
Chess
Middlegames

Improve Your Middle Game

Part 1 - Patterns

Pattern recognition is one of the skills that makes a master. It's not inherent; it's learned.

Why is one chess player a struggling club player and another a master? There are many skills that make a master, but one of the most important is pattern recognition.

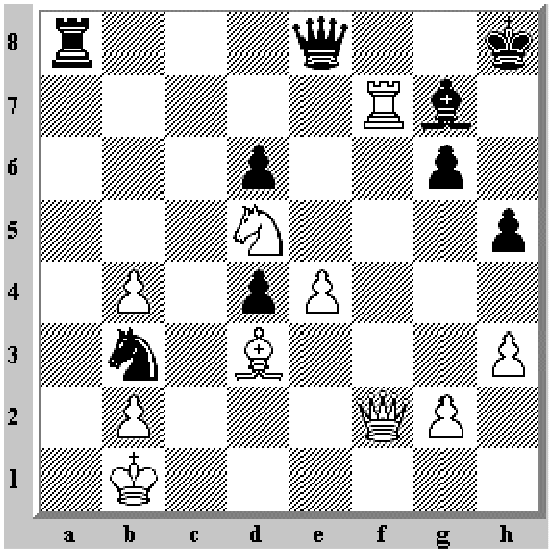
In an average middle game position there are about 40-50 legal moves. A beginner will look at a position and work out the legal moves one by one, perhaps overlooking the most important. An intermediate player will look at the position and see all legal moves without too much trouble, but will have some problem determining which moves are worth further consideration and which aren't. A master will look at the position, will see all of the legal moves without even thinking about them, will quickly decide which side is better, and will start examining the most promising continuations.

On the path to chess mastery, a player sees and studies many different types of positions. Every time a master encounters a new position, the previous experience helps to find the right path in the new position. This is pattern recognition.

Here's an experiment which you can do at your local club. Show a position from a real game to players of different strength. Show it only for a short period of time, hide it, and let each player set up the position from memory on another board. Stronger players will set up the position with fewer errors than weaker players.

Now try the same experiment with a random position where the pieces are scattered on the board in ways which are not likely to occur in a real game. The stronger players will make more errors setting up the position than they did before.

What do you think about the following position?



White to move

How many legal moves are there? How many good moves? How do you evaluate the position -- who is better and what is the probable outcome? Work out a possible continuation and we'll come back to it later.

How can you improve your own pattern recognition? Unfortunately, there's no magic solution. You have to play and become familiar with standard positions that arise frequently.

There are a few exercises which can help. The first is to visualize the minimum number of moves for a Knight to go from one random square to another. The Knight is the only piece which does not move in a straight line. It's the trickiest piece on the chessboard and beginners often have trouble with it.

On an empty board, place a Knight on a random square, like d4. Now work out the shortest path to arrive on another square, like d5. The answer, of course, is that it takes three moves to go from d4 to d5 and there are many paths. On the Knight's first move off d4, how many of the eight legal moves are not on one of the shortest paths? Now answer the same questions to go from d4 to each of the four corner squares. Then try the same thing with f5 & b2 instead of d4 & d5.

Another useful exercise is to identify the color of a random square without looking at the chess board. What color is f5? Let's see, h1 is always white, so f1 is white, so is f3, and then f5. How about c3? Well, it's on the a1-h8 diagonal, which is black, so it must be black. How about e2? And so on. Try this with a couple of friends to see who answers faster.

Here's another trick I use frequently. It's a procedure for setting up a position on a board. First, clear the board. Don't try to set up a position by adjusting the pieces already in place unless the old position is almost identical to the new. Second, place the two Kings on the

board. Third, set up the Pawns. Then add the Queens (both White and Black) if they are present, then all the Rooks (White and Black), and finally all of the minor pieces (ditto).

'What's the big deal?', I hear you asking. What difference does that make? Perhaps no difference whatsoever, except that it works for me.

Setting up the Kings first tells me immediately where the most important pieces on the board are located. Are they on their original squares, on the same side, on opposite sides, or in an unusual place?

Setting up the Pawns without the other pieces gives me a quick picture of the Pawn structure. Does one side have a numerical advantage? Are there any classic weaknesses like doubled or isolated pawns? How many islands are there? Since the pawn structure changes very slowly, it's often the key to devising a long term plan. This is one of the things Philidor meant when he said, 'The Pawn is the soul of chess.'

Setting up the Queens, then the Rooks, then the minor pieces gives me another quick count on the material. Is there an advantage? An imbalance? How do the minor pieces match? Does one side have two Bishops and a Knight where the other side has two Knights and a Bishop?

By the time I've set up the position, I've already registered a lot of information about what's happening on the board. This makes up for the lack of information from not having played the game from the starting moves.

Let's go back to that 'White to move' diagram. Did you work out that there are 44 legal moves and 4-5 good moves for further consideration? How did you evaluate it? The game is the adjourned position from the 21st game of the Kasparov - Karpov World Championship match, Lyon, 1990. Kasparov, playing Black, just moved 40...Qd8-e8, leaving Karpov to seal his move.

In his book on the match, Kasparov wrote,

'The adjourned position was extremely difficult for me. Even now I do not know its correct evaluation. As [Kasparov's second] Dolmatov said, this ending demonstrated human helplessness in the face of chess. The two teams spent a total of about twenty hours analysing the adjourned position, and still could not decide whether it was a draw or a loss. Incidentally, Karpov sealed the strongest move.'
The sealed move was 41.b5, and the continuation was 41...Ra1+ 42.Kc2 Nc5 43.Rxg7 Kxg7, where Karpov sacrificed the exchange. The game ended in a draw on move 86. Most people are never going to spend 20 hours analysing a single chess position.

Even world champions encounter unfamiliar positions that they can't fathom after hours of work. That's how hard chess is. Whatever spare time we have to improve will be well spent on developing pattern recognition. More about that in Part 2.

Part 2 - Combinations

Improve Your Middle Game ()

Whether you call it a combination, a sacrifice, a maneuver, or a forced variation, it's an essential part of the game.

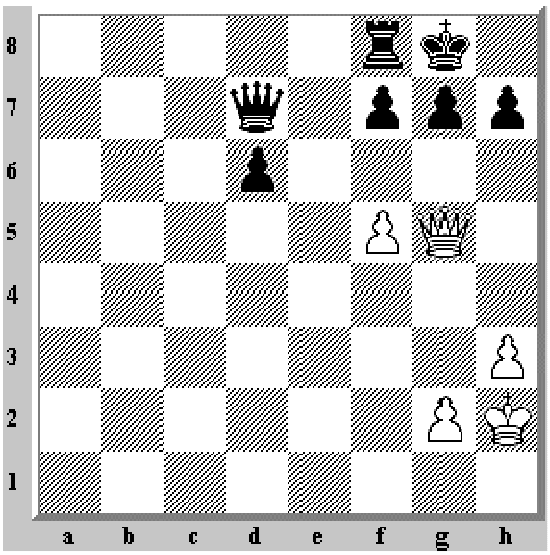
Ask a few chessplayers why they play, and you're bound to get a variety of answers. One says 'for the competition'; another says, 'to keep my thinking processes in shape'; and yet another says, 'for the beauty'. That last answer may raise some eyebrows. What could possibly be beautiful about moving little wooden pieces on a checkered board?

Chess, in fact, has very little to do with little wooden pieces. It is more the manipulation of complex geometric patterns to achieve a definite goal. These patterns take many forms and vary according to the ingenuity and skill of the players.

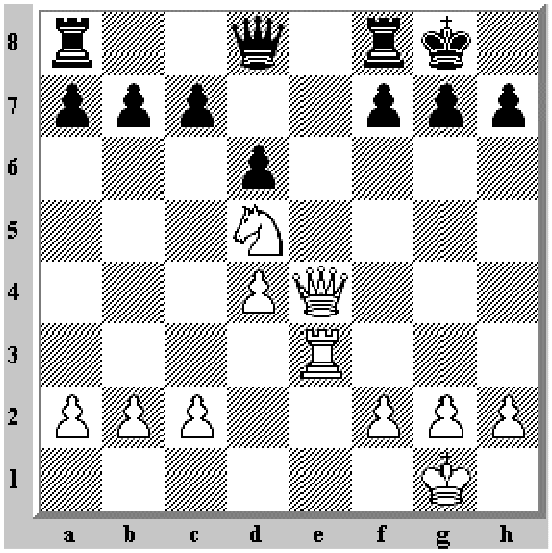
One of the most fertile areas for beautiful patterns is the **combination**. Combinations are one of those things that are easy to spot, but hard to define. **Emanuel Lasker** defined them as a net of variations.

In the rare instances that the player can detect a variation or net of them which leads to a desirable issue by force, the totality of these variations and their logical connections, their structure, are named a 'combination.' And he who follows in his play such a chain of moves is said to 'make a combination.' (***Lasker's Manual of Chess***)

His first two examples were the following positions.



1.f6 g6 2.Qh6 mates

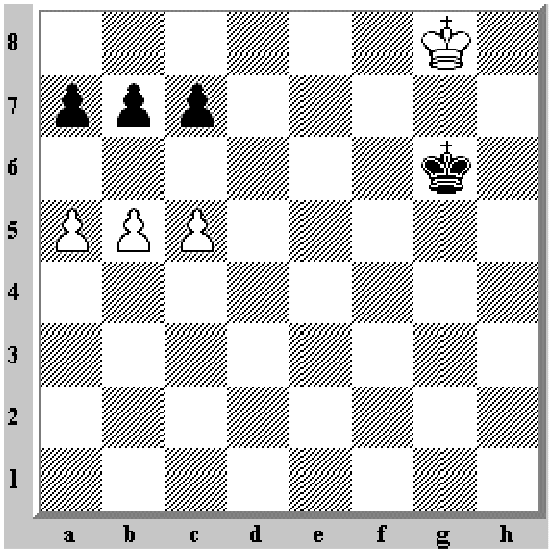


1.Ne7+ wins the Queen or mates after 1...Kh8 2.Qxh7+ Kxh7 3.Rh3

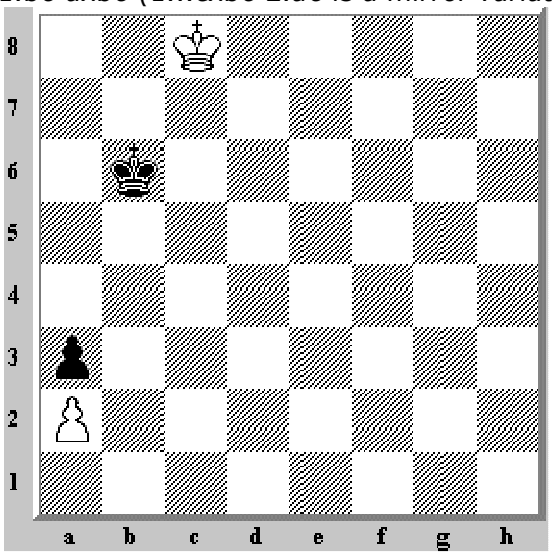
Lasker's second example differs from the first in that it involves a **sacrifice** with 2.Qxh7+. Some authors go as far as saying that a sacrifice is indispensable to a combination. Here's another definition of a combination, given by the leading authorities David Hooper and Kenneth Whyld.

combination, a sequence of forcing moves with a specific goal, and grounded in tactics. A sacrifice is likely to be present and Botvinnik, among others, says is always present. The purpose may be anything from a defensive resource to a mating attack, from a small positional advantage to a gain of material. Essential to most combinations, and a reason for their popularity, is surprise: the series of moves differs in form from the kind of continuation normally to be expected. (***The Oxford Companion to Chess***)

The mention of **Mikhail Botvinnik** refers to an essay titled 'What is a "combination"?', an appendix to his *One Hundred Selected Games*. Botvinnik gave two endgame examples.



1.b6 axb6 (1...cxb6 2.a6 is a mirror variation) 2.c6 and a Pawn promotes



1.Kd7 Kc5 2.Ke6 Kd4 3.Kf5 Kc3 4.Ke4 Kb2 5.Kd3 Kxa2 6.Kc2 and draws

Botvinnik agreed that the first example is a combination because it involves a sacrifice of two Pawns, but called the second a **maneuver**because no sacrifice is involved.

A combination is a forced variation with sacrifice. It seems to me that this is both an exact and a simple definition. A combination must not be confused with a forced maneuver. There are two kinds of maneuvers: positional, when the opponent's moves are not forced, and forced. Then what is the difference between a combination and a maneuver? A forced maneuver is a forced variation without sacrifice.

Whether you consider a certain variation to be a combination, a maneuver, or something else, familiarity with recurring tactical themes will improve your game. The great instructor Siegbert Tarrasch was even more forceful.

In a well-planned game [combinations] appear quite automatically; it is often possible to reduce them to certain simple types and therefore you can train your imagination, you can *learn* to combine by making these constantly recurring maneuvers the object of your study. The essential for the student is to play over and study again and again what he has learned until it becomes part of his very self. (***The Game of Chess***)

Tarrasch attempted to categorize combinations into themes like 'Pinning', 'Double Attacks', and 'Unguarded Men'. I've used a simpler structure for the puzzles that I'll be placing under ***Middle Games***. These are categorized as combinations for checkmate, combinations for material gain, and combinations for achieving a draw. I've classified them further by level of difficulty.

Part 3 - Plans

Improve Your Middle Game ()

Plan = strategy = positional play. No plan = defeat.

'Play with a plan.' How many times have you heard that phrase? There are many ways to lose a chess game, but playing without a plan is guaranteed to put you on the path to defeat.

What is a plan and how do you make one? Here's what **Emanuel Lasker** had to say.

The thought behind position play is called the *plan*. The plan has breadth and depth which are imposing and which, by slow, methodical building, give a structure to the position. The position-player thinks backward: he conceives a position to be arrived at and works toward that position of which he is more conscious than the one on the board. He sees successive stages of the position of the position aimed at and he visualises the stage in a reverse order. (***Lasker's Manual of Chess***)

Siegbert Tarrasch offered specific advice for the middle game.

The strategic conduct of the Middle Game generally arises out of the Opening. Frequently one of the players has secured a slight advantage in the Opening and this must be further developed in the Middle Game. Often the pawn formation shows the direction the attack is to take. [...] In chess, to play correctly, we can never do what we *wish*, we must do only what we are*forced* to do, what the position demands. (***The Game of Chess***)

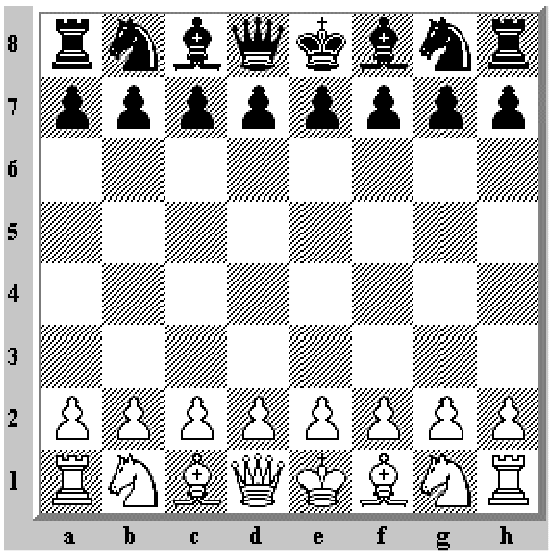
These two great masters make several important points:-

- Positional play is based on the plan. Your individual moves should fit into your overall plan.

- The plan is formulated by visualizing a future position and working toward it. A common example : you see a possibility to checkmate, so you aim your pieces at your opponent's King. Yes, that's a plan.
- The plan arises from the position on the board. The pawn structure is one of the most important elements of the position.

The plan is not unique to the middle game, but is important to all phases of the game. Following are two familiar positions.

The plan starts with the first move



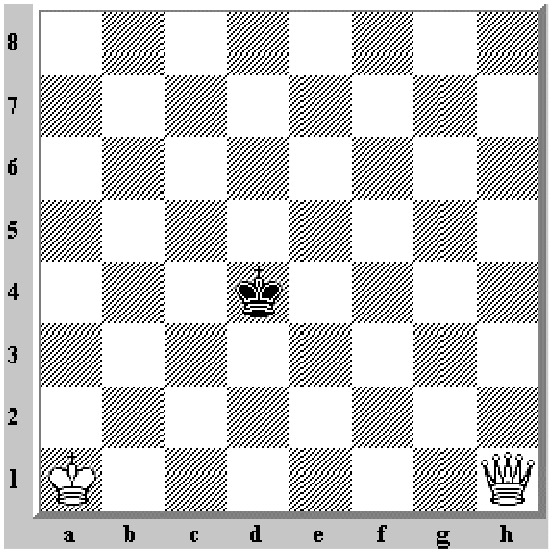
White to move

The plan for this position is one of the first learned by most players:-

- Push some Pawns to open lines for the Bishops and the Queen.
- Develop the minor pieces with an eye on the center.
- Place the Queen where it is active, but safe.
- Castle.
- Develop the Rooks with an eye on open or potentially open files.

