# Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td><em>Chapter One: Twenty Five Key Priyomes</em></td>
<td>7</td>
</tr>
<tr>
<td><em>Chapter Two: Twenty Five Must-Know Endgame Techniques</em></td>
<td>72</td>
</tr>
<tr>
<td><em>Chapter Three: Twenty Five Crucial Sacrifices</em></td>
<td>120</td>
</tr>
<tr>
<td><em>Chapter Four: Twenty Five Exact Endings</em></td>
<td>176</td>
</tr>
<tr>
<td>Quiz Answers</td>
<td>207</td>
</tr>
</tbody>
</table>
Introduction

When my readers complain, I listen.

They complained about what I left out of Studying Chess Made Easy. In that book I explained that there was a less painful – and more beneficial – way to learn how to play the endgame:

There are some basic endings, with few pieces and pawns, that you can learn perfectly. You can always get the optimum result – a win or a draw – no matter how strong your opponent, I wrote.

And the good thing is there are only about two dozen of these ‘exact’ endgames that you must know. Once you master them, you can spend your scarce time on the more important endgame know-how, techniques.

These are the weapons, such as mismatches and opposition, shoulder blocking and zugzwang, that you use when there are more pieces and pawns on the board. That is, when it’s not yet an exact ending.

The complaint I got from readers?

“You didn’t tell us which exact endgames.”

“And you didn’t say which techniques.”

I also heard from my readers when I wrote What It Takes to Become a Chess Master. They were surprised – and somewhat pleased – to learn that the most important book knowledge was the middlegame techniques called strategic priyomes.

I gave some examples. But there are many other priyomes. Some are more important than others, I wrote.

The complaint from readers?

“You didn’t name the most important priyomes.”
Introduction

This book will answer those complaints — and some others. It provides 100 specific examples of master trade secrets. It’s the kind of know-how you need to become a master. And it will help you set priorities in determining what you really need to study.

That’s difficult even for great players. Mikhail Botvinnik, for example, decided to study an obscure exact ending before the tournament that made him world champion. It was K+R+BP+RP -vs.-K+R.

Botvinnik felt that it was something he could study so deeply that he could play either side perfectly. He also felt that if he were going to become the world’s best player, he should know how to play this endgame.

But this ending is very, very rare. So let me say it one more time: There is an awful lot of things to study in chess. It’s a classic example of Too Much Information. You have to set priorities.

The first step to becoming a master is to separate the things you could know from what you should know — and from what you must know. In this book I’ve identified 25 examples each of the most valuable things to learn — priyomes, sacrifices, exact endings and endgame techniques.

There are things that every master knows — and it’s where every would-be master can start.
Chapter One:
Twenty Five Key Priyomes

Every serious player knows the basic tactical devices, the ones with names like pin, skewer and fork. These have little to do with where the pawns are and everything to do with where the pieces are.

But there are strategic devices which depend on pawn structure. The only name we have for them is the one the Russians use: priyome.

You already know some simple examples of it even if you’ve never heard the word. Imagine a rook endgame with one pair of pawns traded.

\[
\text{White to play}
\]

The priyome calls for \textbf{1} \texttt{Rd1!} and \textbf{2} \texttt{Rd7}. White gets a huge advantage.

Other priyomes are only a bit more elaborate and only slightly improve a position. After \texttt{1 e4 d6 2 d4 Qf6 3 Qc3 g6 4 f3 Qg7} White may want to trade off Black’s bishop. The priyome consists of three or four steps, a bishop move such as \texttt{Qe3} or \texttt{Qg5} followed by \texttt{Rd2} and \texttt{Qh6xg7}.

Alexey Suetin, one of the deans of the Soviet Chess School, said mastering priyomes was a key to success. Each would-be master
should collect his own ‘personal fund’ of priyomes, as he put it, study them and – when the same patterns arise during a game – apply the priyomes.

Priyomes can be very general, like seizing a file with a rook in the last diagram. They can be described in words, not moves, as Vladimir Kramnik did in the next:

After 1 \textit{\text{\underline{\text{b}5}}, he wrote “My opponent underestimated this standard priyome.”} He explained what he meant – “the exchange of the ‘bad’ bishop but one that defends many of his pawns.” Once the bishops are gone, Black had to lose the a- or d-pawn.

Other priyomes apply only to certain pawn structures. A priyome may consist entirely of piece maneuvers, like h5xc6 and e5 as in the Bird Bind, the first priyome we will look at. Or it can begin with a piece move, followed by a pawn move, such as Harry Pillsbury’s e5 and f2-f4. Or it may begin with a pawn move like h2-h4 in response to ... g6 or ... \textit{\text{\underline{g}6}}.

The Russian trainer Anatoly Terekhin estimated that masters know about 100 priyomes. But you don’t need to know nearly that many. We’ll examine 25 of the most common and useful.

\section*{1 Bird Bind}

Henry Bird, the 19th century English master, deserves credit for popularizing a priyome based on trading a bishop for a knight so that he could occupy the center with his own knight.
He did it with his favorite 1 f4 and then 1 ... d5 2 Qf3 c5 3 e3 Qc6 4 Qb5! in order secure e5 as an outpost after Qxc6. An 1885 game of his went 4 ... d6 5 0-0 e6 6 b3 Qf6 7 Qb2 Qe7 8 Qxc6! Qxc6 9 Qe5 Qc7 10 d3.

![Chess board diagram](image)

Black to play

White can continue with Qd2, We2 and eventually e3-e4 and/or c2-c4 with a small edge. This priyome has been adopted in similar positions, by players from Bobby Fischer to Aron Nimzovich, who adopted it with colors reversed in the Nimzo-Indian Defense: After 1 d4 Qf6 2 c4 e6 3 Qc3 Qb4 Black often equalizes with a timely ... Qxc3 and ... Qe4.

Aside from the strategic value, the Qxc6 idea can have a tactical punch:

Geller – Petrosian
Moscow 1963
Black to play

There wasn’t a vacant central square to exploit – until Black innocently played 1 ... fxe5?? and was stunned by 2 Qb5!.

White will win e5 for his pieces, ideally the knight. Bad would be 2 ... exd4 3 Qxd4, e.g. 3 ... Wd6 4 Qxc6 Qxc6 5 Qf4! Wd7 6 Qxd5!.
And Black would be blown off the board after 2 ... e4 3 ðe5 ðd6 ...

... 4 ðf4! because he has no good defense to ðg6.

In the game, Black tried to bail out after 2 ðb5 with 2 ... ðg6. But he had no good defense after 3 ðxe5 ðxe5 4 ðxe5.

For instance, 4 ... ðd6 5 ðxe6+ ðxe6 6 ðxc6+. Or 4 ... ðe7 5 ðf3 ðf6 6 ðxd5! ðxe5 7 ðf6+! and 8 ðxc6. Or, as the game went, 4 ... a6 5 ðxc6 ðxc6 6 ðxd5 and White won.

This priyome also works in a mirror image. In that case White wins control of d5 by means of ðxf6, as in variations of the Sicilian Defense.

White began the priyome earlier with ðg5 and completed it with 1 ðxf6! ðxf6 2 ðd3 ðc6 3 ðd5. Then 3 ... ðxd5 4 ðxd5 would confer a major positional edge because of his better bishop and the target pawn at d6.
It’s revealing that this game began as a Najdorf Variation – and that Black, Miguel Najdorf himself, did not understand that the best defense is a counter-priyome, eliminating the d5-knight with ... $\text{g}5$ and ... $\text{e}7!$.

The game went $3 \ldots \text{g}5 4 \text{fd}1$ and now instead of $4 \ldots \text{c}8 5 \text{c}3 \text{e}7!$, Black tried to get counterplay on the f-file, with $4 \ldots \text{h}8 5 \text{c}3 \text{f}5? 6 \text{f}3$.

Now $6 \ldots \text{e}7 7 \text{xe}7 \text{xe}7$ and $8 \text{xf}5 \text{xf}5 9 \text{e}4$ allows White to exploit e4 as well as d5.

Black ended up in a poor middlegame after $6 \ldots \text{xd}5 7 \text{xd}5 \text{xe}4 8 \text{xe}4 \text{e}7 9 \text{d}5 \text{f}6 10 \text{d}2!$, with the idea of $11 \text{e}4$.

He was headed for a bad endgame after $10 \ldots \text{xd}2 11 \text{xd}2 \text{c}7 12 \text{e}1 \text{af}8 13 \text{e}3 \text{g}6 14 \text{e}4 \text{g}7 15 \text{f}3 \text{xf}3 16 \text{xf}3 \text{f}6 17 \text{e}4 \text{f}7$ and lost.

## 2 White’s a-pawn vs. ... b5

Black often expands on the queenside with ... a6 and ... b5 in a wide variety of openings, from the Queen’s Gambit Declined to Sicilian and King’s Indian Defenses. But this comes with a risk: White can train more firepower on b5 than Black – and that makes a2-a4! dangerous.
White's a-pawn vs. ...b5

Najdorf – Fischer
Santa Monica 1966
White to play

White has more of his pieces on the kingside, so 1 f4 looks natural. But after 1 ... gxf4 2 xf4 e5! Black would stand well.

However, 1 a4! led to a positional rout. The problem with 1 ... bxa4 is 2 c4!, threatening to capture on d6. After 2 ... e5 3 xe5! dxe5 4 xa4 White would have a big positional edge: He has a protected passed pawn and can attack pawns at c5 and a6. Black has a bad dark-squared bishop.

So, Black bought time with 1 ... b4. But after 2 d1! and 3 e3! White had two knights to control c4 and Black only had one.

Since 2 ... xe4? 3 d3 would open the center too quickly, Black chose 2 ... e5 3 e3 g6. But then came 4 ec4, attacking d6.

Black to play
If Black has to defend it with 4 ... \( \text{d}8 \) White can exploit other holes in Black’s camp with 5 \( \text{b}6 \), e.g. 5 ... \( \text{b}8 \) 6 \( \text{xc}8 \) and \( \text{xa}6 \) or 5 ... \( \text{a}7 \) 6 \( \text{dc}4 \) with the idea of \( \text{xc}8/\text{xd}6 \) or \( \text{a}5-\text{c}6 \).

Instead, Black chose 4 ... \( \text{f}4 \) 5 \( \text{xf}4 \) \( \text{gx}f4 \). But White’s knights ran riot after 6 e5! \( \text{dxe}5 \) 7 \( \text{f}3 \) \( \text{f}8 \) (7 ... \( \text{d}7 \)? 8 d6 costs a rook) 8 \( \text{xe}5 \).

He won after 8 ... \( \text{b}7 \) 9 \( \text{dc}4 \) \( \text{ad}8 \) (9 ... \( \text{xd}5 \) 10 \( \text{d}7 \)!) 10 \( \text{c}6 \).

It’s not just the square at c4 but also c5 and even b6 that can be exploited by a2-a4:

![Chess Diagram](image)

**Euwe – Sanguineti**

Mar del Plata 1948

*White to play*

White can see that c6 is potentially vulnerable and might have considered 1 \( \text{a}2 \) and 2 \( \text{b}4 \). But Black can get good play from his own priyome, the ‘Philidor Ring,’ as we’ll see, with ... \( \text{b}6-\text{c}4 \).

Instead, White played the forcing 1 a4!. Then 1 ... bxa4 2 \( \text{xa}4 \) followed by 3 \( \text{c}5 \) or 3 \( \text{xd}7/ \) 4 \( \text{b}6 \) – or even 2 \( \text{xa}4 \) – assures him a small edge.

Black replied 1 ... \( \text{b}4 \) and White had a choice. In many similar positions, 2 \( \text{b}1 \) followed by \( \text{d}2-\text{b}3 \) is best. The knight can then occupy either c5 or a5 with a powerful cramping impact.

On this day, White chose 2 \( \text{e}2 \) so that the knight can occupy d4 after 2 ... \( \text{xe}5 \) 3 dxe5. Black replied 2 ... \( \text{df}6 \) (not 2 ... \( \text{d}6 \) 3 \( \text{c}7 \)!).
White's a-pawn vs. ...b5

White took further advantage of the priyome with 3 a5!. Both of Black's queenside pawns became potential targets now that ... a5 is ruled out.

Black protected his a-pawn with 3 ... d6 4 a4! de4. However, White made progress with 5 c2! ac8 6 fc1 xc2 7 xc2. He would be winning if he can play c1-a2 or c1-b3-c5.

Black lacks counter play. If he tries 7 ... c8 8 xc8+ xc8 White invades with 9 c6 b7 10 wb6. Black tried 7 ... g4 but was lost after 8 xg4 fxg4 9 xd4 dxe4 10 c5 and xb4.

The simplest and often best defense to a2-a4 is to liquidate, ... bxa4:

Alekhine – Flohr
Bled 1931

Black responded to a2-a4 with 1 ... b4?. White established positional superiority with routine moves: 2 bd2 0-0 3 b3 e7 4 e4 d7 5 e3 and then 5 ... de5 6 xe5 xe5 7 ac1 wb8 8 c5! xc5 9 xc5. Black's weak a-pawn and bad-bishop helped cost him the game.
How could he have improved? With 1 ... bxa4!.

White’s advantage would be minimal after 2 \( \text{c3} \) \( \text{b4} \) 3 \( \text{e4} \) \( \text{e7} \) for instance (4 \( \text{xf6}+ \) \( \text{x6} \) 5 \( \text{e4} \) \( \text{b7} \)).

Once White retakes on a4, his b-pawn will be about as weak as Black’s a-pawn. Neither side’s pieces are superior. Chances are roughly equal.

3 Pillsburial

One of the most famous priyomes was popularized by Harry Nelson Pillsbury, from a position that has been arising out of a Queen’s Gambit Declined for more than a century. There are very similar ones with slightly different pawn structures, such as Black pawns at c6 and b7.

Pillsbury played 1 \( \text{e5} \), 2 \( \text{f4}! \) and \( \text{f3} \). This entrenches his knight and if it’s captured he can retake fxe5! and exploit the half-open f-file.
Brothers e4-e5 and \( ... \) b4

One of Pillsbury’s games went 1 \( \text{\text{Q}} \text{bd7} \) 2 f4 c5 3 0-0. Black began his own priyome, the queenside phalanx that we will examine later in this chapter. But this time it’s bad, 3 ... c4? 4 \( \text{\text{Q}} \text{c2} \) a6 5 \( \text{\text{Q}} \text{f3} \) b5.

This is a case of timing. Black’s queenside might become significant if it were not for White’s initiative after 6 \( \text{\text{Q}} \text{h3} \). He targets h7 and threatens 7 \( \text{\text{Q}} \text{xd7} \) (7 ... \( \text{\text{Q}} \text{xd7} \) 8 \( \text{\text{Q}} \text{xh7 mate; 7 ... \text{\text{Q}} \text{xd7} \) 8 \( \text{\text{Q}} \text{h7+} \) \( \text{\text{Q}} \text{h7} \) 9 \( \text{\text{Q}} \text{xd7} \)).

\[ \text{Black to play} \]

His attack exploded, 6 ... g6 7 f5 b4 8 fxg6! hgx6 9 \( \text{\text{Q}} \text{h4} \) bxc3 10 \( \text{\text{Q}} \text{xd7} \) \( \text{\text{Q}} \text{xd7} \) 11 \( \text{\text{Q}} \text{xh6} \) and 12 \( \text{\text{Q}} \text{a1} \). Or 6 ... h6 7 \( \text{\text{Q}} \text{xh6} \) gxh6 8 \( \text{\text{Q}} \text{h6} \) (8 ... \( \text{\text{Q}} \text{e5} \) 9 fx e5 \( \text{\text{Q}} \text{e4} \) 10 \( \text{\text{Q}} \text{xe4} \) dxe4 11 \( \text{\text{Q}} \text{f3} \)). Such games were known as ‘Pillsburials.’

This priyome typically works best with at least three sets of minor pieces on the board. A good defense was eventually found in 3 ... \( \text{\text{Q}} \text{e4} \), which blocks the b1-h7 diagonal and trades pieces.

But in other forms, \( \text{\text{Q}} \text{e5/f2-f4} \) remains vibrant: Pillsburials still occur.

4 Brothers e4-e5 and \( ... \) b4

Certain pairs of pawn moves, one by White and one by Black, are linked by bonds both tactical and strategic. We saw f2-f4 and \( ... \) c5 in the Pillsburial and we’ll consider that pair in more detail later in this chapter.

In the Sicilian Defense, e4-e5 is linked with \( ... \) b4, like brothers who never get along. Often the best defense to e4-e5 is \( ... \) b4. And
when Black drives a knight off c3 with ... b4, the best counter may be e4-e5.

At first it seems that 1 ... b4 just wins a pawn (2  \texttt{Qa4}  \texttt{Qxe4}). A further look reveals that White has some compensation after 3  \texttt{Wd4}  \texttt{Qf6} 4  \texttt{Qb6}.

But the priyome tells us that when you see ... b4, you should look for its brother. Here 2 e5! and then 2 ...  \texttt{bx}c3 3  \texttt{ex}f6  \texttt{gxf6} is promising for White after 4  \texttt{b}3 or 4  \texttt{f}5  \texttt{cxb}2 5  \texttt{xB}2.

In this case White can exploit the position tactically because he was well developed. But if both players have their pieces well deployed, it's usually bad to be the second to act in the e5/... b4 chain reaction:

Black's last move, ... b4!, ensures an advantage. For example, 1  \texttt{Qce2} e5! 2  \texttt{Qf}5  \texttt{b}5 3  \texttt{Wd2}  \texttt{c}4 with favorable complications.
Philidor’s Ring

White tried 1 e5. He was right in thinking that if the Black knight moves from f6 he can play a good \( \text{\textit{Q}} \text{e}4 \). And on 1 ... dxe5 2 fxe5 \( \text{\textit{W}} \text{xe}5 \), White can complicate with 3 \( \text{\textit{R}} \text{xh}6 \) and 3 ... \( \text{\textit{B}} \text{b}8 \) 4 \( \text{\textit{R}} \text{xg}7 \) bxc3 5 \( \text{\textit{Q}} \text{b}3 \).

But Black replied 1 ... bxc3! 2 exf6 \( \text{\textit{B}} \text{xf}6 \). Then 3 bxc3 or anything that allows 3 ... cxb2 would weaken White’s king position considerably.

He kept the position semi-closed with 3 b3 and Black replied 3 ... d5.

White to play

White’s 1 e5 has failed: Black is a pawn ahead and has the better attack, as 4 \( \text{\textit{R}} \text{cl} \) 0-0 and then 5 g4 \( \text{\textit{B}} \text{b}5! \) 6 \( \text{\textit{R}} \text{xb}5 \) axb5, showed. Black threatened 7 ... \( \text{\textit{R}} \text{xb}3! \) (8 cxb3? c2+; 8 axb3 \( \text{\textit{W}} \text{a}5 \) and ... \( \text{\textit{R}} \text{a}8 \) and won.

The moral is: When you see e4-e5, look for ... b4, and vice versa – but be careful when you’re the second to act.

5 Philidor’s Ring

The Russians say a knight that is supported by two pawns inside enemy territory is a ‘ring,’ such as Pillsbury’s \( \text{\textit{Q}} \text{e}5 \), with pawns at d4 and f4. Trainer Anatoly Terekhin named this priyome after Andre Philidor because of this game:
Black can claim a positional advantage but he has no point of penetration on the c-file to make it count. On 1 ... \texttt{Ac8} 2 0-0 and 3 \texttt{Ac1}, a swap of rooks will nudge White closer to a draw.

Philidor's solution was 1 ... \texttt{b5}! 2 0-0 \texttt{Bb6}! and then 3 \texttt{Gg3} \texttt{g6} 4 \texttt{Ac1} \texttt{Cc4}. This attacks b2 and looks for an opportune time for ... \texttt{Xxe3}. Since the file is plugged up, Black may add to the queenside pressure with ... \texttt{a5-a4} or double rooks on the c-file, without allowing a trade of rooks.

Moreover Black does not fear a capture on c4 because he would get a protected passed pawn. After 5 \texttt{Xxc4} he might opt for 5 ... \texttt{dxc4} and occupy the excellent d5 square with a knight.

White tried to exploit the kingside, 5 \texttt{Xxf5} \texttt{gxf5} 6 \texttt{Wg3}+. But 6 ... \texttt{Wg7}! 7 \texttt{Wxg7}+ \texttt{Xg7} turned out to be an excellent endgame for Black.
Philidor's Ring

Philidor went on to win after 8 \( \text{bxc4} \text{ bxc4}! \) 9 g3 \( \text{ab8} \) 10 b3 \( \text{a3} \) 11 \( \text{c2} \text{ cxb3} \) 12 axb3 \( \text{f8} \) 13 \( \text{xc8} \text{xc8} \) 14 a1 \( \text{b4} \) 15 \( \text{xa6} \text{c3} \) and then 16 \( \text{f2} \text{d3} \) 17 \( \text{a2} \text{xd2} \) 18 \( \text{xd2} \text{xb3} \) 19 \( \text{c2} \text{h4}! \). But the key to victory was 1 ... b5, 2 ... \( \text{b6} \) and 4 ... \( \text{c4}! \).

Philidor’s Ring is often effective after \( \text{wb3} \) and ... \( \text{wb6} \) followed by a queen swap that opens half of the a-file:

![Chess Diagram]

Janowski – Marshall
Match 1905

White to play

Three moves before, Black traded queens on b3. White had a choice of recaptures and chose axb3! so that he could continue 1 b4! \( \text{e8} \) 2 \( \text{b3}! \).

White is in no rush to dissolve his doubled pawns with b4-b5 because a pawn at b4 supports \( \text{c5}! \). He also wants as many Black pawns left on the queenside so they can become targets.

Black was able to defend b7 with 2 ... \( \text{d6} \) 3 \( \text{xd6} \text{xd6} \) 4 \( \text{c5} \).

![Chess Diagram]

Black to play

White’s pressure increased after 4 ... \( \text{c7} \) 5 \( \text{f1} \text{c8} \) 6 \( \text{d2} \text{e8} \) 7 f4 f5 8 \( \text{f3} \text{e4} \) but he had not broken through.
So he played 9 b5! axb5 10 h5 with the idea of e5/xc6 and a8/e1. Black ended up in a very poor case of bad-B-versus-good-N, 10 ... e5 11 dxc5 d7 12 xc6! bxc6 13 d4 f7 14 a6! h6 15 b4, and lost.

6 Center Strike: ... d5 vs. g2-g4

An ancient axiom says: ‘The best defense to an attack on a wing is a counterattack in the center.’

Good advice. But how? The most common way is ... d5.

White’s last move, g2-g4, threatens to drive away the f6-knight, Black’s best kingside defender. Once that is done, White can choose between promising pawn action (f4-f5) and promising piece play (perhaps g2, h4 and f3-h3).

Black appreciated that if he was going to strike back, 1 ... d5! was the right way. Opening the long diagonal favors him (2 exd5 fxd5 3 xd5 xd5, e.g. 5 c3 c5 and ... d8/ ... e3).

But why isn’t 2 e5 good? The center remains closed and White can continue on the kingside after 2 ... d7.

The answer is 2 ... e4! For better or worse, this is what the ... d5 priyome calls for. After 3 e4 dx4 4 h2 Black should have ample play with ... c5, ... fd8, ... c4 and ... d5. (But not 4 ... xc2 5 ac1.)
Center Strike: \( \ldots d5 \) vs. g2-g4

White preferred 3 \( \mathcal{A}xe4 \) dxe4 and then 4 h4?.

![Chessboard diagram]

But this was a blunder that was punished by 4 ... \( \mathcal{W}d8! \) 5 g5 (to stop 5 ... \( \mathcal{A}xh4 \)) and then 5 ... \( \mathcal{W}xd4! \) 6 \( \mathcal{A}xd4 \) e3+. Among the improvements is 4 \( \mathcal{A}ac1 \), to safeguard c2. But 4 ... \( \mathcal{A}fd8 \) 5 \( \mathcal{A}g1 \) \( \mathcal{A}c5 \) offers good chances.

There is a downside to this priyome. After \( \ldots d5 \) Black may end up losing a pawn, either on d5 or on e4 after 5 ... \( \mathcal{D}e4/ \mathcal{D}xe4 \). But he often gets excellent compensation because of the loosening effect of g2-g4.

![Chessboard diagram]

Baturinsky – Panov
Moscow 1936

Black to play

White’s last move, g2-g4?, was a mistake that was punished by 1 ... \( d5! \).

Then 2 e5 \( \mathcal{D}e4 \) 3 \( \mathcal{D}xe4 \) dxe4 4 \( \mathcal{A}xe4 \) would favor Black after 4 ... \( \mathcal{D}xd4 \) 5 \( \mathcal{A}xd4 \) \( \mathcal{A}c6 \) because of the threats of 6 ... \( \mathcal{A}c5 \) and 6 ... \( \mathcal{A}xe4+ \).

