal moves are b1, g2 and h2). Playing a6 is very poor since it flips a large number of frontier discs (those on row 6) and establishes on this row a large black frontier adjacent to which black may no longer play.

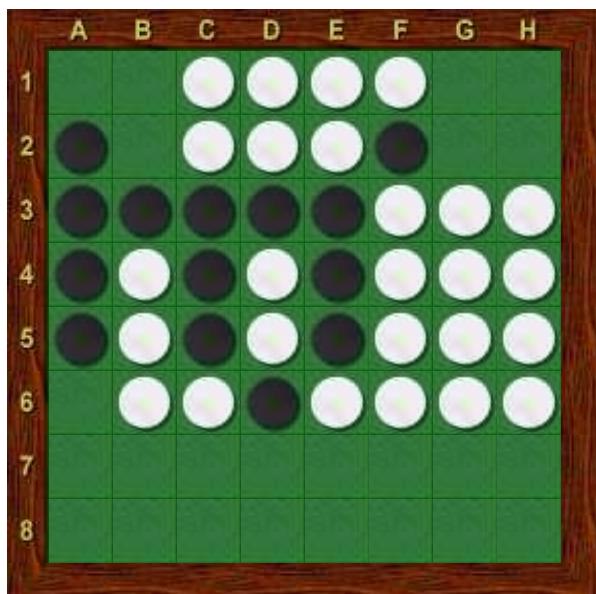


Diagram 13 : Should black play A6 ?

Playing a6 in diagram 13 is much more reasonable since, among the flipped discs, only b6 and c6 are frontier discs. However, this move still deprives black of access to some squares which may become important later on, for example a7. Perhaps it would be better to play e7 which flips fewer frontier discs.



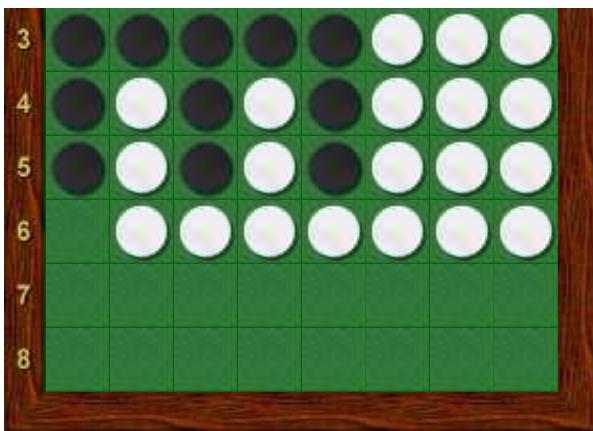


Diagram 14 : Should black play A6 ?

By contrast, the best move in diagram 14 is a6. If white responds with b2 or g2, black can immediately take a corner, and if he responds with g1 (the only other legal move), black may respond with a7 and white is now forced to give up a corner to black (he can only play b2 or b7). In this diagram, the move to a6 is called a perfectly quiet move, since it flips no frontier discs (after playing a6, b5 is no longer a frontier disc). Now we can see the limits of an evaluation of moves based simply on a positional strategy : what's important isn't just where you play but especially what discs which you flip. We can now better understand the weakness of white in diagram 8. All the frontier being white and black having many moves at his disposal (7 moves in addition to those to an X-square or C-square). He has a perfectly quiet move to e8 which adds no discs to his frontier. White now sees the consequences of his enormous frontier : he is obliged to play b2 or g2. Similarly, in diagram 10, a large part of the frontier is white (largely because of the white wall on the east), and by playing g6 black offers no new moves to white.

One of the methods of reducing your opponent's mobility (and especially of not reducing yours by much) will be to avoid flipping too many frontier discs. It's better to have internal discs (that is, discs which are not adjacent to an empty square) than frontier discs. This is what we call the strategy of control of the center. Of course, it is not an accident that all the black discs in diagram 8 are internal discs.

TEMPO, WAITING MOVES

Consider diagram 15. The frontier to the north is equally divided between the two players.

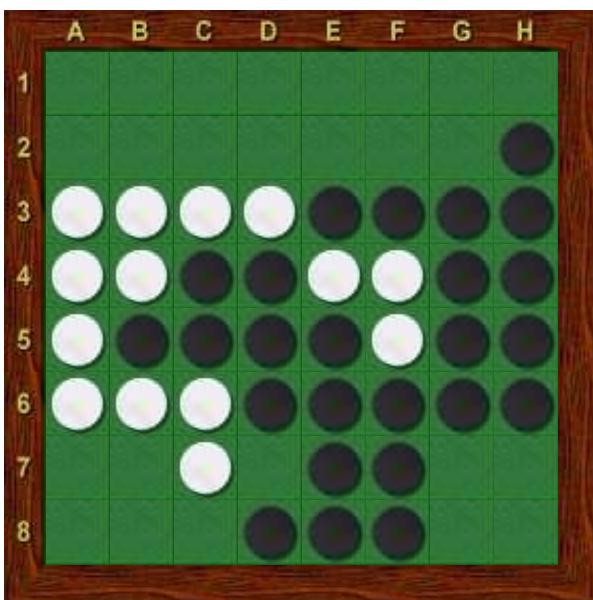


Diagram 15 : Black to play

It's black to play. He may consider a move to the north (e2, d2, or c2 are reasonable), but of course he would prefer white to play first into this region and lengthen his frontier. This is one of the paradoxical characteristics of Othello : it is often unfavourable to have to move since you flip discs of your opponent and risk giving a number of new moves to your opponent. Now, if black doesn't want to play to the north, the only remaining option is to play to the south. He has the choice between two reasonable moves there: c8 and d7. What will happen if black plays c8? White, who doesn't want to play to the north either, will respond with d7 (diagram 16), and black must open the game to the north first. By contrast, if black plays d7, the only plausible move to the south for white is c8 to which black may easily respond b8 (see diagram 17). We say that black has gained a tempo in the southern region. Now it is white who must initiate play to the north.