Yes, that's a plan. It's a very good one, and it applies to both players. A player who follows a different plan is asking for trouble.

Even the simplest position demands a plan



Either side to move

The plan here is another one of the first learned:-

- Move the White King close to the Black King.
- Use the King and Queen to drive the Black King to the side of the board.
- Deliver checkmate with the Queen.

Yes, that's also a plan. If White fails to execute it, the game will eventually be drawn because of the 50 move rule.

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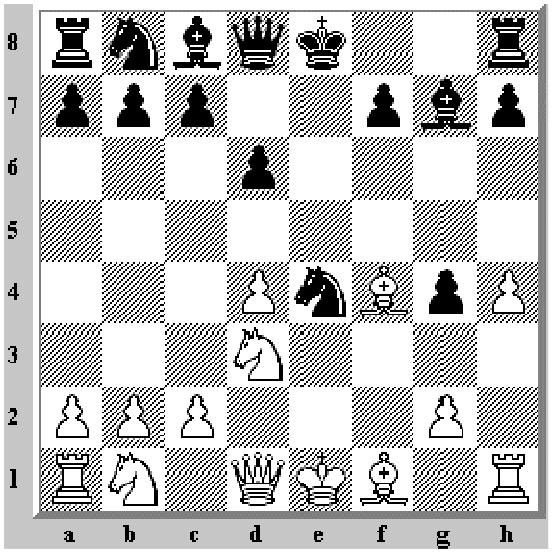
As Tarrasch said, the middle game plan follows from decisions made during the opening. Here are some typical positions where the plan can be stated in a few words. All of these positions are typical of a game at the end of the opening and the start of the middle game.

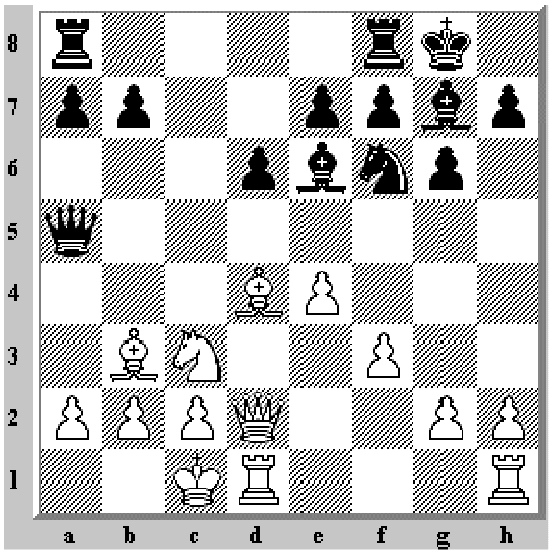
Gambit!


White to move

In this position from the King's Gambit, White has sacrificed a Pawn for rapid development and an open f-file. Who has the better of the deal?

White's plan will be to take advantage of the lead in development. Black's plan will be to consolidate the material advantage, or perhaps give it back to neutralize White's pressure.

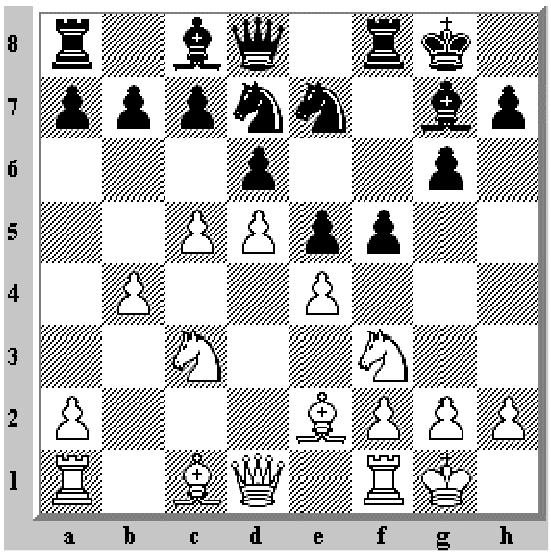
Opposite side castling


Black to move

The choice of when and where to castle sets the stage for plans based on an attack against the King. When the players have castled on opposite sides -- White on the Queenside, Black on the Kingside, as in this diagram -- the plan of the opponents is the same. Avoid weakening the pawn structure around your own King and launch the other Pawns against the opponent's King.

Here, White will advance the g- & h-Pawns; Black will advance the a- & b-Pawns. The player who does not follow this plan will probably lose.

Blocked center

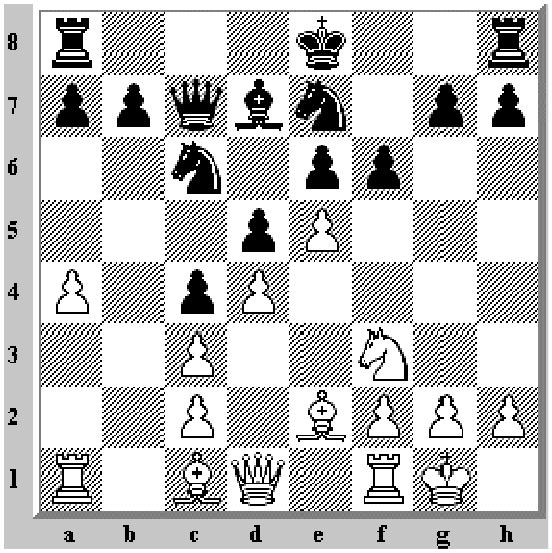


White to move

In this diagram, both players have immobile d- & e-Pawns. The c- & f-Pawns have become the most important Pawns on the board.

White will play cxd6 or c6 as required. Black will play fxe4 or f4. The subsequent play will depend on which lines have been opened by these variations.

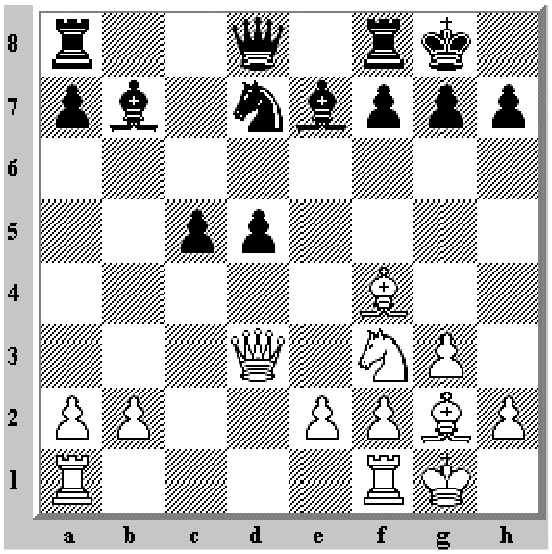
Pawn chain


White to move

A blocked center is often associated with a pawn chain, as in this diagram. The plan then revolves around attacks on the head and base of the chain.

Black threatens fxe5. If White pre-empts this with exf6, Black will reply gxf6 planning to attack the chain again with e6-e5.

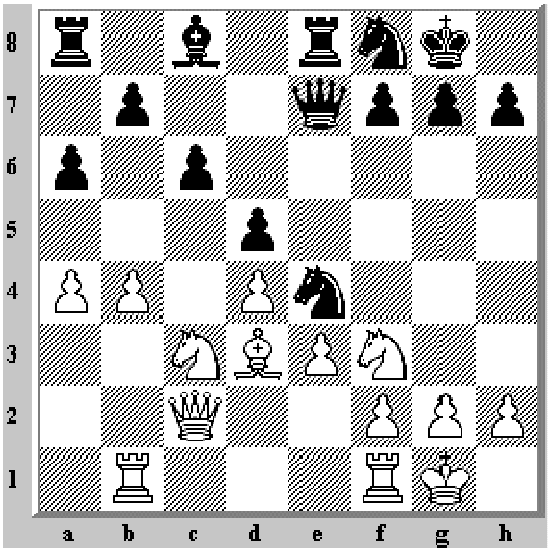
Hanging pawns


White to move

Are the Black Pawns on c5 and d5 strong or weak? They control key squares at b4, c4, d4, and e4, but they are attacked easily.

White will try to make one of them advance, creating a weak square in front of the other. Black will try to reinforce the slight space advantage by placing the other pieces appropriately.

Minority attack



Black to move

White has used the last few moves to threaten the advance b4-b5. Black has used the moves to take a strong position on the e-file.

After b4-b5, if Black captures 1... axb5 2.axb5 cxb5, the Black Pawn on b7 will be weak. If Black doesn't capture, 1.bxc6 bxc6 will leave a weak Pawn on c6. Black's plan must consider this threat.

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The preceding diagrams are examples of various plans which are familiar to many players. Just as every position is different, so every position has its own corresponding plan. Your task during a game is to formulate that plan in the time available to you and to play your**unforced** moves according to that plan. It is by no means an easy task.

Part IV - Double attacks

Tactics appear when one move does two things.

After you've read the About Chess introduction to Tactical Play (see link at the end), you know something about forks, pins, discovered attacks, and xrays. All of these basic tactical devices, where one move does two things at the same time, are examples of the **double attack**.

In this article we're going to look a little deeper into double attacks. Our guide will be *Chess Tactics for Advanced Players* by Yuri Averbakh, one of the recommended books on our Bibliography.

Averbakh was a Soviet-era GM who participated in numerous USSR championships starting with the 16th in 1948. He won the title in 1954 and tied for first in 1956. He is better known for his works on endgames than on middle games, but only because he has written far more about the endgame. Along with his other accomplishments, he is a chess historian of no small reputation.

If you don't consider yourself an *advanced player*, don't be intimidated by the title of the book. There is plenty of material for the intermediate player and a healthy dose for the beginner. After you've worked your way through the many examples and exercises, your playing strength will be at least a class stronger than before.

The book has two parts : the **double attack** and the **combination**. Averbakh introduces a special terminology to classify tactical positions and shows how a combination builds on the same elements found in the double attack. As Averbakh says,

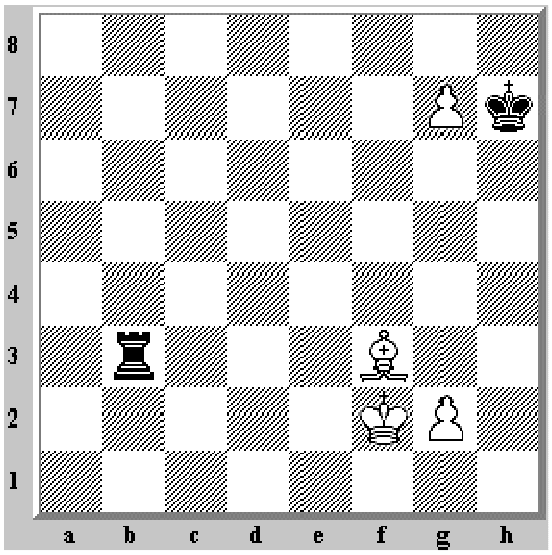
If we regard the term 'double attack' in a broader sense than has been done up to now by theoreticians, namely not merely as a two-pronged attack, but as a combination of attacks and threats, we notice that the double attack in one form or another is the basis of most intricate tactical operations.

That theoretical discussion may be aimed at advanced players, but the illustrative examples are for everyone. We drew from those hundreds of well-chosen examples to illustrate this article.

Basic elements

Let's do a quick review of the double attack in its simplest forms. The following position looks like a draw, but White has a forced win based on a fork.

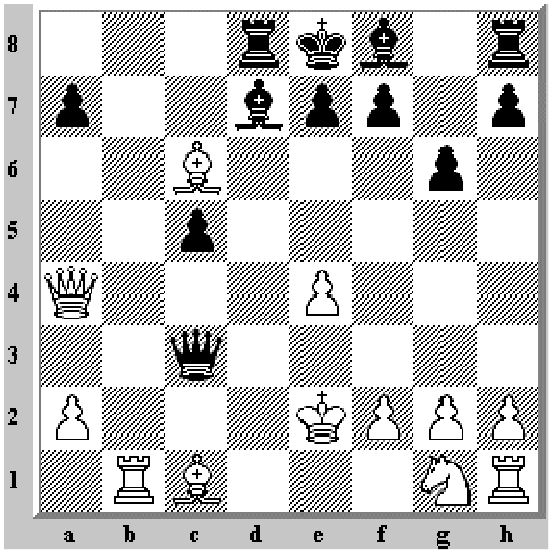
White to move



After 1.g8=Q+ Kxg8 2.Bd5+, White wins the Black Rook. The extra Bishop and b-Pawn will be enough to win the game easily.

The following position is less obvious. Black is a piece down and is threatened with mate in two moves.

Black to move



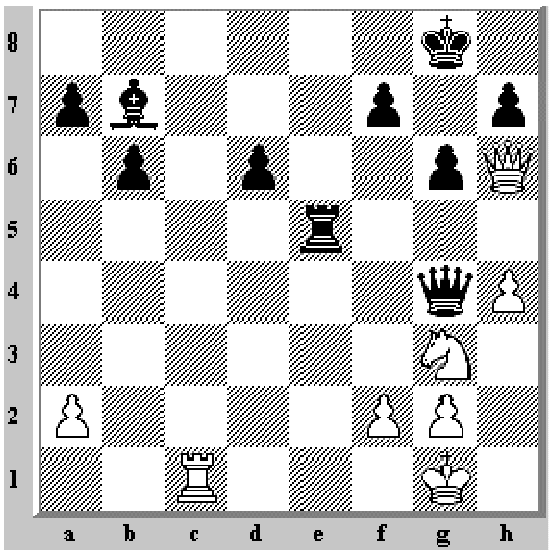
The Queen sacrifice 1...Qd3+ sets up a discovered check with 2.Kxd3 Bxc6+. After recapturing the Queen, Black will have a good position.

Note that both of these positions share a common feature : an introductory move prepared the double attack. In the first position the move was 1.g8=Q+; in the second it was 1...Qd3+.

Multiple basic elements

Separate basic tactical elements often occur simultaneously. Consider the following position.

White to move

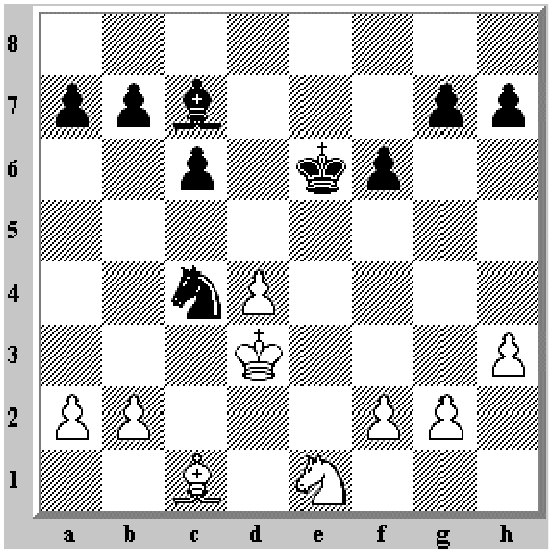


After 15.Rc7**?**, Black delivers checkmate with 15...Re1+ 16.Kh2 Rh1+. If 17.Nxh1, then 17....Qxg2 mates immediately, while if 17.Kxh1, then 17...Qh3+ is possible; the g-Pawn is pinned by the Bishop and mate follows next move.

It may not be obvious, but the diagrammed position is a combination of separate basic elements. The Knight, pinned by the Queen, does not shelter another piece, as is usually the case with pins; it shelters the weak g2-square, which is under double attack from the Black Queen and Bishop.

The following position is from a game between two World Champions.

Black to move



Black overlooked that after 1...Ba5**?**, the forced sequence 2.b4 Bxb4 3.Nc2 wins a piece. This time the double attack is an attack on two pieces by two pieces.