White chose 2 exd5 and then 2 ... \( \mathcal{D}xd4 \) 3 \( \mathcal{W}xd4 \) \( \mathcal{A}c5! \). If the queen goes to d3 or d1 he loses the f-pawn. Worse is 4 \( \mathcal{W}d2? \), which costs a piece (4 ... \( \mathcal{A}b4 \)).
Play went 4 ♕c4 exd5 5 ♝xe4 ♝xe4 6 ♝xe4 (or 6 ♝xd5 ♝c6 7 ♝g5 ♝d4!). Black to play

White is hoping for 6 ... ♝xg4 7 f5!. Then he would threaten ♝xg4 and survive the crisis (7 ... ♝h5 8 ♝c3 ♝f8 9 ♝xc7 and 10 c4).

But Black shot back 6 ... ♝c6!. Thanks to opening the long diagonal, he would win after 7 ♝ad1 ♝xd5 8 ♝xd5 ♝d8 9 ♝d1 ♝xd5 10 ♝xd5 ♝d6!.

White played the forced 7 ♝f3 but 7 ... ♝d7 threatened 8 ... ♝xf3+ 9 ♝xf3 ♝xg4 as well as 8 ... ♝a3! (and the immediate 8 ... ♝xg4). Black won after 8 ♝c3 ♝xg4 9 ♝xc6 ♝xc6 10 ♝f3 ♝xf3+ 11 ♝xf3 ♝d2.

7 Bayonet b-pawn

A queenside pawn majority is often an endgame asset. But it can also be a middlegame target for an enemy b-pawn supporting a Philidor knight.

In the following position, Black has two good ways of proceeding. One is 1 ... ♝c4 to force 2 ♝e2 ♝fc8 3 c3. Then he can favorably blow open lines with ... b5-b4. But there's a tactical problem: 3 ... ♝c6 allows 4 b3, trapping the rook.
Black chose the alternative, 1 \( \text{wc6} \)!. His idea is 2 \( \text{a6} \) and 3 \( \text{b5} \), since that would threaten to win the c-pawn after 4 \( \text{b4} \).

In this case, the tactics help Black, e.g. 2 \( \text{Be2} \) \( \text{a6} \) 3 \( \text{a4} \) walks into 3 \( \text{b6} \), which threatens \( \text{xa4} \) (4 \( \text{b3? wc3} \) or 4 \( \text{a5 wb4} \)).

White chose 2 \( \text{wh3?} \) instead and Black made steady progress: 2 \( \text{b5} \) 3 \( \text{a3} \) a5 4 \( \text{Bd2} \) \( \text{b4} \) 5 axb4 axb4 6 \( \text{Bd1} \) \( \text{a8} \)!

White has protected c2 but ruined his piece coordination. Black will exploit it with \( \text{xa1} \) and \( \text{f6-e4} \) or \( \text{b6-c4} \).

White didn’t last long: 7 \( \text{Be3} \) \( \text{f6} \) 8 \( \text{Bd3} \) \( \text{e4} \) 9 \( \text{Bd1} \) \( \text{a1} \) 10 \( \text{wh4} \) \( \text{wb6} \) (threat of 11 \( \text{xd4} \) 12 \( \text{xd4} \) \( \text{xc1} \)). He resigned after 11 \( \text{g4} \) \( \text{h5} \) in light of 12 \( \text{e5} \) \( \text{f6} \) 13 \( \text{wh3} \) \( \text{xe5} \) 14 dxe5 \( \text{xf2} \) or 13 \( \text{xf4} \) \( \text{g5} \). Another case:
Since White’s bishop discourages ... \textemdash b8 it doesn’t seem that Black can achieve much by opening the b-file. But he got good things going with his queen, 1 ... \textit{c6}!.

Black readied ... b5 followed by ... a5, ... \textit{d7}, ... \textit{d6}, ... \textit{fb8} and eventually ... b4. If White opens the center, 2 c4 dxc4 3 \textit{xc4}, Black has the better of 3 ... b5 and ... \textit{d5}.

Instead, White tried to attack the king, 2 \textit{e3} b5 3 g4 a5. But by then it was clear the attack wasn’t working. White should have tried to cut his losses by trading queenside pawns (4 a3 b4 5 axb4 axb4).

Instead, the game went 4 \textit{d1} b4 5 h4 a4.

Black threatens to collapse the queenside chain with ... a3. For example, 6 h5 a3! 7 hxg6 fxg6 8 \textit{c2} axb2 and now 9 \textit{xb2} bxc3!!.

Black’s king would be safe but White has lost the queenside.

White’s best try may be 6 \textit{xf6} \textit{xf6} 7 h5. Instead, he went downhill, 6 \textit{b1} \textit{e4} 7 f3 \textit{d6} 8 \textit{g3} \textit{fb8} 9 \textit{f2} \textit{b6} 10 \textit{g2} \textit{c4} 11 \textit{el} \textit{d6}, and lost.
8 Exploiting c6

In several 1 d4 and 1 c4 openings Black’s best method of developing his light-square bishop is a fianchetto, ... ♖b7. But ... b6 creates a hole at c6. How to exploit this is a trade secret known to every master.

Botvinnik – Donner
Amsterdam 1963
White to play

The priyome typically consists of three steps: (a) trade light-square bishops, (b) secure c6 with b4-b5, and (c) occupy the hole with a knight.

White began with 1 ♖d4! ♖xg2 2 ♖xg2. Black could avoid the bishop swap only through concessions. For example, 1 ... ♖d5 2 e4! ♖f6 and 3 e5! ♖d5 4 ♖c4 ♖c8 5 ♖c1 and ♕g4 gives White a serious edge in space (3 ... ♖xg2 4 exf6!).

The trade prompted a battle for control of the g2-a8 diagonal. Play went 2 ... ♖c7 3 ♖b3 ♖fc8 4 ♖fc1 ♖b7+ 5 ♕f3!.

Now 5 ... ♕xf3+ 6 ♖2xf3 and ♖c6/♖c2/♖ac1 is quite bad for Black. So the game continued 5 ... ♖d5 6 e4 ♖f6 and now 7 b5! a6 8 ♖c6! ♖f8 9 a4!.

Black to play
Exploiting c6

The priyome has shut Black’s heavy pieces out of the game. Trying to oust the c6-knight with 9 ... \(\texttt{\textbf{b}8}\)? allows 10 \(\texttt{\textbf{xf}6}\)!. And if he prepares ... \(\texttt{\textbf{b}8}\) with 9 ... \(\texttt{\textbf{e}8}\) he invites 10 \(\texttt{e5}\)!, threatening \(\texttt{\textbf{e}7+}\) and \(\texttt{\textbf{x}b7}\).

Black tried to escape via trades, 9 ... \(\texttt{a\textbf{x}b}5\) 10 \(\texttt{a\textbf{x}b}5\) \(\texttt{\textbf{a}1}\) 11 \(\texttt{\textbf{a}1}\) \(\texttt{a}8\). But 12 \(\texttt{d}1\)! kept enough material on the board to make the c6-knight matter.

After 12 ... \(\texttt{\textbf{e}8}\) 13 \(\texttt{c}4\) \(\texttt{c}5\) 14 \(\texttt{e}5\)! there were tricks on the long diagonal (14 ... \(\texttt{c}7\) 15 \(\texttt{d}7\)! \(\texttt{xd}7\) 16 \(\texttt{e}7+\) and 17 \(\texttt{x}b7\)).

The end was 14 ... \(\texttt{c}8\) 15 \(\texttt{a}1\) \(\texttt{c}7\) (15 ... \(\texttt{a}8\) 16 \(\texttt{x}a8\) \(\texttt{x}a8\) 17 \(\texttt{e}7+\)) 16 \(\texttt{a}7\) \(\texttt{x}a7\) (16 ... \(\texttt{c}8\) 17 \(\texttt{x}b6\) and wins) 17 \(\texttt{\textbf{c}7}\) \(\texttt{\textbf{c}7}\) 18 \(\texttt{x}b6\) resigns.

Even if White does not occupy c6, the threat to do so can be powerful:

\begin{center}
\textbf{Aronian – Carlsen}
Elista 2007
\textit{White to play}
\end{center}

There’s an alternative priyome in this kind of position. White can try to shut out Black’s bishop and KN with \(\texttt{f2-f3}\) and \(\texttt{e3-e4}\). But 1 \(\texttt{f3}\) is ineffective here because after 1 ... \(\texttt{d}5!\) 2 \(\texttt{e4}\) \(\texttt{f}4\) gives Black kingside play he doesn’t deserve (3 \(\texttt{e}3\) \(\texttt{g}5\); 3 \(\texttt{f}2\) \(\texttt{e}5\)).

White preferred targeting c6 with 1 \(\texttt{a}6!\). Play went 1 ... \(\texttt{a}6\) 2 \(\texttt{a}6\) \(\texttt{xc}1+\) 3 \(\texttt{xc}1\) \(\texttt{b}8\).

Before White can exploit c6 he prepared with 4 \(\texttt{c}4\) \(\texttt{d}8\) and 5 \(\texttt{h}3\) \(\texttt{e}8\) 6 \(\texttt{b}5!\). He may decide to create a passed pawn with \(\texttt{c}6/\texttt{xc}6/\texttt{bxc}6\). Or he could restrict Black further with \(\texttt{a}3\-\texttt{a}4\) and a supported \(\texttt{a}3\).
Charging h-pawn

What’s more, White need not hurry. The game went 6 ... \( \text{c}5 \) 7 \( \text{e}2 \) \( \text{c}5 \) 8 \( \text{d}1! \) \( \text{c}8 \) 9 \( \text{f}3 \) \( \text{d}8 \) 10 \( \text{c}1 \) \( \text{d}6 \) 11 a4.

Black’s pieces are still restricted (11 ... \( \text{d}7 \)? 12 \( \text{c}6 \)) and \( \text{a}3 \) is coming. Black chose to force matters, 11 ... e5 12 \( \text{f}5 \) \( \text{xf}5 \) 13 \( \text{x}5 \) f6 14 \( \text{e}4 \) \( \text{f}7 \).

But after 15 \( \text{a}3! \) \( \text{h}8 \) 16 \( \text{h}2 \) \( \text{g}8 \) 17 \( \text{d}6 \) White methodically enlarged his advantage until it won.

9 Charging h-pawn

Pushing White’s h-pawn to h5 is a fundamental idea after ... g6. What makes it particularly attractive is when Black cannot keep the file closed.

Botvinnik – Gligoric
Moscow 1956
White to play

Black has just played ... \( \text{h}6 \). His goal is to occupy d4 with a knight.
But there’s a drawback: After 1 h4! Black cannot play 1 ... h5. The knight move is a priyome tipoff. When a master sees ... g6 and ... Ḍh6 he at least looks at h2-h4. It’s simple pattern recognition.

There followed 1 ... d6 2 d3 Ḍb8. Black lacked an easy defense on the kingside because 2 ... Ḍg4 3 h5! Ḍxh5? loses a piece (4 Ḍxh6 Ḍxh6 5 g4!).

The game went 3 h5 Ḍd7 and then 4 Ḍxh6 Ḍxh6 5 hxg6 hxg6.

White to play

White played the dramatic 6 Ḍc1!. It’s based on 6 ... Ḍxc1?? 7 Ḍxh8 mate.

After the forced 6 ... Ḍg7 and 7 Ḍxh8+ Ḍxh8 8 Ḍh6 Black could have defended better with 8 ... Ḍf6 but lost after 8 ... Ḍxc3+ 9 bxc3 e6?. White can mount a strong attack with 10 Ḍd2 and Ḍh1/Ḍg5.

There’s another trigger that prompts a master to consider pushing his h-pawn. This occurs when his opponent plants a knight on g3 or g6.
Charging h-pawn

White has just played \( \text{Q}g3 \), to protect the e4-pawn and prepare \( \text{Q}h5 \). His position appears promising, e.g. 1 ... \( b4 \) 2 \( \text{Q}xf6 \) \( \text{Q}xf6 \) 3 \( \text{Q}d5 \).

But after 1 ... \( h5! \) he had no good answer to the threat of 2 ... \( h4 \) and 3 ... \( \text{Q}xe4 \). White had to try 2 \( h4 \).

But this made 2 ... \( b4! \) stronger because White would be losing after 3 \( \text{Q}d5 \) \( \text{Q}xd5 \) 4 \( \text{Q}xh4 \) \( \text{Q}xe4 \). White had to try 3 \( \text{Q}xf6 \) \( \text{Q}xf6! \) 4 \( \text{Q}d5 \) \( \text{Q}h4 \) but after 5 \( \text{Q}h5 \) \( \text{Q}g5! \) his kingside was fatally loosened.

Instead, White went 3 \( \text{Q}xf6 \) \( \text{Q}xf6! \) 4 \( \text{Q}d5 \) \( \text{Q}h4 \) but after 5 \( \text{Q}h5 \) \( \text{Q}g5! \) his kingside was fatally loosened.

The h-pawn charge is a familiar priyome in many openings with an early \( \text{Q}g3 \). For example, 1 \( d4 \) \( \text{Q}f6 \) 2 \( c4 \) \( e6 \) 3 \( \text{Q}c3 \) \( \text{b4} \) 4 \( e3 \) \( \text{Q}c6 \) 5 \( \text{Q}e2 \) \( d5 \) 6 \( a3 \) \( \text{Q}e7 \) 7 \( \text{Q}g3 \) and now 7 ... \( h5! \) 8 \( \text{Q}d3 \) \( h4 \) 9 \( \text{Q}ge2 \) \( h3! \).

But driving away a knight should be part of a greater goal, as in that case, when Black induced weaknesses with 9 ... \( h3 \). Another example:

![Diagram](image)

Geller – Flohr
Moscow 1950

White to play

Black’s last two moves were ... \( \text{Q}g6 \) and ... 0-0. The priyome is in the air – but the timing has to be right. White played 1 \( h4? \) and had nothing after 1 ... \( c4! \) 2 \( h5 \) \( \text{Q}e7 \).

His attempt to force matters on the kingside, 3 \( g4 \) \( b5 \) 4 \( g5?! \) \( \text{Q}c5 \) 5 \( \text{Q}f4 \) \( \text{Q}f5 \) 6 \( \text{Q}h1 \) \( h5g5 \) 7 \( \text{Q}xg5 \) \( \text{Q}e7 \), left him overexposed and he eventually lost.

What went wrong? White should play 1 \( \text{Q}f1! \). Then when h2-h4-h5 drives the knight off g6, White can threaten mate on h7 with \( \text{Q}d3! \).
10 Anti-Isolani

An isolated d-pawn often gives a player more space and ample opportunity to attack the wings. But there is an anti-Isolani priyome.

Korchnoi – Karpov
World Championship 1981
Black to play

The priyome calls for swapping all or most minor pieces and then tripling heavy pieces against the pawn. Here White had helped Black by mistakenly trading a wonderful knight on e5 for a bishop on c6.

Then came 1 ... \textit{\texttt{\textbf{\textcolor{red}{d6}}} 2 g3 d8 3 d1 b6} (not 3 ... d7? 4 a4) 4 e1 d7 5 cd3 d6. But White can defend d4 with 6 e4 and meet a knight maneuver to f5 with d4-d5!.

There followed 6 ... c6 7 f4 d5! so that 8 e4 d4! forces a favorable queen trade (9 xc6 xc6 10 d5 d4!).

White retreated 8 d2 but after 8 ... b6 the threat of ... d4 prompted 9 xd5 xd5 and then 10 b3 c6 11 c3 d7!.

White to play
Black is not threatening the pawn because after trades on d4 White has $\mathbb{N}xb7$. But Black is threatening 12 ... e5!.

White’s 12 f4 was forced and then came 12 ... b6! 13 $\mathbb{N}b4$ b5 (threat of 14 ... a5) 14 a4 $\mathbb{B}xa4$ 15 $\mathbb{W}a3$ a5 16 $\mathbb{N}xa4$ $\mathbb{W}b5$ 17 $\mathbb{N}d2$.

Black could penetrate with his rook, 17 ... $\mathbb{N}c8$ and ... $\mathbb{N}c1+$. But he preferred 17 ... e5! 18 fxe5 $\mathbb{A}xe5$ 19 $\mathbb{W}a1$ $\mathbb{W}e8$! 20 dxe5 $\mathbb{N}xd2$ and soon won.

If no minor pieces have been traded, the priyome calls for a swap of the knights. The reason is that knights tend to benefit from the outpost squares on the c- and e-files that the d-pawn controls. Also knights tend to interfere with the doubling or tripling of enemy heavy pieces.

**Anti-Isolani**

![Chessboard with moves](image)

**Karpov – Spassky**

Montreal 1979

*White to play*

White began with 1 $\mathbb{Q}e5!$, which prepares $\mathbb{Q}f3$ and $\mathbb{W}b3/\mathbb{Q}xd5$. Then came 1 ... $\mathbb{Q}e6$ 2 $\mathbb{Q}xc6$!

Note that 2 ... bxc6 would create the more easily defended ‘hanging pawns.’ But 3 $\mathbb{Q}a6$! would cost the Exchange.

So Black retook 2 ... $\mathbb{N}xc6$ and then came 3 $\mathbb{Q}f3$ $\mathbb{W}b6$ 4 $\mathbb{Q}e5$, raising the prospect of $\mathbb{Q}xf6/\mathbb{Q}xd5$ at some point.

Black felt obliged to trade knights, 4 ... $\mathbb{Q}e4$ 5 $\mathbb{W}e2$ $\mathbb{Q}xc3$ 6 $\mathbb{Q}xc3$ $\mathbb{A}d8$. 
Confronting g2-g4 with ...h5

White proceeds with the tripling of heavy pieces, with the queen in the rear, 7 ♞d3 ♠cd6 8 ♞fd1 ♠6d7 9 ♞1d2! ♦b5 10 ♦d1 b6.

But Black is not vulnerable to the pin that won the previous game (11 e4? dxe4).

Instead, White probed for a kingside weakness while Black’s pieces were tied to d5: 11 g3 ♦f8 12 ♞g2 ♦e7 13 ♦h5 a6 14 h3 ♦c6 15 ♞h2 a5.

White’s winning plan began with 16 f4 and a threat of f5-f6. Then came 16 ... f6 17 ♦d1 ♦b5 18 g4. Black overlooked the threat and played 18 ... g5 19 ♦h1 ♦c6, allowing 19 f5! ♦f7 20 e4!. Now 20 ... dxe4?? loses a rook, 21 ♞xd7. So Black answered 20 ... ♦g7 and was lost after 21 exd5.

11 Confronting g2-g4 with ... h5

Computers have taught us not to be afraid of advancing our g-pawn two squares. That push is crucial in many attacks but is also useful in purely positional middlegames because it gains so much kingside space.

Yet g2-g4 can begin a positional horror story if it’s met strongly by ... h5.
Confronting g2-g4 with ...h5

Nimzovich – Capablanca
New York 1927
White to play

Textbooks used to say White was wrong for seeking g2-g4 in this much-anthologized example. Today we know he would stand well after 1 f2 and 2 g4!. Also after 1 ... h5 2 d2, 3 c1 and 4 c4.

But he rushed into 1 g4? and was met by 1 ... xe3 2 xe3 h5!. Then if 3 gxh5? xh5 Black can exploit the pawn structure by securing king’s safety (perhaps ... g8-g7) and then ... ah8 and ... e7-f5.

The other problem for White is that 3 h3? is also poor after 3 ... hxg4 4 hxg4 and 4 ... 0-0-0. Black would be able to use the h-file with ... h4/ ... dh8. He can also undermine the White center with ... g5!.

So, White played 3 g5. That’s an ugly move because it virtually rules out f4-f5. It’s not easy to exploit that. But 16 moves later:

Black to play

Black was ready to invade with heavy pieces and eventually won after ... e4 and ... cc4!
This priyome has become familiar in the Berlin Defense endgame. White often plays g2-g4 to drive a knight off f5 and prepare f2-f4-f5.

White’s bishop is a bit bad and Black has a healthier pawn majority. But Black can’t castle because his king has moved. The position is roughly equal.

White has just played 1 \textit{e}2, instead of the safer 1 \textit{g}2. The difference was revealed by 1 ... \textit{h}5!.

White would like to maintain his pawn on g4 by means of 2 \textit{h}3 \textit{hxg}4 3 \textit{hxg}4. But 3 ... \textit{d}4! would be strong because 4 \textit{cxd}4 walks into 4 ... \textit{h}3! 5 \textit{g}2 \textit{xf}3 (6 \textit{xf}3 \textit{d}4 – with check and advantage).

White felt forced into 2 \textit{g}5. Black can’t play 2 ... 0-0. He might be attracted by 2 ... \textit{d}4 3 \textit{cxd}4 \textit{cxd}4 because of 4 \textit{c}2 \textit{d}3 5 \textit{c}3 \textit{b}4 6 a3 \textit{d}5.

But he decided to activate his king at the cost of a pawn: 2 ... \textit{d}7! 3 \textit{xd}5+ \textit{e}6 4 \textit{xd}8 \textit{xd}8. Thanks to ... \textit{h}5/g4-g5 he prepared 5 ... \textit{f}5!. White replied 5 \textit{h}4.
Knight Shift

Thanks to the f5 square that Black won with 1 ... h5 and the crippled White pawn majority, Black is at least equal.

One good winning try is 5 ... ♜d1+ followed by 6 ... ♞a1 and ... a5-a4/ ... ♛a5-c4. Black chose another, 5 ... ♛d5 6 ♛g3 ♛f5 7 ♛g2 ♛d8 – headed for c7 – and had equal chances.

12 Knight Shift

When the e-pawns oppose one another at e4 and e5, a very common priyome is the transfer of a White knight to f5 or a Black one to f4.

Since the kings are typically castled on this wing, the maneuver often exerts attacking pressure in the same way that a White knight on c5 – or a Black one on c4 – exerts positional pressure in 1 d4 d5 games.

Svidler – Jakovenko
Moscow 2008
White to play

A master knows when the kingside knight shift is effective, such as when his opponent has weakened his king position. Here the tipoff was Black’s last move, ... h6.

White replied 1 ♛h4! since Black cannot prevent ♛f5 (1 ... g6? 2 ♛xg6!).

There would have been complications after 1 ... ♛xe4!?, threatening ♛xh4, and 2 ♛g6 ♛xd2 3 ♛xf8 ♛db3!.

But Black averted ♛g6 with 1 ... ♛h7 and 2 ♛f5! ♛xf5? 3 exf5 ♛c6.
The basic priyome was over with 2 ♜f5. But experience in this kind of position tells us to take advantage of the pawn structure further with 4 g4!.

White will exploit d5 and e4 once the knight is driven off f6. There followed 4 ... ♕g8 5 h4! ♚h7 6 ♖d5 ♗c8 7 axb5 axb5 8 ♗f3! ♘b8 and now 9 g5! hxg5 10 ♘e4!.

The attack would roll on after 10 ... gxh4 11 ♘h1! ♗f6 12 ♖xf6+ ♗xf6 13 ♗g1 or 10 ... ♗f6 11 ♖xf6+ ♗xf6 12 ♘h1! and ♗g1.

Black tried 10 ... ♗d7 instead. After 11 hxg5 ♗xg5 12 ♗xg5 ♗xg5 White eventually won with 13 ♗a6 ♗e7 14 ♗a7 – and 13 ♗xd6! is even stronger.

But when an intruding knight can be driven back it can turn out to be liability.

Black’s knight has just landed on f4. It watches g2, discourages ♖d5, and may prepare a pawn storm, ... g5/ ... h5 and ... g4.
Knight Shift

But 1 h4! was strong because it threatens 2 g3!, now that White is not losing a pawn at h3.

Black would simply drop a pawn after 1 ... d6? 2 g4. Better is 1 d8 but Black would be clearly in retreat after 2 g3! d6 3 a4.

So he played 1 d7. But after 2 g3! it was clear that 2 ... h5 3 h2! h7 4 hg4! would be more than unpleasant.

The poor knight advanced, 2 ... h3+ and 3 g2 g5 4 hxg5 hxg5 5 e2!.

Black to play

White has met the threat of 5 ... g4 6 -moves xf2+. He also made a threat of his own, h2-g4/h1, to win the trapped knight.

Black’s best practical chance would have been 5 ... d4+! 6 gxf4 exf4 – a variation on the f5 sacrifice we’ll examine in Chapter Three.

But he underestimated how much trouble the knight at h3 is in and lost after 5 ... h6 6 h2! g6 7 h1 g4!? 8 exg4 xd2 9 xd2 f5 10 xf5 xf5 11 xh3!. Or 9 ... f4+ 10 gxf4 xg4 11 xg1 and White wins.

The knight shift is common on the Black side of a King’s Indian Defense and the White side of a Ruy Lopez, Giuoco Piano or Two Knights Defense. In the latter cases, White typically plays bd2-f1-g3-f5 or -e3-f5. In fact, Wilhelm Steinitz made the maneuver to f5 famous by adopting it even before he castled.
13 Irregular Recapture \ldots fxg6

‘Pawns should capture towards the center’ is sound advice to beginners. But you’re no longer a beginner. Masters use a priyome to break the rule.

Spassky – Petrosian
World Championship 1969
White to play

White has just played e4-e5, prompting \ldots \texttt{d5}. He intends to use the e4 square, after 1 \texttt{xg6 hxg6}, in a kingside attack.

