

Introduction to Chess Strategy

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Introduction

This book aims to give a brief introduction to chess strategy. Strategy is the part of chess that is concerned with long-term goals and the evaluation of positions. It is a distinct subject from tactics, which focuses on short-term tricks and forcing moves. Strategy tells us what goals we should have, while tactics help us to achieve those goals.

This book breaks strategy down into four elements: material, pawn structure, king safety, and piece activity. This division is somewhat arbitrary and you will probably encounter alternative approaches in other places. For example, another book might include initiative as an independent element of strategy, whereas I consider this to be part of piece activity. The exact approach to breaking down strategy into a number of elements doesn't matter much, just as long as it helps us start thinking about the most important strategic issues.

We can also divide chess games into three different phases: the opening comes first, the middlegame next, and the endgame last of all. The strategy of middlegames is really just the general strategy of chess and is covered in the initial chapters of this book. Opening strategy and endgame strategy have some unique qualities, so these each get separate chapters.

This book was written in response to what I see as the problems with the most commonly recommended strategy books. I have tried to keep the writing simple and straightforward, and to keep the book short. I have also tried to make it possible to read this book without needing to use a board to play out the moves. A few of the examples may be too complicated for this, but in these cases the important point should be obvious even if the use of a board isn't possible.

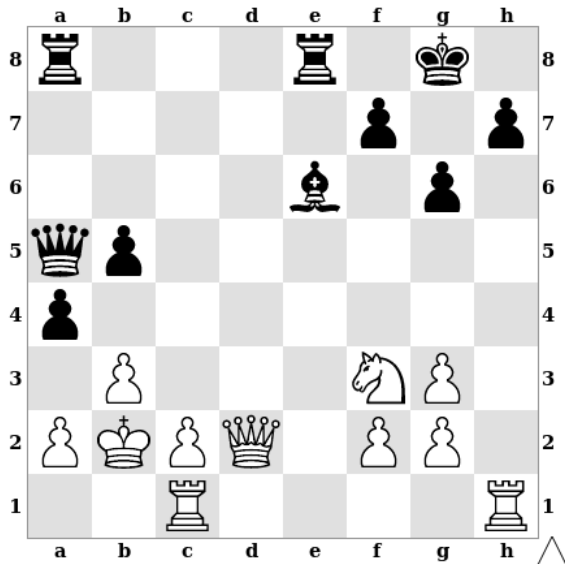
Of course, you won't develop a deep understanding of strategy just from reading this book. The goal of this book is to give a quick, big-picture view of strategy, which is a good first step toward future learning. To seriously improve your understanding of strategy in the long-run, you will need to play many games, learn from those games, and spend a lot of time studying the games of stronger players. However, this book should give you a good foundation of strategic ideas so that you will progress more quickly as you engage in these other forms of study.

1 – Choosing a Plan

Before we begin looking at the individual strategic elements of chess, we should briefly consider how to form a plan. The most important point to understand about planning is that you should choose a plan based on the nature of the position you are playing. Different positions need to be played differently, and the only way to determine the best plan for a given position is to think about that position's characteristics.

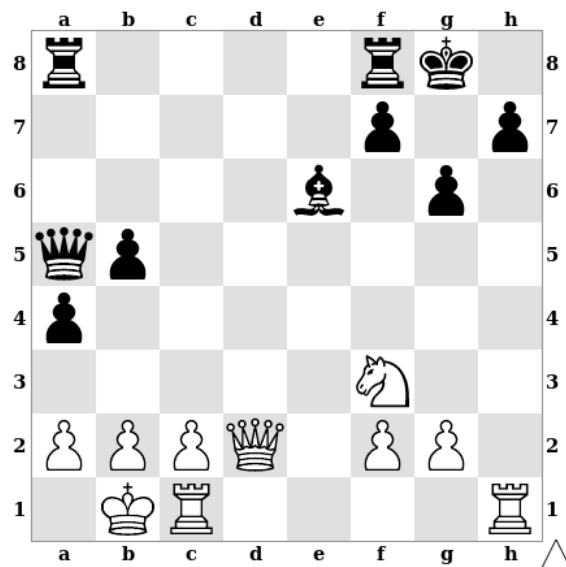
This is such a basic point that many people realize it on their own without ever being told. To these people, it will seem unnecessary to make the observation. However, there are other players who play and study chess for quite a while without fully realizing that each position has its own demands. These players have certain plans that they use over and over again, regardless of the position they find themselves in. It may be that they simply enjoy using these plans or it may be that they have never learned how to do anything else. In either case, this will often turn out to be a major obstacle toward improvement for the player in question.

One common version of this problem is when a player will try to attack the opponent's king in every single position. Such a player will do this whether he is ahead or behind in material, whether his opponent's king is weak or well-defended, etc. Having realized that trading queens makes it harder to attack in this way, he will begin avoiding queen trades as well. Obviously, this leads to his choosing the wrong plan quite often.



In this position, for instance, White has a winning advantage after 1.Qxa5 due to his extra pawn and his active pieces. If he instead avoids the queen trade and plays for an attack against Black's king with 1.Qh6?, then he is lucky to be able to draw after 1...axb3 2.Qxh7+ Kf8 3.Qh6+ Ke7 4.Qh4+ Kf8 etc. White doesn't have time for moves like 3.Ng5? and 3.Nd4? because of 3...Qa3+ 4.Kc3 Qc5+ etc. with a winning attack for Black.

Change a few details of the position, however, and the best plan changes. In this position, White has no extra pawn, but Black also has no attack of his own yet. Now 1.Qxa5? is only equal, and White should instead play 1.Qh6, which gives him a winning attack.



In both positions, White faced a choice between trading queens in order to go into an endgame and avoiding the queen trade in order to attack. In both cases, the correct choice depended entirely on the specific details of the position. Being biased toward a certain kind of plan only makes these sorts of decisions harder by distracting you from what is actually going on in the position. In other words, you can learn to choose better plans by focusing less on what you want to do and more on what the position you are playing wants you to do.

Over the further chapters of this book we will learn about a number of strategic ideas that can help in determining the best plan in a given position. As you continue to play and study chess, you will further improve your ability to find the best plan in different kinds of positions. However, the very realization that your choice of plan should come from the characteristics of the position itself, and not just from your own preferences, will already help you to start playing better chess.

2 – Material

Some chess pieces are stronger than others. Having stronger pieces is called a *material advantage*. The most common way to measure material is with these values:

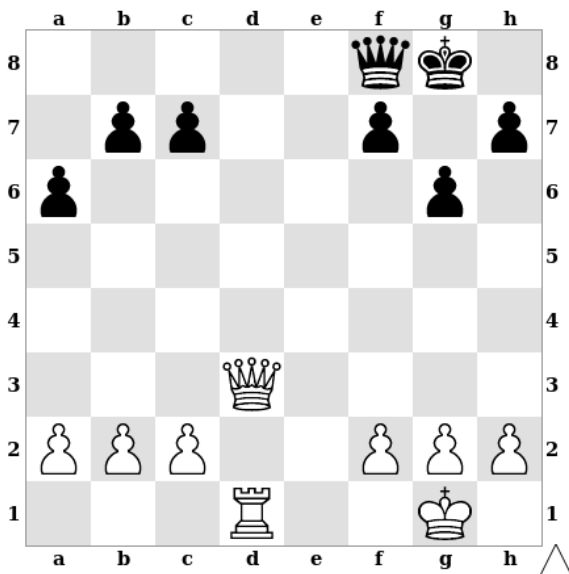
Pawn	1
Knight	3
Bishop	3
Rook	5
Queen	9

(The king isn't given a value since it can't be traded.)

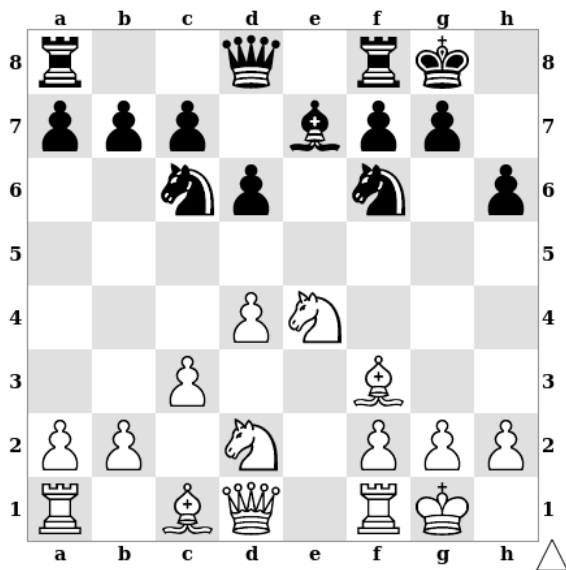
These values aren't part of the rules, they are just a way to think about the strength of each player's pieces and to think about possible trades. For example, trading a *minor piece* (a bishop or knight) for an opponent's rook is a good idea since you *win material* (about two pawns' worth).

Using a Material Advantage

As long as nothing important changes, the side with a material advantage will often win in the endgame. For this reason, when you have a material advantage you should keep the position simple and trade pieces. When your opponent has a material advantage, you should make things complicated and avoid trading pieces.

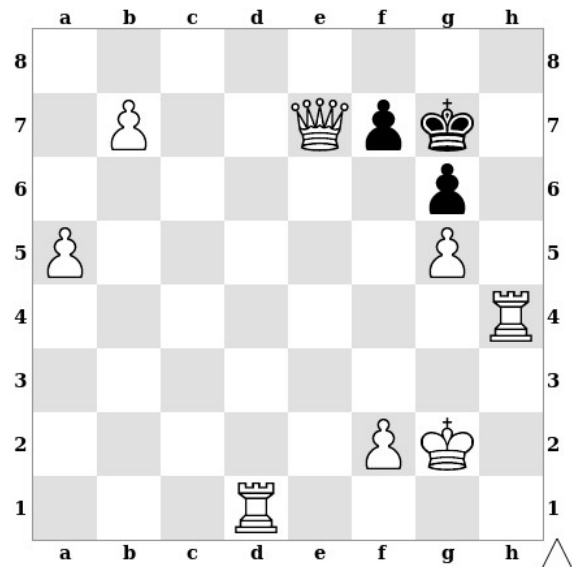


In this position, White is up five points (since he has an extra rook). He can win in many ways, but one very easy way is to play 1.Qd8. This forces a trade of queens, removing Black's only dangerous piece and leaving White with any easy win.



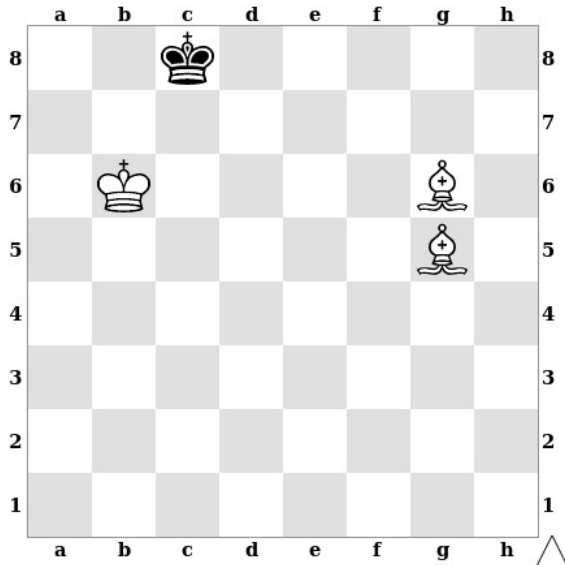
In this position, White is up a minor piece and he should again trade pieces: 1.Nxf6+ Bxf6 2.Bxc6 bxc6. If Black moves first he should play 1...Nd7, avoiding these trades.

When playing with a huge material advantage, there comes a point at which it is better to use your extra pieces to force checkmate, rather than to promote more and more pawns. In this position, for example, many beginners would play 1.b8=Q?, ending the game in an immediate stalemate. Instead, with such a large material advantage, White should be looking for a way to force checkmate, for example with 1.Qf6+ and 2.Rh8#. White could also play 1.Rd7 and 2.Qxf7#, though he should be sure to check that 1.Rd7 is not stalemate. In a position like this, moves that put the opponent's king in check are often safest since they will not create stalemate.



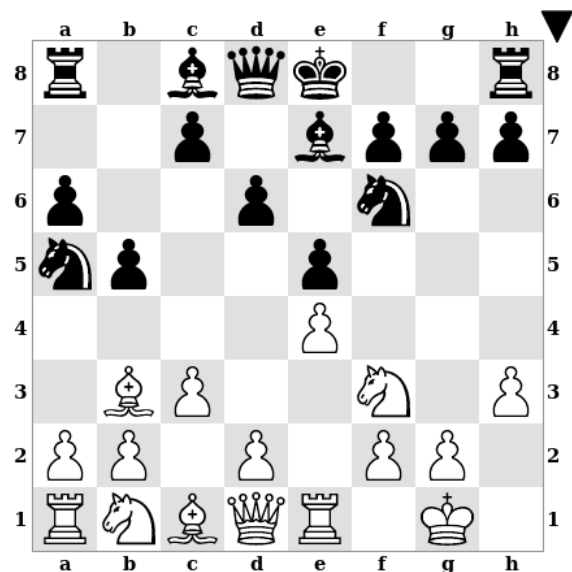
The Bishop Pair

The biggest weakness of a bishop is that it can only control squares of one color. However, when you have both of your bishops, they can work together to control squares of both colors. For this reason, having both bishops is considered an advantage, called having *the bishop pair*. Having the bishop pair is worth an extra half of a pawn on top of the value of the bishops themselves. So while a single bishop is worth three pawns, both bishops together are worth six and a half pawns. When both players have the bishop pair it isn't very interesting since the advantages cancel out. For this reason, the bishop pair is usually only mentioned when one player has it and the other doesn't.