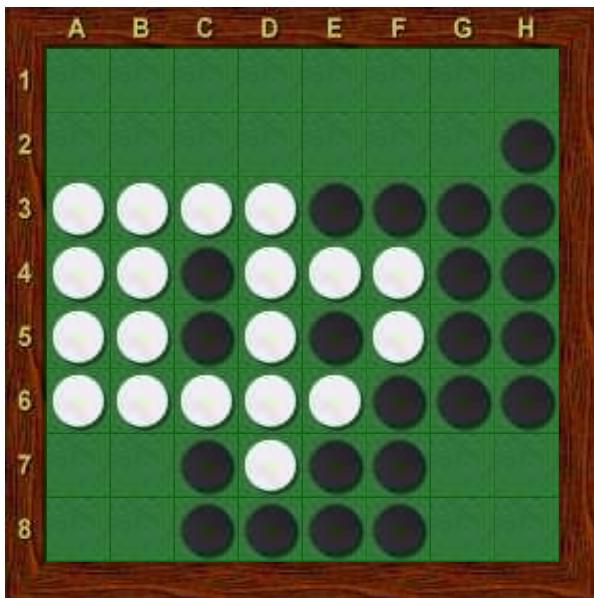


Diagram 16 : Black to play

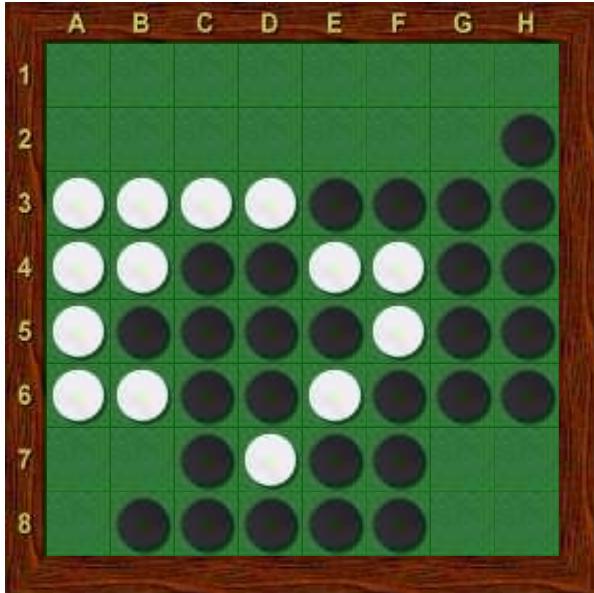


Diagram 17 : After D7-C8-B8

One quick definition of a gain of tempo would be to say that it corresponds to playing one more move than your opponent in a given region of the Othello board (often an edge) and to thus force your opponent to initiate play elsewhere (hence lengthening his frontier).

Diagram 18 gives another example of a gain of tempo along an edge. In order to avoid opening the game up to the north, black would like to gain a tempo on the south edge. How can this be done? How should he choose

between c8 and f8? One could perhaps believe that these two moves are equivalent with the two sequences c8-f8-g8 (see diagram 19) and f8-c8-b8 (see diagram 20).