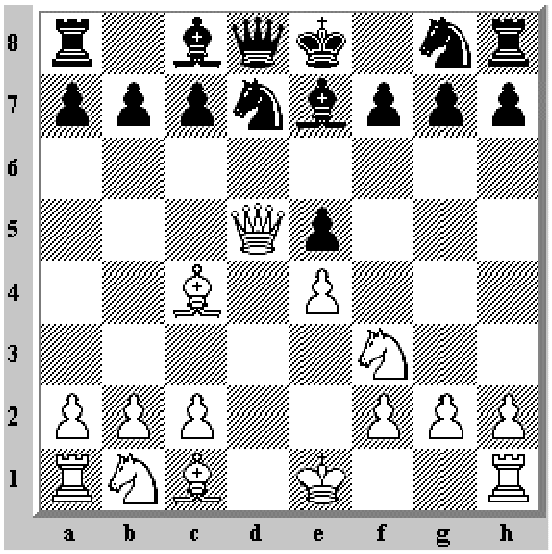
Note that in both examples the introductory moves (15...Re1+ 16.Kh2 Rh1+ and 2.b4) were made possible by blunders. In the second example, the blunder was made by then-World Champion Euwe, otherwise known for his great tactical skill.

Not just the middle game

Although the double attack is usually discussed in the context of the middle game, it can be present in any phase of the game. It is usually responsible for traps in the opening.

Here's an example of a trap in Philidor's Defense. After 1.e4 e5 2.Nf3 d6 3.d4 Nd7 4.Bc4 Be7**?** 5.dxe5 dxe5**??** 6.Qd5, the following position arises.

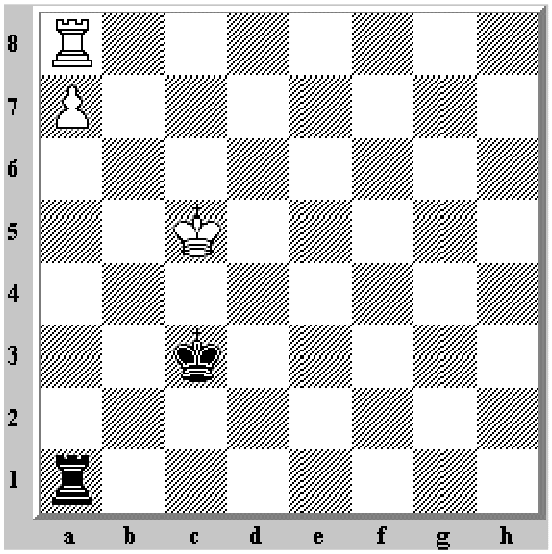
Black to move



Black is unable to protect the weak square f7, which is attacked by a battery of Queen and Bishop. The only possible defense, 6...Nh6, fails to 7.Bxh6, renewing the attack on f7.

The following endgame position is won by a sequence of double attacks.

White to move



The move 1.Rc8 threatens to promote the Pawn. It also threatens, after 1...Rxa7, to win the Black Rook with 2.Kb6+, a discovered check.

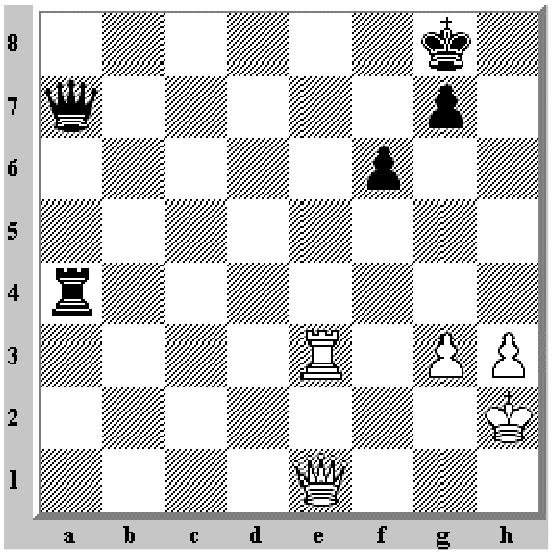
Double attack on a pin

Averbakh gives many examples of a double attack together with a pin. He says,

Situations in which a piece is subjected to a [double] attack and in which it is pinned into the bargain are particularly dangerous for the player who is on the defensive.

Here are two of his examples.

Black to move



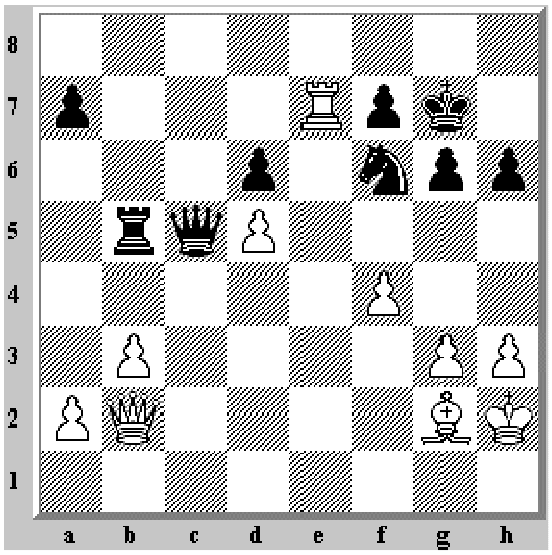
After 1...Ra2+ 2.Re2 (2.Kg1 Ra1 wins with a different pin) 2...Qe3, the White Rook is pinned

- by the Black Rook against the White King and
- by the Black Queen against the White Queen.

Major material losses are inevitable. This theme, which occurs frequently, is always a pleasing way to win a game.

The next position, where the White Pawns advance to threaten the pinned Knight, also shows a theme seen frequently.

White to move

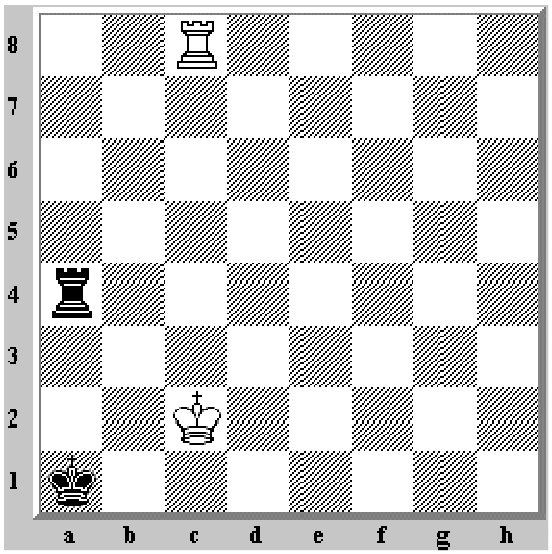


After 1.g4 g5 2.h4 gxh4 (2...Kg6 3.h5+ Kg7 4.fxg5 hxg5 5.h6+ mates) 3.g5, the Knight is doomed.

Other double attacks

There are so many types of double attack that a comprehensive classification may not be possible. In the following diagram, the bad position of Black's pieces allows a quick finish.

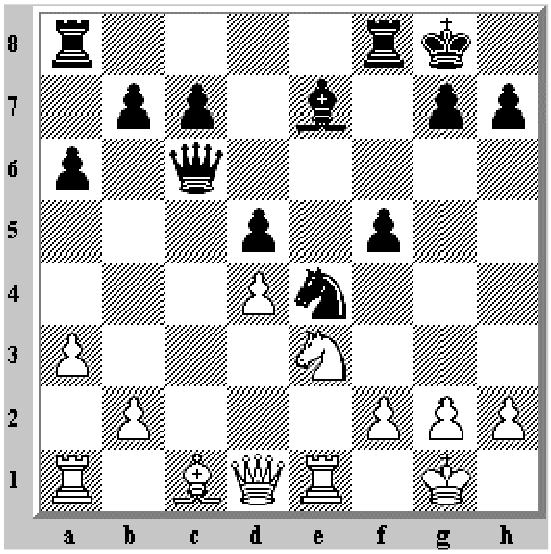
White to move



1.Kb3 attacks the Rook and threatens mate with 2.Rc1+. This shows the simplest form of an attack on a piece combined with a mating threat.

The following position shows a typical middle game position.

White to move



1.Qb3 attacks the d-Pawn a second time while pinning it against the Black King. If Black parries the first threat with 1...Rad8, then 2.Nxf5 Rxf5 3.Rxe4 recovers the Pawn.

***

The preceding examples show only a few of the many types of double attack. You can find more on these pages of *Basic tactics : Intermediate puzzles*:

- Set no.1
- Set no.2

These have been drawn from the easiest of Averbakh's many exercises. Finally, we have an additional page with the PGN scores (no annotations!) of eight complete games 'in which the double attack either decided the game or was its leitmotif'.

Averbakh's sample games
PGN game scores

To close this introduction with another Averbakh quote, 'It is no exaggeration to say that a double attack or at least the threat of one occurs in almost every game.' No exaggeration, indeed!

Part V : Open lines

Paul Morphy showed us that tactics and combinations have a positional basis.

Let's start this article on open lines by repeating a definition. Our introduction to *Positional Play* (see the link box at the bottom of this article) says,

> Open lines are ranks, files, and diagonals which are not obstructed by Pawns.

Now let's make a comparison.

> Open lines are the streets and roads used by the line pieces to move around a chessboard.

You might be wondering why we list both *Positional Play* and *Tactical Play* as 'Related Resources'. One of the objectives of *Positional Play*is to create open lines and then to occupy them with the appropriate pieces : Rooks on open ranks & files, Bishops on open diagonals, and the Queen on any open line. *Tactical Play* then uses those well-placed pieces to strike quickly and decisively at the opponent's weaknesses.

We could give many simple examples of open lines and their use. Instead we'll look at how one of the first great tacticians used open lines to dazzle and delight generations of chess fans with original combinative play.

Paul Morphy (1837-1884) was born and died in New Orleans. His competitive chess career was brief and covered only the years 1857 to 1859. He won the 1st American Chess Congress in 1857 by defeating Louis Paulsen (+5-1=2) in the final round of the knockout competition. Six months later he travelled to Europe for a match with Howard Staunton, now considered to have been an unofficial world champion in the 1840s.

Unable to play Staunton, for reasons which have tarnished the Englishman's reputation to this day, the American played a series of matches with other top-ranked European players, beating them all. His greatest victory was his match against Adolf Anderssen (+7-2=2), unofficial world champion before and after Morphy. For more about Morphy, see the link box.

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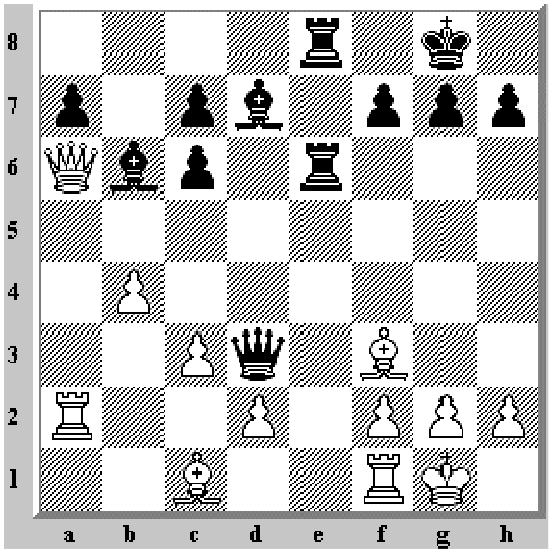
Morphy's best known combination is the following.



Morphy, P.

1857 New York
American Congress rd. 4.6

Paulsen, L.

Black played the surprising 17...Qxf3, followed by 18.gxf3 Rg6+ 19.Kh1 Bh3 20.Rd1 (20.Qd3 is better) 20...Bg2+ 21.Kg1 Bxf3+ 22.Kf1 Bg2+ (22...Rg2 forces mate in 3). The Queen sacrifice is as beautiful as it is unexpected, and you might think that it was due solely to Morphy's imagination. In fact, the sacrifice arose from elements of the diagrammed position which Morphy planned many moves before.

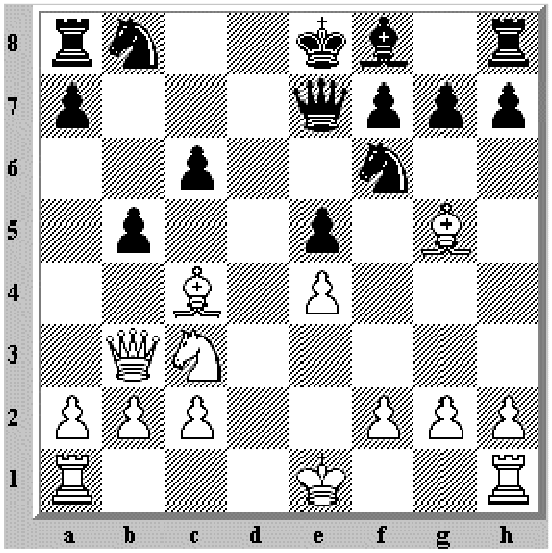
Note the placing of the Black pieces in the diagram. The Rooks are doubled on the open e-file, while the Rook on e6 is free to operate on a good portion of the 6th-rank. The Bishops are posted on diagonals which strike squares close to the White King; the Bishop on d7 is blocked by the Re6, but this is temporary. The Queen sits at the intersection of two open diagonals and can operate on the d-file and on the 3rd-rank.

The placing of the White pieces is less impressive. One Rook and one Bishop are still undeveloped. The Queen and Rook on a2 are on the open a-file, but are far from the center; the Rook looks misplaced on a2. Only the Bishop on f3 is posted actively and that is exactly the piece which Morphy removed with 17...Qxf3.

***

Morphy's best known game is probably the following off-hand game. White's Queen & Bishops are actively placed and the d-file is ready for occupation by one of the Rooks. The Queen Rook can reach d1 in one move.

Black's only well-place piece is the Knight on f6, which is unfortunately pinned. The Queen blocks the development of the Bishop, and the rest of Black's pieces are also undeveloped.



Von Braunschweig/Isouard

1858 Paris

Morphy, P.

Morphy immediately opened more lines by sacrificing the Knight with 10.Nxb5 cxb5 11.Bxb5+ Nbd7. He then brought the Queen's Rook to the d-file with 12.O-O-O Rd8, sacrificed it with 13.Rxd7 Rxd7, and then brought the other Rook to the same file with 14.Rd1 Qe6. He prepared the final sacrifice with 15.Bxd7+ Nxd7, after which 16.Qb8+ Nxb8 17.Rd8 was checkmate. Black's huge material superiority was helpless against a single Rook and Bishop.

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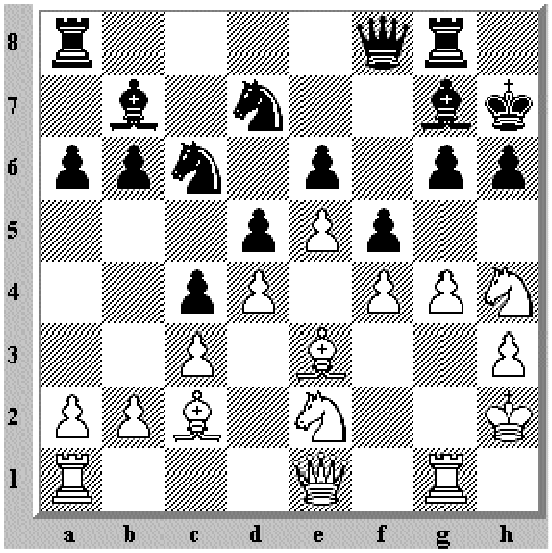
Pieces on open lines aimed at the opponent's King lead to tactics. The following position has almost no open lines, although most of White's pieces are aimed at the Black King.



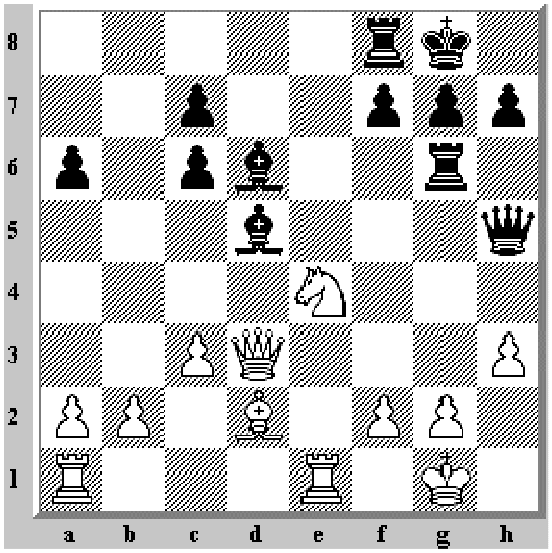
Meek, A.

1857 New York
American Congress rd. 2.2

Morphy, P.