For example, 2 \texttt{e4} would prepare \texttt{fg5} followed by \texttt{g4-h4} and \texttt{h7+}. By retaking towards the center Black can’t counter \texttt{g5} with \ldots h6!.

True, he could play 2 \ldots f6 instead. But 3 exf6 gxf6 4 \texttt{h4} favors White. Also, White has the edge after 2 \ldots c5 3 \texttt{d6}. And on 2 \ldots \texttt{e7} 3 \texttt{g5}:

Black to play

The \texttt{xe7} trade is excellent in view of \texttt{d6} or \texttt{fg5/g4-h4/ a3-h3}.
Irregular Recapture \( \ldots \text{fxg6} \)

But this didn’t happen. Black answered 1. \( \text{ hxg6} \) with 1. \( \text{ ... fxg6!} \). That killed White’s kingside hopes since \( \text{g5} \) can now be met by ... \( \text{h6} \).

Yes, \( \text{f7} \) and \( \text{e6} \) are weakened. But they cannot be exploited. White tried to exert positional pressure with 2. \( \text{ d2 e7!} \) 3. \( \text{ e4 f8} \) 4. \( \text{ a5} \) but ran out of steam after 4. ... \( \text{c8} \) 5. \( \text{ c1} \) \( \text{a6} \) 6. \( \text{g4 h6} \) 7. \( \text{e4 w7} \) 8. \( \text{h4 w6} \) and drew.

The power of ... \( \text{fxg6} \) is so great that allowing it can be a grave mistake.

![Chessboard diagram]

Sveshnikov – Balashov
Moscow 1976
White to play

Instead of defending the threatened e-pawn, White preferred 1. \( \text{ hxg6} \).

It’s not hard to understand why: If Black castles kingside after 1. ... \( \text{hxg6} \) White would have an easy attack based on \( \text{f4} \), \( \text{g5} \) and \( \text{g4-h4} \).

White might prefer 2. \( \text{ g5} \) to stop ... 0-0-0. If Black responds 2. ... \( \text{e7} \), he can land in a bad-B-vs.-N middlegame after \( \text{xe7} \) and \( \text{bd2-b3-d4} \).

Nevertheless, 1. \( \text{ hxg6} \) was bad because of 1. ... \( \text{fxg6!} \). Then Black can safely castle kingside – because of ... \( \text{h6} \) – and use the half-open file.

Play went 2. \( \text{ f4} \) 0-0 3. \( \text{ g3 e7} \) 4. \( \text{bd2 f5} \).
Black has a strong plan of attacking f2 with ... h6!, ... \textit{h}f7, ... \textit{a}f8, ... \textit{b}6 and a mixture of ... \textit{x}g3 and ... g5-g4!

White could not establish his d4 outpost with 5 \textit{b}3 because of 5 ... a4! and he eventually lost after 6 \textit{h}1 \textit{b}6 7 \textit{c}2 \textit{ad}8 8 \textit{e}2 h6! 9 h3 g5!.

\textbf{14 Indian Space-Grab}

One of the more elaborate priyomes arises in the King’s Indian Defense/Reversed. The key is the space-grabbing advance of the e-pawn.

By not advancing his e-pawn to e4, White reduces the center play Black gets from ... exd4. But Black gains ground for attack after 1 ... e4!.
Indian Space-Grab

The basic moves of this priyome are ... $\text{Qf5}/ $ ... h5 and ... $\text{Bd7}$-$f8$-$h7$. That’s a lot more than for most priyomes. But it puts Black into position for a potent attack based on ... $\text{Wd7}/ $ ... $\text{h3}$ and/or ... $\text{g5}/ $ ... h4.

White has so few defensive resources that he tried to open the queenside or center to distract Black, 2 b4! $\text{Qf5}$ 3 h3 h5 4 $\text{Bf4}$ $\text{Bd7}$ 5 a4 $\text{f8}$.

But after 6 c5? Black sealed the center with 6 ... d5!. It was evident after 7 b5 $\text{Bh7}$ 8 $\text{Bd2}$ g5 9 $\text{Bb2}$ $\text{Wd7}$ 10 $\text{h2}$ $\text{h6}$ that Black’s attack was faster.

White’s last chance for play was 11 a5, intending 12 a6!.

Black to play

Black crashed through with 11 ... $\text{g4}$! 12 hxg4 hxg4. He is preparing to invade on the h-file with ... $\text{g7}$/ ... $\text{h8}$ and also has ... $\text{f3}$+ coming up.

White was lost soon after 13 $\text{h1}$ $\text{f3}$+! 14 $\text{xf3}$ gxf3 15 $\text{g1}$ $\text{xf4}$! 16 exf4 $\text{g7}$! and ... $\text{h8}$.

The kingside expansion allows for a variety of sacrifices and methods to pursuing an attack. Here’s a colors-reversed version of it.

Chuchelov – Arlandi
Mondariz 2000
White to play
White may try to push his pawn to h6. If Black replies ... g6, he creates a hole at f6 that White can exploit with \( \text{Wh}2/\text{g}5/\text{xe}7 \) and \( \text{h}2-g4-f6+ \).

Instead, White went for mate with 1 \( \text{g}5 \). Then on 2 \( \text{Wh}5 \) h6, he could decide whether to retreat the knight – followed by a piece sacrifice on h6 – or 3 \( \text{e}3 \) with the idea of 3 ... hxg5 4 hxg5 and \( \text{g}4-f6+ ! \).

Black met 1 \( \text{g}5 \) with 1 ... \( \text{e}8 \) so that 2 \( \text{Wh}5 ? \text{gx}g5 \) 3 hxg5 (or 3 \( \text{x}g5 \) f5! would secure the kingside (4 gxf6?? \( \text{Wh}5 \)).

After 2 \( \text{e}3 \) b4 3 \( \text{g}4 \). Black needed to take defensive steps such as 3 ... h6 or 3 ... \( \text{h}8 \). Instead, he allowed a standard sacrifice, 3 ... \( \text{a}6 ? \) 4 \( \text{f}6+! \text{gx}f6 \) 5 exf6 \( \text{xf}6 \) 6 \( \text{Wh}5 \).

White would win quickly after 6 ... \( \text{hx}g5 \) 7 \( \text{Wh}5+ \text{h}8 \) 8 \( \text{f}6+ \) and \( \text{h}6 \).

Black created a flight square for his king, 6 ... h6 and then 7 \( \text{Wh}6 \) \( \text{hx}g5 \) 8 \( \text{Wh}5+ \text{h}7 \). But White finished off with 9 \( \text{Wh}5+ \text{g}8 \) 10 \( \text{h}6 \) and a check.

### 15 Undoubling Outpost

Pawns become harder to defend as they advance. Doubled pawns become even weaker. But in this Priyome, a liability becomes an asset, as a doubled pawn advances to serve as anchor for a knight outpost.

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![Chessboard Diagram](image.png)

**Ross – Lesiege**

Quebec 1990

*Black to play*
White wants to attack the e5-pawn and force ... f6 or ... d6. Then he can open the center with f2-f4 or d2-d4. Or he could leave the pawn structure intact and try to exploit it with the knight shift to f5.

Black replied with a priyome, 1 ... c5! and 2 b2 f6 3 d3 b8!. He stopped d3-d4 and readied ... c6-d4, which would make the knight the best minor piece on the board.

Then if White captures the knight, ... cxd4 will undouble the pawns. White would have no compensation for his lack of space and unfavorable N-vs.-B matchup. On the other hand, if White ousts the knight from d4 with c2-c3, he grossly weakens his d3-pawn.

Play went 4 c3 e6 5 d1 c6 6 e3.

Now 6 ... d4 would have given Black a fine game. He chose to prepare queenside castling first, with 6 ... d7 and 7 h4 g6.

White appreciated how good 8 ... 0-0-0 and ... d4 would be so he tried, 8 f4 exf4 9 xf4 g5! and 10 xf6 xf6 11 xf6. But he was lost after 11 ... f8! 12 xg5 g7! (13 f3 xf3 and ... xg5).

This priyome has a kingside version, when xf6 and ... exf6 have been played. For example, 1 d4 f6 2 c3 d5 3 g5 c6 4 xf6 exf6 5 e3:
Should Black make his bad bishop worse? Yes, because 5 ... f5! secures a fine outpost at e4. White will be reluctant to play f2-f3, because that weakens e3. And only one bishop is left to attack e3 – Black’s.

In one instructive game White tried 6 d3 g6 7 ce2, preparing c2-c4. Then came 7 ... d7 8 f3 d6! and 9 0-0 0-0 10 b3 f6 11 c4 e4.

Ousting or capturing the e4-knight will favor Black. He gave his opponent another way to undouble the pawns, after 12 cxd5 cxd5 13 df4 e6. White passed up xe6 but lost after 14 a3 f6 15 b4 g5! and ... g4.
Securing e5 with ...g5!?

16 Securing e5 with ... g5!?

When White trades his d-pawn in a Sicilian Defense (1 e4 c5 2 d4 cxd4) he gets a splendid square at d4 for a knight. Black has his own outpost at e5 but White can challenge it with f2-f4. The sharpest way for Black to secure control of e5 is the doubled-edged priyome ... g5.

White has a typical attacking setup that would allow him, for example, to meet ... 0-0 with h2-h4 and g4-g5, with good chances.

If Black counters with the ... d5 priyome she doesn’t have enough compensation for a pawn after 1 ... d5?! 2 e5 dxe4? 3 dxe4 dxe4 4 dxe4.

But 1 ... g5! wins control of e5. The Black knights would take over the game after 2 fxg5 hxg5 3 xg5 e5 and then 4 g3 xg4 5 xe7 xe7!.

46
Securing e5 with ...g5!?

Black retakes with his king because she wants her queen to threaten ...\(\textsf{\texttt{\#b6}}\)!. For example, 6 \(\textsf{\texttt{h3}}\) \(\textsf{\texttt{\#b6}}\)! 7 \(\textsf{\texttt{\#e2}}\) \(\textsf{\texttt{\#g8}}\)! and White crumples.

But 1 ... g5 is not just a tactical shot. It’s a strategic idea that wins e5 one way or the other. Instead of 2 fxg5, White tried 2 f5. But after 2 ... \(\textsf{\texttt{\#e5}}\) 3 \(\textsf{\texttt{\#h3}}\) \(\textsf{\texttt{\#d7}}\)! it was evident that the safer king was Black’s.

White defended his g-pawn with 4 \(\textsf{\texttt{\#e2}}\) but Black had a series of blows: 4 ... h5! 5 fxe6+ fxe6 6 gxf5 g4 7 \(\textsf{\texttt{\#g2}}\) \(\textsf{\texttt{\#xc3}}\)!

Then came 8 bxc3 \(\textsf{\texttt{\#xe4}}\) 9 \(\textsf{\texttt{\#f2}}\) \(\textsf{\texttt{\#xh5}}\) 10 \(\textsf{\texttt{\#f4}}\) g3! 11 hxg3 \(\textsf{\texttt{\#xf4}}\) 12 \(\textsf{\texttt{\#xf4}}\) \(\textsf{\texttt{\#h1+}}\) 13 \(\textsf{\texttt{\#f2}}\) \(\textsf{\texttt{\#h2+}}\) 14 \(\textsf{\texttt{\#e3}}\) \(\textsf{\texttt{\#g5}}\) and Black won. Or 14 \(\textsf{\texttt{\#g1}}\) \(\textsf{\texttt{\#g2+}}\) 15 \(\textsf{\texttt{\#h1}}\) \(\textsf{\texttt{\#h8+}}\).

Of course, ... g5 weakens many squares in Black’s camp. When White can maintain an initiative, this priyome can turn out badly:

![Chessboard](image)

J. Polgar – Topalov
Hoogeveen 2006

Black played 1 ... g5!? and then 2 \(\textsf{\texttt{\#e2}}\) \(\textsf{\texttt{\#bd7}}\). White rejected 3 h4 \(\textsf{\texttt{\#g8}}\)! 4 hxg5 hxg5 because after ... \(\textsf{\texttt{\#e5}}\) her own g-pawn will be under fire and she hasn’t benefited from opening the h-file.

So the game proceeded with 3 0-0-0 \(\textsf{\texttt{\#e5}}\) 4 h3 \(\textsf{\texttt{\#fd7}}\) 5 f4! and then 5 ... gxf4 6 \(\textsf{\texttt{\#xf4}}\) b5 7 \(\textsf{\texttt{\#hf1}}\) \(\textsf{\texttt{\#b7}}\) 8 \(\textsf{\texttt{\#f2}}\). White is taking aim at f7 but that square is safe as long as \(\textsf{\texttt{\#xe5}}\) can be met by ... \(\textsf{\texttt{\#xe5}}\).
However, it is easier to play White's position than Black's. She executed a nice knight maneuver, 8 ... c8 9 c2! g7?! 10 c3 h7 11 h5! h8 12 b1. An inexact move, 12 ... c5?, weakened control of e5.

White could have broken through with 13 f5! exf5 14 xe5! xe5 15 xf5 and xh7 (15 ... h8?? 16 xf7 mate).

17 f-pawn vs. c-pawn

As mentioned earlier, the advance of one player's f-pawn may be linked indirectly with the other player's c-pawn: When White plays f2-f3 or f2-f4, a master playing Black may react by looking at ... c5.

Why? Because f2-f3 loosens the g1-a7 line. If the diagonal is blocked by a White pawn at d4, the best way to unblock it is with ... c5!?.

This is a feature of 1 d4 openings, like 1 d4 d5 2 c3 c5 3 g5 bd7 4 f3. The most challenging responses by Black are ... c5 and ... c6. For example, 4 ... h6 5 h4 c5! leads to sharp play after 6 e4 cxd4 7 xd4 e5 8 a4 d4 or 6 dxc5 a5.

On the other hand, ... c5 can leave Black with an isolated d5-pawn following a dxc5 or ... cxd4 trade. Whether that is more of a liability than the White pawn at e3 will depend on piece play.
This position arose out of a Nimzo-Indian Defense when Black met f2-f3 with ... c5!. He wanted to forestall a strong plan of e3-e4-e5!.

Now 1 dxc5? exd3 makes the e3-pawn the main topic of conversation (2 d4 c4). White switched instead to kingside attack with 1 g4!.

Then ... c4 would cripple Black’s counterplay. He preferred 2 h6 3 b3 d7. White cleared d4 and safeguarded his queenside with 4 dxc5! exd5 4 d3 c8 5 d2 c6 6 d4.

It’s harder to improve Black’s position. He tried 6 ... b7 7 a1 a7 8 e2! e5 9 b1 g6 10 f5! c7 11 b2.

White has made huge progress. He will target g7 with e3-h5 and/or h2-h4 and g4-g5. His immediate threat is xh6+.

His attack grew after 11 h7 12 h1 b8 13 e3 and won after 13 e5? (13 e7!) 14 f4! d3 (14 e4g4 15 h3!) 15 d4 b4 16 g5!
18 Kingside Phalanx

When the center is locked with pawns at e4 and e5, the most promising plan is often an advance of the f- and g-pawns. The less enemy counterplay, the greater the chance of success for this pawn phalanx.

Black lost her best chance for queenside play when she doubled her c-pawns earlier. But she appears secure against an opening of the f-file (1 \texttt{Wg3 d6} or 1 \texttt{fxe5 fxe5 2 g5 f6}).

However, 1 \texttt{f5!} is strong. The priyome will be close to decisive if White can get her g-pawn to g5. Slowing that advance with ... h6 only ensures that more of the kingside will be opened after h2-h4!.

Play went 1 ... \texttt{d6} 2 \texttt{g4 h8 3 h4 g8 4 g5}. Black’s best was to compete on the kingside (4 ... g6!) but she chose 4 ... \texttt{b7 5 h1 e8 6 g1 d8}.

White to play
The difficulty of defending against this priyome was illustrated by 7 g6!. Then 7 ... h6 appeared to shut the kingside door. But 8 \( \text{Q}g5! \) threatened a killing check (or mate) on f7. The rest was 8 ... fxg5 9 h\_xg5 e7 10 \text{Wh}2 f8 11 g\_xh6 \text{Qf6} 12 hxg7+ and mates.

That was an ideal version of the advancing phalanx. Usually the defender has chances for counterplay or for stopping a strong \( f4-f5 \).

White felt he had a free hand to double on the f-file. Instead of 1 f5! he chose 1 \( \text{Q}f2?! b6 2 \text{Qe1}?!.

Both players underestimated 2 ... exf4!. Then White would have been only slightly better in the 3 \( \text{Q}xf6 gxf6 \) endgame.

Instead, Black played 2 ... \text{Qg6}?, allowing White to begin the priyome with tempo, 3 f5! and 3 ... \text{Qf6} 4 e4.

White threatened to mobilize the phalanx, with h2-h4, \text{Ah2} and g3-g4-g5. Black tried 4 ... c6 but then came 5 \text{dxc6 Qxc6} 6 a4!.

\[ \text{Keres - Euwe} \\
\text{Amsterdam 1940} \\
\text{White to play} \]

\[ \text{Black to play} \]
Bishop Slide

Black's counterplay is dead: There will be no ... d5 or ... b5.

In the face of an inevitable g3-g4-g5, Black's king made a dash:
6 ... f8 7 d1 e8 8 b3 e7 9 f3 d7 10 h4 c7 11 f1 b7 12 e2 c8.

But White can open a kingside file for his pieces. He played
13 h2 d8 14 g4 f6 15 g2 c8 16 g3 d7 17 d3 f7 18 h1 h8 19 hh3 cc8.

The end came soon after 20 g5! hxg5 21 hxg5 c7 22 d5+ a7 23 d3 xh3? (23 ... fxg5!) 24 xh3 fxg5 25 h7 e7 26 f3 f8 27 g4 f7. Black was so tied to the kingside that White won after 28 b4! axb4 29 a5!.

19 Bishop Slide

The maneuver of a bad, pawn-bound bishop from the queenside to a new life on the kingside is one of the most transforming of priyomes.

It is particularly common in Stonewall formations, such as when Black has pawns at d5, e6 and f5 and slides his ugly light-square bishop from c8 to d7, then e8 and it magically comes to life as a fine piece on h5.

The bishop can also make a powerful entrance in French Defenses.

Hagarova – Gleizerov
Cappelle la Grande 1995
Black to play

Black seems to have been stuck with several disadvantages – backward e-pawn, bad bishop at c8, weakened kingside. This changed with 1 ... d7 2 e3 e8!. 52
If White had seen ... ♗h5 as a threat, he would have tried something like 3 ♞d2 ♗h5 4 ♞d1!.

But instead, there came 3 ♞c1? ♗h5!. Suddenly White was in a bad pin and facing ... ♗g6-h4 or ... ♋d7-f7/ ... ♋af8.

Black won shortly after 4 ♞b1 ♋d7 5 ♝a4 ♝f7 6 ♝c5 ♈e7 7 ♝d3 ♝g6 8 ♈c2 – positional surrender – 8 ... ♝xf3 9 gxf3 ♌f5 10 f4 ♈h4 and ... ♝xd4.

In the next diagram White is preparing ♝c2/♩g5 to threaten h7 and force a kingside weakness. Black had a good choice:

![Chess Diagram](image)

Wang – Akobian
Los Angeles 2003
Black to play

He could have anticipated White with ... ♝c7 and ... ♗g6. Then he rids himself of his bad B, a common idea we’ll examine in the next priyyme.

But he preferred 1 ... ♗h5 and then 2 g4 ♘f7. Even though the bishop looks strange after 3 ♝c2 ♘g8!, Black’s position can steadily improve.

It did after 4 ♝g2 ♝ac8 5 b4 ♝d8 6 ♝d2 e5!. White’s porous king position was exposed before he got a chance to play ♘f4!.

Black had the edge after 7 ♘f5 e4! and 8 ♝g5 ♛a8 9 ♖e6?! ♚xe6 10 ♛xe6 because of 10 ... ♝e8!.

Then 11 ♛f5 g6 would trap the bishop. Black won after 11 ♘xd5 ♝xd5 12 ♘xd5 ♝f7 followed by ... ♝xd5 or ... ♝f3+.
Bishop Tour

20 Bishop Tour

The pawn structure we just looked at suggests another maneuver, a circular tour by a problem bishop. Suppose we scroll back a few moves:

Instead of 1 \textit{\texttt{e}}e3 – which would lead to the previous diagram after 1 ... \textit{\texttt{h}}h8 2 \textit{\texttt{h}}3 \textit{\texttt{d}}d7 3 \textit{\texttt{e}}e1 \textit{\texttt{e}}e8! 4 a3 – White can play the more ambitious 1 \textit{\texttt{g}}g5.

This is based on a sound offer of a poisoned b-pawn (1 ... \textit{\texttt{w}}xb2 2 \textit{\texttt{c}}b5!, which threatens \textit{\texttt{x}}d6 as well as \textit{\texttt{e}}e1-e2, to trap the queen).

But what is the bishop doing on g5? The answer is that White is getting it to its best diagonal: He aims for \textit{\texttt{h}}h4-g3!. A trade of bishops would make e5 more vulnerable and leave one bad bishop, Black’s.

This priyome is more common in 1 d4 openings when it is Black’s light-square bishop that is the problem piece.

Capablanca – Alekhine
World Championship 1927
\textit{\texttt{B}}lack to \textit{\texttt{p}}lay
 Provoking the e-pawn

White is poised to carry out a version of the b-pawn bayonet, the minority attack with a well-timed b4-b5. He wants to isolate one of Black’s queenside pawns and pound it with heavy pieces.

There are several defensive ideas for Black but his best option is to begin the bishop tour, 1 ... ♖g4!.

It may seem that his threat of ... ♖xf3 just drives White’s knight to where it wants to go, b3. But his intent was revealed after 2 ♖d2 ♗c7 3 ♖b3 ♖h5! (not 3 ... ♖xb4?? 4 ♖c5 ♕a3 5 ♖b3 and the queen is trapped).

The bishop will go to g6. Then White will either allow a trade or concede the splendid b1-h7 diagonal to Black. But White chose 4 ♖c5 ♖xc5 5 ♕xc5 and drew after 5 ... ♕f6 6 b5 axb5 7 axb5 ♖g6! 8 ♖xg6 ♘xg6.

21 Provoking the e-pawn

This subtle priyome employs a bishop to provoke an enemy e-pawn to advance to the fourth rank and concede control of key squares.

It’s time for White to develop his QB. He can do that on e3. Or even d2, if he’s really afraid of ... ♖xc3. But he chose 1 ♖f4!.

If Black’s queen moves, she allows 2 ♖d6!. So play went 1 ... e5 2 ♖e3. How is this position different from the one that occurs after 1 ♖e3?
Provoking the e-pawn

The answer is a gaping hole at d5. White threatens to exploit it with 3 a3 c6 4 d5!.

Black fought for d5 with 2 ... e6. But then came 3 d5! xd5 4 cxd5.

![Diagram](image)

Black to play

The hole is gone but White has created a powerful passed d-pawn. It grew in strength after 4 ... f5 5 d6 d7 6 b6 and 6 ... ac8 7 c7!.

Black’s heavy pieces were shut out of the game and she was lost after 7 ... g4 8 f3 h5 9 ac1 fe8 10 xg4 hgx4 11 e4 g5 12 c5.

Of course, a pawn may increase in strength on the fourth rank. The double-edged nature of this priyome is shown by the next two examples:

![Diagram](image)

Taimanov – Smejkal
Leningrad 1973
White to play

Black’s last move, ... h6, threatens 1 ... xd2 and 2 ... xc4.
As weakening as it may seem, 1 f4 is perfectly safe – and more ambitious than the humble retreat, 1 
\( \mathcal{Q} \) cb1.

But White played 1 e3? and didn’t have a good answer for 1 ... \( \mathcal{A} \) f5!.

Then 2 \( \mathcal{W} \) c1 would lose a pawn to 2 ... \( \mathcal{A} \) d3. No better is 2 \( \mathcal{Q} \) ce4 \( \mathcal{A} \) xe4 3 \( \mathcal{A} \) xe4 in view of 3 ... \( \mathcal{A} \) xe4 4 \( \mathcal{Q} \) xe4 \( \mathcal{A} \) xc4! 5 \( \mathcal{W} \) xc4 \( \mathcal{A} \) xb2.

In the end, White played 2 e4 \( \mathcal{A} \) xd2 3 \( \mathcal{Q} \) d1!? But this allowed 3 ... \( \mathcal{A} \) d7 4 \( \mathcal{A} \) xf6 exf6 5 \( \mathcal{W} \) xd2 \( \mathcal{A} \) xc4. The provoking 1 ... \( \mathcal{A} \) f5! won.

Now consider this:

![Chess Board](image)

**Banusz – Arsovic**

Sarajevo 2012

White to play

Black has just played ... \( \mathcal{A} \) f5. White will choose between 1 e4 and moving the attacked rook. (Not 1 \( \mathcal{Q} \) ce4 because 1 ... \( \mathcal{Q} \) xe4 costs the c4-pawn.)

Did Black just give his opponent a free move? Or can he take advantage of the pawn on e4 and the weakening of d3 and f3?