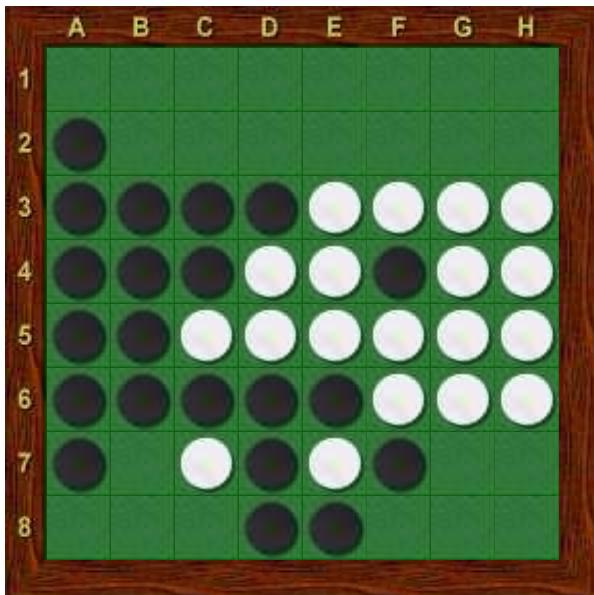


Diagram 18 : Black to play

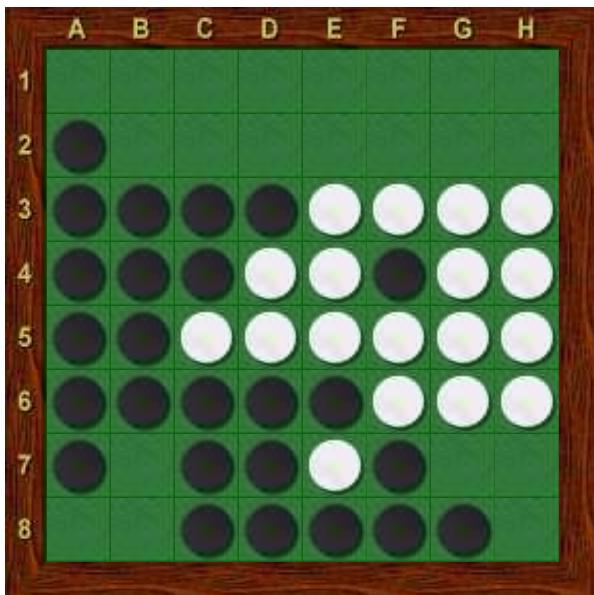


Diagram 19 : After C8-F8-G8

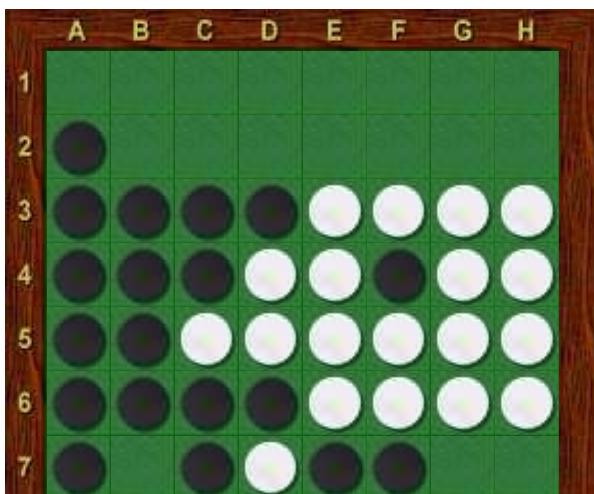




Diagram 20 : After F8-C8-B8

In both cases, black gains the tempo he desired and forces white to be the first to open up the north. However, if we look more closely at the white responses, we see that if black plays c8, white has a better move than f8 : he plays g8 ! (see diagram 21).

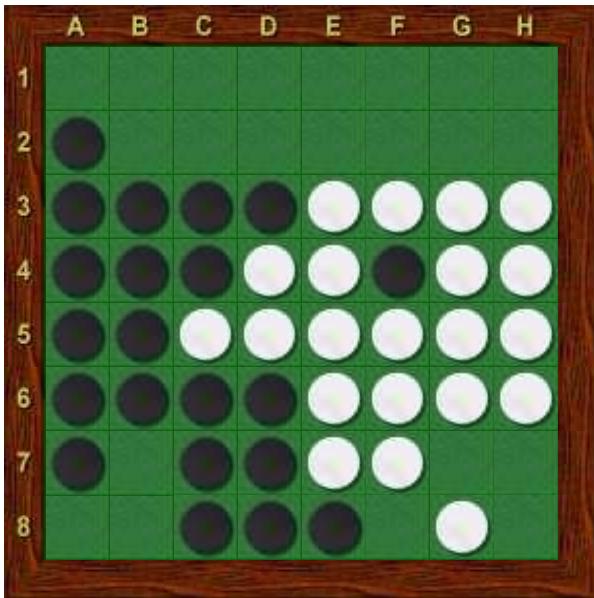


Diagram 21 : After C8-G8

Now black has no more good moves to the south (if black plays f8, white takes back the edge with b8) and must play to the north : he hasn't gained the tempo he wanted. In the position of diagram 18, black must therefore play f8 to gain a tempo. Of course, a gain of several tempi is possible. Needless to say in this case your opponent is in even worse shape since then he'll be obliged to play several moves before you are forced to increase your frontier.

Diagram 22 gives an example of this. If black plays a7 (see diagram 23), white has a horrible position.

Indeed, white has four reasonable moves : g6, f2, e2 and d2, but he will not be able to play all four. More precisely, he will only be able to play one amongst d2, e2 and f2 since they turn the same black disc ; he therefore has, in fact, only two moves. On the other hand, black can gain two tempi on the east edge : he can play a3 followed by a2 ! Diagram 24 gives the position after e2-a3-g6-a2, for example.