One simple example of the power of two bishops is the ease with which they can checkmate a king on an empty board. Here White mates in three after 1.Bf5+ Kb8 2.Bf4+ Ka8 3.Be4#. Other combinations of two minor pieces either can't force mate against a lone king or can do so only with much greater difficulty.

The bishop pair is also an advantage at earlier stages of the game. In this position Black should play 1...Nxb3, trading off one of White's bishops and giving himself the advantage of the bishop pair. If White moved first, he would play 1.Bc2 to avoid this.



3 – Pawn Structure

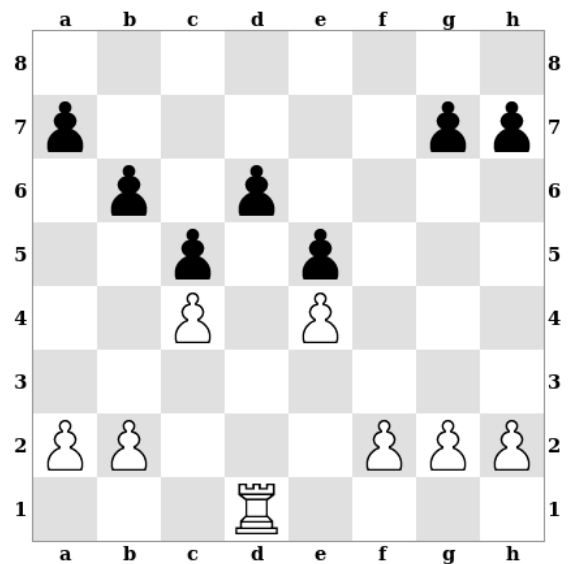
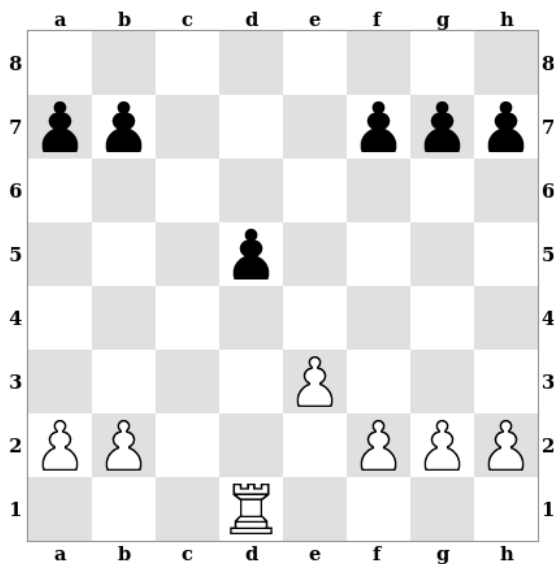
Because pawns are slow and have limited movement, they get stuck in formations called *pawn structures*. Pawn structures are important for a few reasons, including:

- 1) pawn structures can make pawns weak
- 2) pawn structures can make squares weak
- 3) pawn structures can affect the activity of other pieces
- 4) pawn structures can affect pawn promotion

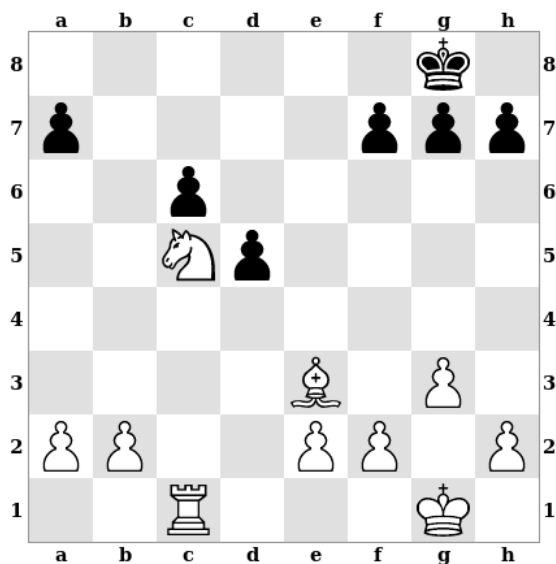
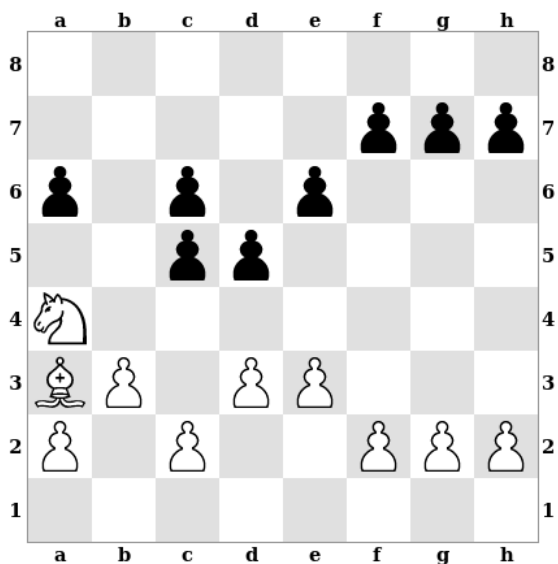
A pawn structure may have both positive and negative effects for the same player. For example, a player's pawns may be weak, but the pawn structure may leave his other pieces very active.

Weak Pawns

Pawns sometimes become long-term weaknesses, especially when they cannot be guarded by other pawns. There are a number of different kinds of pawns that are potential weaknesses. For example:



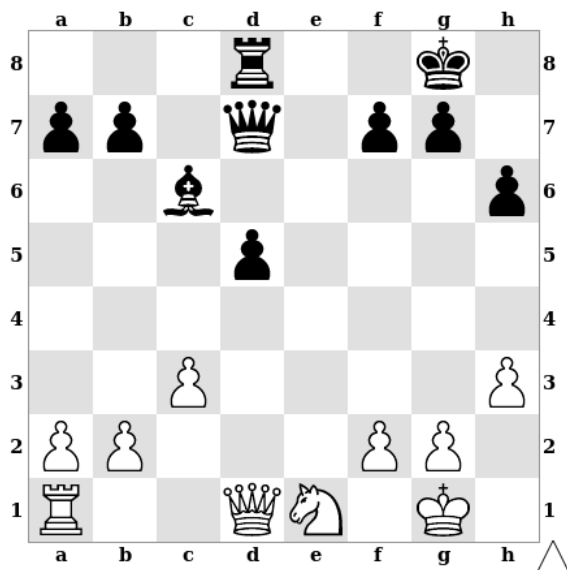
In the first diagram, Black's d5 pawn is *isolated* (there are no black pawns on the adjacent files). In the second diagram, Black's d6 pawn is *backward* (the black pawns on adjacent files have moved past it).



In the first of these positions, Black's pawns on c5 and c6 are *doubled pawns* (two pawns of the same color on the same file). In the second position, Black's pawns on c6 and d5 are *hanging pawns* or an *isolated pawn pair* (a pair of pawns that are isolated together).

Pawns are not necessarily serious weaknesses just because they fall into one of these categories. The actual weakness of pawns is determined by how difficult they are to defend and how easy they are to attack. For example, a pawn weakness is often more of a problem when the opponent has an open file leading to it since this makes it easier for him to attack it.

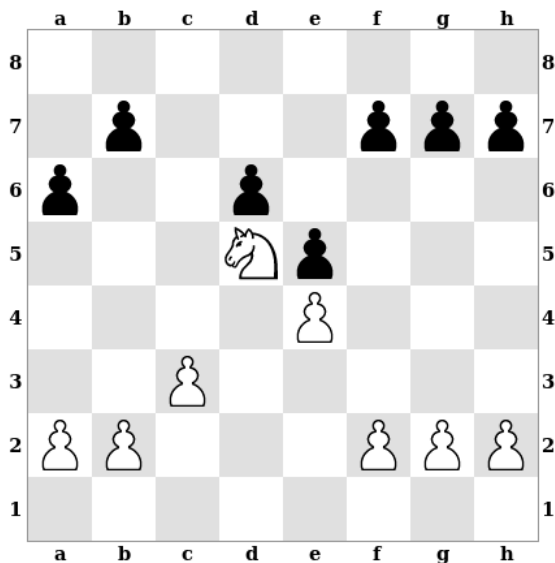
Playing Against Weak Pawns



When playing against a weak pawn, you should control the square in front of the pawn to stop it from advancing. In this position, Black has an isolated pawn on d5 that is both weak and is making his bishop rather passive. If Black moves first he should play 1...d4, eliminating his weak pawn and activating his bishop. If White moves first instead, then he should play 1.Nf3 or 1.Nc2 to control the d4 square and stop Black from playing ...d4.

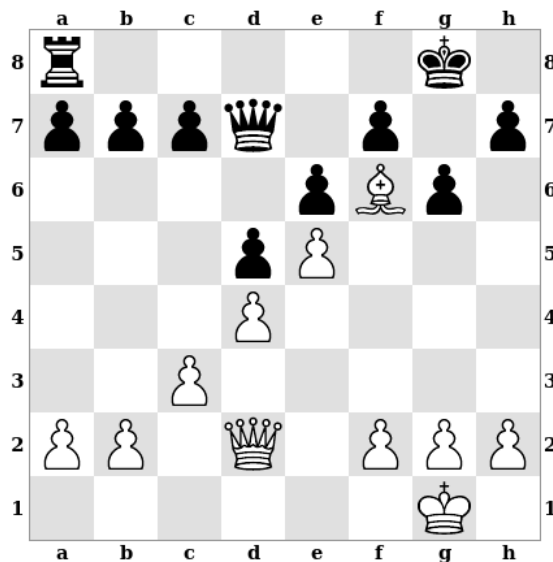
Weak Squares

Pawn structures can also create weak squares. These squares may make good homes for the opponent's pieces, which can lead to trouble.



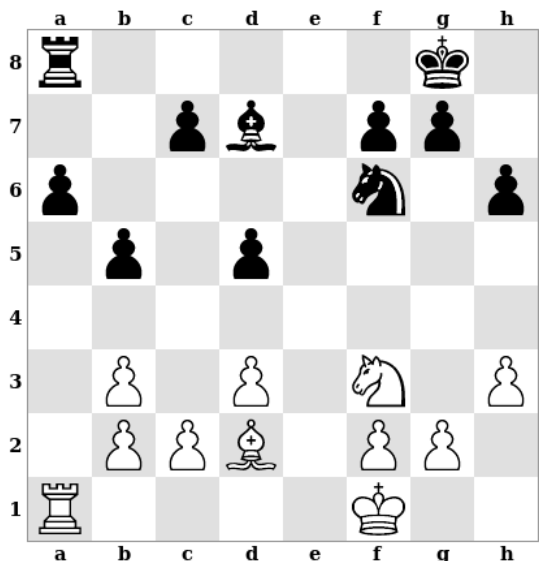
In this position, Black's e-pawn has advanced to e5 and his c-pawn has been traded off. As a result, he can't attack the d5 square with pawns, and so it has become weak. d5 is a good square for White's knight, which Black may find hard to get rid of.

In this position, Black's kingside pawns are all on light squares, and this has weakened the dark squares around his king (f6, g7, and h6). White's bishop already occupies f6, and White's queen is ready to make use of h6. In fact, White can mate in two moves with 1.Qh6 and 2.Qg7#.



Piece Activity

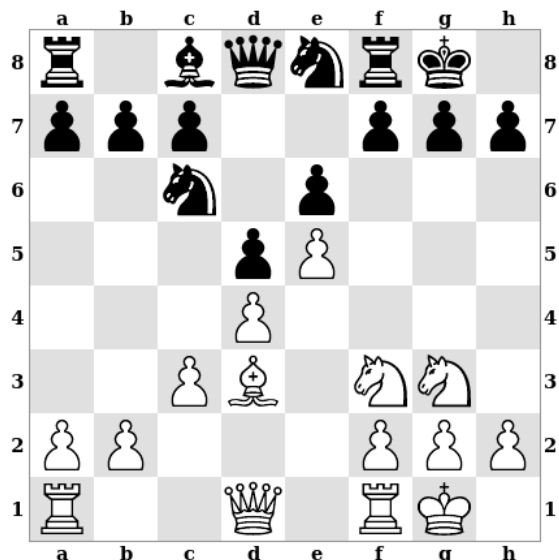
Pawns often get in the way of other pieces, so pawn structures can affect piece activity. In the starting position of a chess game, for example, none of the pieces other than the knights can move without having pawns move out of the way first.



Here White has doubled pawns on b2 and b3, which has given his rook an *open file* (the a-file). As a result, White's rook is more active than Black's (it has more legal moves), and it attacks one of Black's pawns, while Black's rook is only defending. Since it is also difficult for Black to attack White's doubled pawns, they are really a strength of White's position, rather than a weakness.

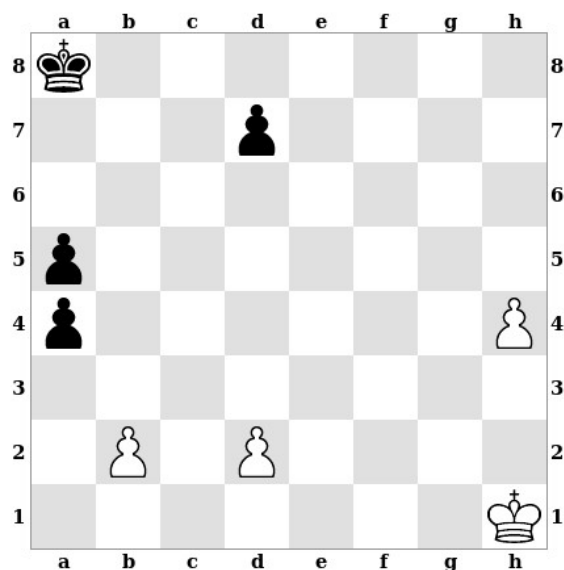
This example illustrates two very important points. First, pawns are not necessarily a serious weakness just because they fall into one of the previously mentioned categories of weak pawns. Second, weak pawns often bring some corresponding advantages. It is especially common for doubled, isolated, and hanging pawns to come with open files that rooks and queens can make use of.