Morphy started opening lines with the Knight sacrifice 19.Nxg6 Kxg6 20.gxf5+ Kf7 21.fxe6+ Kxe6 22.f5+. Now the White line pieces were ready to penetrate Black's position in a single move. After 22...Ke7 23.Qh4+ Ke8 24.f6, Black was quickly overwhelmed.

In the following position you should be able to see that all but one Black piece is ready for action.



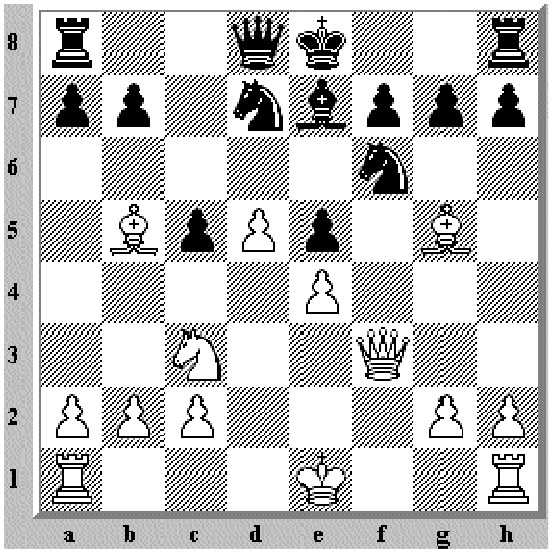
Morphy, P.

1857 New York
American Congress rd. 4.2

Paulsen, L.

Morphy played a Rook sacrifice 21...Rxg2+ 22.Kxg2, and brought the other, undeveloped Rook into play with 22...f5 23.f3. Now 23...fxe4 24.Rxe4 (24.fxe4 Qg6+ mates) 24...Qg6+ would have won quickly. Instead, Morphy stumbled with 23...Qg6+ 24.Ng5 h6, but eventually managed to draw the game.

In the following position, White certainly looks better.

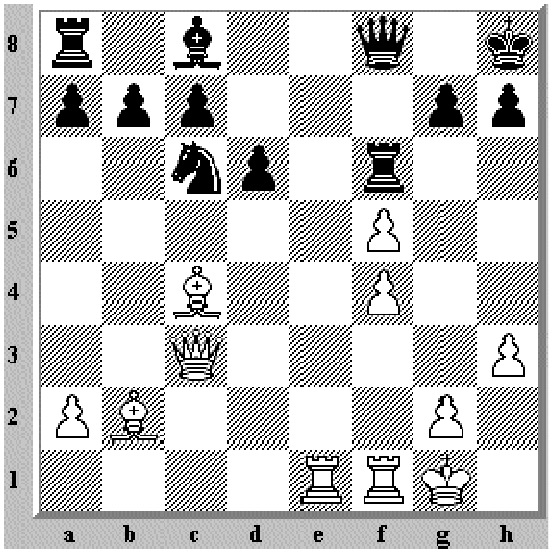


Meek, A.

1857 New York

Morphy, P.

Who would guess that after 11.d6 Bxd6 12.O-O-O, Black would have nothing better than to resign?

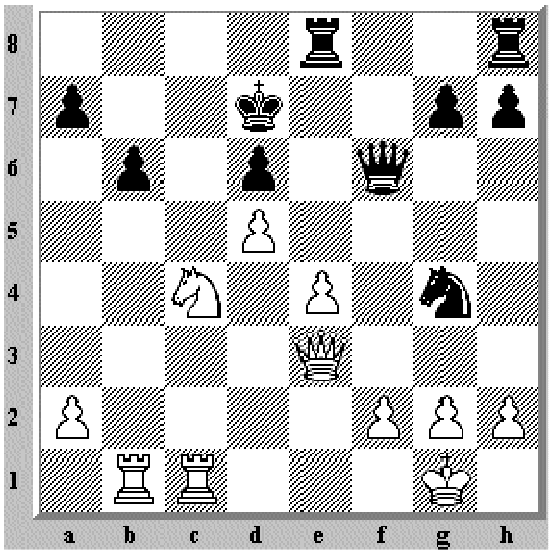


NN

1858 New Orleans
Blind simultaneous

Morphy, P.

Once again, we see the Bishops aimed at the King on open diagonals, one Rook on an open file with the other ready to follow, and the Queen ready to move in almost any direction. Morphy sacrificed a Rook with 21.Re8 Qxe8, then opened the a1-h8 diagonal with 22.Qxf6 Qe7 (if 22...Ne5 23.Qg5) 23.Qxg7+. After 23...Qxg7 24.f6 Black tried Qxg2+ 25.Kxg2 Bxh3+ 26.Kxh3 h5 27.Rg1 and resigned.

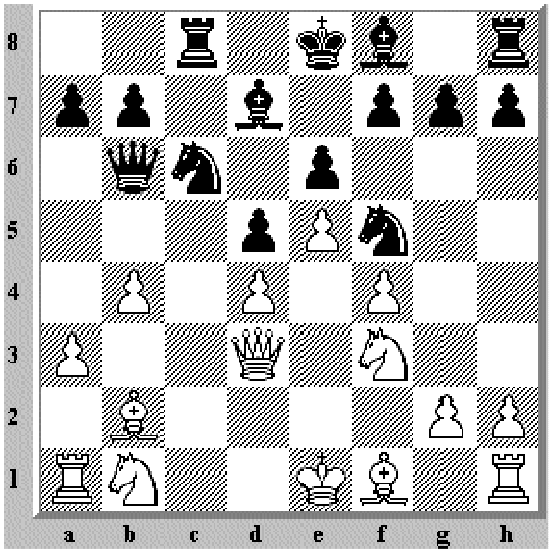


Lowenthal, J.

1859 London

Morphy, P.

A Pawn ahead, White can win with the unspectacular 25.Qa3, but Morphy sacrificed the Knight with 25.Nxb6+ axb6, then sacrificed a Rook with 26.Rc7+ Only 26...Kd8 avoids immediate mate, but 27.Qxb6 Qxf2+ 28.Qxf2 Nxf2 29.Ra7 is also hopeless.



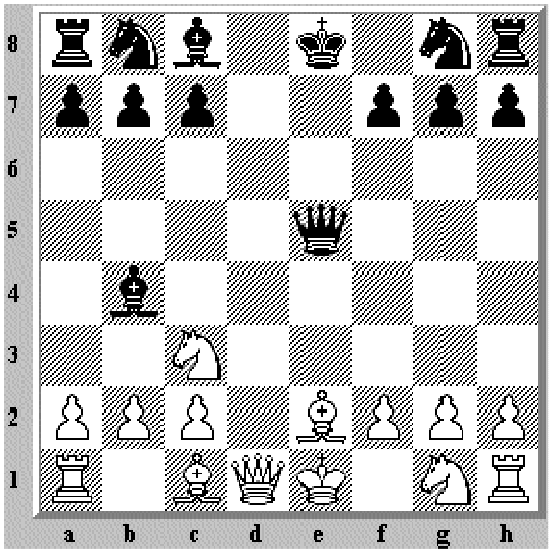
Morphy, P.

1850 New Orleans

McConnell, J.

In this position Morphy sacrificed the undeveloped Bishop with 11...Bxb4+. After 12.axb4 Nxb4 the Knight attacked the Queen and supported the Rook's advance to c2. White tried 13.Qd2 Rc2 14.Qd1, but resigned after 14...Ne3.

The following position is from the match against Anderssen, the second best player in the world at the time of the game.



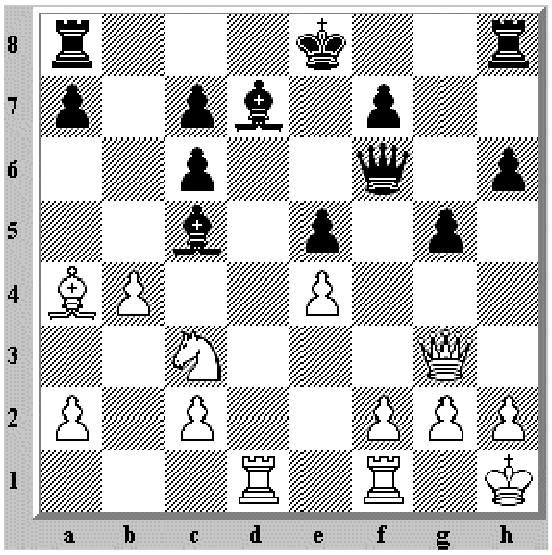
Anderssen, A.

1858 Paris
Match g.7

Morphy, P.

Most players would play 7.Bd2 without giving the position much thought, but Morphy sacrificed a Pawn with 7.Nf3. After 7...Bxc3+ 8.bxc3 Qxc3+ 9.Bd2 Qc5 10.Rb1, White's pieces were ready to strike on the many open lines. Anderssen was unable to cope with the complications and eventually lost.

It is just as important to prevent your opponent's use of open lines as it is to use them yourself. Our last position shows Morphy on the defensive.



Morphy, P.

1857 New York
American Congress rd. 4.3

Paulsen, L.

White has just offered a Pawn sacrifice with 16.b2-b4. If 16...Bxb4, White takes advantage of the open lines and wins with 17.Rxd7 Kxd7 18.Nd5 Qd6 19.Nxb4 Qxb4 20.Rd1+. Morphy kept the lines closed with 16...Bd6, but eventually succumbed to White's pressure on the open d-file.

***

You may not be able to conceive and calculate the brilliant combinations which characterized Morphy's chess. He was, after all, one of the greatest players of all time.

You should be able to incorporate into your own planning the principles which he discovered and by which he played. Try to recognize which lines are important, to place your pieces on those lines, and to take advantage of the active possibilities which arise. The tactics and combinations will be there!

Part VI - King safety

Why, when, and where to castle.

Since the loss of the King means loss of the game, the player whose King is well protected has a big advantage over an opponent whose King is poorly protected. King safety is an important element of *positional play* (see the link box at the bottom).

In the opening of a game, the players typically push their center Pawns to occupy the center and to open lines for the development of the pieces. One consequence of the opening is that the King, who starts the game on a central file, becomes exposed to attacks from the opposing pieces. Keeping the King for too long on its initial square often leads to catastrophic problems.

Castling (see the link box again if you're not sure how to castle) serves two purposes. It:-

- places the King in relative safety, and
- furthers the development of the castling Rook.

The castling move was introduced in the 15th century during the great reform of chess rules which created the modern game. Ever since Ruy Lopez simplified the many variants in 1561 to create today's standard, players have been faced with two key questions in every chess game:-

- when to castle?
- where to castle : Kingside, Queenside, or not at all?

The answer to both questions is, 'It depends'. *It depends* on the other details of the position.

When to castle

Castling occurs once in a game and fixes the long-term residence of the King. This makes it an important strategic decision.

For offense, aiming the pieces at the opponent's King is a common strategy, so knowing the address of the King helps to develop the forces. For defense, keeping a piece or two near the King is also a common strategy, so knowing the address of the King helps here, too.

Same side or not?

When both Kings castle to the same side -- both on the Kingside or both on the Queenside -- it is risky for either player to launch a Pawn attack against the opposing King. This is because at the same time the moving Pawns threaten the opposing King, they move away from the protection of their own King.

When the Kings castle to opposite sides -- one on the Kingside and one on the Queenside -- both players routinely launch a Pawn attack against the opposing King. Now the Pawns that threaten the opposing King aren't the same Pawns which protect their own King.

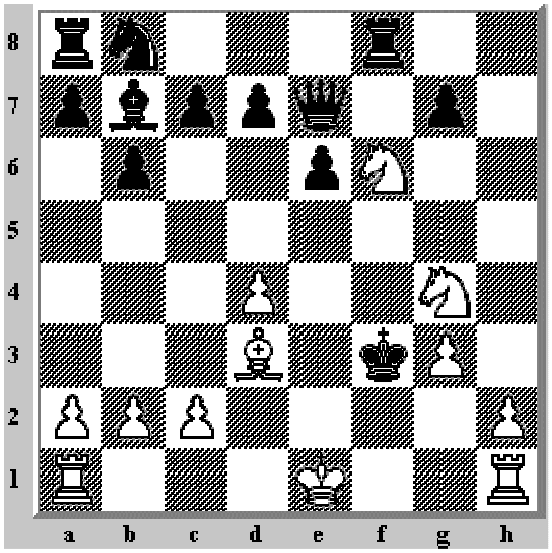
For these reasons, both players often wait for the other to castle first. Once one of the players has committed the King to one side, the other player can castle to that side or to the opposite side, depending on plans for the next phase of the game.

In other games it becomes obvious at an early stage which side is best for one or both Kings to castle. Following the principle of playing obvious moves first, a player may choose to castle as fast as possible.

Offense or defense?

As the only move involving two pieces at the same time, castling can be done for offensive reasons, for defensive reasons, or for both. Sometimes a player castles because the castling Rook is needed to occupy an open file immediately -- this is offensive. At other times a player castles because the risk of keeping the King in the center is increasing with every move -- this is defensive. A player who is attacking may decide to delay castling only because it puts no new pressure on the opponent.

Castling occasionally wins a game outright. Here is a rare case of castling to deliver checkmate.

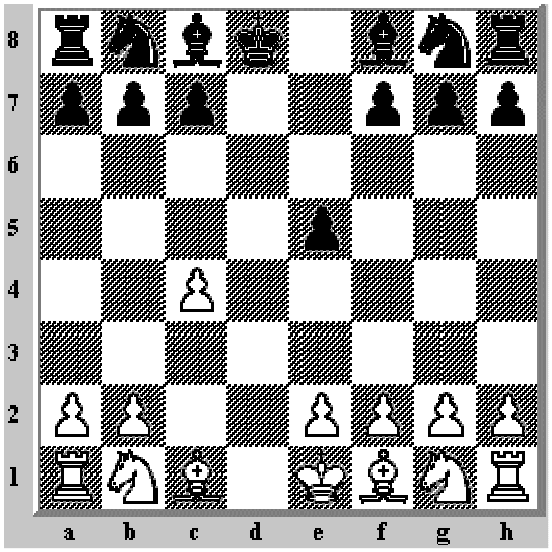


16.O-O is mate. The position is from a variation of Ed. Lasker - Thomas, London 1911, which did not occur in the real game. Instead, White delivered checkmate a few moves later with 18.O-O-O.

To castle or not?

After the Queens have been exchanged, the center is almost as safe as the corner. This is the same principle that allows a King to become active in the endgame.

Sometimes castling can be dispensed with altogether. This option usually arises when the Queens are traded early. Here's an example.



After 1.d4 d6 2.c4 e5 3.dxe5 dxe5 4.Qxd8+ Kxd8, Black's King is in no particular danger in the center, although it does interfere with the development of the Black Rooks. Black will have to find another square for the King in order to develop the Rooks to the center files.

With the Queens on the board, there is one tried-and-true piece of advice on when to castle. Castle before your opponent forces you to give up the castling option. Similarly, if you can prevent your opponent from castling, you'll usually have the upper hand.

Where to castle

Even before you have the possibility to castle, you should be considering where your King will be best placed : Kingside, Queenside, or in the center. The main elements behind this decision are

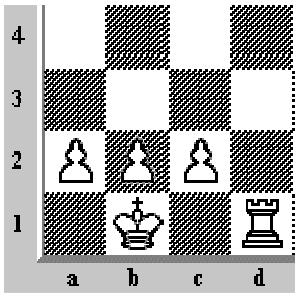
- the pawn structure that will protect your King, and
- any open lines that can be used against your King.

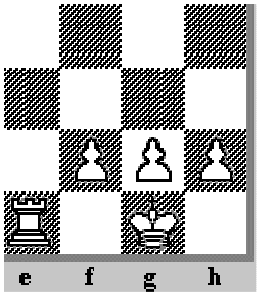
As mentioned in the discussion about castling on opposite sides, the position of your opponent's King is another factor.

Two moves or one?

At first glance it may seem that castling Queenside is more efficient than Kingside. After O-O, you need to play another Rook move like Re1 (Re8 for Black) or Rd1 (Rd8) to bring the King Rook into play on a center file. After O-O-O, the Queen Rook is already developed on a center file.

It may seem that Queenside castling gains a move, but things are not so simple. Because the a-Pawn is unprotected after O-O-O, the King must often move to b1 (b8) to protect it. This second King move can also be necessary to get the King off the c1-h6 (c8-h3) diagonal.