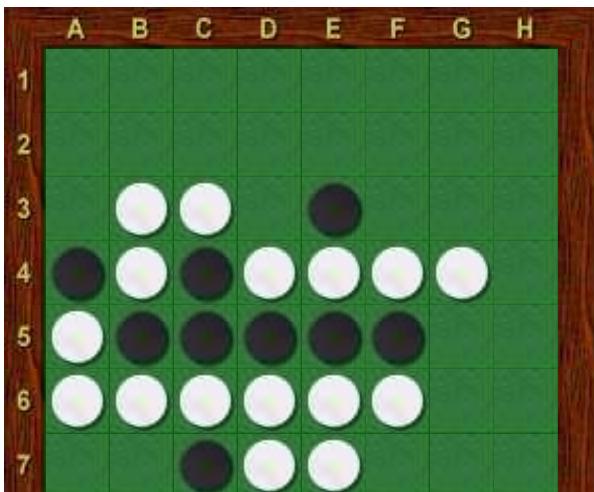




Diagram 22 : Black to play

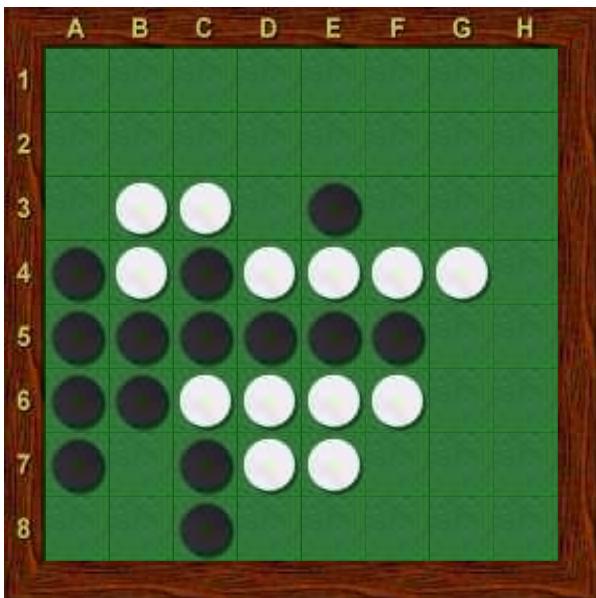


Diagram 23 : After A7

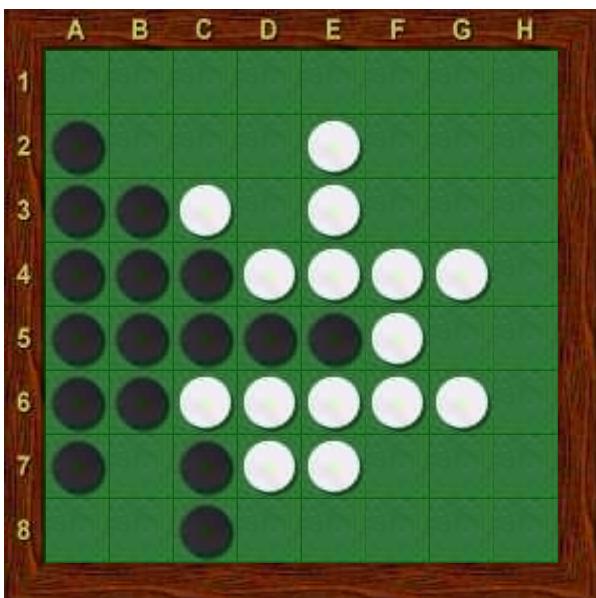


Diagram 24 : After A7-E2-A3-G6-A2

White is now forced to give up the a8 corner to black. Thanks to his gain of three tempi on the west edge, black has forced white to completely absorb his frontier. Unfortunately, a gain of tempo along the edges often translates into a positional weakness : the player who attempts to gain tempi at all costs will often find himself with particularly dangerous edge configurations (see the chapters on wedges and unbalanced edges). Furthermore, discs on the edges are going to have an influence on future flippings : the player will often be obliged to flip discs in several directions for each move. Thus, in diagram 25, black has tried to gain tempi by playing on the south and north edges but now that he must play to the west, he is obliged to flip discs in several directions and therefore he is going to end up with more black frontier discs than he would like.



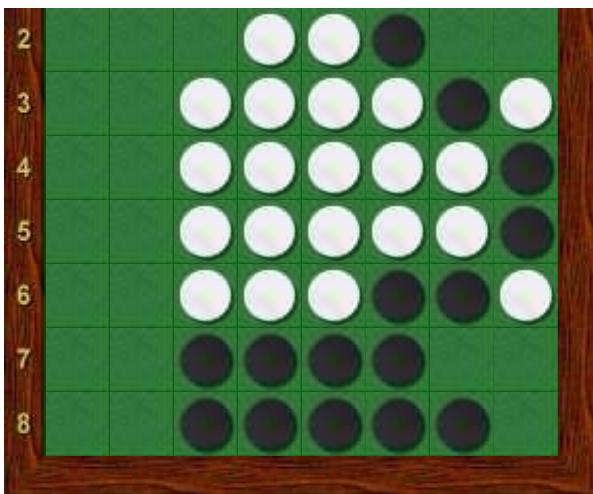


Diagram 25 : black to play

CREEPING ALONG EDGES

This discussion leads us to speak of a strategy of play which pushes the principle of tempo-gaining to the extreme. It's referred to as creeping along edges. One of the two players decides to give up control of the center and play frequently moves to the edges. The result is often similar to the position in diagram 26.

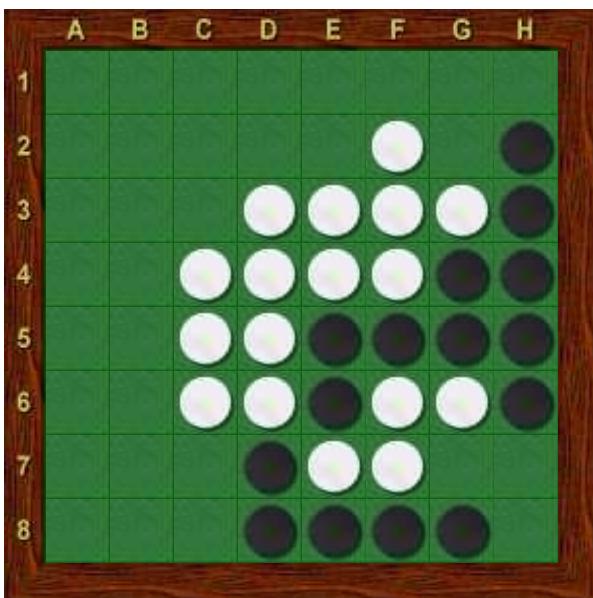
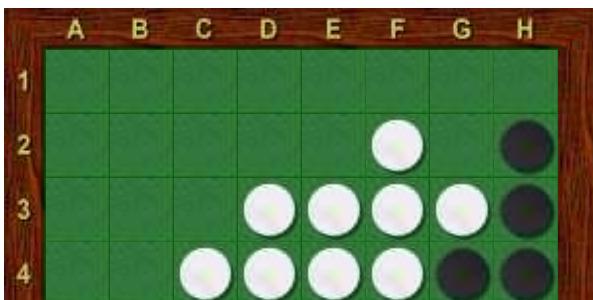


Diagram 26 : Black to play

The creeping player takes possession of one, or more often of two edges (adjacent) and leaves the center, and the frontier, to his opponent.



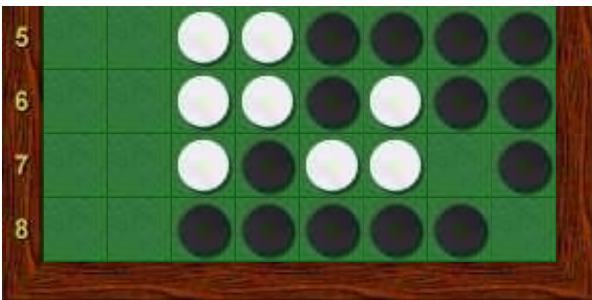


Diagram 27 : After H7-C7-C8

If the creeping succeeds, your opponent finds himself short of moves since he cannot flip your discs off the edge of the board. Thus, in diagram 26, black can play h7. White then has only one reasonable move, c7 and black responds c8. White is now forced to give a corner to black by playing g7 (see diagram 27).

The danger of creeping can be equally devastating. If your opponent succeeds in holding on without being completely run out of liberties, you may find yourself handicapped by edges which will give your future moves a strong negative influence. Thus, in diagram 28, black has probably failed in his creeping attempt.