In this position, White's bishop is much more active than Black's. The difference is in the players' pawn centers: Black's center pawns are on the same color squares as his bishop, blocking it in and making it a *bad bishop*, while White's center pawns are on the opposite color to his bishop, allowing it to move freely.



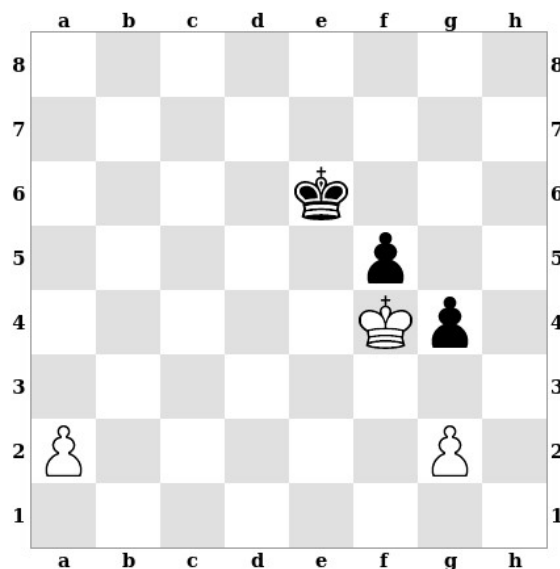
Passed Pawns and Pawn Majorities

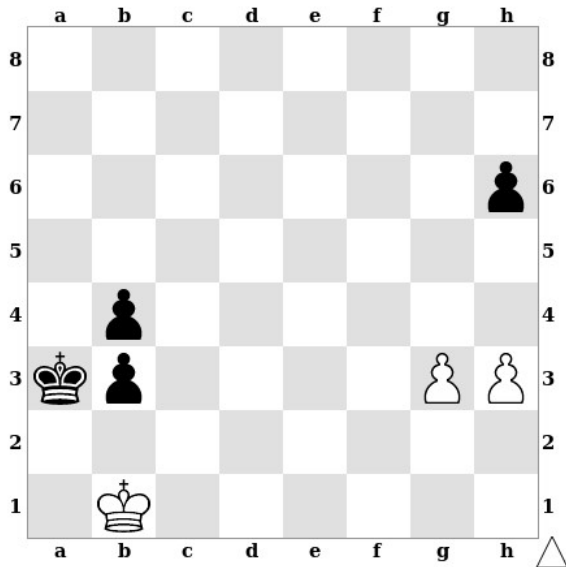
Pawn structures can also affect pawn promotion. In some cases the pawn structure may allow a player to promote a pawn by force, while in others, a player's pieces may become less active while trying to prevent a pawn from promoting.



A *passed pawn* is a pawn that doesn't have any enemy pawns stopping it from advancing to the eighth rank and promoting. In this position, White's h4 pawn is a passed pawn. White can win by simply pushing it up the board and promoting it. None of the other pawns in this position are passed pawns because they all have enemy pawns standing in their way.

Here Black's king is close enough to White's passed a-pawn to catch it before it promotes. However, White still has a winning advantage since his a-pawn is an *outside passed pawn*: a passed pawn that is on the other side of the board, far away from the other pawns in the position. Black's king can stop the a-pawn from promoting, but he has to move away from his own pawns to do so, for example: 1.a4 Kd6 2.Kxf5 Kc5 3.Kxg4 etc.

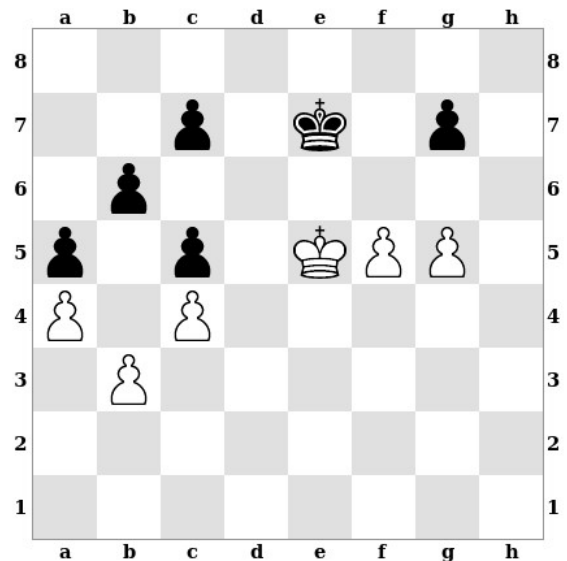




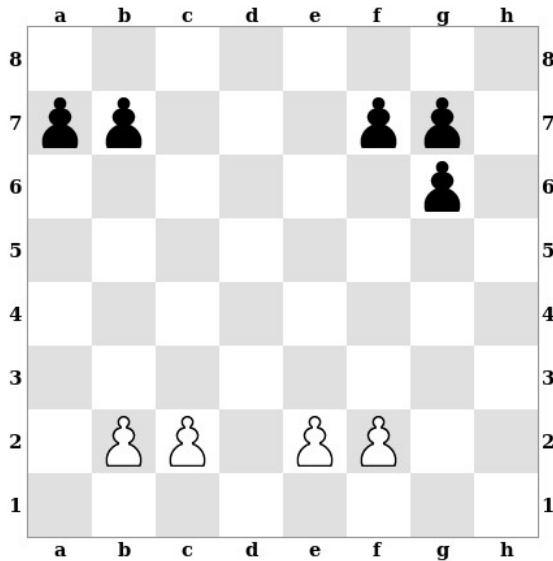
Here Black has passed pawns on b3 and b4, but White's king is preventing these pawns from promoting. White doesn't yet have a passed pawn himself, but he does have a two-to-one *pawn majority* on the kingside.

It is best to advance a pawn majority by moving the unopposed pawn first. White can win with 1.g4 followed by 2.h4, 3.g5, and then just pushing his g-pawn to promotion. It would be a huge mistake to begin with 1.h4? instead, since after 1...h5, White can't safely advance his majority any further.

In this case, the two players have *rival* pawn majorities; White has a *kingside majority*, while Black has a *queenside majority*. White has a winning advantage, however, due to the fact that his majority is a *healthy majority*, while Black's majority is *crippled* by his doubled pawns. White wins by creating an outside passed pawn, using it to distract Black's king, and then running over with his own king to capture Black's pawns. For example: 1.f6+ gxf6+ 2.gxf6+ Kf7 3.Kf5 Kf8 4.Ke6 Ke8 5.f7+ Kf8 6.Kd7 etc.

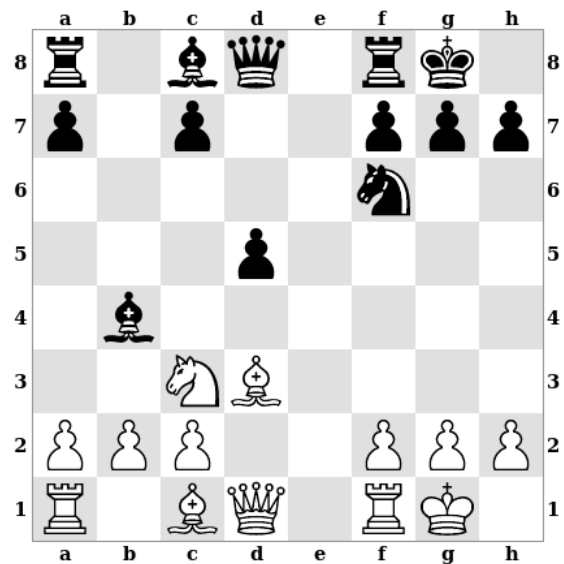


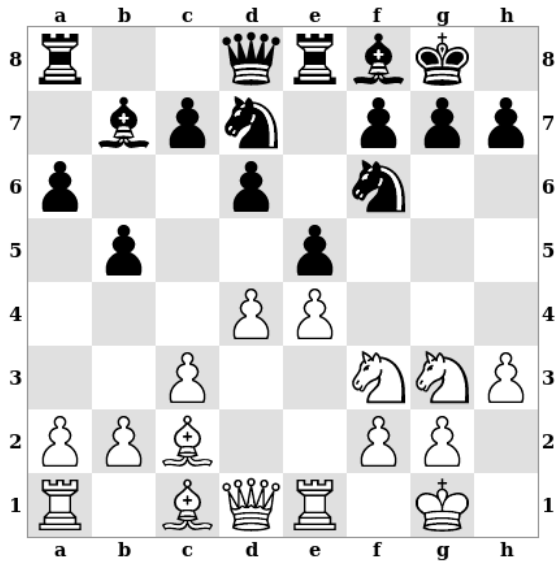
Pawn Centers



We can classify files on the board according to what combination of pawns are on them. In this position, the d-file and h-file are both *open files* since they have no pawns on them. The a-file, c-file, e-file, and g-file are *half-open files* since they have one player's pawns on them but not the other's. Finally, the b-file and f-file are *closed files* since they have pawns of both colors on them.

We often refer to entire positions as *open positions* or *closed positions*. Rather than trying to find an absolute rule to distinguish the two, it is more important to think about the degree to which any position is open or closed. This is determined by looking at all of the files on the board but especially the two central files (the d-file and e-file). The position shown here is quite open, for example, because there are both one fully open and one half-open file in the center.

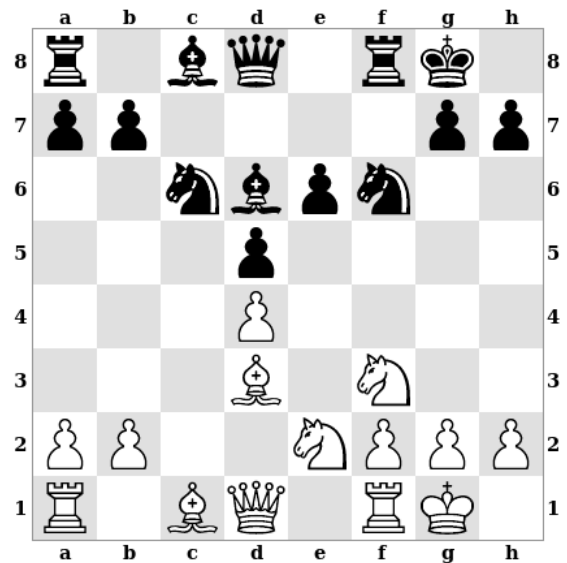




By contrast, this position is closed since there are no open or half-open files anywhere.

And, of course, there are some positions that don't fall clearly into one category or the other. We might call this a half-open position, though the exact label we use is not all that important.

As we will see in further examples, there are many strategic ideas and guidelines that apply more to open positions than to closed positions and vice versa.

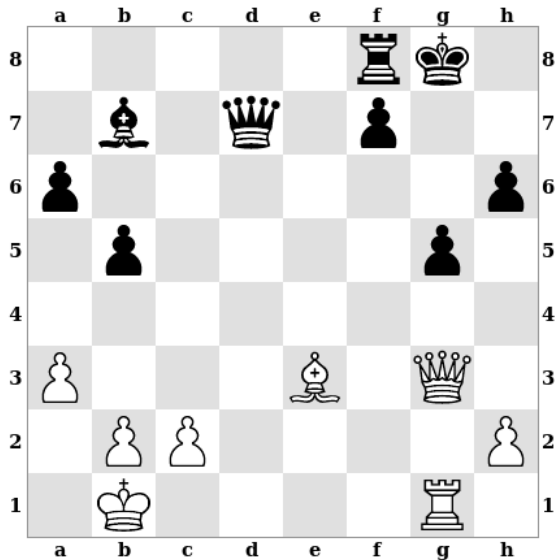


4 – King Safety

The king is the most valuable piece in the game, but it moves slowly and has trouble defending itself. For these reasons, the safety of the king can become a long-term issue in many positions. King safety is mostly a matter of how easily the king can be attacked and how easily it can be defended. However, there are a few factors that can serve as clues as to whether the king is safe or not.

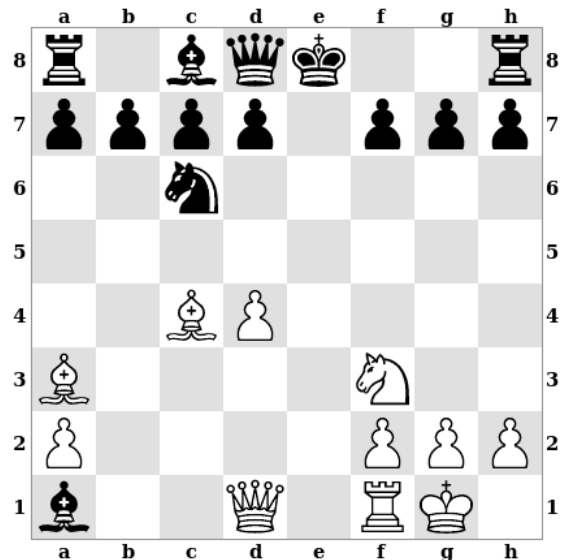
Pawn Cover

In the opening and middlegame, the king is usually safest when it has some pawns covering it to make it harder for enemy pieces to attack it. When the king has no pawn cover, it can quickly find itself in danger.