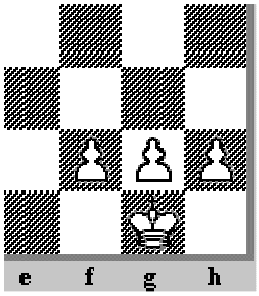
O-O-O and Kb1

O-O and Re1

These diagrams show that two moves are usually required when castling on either side.

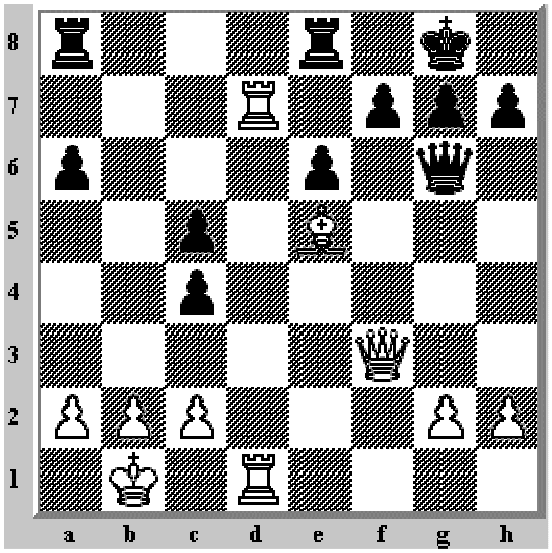
Pawn structure

The Pawns in front of the King play the main role in its protection. The most solid formation is when all Pawns in front of the King are on their initial squares.



There's a drawback to castling : the King sitting in a corner behind its own Pawns can be easier to attack than when it is in the center. The same Pawns that provide protection to the King also restrict its mobility.

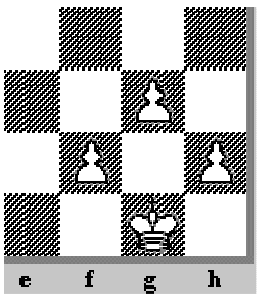
The Pawn structure in the preceding diagram has a serious disadvantage : back-rank mates. Many games end in mate because a King has no escape from an opposing Queen or Rook checking on the back rank. Here's an early example from the first international tournament in chess history.

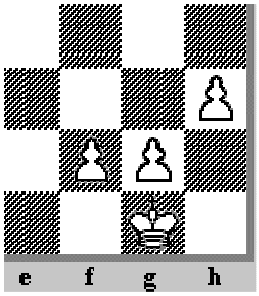


In game 3 of the final match of the London 1851 knockout tournament, Anderssen played 1.Qxa8. Wyvill resigned because 1...Rxa8 2.Rd8+ is mate next move, and on any other move, Black has lost a Rook for nothing.

The safest protection against back-rank mates is to move one of the Pawns in front of the castled King. Which Pawn should you move? As you may have already discovered, when a Pawn advances it creates a weakness. This weakness can provide a target for an attack. Let's look at some examples.

Bear in mind that although the next few diagrams show the White King castled on the Kingside, the remarks are equally relevant for a King castled on the Queenside. And, of course, they also apply to a castled Black King.



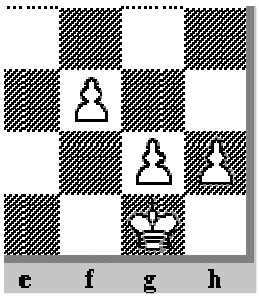


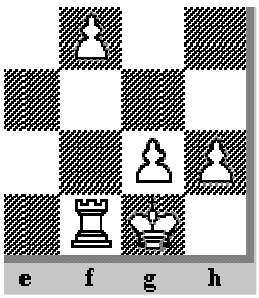
g3

h3

In the first diagram, White has played g3 to create an escape square on g2 against back-rank mates. At the same time, the move has created one **hole** on f3 and another hole on h3. Black's pieces can move to either square without fear of being attacked by a White Pawn.

In the second diagram, White has played h3 to create an escape square on h2. Unlike the previous diagram, the move has not created a hole. The Pawn on f2 prevents any Black piece from moving to g3.





f3

f4

In the first diagram, White has played f3 to create an escape on f2. This may look similar to the position after h3, but there is a big difference. The move f3 has created a hole on e3. It

has also blocked the square f3 so that White can no longer move a Knight to that square. A Knight on f3 is a natural protector of the castled King.

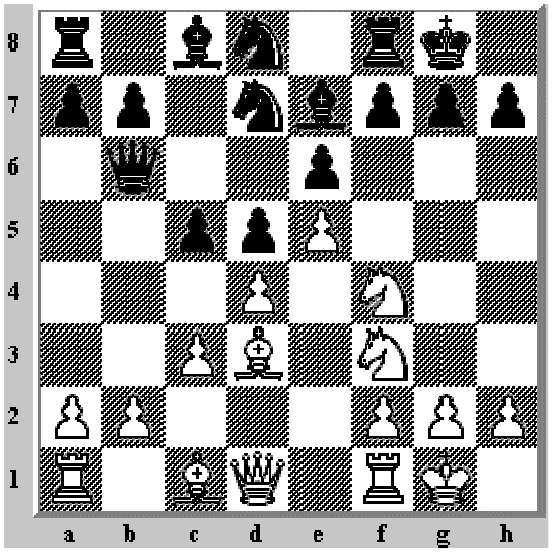
Even worse, the move f3 is considered **passive** : it puts no pressure on Black. If White wants to move the f-Pawn to create an escape square, f4 is better. Although it also leaves a hole on e3 (and on e4), it strikes Black's center and threatens to move to f5, menacing the Black position. When supported by a Rook, as shown in the diagram, f4 is a dangerous attacking move at the same time that it creates an escape square for the White King.

There are many other possible Pawn formations around the castled King. Whenever you move a Pawn near your King, consider the long-range impact on your King's safety as well as the impact on your opponent's position.

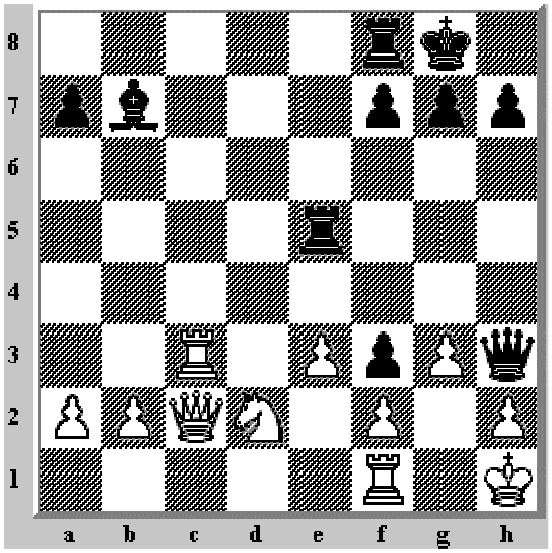
Open lines

Pawn structure is not the only consideration for the castled King. Open lines are just as important and are often the basis for **attacks on the castled King**.

Here we give two examples of such attacks. There are many other examples and some writers have attempted to classify them according to different sacrificial themes.



In this diagram the b1-h7 diagonal is an open road to Black's King. Black can't close it with f5. After 1.Qc2 f5 2.exf6 Nxf6 3.Ng5 g6 4.Bxg6 hxg6 5.Qxg6+, White mates.



In this diagram Black threatens mate with 1...Qg2. If White defends with 1.Rg1, Black mates with 1...Qxh2+ 2.Kxh2 Rh5. The holes on f3 and h3 let Black's pieces approach the White King. Then the 5th-rank and the h-file helped to deliver the decisive blow.

In future articles we'll look at other typical attacks on the castled King. We'll discuss when it's safe for the King to emerge from the corner. Don't forget that, when it comes to your King, safety is the first priority!

Part VII : Pawn Structure

Some types of Pawn structure are so common that they have been given names.

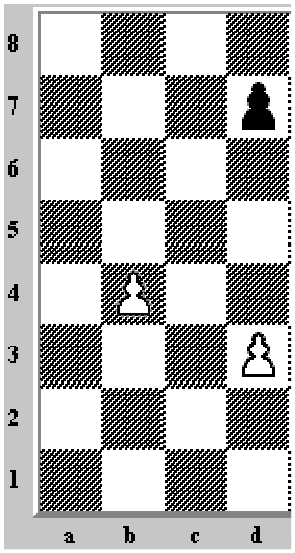
In our introduction to *Positional play* (see the link box at the end of this article), we list a half dozen elements that distinguish a strong position from a weak one. One of those elements is the *Pawn structure* : the position of the Pawns, ignoring the position of all other pieces.

In our introduction to *Planning* (see the link box again) we say, 'The plan arises from the position on the board. The Pawn structure is one of the most important elements of the position.' What makes the Pawn structure so important?

Unlike the other pieces, which can make as many moves as required in a single game, each Pawn is limited to a maximum of five or six moves. The Pawns advance slowly and deliberately. The consequence is that the Pawn structure itself evolves slowly and a single aspect of that structure can remain fixed for many moves, sometimes for the remainder of the game.

In this article we're going to look at some of the basic types of Pawn structure. These are so fundamental that they have been given names by generations of chess players and writers.

Since both players manipulate a separate formation of Pawns, many common configurations come from how the two Pawn structures relate to each other. A Pawn is *passed* because there are no opposing Pawns; another Pawn is *backward* because it has no opposing Pawn on the same file.

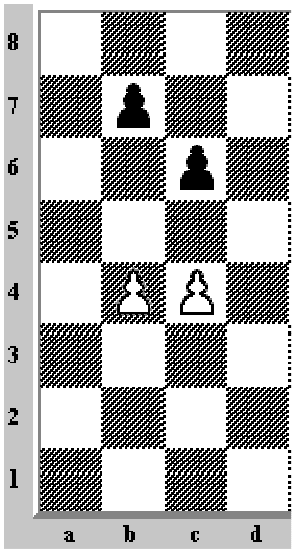


Passed Pawn

Our first example is a key factor in the endgame. In our series on elementary endgames (link box again) we say, 'An extra Pawn is an advantage; when it's an outside passed Pawn, it's a big advantage.'

A passed Pawn is a Pawn which has no opposing Pawn in front of it or on a file to the side. The b-Pawn in our diagram is an example of a passed Pawn. The two d-Pawns are not passed, because they stand in the way of each other.

The advantage of a passed Pawn is that it constantly threatens to advance to its eighth rank where it will promote to a more powerful piece, usually a Queen. It requires constant attention by the enemy pieces.



Connected Pawns

The most favorable position of two Pawns is side by side. In the diagram, the b- and c-Pawns for both sides are connected (sometimes called *united*).

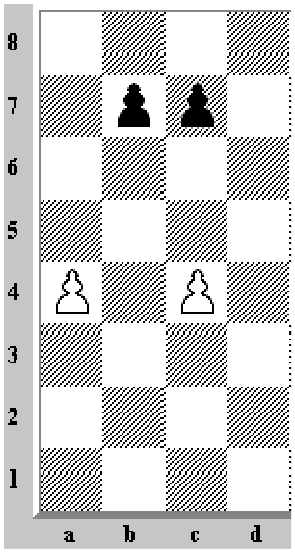
Each Pawn, wherever it is placed on the chessboard, has certain squares which are more important to that Pawn than other squares. These are

- the two squares diagonally in front where it can capture an enemy piece or guard a friendly piece (one square diagonally for a Pawn on the a- or h-file), and
- the square directly in front where it is blocked by any piece occupying the square.

These are called the Pawn's *strong squares* and *weak square*.

The strongest formation of connected Pawns is illustrated by the White Pawns in the diagram, where each Pawn controls the weak square of the Pawn to its side. The Black Pawns, which are also connected, are not as strong because neither controls the other's weak square. Their position is not entirely weak, because the b-Pawn guards the c-Pawn.

Pawns on adjacent files separated by more than one rank, are not connected : this would be the case in our diagram if the White b-Pawn were still on b2. They become connected if the lagging Pawn advances.

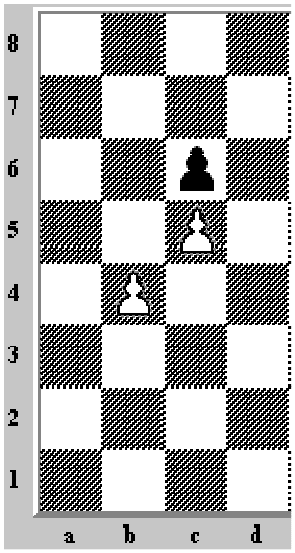


Isolated Pawns

In sharp contrast to the strength of connected Pawns is the weakness of isolated Pawns. These are Pawns which have no friendly Pawn on either adjacent file.

Both White's a-Pawn and c-Pawn in the diagram are isolated. They are weak because any enemy piece can occupy the square in front without fear of being attacked by another Pawn.

In the diagram, any Black piece on c5 would attack squares in White's camp. The c-Pawn would also protect it from attack by a Rook on the c-file.

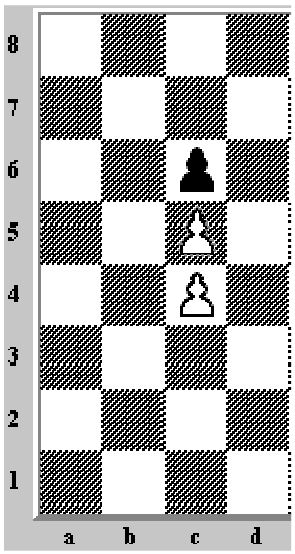


Backward Pawn

Another example of a weak Pawn is shown in this diagram. The b-Pawn is backward because it lags the Pawn to its side and can no longer be protected by any other Pawn.

Pawns are only called backward when they are on a *half-open file* : a file with no opposing enemy Pawn. If a Black Pawn were on b7, the White b-Pawn would not be backward.

The backward Pawn is weak because it is easily blocked by an enemy piece and has difficulty advancing, especially where its weak square is controlled by an enemy Pawn, as in the diagram. Backward Pawns are obvious targets for the enemy pieces.

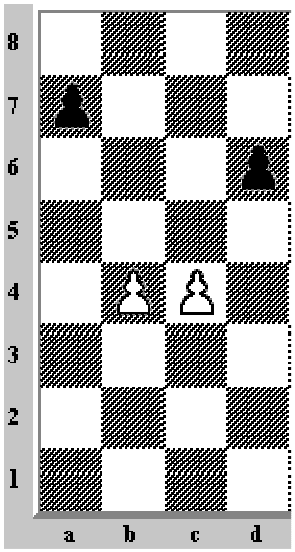


Doubled Pawns

Pawns of the same color on the same file, like the White c-Pawns in the diagram, are called doubled Pawns. Their particular weakness is that they are unable to create a passed Pawn by force. The single Black Pawn easily blocks its two adversaries.

Doubled Pawns have some strength in that they guard a compact area of the chess board, making it difficult for an enemy piece to enter that area. The squares b5, b6, d5, and d6 are all protected by the doubled c-Pawns in the diagram.

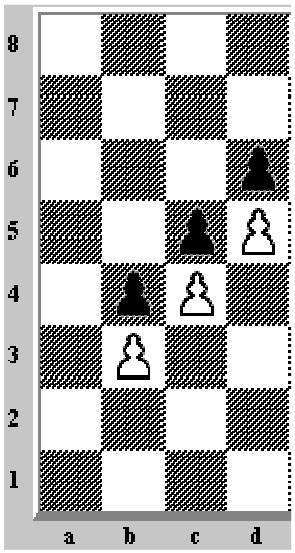
If another White Pawn were on c2 or c3, we would have an example of tripled Pawns. This is a particularly weak formation because all three Pawns can be blocked by a single enemy piece, while the Pawns can't protect each other and are vulnerable to attack.



Hanging Pawns

Another common example of a Pawn formation having both strength and weakness is shown in this diagram. As we saw earlier, the connected b- and c-Pawns are strong, but here they sit on half-open files.

This makes them vulnerable to attack from the enemy pieces, especially the Rooks. If either Pawn advances, the other Pawn becomes backward, transforming the strong connected Pawns into weak connected Pawns.

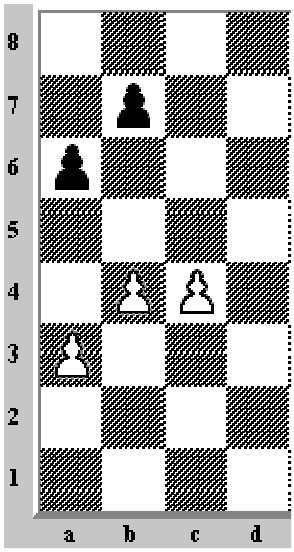


Pawn chain

Connected Pawns on a diagonal are known as a chain. Although two Pawns on a diagonal can be considered a chain, the term is usually applied to three or more Pawns.