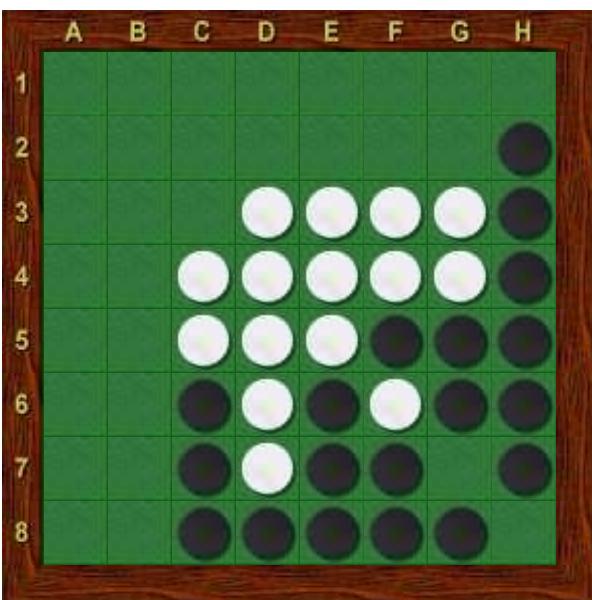


Diagram 28 : black to play

It's his turn to play and he must open up the white frontier. By flipping in several directions he will offer new options to white, who is nowhere near to being forced to give up a corner to black.

One could sum up creeping along edges as being a short-term strategy (your opponent must quickly find himself short of moves) with detrimental long-term strategic problems (unbalanced edges, weak edges, influence...). Thus a successful creeping is often a guaranteed win while a failed edge-creeping attempt is often impossible to recover from.

PARITY

This extremely important notion is an ideal completion to our discussion of mobility. If neither player passes his turn during the game, there will be an even number of empty squares whenever black moves, and an odd number of empty squares whenever white moves. From this we could conclude that white will play the final move of the game and may possess a slight advantage, since the disc which he places and those which he flips are clearly stable. In diagram 29, black must play g8 (the only possible move), white takes h8 and wins. But if it were white

to move, he would play his disc in one of the two squares g8 or h8, black would play to the other square and win !

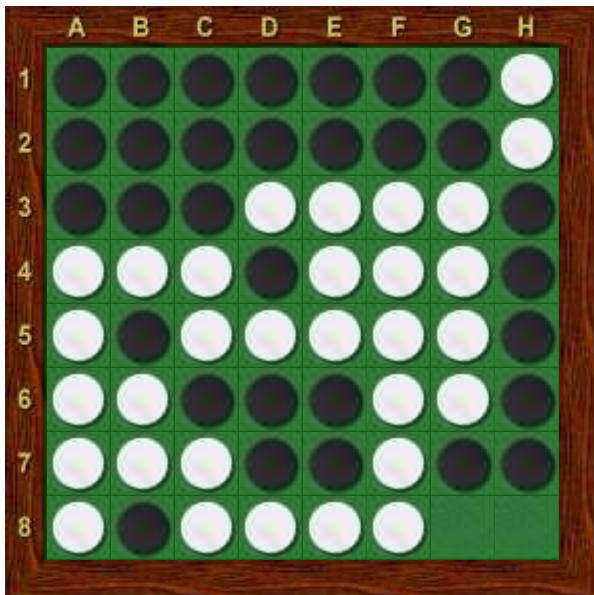


Diagram 29 : black to play

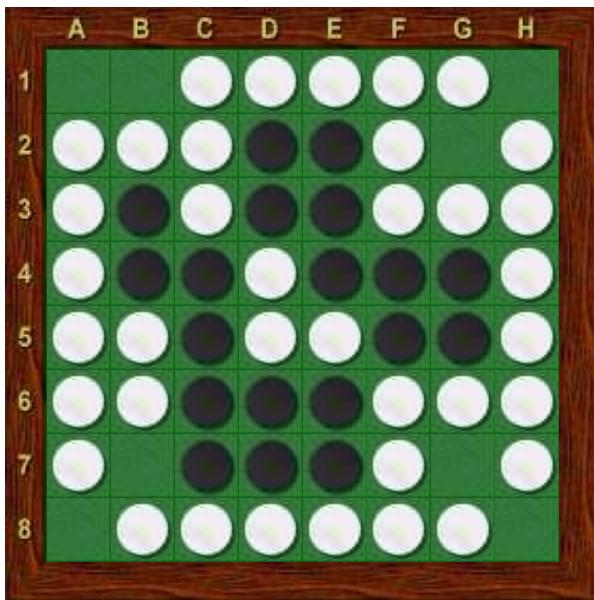


Diagram 30 : black to play

This advantage can become even more important if white plays the last move in several even regions (regions with an even number of empty squares). Consider diagram 30 : there are four regions of two squares each. Black must play first into each one of these, and white may respond by playing to the same region. The game could continue for example with the moves g2-h1-g7-h8-b7-a7-b1-a1, where white wins 24-40.

Parity gives an intrinsic advantage to white. However, black has a method to turn it to his advantage : if one of the players passes his turn, parity reverses ; but if there is a second pass, the situation returns to its initial state. Black therefore would like to force an odd number of passes in the game.

One effective method for black to gain parity is to force white to create an odd region into which he cannot play. In the situation of diagram 31, white cannot play to the singleton region g8. Black should not play there either! Besides g8, there are an odd number of squares into which black may move. He must play in such a fashion that after each move, there are only even regions (excepting of course g8), that is, here, play g2.