After 1 e4! \( \mathcal{A} \) d7 2 b3 he played 2 ... e5 and prepared ... f5, a sound policy in similar positions. But here, after 3 \( \mathcal{W} \) c2 \( \mathcal{Q} \) g4 4 h3 \( \mathcal{Q} \) h6 5 \( \mathcal{Q} \) e2 f5, White stood better with 6 exf5!.

Then if Black retakes on f5 with a piece, White gets a fine outpost for his knight at e4 and Black’s knight is badly placed at a5.

Black preferred 6 ... gxf5. But White was winning after 7 f4 and 7 ... \( \mathcal{W} \) e7?! 8 fxe5 dxe5 9 \( \mathcal{A} \) a3 and 10 b4!.

In retrospect, ... \( \mathcal{A} \) f5 wasn’t bad. Black should have played for ... b5, rather than ... f5.
22 Strategic Retreats: $\text{d}3/\text{c}2$ and ... $\text{d}6/...\text{c}7$

When a knight occupies a center square, it may be challenged by an enemy knight. After $1 \text{e}4 \text{c}5 2 \text{f}3 \text{f}6 3 \text{e}5 \text{d}5$, for instance, the best move is $4 \text{c}3!$ since $4 ... \text{xc}3 5 \text{dxc}3!$ – another irregular recapture – will expose Black to pressure along the d-file after $\text{f}4/\text{d}2$ and $\text{d}1$ or $0-0-0$. Black could, of course, retreat rather than trade. But that costs time.

The unwillingness to lose time is why it took so long to appreciate the strategic retreat of a White knight to c2 or b3 or a Black one to c7 or b6.

Kirillov – Botvinnik
Moscow 1931
Black to play

Since an 1894 (!) game, the correct move in this position was believed to be $1 ... \text{xc}3$, even though $2 \text{bxc}3$ is quite nice for White.

But in this game Black chose $1 ... \text{c}7!$ and a new era in strategy began. Unless White can play d2-d4, Black will dominate the center with $... \text{e}5/... \text{c}6$ and eventually $... \text{e}6-\text{d}4$.

Play went $2 \text{f}3 \text{c}6 3 0-0 \text{e}5! 4 \text{b}3 \text{e}7 5 \text{b}2 0-0 6 \text{c}1 \text{f}6$. White’s only counterplay stems from threats to the c-pawn and the prospect of f2-f4.
But he achieved little from the former and never accomplished the latter after 7 \( \text{c1} \)  f5 8 \( \text{a4} \)  a6 9 \( \text{a3} \)  a5.

Black’s edge grew after 10 \( \text{c2} \)  f8d8 11 \( \text{e3} \)  e6 12 d3 \( \text{ac8} \) and it became a winning advantage after his knights landed on d4 and b4.

This pawn structure, the Maroczy Bind, is regarded as slightly favorable for the player with the advanced c- and e-pawns. The strategic retreat is a common feature of it, e.g. 1 e4 c5 2 \( \text{f3} \)  c6 3 d4 exd4 4 \( \text{x}d4 \)  g6 5 c4 \( \text{f6} \)  6 \( \text{c3} \)  g7 and now 7 \( \text{c2} \) !?

But even when the Bind is not possible, the retreat can make sense. If White plays 5 \( \text{c3} \) instead of 5 c4, then 5 ... \( \text{g7} \)  6 \( \text{e3} \)  f6 7 \( \text{e2} \)  0-0 is typically met by 8 \( \text{b3} \) ! to avoid an equalizing ... d5 and prepare a possible \( \text{d}5 \).

The key to the retreat is restraining the enemy center. In the Vienna Game, 1 e4 e5 2 \( \text{c3} \)  f6 3 g3 d5 4 exd5 \( \text{x}d5 \)  5 \( \text{g2} \), the retreat 5 ... \( \text{b6} \) is second best. White’s lead in development counts after 6 \( \text{f3} \)  c6 7 0-0 \( \text{e7} \)  8 \( \text{e1} \) ! and 8 ... f6 9 d4! exd4 10 \( \text{b5} \)  0-0 11 \( \text{bxd4} \).

But Black equalizes with 5 ... \( \text{xc3} \) ! 6 bxc3 \( \text{d6} \).

And it should be noted that the strategic retreat is not limited to c7 and b6 for Black: 1 e4 \( \text{f6} \)  2 \( \text{c3} \)  d5 3 e5 \( \text{fd7} \)  4 \( \text{x}d5 \)  xe5 5 \( \text{e3} \)  c5 6 b3:
Queenside Phalanx

Black to play

Here the surprising 6 ... \( \text{Qe}c6! \) followed by 7 ... e5! secured Black superiority in Groszpeter – Suba, Keskemet 1979.

23 Queenside Phalanx

The hanging pawns and their relatives are among the most double-edged pawn structures, and there are several priyomes available:

Gligoric – Spassky
Bugojno 1978
White to play

One that occurs often in similar positions is 1 dxc5 bxc5 and then 2 b4. White wants to isolate the d5-pawn or to force the c-pawn forward.

But 2 b4? has a tactical flaw that is exposed by 2 ... d4! 3 exd4 exd4 4 \( \text{Q}x\text{d}4? \) and now not 4 ... \( \text{Q}x\text{d}4?? \) 5 \( \text{Q}xh7+ \) but 4 ... \( \text{Q}d5! \) (5 f3 \( \text{Q}x\text{d}4+ \)).
Queenside Phalanx

The proper way is 2 hxg6! and 2 ... hgx6 3 c2, attacking h7 and c5.

Instead, White played 1 e4?.. This allowed a powerful priyome, 1 ... c4! 2 c3 b5. Black will mobilize his pawn phalanx with ... a5 and ... b4.

White needs to counter that in the center or kingside. But 3 f3? dxe3 just drops a pawn. Play went 3 e1 c4! 4 f3 c3 5 c3 f6 b6 and White’s center was frozen (6 e4? allows 6 ... dxe4 7 fxe4 d6 d8!).

The next stage was 6 c2 g6 7 f2 d8 8 f4 f5!.

![White to play](image)

Yes, Black’s bishop has become very bad. But what’s more important is that he is carrying out a strong queenside plan begun with 1 ... c4.

White needs counterplay, such as with g2-g4. But he temporized with 9 h4 d7 10 h1? g7 11 f1 f6! 12 f2. The phalanx prevailed after 12 ... a5 13 c1 b4 14 axb4 axb4 and ... d8-a1/ ... c8/ ... c3!.

But pushing the c-pawn to the fifth rank kills Black’s influence on the center. That becomes significant if White can muster kingside pressure.
Black began the priyome with ... c4 and found he had to defend the kingside with ... f5, e.g. 1 \texttt{Wh}h5 \texttt{We}8. Black would benefit from a queen trade because he can create a passed queenside pawn.

But White has a strong counter, 1 \texttt{Af}e5! and 1 ... b5 2 f4!. He can follow up with g2-g4 or \texttt{Ff}3-g3 with serious kingside threats.

Black defended with 2 ... \texttt{Ac}8 3 \texttt{Af}3 \texttt{Af}6 and 4 \texttt{Ag}3 \texttt{We}8 5 h4 a5 6 h5 \texttt{Ah}8.

White’s rook is headed to g6. His kingside play is at least as promising as Black’s queenside pawns. There followed 7 \texttt{Ff}3 \texttt{Ae}6 8 \texttt{Ag}6 b4 9 b3.

Black needed an open line but now ... a4 and ... b3 is stopped. After 9 ... cxb3 10 \texttt{Ax}b3 he has to worry about defending the d-pawn.

His passed pawn may look good after 9 ... c3. But he would lack play to counter a White buildup, say with \texttt{Wh}3-h4 and \texttt{Ff}1-f3-g3.
Instead, Black tried 9 ... \( \text{hxg5} \) 10 fxe5 \( \text{exf5} \) 11 \( \text{f1} \) cxb3 12 \( \text{xb3} \) and lost soon after 12 ... \( \text{f7} \) 13 \( \text{d6} \) \( \text{h5} \) 14 \( \text{b4} \) \( \text{h6} \) 15 \( \text{xd5} \) and e3-e4.

If the hanging pawns are created, they can be a strength or weakness if one of them advances to the fifth rank. An instructive example was:

![Chess diagram]

Bertok – Fischer
Stockholm 1962
White to play

White should not fear the phalanx because it is premature and would collapse after 1 \( \text{e5} \) c4? 2 b3! b5 3 a4! and 3 ... a6? 4 axb5 axb5?? 5 \( \text{xa8} \).

But White erred with 1 \( \text{dxc5} \)?, thinking the pawns would be weak after 1 ... \( \text{bxc5} \) 2 \( \text{a4} \) followed by \( \text{a3} \) and \( \text{fd1} \).

They turned out to be quite strong following 2 ... \( \text{b7} \) 3 \( \text{a3} \) \( \text{d7} \) 4 \( \text{e1} \) a5 because ... \( \text{b4} \) or ... \( \text{fb8} \) was coming up.

Black was happy to push his c-pawn, 5 \( \text{d3} \) c4! and 6 \( \text{f4} \) \( \text{fb8} \)! because the b-pawn is doomed (7 \( \text{ab1} \) \( \text{f5} \)). He won.

24 Burying the Bishop

When a knight is pinned – \( \text{g5} \) vs. ... \( \text{f6} \), for example – it's natural to 'put the question to the bishop.' This means forcing it, with ... h6, to choose between capturing or retreating. If the bishop retreats and maintains the pin, it risks becoming buried by pawns.
White posed the question with h2-h3 and Black answered it with ...  \textit{\textbf{h}5}. If White plays quietly, say with 1 d3, Black will castle and equalize with ... \textit{\textbf{d}5}!.

The priyome consists of 1 g4! and not much more. White has to be sure that a sacrifice on g4 is unsound. In this case, he can defend after 1 ... \textit{\textbf{x}g}4 2 hxg4 \textit{\textbf{x}g}4 in various ways, including 3 \textit{\textbf{d}d}3 \textit{\textbf{f}f}6 4 \textit{\textbf{e}e}3 and \textit{\textbf{f}f1-g2}.

Black retreated 1 ... \textit{\textbf{g}6} and that freed White to advance in the center, 2 d4 \textit{\textbf{e}e}7 3 d5! \textit{\textbf{b}b}8. The most important feature of the position is simply that Black's bishop doesn't play.

True, Black has ... h5. That is the traditional drawback to the burying priyome. But here, the kingside was easily protected, 4 \textit{\textbf{h}h}4 \textit{\textbf{g}g}8 5 \textit{\textbf{g}g}2! – not 5 \textit{\textbf{x}g}6 hxg6 when the bishop is no longer a liability.

Play continued 5 ... \textit{\textbf{h}5} 6 \textit{\textbf{d}d}2 \textit{\textbf{x}g}4 7 \textit{\textbf{x}g}4 \textit{\textbf{f}f}6 8 \textit{\textbf{e}e}3 \textit{\textbf{c}c}7 and then 9 c4 \textit{\textbf{b}d}7 10 \textit{\textbf{g}g}2! \textit{\textbf{c}c}5? 11 f3.
Black missed his chance to exact some compensation for his bishop by doubling rooks on the h-file (10 ... 0-0-0 11 \textit{\textipa{c}b2 \textipa{h}7!} 12 \textit{\textipa{h}1 \textipa{d}h8}) although White would stand better.

Instead Black chose 11 \ldots \textit{\textipa{c}h7?} with the idea of \ldots \textit{\textipa{g}5-f4} and \ldots \textit{\textipa{g}5}. White executed a good version of the c4-c5 sacrifice that we’ll examine in Chapter Three, 12 \textit{\textipa{b}4 \textit{\textipa{d}7} 13 \textit{\textipa{c}5!} \textit{\textipa{d}xc5} 14 \textit{\textipa{d}c4!} with a threat of 15 d6.

He won after 14 \ldots \textit{\textipa{d}d8} 15 d6 \textit{\textipa{h}4} 16 \textit{\textipa{h}1 \textipa{xb}4} 17 \textit{\textipa{d}d5!}. No better was 14 \ldots \textit{\textipa{d}6} 15 \textit{\textipa{d}d6+} \textit{\textipa{xf}6} 16 \textit{\textipa{c}4 \textipa{c}7} 17 \textit{\textipa{b}xc5 \textipa{xc}5} 18 \textit{\textipa{d}d3} and 19 \textit{\textipa{a}3}.

Perhaps the most famous example of the bishop burial was this:

\begin{center}
\textbf{Winter – Capablanca}

Hastings 1919

\textit{White to play}
\end{center}

White should play 1 \textit{\textipa{d}2} followed by \textit{\textipa{c}4} and f2-f4, a useful priyome in similar positions. He shouldn’t fear 1 \ldots \textit{\textipa{g}5} 2 \textit{\textipa{g}3} because his bishop will emerge at f2 after f2-f3.

This occurs in positions like 1 e4 c5 2 \textit{\textipa{f}3} d6 3 d4 cxd4 4 \textit{\textipa{d}xd4} \textit{\textipa{f}6} 5 \textit{\textipa{c}3} a6 6 \textit{\textipa{e}3} \textit{\textipa{g}4} 7 \textit{\textipa{g}5} h6 8 \textit{\textipa{h}4} g5?! 9 \textit{\textipa{g}3} \textit{\textipa{g}7}. White plays 10 h3 \textit{\textipa{e}5} 11 f3! and \textit{\textipa{f}2/\textipa{d}2} with a nice game.

In the diagram White tried to exploit the pin immediately with 1 \textit{\textipa{d}5?} and was surprised by 1 \ldots \textit{\textipa{g}5!}. This was based on tactics – the 2 \textit{\textipa{x}g5?} hxg5? 3 \textit{\textipa{x}g5} sacrifice is refuted by 2 \ldots \textit{\textipa{d}x5!}.

So White played 2 \textit{\textipa{x}f6+} \textit{\textipa{xf}6} 3 \textit{\textipa{g}3} and his bishop was hopelessly out of play following 3 \ldots \textit{\textipa{g}4!} 4 h3 \textit{\textipa{xf}3} 5 \textit{\textipa{xf}3} \textit{\textipa{xf}3} 6 gxf3 f6!.
25 Another Bayonet

When an opponent has *advanced* queenside pawns that are qualitatively – or quantitatively – superior to yours, they can be challenged by your b-pawn. This is a variation on the minority attack and b-pawn bayonet when the enemy pawns are not advanced.

White’s last two moves were ℃b1 and a2-a3. At first glance he seems to be safeguarding his queenside so he can meet 1 ... b4 with 2 axb4 cxb4 3 ℋe2 and avoid losing the b-pawn now (or the a-pawn later).

But White has two other ideas. One is to go on the offensive with b2-b4!? . One Spassky game went 1 ... ℃a6 2 b4! and 2 ... ℋb6 3 ℋh1 with ideas such as ℋe2/ ℋe3 to target the c-pawn. White had the edge after 3 ... cxb4 4 axb4 ℋfc8 5 ℋe2.

The second idea comes when Black plays 1 ... a5, so that he can open the a-file after 2 ... b4 3 axb4 axb4. Spassky’s answer to that was 2 a4!, taking advantage of Black’s inability to push his a-pawn back to a6.

White neutralizes the queenside after 2 ... bxa4 3 ℋxa4 and 4 b3. The same for 2 ... b4 3 ℋb5 and 4 c4! (after 3 ... ℃a6, 3 ... ℋd4 or 3 ... d5).
A similar b2-b4 idea occurs when Black has a queenside majority.

This is a popular position from the Modern Benoni Defense and is similar to several others. White’s a2-a3 may seem designed to discourage ... b4, as in the previous example.

But the real intent is to play 1 b4!. Then the queenside turns out to be a Black liability after 1 ... \texttt{ac8} 2 \texttt{ac1} cxb4 3 axb4 followed by \texttt{ac2/ae1}.

True, 1 ... c4 creates a protected passed pawn. But after 2 \texttt{ae2} White obtains d4 (3 \texttt{ae3} and 4 \texttt{ad4} or 4 \texttt{bd4}). That, and prospects for kingside attack with g2-g4 or a minority attack with a3-a4, counts more.

\textbf{Quiz}

It’s time to see what you’ve learned. In each of the following positions there is a priyome to follow. First, try to recognize it. Then see if it is appropriate. Does it work in \textit{this} position?

Some positions seem perfect for a priyome that we’ve examined – but it fails tactically. Answers to Quizzes are on pages 207-215.
Quiz

1  Karpov – Kasparov
World Championship 1985
Black to play

Black has a development problem to solve. How does he do it?

2  Alekhine – Novotny
Prague 1943
White to play

Should White try to exploit ... b5 with 1 a4 – or play elsewhere?

3  Ehlvest – Andersson
Belfort 1988
Black to play

Is there a priyome that suggests itself? And would it work?
4 A. Rodriguez – Polugayevsky
Moscow 1985
Black to play

White’s last move was h2-h4. What should Black do?

5 Kostic – Capablanca
Havana 1919
Black to play

What’s the appropriate priyome and how would it turn out?

6 Fuster – Sanguineti
Portoroz 1958
White to play

You can probably spot the priyome. But is this the right time for it?
There is more than one priyome available for Black. Which is best?

What should White do – and how should Black respond?

White is preparing the \( \text{g}3-f5 \) priyome. What can Black do?
Black is virtually forced into 1 ... fxg3. Is there any benefit to 2 fxg3?
Chapter Two:  
Twenty Five Must-Know Endgame Techniques

Mastering the endgame means acquiring two very different kinds of know-how. The most important are techniques. These are the recurring devices that enable you to win favorable endings and draw unfavorable ones.

You already know many of these techniques. Everyone who takes chess seriously has won endgames with zugzwang, even if he or she can’t pronounce it. You can’t win K+R-vs.-K without zugzwang.

Other techniques are more subtle and remain the trade secrets of masters. In this chapter we’ll examine 25 of the most essential.

1 Entry

In most endgames, you must penetrate an enemy defense to win. Even with a significant positional or material edge, you can fail to win because you are simply locked out.

Cosma – Schut
Istanbul 2012
White to play
White has a vastly superior bishop, better pawns and control of the only open file. But there is no way for her king or rook to penetrate.

Black can defend indefinitely with ‘pass’ moves like ... c8–d8. After 20 moves of fruitless maneuvering, White agreed to a draw.

To become a master you need to know how to create an entry for yourself – and how to deny one to an opponent.

White’s king can’t get through the center. His best winning chance lies on the kingside. But Black can shut the door with 1 ... h5!.

White could still try to win, through zugzwang – 2 b3 b7 3 a5 bxa5 4 a3!.

That would be rewarded by 4 ... b6?? 5 a4! and 6 xa5. But if Black is alert he can draw with 4 ... a7 5 a4 b6.

Instead of this, Black blundered with 1 ... b7??. That allowed White to create an entry with 2 h5! gxh5 3 d3.

His plan was e3–f3–g2–h3–h4xh5 and the eventual win of the f- or h-pawn.

If Black’s king runs to the kingside, 3 ... c7 4 e3 d6 5 f3 e6 6 g2 f6, he allows White to queen on the abandoned queenside, 7 a5! bxa5 8 b6.

Black thought he could recover with 3 ... h4!.
Entry

Then 4 gxh4 h5! would seal the kingside. But White won with 4 e3!.

He needed an entry, not extra pawns, e.g. 4 ... hxg3 5 f3 c7 6 xg3 d6 7 h4 e6 8 g5 and White wins.

Entry is needed in all sorts of endings, with rooks, knights, you name it. In the next example, with bishops, White is worse because all of his pawns are on light squares. He would lose if Black’s king or bishop penetrates the queenside.

For example, 1 axb5 axb5 and 2 cxb5 dxb5 threatens a winning ... f1. White is also lost after 2 f3 d4!.

White could pass with 2 d3. But then 2 ... bxc4 3 bxc4 a4! invades and wins – 4 b1 b3 5 d3 a2 6 e2 b1. (White can draw with 3 xc4 xe4 4 xe6! g2 5 c4.)
Nevertheless White drew with the simple 1 a5!. Black’s king can’t penetrate via b6 and his bishop can’t get out via a4. No progress was possible, as 1 ... bxc4 2 bxc4 $e2$4 3 $d1$ c6 4 $c2$ a8 5 $d3$ b7 etc. showed.

2 Mismatch

In the middlegame with lots of material, players readily shift their pieces from one wing to the other as they attack and defend. But in an ending, the battles are often separated. A few pieces may face off on the kingside, a few on the queenside.

This means that a player can win if he can create a 2-to-1 mismatch on one of the wings.

Gurgenidze - Radev
Tbilisi 1971
White to play

Rooks belong behind passed pawns – except when they don’t. Despite White’s rook he can’t make easy progress after 1 b5 axb5 2 axb5 $f6$ 3 $b4$? $g5$.

More accurate was 1 $f3$+! $g5$ 2 $c4$. Black’s king is useless on the kingside because it cannot attack the rook or h-pawn.

But White has a K+P-vs.-R mismatch on the queenside. He threatens 3 b5 axb5+ 4 axb5 followed by $b4$-a5 and the winning push of the pawn.

Black tried 2 ... $c6$+ 3 $b3$ and saw that 3 ... $b6$ would fail to 4 b5! axb5 5 a5 followed by $b4$. Instead, he chose 3 ... $c1$ and lost after 4 b5 axb5 5 axb5 d5 6 $d3$! (6 ... $c5$ 7 $b4$).
Mismatch

Mismatches typically involve a king and pawn(s) versus a single piece. They are surprisingly strong against a lone rook and can usually out-muscle a lone bishop.

Geller – Kopylov
Soviet Championship 1951
White to play

Bishops of opposite color can make winning an ending difficult, time-consuming – or impossible. But in this case White won with 1 \textit{\textbf{\text{\texttt{\texttt{x}a7}}}}!.

Black can trap the bishop with 1 ... \textit{\textbf{\texttt{\texttt{c}7}}}. But after he wins it, 2 f4 \textit{\textbf{\texttt{\texttt{b}7}}} 3 \textit{\textbf{\texttt{\texttt{\texttt{x}b6}}} \textit{\textbf{\texttt{\texttt{x}b6}}} 4 g5, White has a K+Ps-vs.-B mismatch on the kingside.

Black would lose after 4 ... fxg5 5 fxg5 \textit{\textbf{\texttt{\texttt{f}5}}} 6 \textit{\textbf{\texttt{f}4}} \textit{\textbf{\texttt{\texttt{h}7}}} 7 \textit{\textbf{\texttt{e}5}} and \textit{\textbf{\texttt{e}6-f7}}, for example, because his king can’t help the bishop (5 ... \textit{\textbf{\texttt{c}6}} 6 \textit{\textbf{\texttt{f}4}} \textit{\textbf{\texttt{d}6}} 7 h6 gxh6 8 gxh6 \textit{\textbf{\texttt{g}8}} 9 \textit{\textbf{\texttt{f}5}} and \textit{\textbf{\texttt{g}6}}).

Instead, he tried 4 ... \textit{\textbf{\texttt{\texttt{f}5}}} 5 g6 \textit{\textbf{\texttt{\texttt{c}6}}} 5 \textit{\textbf{\texttt{h}4}} \textit{\textbf{\texttt{e}6}} (or 5 ... \textit{\textbf{\texttt{d}6}} 6 h6!). But he resigned after 6 h6! gxh6 7 \textit{\textbf{\texttt{h}5}} \textit{\textbf{\texttt{d}6}} 8 \textit{\textbf{\texttt{x}h6}} \textit{\textbf{\texttt{e}7}} 9 g7 when he realized he cannot defend both wings (9 ... \textit{\textbf{\texttt{g}8}} 10 \textit{\textbf{\texttt{g}6}} \textit{\textbf{\texttt{e}6}} 11 a4).

Sometimes a simple trade of pieces will create a mismatch.

Tal – Ragozin
Soviet Championship 1956
Black to play
Black has good drawing chances if his knight and king reach the kingside (1 ... \( \text{Q}d7 \)!). But he played 1 ... \( \text{Q}e7 \)? and White jumped at the chance to swap rooks, 2 \( \text{Q}b4 \! \! \text{Q}xb4 \! 3 \text{axb4} \).

Black’s king can win the b-pawn, 3 ... \( \text{Q}d6 \) 4 \( \text{h}4 \! \! \text{Q}c6 \) and ... \( \text{Q}b5 \). But by then White’s king and kingside pawns will beat the overmatched knight.

Black saved time with 3 ... \( \text{Q}c6 \) 4 \( \text{b}5 \! \! \text{Q}d4 \) 5 \( \text{b}6 \! \! \text{Q}d7 \) 6 \( \text{h}4 \! \! \text{Q}c6 \).

But he was still lost on the kingside after 7 \( \text{h}5 \! \! \text{Q}e6 \) 8 \( \text{h}6 \! \! \text{Q}f8 \) 9 \( \text{g}3 \! \! \text{Q}xb6 \) 10 \( \text{Q}f4 \).

A knight versus a king and two connected pawns isn’t even close, as 10 ... \( \text{Q}c7 \) 11 \( \text{Q}f5 \! \! \text{Q}d7 \) 12 \( \text{Q}f6 \! \! \text{Q}e8 \) 13 \( \text{Q}g7 \) showed. Black insisted on playing out a lost pawn endgame, after 13 ... \( \text{Q}e7 \) 14 \( \text{h}7 \! \! \text{Q}xh7 \) 15 \( \text{Q}xh7 \).