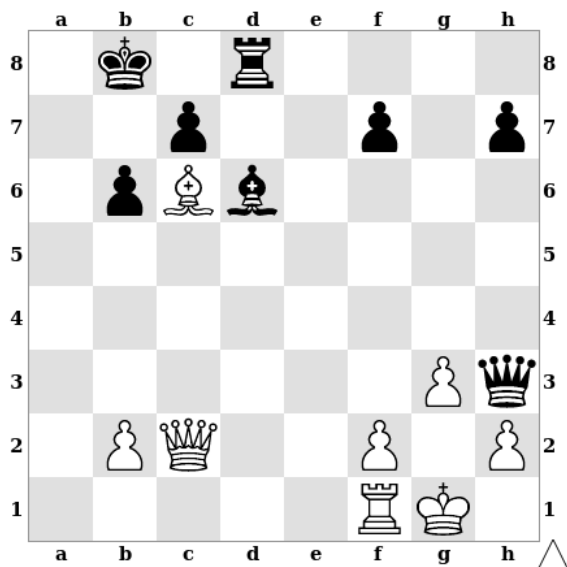


In this position, Black has advanced the pawns in front of his king recklessly. White can exploit this with the move 1.Bxg5, destroying the king's pawn cover completely. If Black captures the bishop, he gets mated right away: 1...hxg5 2.Qxg5+ and 3.Qg7#. Black should decline the sacrifice, though he is still losing, e.g. after 1...f5 2.Bxh6+, when White has a material advantage and a continuing attack.

Lack of pawn cover for the king can quickly become an issue in the opening phase, especially in open positions. For this reason, it is often a good idea to castle early in the game if it looks like the position could become open. Here, Black has delayed castling too long and the e-file has become open. White can punish him with 1.Re1+, when Black has nothing better than 1...Ne7 2.Bxe7, losing his queen.

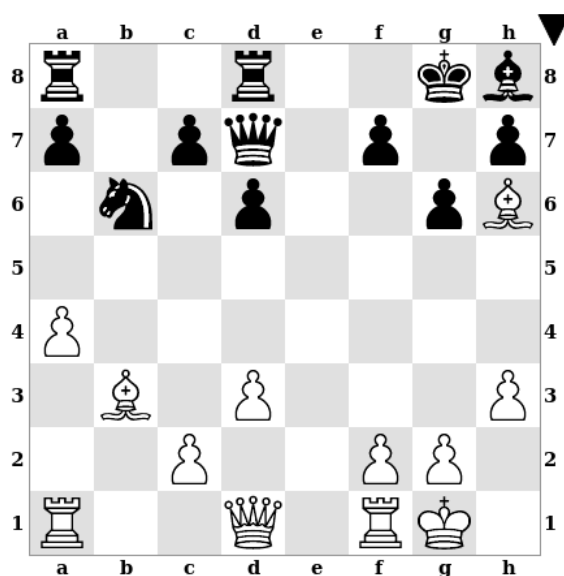


Weak Squares



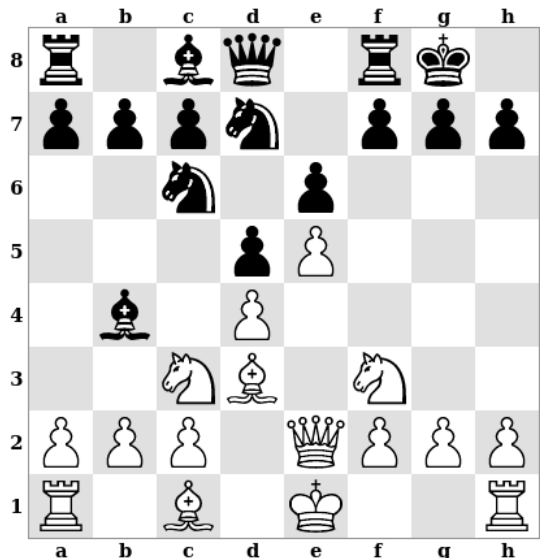
Kings can also find themselves in danger when there are groups of weak squares around them. In this position, both castled king positions have a system of weak light squares around the king. However, because only White still has a light-square bishop, he is better prepared to exploit Black's weak squares than Black is to exploit his. White can force checkmate with 1.Qa4, threatening Qa8#. Black can only delay mate by sacrificing his queen.

Weak squares around a king are often less of an issue when there is a piece available to defend them. It is especially common for a bishop to help protect weak squares of a particular color. Here Black's kingside has a system of potentially weak dark squares, but he isn't currently in much danger since he still has his dark-square bishop. However, he could easily lose by giving up this bishop, for example after 1...Bxa1? 2.Qxa1, when there is no way to stop 3.Qg7#.



Piece Activity

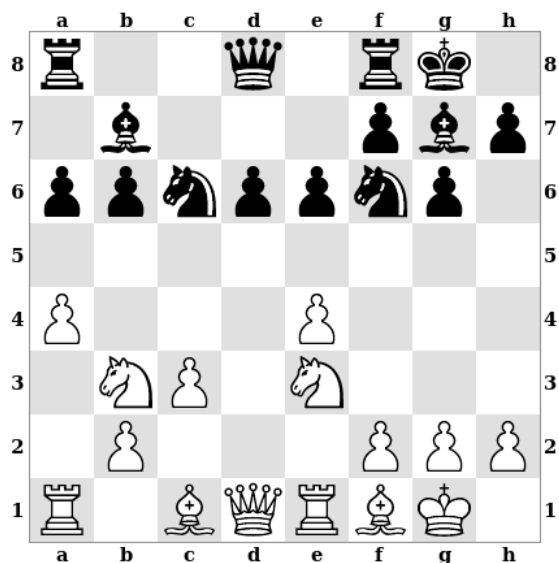
At a more sophisticated level, king safety is affected by the activity of both sides' pieces. When the attacker has more active pieces near the king than the defender, the king may be in danger in spite of having good pawn cover and no obviously weak squares nearby.

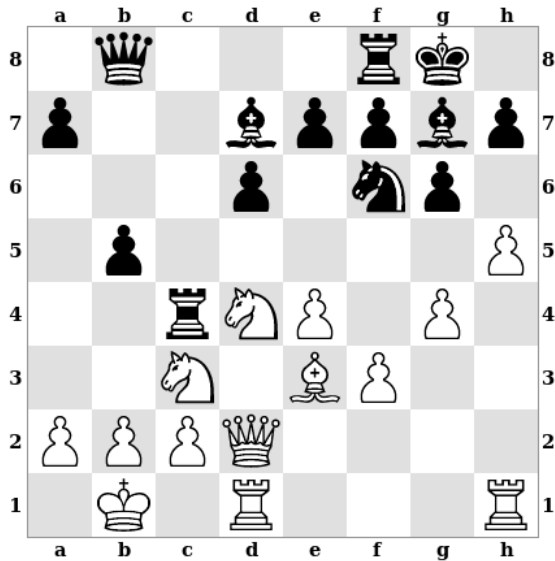


In this position, Black has just castled. His king position might look quite safe since he has three unmoved pawns in front of his king. However, White has a space advantage on the kingside and a number of pieces with easy access to that part of the board. By contrast, Black has no pieces that are on the kingside or able to get there quickly. White's e5 pawn also interferes with Black's pieces; for example, it stops a black knight from coming to f6. As a result, White can start a winning attack with the famous "Greek Gift" bishop sacrifice: 1.Bxh7+ Kxh7 2.Ng5+. The further details are somewhat complicated, but White's attack should lead to checkmate or winning large amounts of material quite soon.

Opposite-Side Castling

King safety is also sometimes affected by whether or not the players choose to castle on the same or opposite sides from one another. This position comes from a line of the Sicilian Dragon in which both players have castled kingside. Because the kings are castled on the same side of the board, neither player can begin a pawn storm against his opponent's king without moving the pawns in front of his own king. As a result, the players have adopted more cautious strategies that don't revolve around immediate kingside attacks.



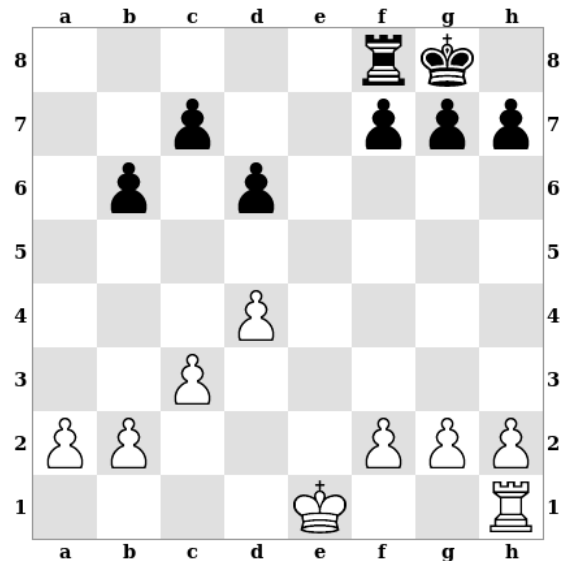


This position also comes from the Sicilian Dragon, but here White has chosen a more aggressive strategy in which he castles queenside. With the kings castled on opposite sides of the board, both players are free to use pawn storms against each other's kings without exposing their own kings in the process. For this reason, opposite-side castling often leads to a race between two kingside attacks, which puts both kings in increased danger.

The Endgame

In the endgame, it is often quite safe for the king to come out in the open, since there are not enough pieces left on the board to put it in real danger. Once it is safe to do so, bringing the king into the game is quite important since the king can play a valuable role as an aggressive piece itself.

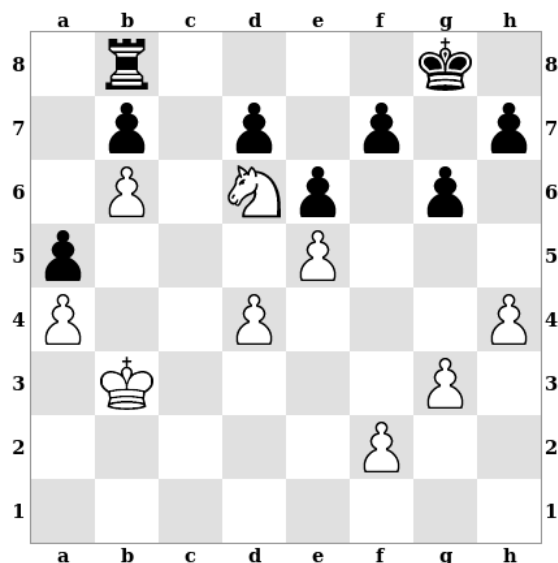
Here White should play 1.Kd2, bringing out the king and preparing to activate his rook. Instead, 1.0-0? would be a serious mistake, allowing Black to play 1...Re8 and 2...Re2.



5 – Piece Activity

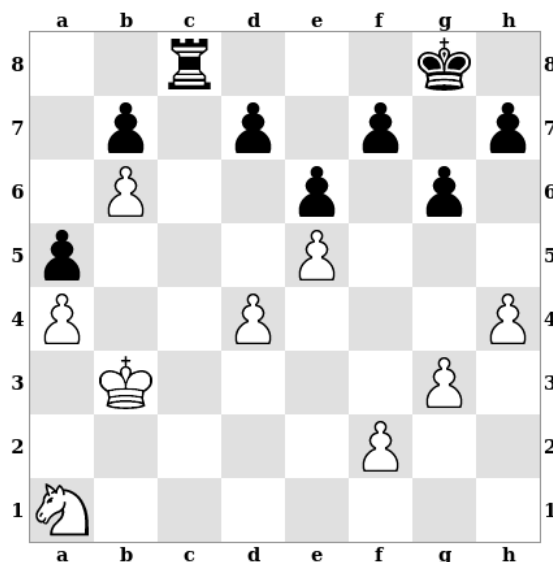
Because some pieces are stronger than others we give them material values (e.g. a rook is worth about five pawns, while a knight is worth about three); but the real value of a piece in a specific position may be quite different from what its material value would suggest. Some pieces are *active*, well-placed and doing useful things, while others are *passive*, poorly placed and unable to do anything useful. The factors that make pieces active and passive are closely tied to the way that different chess pieces move. For example, a knight becomes active under different conditions than a rook does.

Active and Passive Pieces



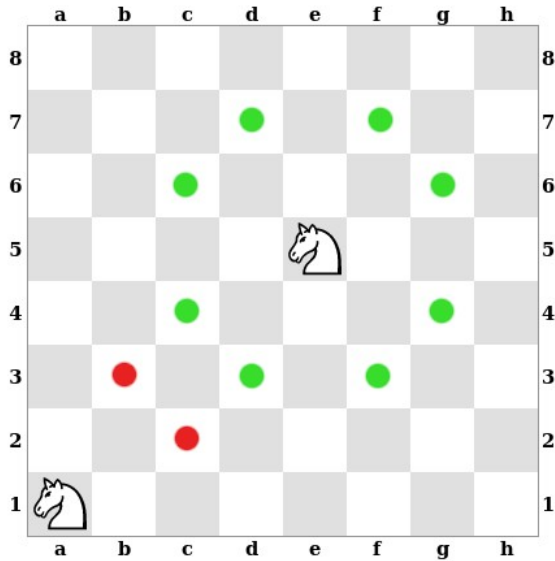
In this position, White is down material (he only has a knight relative to Black's rook). However, his knight is extremely active and impossible for Black to dislodge from its position, while Black's rook is in a passive position and cannot easily be activated. In fact, White has an easily winning advantage. He can continue with Kc4-b5-xa5 which Black has no good way of defending against. Black would love to play ...Rc8 at some point, but White's well-placed knight would simply capture the rook.