If we remove two or three of the Black Pawns (or even the single Pawn on c5) from the diagram, the remaining White Pawns would still make a chain. The Pawns on d5 and b4 are the *head* of their respective chains; the Pawns on b3 and d6 are the *base*.

The diagram shows both White and Black Pawns in a chain where each chain blocks the other, effectively dividing the board into one region behind the White Pawns and another behind the Black Pawns. The blocked chain makes it difficult for the other pieces to move quickly from one of these regions to another.

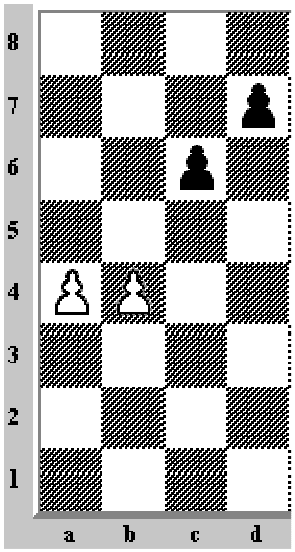


Pawn majority

As we already saw in the first diagram, a passed Pawn can be a real advantage. Where a player has more Pawns than the opponent on one side of the board, that player can advance the Pawns to create a passed Pawn. This formation is called a majority.

The diagram shows a *Queenside majority*. The same formation mirrored on the other side of the board would be a *Kingside majority*.

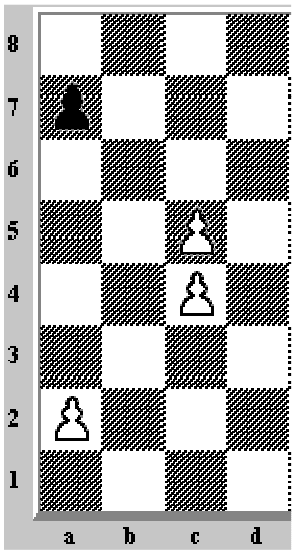
Sometimes a player has more Pawns on one side, but is unable to create a passed Pawn by force. This would be the case in the diagram if we moved the c-Pawn from c4 to b3. This is called a *crippled* majority and is always associated with doubled Pawns.



Connected Pawns, one passed

The basic Pawn formations can be combined in different ways to create more complex formations. Here White has connected Pawns where the a-Pawn is a passed Pawn. The Black d-Pawn might also be passed; it depends whether White has a Pawn on the e-file or not.

If we remove the Black c-Pawn, the White Pawns would become connected passed Pawns. This is a very strong formation and a tangible advantage in an endgame.



Passed, doubled Pawns

If you've followed the discussion to this point, you recognize that White's c-Pawns are doubled and passed. While nowhere near as strong as connected passed Pawns, White's formation can be an advantage in the endgame.

The Pawns provide natural protection for White's pieces to occupy the central squares d5 and d6. The lead c-Pawn can eventually be exchanged, leaving another passed Pawn in its wake.

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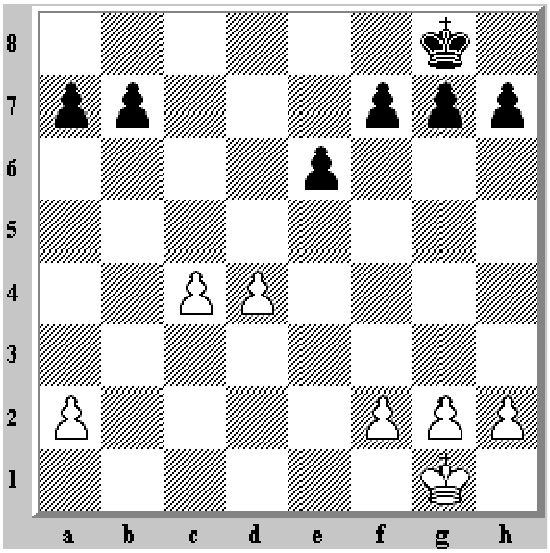
If Pawns had a motto, it would be 'United we stand; divided we fall.' Connected Pawns are strong while isolated Pawns are weak. Consider the following diagram.



Pawn islands

White has an isolated Pawn at a2, hanging Pawns at c4 & d4, and three connected Pawns at f2, g2, & h2. Black has one set of connected Pawns at a7 & b7 and another stretching from e6 to h7.

If we count the sets of connected Pawns for each side, we have three for White and two for Black. In other words, White has three Pawn islands, while Black has two.

All other things being equal, the player with fewer Pawn islands has an advantage, because the individual Pawns are easier to defend against enemy attacks. The Pawns in each island defend each other and cover the others' weak squares.

Each player starts with eight connected Pawns stretching from the a-file to the h-file. As the Pawns advance and are exchanged, the islands appear.

Advanced Pawns

The last topic in our introduction to Pawn structure is another example of how Pawns can create strengths and weaknesses at the same time. Advanced Pawns are those Pawns that have moved past their own fourth rank into the opponent's side of the board.

As they advance into enemy territory they

- cramp the opponent and restrict the activity of the enemy pieces, but
- are subject to encirclement and capture.

Their advance also

- gives their own pieces more freedom of movement, but
- leaves unprotected areas in their own camp which can be invaded by enemy pieces.

As is so often true in chess, each position has to be judged objectively and on its own merits. Where one player sees an opportunity, another sees a disadvantage. A particular Pawn structure can be either weak or strong depending on which other pieces remain on the board. We'll say more about this in a companion article.

Part VIII : Piece Placement and Chess Strategy

Some elements of piece play which are in the arsenal of every good player.

'Play with your Pieces, not with your Pawns!' Your Chess Guide's first (and only) chess teacher used to repeat this saying frequently. It often pops into mind when making the final choice between two equally attractive moves : one a piece move and the other a Pawn move.

In this article we'll look at some elements of piece play and chess strategy which are in the arsenal of every good player. These elements assume you already know about *Positional Play* and about *Pawn Structure* (if not, see the link box at the end of this article).

Our guide here is Aron Nimzovitch, the author of two ground breaking books on chess strategy published in the 1930s:-

- *My System*
- *Chess Praxis*

Click the links for pricing and other resources about these books, which are reprints from the 1990s called the '21st Century Edition'.

Our diagrams in this article are from *My System*, which had the following structure

- First Part - The Elements
    1. On the Center and Development
    2. On Open Files

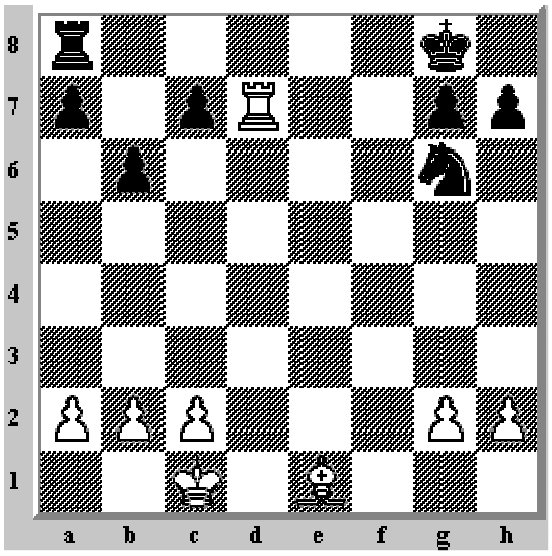
3. The Seventh and Eighth Ranks
4. The Passed Pawn
5. On Exchanging
6. The Elements of End Game Strategy
7. The Pin
8. Discovered Check
9. The Pawn-Chain

- Second Part - Position Play
    1. The Conception of Position Play and the Problem of the Center
    2. The Doubled Pawn and Restraint
    3. The Isolated QP and His Descendents
    4. The Two Bishops
    5. Over-Protection
    6. Maneuvering Against Weaknesses

plus 50 illustrative games.

Nimzovitch covered far more ground in far more depth than we can possibly cover in this article, but we are confident that most good players would rank the following concepts among the most fundamental. The numbers under each diagram refer to the numbering of the diagrams in *My System*.

Rook on the 7th rank



My System 029; Black to move

The term *7th rank* might be confusing unless you realize that it can be counted from the side of each player. The 7th rank of one player is the 2nd rank of the other player, where the Pawns are placed at the start of the game.

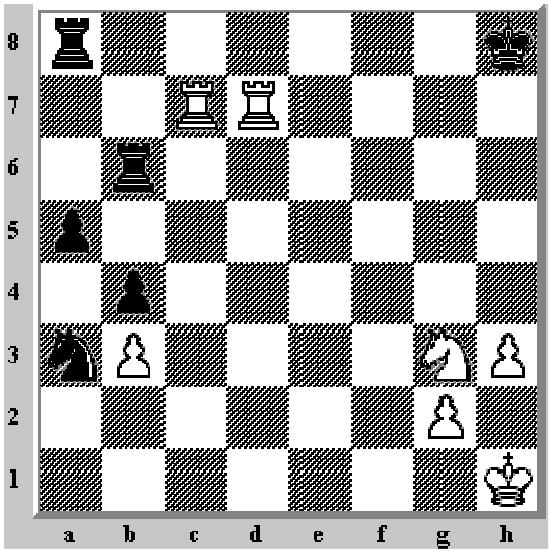
Nimzovitch devoted an entire chapter to the subject of Rook on the 7th rank (and 8th rank, also called the *back rank*). All players learn quickly that a Rook on the 8th rank can checkmate an enemy King which has failed to create a flight square ('back rank mate').

The diagram shows a typical position with a 'Rook on the 7th'. The White Rook on d7 is well posted. It

- attacks the Black Pawns on the Queenside and on the Kingside,
- prevents the Black King from reaching the center by the shortest route, and
- threatens to get behind the Black Pawns if they advance.

White wins a Pawn after 1...Rc8 2.Bg3, but has even bigger material gains after 2.Bc3.

Two Rooks on the 7th rank

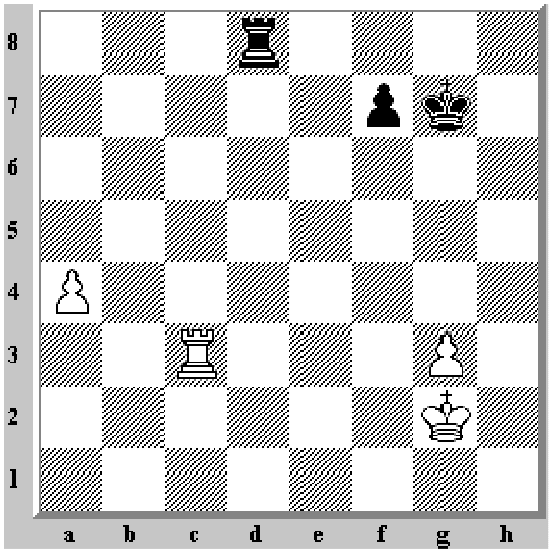


My System 030; Black to move

If one Rook on the 7th rank is a powerful weapon, then two Rooks on the 7th are often sufficient to win by force. In the diagram, Black is helpless against the Rooks supported by the Knight : 1...Rh6 2.Nf5 Rh5 3.g4 Rxh3+ 4.Kg2 Rxb3 5.Rh7+ Kg8 6.Rcg7+ Kf8 7.Rh8 mate

Two Rooks on the 7th often compensate for a significant material disadvantage by delivering perpetual check to a King trapped on the back rank.

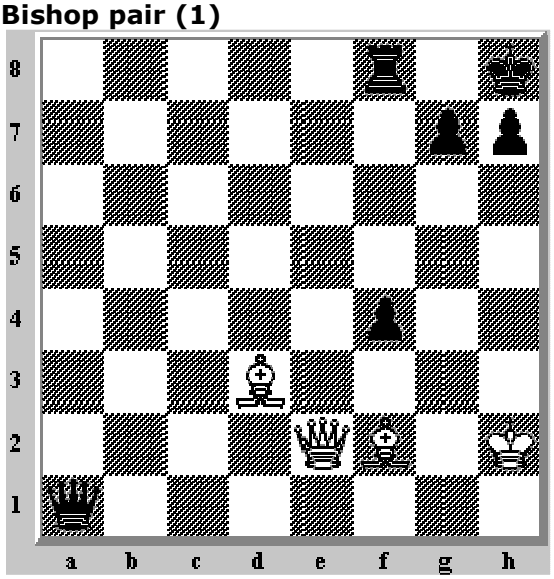
Rook in the endgame


My System 078

While we're discussing the power of the Rook, it's worth remembering the endgame principle that Rooks belong behind passed Pawns. As the Pawn advances, the Rook's space increases.

In the diagram, White to move should play 1.Ra3, getting behind the a-Pawn. Black to move should play 1...Rd2+ 2.Kf3 Ra2 for the same reason.

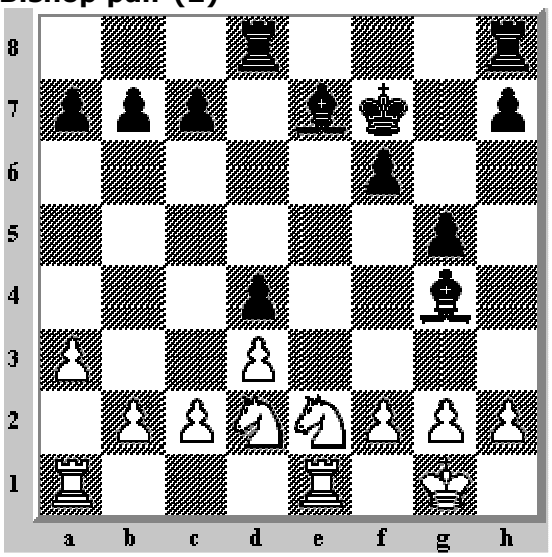
Bishop pair (1)


My System 179; White to move

Nimzovitch devoted another chapter to *The Two Bishops*, also known as the Bishop pair. Although Black has a material advantage in the diagram, White wins immediately with

1.Qe4 g6 2.Bd4+. This shows the tactical power of the Bishop pair. The next diagram shows their positional power.

Bishop pair (2)

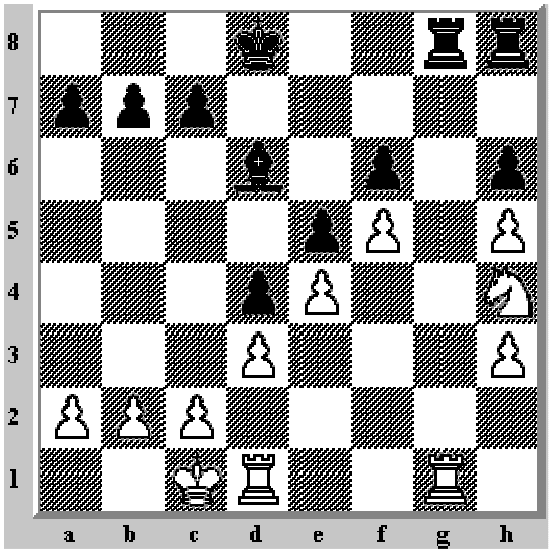


My System 181; Black to move

To put up a fight, White must activate the pieces. The combined action of the Black Bishops and Pawns prevent White from establishing a Knight in the center, where it is most effective.

The diagram is Richter - Tarrasch, Nuremberg 1888. The game continued 19...c5 20.Ng3 h5 21.f3 Bd7 22.Re2 b5 23.Rae1 Bf8 24.Nge4 Rg8 25.Nb3 Rc8 26.Ned2 Bd6 27.Ne4 Bf8 28.Ned2 f5 29.Re5 Bd6 30.R5e2 Ra8 31.Na5 Rab8 32.Nab3 h4 33.Kh1 Rg6 34.Kg1 Be6 35.Rf2 Ra8 36.Rfe2 a5 37.Nb1 a4 38.N3d2 c4 39.Nf1 Rc8 40.Kh1 c3 41.bxc3 dxc3 42.Ne3 b4 0-1

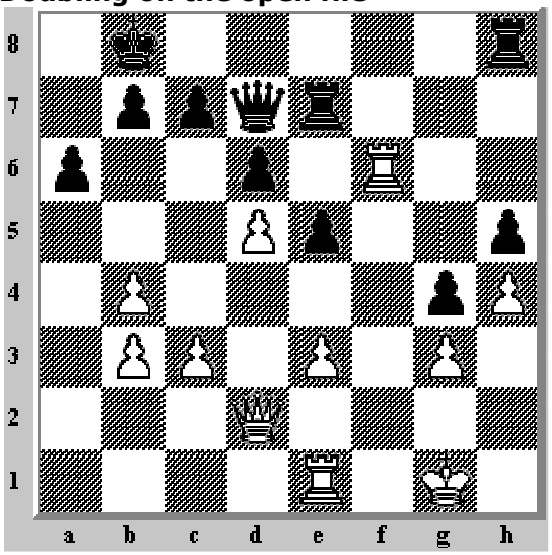
The outpost


My System 027; White to move

Nimzovitch gives both 1.Rg2? Rxg2 2.Nxg2 Rg8 and 1.Rg4? Rxg4 2.hxg4 Rg8 3.Ng6 as unsatisfactory for White. Only 1.Rg6! (the 'outpost') Rxg6 (else 2.Rdg1 is strong) 2.hxg6 wins, where White suddenly has a protected passed Pawn only two steps from promotion.