### 3 Opposition

Some techniques can only be used to try to win. Others are useful only when defending. But the opposition can be invaluable in either case.

![White to play](image)

White can seize the opposition with 1 \( \text{b}2 \)\. But Black regains it with 1 ... \( \text{d}4 \)! and reaches a winning position we’ll examine in Chapter Four (2 \( \text{c}2 \! \! \text{a}3 \) 3 \( \text{d}2 \! \! \text{b}2 \) 4 \( \text{e}2 \! \! \text{c}2 \) and 5 \( \text{e}1 \! \! \text{xd}3 \) 6 \( \text{d}1 \! \! \text{e}3 \) 7 \( \text{e}1 \! \! \text{d}3 \) 8 \( \text{d}1 \! \! \text{d}2 \) 9 \( \text{c}2 \! \! \text{e}2 \) is Exact Ending 1).
Opposition

One way to draw is $1 \text{d4!}$. Black wins the pawn but White gets the opposition after $1 \ldots \text{c}e4 \ 2 \text{d}1 \text{xd}4 \ 3 \text{d}2!$.

He gets to another Exact Ending. But that one is a draw, e.g. $3 \ldots \text{e}4 \ 4 \text{e}2 \text{d}4 \ 5 \text{d}2 \text{d}3$ and $6 \text{d}1! \text{e}3 \ 7 \text{e}1 \text{d}2+ 8 \text{d}1 \text{d}3$ stalemate. (By the way, $1 \text{c}1$ draws in a similar way.)

And here's how the opposition is used to win.

\[ \text{Adams – Carlsen} \]
\[ \text{London 2012} \]
\[ \text{Black to play} \]

Black must give way after $1 \ldots \text{e}6?? \ 2 \text{xe}4$ and loses. For example, $2 \ldots \text{f}6 \ 3 \text{d}5 \text{g}5 \ 4 \text{xc}5 \text{yg}4 \ 5 \text{d}5 \text{xh}5 \ 6 \text{c}5$ and White queens first.

No better is $2 \ldots \text{d}6 \ 3 \text{f}5 \text{e}7 \ 4 \text{e}5!$, when White again has a winning opposition ($4 \ldots \text{f}7 \ 5 \text{d}5$).

But the position in the diagram is actually a win for Black after $1 \ldots \text{e}3!$. He would have the opposition after $2 \text{xe}3 \text{e}5!$ ($3 \text{f}3 \text{d}4$ or $3 \text{d}3 \text{f}4$).

Instead, White tried the clever $2 \text{f}3!$, hoping for $2 \ldots \text{e}5?? \ 3 \text{xe}3!$, when he has stolen the opposition.

But Black replied $2 \ldots \text{e}6!$ and $3 \text{e}2 \text{f}6$. Then $4 \text{xe}3 \text{e}5!$ is that winning opposition once more.

White tried one last time, $4 \text{f}3$. But Black had $4 \ldots \text{g}5!$. 

78
White has run out of useful passes (5 \texttt{g3 e2}). He began the
queening race with 5 \texttt{xe3 xg4 6 e4 xh5 7 d5}. But Black is
way ahead and won after 7 ... g5 8 xc5 g4 9 d4 g3 10 e3 g4.

‘Distant opposition’ sounds complex but just means that the kings
are more than two squares apart. Then the right move is often easier
to \textit{visualize} than to calculate.

Natural moves like 1 \texttt{g3?} would lose, e.g. 1 ... \texttt{g5 2 h3 f4
3 exf4+ xf4 4 g2 e3 5 f1 d2 and ... e3). Also 2 \texttt{f2 h4!
3 g2 g4 3 f2 h3.

White saw that Black’s king is on a light square. White just had to
look for one near his own king. He played 1 \texttt{g2!} and then 1 ... \texttt{g7
2 g1! f7 3 f1 e6 4 e2.}
Shouldering

Now on 4 ... $d5$ White cannot play the illegal 5 $d3$. But he can draw after 5 $d2$ $c4$ 6 $c2$, or, as the game went with 5 ... $d6$ 6 $d1$ $c5$ 7 $c1!$ (7 ... $b5$ 8 $b1$ $a5$ 9 $c1$).

4 Shouldering

This has been called the ‘hockey’ technique. One king stands in the way of the other king, like a hockey skater throwing a shoulder block.

This is particularly common after one player has been forced to give up his rook for a passed pawn and the result is a position like this:

Liss – Lalic
Isle of Man 1997
White to play

The intuitive move is 1 $e7$. It succeeds after 1 ... e4 2 $b7$ $f4$ 3 $c6$ e3 4 $d5$ $f3$ 5 $d4$ e2 6 $d3$. Black had to spend two moves – one by his king, one by his pawn – to safely advance the pawn one square.

Black can’t advance faster. But he can advance smarter, by meeting 1 $e7$? with 1 ... $e4!$ and 2 $b7$ $d4!$.

The point is that Black’s king blocks the White king after 3 $c6$ e4.
The draw is clear after $4 \textit{b}5 \textit{e}3 5 \textit{b}4$ and now $5 \ldots \textit{d}3 6 \textit{b}3 \textit{e}2$.

No better is $6 \textit{d}7+$ as long as Black finds $6 \ldots \textit{c}2!$ (not $6 \ldots \textit{e}2??$, which blocks the pawn and allows a winning $7 \textit{c}3$).

So let’s go back to the previous diagram and think up a better strategy for White. As slow as it seems, the correct way to start is $1 \textit{a}7!$.

Then $1 \ldots \textit{e}4 2 \textit{b}6 \textit{e}3 3 \textit{e}7! \textit{f}4 4 \textit{c}5$ wins because Black never got a chance to throw a shoulder block.

But what if Black meets $1 \textit{a}7$ with $1 \ldots \textit{e}4$, the move that beat $1 \textit{e}7$? The answer is $2 \textit{b}6! \textit{d}4 3 \textit{b}5 \textit{e}4 4 \textit{b}4!$.

Now $4 \ldots \textit{e}3 5 \textit{d}7+ \textit{e}4 6 \textit{c}3$ and White’s king gets to d2 in time to prevent promotion and win. Craftier is $4 \ldots \textit{d}3! (5 \textit{d}7+? \textit{c}2). But $5 \textit{b}3!$ wins ($5 \ldots \textit{e}3 6 \textit{d}7+$).
Outside Passed Pawn

5 Outside Passed Pawn

Creating a passed pawn on the distant (‘outside’) wing of the board offers two ways to win:

Your opponent may not be close enough to stop it from queening.

Or, if he stops it, he may have to devote so much material to that task that he allows a mismatch on the other wing.

Fischer – Larsen
Candidates match 1971
White to play

White’s a-pawn is very ‘outside.’ But he cannot queen by force (1 b4 d7 2 b5 c7 3 a5 b7 or 1 a5 d7 2 a6 c7).

White won by heading to the kingside while Black is torn between the two wings: 1 d4! d6 2 a5.

Then 2 ... f6 – which stops e5-f6 – was met by 3 a6!, threatening 4 a7. Black had to run to the queenside, 3 ... c6 4 a7 b7 5 d5.

Black would lose after 5 ... xa7 6 e6. He tried to confuse matters with 5 ... h4. White just ignored him and the game ended with 6 e6 resigns in view of 6 ... f5 7 f6 hxg3 8 hxg3 and xg6/xf5.

Sometimes a potential outside pawn is hard to detect:
White has the most advanced pawn and it is passed. But the f-pawn can be stopped by Black’s king.

What decided the game was on the other wing: 1... d5! 2 cxd5 a5!. Black created a passer that is seven files away from the helpless White king.

The game went 3 g4 b5 4 f5 a4 5 bxa4 bxa4 6 f6 a3 7 d6 and now not 7... a2?? 8 f7! but simply 7... xd6 prompted resignation.

Black knew he was winning after he created a passed pawn in the last example because White’s king was ‘outside the square.’

Which square? It’s the one you can visualize with the Black pawn on a4. The square runs from a4 to a1, then to d1, to d4 and back to a4.

Even if White had played 3 g3 b5 4 f3 a4 5 bxa4 bxa4 he would be outside the square. Black would queen in three moves (5 e2 a3).

This bit of elementary geometry is crucial when you can trade down to a pawn endgame:
White has executed a cutoff ($\text{Kh}f4!$), a potent technique we'll consider shortly. Black's king cannot cross the f-file to stop the b-pawn.

Black's only hope was $1 \ldots \text{Kh}g2!$ so that $2 \text{b5? Kh}g4!$. That would work since White is outside the square ($3 \text{Kxh}4 \text{hxh}4 4 \text{Qc}2 \text{g3 5 Be}d2?? \text{g2}$).

He would have a choice of a drawn queen endgame ($3 \text{Kxh}4 \text{hxh}4 4 \text{b6 g3 5 b7 g2}$) or an equally drawn rook endgame ($3 \text{Kf5 Kh}xh4$ and $\ldots \text{Kh}b4+$).

But White met $1 \ldots \text{Kh}g2!$ with a simple precaution, $2 \text{Bc}1!$. Then he was inside the square ($2 \ldots \text{Kh}g4 3 \text{Kxh}4 \text{hxh}4 4 \text{Bd}2 \text{g3 5 Be}e2 \text{g2 6 Bd2}$).

Black had no other tricks and played $2 \ldots \text{Ka}2 3 \text{b5 Ka}5$. White relinquished the cutoff, $4 \text{Kb}4!$, because Black's king is too far from the pawn.

The game went $4 \ldots \text{Kf7 5 b6 Ka}8 6 \text{b7 Kb}8 7 \text{Bd2}$ resigns, because White's king will either reach c7 or win the h-pawn.

If these examples of the square seem too easy, consider this case:
White can try 1 \texttt{xd7} since 1 \ldots \texttt{xd7} 2 \texttt{h1} (‘Rook behind the pawn’) makes his h-pawn a threat and wins. But this loses to 1 \ldots \texttt{x} 2 \texttt{h} 2 \texttt{h} 7.

Instead, White played 1 \texttt{g6??} and lost after 1 \ldots \texttt{h2} 2 \texttt{h} 7 \texttt{e7}.

Yet White should be playing \texttt{for a win} with 1 \texttt{c1!}. Then 1 \ldots \texttt{h2} loses to 2 \texttt{d1!}. Or 1 \ldots \texttt{f2} 2 \texttt{xd7} and 3 \texttt{h1!}.

Best is 1 \ldots \texttt{d4} but then comes 2 \texttt{xd7}.

Now both 2 \ldots \texttt{xd7} and 2 \ldots \texttt{xd7} lose to 3 \texttt{d1!}. After the rook trade, Black is outside the square. The best Black has is 2 \ldots \texttt{c4+} 3 \texttt{b1} \texttt{h4} 4 \texttt{d1}, when White holds all the winning chances.
7 Zugzwang

Zugzwang sounds sophisticated. But anyone who has played rummy, contract bridge or one of several other card games knows what it's like: It's your turn to play a card but anything you do hurts your chances.

In chess, zugzwang can result from a move that seems to do nothing.

Sokolov – Sasikiran
Zafra 2007
White to play

White played 1 a1!. It doesn't threaten a thing. But Black resigned. A king move allows 2 xf5. And a rook move (1 ... a5) allows 2 xf6+.

You often must rely on zugzwang when you have an edge in pieces – like having an extra Exchange – rather than in pawns.

The next position looks like it should be easy.

Anand – Topalov
Linares 2005
White to play
But after 1 \( \text{d2} \) and 1 ... \( \text{b4} \) 2 \( \text{e3} \) \( \text{a3} \) how can White make progress?

He only has two pieces to perform three tasks. He needs to (a) capture the pawns, (b) stop ... f2-f1(\( \text{\#} \)) and (c) protect the a-pawn.

For example, after 3 \( \text{e6} \) \( \text{b4} \), 4 \( \text{xe4} \) f2 5 \( \text{h3} \) \( \text{a3} \) and 6 ... \( \text{xa2} \) draws.

But White can win after 3 ... \( \text{b4} \) with 4 \( \text{d5!} \) \( \text{a3} \) 5 \( \text{f2!} \) – zugzwang. The win becomes obvious after 5 ... \( \text{b4} \) 6 \( \text{xe4} \) or 5 ... \( \text{b2} \) 6 a4.

So, in the game Black played 1 ... f2. He set a trap:

After 2 \( \text{e2?} \) e3! he draws (3 \( \text{e6} \) \( \text{b4} \) 4 \( \text{b3} \) \( \text{a3} \) 5 \( \text{f1} \) \( \text{b4} \)).
But White won with 2 \( \text{e2+!} \) \( \text{b4} \) 3 \( \text{c2!} \) \( \text{a3} \) 4 \( \text{b1} \) e3 5 \( \text{a1} \).

\[ 
\text{Black to play}
\]

Black is again in zugzwang. He must allow the a-pawn to begin its march to a8, 5 ... \( \text{a4} \) 6 \( \text{b2} \) \( \text{b4} \) 7 a3+ \( \text{a4} \) 8 \( \text{a2!} \) and White duly won.

8 Triangulation

Triangulation is a crooked path to zugzwang. It occurs when your opponent would be in zugzwang if it were his move. But it isn’t his turn.
Triangulation

If this were Black’s move, he loses, 1 ... \( \text{e8} \) 2 \( \text{g6} \) \( \text{f8} \) 3 \( \text{f7} \) or 3 \( \text{xh6} \).

But since it’s White’s turn, he has to lose a move. The way to do this is 1 \( \text{e5} \) \( \text{f8} \) 2 \( \text{e4} \)!

Then 2 ... \( \text{f7} \) 3 \( \text{f5} \)! recreates the position in the diagram but with Black to move. White accomplished this by moving his king in a triangle (e5-f4-f5) while Black’s king moved back and forth (f7-f8).

But suppose Black knows about opposition and plays 2 ... \( \text{e8} \)!

White would win with 3 \( \text{f4} \) \( \text{f8} \)! 4 \( \text{e5} \). Black gives up the opposition and lands in the losing 4 ... \( \text{f7} \) 5 \( \text{f5} \)! position or 4 ... \( \text{e8} \) 5 \( \text{e6} \) \( \text{f8} \) 6 \( \text{f7} \).

Knowing how to triangulate allows you to force all sorts of simpler winning positions.

Dumitrake – Kiselev
Enakievo 1997
White to play
White played 1 h5! and 1 ... hx5 2 gxh5. Black’s king is close enough to stop g6xh6 with a shoulder block, 2 ... e6!.

But White forced his way to the previous diagram with 3 e4! f6 4 f4! e6 5 f5+ and 5 ... d6 6 d4 e7 7 e5! f7 8 f6.

9 Blockade

It’s this simple: The most common way to win an ending is to queen a pawn. Therefore, the most effective way to stop a pawn is to blockade it.

White has two extra, passed pawns near their queening squares. His winning chances? Zero.

Why? Because Black can hold his blockade at d7 and e6 forever.

This technique is so simple and powerful that every player with the advantage has to be careful about blundering into a blockade.
Black played 1 ... ♖d8!, a good try in a lost position. White saw that 2 g5?? allows 2 ... ♖xg5, eliminating the last White pawns.

But he thought the position was an easy win after 2 h5??. He was shocked to find that Black can draw after 2 ... ♖g5 or 2 ... ♖g5.

To win White had to take his time and avoid blockades. The right way is 2 ♖g2!. Then 2 ... ♖xh4? 3 ♖xh4 ♖g5 fails to 4 ♖f3 ♖xh4 5 ♖f4 and wins.

Black's only try is 2 ... ♖g6. But then 3 ♖f3 ♖h6 4 ♖g3 ♖c7+ 5 ♖f4 threatens 6 g5+/♖g4 and leads to 5 ... ♖d8 6 ♖e6 ♖e7 7 g5+ ♖g6 8 ♖g4.

Only then does the win become easier, 8 ... ♖h7 9 ♖f5! ♖g8 10 ♖g6 ♖h8 11 ♖f7. Or 9 ... ♖h8! 10 ♖g6 ♖g8 and then 11 h5 ♖xg5 12 ♖xg5 ♖h8 13 ♖f7+ and h5-h6-h7.

10 Breakthrough

In most cases, creating a passed pawn is routine. But in some, a dramatic technique – sacrificing a pawn or pawns – is necessary.
Breakthrough

Averbakh – Bebchuk
Moscow 1964
White to play

Black has the outside passed pawn. Shouldn’t he be winning after 1 \( \text{c4} \) \( \text{d6} \) 2 \( \text{d4} \) \( \text{b5} \) 3 \( \text{c3} \) \( \text{e5} \) ?

No. He loses: 1 \( \text{e5!} \) \( \text{fxe5} \) 2 \( \text{g5!} \) and 2 ... \( \text{hxg5} \) 3 \( \text{f6!} \) \( \text{gxf6} \) 4 \( \text{h5} \) and queens.

There is no salvation in 2 ... \( \text{d6} \) because of 3 \( \text{f6!} \) \( \text{e6} \) 4 \( \text{fxg7} \) \( \text{f7} \) 5 \( \text{gxh6} \) \( \text{b5} \) 6 \( \text{e4} \) \( \text{b4} \) 7 \( \text{d3!} \) and 8 \( \text{c4/9} \) \( \text{xb4} \) wins.

Breakthroughs occur most often in pawn endings. But they can have an equally surprising impact when other pieces are on the board.

Ivanchuk – Adams
Frankfurt 2000
White to play

White, a pawn down, can draw easily if he makes a cutoff, 1 \( \text{xf6!} \). Black’s king cannot easily advance and 1 ... \( \text{d6} \) 2 \( \text{f5!} \) would cost a pawn.
Counter-Passer

But White tried to draw more quickly by using tactics. After 1 h3? he expected 1 ... gxh3 2 h4 and 3 xh3 would eliminate all kingside pawns.

That's good logic but bad calculation. He overlooked 1 ... d4!. Then White would be outside the square after 2 hxg4 xf4 3 gxf4 h4!.

White played 2 f2, so that 2 ... gxh3 3 h2 keeps his hopes alive.

But this time he overlooked a breakthrough, 2 ... h4!. That guarantees Black a strong passed pawn. For example, 3 gxh4 gxh3 followed by 4 ... xh4 5 h2 c6 and the decisive entry of the Black king.

White preferred 3 hxg4 but was lost after 3 ... hxg3 4 g2 xg4 5 d2 c6 6 e3 b5.

11 Counter-Passer

A protected passed pawn is typically decisive in pawn endgames. It can often win piece endgames as well. But there is a way to offset it.
Black has just traded off all four rooks and appears assured of a win.

Why? Because he has an entry route, ... \( \text{d7-e6} \) and ... \( \text{xe5} \).

White’s king can defend the e-pawn – 1 \( \text{f2} \) 2 \( \text{f3} \) \( \text{e6} \) 3 \( \text{f4} \). But the protected passed h-pawn pulls him away, 3 ... \( \text{h4} \) and 4 ... \( \text{h3} \) 5 \( \text{g3} \) \( \text{xe5} \) 6 \( \text{hxh3} \) \( \text{e4} \), for example.

Yet White was able to draw in the diagram and the outcome was clear after one move, 1 \( \text{e6} \)!. After the forced 1 ... \( \text{fxe6} \) he can just pass, \( \text{h2-g2-h2} \), if he wants.

Black’s king cannot advance beyond the square of White’s protected f-pawn. He cannot create a passed queenside pawn either because ... \( \text{b5} \) would be answered by \( \text{b2-b3} \)!.

Creating a counter-passer is often a lot more complicated:
Counter-Passer

White has just traded a rook and piece to reach what looks like an easy win. His king can reach c4 and begin picking off pawns. For example, 1 ♞e2 ♞f7 2 ♞d3 ♞e6 3 ♞c4 a5 4 ♞c5 and wins.

But Black would have counterplay after 1 ♞e2 ♞g6 2 ♞d3 f5! and then 3 exf5+ ♞xf5 4 ♞c4 e4!.

Then White could win all the queenside pawns – and lose to a counter-passer, 5 ♞xb4 e3! 6 fxe4 ♞e4 7 ♞c5 ♞xe3 8 ♞xc6 ♞f2 9 c4 ♞xg2 and 10 ... g4!.

So White found 1 g4!. That costs him a tempo, after 1 ... ♞f7 2 ♞e2 ♞e6 3 ♞d3 ♞d6 4 ♞c4 a5. But White would win with 5 f3!, creating zugzwang:

For example, 5 ... ♞d7 6 ♞c5 ♞c7 7 c3 bxc3 8 bxc3 ♞d7 9 ♞b6. Or 8 ... ♞b7 9 ♞d6 ♞b6 10 c4 and wins.

All very logical. But after 1 g4 Black saved himself with the shocking 1 ... hxg3! 2 fxg3 g4!.

His first idea is to create a kingside entry, 3 hxg4 ♞g6 and ... ♞g5xg4, to create a counter-passer. But this was doomed by 3 h4!. Black’s king could not leave the kingside.

But Black had a second point. After 3 ... c5 4 ♞e2 ♞h7 5 ♞d3 ♞h6 6 c3 a5 7 cxb4 axb4 it seemed like he was just passing aimlessly. But he was setting an ingenious trap. If White had continued 8 ♞c4 he would lose to 8 ... f5!.
White can’t stop the e-pawn after 9 exf5 e4 and he’s too late in creating his own counter-passer (10 ñxc5 e3).

Also lost is 9 ñd3 f4! 10 gxf4 exf4 11 ñe2 ñh5 12 e5 g6! and ... ñf5xe5.

So White backed off, didn’t play 8 ñc4?? and agreed to a draw.

12 Conversion

One of the contradictions of endgame play is that it is often easier to win by reducing your material advantage.

White has a choice of possible winning plans. He could try to advance his king to the vicinity of d7 or e6. Or he could try to isolate
Black’s pawns (perhaps with f4-f5 and fxg6) so that they will be easier to attack.

But simpler and better was 1 ♙d5! and then 1 ... ♞e6 2 ♙xf6!. This converted to a pawn ending that was a routine win.

Yes, White’s material advantage was less after 2 ... ♧xf6 3 g4 hxg4 4 hxg4 ♛f7 5 ♧xf6 ♧xf6 than it had been in the previous diagram.

But it’s easier to win now. In fact, White has more than one way. He chose 6 ♙d4 ♛e6 7 ♙c5 with the opposition.

Then came 7 ... ♛e7 8 ♙d5 ♙d7 9 ♛e5 ♛e7 10 g5! resigns (10 ... ♛f7 11 ♙d6 ♙g7 12 ♛e6 ♛g8 13 ♙f6 ♙h7 14 ♙f7).

Jose Capablanca formulated one of the most useful conversion plans: When pawns are equal and you are ahead the Exchange, look for a way to give back the Exchange to win a pawn. Your material edge will decline slightly. But the win is usually much easier to achieve.

13 Domination

We’ve seen how a king can demonstrate superiority over the rival king by limiting its scope, e.g. by seizing the opposition or throwing a shoulder block. Other pieces can dominate their rivals in a similar way.
White might win by creating a passed pawn, 1 b4 \(\text{c7}\) 2 \(\text{d3}\) and \(\text{c4/b4-b5}\). But easier is 1 \(\text{e5}\)!

That virtually stalemates the knight, since 1 \(\text{f6}\) 2 \(\text{xf6}\)! leads to a won pawn endgame (2 \(\text{xf6}\) 3 \(\text{d3 e5}\) 4 \(\text{c4}\)).

Black’s kingside majority can’t create a passed pawn after 4 \(\text{g4}\) 5 b4 \(\text{h5}\) 6 a4 \(\text{h4}\) 7 \(\text{h3}\)!, which stops 7 ... \(\text{h3}\)!

Instead, Black tried to create a kingside mismatch with 1 \(\text{h5}\) 2 \(\text{d3\ g4}\). White just ignored him: 3 b4 \(\text{a6}\) 4 \(\text{a4\ gxf3}\) 5 \(\text{gxf3\ h4}\) 6 b5 \(\text{axb5}\) 7 \(\text{a5}\)! (breakthrough) \(\text{h3}\) 8 \(\text{c6}\)! resigns.

When there are few pieces on the board, it stands to reason that dominating a single enemy piece can be decisive.

It appears that White’s only winning idea is to create a passed e-pawn with a prepared f4-f5. (The immediate 1 \(\text{f5}\)? allows 1 ... \(\text{gxf5}\) 2 \(\text{gxf5\ xe5}\).)
But 1 g5! was better. Black’s bishop joins his king in the penalty box.

Since there is no counterplay to worry about, White can explore various plans to win the f-pawn, such as bringing his king to e8 or his bishop to f6.

The game went 1 ... a4 2 d4 a6 3 e4 a4 4 b8 h8 5 f8 g7 6 d8 h7 7 d3 a3+ 8 c4 a4+ 9 b5 a3.

The maneuvering gave White a chance to look at tactics such as 10 e6 xd4 11 e7. But that fails after 11 ... e3 12 e8(?) xe8, a book draw, or 12 exf7 g7.

So play continued 10 f8 g7 11 c8 h7 12 f8 g7.