This position features the same material balance and the same pawn structure as the one above. However, Black's rook is now very active on the open c-file while White's knight is passively placed on a1. This change results in a completely different evaluation of the position. Black is now winning, one idea for him being ...Rc6-xb6.



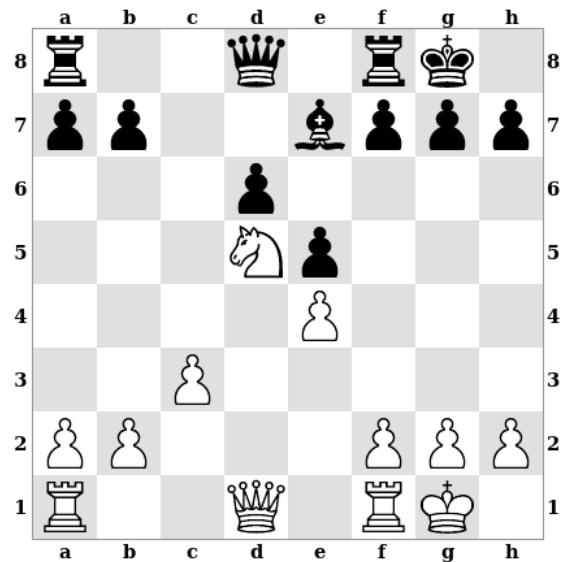
Knights

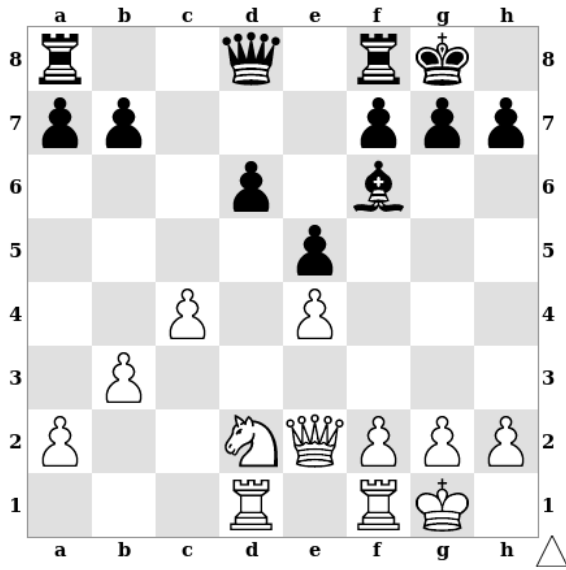
Knights are short range pieces; they do well when they are close to important parts of the board, such as the center or the opponent's territory.



A knight in the center of the board attacks eight squares, while a knight on the edge normally attacks four squares, and a knight in the corner only attacks two. Clearly, knights are more active closer to the center of the board.

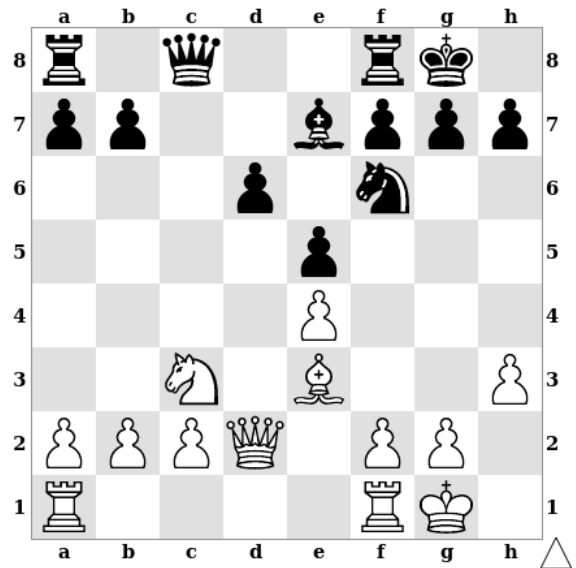
One of the most active positions for a knight is an *outpost*. An outpost is a square near the opponent's territory that the opponent cannot attack with pawns. In this position, d5 is an outpost since Black's c-pawn has been traded off and his e-pawn has advanced too far to attack d5. This particular outpost is made even stronger by the fact that Black doesn't have any knights or a light-squared bishop that he could try to trade for White's knight.

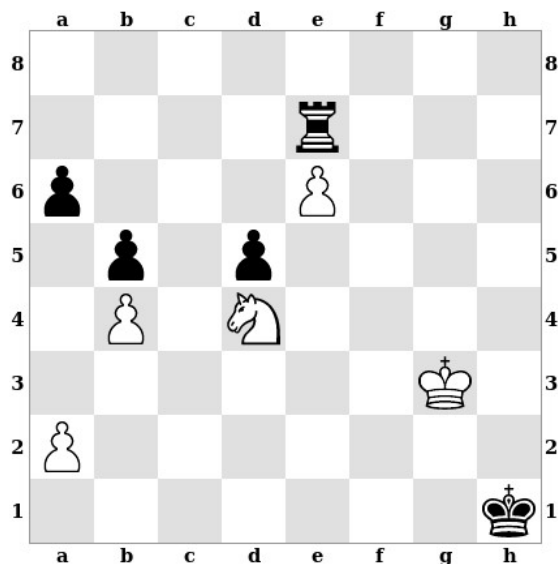




It is sometimes possible to re-route a knight to an outpost square. For example, White's best move here is probably 1.Nb1. At first this move looks counterproductive since it moves the knight away from the center. However, the idea is to play 2.Nc3 and 3.Nd5, putting the knight on a much better square than d2. Black has no good way to stop this and White ends up with a strong knight outpost.

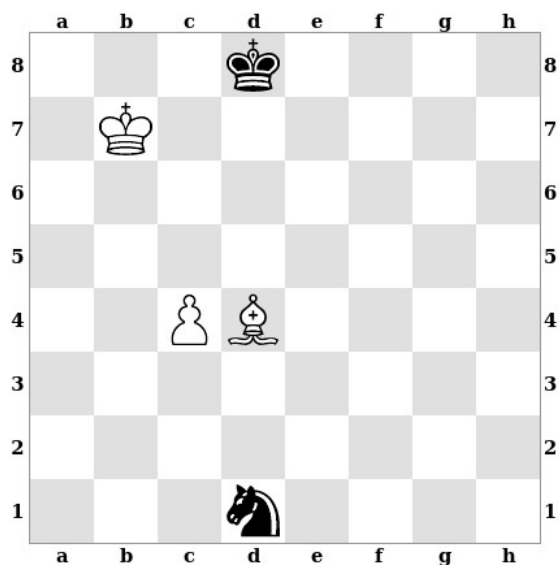
It is also sometimes necessary to play some preparatory moves to secure a knight outpost. White would love to establish his knight on d5 here, but the immediate 1.Nd5 is met by 1...Nxd5. Instead, White should play 1.Bg5 and 2.Bxf6 in order to eliminate Black's knight and only then play 3.Nd5.





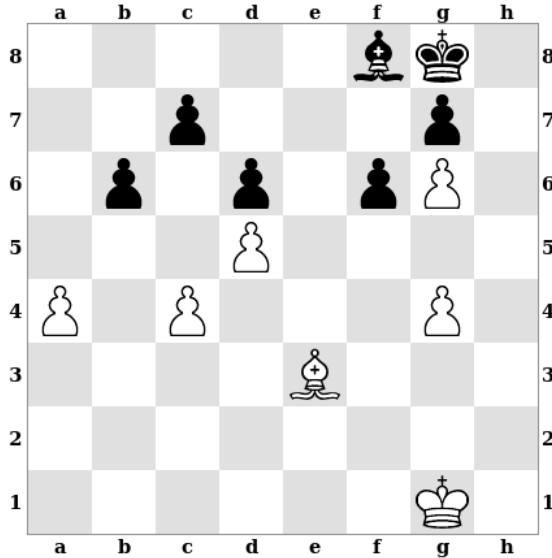
Because knights can jump over other pieces, they are also quite good at *blockading* pawns (standing in their way to stop them from advancing). In this position, White's knight and Black's rook are each blockading a pawn. However, White's knight is still quite active, attacking the black pawn on b5 and guarding White's e6 pawn. Black's rook, by contrast, has been left rather passive by its role as a blockader. White has a strong plan in Kf4-e5-xd5-d6 followed by trying to promote his e6 pawn.

Knights often get into trouble on the edge of the board. Here Black's knight is stuck on the edge since White's bishop controls all the squares it can move to. Without the help of the knight, Black has no way to stop White's pawn. White can win by simply moving his pawn up the board and promoting.



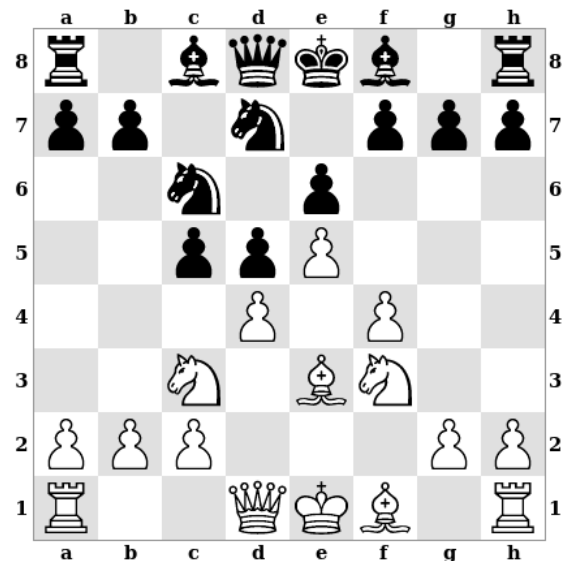
Bishops

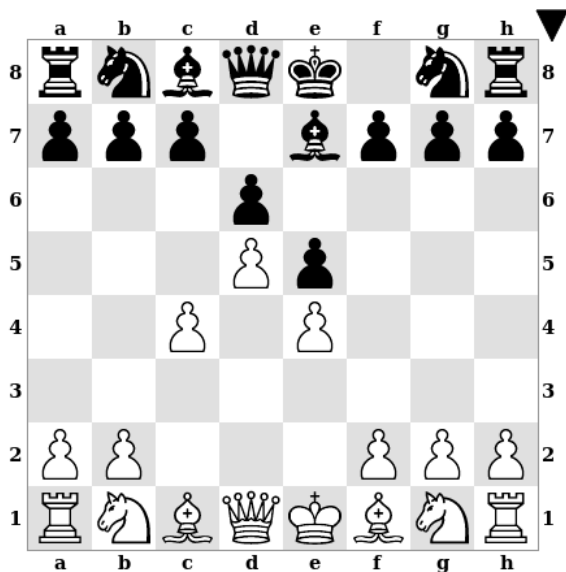
Bishops are long-range pieces. They don't necessarily need to be in the center to be active, but they need open diagonals to move along.



Bishops are most active when they are not blocked in by their own pawns. Here Black's bishop is quite passive since his pawns are on the same color squares as those the bishop moves on. White's bishop is active since his pawns are on the opposite color to his bishop.

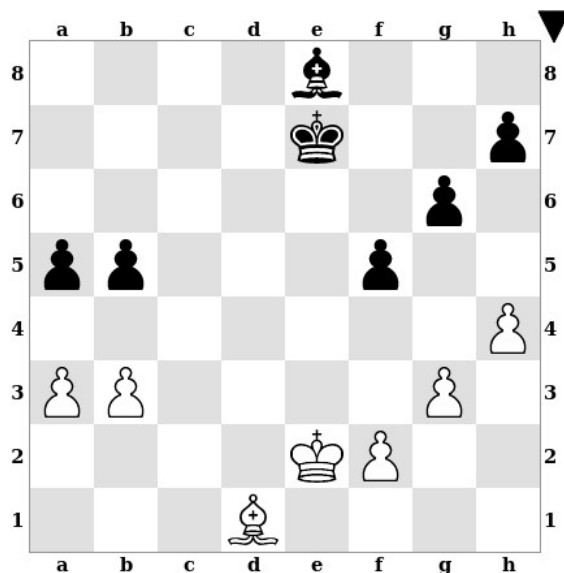
Many opening variations lead directly to pawn structures in which bishops become passive. This position comes from a popular variation of the French Defense. Black's center pawns are fixed on light squares, so his light-square bishop will be passive for the foreseeable future. If Black could remove both players' light-square bishops from the board, his position would immediately become much better.





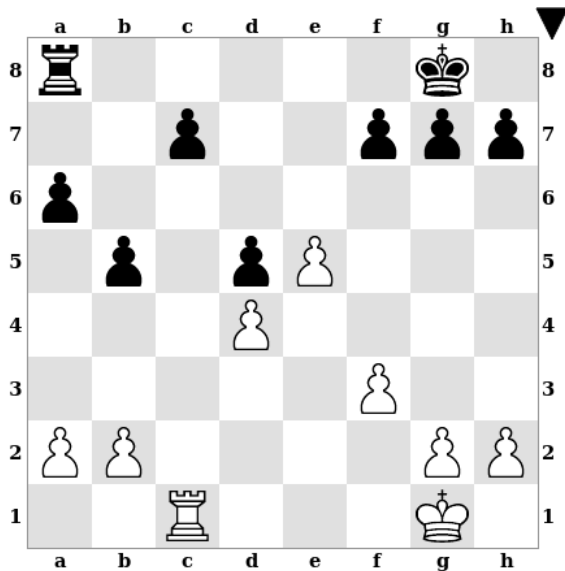
The distinction between good and bad bishops can often be used to decide which pieces to trade and which to keep on the board. In this position, the central pawn structure is already well defined and has clear implications for the bishops. White's pawns are on light squares, so his dark-square bishop is his better bishop, while Black's pawns are on dark squares, so his dark-square bishop is his worse bishop. These observations suggest a strong idea for Black: with the move 1...Bg5 he can try to force a trade of his bad bishop for White's good bishop. White can only avoid this by playing 2.Nd2, but after 2...Nd7 3.Nf3 Bh6, Black's bishop will wait on h6; when White's knight eventually moves, Black will carry out the bishop trade anyway.