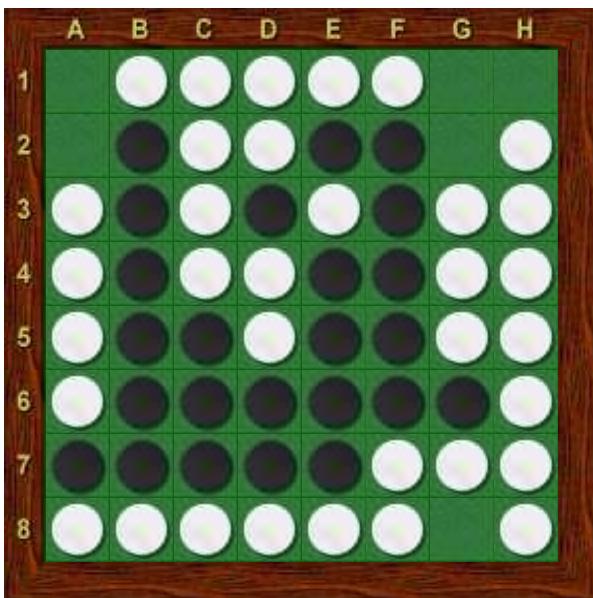


Diagram 31 : black to play

White is then obliged to play first into each of the two even regions on the north-west and north-each. Parity ends with g2-h1-g1-a1-a2, white passes, and black finishes with the devastating move g8, winning 37-27.

And if black had begun with g8 ? White would have responded g1 (leaving two even regions), and would have won 26-38 after the sequence g2-h1-a2-a1 !

UNBALANCED EDGES

We are now going to examine a very frequent case of wedging. This example is equally important since as we shall see it isn't always a bad idea to play to an X-square. Consider diagram 32.

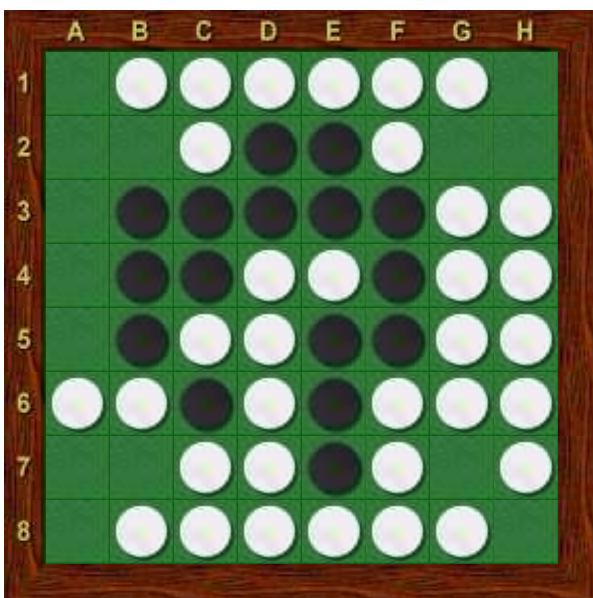


Diagram 32 : black to move

The game is now nearly complete, but neither of the two players has succeeded in gaining a clear win, and black must now play. Whatever he does, he must give up a corner to white. Look closely at what's happening on the east edge. The structure of 5 white discs on the h column is called an unbalanced edge. It's a weakness since it often permits your opponent to sacrifice the corner. Let's look at the details with an example. If black plays to the X-square g2, white could respond by taking the corner, h1 ; but then black can wedge in with h2 (see

diagram 33). The h1 corner allows white to stabilize the north edge : he has 7 stable discs. However, black's wedge at h2 allows him to play h8 (a corner !) on his next move then a8 (another corner !). He has amassed 14 stable discs, with most likely the western edge to come ; furthermore, he still has a move to g7 : the exchange of corners is very favourable to black. The unbalanced edge of white on the east edge makes a black move of g2 very favourable indeed in diagram 32.

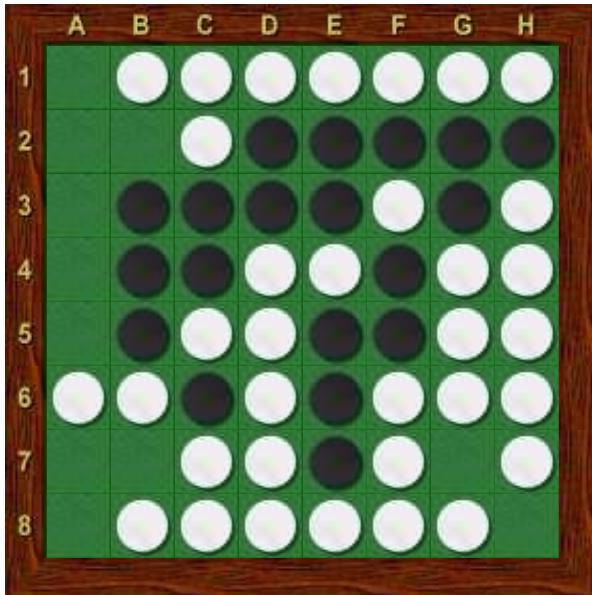


Diagram 33 : After G2-H1-H2

In fact, in practise the situation is a bit more complicated : white is not forced to take the corner. This move leads to a possible exchange of corners. Each player must determine if this exchange is favourable to them or not : everything will depend on the other edges and the number of stable discs which each player stands to gain. However, in general, this move allows one of the players to gain a tempo by playing to the appropriate X-square.

One should not believe that this sacrifice works every time. Without entering into details, here are three examples of sacrifices which do not work.