Black resigned after 13 xh8! xh8 14 e6+ g8 15 e7 a8 16 f6! because the king and bishop get to dominate the rook.

The main line is 16 ... e8 17 c6 a8 – otherwise 18 d7 wins.

Then 18 c7 leaves Black with no good moves. After 18 ... h7 19 d4! g8 20 d7 and 21 e8(?) because 20 ... a7+ drops the rook.

14 Cutoff

The most interesting battle that regularly occurs in an endgame is R-vs.-K. In some cases a king proves superior, such as when it can advance a passed pawn against a helpless rook.

But there are two cases when the rook wins the battle. The first occurs when a rook cuts a king off from the scene of action.
If it were White’s move he would draw with 1 \( \text{d1} \) or 1 \( \text{d2} \).

But it’s Black’s turn and 1 ... \( \text{d5}! \) sealed off the White king from the kingside. That creates a K+P-vs.-R mismatch.

Play went 2 \( \text{a2} \) \( \text{g6} \) 3 \( \text{f2} \) \( \text{f5} \) and now 3 \( \text{d2} \) \( \text{xd2}! \) 4 \( \text{xd2} \) \( \text{g5}! \) is distant and winning opposition (5 \( \text{e2} \) \( \text{g4}! \) 6 \( \text{f2} \) \( \text{f4} \)).

On other moves, Black would make steady progress, e.g. 3 \( \text{g2+} \) \( \text{h5} \) 4 \( \text{f2} \) \( \text{g4} \) 5 \( \text{g2+} \) \( \text{f3} \).

The best way to break a cutoff is to attack the rook, either with your king or your rook, offering a trade.

Here 1 ... \( \text{d4} \) seems to win as in the previous diagram. For example, 2 \( \text{c3} \) \( \text{d8} \) 3 \( \text{c2} \) \( \text{h4} \) 4 \( \text{c3} \) \( \text{f5} \) 5 \( \text{c2} \) \( \text{h3} \) 6 \( \text{c3} \) \( \text{f4} \) 7 \( \text{c2} \) \( \text{h2} \) 8 \( \text{h1} \) \( \text{g3} \).

Or 3 \( \text{f1+} \) \( \text{g5} \) 4 \( \text{g1+} \) \( \text{f4} \) 7 \( \text{h1} \) \( \text{g4} \) 8 \( \text{g1+} \) \( \text{f3} \) 9 \( \text{h1} \) \( \text{h8!} \) and ... \( \text{h4-h3} \).
But White can draw with 2 \textit{\texttt{\texttt{\texttt{d1}}}}! because his king is in the square (2 \ldots \texttt{xd1} 3 \texttt{xd1} h4 4 \texttt{e2} h3 5 \texttt{f2} h2 6 \texttt{g2}).

Black tried 2 \ldots \texttt{e4}, hoping that a cutoff on the e-file would be sufficient. But White repeated the process, 3 \texttt{d2} h4 4 \texttt{e1}!. Black accepted a draw in view of 4 \ldots \texttt{xe1} 5 \texttt{xe1} and \texttt{f2-g2} or 4 \ldots \texttt{f4} 5 \texttt{e2} h3 6 \texttt{f1}!. (Also 6 \texttt{h1} \texttt{h4} 7 \texttt{f2}).

When the defending king is cut off by a rank, rather than a file, the situation is usually worse, as we'll see.

\textbf{15 Checking Distance}

The geography of the board provides us with the other way for a rook to win a battle against a king.

\begin{center}
\includegraphics[width=0.5\textwidth]{check_distance_diagram.png}
\end{center}

Taimanov - Larsen
Palma de Mallorca 1970

\textit{Black to play}

Black's king is not cut off. But the tempting 1 \ldots \texttt{f4} 2 \texttt{a4+} \texttt{e5} allows to 3 g5!.

Then Black's only active play, 3 \ldots \texttt{g8+} 4 \texttt{h6} \texttt{h8+}, is foiled by 5 \texttt{g7}!. That wins time for 6 g6. The winning Lucena position is near. (See Exact Ending 5 of Chapter Four.)

Instead of this, Black chose the immediate 1 \ldots \texttt{g8+}! 2 \texttt{h5} \texttt{h8+}!. This time the pawn is on the fourth rank and that means the king cannot approach the rook (3 \texttt{g6} \texttt{g8+} 4 \texttt{h7} \texttt{xg4!} draw).

So play went 3 \texttt{g5} \texttt{g8+}! 4 \texttt{h4}.
Nothing has changed so 4 ... \( \text{h8+!} \) is best. Then on 5 \( \text{g3} \) Black would draw with 5 ... \( \text{e5} \) 6 \( \text{g5? f5!} \).

If White tries the cutoff, 6 \( \text{f3} \), Black has the anti-cutoff method mentioned above, 6 ... \( \text{e6} \) 7 \( \text{g5 e7} \) 8 \( \text{g4 f8!} \) and draws.

Yet Black, a world-class player, didn’t check in the last diagram. He chose 4 ... \( \text{e5??} \) and White cut the king off by a rank, 5 \( \text{a6!} \).

This wins after 5 ... \( \text{f4} \) 6 \( \text{f6+ e5} \) 7 \( \text{g5!} \) since Lucena is coming up. Or 5 ... \( \text{h8+} \) 6 \( \text{g5 g8+} \) 7 \( \text{g6} \).

The advantage of knowing these techniques is that they spare you from a lot of calculating. For example, in the last diagram, 4 ... \( \text{f4} \) does draw. But you have to see then 5 \( \text{a4+} \) can be met by the surprising 5 ... \( \text{f3!} \). Knowing the checking distance is easier.

16 Rook Behind

When a rook, not a king, is trying to promote a pawn, it usually belongs behind the pawn. Let’s see why.
Rook behind

White wins with 1 b7!. Since his rook is behind the pawn he can answer a Black rook move with 2 b8(\textup{\texttt{\textregistered}}).

King moves will allow White’s king to penetrate, e.g. 1 ... \textup{\texttt{\textregistered}}e6 2 \textup{\texttt{\textregistered}}f3 \textup{\texttt{\textregistered}}d6 4 \textup{\texttt{\textregistered}}g4 and \textup{\texttt{\textregistered}}g5xg6. The greater range of the ‘behind’ rook also wins after 2 ... \textup{\texttt{\textregistered}}f5 3 \textup{\texttt{\textregistered}}b5+!.

But suppose we reverse the position of the rooks. Put the Black one at bl and the White one at b8.

Then 1 b7? is an error because of 1 ... \textup{\texttt{\textregistered}}g7. White’s rook is frozen at b8 and his king can be checked away if it tries to reach the b-pawn.

A better White try is to support the b-pawn with the king. But 1 \textup{\texttt{\textregistered}}f3 \textup{\texttt{\textregistered}}g5 2 \textup{\texttt{\textregistered}}e4 \textup{\texttt{\textregistered}}g4 3 \textup{\texttt{\textregistered}}d5 \textup{\texttt{\textregistered}}xg3 4 \textup{\texttt{\textregistered}}c6 allows Black to draw with his pawn, 4 ... g5.

When the player with advantage can steal the ‘behind’ role, the impact can be huge.

\begin{center}
\begin{tikzpicture}
\end{tikzpicture}
\end{center}

Georgiev – Kamsky

Istanbul 2012

White to play

White should draw because his rook is excellently placed. When he is forced give up his rook he can create one or two passed kingside pawns.

For example, 1 g5 fxg5+ 2 \textup{\texttt{\textregistered}}xg5 and then 2 ... \textup{\texttt{\textregistered}}b2 3 f5 a1(\textup{\texttt{\textregistered}}) 4 \textup{\texttt{\textregistered}}xa1 \textup{\texttt{\textregistered}}xa1 5 f6 draws.

But White played 1 \textup{\texttt{\textregistered}}h5??, perhaps thinking he will have winning chances after 2 \textup{\texttt{\textregistered}}g6.

What he overlooked was 1 ... \textup{\texttt{\textregistered}}d4!. Black threatens to make his rook the one ‘behind,’ with 2 ... \textup{\texttt{\textregistered}}a4!. Then White can’t stop the
a-pawn. Black ends up with an extra queen, not just a rook.

Seeing that, White played 2 \( \text{Ax}a2 \) \( \text{xa}2 \) 3 \( f5 \). But Black’s king was fast, 3 ... \( c3 \) 4 \( g5 \) \( fxg5 \) 5 \( \text{hxg}5 \) \( c4 \) 6 \( f6 \) \( \text{d}8 \) 7 \( \text{g6} \) \( \text{d}5 \), and White resigned.

**17 Seizing the Seventh**

If a rook reaches the seventh rank in a typical early endgame it exerts a powerful force because it attacks vulnerable pawns. This is true even when the defender’s king is not limited to the eighth rank.

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**Ivanchuk – Short**

Amsterdam 1994

*White to play*

Everything seems defended until 1 \( \text{d}5 \)!

If Black had tried 1 ... \( \text{c}6 \) 2 \( \text{xe}7 \) \( \text{xe}7 \) White would win with 3 \( g6 \) \( \text{hxg}6 \) 4 \( \text{hxg}6 \) and \( \text{f}7+ \).

The pawn ending, 4 ... \( \text{f}8 \) 5 \( \text{xf}8 \) \( \text{xf}8 \), would also be lost, 6 \( \text{f}3 \) \( \text{e}7 \) 7 \( \text{g}4 \) \( \text{f}6 \) 7 \( \text{h}5 \) (zugzwang) \( \text{e}7 \) 8 \( \text{g}5 \) \( \text{e}6 \) 9 \( \text{c}4 \) \( \text{e}7 \) 10 \( \text{f}5 \) \( \text{d}6 \) 11 \( \text{b}3 \)!

So, Black tried 1 ... \( \text{d}5 \) 2 \( \text{exd}5+ \) \( \text{xd}5 \). But then 3 \( \text{f}7 : \)

---

*Black to play*
Seizing the Seventh

After 3 ... d6 4 f3 Black runs out of useful moves, e.g. 4 ... b6 5 axb6 cxb6 6 e4 e6 7 b7 b5 8 b6+! and wins.

Instead, Black chose 3 ... b6 4 xc7 bxa5 and was lost after 5 f3 f8+ 6 e3 h6 7 xg7 (or 6 g8 7 a7).

Seizing the seventh is also an important defensive technique. In some cases it allows you to eliminate enough enemy pawns to draw.

Kasparov – Karpov
World Championship 1984

White to play

White cannot stop ... a8 and the advance of the a-pawn. He tried to raid the kingside with 1 h5? h6 2 e5. But after 2 ... a8! he was too late, 3 e6+ b5 4 g6 a5 5 xg7 a4 6 b7+ a5 and Black won.

It was a good idea but a bad execution. The right way to raid was 1 e5! a8 2 e6+ c5 3 e7 because White gets both kingside pawns.

Play would go 3 ... a5 4 xg7 a4 5 xh7 a3.

White to play
By exploiting the seventh rank, White has three passed pawns. His rook can get back just in time to give itself up for the a-pawn, $6 \text{c}7+! \text{b}4 7 \text{c}1! \text{a}2 8 \text{a}1$. Then his kingside pawns enable him to draw.

### 18 Eliminate Queenside Pawns

If a player has no pawns he usually needs the equivalent of an extra rook to win. That’s a lot. Therefore a wise defender wants to eliminate as many enemy pawns as possible.

And when there are pawns on both wings, the defender wants to get rid of the queenside pawns first. Why? Because his king is typically on the kingside and that makes it harder to stop a queenside passer.

![Chessboard diagram]

**Eliskases – Fischer**

Buenos Aires 1960

*Black to play*

Black may have had hallucinations of winning when he played 1 ... $\text{c}5$? If he can follow up with 2 ... b5!, the bishop dominates the stalemated knight, which could be lost after ... $\text{g}8$-$\text{f}8$-$\text{e}8$-$\text{d}8$.

But White saw 2 a4! and he gradually won after 2 ... $\text{g}6$ 3 $\text{g}2$ $\text{f}6$ 4 $\text{f}3$ $\text{e}6$ 5 $\text{e}4$ $\text{f}2$ 6 f5+ $\text{d}7$ 7 $\text{a}7$ and $\text{d}5$.

Black should have drawn by swapping pawns – but not with 1 ... $\text{x}f4$ 2 $\text{x}b6$, when White gets two queenside passers.

Correct is 1 ... $\text{x}a3$!. Then 2 bxa3?? c3! and the c-pawn queens. White has to play 2 $\text{xb}6$ but after 2 ... $\text{xb}2$ 3 $\text{xc}4$ $\text{c}1$ 4 f5 h5 his chances are minimal.
19 Build a Bigger Majority

When there are pawns on both wings, the player who is trying to win wants a majority – as large as possible – on the distant wing. If pawns are equal on that wing it’s usually very hard to win.

But a win is possible if there is a one-pawn edge on the distant wing. And a two-pawn edge is better. That explains \(1 \text{ Wh}d4! \text{ Wh}d4 \ 2 \text{ exd}4\).

White had the edge after \(2 \ldots f5 3 b4! \text{ Wh}f6 4 c5! a6 5 a4 \text{ Wh}e7 \ 6 b5! axb5 7 axb5 g5 8 \text{ Wh}f2\).

But he is not yet winning: If he advances his king to, say, a5, Black can create a counter-passer on the kingside.

However, Black rushed with the immediate \(8 \ldots h5?\).

White switched gears with \(9 \text{ h}4!!\). That ensures him of a kingside entry. He won after \(9 \ldots gxh4 10 \text{ Wh}f3 \text{ Wh}e8 11 \text{ Wh}f4 \text{ Wh}d7 12 \text{ Wh}g5 \text{ Wh}d8\)
On 10 \ldots \texttt{f6} White can win with 11 \texttt{f4 g6} 12 c6!, exploiting his big queenside majority.

The bigger-majority principle is particularly important in rook endgames. Suppose you are a pawn ahead. There are two scenarios:

In one of them, you have a 2-to-1 majority on the queenside and the pawns are balanced, three to three, on the kingside. Some positions like that are winnable. Many are not.

But suppose that you have a 3-to-1 edge on the queenside, while your opponent has a one-pawn majority on the kingside. Your chances of winning escalate sharply.

20 Fortress

When all else fails, you can draw some hopeless-looking positions by arranging your pieces and pawns on impregnable squares.

Usually a player needs a rook, bishop and pawn to balance a queen. Therefore White has a slight material edge. He might win if he captures Black’s a-pawn and pushes his own a-pawn.

And there’s also zugzwang. White found 1 \texttt{f6!} which seems to run Black out of useful moves:

He can’t safely move his king (1 \ldots \texttt{g8} 2 \texttt{xh6}) or move his rook from the g-file (1 \ldots \texttt{c5} 2 \texttt{f7+ h8} 3 \texttt{g6!}). If his rook leaves the rank White can create a passed pawn (1 \ldots \texttt{g7} 2 b4 axb4 3 a5 \texttt{xa5?} 4 \texttt{f5+/5 xa5}) or advance his king.
Yet Black saved the game with 1 ... ♞c5! and ... ♞b4. There followed 2 ♞f7+ ♞h8 3 ♞e8+ ♞g7 4 ♞d7+ ♞f6 5 ♞xc7 ♞b4!.

White to play

Now it’s White who has no particularly useful moves. His king cannot pass the fourth rank without losing the g-pawn. He can’t create a passed pawn. There are no zugzwangs. He tried 6 ♞h7 ♞g6 7 ♞g3 ♞d6+ 8 ♞f3 ♞b4 9 ♞d7 ♞g5 but eventually agreed to a draw.

In some cases, a fortress is nothing more than a position that denies your opponent an entry point for his king.

Kramnik – Grischuk
Kazan 2011

Black to play

Black’s rook and knight are both en prise. Is he lost?

No, because of 1 ... ♞b4!. Then 2 ♞xd6? allows 2 ... b6+. So 2 ♞xb4 axb4 is forced and 3 ♞xb4 was followed by 3 ... b6!.

The fortress is secure. Black can pass with ... ♞d8-e7. If White’s king runs to the kingside, Black slams the door with ... ♞g7. Draw.
21 Attack from Behind

When defending your pawns, the best place for your pieces is usually next to or behind the pawns. But when your opponent’s king got there first, the best defense may be attacking his pawns from behind.

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      21 Attack from Behind

When defending your pawns, the best place for your pieces is usually next to or behind the pawns. But when your opponent’s king got there first, the best defense may be attacking his pawns from behind.

Black’s position appears hopeless because of \( \text{xb7} \). On 1 ... \( \text{g2} \) White can win with 2 c5 and \( \text{c8-d6xb7} \). (Or, after 2 ... \( \text{d4} \), with 3 b5! as he did in the game, as we’ll see.)

A second idea is to trade a pair of pawns, 1 ... \( \text{xc4} \) 2 \( \text{xb7} \), and defend with the king. But after 2 ... \( \text{d6} \) 3 \( \text{c8+! e5} \) (not 3 ... \( \text{d7} \) 4 \( \text{b6+!} \)) 4 \( \text{b6} \) Black is lost.

For example, 4 ... \( \text{d4} \) 5 \( \text{d6 f1} \) 6 b5 axb5 7 a6. Or 4 ... \( \text{e6} \) 5 \( \text{a7 d7} \) 8 \( \text{c6 c8} \) 9 \( \text{a7} \) and \( \text{b8xa6} \). So, Black tried to attack the pawns with his king, 1 ... \( \text{d4} \). But after 2 c5 \( \text{g2} \) 3 b5! he resigned in view of the breakthrough, 3 ... \( \text{xb5} \) 4 c6! \( \text{bxc6} \) 5 a6 c5 6 \( \text{c6+} \) and the a-pawn queens.

Right was 1 ... \( \text{xc4!} \) 2 \( \text{xb7 d4!} \). Then on 3 \( \text{b6 c3} \) 4 \( \text{c5}: \)
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The draw is secured by 4 ... $b3!$. For instance, 5 $c6 $f1 6 $d4+ $a4 7 $b5 $xb5! 8 $xb5 $xa5!.

Attack from behind arises in many bishop endings, both with bishops of the same color or of opposite color. It is also common in R-vs.-Ps.

There's no point in 1 $a4+ $f3. The rook must attack the pawns from a distance and prompt zugzwang. So let's start with 1 $a8.

Then on 1 ... $f3 White attacks the d-pawn, 2 $d8!, He wins after 2 ... d2+ 3 $d1 e2+ 4 $xd2 $f2 5 $f8+. The same for 3 ... $f2 4 $f8+ 5 $e2.

The best try is 2 ... $e4. But White passes, 3 $d7!, to create zugzwang, e.g. 3 ... e2 4 $d2! or 3 ... d2+ 4 $e2 $f4 5 $d4+ $e5 6 $xe3.

Back at the diagram Black has a trickier defense in 1 ... $d4!. Again White should attack from behind, 2 $e8!. But this time Black can set a trap, 2 ... $c3 3 $xe3?? $c2!, threatening 4 ... d2+.

White has to play the accurate 3 $d1! and 3 ... $d4 4 $e7! to create zugzwang, e.g. 4 ... e2+ 5 $d2 $c4 6 $e4+ $d5 7 $xd3.

22 Piece for Passed Pawn(s)

The more valuable the piece, the less likely it is to be sacrificed in an endgame. Queen sacrifices only occur in rare combinations or composed studies. But there are cases when a minor piece can be profitably given up to obtain one or more passed pawns.
White traded off a Black d-pawn with her last moves. She hopes to draw by eliminating the last pawns when Black advances to b3.

Black could try to win by maneuvering the knight to c4. But much easier is 1 ... \( \text{\textbdash} \text{x}a2! \) and 2 \( \text{\textbdash} \text{x}a2 \text{a}4. \)

A pawn must queen after 3 \( \text{\textbdash} \text{e}4 \text{b}3 \) 4 \( \text{\textbdash} \text{b}1 \text{a}3 \) 5 \( \text{\textbdash} \text{d}3 \text{a}2. \)

A piece sacrifice is most likely to succeed when it leaves your opponent with no piece stronger than a knight. Second best is leaving your opponent with a bishop, as we saw in the discussion of mismatch.

23 Pawns on Right Color Square

In bishop endgames, what matters most is the color of the squares that your pawns and your opponent’s pawns are on.
Second Weakness

This textbook example illustrates how useless pawns can be on the wrong colored squares. With 1 c5! and 2 b3 White creates an ironclad blockade.

For example 1 ... x5 2 b3 e5 3 e6 c7 4 e4. Black cannot make progress if White passes with bishop moves to g4, f5, e6, etc.

There’s a general rule: In most cases you want your pawns on squares of the opposite color of your bishop. Even with three extra pawns in the last example Black couldn’t win because they were on the wrong color squares.

The pawns lose their offensive power when they share squares with your bishop, as they did in the last example.

24 Second Weakness

The endgame technique that typically takes the longest to execute is creating and exploiting a second weakness in the enemy camp. It’s a concept that also occurs in middlegames. But it yields the clearest result in an endgame.

P. Nikolic – Movsesian
Polanica Zdroj 1996
Black to play

Black’s a-pawn is White’s only target. After 1 ... c7 Black was ready to free his rook for duty with 2 ... b6.

But White won by opening a new front, 2 h5!. Then 2 ... g5 would lose to 3 e4 and 4 f5.

Black had to play 2 ... gxh5 3 xh5. Now on the passive 3 ... h8 White gets the superior king position, 4 e4 d6 5 f5 e7 after which he can win by activating his rook with 6 h1 and 7 e1+/ 8 e6 or 7 c1.
Black played \( 3 \ldots \text{h}^\text{g}8 \) instead. He was hoping that White would trade pawns (4 \text{h}^\text{xh}6? \text{g}^\text{g}4) or be forced to use his rook to defend his g-pawn. Play went 4 \text{h}^\text{h}4 \text{d}^\text{d}7 5 \text{e}^\text{e}4 \text{e}^\text{e}6.

![White to play](image1)

But White turned the guard duty over to his king, 6 \text{f}^\text{f}3! \text{h}^\text{h}8 7 \text{h}^\text{h}5 \text{h}^\text{h}7 8 \text{g}^\text{g}3. When Black tried to activate his rook, 8 \ldots \text{d}^\text{d}7, White made it passive again with 9 \text{a}^\text{a}5!.

It still might seem that Black was holding after 9 \ldots \text{a}^\text{a}7 10 \text{h}^\text{h}4 \text{f}^\text{f}7 11 \text{h}^\text{h}5 \text{g}^\text{g}7 12 \text{f}^\text{f}5 \text{h}^\text{h}7. White had no king entry on the kingside.

![White to play](image2)

However, the passivity of Black’s rook proved to be fatal after 13 \text{c}^\text{c}5 \text{c}^\text{c}7 14 \text{a}^\text{a}4!. The threat was 15 \text{b}^\text{b}5 and there was no relief in 14 \ldots \text{b}^\text{b}7 15 \text{xc}6 \text{xb}4 16 \text{xf}6.

The rest was 14 \ldots \text{g}^\text{g}7 15 \text{b}^\text{b}5 \text{xb}5 16 \text{xb}5 \text{b}^\text{b}7 17 \text{xc}6 \text{c}^\text{c}7 18 \text{c}^\text{c}1 \text{c}^\text{c}8 19 \text{c}^\text{f}7 20 \text{c}^\text{c}6 \text{g}^\text{g}7 21 \text{h}^\text{h}4 \text{f}^\text{f}7 22 \text{g}^\text{g}3 resigns, in view of the threat of \text{f}^\text{f}4-\text{e}4-\text{d}5-\text{d}6.
Stalemate

25 Stalemate

The ultimate defensive trick is to draw by means of stalemate. This may sound like a rare and remote possibility. It isn’t.

Stalemate appears regularly in Exact Endings:

It’s how the defender can often draw in K+P-vs.-K. The same goes for K+Q-vs-K+P when the pawn is on a bishop or rook file. Stalemate is the key to the ‘wrong bishop’ case of K+B+RP-vs.-K and in many versions of K+Q-vs.-K+R. A lone king draws against a king and two knights because of stalemate.

And you’ll find it in many cases of K+R+P-vs.-K+R.

Black to play

Black’s king is cut off. White threatens g4+ followed e8 or f7.

But Black has one way to draw, 1 ... a7+! 2 f6 f8!.

The outlook still looks grim after 3 b4!. White threatens 4 b8 mate and he would meet 3 ... a8 with 4 h4!, reaching a winning Exact Ending (‘When Philidor Fails’ in Chapter Four).

But the position after 3 b4 is a draw thanks to 3 ... f7+! since 4 exf7 is stalemate. Similar tricks occur in K+R+B-vs.-K+R.

There is no secret to mastering stalemate. The main thing is simply to be aware of the possibility.
Black foresaw this position earlier and forced White to bring his king forward to g6. Black’s king appears vulnerable to a different kind of trick – 1 ... d2 allows 2 \( \text{d5} \) and 2 ... \( \text{xd5} \) 3 \( \text{b8} \) and mates.

Black has a tempting defense, 1 ... \( \text{d6} \). But stronger was 1 ... \( \text{xb5} \!! \) and then 2 \( \text{xbxb5} \) d2. He threatened to queen the d-pawn.