A player can sometimes make his own bishop better than his opponent's by choosing the right pawn structure. If Black moves first here, he should play 1...b4. This both fixes his own queenside pawns on the opposite color to his bishop and fixes White's pawns on the same color as his bishop. Black's bishop will be more active than White's as a result. This will also make White's queenside pawns more vulnerable than Black's. If Black instead misses his chance with 1...Kd6?, then White should respond with 2.b4 himself, seeking the same advantages.



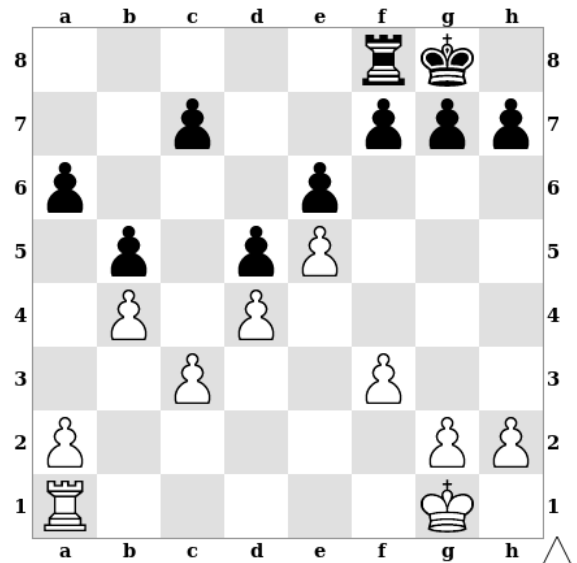
Rooks

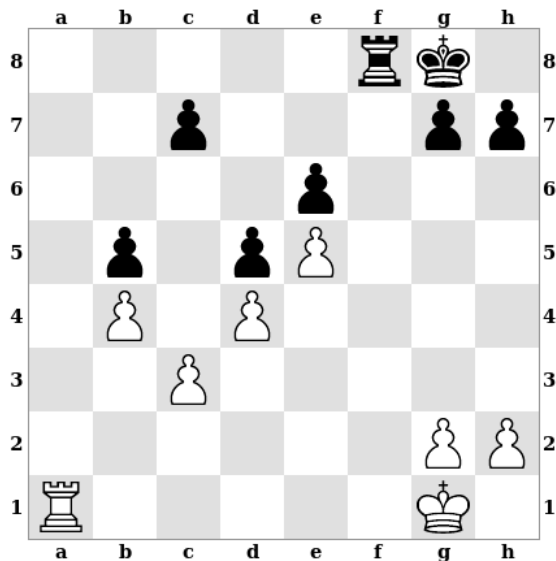
Like bishops, rooks don't need to be centralized to be active, but they do require open lines to move along.



Rooks are most active on open files. Here White's rook is on the open c-file, while Black's rook is on the closed a-file. As a result, White's rook is much more active than Black's.

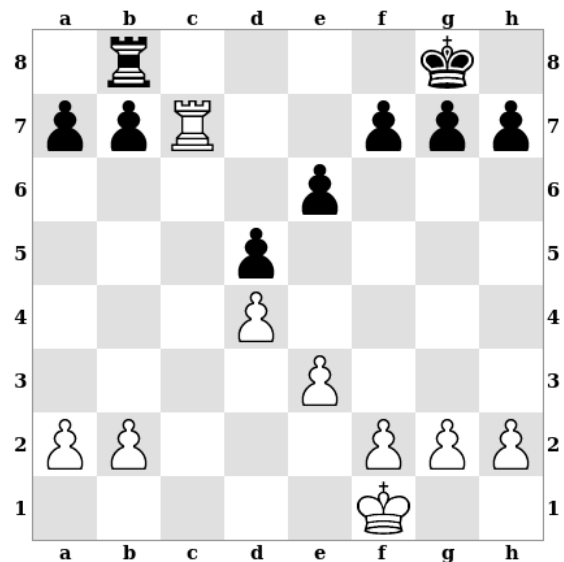
It is sometimes necessary to create an open file for a rook. The most common method of doing this is to use a *pawn break*, a pawn move that attacks an opponent's advanced pawn. Here White can open the a-file for his rook by playing 1.a4, intending 2.axb5. If Black responds with 1...bxa4, then White plays 2.Rxa4. In either case, White's rook will now stand on an open file which it can use to invade Black's position or attack Black's pawns.

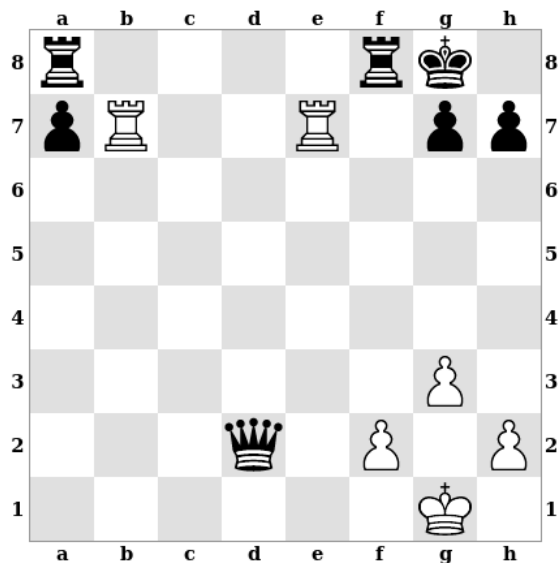




The actual value of an open file depends on whether or not it can be used to attack the opponent's pawns or infiltrate his position. In this example both rooks are on open files, but White's open file is much more valuable. The f-file isn't really very useful to Black's rook because White's king and pawns cover all of the rook's entry points into White's position. By contrast, White's rook can easily use the a-file to get into Black's position and start causing trouble.

Rooks also become very active on the seventh rank (or the second rank for black rooks). Here White's rook has reached the seventh rank and now dominates the position. Black's king can't approach the rook easily since this would let the rook capture Black's kingside pawns. Black's rook also can't move without hanging the b-pawn, and moving the b-pawn itself would hang the a-pawn. Black is left without good moves and White can gradually improve his position.



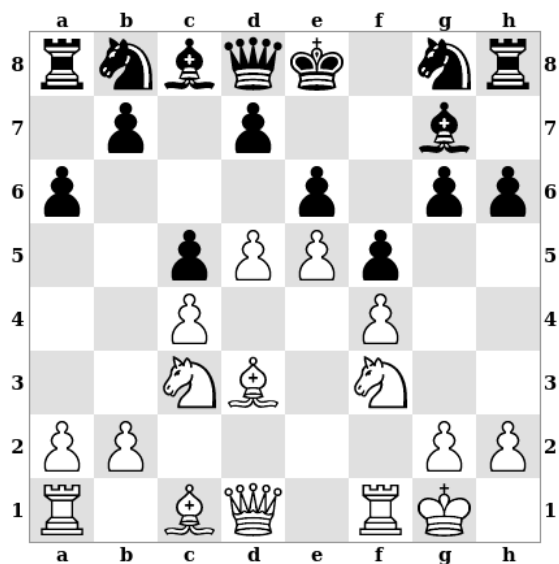


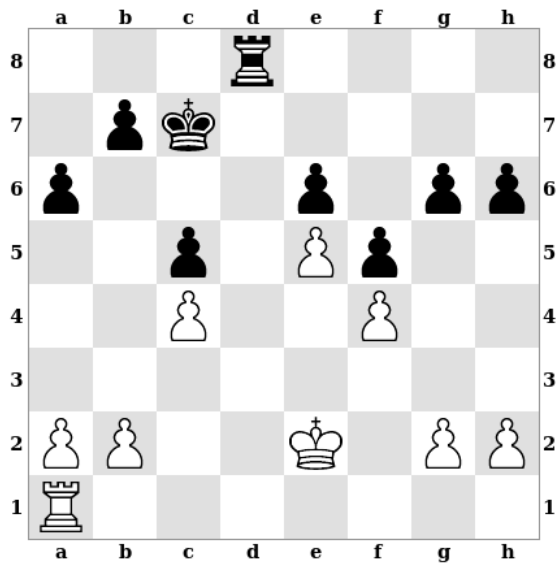
Two rooks working together on the seventh rank can be especially powerful. Here White's seventh rank rooks can even force a quick mate: 1.Rxg7+ Kh8 2.Rxh7+ Kg8 3.Rbg7#

Space

In some positions, one of the players has a *space advantage*, meaning that he controls more territory than his opponent. There is no simple way to measure space, but it is closely related to how far advanced a player's pawns are. Having more space typically gives you more room for your pieces and makes them more active.

Here White's advanced pawn center gives him a space advantage, which has made his pieces more active than Black's. For example, it is difficult to imagine good placements for both of Black's knights or to see how he will be able to develop his light-square bishop effectively. White's pieces, by contrast, have many good squares available to them.

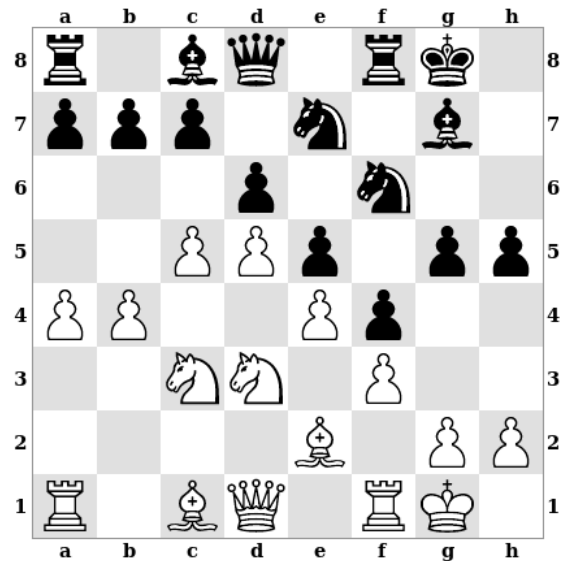


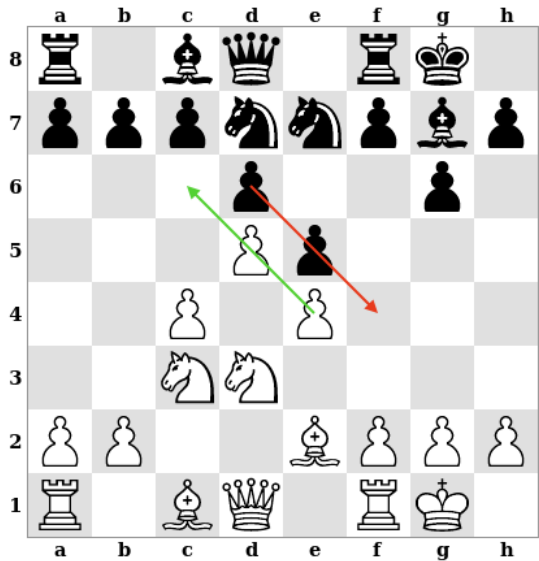


A space advantage is most important when there are many pieces on the board and becomes less important the fewer pieces there are. In this position White has a space advantage, but with so few pieces left it just doesn't matter much.

This suggests that the player with a space advantage should avoid trading pieces, while the player with less space should trade off some pieces to make his position easier.

In some positions, the two players end up with rival space advantages in different parts of the board. In this position, arising from a line of the King's Indian Defense, White has a space advantage on the queenside, while Black has a space advantage on the kingside. Each player will find it easier to attack on the side of the board where he has more space.



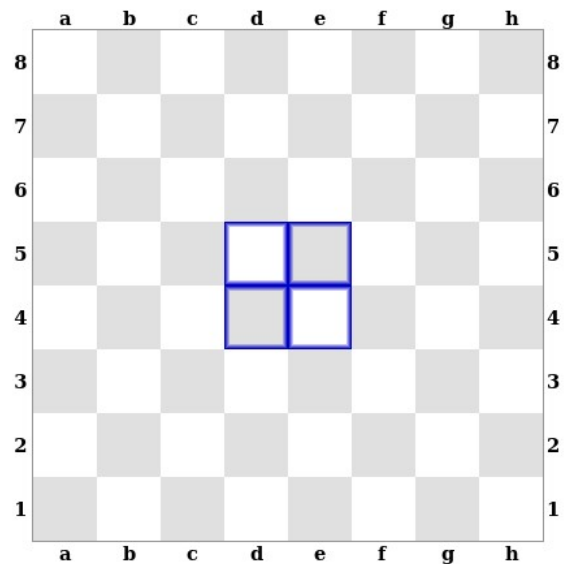


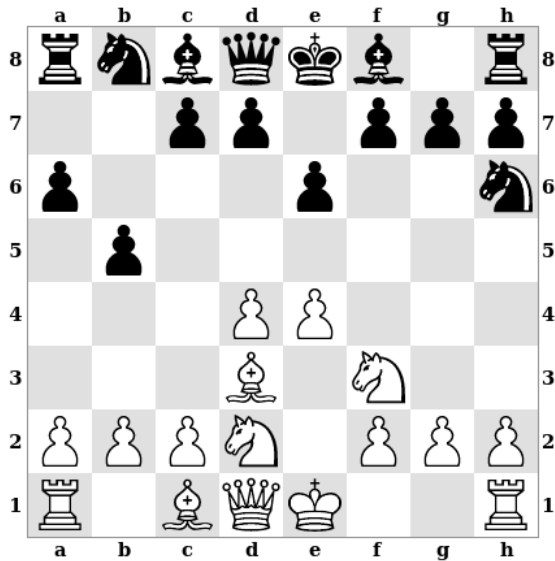
This position occurs at an earlier point in the same variation of the King's Indian. Even though the players have not begun their pawn storms yet, it is already clear which side of the board each player should focus on. White's more advanced center pawn is closer to the queenside, so he should play there, while Black should play on the kingside where his more advanced center pawn is.