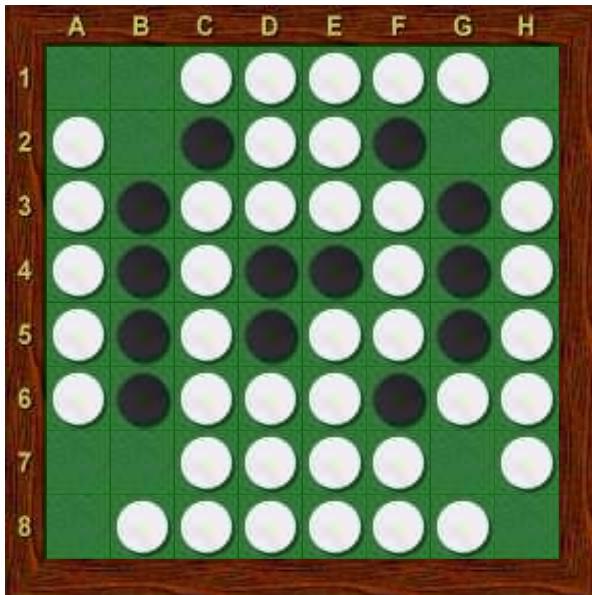


Diagram 34 : black to play

In diagram 34, white has two unbalanced edges : to the north and to the west. However, neither of these two is attackable. If black plays b2, white plays b1 (without flipping b2), then plays a1 on his next move, without giving black the chance to wedge. If black plays b7, white plays a8 and black cannot wedge in at a7 ; white will play there himself on the next move.

The position in diagram 35 is a bit more subtle : what will happen if black attacks the white west edge by playing b7 ? White will respond then with a7 (!), controlling the f3-b7 diagonal, so black cannot take the a8 corner and white can play there next move thanks to his wedge at d8. Here again, black has failed at his attempted wedge.

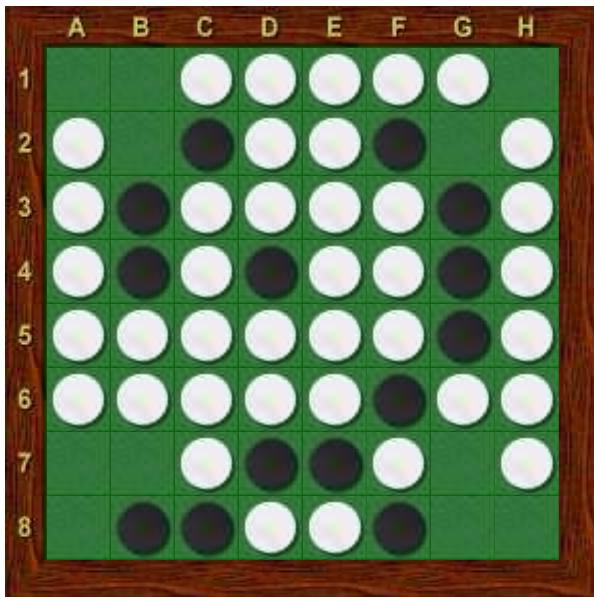


Diagram 35 : black to play

The situation above is referred to as a swindle. This term is easily understood : the usual sequence of moves on the west edge doesn't work due to white's control of the diagonal. There are other examples of swindles and you must always be very careful to check if your opponent can play an unforseen sequence of moves which will ruin your corner sacrifice.

STONER TRAPS

We just saw that attacking an unbalanced edge does not force the exchange of corners. Indeed, the attacked player can decide whether to take the corner or not. We will now see a more forcing edge trap which leads to a guaranteed corner. As with the unbalanced edge attack, the Stoner trap provokes a corner exchange but this time, if the trap is well executed, the defender has no means to prevent it.

The Stoner trap proceeds in two stages : the attacker first gains control of a diagonal by playing to an X-square, then he attacks the opponent's weak edge (an edge including a C-square) while threatening to take the corner. The opponent cannot respond by taking back the edge since in this case he would flip back the X-square played the previous move. Diagram 36 gives an example.



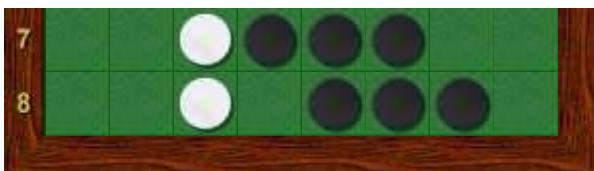


Diagram 36 : White to play

Here, black has a weak edge configuration on the south. White plays b7 and takes control of the e4-b7 diagonal (see diagram 37). Black can't immediately take the a8 corner, and he will probably try to retake the diagonal to gain access to this corner, for example by playing f3. But now, white plays his attacking move d8 (see diagram 38). Black cannot prevent white from having the h8 corner and at least six stable discs on the south edge.

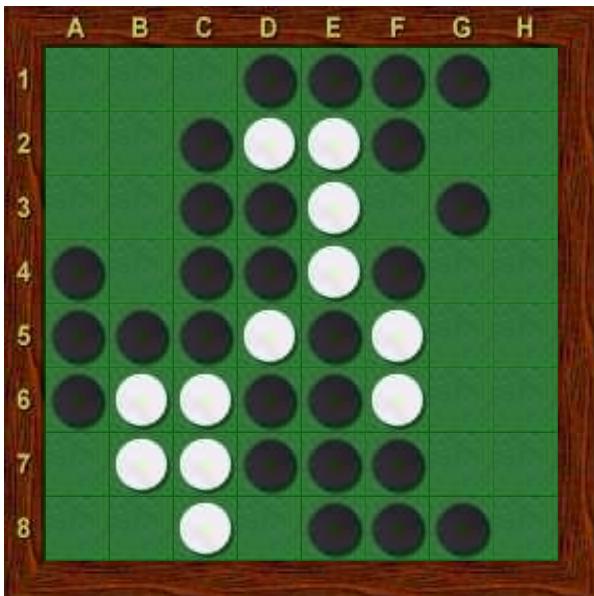


Diagram 37 : After B7

If black responds with b8, he flips the b7 disc, thus giving up the a8 and subsequently h8 corners to white. If black takes the a8 corner, white can directly take the h8 corner or, better yet, wedge in with b8, keeping access to h8. Furthermore, even if black plays neither a8 nor b8, white always has access to h8 (this being the difference between an unbalanced edge attack).