On 3 \( \text{b1} \) he would avoid 3 ... d1(\( \text{w} \)) 4 \( \text{xd1} \) \( \text{xd1} \)?? 5 \( \text{e8} \) mate – and draw instead with 4 ... \( \text{d6} \)!! because 5 \( \text{xd6} \) is stalemate. Or simply 3 ... \( \text{d6} \)!! and 4 ... d1(\( \text{w} \)).

So the crucial position arose after White met 2 ... d2 with 3 \( \text{bd5} \).

Black drew with the dramatic 3 ... d1(\( \text{w} \)) 4 \( \text{xd1} \) \( \text{d6} \)!! 5 \( \text{xd6} \), stalemate. And with that we leave the learning of endgame techniques and see how many trade secrets you remember – and can use.
Quiz

Set up each of these positions on a computer screen or board. Then:

(a) Try to figure out which technique – or techniques – can be used. Both players may have techniques available to them. Or one player might use more than one technique.

(b) Try to find the best play, without moving the pieces.

(c) Then try to find the best play, with moving the pieces.

11 Kavalek – Bilek
Sousse 1967
White to play

How can White take advantage of Black’s piece placement?

12 Fischer – Reshevsky
Los Angeles 1961
White to play

With no passed or queenside pawns White’s chances seem slim. He drew after 1 \( \mathcal{e}4 \). Did he have better?
13 Bareev  
– Azmaiparashvilli  
Shenyang 2000  
Black to play

Black has more than one way to win. Which is the easiest?

14 Timman – Spassky  
Hilversum 1983  
Black to play

White threatens to win the knight with 1 $\text{We}7 + \text{C}c8$ 2 $\text{We}8+$ or 1 f7. What can Black do?

15 Grischuk – J. Polgar  
Biel 2007  
Black to play

A knight and two connected pawns usually beats a knight. Why is this position different?
Quiz

16 Hort – Doncevic
Bundesliga 1983
White to play

Black wants to create a counter-passer with ... e5+. What can White do?

17 Ljubojevic – Smeets
Amsterdam 2007
White to play

White is in check and will lose the c5-pawn. What’s the difference between 1 e5 and 1 c7?

18 Carlsen – Morozevich
Morelia-Linares 2007
Black to play

Black can win the kingside pawns beginning with 1 ... xf4. Should he?
19 Mieses – Gunsberg
Hanover 1902
White to play

White has an extra pawn but no passer. What should he do?
Chapter Three:
Twenty Five Crucial Sacrifices

A master can calculate sacrifices better than you. But before he starts counting out five-move variations, he has to come up with one move – the one that starts the sacrifice. He doesn’t do this by looking at every possible offer of material. He relies on his know-how – the sacrifices that occurred in similar positions in previous games. There are very few new, unique sacks.

Standard sacrifices are a form of priyome. A master knows, for instance, the ... $\text{xc3}$ Exchange sacrifice in the Sicilian Defense the same way that he knows when to answer ... $g6$ with $h2$-$h4$-$h5$. He recognizes the pattern. That tells him what is likely to be worth calculating.

In this chapter we’ll examine 25 of the most commonly occurring sacrifices. These are not sham sacrifices, as Rudolf Spielmann called them. Those are really combinations, such as the ancient $\text{xh7}+$/ ... $\text{xh7}$/ $\text{g5}+$ against a castled king. Sham sacks lead to a quick and definite outcome.

A real sacrifice, on the other hand, may just offer compensation and alter the dynamic of the middlegame. They are harder to learn – and that’s why they are the trade secrets of masters.

1 The ‘Impossible’ $d4$-$d5$

When White plays $d4$-$d5$ as a sacrifice he wants to open the d- or e-file for his heavy pieces and perhaps plant a knight on d4. This happens after openings as varied as the Caro-Kann and Nimzo-Indian Defenses, and the Queen’s Gambit, both Accepted and Declined.
The 'Impossible' d4-d5

Spassky – Avtonomov
Leningrad 1949

White to play

In this position, from a QGA, Black controls d5 five times compared with two times for White. Yet 1 d5! works. On 1 ... ♞xd5? Black is lost because of 2 a3! (2 ... ♞c6 3 ♞xd5 or 2 ... ♞xc3 3 ♞xd8 with check). Cfj

Moreover, both 1 ... ♞xd5 and 1 ... ♞bxd5 allow a strong 2 ♞g5!.

Black defended with 2 ... ♞e7 3 ♞xf6 ♞xf6. Then on 4 ♞xd5 he could recapture with the pawn and keep his bishop so that ♞d4-c6 is ruled out.

White would then retain a strong initiative after 4 ... exd5 5 ♞d4! ♞d7 (else ♞f5) 6 ♞e1 ♞f8 7 ♞h5.

Instead, the game went 4 ♞xd5 ♞xd5 5 ♞xd5 exd5. White does not have a forced win, just a terrific position after 6 ♞d4!.

Black to play
The ‘Impossible’ d4-d5

White threatens to exploit the e-file pin with heavy pieces and \( \mathcal{c} f5 \) or \( \mathcal{c} c6 \). Black tried \( 6 \ldots \mathcal{d} f8 \ 7 \mathcal{f} f5 \mathcal{h} 5? \), overlooking \( 8 \mathcal{e} xd5! \mathcal{w} xd5 \ 9 \mathcal{w} xe7+ \mathcal{g} 8 \ 10 \mathcal{w} xf6 \). He resigned in view of \( 11 \mathcal{g} 7 \) mate or \( 12 \mathcal{e} e7+ \).

Better was \( 6 \ldots \mathcal{w} d7 \ 7 \mathcal{e} e1 \mathcal{a} 7 \). But White would have a strong initiative, well worth a pawn, after \( 8 \mathcal{a} ac1 \mathcal{f} 8 \ 9 \mathcal{w} h5 \).

The moral: Even when d4-d5 looks impossible, it’s worth a second look.

Another form of d4-d5 occurs when White has a pawn at e4 and will meet \( ... \) exd5 with e4-e5.

\[
\text{Keres – Fine} \\
\text{Ostende 1937} \\
\text{White to play}
\]

The tempting \( 1 \) e5? surrenders a wonderful outpost to Black at d5 and opens the diagonal of his bishop at b7. The position calls for \( 1 \) d5! instead.

Many of the most common real sacrifices are not forcing. Here, for example, Black can refuse the pawn with \( 1 \ldots \) e5.

But the new pawn structure favors White after \( 2 \mathcal{g} g5 \mathcal{c} d7 \ 3 \mathcal{h} h4 \) and \( 4 \mathcal{f} f5 \). Or after \( 2 \mathcal{g} g5 \), with threats of \( 3 \) d6 and \( 3 \mathcal{h} h7 \mathcal{a} xh7 \ 4 \mathcal{h} h3 \).

So, Black played \( 1 \ldots \) exd5. White would get little from \( 2 \) exd5? \( \mathcal{a} xd5 \). But \( 2 \) e5! drove away the Black knight and made e5-e6!? possible.

For example, \( 2 \ldots \mathcal{d} e4 \) can be met by \( 3 \) e6! fxe6 \( 4 \mathcal{a} xe4 \) dxe4 \( 5 \mathcal{g} 5 \). White would have a dangerous attack with \( 6 \mathcal{w} xh7+, \) \( 6 \mathcal{a} xe6+ \) or \( 6 \mathcal{a} xe6 \).
Instead, the game went 2 ... \( \text{d}7 \) 3 \( \text{g}5 \).

Now on 3 ... h6 White can draw with perpetual check after 4 e6 hxg5 5 exf7+ \( \text{x}f7 \) 6 \( \text{e}7+ \) \( \text{g}6 \)! 7 \( \text{x}g7+ \) or look for more.

Black played 3 ... \( \text{f}8 \), a natural but faulty follow-up to his previous move. He lost after 4 \( \text{x}h7! \) \( \text{x}h7 \) 5 \( \text{h}3 \) and 5 ... \( \text{c}1 \) 6 \( \text{h}7+ \) \( \text{f}8 \) 7 \( \text{h}3 \).

### 2 Sicilian ... \( \text{xc}3 \)

This arises almost exclusively in the Sicilian Defense. But it is so common and so crucial to the outcome of middlegames that it is one of the most important recurring sacrifices.
After White met the threats (... $\mathcal{Q}xc3/ ... \mathcal{W}xf2+/ ... \mathcal{Q}xf2) with 3 $\mathcal{W}e3$ the forced moves were over and we can evaluate the sacrifice:

Black has improved the scope of his bishop at b7 and threatens to push his center pawns down White’s throat. His chances are better in a middlegame than in an ending so he played 3 ... $\mathcal{W}c7!$ and 4 $c3$ f5.

![Chessboard](image)

*White to play*

Theoretically White is about a half a pawn ahead. But the initiative and center control matter more. White played 5 $\mathcal{W}c1$ and chances would be roughly equal after 5 ... f4. But it was much harder to play the White pieces and Black won.

When Black does not immediately win the e4-pawn, White’s king safety and the weakness of his pawns are keys to Black’s compensation.

![Chessboard](image)

*J. Polgar – I. Ivanov*

*New York 1989*

*Black to play*

A priyome in this position is g2-g4-g5 by White and ... b5-b4 by Black, as we saw in Chapter One. Since it’s Black move, he can start the chain reaction and would likely stand well after 1 ... b5 2 g4 b4
Exchange Sacrifice on f6 or f3

and either 3 g5 bxc3 4 gxf6 cxb2+ and 5 ... ♖xf6 or 3 ♕d5 ♕xd5 4 ♕xd5 ♞c7.

But more promising is 1 ... ♞xc3! 2 bxc3 ♕c6. Black threatens to take on e4 as well as build up on the queenside with ... ♗a5/ ... ♗c8.

He would stand better after 3 ♕d5 ♕xd5 4 exd5 ♗a5 5 ♗b2 ♗c8, with threats to c3 and prospects of ... e4 or ... ♗c4-a4.

Instead, play went 3 ♗b2 ♘xe4. Black’s compensation was more than enough because of White’s unsafe king. White bet on a kingside attack and was lost after 4 ♗g4 d5 5 ♗d3 ♗a5 6 ♗h6 ♗f6 and now 7 ♗g3?! ♘xg3 8 ♘xg7 ♘xg7 9 f6 ♗h5! won.

3 Exchange Sacrifice on f6 or f3

A kind of reversed image of ... ♘xc3 is an Exchange sacrifice on f6 or f3. Its main aim is to damage the enemy’s castled position. If the sacker can also pick off a pawn, all the better. This is a common theme in the French Defense:

Rovner – Tal
Riga 1955
Black to play

If White had seen it coming he would have tried something like 1 ♕d2. But he chose 1 h3? and allowed 1 ... ♘xf3!.

Declining the sack, 2 hxg4, fails to 2 ... ♕xd4! 3 gxf3 ♕xf3+ 4 ♗g2 ♘xg5. Black would have two pawns for the Exchange – more than enough ‘comp.’

White preferred 2 gxf3 ♗h2! 3 ♗g2. But he was worse after 3 ... ♕xd4 4 ♕e3 ♗h6! and 5 ♗h4 ♗f4.
Exchange Sacrifice on f6 or f3

For example, 6 b1 f8!, piling up against f3, is better than the complications of 6 ... xe3 7 fxe3 hxf3 8 f2!.

Instead, the game went 6 g6?! xe3 7 xe8 and Black won after 7 ... hxf3! 8 xd7 xh4+.

The White version of this, xf6, is a familiar guest in the Sicilian Defense. The positional benefits often include securing outposts at d5 or f5.

Stein – Parma
Lvov 1962
White to play

The natural 1 f5 is handled by 1 ... e7. White secured the f5 square and the win of a pawn for the Exchange with 1 xf6! gxf6 2 f2.

A key point is that 2 ... g7 3 f1 e7?? allows 4 f5+. Black tried 2 ... g8, leaving White with a choice of 3 xf6 e7 or the more ambitious ideas, 3 e3 and h6/f5 or building up with 3 f1.

He chose the latter and play went 3 f1 de8 4 f5 d8 5 g3.

Black to play
White’s main threat is h2-h4-h5, which, thanks to the knight on f5, would be decisive. (In fact, 5 h4 is stronger than 5 \( \text{g}3 \).)

Black began to give back material, 5 ... \( \text{h}8 \) 6 \( \text{xd}6 \) (6 h4!) \( \text{e}7 \) 7 \( \text{xf}6 \). Then he gambled on 7 ... \( \text{xe}4 \) based on 8 \( \text{xe}4 \) \( \text{xf}6 \) and 8 \( \text{xe}4 \) \( \text{xd}5 \).

But this lost to 8 \( \text{xf}7 \) \( \text{xf}7 \) 9 \( \text{xe}5 \) 10 e4. The outcome would have been unclear after 7 ... \( \text{d}7 \) 8 e5 \( \text{e}7 \).

4 Knight Takes Center

Pawn chains encourage attacks on the flanks of the chain. With White pawns at d4 and e5 facing Black pawns at d5 and e6, a standard idea is f4-f5/ ... exf5 – and even the follow-up of e5-e6 – to open the center.

But another recurring theme is blasting open the center by giving up a knight for two chain pawns.

Jansa – Gligoric
Nice 1974
Black to play

That happens most often when White creates a chain with links at e4 and d5, as in the King’s Indian and Benoni Defenses but also in 1 e4 e5 openings. This position arose from a Ruy Lopez.

White prepares to pressure the queenside with a3-a4 and \( \text{d}2 \). Or with \( \text{d}2 \)-c4 and ... \( \text{xc}4/\text{bxc}4 \) and \( \text{fb}1 \).

Black acted first, 1 ... \( \text{b}xd5 \)! 2 \( \text{ex}d5 \) \( \text{d}5 \). At meager cost his center pawns – and the bishops behind them – became an offensive force following 3 \( \text{b}2 \) \( \text{b}6 \) 4 \( \text{e}4 \) \( \text{c}7 \).
Knight Takes Center

Black threatened ... \( \text{W} x b 5 \) but also prepared ... d5 followed by ... e4.

![White to play](image)

He was better after 5 a4 d5 6 ed2 e4! 7 xg7 xg7 and then 8 h2 e6 9 ac1 f5.

Black’s edge became obvious after 10 f3 c4+! (11 h1 c5 or 11 f2 xf2+ 12 xf2 c5 and ... d3+). But even without 10 f3 he would have a strong game with ... f4-d3 or ... f8 and ... f4.

A variation on this theme is a sacrifice on e4 rather than d5. If Black then wins the d5-pawn the effect is the same.

![Geller – Eingorn](image)

Riga 1985

Black to play

Having seen the last example, you might start by looking at 1 ... edx5. But 1 ... xe4! and 2 xe4 f5 is more forcing.

Black gets to mobilize his center pawns immediately thanks to his threats to take on c3. Play went 3 c2 e4 4 d4 xd5.
The game could become wildly unbalanced after 5 \( \text{\textbf{d}}2 \text{\textbf{c}}5 \text{\textbf{6 \textbf{e}}2} \) \textbf{b}4 7 c4!? \textbf{\text{x}}a1 8 \textbf{w}xa1 or 5 ... \textbf{b}4 6 c4! \textbf{\text{x}}d4 7 cxd5 \textbf{\text{x}}a1 8 \textbf{w}xa1 \textbf{\text{x}}d5 9 \textbf{\text{x}}b4.

Instead, White replied 5 \( \text{\textbf{e}}2? \) and then 5 ... 6 \( \text{\textbf{c}}3 \) 6 \( \text{\textbf{c}}3 \) 7 \( \text{\textbf{b}}1 \).

Black didn’t want to give his opponent attacking chances along the a1-h8 diagonal after 7 ... \( \text{\textbf{x}}e1 \) 8 \( \text{\textbf{w}}xe1 \) followed by \( \text{\textbf{b}}2 \).

He felt he could win with his center pawns alone and did so after 7 ... \( \text{\textbf{c}}5 ! \) 8 \( \text{\textbf{b}}2 \) \( \text{\textbf{x}}b2! \) 9 \( \text{\textbf{x}}b2 \) d5 10 \( \text{\textbf{c}}1 \) d4 11 \( \text{\textbf{d}}1 \) \( \text{\textbf{d}}6 \).

5 \textbf{File-Plugger}

This arises in several different pawn structures with an open file. The sacrificer, White or Black, wants to close the file and secure positional benefits like a protected passed pawn.
White can occupy c7 with his rook but it can be challenged by ... \(\mathbf{\text{\textit{d}}}_c8\).

Better is 1 \(\mathbf{\text{\textit{c}}}_c6\)!, threatening the pawns on b6 and d6. After the forced 1 ... \(\mathbf{\text{\textit{x}}}c6\) 2 \(\mathbf{\text{\textit{d}}}c6\) we can evaluate:

(a) White created a protected passed pawn at c6.

(b) He opened a splendid diagonal leading to f7 and threatens \(\mathbf{\text{\textit{d}}}c4\).

(c) He is virtually certain to win back at least one pawn.

Of course, Black has an extra Exchange. But rooks need files to prove they are superior to minor pieces. Since the c-file is now plugged up, a diagonal, a2-g8, counts much more.

This became evident as the game went 2 ... \(\mathbf{\text{\textit{h}}}h8\) 3 \(\mathbf{\text{\textit{d}}}xd6\) and now 3 ... \(\mathbf{\text{\textit{c}}}c1\)!? 4 \(\mathbf{\text{\textit{w}}}c3\) \(\mathbf{\text{\textit{a}}}a3\) 5 \(\mathbf{\text{\textit{e}}}e6\) \(\mathbf{\text{\textit{g}}}g7\) 6 \(\mathbf{\text{\textit{g}}}g2\).

White could have won a second pawn (6 \(\mathbf{\text{\textit{w}}}xe5\) or 6 \(\mathbf{\text{\textit{d}}}xe5\)). Or he could have pushed the c-pawn. But he preferred to exploit the a2-g8 diagonal, with 6 ... \(\mathbf{\text{\textit{e}}}e7\) 7 \(\mathbf{\text{\textit{c}}}c4\) \(\mathbf{\text{\textit{aa}}}a7\) 8 \(\mathbf{\text{\textit{h}}}h4\) \(\mathbf{\text{\textit{e}}}e6\) 9 \(\mathbf{\text{\textit{xe}}}e6\) \(\mathbf{\text{\textit{f}}}f8\) 10 \(\mathbf{\text{\textit{b}}}b3\)!

He was preparing \(\mathbf{\text{\textit{w}}}c4\) and \(\mathbf{\text{\textit{d}}}g5\)-f7+. The game ended with 10 ... \(\mathbf{\text{\textit{h}}}h6\) 11 \(\mathbf{\text{\textit{w}}}c4\)! g5 12 \(\mathbf{\text{\textit{hx}}}x5\) \(\mathbf{\text{\textit{hx}}}x5\) 13 \(\mathbf{\text{\textit{e}}}e6\) g4 14 \(\mathbf{\text{\textit{fx}}}x4\). Black resigned in view of \(\mathbf{\text{\textit{d}}}f6\) followed by \(\mathbf{\text{\textit{e}}}e8\)! or \(\mathbf{\text{\textit{h}}}h5\)!

The file plugger works best when it not only limits enemy rooks but benefits one of your minor pieces, such as White’s light-squared bishop in the last example, and Black’s in the next.
White threatens to win a second pawn, $\texttt{Wxd5}$. If Black defends with ... $\texttt{Wf7}$, White can continue with $\texttt{Qf3-e5}$ or perhaps $\texttt{a2-a4}$ and enjoy an edge.

So Black played 1 ... $\texttt{Be4}$! and 2 $\texttt{Qxe4 fxe4}$. Then White had no targets to attack. His rooks don’t play because the e-file is plugged. Black’s bishop goes from bad to good, e.g. 3 ... $\texttt{Bf3}$! 4 $\texttt{Wf2}$ $\texttt{g5}$ or 4 $\texttt{Wf1}$ $\texttt{Be6}$.

But one of the advantages of having an extra Exchange is that you can give it back. White chose 3 $\texttt{Bxf1}$. He invited 3 ... $\texttt{Bh3}$ 4 $\texttt{Wf2}$ $\texttt{xf1}$ 5 $\texttt{Wxf1}$ when he would still be a pawn up and ready for 6 $\texttt{a4}$.

Black appreciated that and preferred 3 ... $\texttt{Bf3}$ so that he could answer 4 $\texttt{Wf2}$ with 4 ... $\texttt{Bg4}$, threatening ... $\texttt{Bxf4}$ or ... $\texttt{h5-h4}$.

White kept winning chances with 4 $\texttt{Bxf3}$! and 4 ... $\texttt{exf3}$ 5 $\texttt{Wf2} \texttt{Be6}$ 6 $\texttt{Bf1}$! (not 6 $\texttt{Bf1}$ $\texttt{xf4}$ 7 $\texttt{Bxf4} \texttt{Be2}$ or 7 $\texttt{gxf4 Wg4+}$ and 8 ... $\texttt{Wg2+}$).
Exploding ...d5

The upshot is that he can trade rooks and try to win the f3-pawn in the endgame. Black had enough counterplay, 6 ... h6 7 d2 f7 8 xe6 xe6 9 h3 g5!, to draw. A good sacrifice had been met by a good counter-sack.

6 Exploding ... d5

This sacrifice occurs in two forms of the Sicilian Defense. In one, Black plays ... d5 in answer to g2-g4. We examined that in Chapter One.

The second version arises when Black’s pawn is at e5, not e6. Then when ... d5 is met by exd5, Black may be able to liberate his pent-up power with ... e4.

Petrosian – Smyslov
Moscow 1949
Black to play

If White can threaten the d-pawn with fd2, Black’s bishops suffer after ... e7 or ... c6. White would be at least equal. So Black chose 1 ... d5!.

White cannot allow ... dxe4, e.g. 2 f3 dxe4 3 xd8+ xd8 4 xe4?? xe4 5 xe4 d1+.

In the game, he chose 2 xd5?. This turned out badly following 2 ... xdx5 3 edx5 xc2 and then 4 b3 e4!. Black kept his pawn and it grew in power with 5 g4 e3 6 g2 d2! 7 xd2 edx2 8 d1 xd5. He won.

But what if White played 2 edx5? The answer is 2 ... e4!
Exploding \( \text{d5} \)

The only way to avoid 3 \( \text{\textit{dxc3}} \) 4 \( \text{bxc3} \) \( \text{\textit{xc3}} \), which favors Black, is 3 \( \text{\textit{xe4}} \). But the Black bishops take over after 3 \( \text{\textit{xb2}} \) and 4 \( \text{\textit{f3}} \) \( \text{\textit{xa3}} \).

If \( \text{d5} \) can be carried off favorably in an endgame like that, it stands to reason that it should be a worthy option in a middlegame:

White to play

\begin{center}
\textbf{Bokuchava – Tal}
Poti 1970
\textbf{Black to play}
\end{center}

White has taken steps (\( \text{d2}, \text{f3} \)) to make sure \( \text{\textit{xc3}} \) will be unsound. But 1 \( \text{\textit{d5!}} \) is promising. The main line is 2 \( \text{\textit{exd5}} \) \( \text{e4!} \).

White’s bishop is not trapped because 3 \( \text{\textit{fe1}} \) \( \text{\textit{exf3}} \) allows 4 \( \text{\textit{xe8}} \). Therefore, play could go 3 \( \text{\textit{fe1}} \) \( \text{\textit{e5}} \) and then 4 \( \text{\textit{xe4}} \) \( \text{\textit{xe4}} \) 5 \( \text{\textit{xe4}} \) \( \text{\textit{xd5}} \).

There would be chances for both sides after 6 \( \text{\textit{f4}} \) and then 6 \( \text{\textit{xe4}} \) 7 \( \text{\textit{xe4}} \) \( \text{\textit{xc2}} \) and 8 \( \text{\textit{g3}} \) \( \text{f6} \) or 8 \( \text{\textit{d4}} \) \( \text{\textit{c4}} \).

But back at the diagram White met 1 \( \text{\textit{d5}} \) with 2 \( \text{\textit{xd5?}} \) and Black replied 2 \( \text{\textit{xd5}} \) 3 \( \text{\textit{exd5}} \) \( \text{e4} \). On 4 \( \text{\textit{xe4}} \) White just loses a piece.
Exchange Sacrifice on e6 or e3

He tried 4 ♦fe1 ♦e5 5 ♦f4 but lost after 5 ... ♦xf3 6 ♦xe5 ♦g4 (or 6 ♦xe5 ♦g4).

7 Exchange Sacrifice on e6 or e3

This is another sacrifice that can be carried out by White or Black. A rook is almost always given up for a bishop, not a knight. The compensation often comes in the form of domination of light or dark squares, depending on which bishop is captured.

Polugayevsky – Petrosian
Moscow 1983
Black to play

White might feel he is better because of his bishops and pressure (♦b3, ♦fb1) against b7. But that changed radically after 1 ... ♦xe3! 2 ♦xe3 ♦c5.

The two-bishop edge is gone, b7 is rock solid and Black is preparing to target e3 and dominate the dark squares.