Our dictionary defines an outpost as 'an outlying or frontier settlement'. An outpost is often associated with an open file. The following diagram shows another method of using an open file to achieve a winning position.

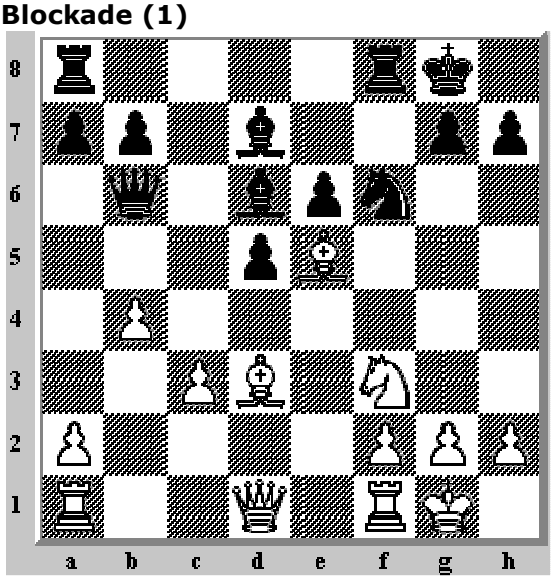
Doubling on the open file


My System 082; White to move

After White plays 27.Ref1, Black has no way to oppose the Rooks on the f-file. These are called *doubled* Rooks. If the Queen were also on the f-file, we would say that White has *tripled* on that file.

Capablanca - Martinez, Argentina 1914, continued 27.Ref1 Rhe8 28.e4 Qb5 29.Ra1 Qd7 30.c4 Rf7 31.Rxf7 Qxf7 32.Rf1 Qg7 33.Rf5 Rf8 34.Qg5 Qh8 35.Qxh5 Qxh5 36.Rxh5 Rf3 37.Kg2 Rxb3 38.Rf5 Rb2+ 39.Rf2 1-0

Blockade (1)

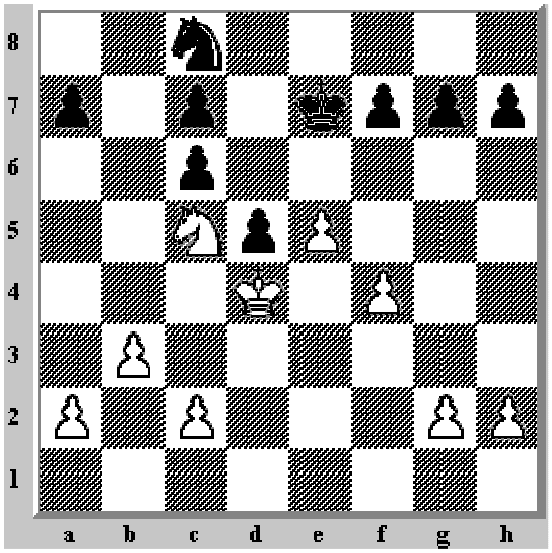


My System 116; White to move

Nimzovitch is perhaps best known for his ideas on the blockade, where a piece prevents a Pawn from advancing by occupying the square in front. In the diagram Black has a Pawn chain on d5 and e6. If Black could play e6-e5, the central Pawns supported by the pieces would give Black an advantage. White plays to prevent this.

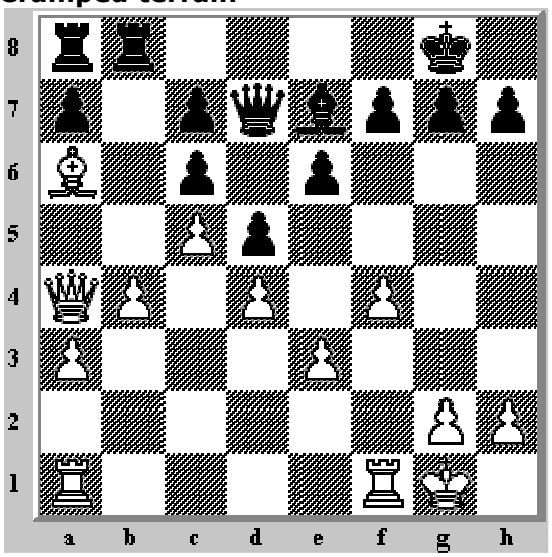
After 15.Qe2 (strengthening the blockade on e5) Rac8 (if 15...Bxe5 16.Nxe5 Rac8 17.c4) 16.Bd4 Qc7 17.Ne5, the Bishop on d4 and the Knight on e5 are well centralized and impossible to dislodge. White has a big advantage.

Blockade (2)


My System 166

This diagram shows a typical weakness of doubled Pawns. Black's Queenside majority can not advance and the White Kingside Pawn majority should be sufficient to win.

Cramped terrain


My System 165; Black to move

This diagram shows an extreme form of blockade. Black's position is so restricted that neither Rook can move. White is free to organize an advance on the Kingside.

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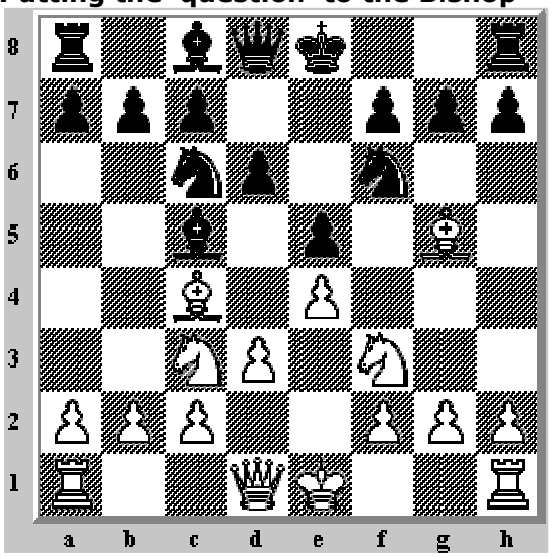
The remaining diagrams illustrate positional themes which arise frequently.

Putting the 'question' to the Bishop

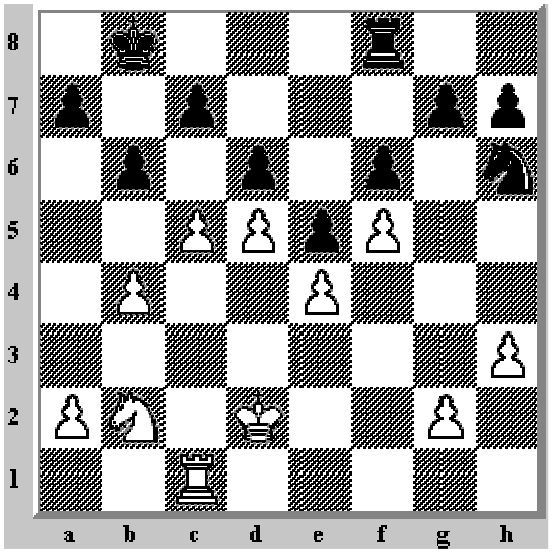


My System 095; Black to move

After the opening moves 1.e4 e5 2.Nf3 Nc6 3.Bc4 Bc5 4.Nc3 Nf6 5.d3 d6 6.Bg5, Nimzovitch says that along with the moves 6...Bg4, 6...Nd4, 6...Na5, and 6...O-O, Black can force White to declare the Bishop's intentions with 6...h6. White can exchange Bishop for Knight or retreat along either diagonal.

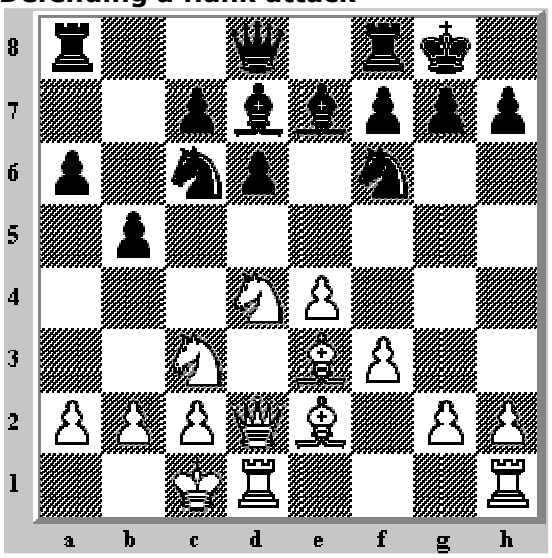
If 7.Bh4, then 7...g5 8.Bg3 breaks the pin at the expense of weakening the Kingside. This maneuver is most effective when Black has not castled Kingside.

Attacking the Pawn-chain at its base


My System 119; White to move

Nimzovitch believed that the weakest point of a Pawn chain is its base, where the Pawn is not protected by another Pawn. In this diagram, White fixes the base at d6 and then attacks it with the remaining pieces. 1.cxd6 cxd6 2.Rc6 Nf7 3.Nc4 Rd8 (If 3...Rc8 then 4.b5 Rxc6 5.dxc6 with a better endgame.) 4.a4. Now White is free to advance the Kingside Pawns supported by the King.

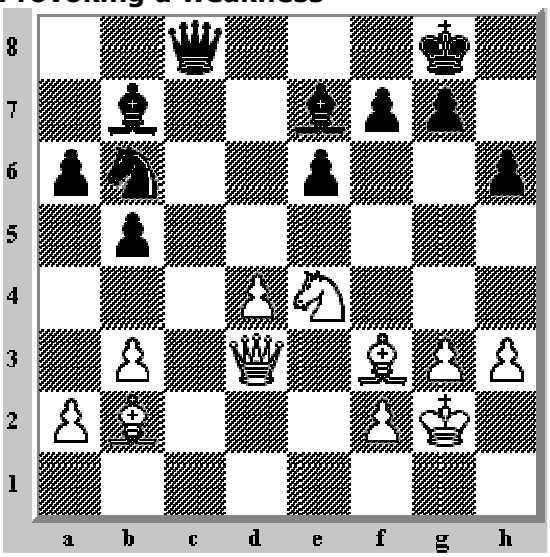
Defending a flank attack


My System 123; White to move

The diagrammed position (Nimzowitsch - Amateur, Riga 1910) occurred after the opening moves 1.e4 e5 2.Nf3 Nc6 3.d4 exd4 4.Nxd4 d6 5.Nc3 Nf6 6.Be2 Be7 7.Be3 Bd7 8.Qd2 a6 9.f3 O-O 10.O-O-O b5.

Black was undoubtedly expecting 11.g4, with a race to push the Pawns on opposite sides of the board. White instead followed the principle of defending a flank attack by active play in the center : 11.Nd5 Nxd5 12.exd5 Nxd4 13.Bxd4 Bf6 14.f4 Re8 15.Bf3. White's better center gives more freedom of play.

Provoking a weakness



My System (between 169 and 170); Black to move

The diagram is from Rubinstein - Lasker, Moscow 1925, after the opening moves 1.d4 d5 2.c4 c6 3.e3 Nf6 4.Nc3 e6 5.Nf3 Nbd7 6.Bd3 dxc4 7.Bxc4 b5 8.Be2 a6 9.O-O Bb7 10.b3 Be7 11.Bb2 O-O 12.Ne5 c5 13.Bf3 Qc7 14.Nxd7 Nxd7 15. Ne4 Rad8 16.Rc1 Qb8 17.Qe2 cxd4 18.exd4 Rc8 19.g3 Qa8 20.Kg2 Rfd8 21.Rxc8 Rxc8 22.Rc1 Rxc1 23.Bxc1 h6 24.Bb2 Nb6 25.h3 Qc8 26. Qd3

26...Nd5 threatened ...Nb4. White prevented this with 27.a3, weakening the Pawn on b3. The Knight immediately vacated the d5 square for the Bishop with 27...Nb6 28.Kh2 Bd5 and Black pursued the attack on the weakened Queenside with 29.Kg2 Qc6 30.Nd2 a5.

The game continued 31.Qc3 Bxf3+ 32.Nxf3 Qxc3 33.Bxc3 a4 34. bxa4 bxa4 35.Bb4 Bxb4 36.axb4 a3 37.Nd2 Nd5. Black won after another 20 moves.

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'Play with your Pieces!' is only a rule of thumb. There are many positions where Pawn moves are the key to a winning strategy. Even so, you have to know where to place your pieces to get the maximum benefit from them.

Part IX : Kasparov - X3D Fritz, New York, 2003

Explaining positional play in a game between Kasparov and a computer is not an easy task.

(November 2003) In our two previous articles on *Positional Play* (see the link box at the bottom of this article) we looked at pawn structure and piece placement. These were introductions to the subject to present standard terminology: here are '*isolated doubled Pawns*', while over here we have a '*Bishop pair*'.

During the course of any chess game positional themes come and go. The players exchange them in almost the same way that they exchange pieces.

'If I give up the Bishop pair, my opponent gets weak Pawns around the King. But then the Rooks can attack my King by doubling on that open g-file. I think my Knight can prevent that from happening by going to f5. First I'll have to maneuver it to e3 or g3. How can I do that without allowing an attack on my center.' And so on and so forth.
The player who judges these positional exchanges more accurately wins more games.

Since every single game is filled with positional themes, we could pick examples at random from just about any source. Let's look at the games from the man-machine match between Garry Kasparov and X3D Fritz, played at New York, November 2003.

Explaining positional play in a game between Kasparov and a computer is not easy to do. Some experts might say it's impossible. First, computers are not known for their positional play. Their great strength comes not from weighing positional pros and cons, but from the rapid calculation of millions of variations. Second, Kasparov's play is so subtle and complex that it is often beyond explanation. One reason he is the world's highest rated player is because he judges positional factors better than most other players on the planet.

Let's not let that stop us. On to the match!

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The four game Kasparov - Fritz match was played less than a year after a six game match between Kasparov and Deep Junior, another world-class chess computer. The Kasparov - Junior match had seen the same venue at the New York Athletic club.

A long-time contender in the World Computer Chess Championship (WCCC), Fritz had won the title only once, at the 8th World Championship, Hong Kong 1995. In 2001, it won the right to play World Champion Vladimir Kramnik in the much ballyhooed *Brains in Bahrain* man-machine contest, by drawing a 24-game match with Junior and then winning two playoff games.

Fritz, one of the cornerstones of ChessBase's commercial success, was represented in the latest match by Jeroen van den Belt, Alex Kure, Frans Morsch, Mathias Feist, and Mr. ChessBase himself, Frederic Friedel. According to match sponsor X3D, it ran 'on an Intel Xeon server with four 2.8 GHz processors.'

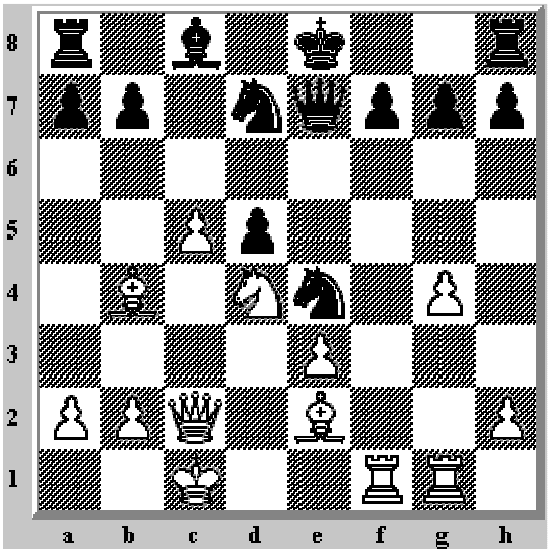
The winner would receive a golden trophy and the title of Man-Machine World Champion. For risking his reputation once more, Kasparov would receive $150.000 for the match, plus a bonus of $50.000 for winning or $25.000 for drawing.