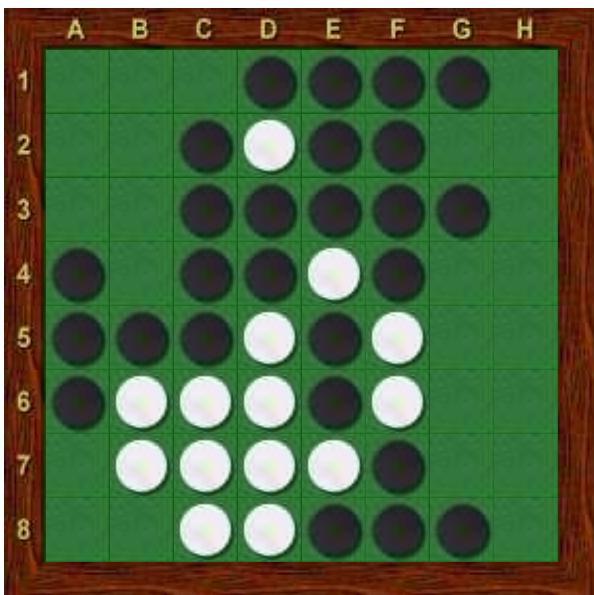


Diagram 38 : After B7-F3-D8

As in the case of unbalanced edges, the trap isn't always possible and it's necessary to be careful in checking that the sequence of moves is correct. Here is an example, in diagram 39, of a Stoner trap which doesn't work.

If white wants to play a Stoner trap by playing b7, black responds c3 and white can no longer play c8 before black takes the a8 corner. The south edge now consists only of a pair of empty squares and white cannot wedge in.

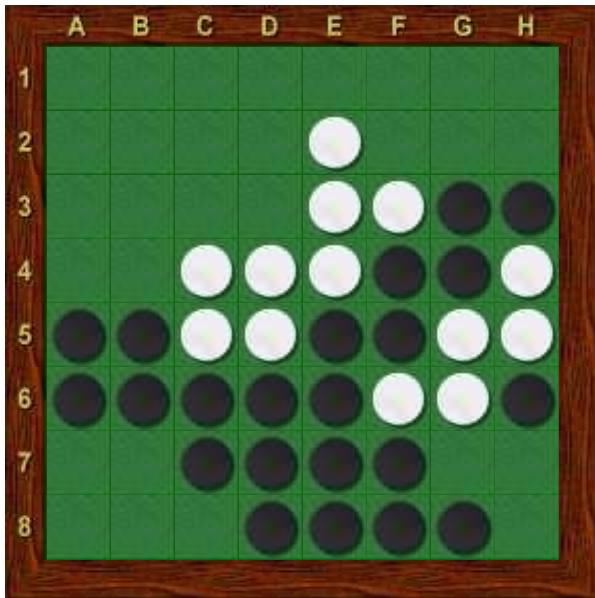


Diagram 39 : White to play

CONCLUSION

We have tried in these few pages to give you an appreciation for the complexity of the game of Othello. Despite relatively simple rules, Othello contains a strategic richness equaling the great "classics" of strategy games. Of course, in only 20 pages we cannot discuss all that has been developed in 20 years of Othello playing in France and the world, but our wish is that the few ideas which we have given you throughout this initiation will permit you to better appreciate your next Othello games. If you would like to know more, the French Othello Federation would be happy to comply with the articles of its Fforum magazine, books on Othello, club meetings, tournaments, ...

GLOSSARY

C- and X-squares : C-squares are the squares at a2, a7, b1, b8, g1, g8, h2, and h7. X-squares are the squares at b2, b7, g2, and g7. These squares should only be occupied with care.

Center : The center of a position is the set of interior discs.

Control of the center : Strategy which consists of trying to have as many of your discs as possible in the center of the position and as few as possible along the frontier for the maximum possible mobility.

Corner : The corners are the squares at a1, a8, h1, and h8. They are often very good squares to occupy.

Edge creeping : Strategy which consists of gaining the maximum number of moves on one or two edges at the expense of edge weaknesses (unbalanced edges, ...). The creeper tries to very quickly run his adversary out of moves by leaving him the entire frontier but if it doesn't work, the influence from his bad edges will rapidly weaken his position.

Frontier : The set of external discs, that is to say discs which are adjacent to an empty square.

Gain a tempo : Playing one more move than your opponent in a region of the Othello board and forcing him to initiate play elsewhere (thus lengthening his frontier).

Influence : One says that a players discs exercise influence when they force him to flip discs in several directions at the same time.

Internal/external discs : An internal disc is a disc which isn't adjacent to an empty square. It is strategically bad to have no interior discs.

Liberty : Non-catastrophic moves. "To be short of liberties" : to have to give up a corner in the near future.

Maximum disc strategy : Incorrect strategy, applied by many beginners, which consists of trying to flip the maximum number of discs on each move.

Mobility : Number of possible moves available to a player. By extension, a player has good mobility when he has a large number of possible moves.

Parity : Strategy which consists of leaving an even number of empty squares in each region to which your opponent has access.

Quiet move : A move which flips no frontier discs. Often excellent.

Stable discs : Discs which can never be flipped. A corner is an example of a stable disc.

Stoner Trap : Attack of a weak edge position which leads to a forced exchange of corners.

Unbalanced edge : Edge formation consisting of 5 discs of the same colour, adjacent to each-other, none of which is a corner disc.

This text is the electronic equivalent of a booklet created and distributed by Emmanuel Lazard and the French Othello Federation (F.F.O.). This copy is distributed with the authorization of Emmanuel and the F.F.O. The printed version of this booklet (with nice round discs) is available from the F.F.O. for 20 French Francs (shipping included) by check payable to the F.F.O.

[FEDERATION FRANCAISE D'OTHELLO](http://radagast.se/othello/Help/strategy.html), BP 383 75626 Paris Cedex 13, FRANCE

(C) Emmanuel Lazard (and the entire F.F.O. team) March 1993

Translated from French into English by Colin Springer with the permission of the author. This text may not be further distributed without the explicit agreement of the author.