A useful idea here is the *pawn pointing rule*: when the center pawns become locked, each player should focus his play on the side of the board that his center pawns "point" toward. In this position, the white pawns on e4 and d5 point toward the queenside, while the black pawns on d6 and e5 point toward the kingside.

Central Control

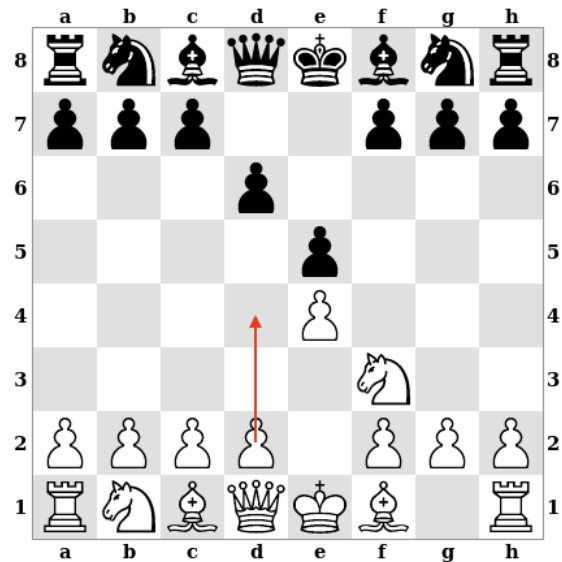
The center of the board is generally the most important part of the board for at least two reasons. First, the center is close to every other part of the board. If you want to move pieces from one part of the board to another, it helps to be able to move them through the center. Second, some pieces, like knights, are most active when they can occupy squares in the center of the board. For these reasons, the player with better control of the center will often have an advantage as a result.





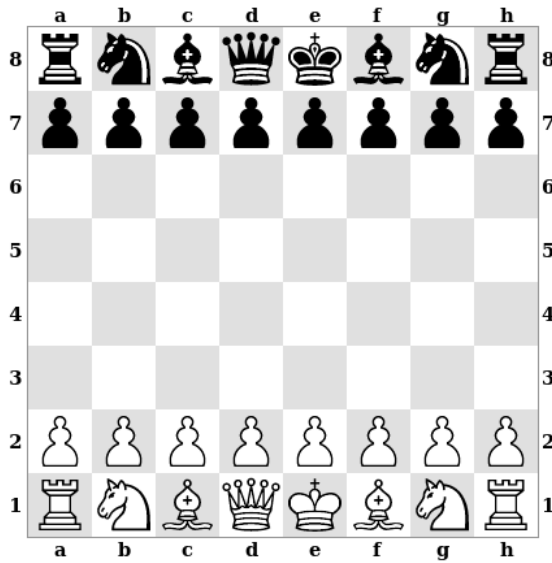
In this position, White has greater central control than Black. White has multiple pieces attacking both e4 and e5, and additionally has pieces attacking d4 and d5. By contrast, Black only has one piece attacking d5 and no other pieces attacking the center at all. As a result, White's pieces already have more good squares available to them than Black's do.

Increasing your own control of the center is sometimes accomplished by trying to reduce your opponent's central control. This is another situation in which pawn breaks are useful. In this position, which comes from Philidor's Defense, White should start attacking Black's pawn center by playing 1.d4. This threatens to win a pawn on e5 and encourages Black to give up his strong central pawn, which would leave White with better central control.



6 – The Opening

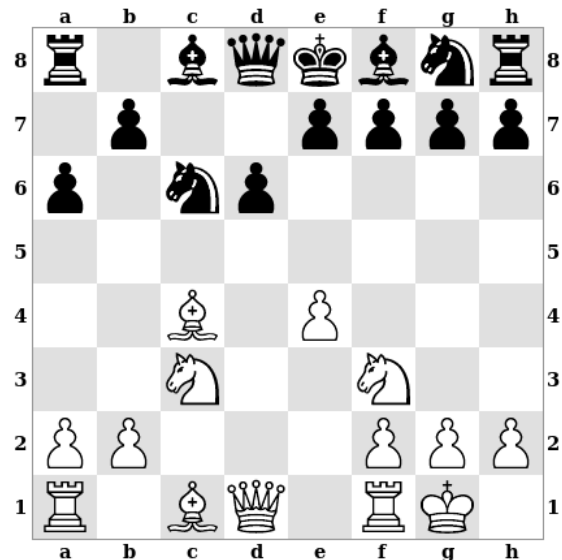
The first phase of a chess game is known as the *opening*. The strategic ideas in the opening are largely the same as in the middlegame, but the emphasis is different because of the unique nature of the starting position. The best way to begin thinking about opening strategy is to think about what makes the starting position so unique.

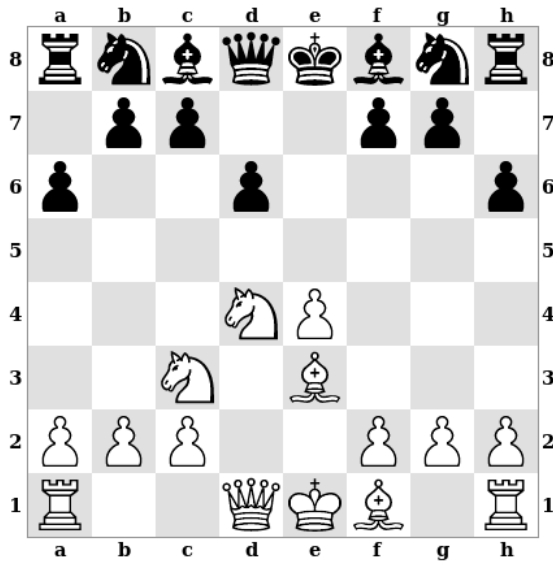


Compared to a normal middlegame position, there are two important things that stand out here. First, both players' pieces are totally inactive. Second, neither player has any space or control of the center. The most important strategic goals in the opening come from addressing these points. Both players will try to *develop* their pieces quickly to make them more active. At the same time, the players will focus on controlling the center of the board and gaining space where possible.

Development

The most important goal in the opening is *development*, the process of bringing pieces out to more active squares. In this position, from a line of the Morra Gambit, White has sacrificed a pawn in order to develop his pieces more quickly. White now has three pieces developed, has castled, and will not need another pawn move to develop his second bishop. Black, by contrast, has only one piece developed, has not castled, and will need another pawn move in order to develop his dark-square bishop. White's lead in development gives him good *compensation* for his sacrificed pawn.



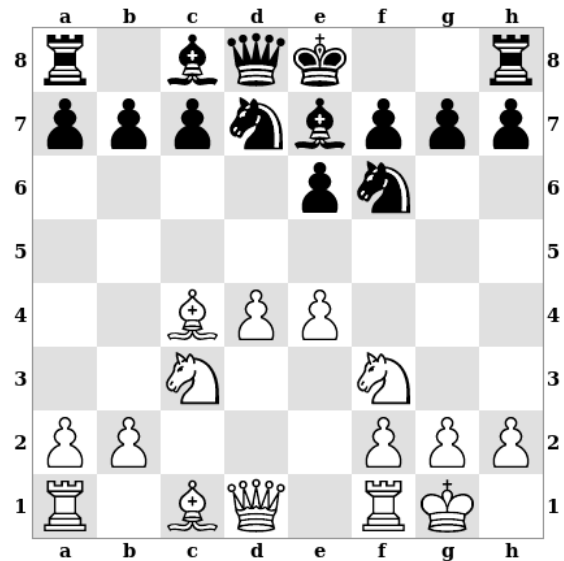


Pawns can't achieve the level of activity of other pieces because their movements are so limited. For this reason, pawn moves can't really be considered developing moves on their own. In this position, for example, White has developed three pieces and Black has developed none, giving White a significant lead in development.

Of course, pawn moves do sometimes contribute to development by opening lines for bishops, rooks, or the queen. In fact, without making any pawns moves in the opening, it would be impossible to develop any pieces other than the knights.

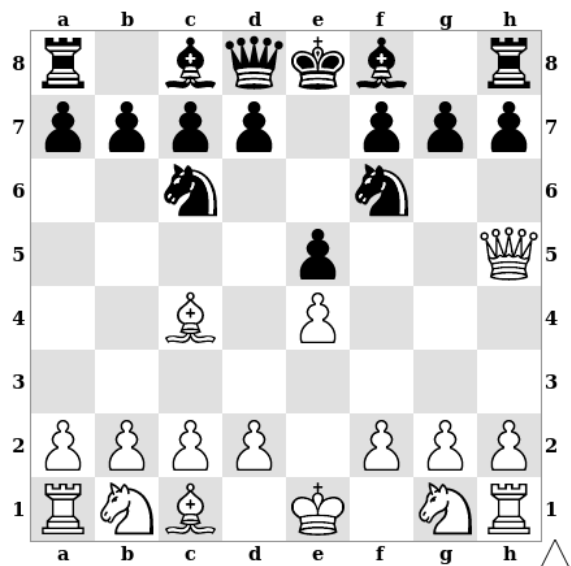
Central Control

The battle for control of the center begins directly in the opening. This position comes from a line of the Queen's Gambit Accepted, in which Black has captured White's c-pawn, giving up one of his center pawns in the process. Over the next moves, White has established both his center pawns on the fourth rank and developed a number of pieces to active positions from which they attack the center. Black has played too passively and has not contested White's central control, giving White a pleasant advantage.



King Safety

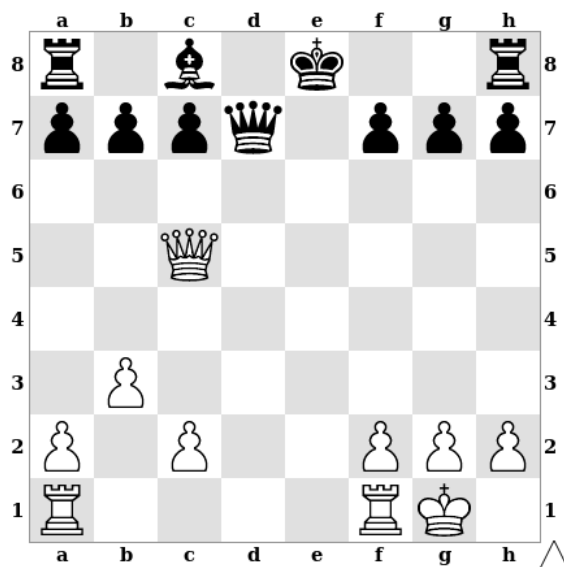
In the initial position, the kings both have plenty of pawn cover and appear to be quite safe. However, this is misleading for two reasons.

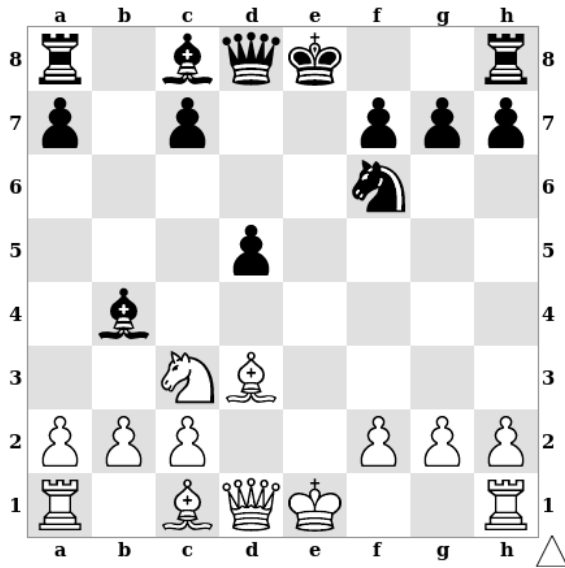


First, the squares f7 and f2 (for black and white, respectively) are very vulnerable in the opening. These squares are right next to the two kings and are not guarded by any pieces other than the kings. This makes them easy targets for a quick attack.

This position comes from a version of what is known as *Scholar's Mate* or the *Four Move Checkmate*. The game began 1.e4 e5 2.Qh5 Nc6 3.Bc4. Black then blundered with 3...Nf6??, which now allows White checkmate in one move with 4.Qxf7#. Black should instead have played something like 3...g6 4.Qf3 Nf6, when he would have successfully defended the attack. While this opening shouldn't work against a good defense, it highlights the weakness of the f7 square in the opening.

The second issue is that as the players fight for control of the center, the center pawns will often be traded, leaving open lines in the center. The kings may find their pawn cover suddenly missing, which can lead to trouble. Here Black has kept his king in the center too long. White can punish this by playing 1.Rfe1+ Kd8 2.Rad1, winning Black's queen for a rook.