Game 1

The first game started with the same opening as in game 1 of the Kasparov - Junior match...

1.Nf3 d5 2.c4 c6 3.d4 Nf6 (Slav Defense) 4.Nc3 e6 5.e3 (Semi-Slav Variation) Nbd7 6.Qc2 Bd6 7.g4 Bb4

...where Junior had played 7...dxc4 in the earlier game. A few moves later the players reached the following position.



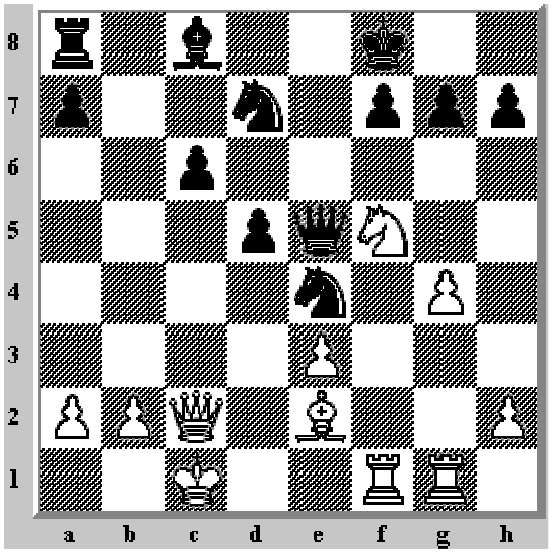
Fritz

after 17.Nf3-d4

Kasparov

White's entire army is in action. Black has developed only three pieces and the Black King is still in the center. If Black tries to win a Pawn with 17...Ndxc5, then 18.Bb5+ Kf8 (18...Bd7 19.Bxc5 Nxc5 20.Nf5 Qf8 21.Nxg7+) would prevent the Black King from castling.

Fritz played 17...O-O, sacrificing material to get the King into safety. After 18.Nf5 Qe5 19.c6 bxc6 20.Bxf8, Black could recapture the Bishop with the Knight. Most human players would do this automatically, but the computer played 20...Kxf8, reaching the following position.



Fritz

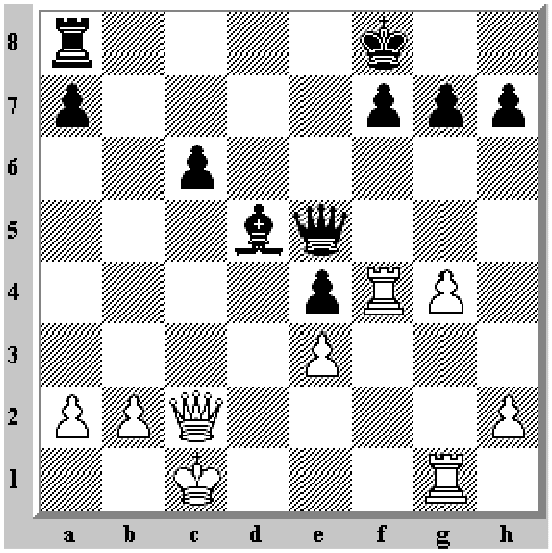
after 20...Kg8-f8(xB)

Kasparov

White has an extra Rook against which Black has an extra Knight and Pawn. If White tries to win back the Pawn with 21.Qxc6, then Black gets good counterplay with 21...Nb6 22.Qc2 Bd7 or 22...Bb7.

Kasparov played 21.Ng3 and in his notes to the game wrote, 'White should trade this dangerous Knight', meaning the Ne4. The game continued 21...Ndc5 22.Nxe4 Nxe4, where we see why Black played 20...Kxf8 instead of 20...Nxf8. The second Knight has replaced the first on e4.

White eliminated the second Knight with 23.Bd3 Be6 24.Bxe4 dxe4, and after 25.Rf4 Bd5, the players reached the following position.



Fritz

after 25...Be6-d5

Kasparov

The dangerous Knights on e4 are gone, but the Bishop on d5 is a marvel. Note how it guards three Black Pawns, attacking the White Pawn on a2 at same time.

Kasparov said, 'My position is better, but very hard to win.' The game was drawn on the 37th move.

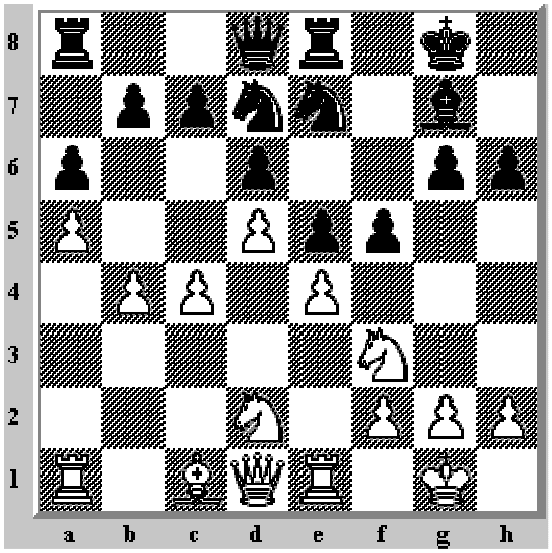
Kasparov 0.5 - Fritz 0.5

Game 2

The second game saw Kasparov play the same solid defense that had given him so much trouble during his World Championship match with Kramnik, London 2000...

1.e4 e5 2.Nf3 Nc6 3.Bb5 (Ruy Lopez) Nf6 (Berlin Defense)

...Now Fritz avoided the main variations with 4.d3. The game continued 4...d6 5.c3 g6 and after a few more moves the players reached the following position.



Kasparov

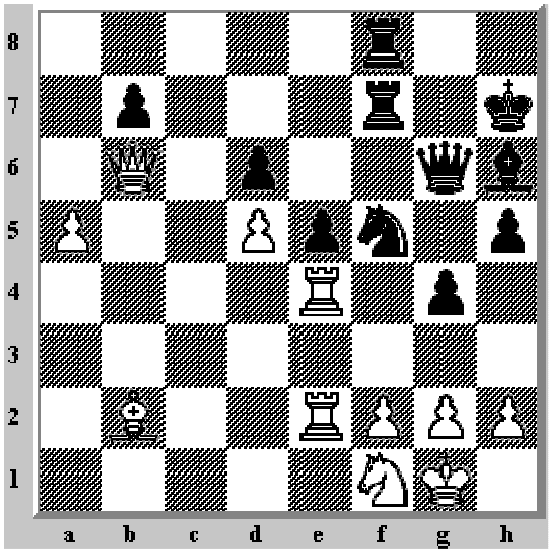
after 15.c3-c4

Fritz

White has advanced on the Queenside, Black on the Kingside. The Queenside advance threatens nothing in particular, while the Kingside advance is designed to expose White's King.

On top of preparing ...g5, the Pawn on h6 prevents Nf3-g5-e6, where the Knight would be well placed in the absence of the light-squared Bishops. The structure of the White and Black Pawns on the Queenside make an unusual circular formation. If either player pushes the b- or c-Pawn, the game would be altered radically. The formation remained for the next 12 moves.

The following fateful position was reached after Black's 31st move.



Kasparov

after 31...Kg8-h7

Fritz

Here Fritz played 32.Qb4. The move has two objectives:

1. It attacks the Pawn on g4, making it impossible for White to pursue the Kingside advance with 33.h4; and
2. it pins the Pawn on d6, rendering the Rf7 immobile.

Kasparov momentarily overlooked the second objective and played 32...Rg7?, which lost immediately to 33.Rxe5. He struggled for a few moves, but resigned on the 39th move.

A better move would have been 32...Rg8, neutralizing both of White's objectives from the previous move:

1. It guards the Pawn on g4, making it possible for White to continue 34.h4; and
2. it removes the pin on d6, freeing the Rf7.

Also good was 32...Rc8. After either ...Rg8 or ...Rc8, Black would not have stood worse and would have had some winning chances. Kasparov noted that 32...Bf4 would have allowed the 'promising' exchange sacrifice 33.Rxf4!? exf4 34.Re6 Qg5 35.Nd2.

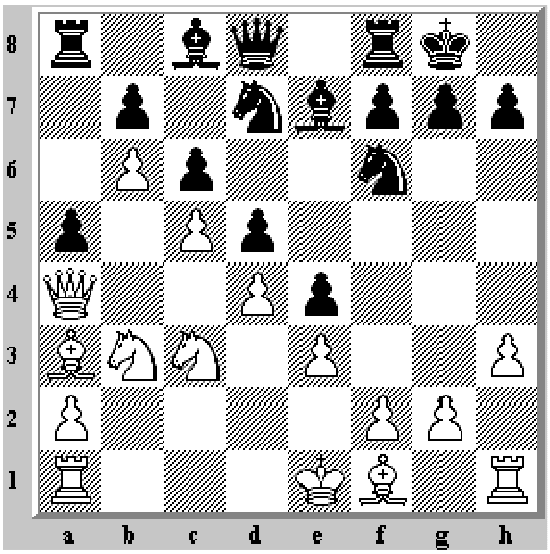
Kasparov 0.5 - Fritz 1.5

Game 3

By a different move order the opening repeated game 1...

1.Nf3 Nf6 2.c4 e6 3.Nc3 d5 4.d4 c6 5.e3 a6

...where 5...Nbd7 had been played instead. Kasparov closed the position with 6.c5, leaving Fritz clueless. The following position was reached on move 14.



Fritz

after 14.Nd2-b3

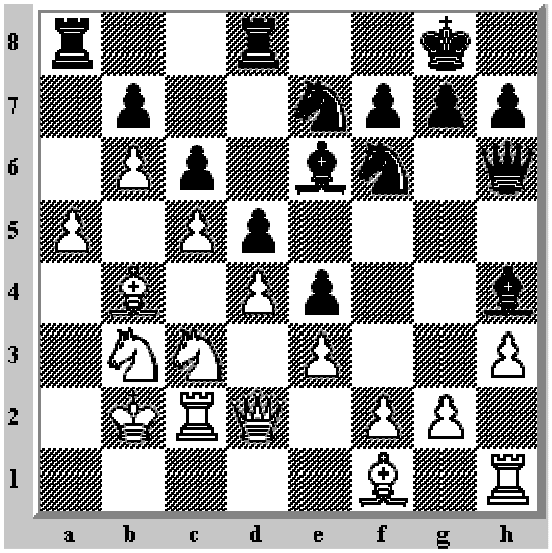
Kasparov

Here the most important positional element is the chain of Pawns spanning the b-, c-, d-, and e-files. The chain cuts the board in two, with White controlling the Kingside and Black the Queenside.

There is only one good plan for both sides : attacking the enemy Pawn chain at its base. White will win the Pawn on a5 and advance the a-Pawn to a6. Black will advance the f-Pawn to f4.

Instead of a sensible continuation like 14...Ne8 15.Rb1 f5 16.g3, the computer played 14...Bd6, hoping for 15.cxd6? Nxb6, winning the Queen. It probably took Kasparov less than two nanoseconds to see this threat and he continued 15.Rb1. Now the computer retreated 15...Be7, having handed its opponent two free moves.

Kasparov won the a-Pawn with 16.Nxa5 and kept to the scripted plan with the advance of his own a-Pawn. Fritz continued to play without a plan and the game reached the following position.



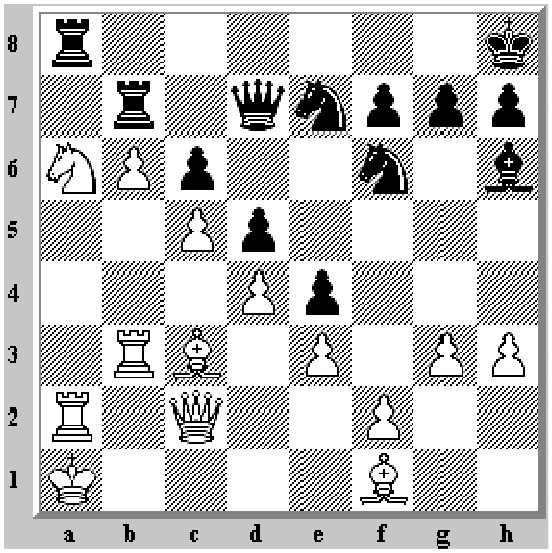
Fritz

after 28...Ng6-e7

Kasparov

The White King has reached safety on the Queenside. Should Black eventually find the right plan involving the f-Pawn, the White King is well protected by the Pawn chain and by its own pieces,

Now Kasparov returned the a-Pawn with 29.a6 bxa6, aimed his pieces at the weak Pawn on a6, and reached the following position.



Fritz

after 45.Rb1-b3 1-0

Kasparov

Note how little the Pawn structure has changed since the diagram after White's 14th move. The Fritz handlers resigned for their machine, although many observers would have enjoyed seeing Kasparov crush his electronic adversary.

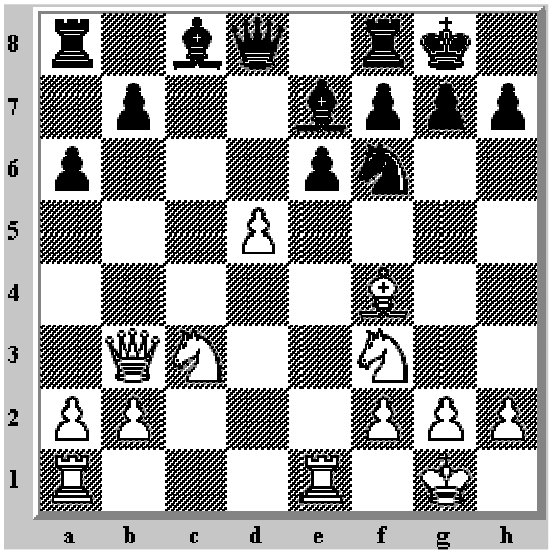
Kasparov 1.5 - Fritz 1.5

Game 4

For the final game in this too-short match, with the score tied at a win, a loss, and a draw for each player, Fritz's operators switched from 1.e4 to 1.d4...

1.d4 d5 2.c4 dxc4 (Queen's Gambit Accepted) 3.Nf3 e6 4.e3 a6 5.Bxc4 c5

...The game followed a known path until the following position was reached.



Kasparov

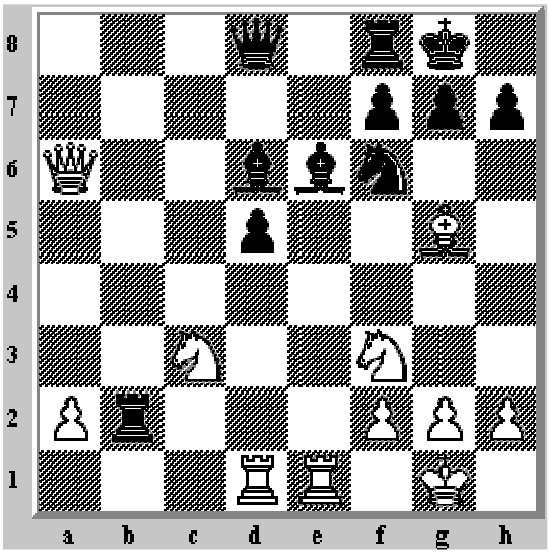
after 13.Qd1-b3(xN)

Fritz

Kasparov could have continued 13...Nxd5 14.Rad1 Nxf4 15.Rxd8 Rxd8, as he had played in a game during a blitz match against Kramnik, Moscow 2001. Although he had won the game

against Kramnik, 'Playing this position minus the Queen in the last game was too risky', he said later.

Instead he continued with the cautious 13...exd5. After 14.Rad1 Be6 15.Qxb7 Bd6 16.Bg5 Rb8 17.Qxa6 Rxb2, the players reached the following position.



Kasparov

after 17...Rb8-b2(xP)

Fritz

Fritz continued 18.Bxf6, the first original move of the game. The remaining minor pieces were eliminated with 18...Qxf6 19.Qxd6 Qxc3 20.Nd4 Rxa2 21.Nxe6 fxe6 and the game petered out to a draw.

Kasparov 2.0 - Fritz 2.0

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In an interview on WorldChessRating.com, Kasparov said,

This match was very similar to that held in January. I think the human dominated both times. The human had much more opportunities, whereas the defeats were the result of terrible mistakes caused by stress. This time the computer failed to outplay me. I had the initiative on my side throughout the match. I am satisfied with the course of the games. The final outcome depends on me -- if not for the blunders, I would not have lost a single game.

The world now awaits the next chapter in the series of exciting man-machine contests.

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