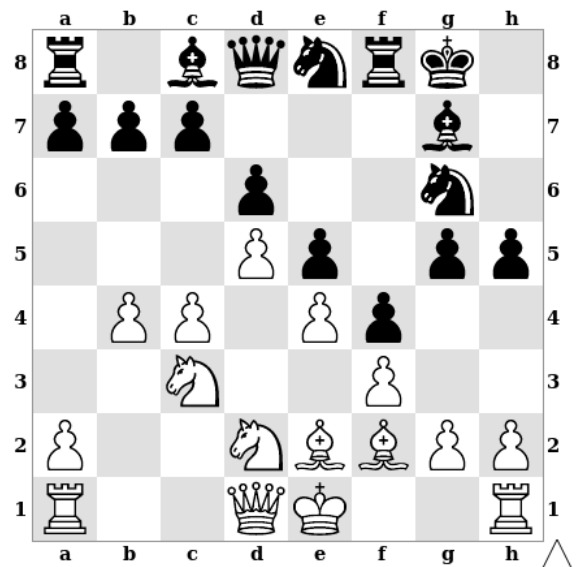




One standard way to protect the king is to castle, since this moves the king away from open lines in the center. An added benefit is that castling brings one of the rooks closer to the center, which can help that rook become more active.

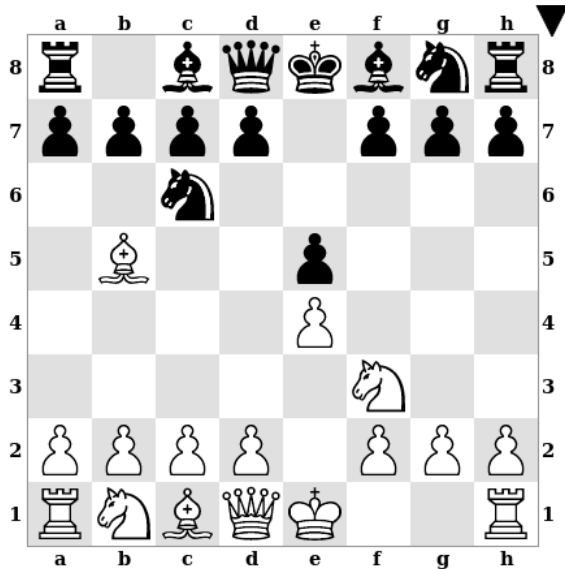
This position comes from a line of the Scotch Four Knights. The e-file has been opened and so a very common continuation here is for both players to castle: 1.0-0 0-0.

However, castling is not always a good idea and should not be done automatically. In this position it would actually be a terrible mistake for White to play 1.0-0. First of all, the center is closed and isn't likely to be opened any time soon, so White's king isn't really in danger on e1. Secondly, Black has already made a lot of progress on an aggressive kingside pawn storm, so White's king would be in serious danger after castling kingside.



Opening Theory

Chess players give names to specific sequences of moves beginning from the initial position. Certain sequences of moves are understood to be good for White, good for Black, or to give both players equally good positions. *Opening theory* refers to the chess world's collective knowledge of these sequences of moves and their assessments.



For instance, this position occurs after the moves 1.e4 e5 2.Nf3 Nc6 3.Bb5. This opening is known as the Ruy Lopez or the Spanish. It has been one of the most popular openings throughout chess history and now has quite a large amount of theory surrounding to it.

Because White moves first in chess he begins the game with a small advantage. Opening theory has traditionally been based on the assumption that an opening needs to maintain or increase White's advantage in order to be a good opening for White. In order for an opening to be considered good for Black, it would need to lead to a position in which neither side has much of an advantage. In this latter case, Black is said to have *equalized*. As chess has been studied more and more deeply, it has become harder and harder to find meaningful advantages for White when Black plays well. As a result, modern opening preparation is as likely to involve White simply trying to get into a position that he knows well or enjoys playing, even if it is fairly equal, as to look for a lasting advantage out of the opening.

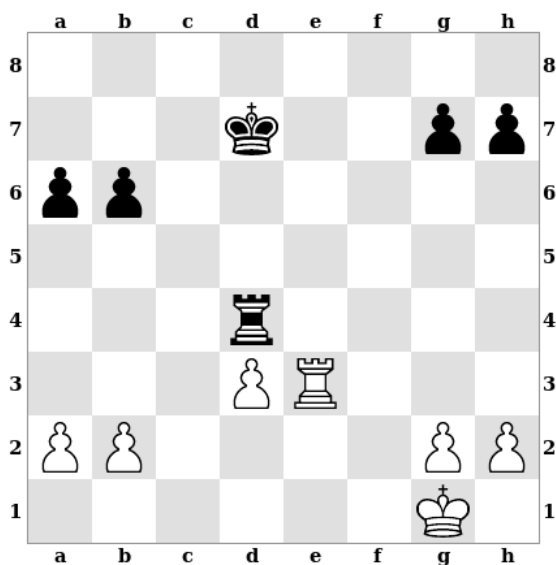
7 – The Endgame

The final phase of a chess game is known as the *endgame*. The endgame is characterized by the fact that there are fewer pieces on the board than in the opening or middlegame. An endgame typically does not involve more than a few pieces beyond the kings and pawns, though there is no absolute rule about how many pieces must be left before an endgame is reached.

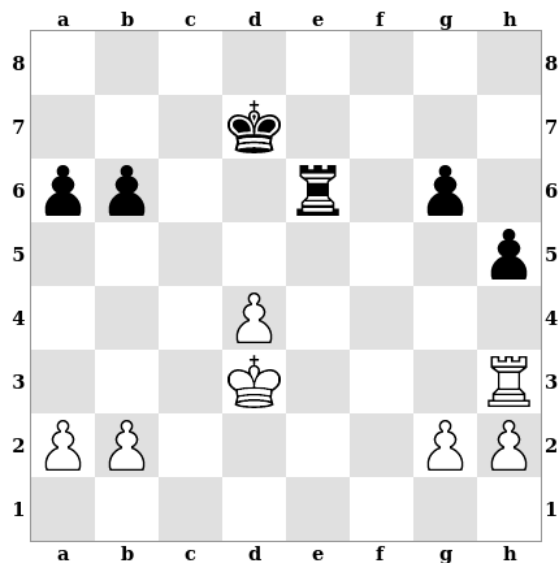
The fact that there are fewer pieces on the board means that it is less likely that a direct attack on one of the kings will be successful. This has two further consequences for strategy. First, it becomes safe for the kings to come out into the game. Second, direct attacks on the king become less important and the focus shifts toward promoting pawns.

King Activity

During the opening and the middlegame, the highest priority for the king is to stay safe and avoid being checkmated. As the endgame approaches, however, it becomes more and more reasonable for the king to enter the game. It turns out that the king is a useful piece in its own right and can often be used to invade the opponent's territory, win valuable pawns, and defend one's own pieces and pawns. Bringing the king out in the endgame is just as important as developing the other pieces in the opening.

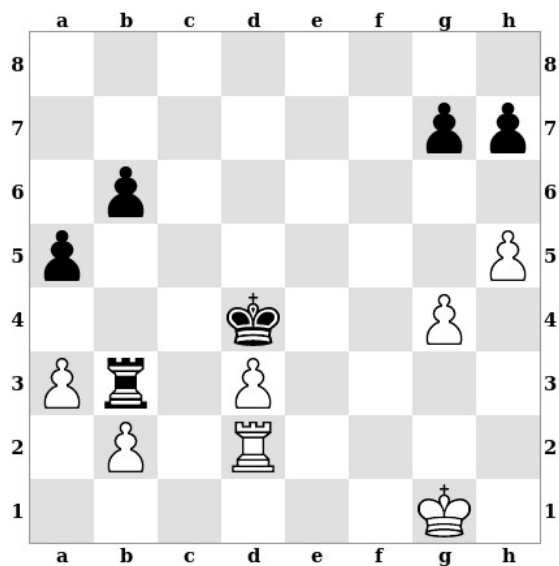


This position occurred in the game Tarrasch vs. Thorold, Manchester, 1890. White has an extra pawn and Black doesn't currently have any advantages of his own that would be enough to compensate for this material disadvantage. As a result, White has excellent chances to win the game. Tarrasch now brought his king into the game by playing 1.Kf2 g6 2.Rh3 h5 3.Ke3 Rd6 4.d4 Re6+ 5.Kd3, leading to the position in the next diagram.



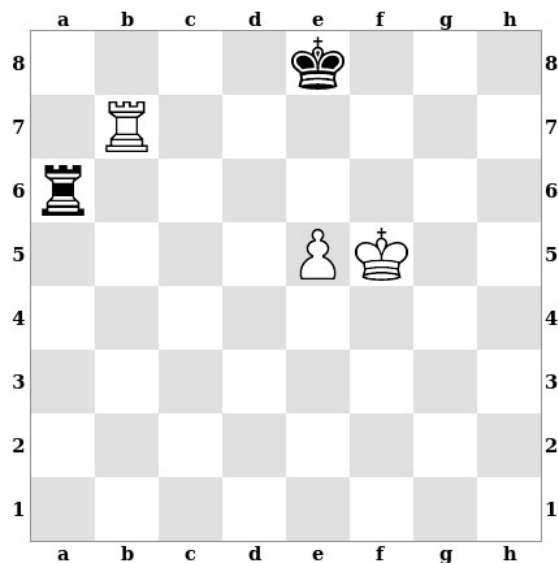
Having activated his king in this way, Tarrasch went on to win the game with his extra pawn.

This diagram, however, shows a position that could have occurred had Tarrasch not activated his king and instead made a series of aimless pawn moves. Black has now activated his own king, while White's king is still uninvolved in the game. Black is still down a pawn for the moment, but he now has a large advantage. There is no way for White to avoid losing his d-pawn to ...Rxd3, after which Black's more active pieces should allow him to win even more material.



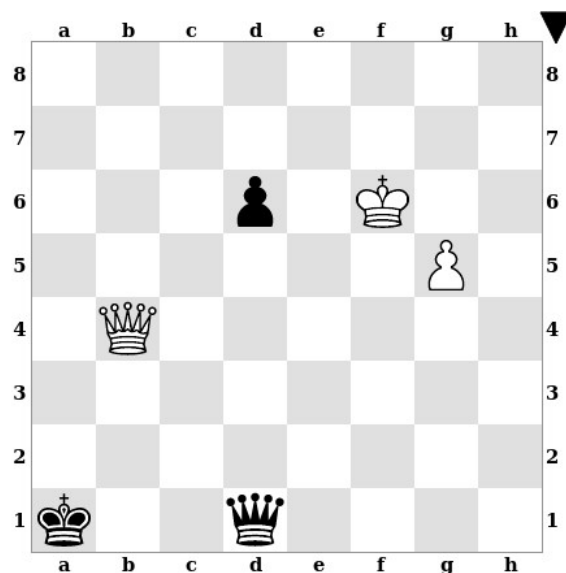
Endgame Theory

Many endgame positions have been given names and studied in much the same way as openings. The difference is that opening theory is often concerned with small advantages, whereas endgame theory is concerned with whether one of the players can win by force or whether the game will end as a draw.



For example, this position is known as Philidor's Position, and is a well-known position in the theory of rook endgames. With correct play, Black can hold a draw no matter how White plays.

Precise evaluations have been calculated for many endgame positions using computers. These results are stored in what are called *endgame tablebases*. At this point, complete results have been computed for all legal position featuring eight or fewer total pieces (counting the kings). For example, this position comes from the game Kasparov vs. The World, Internet, 1999. A tablebase can tell us that White is winning in this position with perfect play, that he can force mate in 82 moves, and also what effect each legal move in the position would have on the outcome. Interfaces for querying tablebase results can be found online in a number of places.



8 – Rules and Exceptions

People often express ideas about chess strategy as generalizations, for example: “knights usually should not be placed on the edge of the board.” The previous chapters of this book contain many generalizations of this kind. People sometimes go further, suggesting that these sorts of generalizations reflect a consistent set of principles that govern the game of chess. In some cases people will even state things as absolute rules, for example: “never put knights on the edge of the board.”

Generalizations are inevitable and quite useful; however, it is important to understand that they are often simplistic and have many exceptions. As strong players have studied chess more deeply, they have become increasingly willing to do things that violate traditional ideas of good strategy. As a result, it seems less and less likely that chess strategy is governed by consistent principles or rules at all.

Given that generalizations about chess strategy are not entirely reliable, it may seem that they have no value. In fact they can be useful, as long as you are careful about how you use them. The best approach is to rely on generalizations only as one part of your thinking about a given position. If you want to move a knight to the edge of the board, for example, you should certainly be aware that this can have negative consequences and you should consider whether or not these are likely in your particular position. But in the end, you should trust your own instincts and calculations over generalizations. The more you play and study chess, the more effectively you will be able to do this and the less you will need to rely on general rules.

As you see less value in generalizations, you may be tempted to ignore any chess idea that is phrased as a generalization or principle. However, there are many great chess books that have a lot of useful things to teach, but which feature an excessive amount of this kind of rule-based thinking. You will also encounter other players and teachers whose ideas about chess have value, but who are overly reliant on principles and rules.

There are two helpful things you can do to deal with these situations. First, rephrase chess ideas in your own words to make them more reasonable. If a book says that “knights do not belong on the edge of the board,” take this to mean that “knights on the edge of the board sometimes become a problem.” If a coach tells you that “you should never move the same piece twice in the opening,” you should understand this to mean that “moving the same piece twice in the opening is sometimes a tempting mistake.”

Second, think about the reasoning behind these claims. Why do knights ever run into trouble on the edge of the board? When does this happen? Why might it be a bad idea to move the same piece repeatedly in the opening? Are there certain times when this is a better or worse idea than others? The very process of considering these questions will help you to stay flexible in your use of these ideas.

You should remember that chess is full of people with opinions about things. Some of those opinions are reasonable, some are simply wrong, and others are entirely a matter of preference or taste. You will learn the most by assuming that people are fallible and by thinking for yourself about everything you are told. As Grandmaster David Bronstein once said, “the essence of chess is thinking about what chess is.”