For example, 3 ♦c1 ♦e8 4 ♦f3 ♦h6 and 5 ... ♦e7 threatens to win a pawn with ... ♦xe3+. If White tries to keep his material edge with ♦f2, Black can repeat the position with ... ♦e4+ – but may want more.

White preferred 3 ♦c2 ♦e8. He should have conceded the e-pawn with 4 ♦b1 ♦xe3 5 ♦be1. If White can trade a pair of rooks he would reach rough equality. But he chose 4 ♦f3 ♦h6 5 ♦c3 ♦e7 instead.
Exchange Sacrifice on e6 or e3

White to play

Now 6 \textit{f2?? e4+} is out of the question. On other moves Black would enjoy slightly better chances after \ldots \textit{xe3+}.

White blundered, however, with 6 \textit{b6?} and resigned after 6 \ldots \textit{a4!}.

The colors-reversed version, when White plays \textit{xe6}, often begins a kingside attack directed at squares around f7.

\begin{center}
\begin{tikzpicture}
% Chessboard
\end{tikzpicture}
\end{center}

Adorjan – Vadasz

Hungary 1970

\textit{Black to play}

Since 1 \ldots \textit{g4} invites 2 \textit{e5!}, Black tried 1 \ldots \textit{e6}. But this innocuous-looking move turned out to be a serious error because of 2 \textit{xe6!}.

White’s immediate aim is to win a pawn after 2 \ldots \textit{fxe6 3 e1}.

But he also had attacking chances based on \textit{e5} or \textit{g5} – as well as on \textit{h6/g5} and then either \textit{xg6} or \textit{c4}.

The dangers to Black were evident after 3 \ldots \textit{c5 4 c4! d5} and 5 \textit{h6}.
Black’s position would be in free fall after 5 ... h8 6 g5 and xe6 or xe6. Also, after 5 ... f6 6 g5 xg5 7 xg5 and e5 or xg6.

He played 5 ... ad8? 6 xg7 xg7 7 g5 c7 8 f4. In this lost position he walked into 8 ... f6 9 xc7! (9 ... xc7 10 xe6+ and xc7).

8 Poisonous b-pawn

Many of the rules given to beginners are so general (‘Don’t lose time in the opening’) that they’re almost useless. One of the most specific concerns a sacrifice: ‘Do not take the enemy b-pawn with your queen.’ There are good reasons for this.

The game is five moves old and Black is already threatening to violate the rule with ... xb2. White played 1 d2! xb2 2 b1
and then 2 ... \textit{\textbf{a}}3 3 \textit{\textbf{\textordrigin{c}}\textbf{c}4. His compensation is having six pieces in play in a semi-open position while Black is trying to fight with two.

After 3 ... \textit{\textbf{a}}5 4 0-0 Black should have developed, such as with 4 ... \textit{\textbf{d}}d7. But he played 4 ... e6 and 5 \textit{\textbf{\textordrigin{f}}\textbf{e}1 a6? 6 \textit{\textbf{f}}4 e5 7 dxe5 dxex5.

It shouldn’t be shocking that White can begin a sham sacrifice – that is, a combination – with 8 \textit{\textbf{\textordrigin{d}}\textbf{d}6!. Then 8 ... exf4 9 \textit{\textbf{d}}d5! cxd5 10 exd5+ loses and 9 ... \textit{\textbf{d}}d7 10 \textit{\textbf{g}}5 \textit{\textbf{e}}5 11 \textit{\textbf{c}}7+! \textit{\textbf{x}}c7 12 \textit{\textbf{x}}xf7+ \textit{\textbf{d}}8 13 \textit{\textbf{e}}6 is mate.

Black accepted a different sacrifice, 8 ... \textit{\textbf{\textordrigin{c}}\textbf{x}3, and resigned after 9 \textit{\textbf{\textordrigin{e}}\textbf{d}1 \textit{\textbf{d}}7 10 \textit{\textbf{x}}xf7+! \textit{\textbf{x}}f7 11 \textit{\textbf{g}}5+ \textit{\textbf{e}}8 12 \textit{\textbf{e}}6+ because of 12 ... \textit{\textbf{d}}8 13 \textit{\textbf{f}}7+ \textit{\textbf{c}}7 14 \textit{\textbf{d}}6 mate or 12 ... \textit{\textbf{e}}7 13 \textit{\textbf{f}}7+ \textit{\textbf{d}}8 14 \textit{\textbf{e}}6 mate.

This sacrifice is offered so often because the best way to punish an early move of the enemy QB is to attack the undefended b-pawn. This occurs in openings as varied as the Sicilian’s Poisoned Pawn Variation (1 e4 c5 2 \textit{\textbf{f}}3 d6 3 d4 cxd4 4 \textit{\textbf{x}}xd4 \textit{\textbf{f}}6 5 \textit{\textbf{c}}3 a6 6 \textit{\textbf{g}}5 e6 7 f4 \textit{\textbf{b}}6) and the Slav Defense (1 d4 d5 2 c4 c6 3 \textit{\textbf{f}}3 \textit{\textbf{f}}6 4 \textit{\textbf{c}}3 \textit{\textbf{f}}5 5 cxd5 cxd5 6 \textit{\textbf{b}}3!).

The compensation is usually just a lead in development. But the sacrificer usually needs to open the center to make that matter. For example, 1 e4 e6 2 d4 d5 3 e5 c5 4 dxc5 \textit{\textbf{c}}6 5 \textit{\textbf{f}}3 \textit{\textbf{c}}5 6 \textit{\textbf{d}}3 \textit{\textbf{g}}e7 7 \textit{\textbf{f}}4 \textit{\textbf{b}}6.
Poisonous $b$-pawn

Keres – Alexandrescu
Munich 1936

White to play

White played this way for several reasons. First, the conservative
7 0-0 $\square$g6! would have posed problems defending the e-pawn, e.g.
8 $\square$el $\square$d7 followed by ... $\square$b6-c7.

The sacrifice, 8 0-0 $\boxtimes$xb2, made sense because (a) it costs Black
two tempi to grab the pawn and bring his queen to safety, (b) White
can open the center with c2-c4!, and (c) Black won’t be able to castle
easily because of tactics.

Play went 9 $\bxc3$ $\boxtimes$b6 10 c4!. Note that 10 ... 0-0 is no good
because of 11 $\boxtimes$xe7+ $\boxtimes$xh7 12 $\bxc4$+ $\boxtimes$g8 13 $\boxtimes$h5 or 12 ... $\boxtimes$g6
13 $\boxtimes$g4.

Therefore Black played 10 ... h6, But White replied 11 $\boxtimes$c1!.

Black to play

He threatens 12 $\text{h}b1$ $\text{d}d8 (12 ... $\text{a}5 13 $\text{b}3$) 13 cxd5 $\text{xd}5$
14 $\text{c}4$ and $\text{xc}5$ when the queen retreats. And he’s also looking to
play $\boxtimes$xe6.
Black was forced into unnatural moves, 11 ... \( \Box b4 \) 12 \( \Box e2 \) \( \Box d7 \) 13 a3 \( \Box a6 \) 14 \( \Box b1 \) \( \Box c6 \).

He was in trouble after 15 \( \Box g3 \) \( \Box f5 \) 16 cxd5 exd5 17 e6! because of 17 ... \( \Box x e6?? \) 18 \( \Box b5 \).

He lost quickly: 17 ... fxe6 18 \( \Box e5 \) \( \Box x g3 \) 19 hxg3 \( \Box c7 \) 20 \( \Box d7 \) \( \Box x d7 \) 21 \( \Box b2 \) \( \Box b6 \) 22 \( \Box x g7+ \) \( \Box d6 \) 23 \( \Box e4+! \) dxe4 24 \( \Box f d 1 + \) resigns.

But the b-pawn is not poisoned in other cases, as the success of 1 d4 \( \Box f 6 \) 2 \( \Box f 3 \) e6 3 \( \Box g 5 \) c5 4 e3 \( \Box b 6 \) 5 \( \Box b d 2 \) \( \Box x b 2 !? \) and other openings have shown. Understanding what makes the sacrifice work - such as opening the center - is part of a master’s know how.

9 Benoni Breaker

When the center is locked thanks to Black pawns at c5, d6 and e5, the action typically turns to the wings. But a sacrifice of a piece on c5 or e5 can make an explosive difference.

\[ \text{Spassky – Penrose} \]

\[ \text{Palma de Mallorca 1969} \]

\[ \text{White to play} \]

White has better pieces but the closed center stifles them. He would have little after 1 \( \Box f 5 \) \( \Box x f 5 \) 2 exf5 and 2 ... \( \Box g 7 \) and ... \( \Box f 6 \), for example.

White’s solution was 1 \( \Box x c 5 ! \) dxc5 2 \( \Box x e 5 \). His aim is e4-e5, which frees e4 for a piece and can make threats of d5-d6 or e5-e6. On 2 ... \( \Box d 6 \) he should avoid the endgame (3 \( \Box x d 6 \) \( \Box x d 6 \) 4 e5 \( \Box f 7 \)) and continue 3 \( \Box a 1 ! \).

The game went 2 ... \( \Box g 8 \) and 3 \( \Box b 8 \).
Now 4 e5 can’t be stopped. Then White’s minor pieces take over, e.g. 5 \( \text{Q}e4+ \), 5 \( \text{Q}e4 \) and 6 \( \text{Q}xc5 \) or 5 \( \text{Q}f5 \) followed by 6 e6.

Black’s reply, 3 \( \ldots \text{Q}e7 \), prepared to give back the piece, 4 e5 \( \text{Q}xd5! \) 5 cxd5 \( \text{Q}xd5 \), when chances would be equal.

But White found 4 \( \text{Q}f5 \) and then 4 \( \ldots \text{Q}e7 \) 5 \( \text{Q}xh6! \). This is based on 5 \( \ldots \text{Q}xh6 \) 6 \( \text{W}f8+ \) followed by 7 \( \text{W}f7+ \), 8 \( \text{W}xf6+ \) and a winning e4-e5.

Black decided on 5 \( \ldots \text{Q}xd5 \) 6 cxd5 \( \text{Q}xh6 \). But after 7 \( \text{W}f8+ \) \( \text{G}g7 \) 8 \( \text{W}xc5 \) the center pawns could no longer be restrained.

The game ended with 8 \( \ldots \text{Q}d7 \) 9 \( \text{W}d6+ \) \( \text{H}h7 \) 10 e5! \( \text{G}h8 \) (10 \( \ldots \text{Q}xe5 \) 11 \( \text{Q}e4+ \) \( \text{G}g8 \) 12 \( \text{W}b8+ \)) 11 h6 \( \text{W}h7 \) 12 e6! \( \text{W}c2+ \) 13 \( \text{G}g3 \) resigns.

Because of Black’s tight quarters in the full Benoni pawn structure, it’s often impossible for him to stop the sacrifice. The best defense may be a counter-sacrifice as he tried in the last example and more successfully in the next.
The g2-g4 Gambit

This arose from a Ruy Lopez, not a Benoni. After 1 \( \text{Qxe5!} \) \( \text{dxe5} \) 2 \( \text{Qxc5} \) White would pocket the b4-pawn and have a huge pawn roller.

For example, 2 ... \( \text{Qc8} \) 3 \( \text{Qxf8} \) \( \text{Qxf8} \) 4 \( \text{Qxb4} \) followed by c4-c5 and maybe \( \text{Qd3} \), \( \text{Qc3} \) and \( b3-b4-b5 \).

But White preferred 1 \( \text{Qxc5} \) \( \text{dxc5} \) 2 \( \text{Qxe5} \). When Black prevented 3 \( \text{Qxf7+} \) by means of 2 ... \( \text{Qg8} \), White continued 3 \( \text{Qxd7} \) \( \text{Qxd7} \) 4 e5.

\[ \text{Black to play} \]

This looks ominous because of 5 d6 \( \text{Qg6} \) 6 e6 or 5 ... \( \text{Qc6} \) 6 \( \text{Qd3} \), threatening mate on h7.

But Black found safety in 4 ... \( \text{Qxd5!} \) 5 \( \text{cxd5} \) \( \text{Qxe5} \) and then 6 \( \text{Qxe5} \) \( \text{Qxe5} \).

Material is equal and 7 f4 \( \text{Qd7} \) 8 \( \text{Qe4} \) allowed him to flee into a bishops-of-opposite-color ending, 8 ... \( \text{Qa1+} \) 9 \( \text{Qf2} \) \( \text{Qd4+!} \) 10 \( \text{Qxd4} \) \( \text{cxd4} \) 11 f5 \( \text{Qf6!} \) 12 \( \text{Qxf6+} \) \( \text{gxf6} \), that was ultimately drawn.

\textbf{10 The g2-g4 Gambit}

When White pushes his unsupported g-pawn two squares he dares Black to take it. If Black doesn’t, White saves a tempo for his attack – and an extra tempo often makes an attack decisive.
A primary move in similar positions is 1 e5. But White chose 1 g4! because it prepares a powerful push to g5 and g6, e.g. 1 ... b5 2 g5! hxg5 3 fxg5 d7 5 g6! or 4 ... h5 5 g6! fxg6 6 w5.

So Black played 1 ... xg4 and then came 2 w2 f6 3 g1. White’s ideas include (a) f4-f5, (b) f3 and e4-e5, and (c) d3-g3 and xg7+.

Black defended with 3 ... d7 4 f5 g8, because 4 ... e5 5 de2 and 6 w6! would have been too strong. White continued to build up, 5 d1.

Now 5 ... e5 is bad because of 6 e6! fxe6 7 fxe6 xxe6 and 8 xf6!, threatening 9 xf8+! xf8 10 wxf8 mate.

Black should have tried 5 ... exf5! 6 xf5 xf5. But he allowed 5 ... d8? 6 xex6 xex6 7 e5!, a sacrifice we’ll examine in a few pages.
After 7 ... dxe5 8 Qe4 White threatened to take on f6. He would meet 8 ... Qxe4 with 9 Qxf8+! and 10 Qxg7 mate. The rest: 8 ... Qh5 9 Qg6 exd4 10 Qg5! Resigns. (11 ... hxg5 12 Qxh5+ Qg8 13 Qf7+ Qh8 14 Qf3 and mate).

The g2-g4 push is not exclusive to Sicilian bashers. It crops up in Caro-Kann Defense middlegames and 1 d4 openings like the Semi-Slav (1 d4 d5 2 c4 e6 3 Qc3 Qf6 4 Qf3 c6 5 e3 Qbd7 6 Qc2 Qd6 7 g4 Qxg4 8 Qg1) and various Indian defenses, like 1 d4 Qf6 2 c4 d6 3 Qc3 e5 4 Qf3 Qbd7 5 e4 Qe7 6 Qe2 0-0 7 g4!? Qxg4 8 Qg1. Here's a vintage example from a Semi-Slav.

Alekhine – Illa
Buenos Aires 1926
White to play

With 1 g4! White tried to force half of the g-file open. On 1 ... Qxg4 he would gain time with 2 Qdgl Wh5 3 Qg5 Wh3. He might win after 4 Qhg1 g6 5 c5 Qe7 6 Qe5 followed by Qxg6.

But what if Black takes with his knight, 1 ... Qxg4 and 2 c5 Qc7? Once again the file is dangerous after 3 Qhg1. Black was clinging to life after 3 ... f5 4 Qe5 because 4 ... Qxe5 5 dxe5 threatens 6 f3 (5 ... Qf6 6 Qxg7+!).

Instead he chose 4 ... Qf6 and White won with 5 f3 Qxe5 6 Qxe5 Qe8 7 Qg5 Qf7 8 Qxf5! (8 ... exf5 9 Qb3).

A colors-reversed form of the g2-g4 sacrifice is ... b5 by Black when White has castled queenside. If the pawn is not captured it can become a battering ram.
Black has a space edge on the queenside but it looks like White has the quicker attack. This appearance changed after 1 ... b5!.

Then on 2 axb5 axb8 White would hold the initiative, 3 d6 xex6 4 exd6 and 4 ... b4 5 b1 f6 and ... e4, for example.

In the game White ignored the offer with 2 fxe6 fxe6 3 h4. But he was soon overwhelmed by 3 ... a5 4 g5 b4!.

**11 Bishop (xe6) for Pawns**

Another common feature of Sicilian Defenses is a White sacrifice on e6. Ideally he gets three pawns – and an attack – for a bishop.

Black has just retreated his attacked knight to d7. But this allowed 1 xe6!. Then 1 ... xex6 loses a pawn to 2 xex7+ and 3 xexd.
Play went 1 ... fx e6 2 dxe6. Black had to move his attacked queen and give up a third pawn, 2 ... w a5 3 xg7+.

White’s pawns provide cover for attacking pieces, e.g. 3 ... f f7 4 f5 f8 5 h5+ g8? 6 h6+ mates or 5 g6 6 xe7 xe7 6 d2 and d5+.

Black tried 3 ... f8 4 e6+ g8 but was losing after 5 h5 f8 6 xf8 xf8 7 d2 with a threat of 8 d5 followed by f6+ or xa5.

When White would get three pawns and strong attacking chances from xe6, it may pay to decline the offer. For instance: 1 e4 c5 2 f3 d6 3 d4 cxd4 4 xd4 f6 5 c3 a6 6 c4 e6 7 b3 e7 8 f4 b5 9 e5! dxe5 10 fxe5 fd7.  

When White opts for 11 xe6 Black should avoid 11 ... fxe6 12 xe6 wb6? 13 d5 or 12 ... wa5 13 xg7+.

He has better chances of survival after 11 ... xe5! even if White has the upper hand following 12 xc8 and 13 d5.

12 Spielmann’s e5-e6

Rudolf Spielmann loved all kinds of sacrifices but he is particularly associated with the advance of an e-pawn to the sixth rank. One of his games began 1 e4 f6 2 c3 d5 3 e5 fd7 4 e6!?.

The point is that 4 ... fxe6 5 d4 makes a mess of Black’s pawn structure.
Spielmann's e5-e6

The safest policy may be to return the pawn, 5 ... e5 6 dxe5 e6, but this is not to everyone's taste. Black played 5 ... f6?! 6 f3 e5 7 dxc5 c6 and lost quickly after 8 b5! d7 9 0-0 c7 11 e1 (threat of g5xe6) h6 12 xc6 bxc6 13 e5.

This obstruction idea occurs in many different openings. Another of Spielmann's games began 1 e4 c6 2 f3 d5 3 f3 f6?! 4 e5 e4 5 e2 xc3 6 dxc3 b6?! 7 d4 c5? and then 8 e6!.

If Black can't correct his pawn structure, he needs active counterplay, as in this example from a King's Indian Defense.

If Black retreats 1 ... e8, he is worse after, say, 2 cxb5 axb5 3 f4 and e4. His choice is between 1 ... d7 or an exchange of pawns and queens first. In either case White cannot maintain his pawn on e5.
If Black opts for the middlegame, 1 ... \( \text{d}d7?! \) 2 e6! he faces dangers like 2 ... fxe6 3 d5!, when 3 ... exd5 4 cxb5 axb5? 5 \( \text{w}x\text{d}5+ \) costs a piece. Or 3 ... \( \text{a}a5 \) 4 cxb5 exd5 5 \( \text{d}d4 \) and 3 ... \( \text{a}a7 \) 4 dxe6.

Experience indicates White has compensation in the endgame, after 1 ... dxe5 2 dxe5 \( \text{w}x\text{d}1 \) 3 \( \text{x}x\text{d}1 \) \( \text{d}d7 \), in view of 4 e6! fxe6 5 cxb5 axb5 6 \( \text{f}4 \).

Black is worse after 6 ... e5? 7 \( \text{e}3 \). For example, 7 ... \( \text{f}6 \) 8 \( \text{a}c1 \) \( \text{d}7 \) and now both 9 \( \text{e}4 \) followed by \( \text{c}5 \) and 9 \( \text{d}5 \) \( \text{x}d5 \) 10 \( \text{x}d5 \) are good.

As in the Spielmann games, Black’s downfall comes from passive play. In the diagram, 6 ... \( \text{b}4 \) 7 \( \text{a}4 \) \( \text{b}6! \) is a fine, forcing idea, e.g. 8 \( \text{x}b6 \) \( \text{x}b6 \) 9 \( \text{x}c7 \) \( \text{b}7 \) and 10 ... \( \text{x}b2 \).

13 Real and Sham \( \text{d}5 \)

Planting a knight on d5 is a common sacrifice in English Opening and Sicilian Defense middlegames. It works when the virtually forced ... exd5 allows White to build pressure on a newly opened file.
Real and Sham d5

**Uhlmann – Brameyer**

East German Championship 1972

*White to play*

White began with 1 d5! because 1 ... b8? 2 xc6 and 3 xe7+ or 1 ... d7? 2 b6 are verboten.

Black played 1 ... exd5 2 cxd5 and 2 ... d5 3 xd5. Thanks to the sham sacrifice White pressures c6. The game ended quickly: 3 d7 4 d3 b6 and 5 f5 f8? and 6 xc6! bxc6 7 h6+! gxh6 8 c3 and mates.

In the Sicilian, a sacrifice on d5 is more often real, rather than sham, and is typically designed to open the e-file when the enemy king is uncastled. Here's a case of White offering pieces twice on d5.

**Tal – Mukhin**

Baku 1972

*White to play*

After 1 d5! Black rejected 1 ... exd5 2 exd5+ because 2 ... e7 3 f5 loses back the piece and 2 ... d7 3 b4 or 3 c6 gives White excellent compensation. For example, 3 b4 a4 4 xa4 bxa4 5 c4 and xa4+.

So he chose 1 ... b4, expecting the knight to retreat from c3. But White fired back 2 xb7 xb7 and 3 d5!.
Black had little choice this time in view of 3 ... \( \text{g7} \) 4 \( \text{c6} \) or 3 ... a5? 4 \( \text{x} \)xf6 gxf6 5 \( \text{c6!} \) \( \text{c8} \) 6 \( \text{xf6} \) mate.

So the game went 3 ... exd5 4 exd5+ and 4 ... \( \text{d7} \) – again avoiding 4 ... \( \text{g7} \) 5 \( \text{f5} \).

White to play

White has one pawn for his knight but Black’s king predicament and the prospect of \( \text{c6} \) offers excellent ‘comp.’ White chose 5 c3 because 5 ... bxc3 6 \( \text{a4}+ \) and 7 \( \text{ac1}! \) would open decisive attacking lines.

So play went 5 ... b3 6 \( \text{xb3} \) \( \text{c5} \) 7 \( \text{c4} \) with 8 b4 or 8 \( \text{c6} \) coming up, e.g. 7 ... \( \text{c8} \) 8 b4 \( \text{ce4} \) is met by 9 \( \text{c6} \) \( \text{xg5} \) 10 \( \text{b8}+! \) \( \text{xb8} \) 11 \( \text{c6} \) mate.

Instead, Black tried 7 ... \( \text{c8} \) 8 \( \text{c6} \) and White was threatening 9 \( \text{e3} \) followed by \( \text{ae1} \) and \( \text{e3} \) and \( \text{e7}+! \).

The game ended with 8 ... h6 9 \( \text{x} \)xf6 gxf6 10 \( \text{e3} \) \( \text{c7} \) 11 b4 \( \text{g8} \) and Black resigned.

14 Line-Opening g5-g6 or ... b4-b3

It’s a familiar scenario: Kings are castled on opposite wings and the player who first opens attacking lines wins. He may have done it with a supported pawn charge. But quicker is an unsupported charge, that is, a sacrifice.
White's attack seems to be on schedule with 1 h5 followed by 2 \textit{\#h3} or 2 \textit{\#d3} and 3 \textit{\#dg1/4 g6}.

But Black can interrupt him with the forcing 1 \ldots b4!. That seizes the initiative, 2 \textit{\#a4} \textit{\#c5!} 3 \textit{\#xc5} dxc5, and White's attack grinds to a halt. Or 2 \textit{\#e2} \textit{\#de5} threatening 3 \ldots \textit{\#xf3} and 3 \ldots \textit{\#c4}.

White doesn't need to support his g-pawn. With the faster 1 g6! he threatens gxf7+ \textit{\#xf7}. Then he can choose between 3 \textit{\#h3}, with \textit{\#xe6+} in mind, and 3 f4/4 f5.

And what if the pawn is taken? One way is 1 \ldots hxg6 and then 2 h5! gxh5 3 \textit{\#xh5} with deadly play on the open file (3 \ldots \textit{\#f6} 4 \textit{\#h3} and \textit{\#h2}).

Only slightly better is 1 \ldots fxg6 2 h5! gxh5 3 \textit{\#xh5} and 3 \ldots \textit{\#f6} 4 \textit{\#g5}.

Now the target is g7. For example, 4 \ldots \textit{\#e5} 5 \textit{\#g2} \textit{\#f8} and 6 \textit{\#e2} followed by f3-f4 with a terrific attack for White.
While White is looking to his right in this kind of position, Black can look to his right – to open a queenside file with a very similar sacrifice.

**Ilincic – Cvetkovic**
Kladovo 1990

*Black to play*

White is on the verge of g5-g6 while Black has a hard time preparing a supported ... b3 – since 1 ... a4 allows 2 \text{\textit{W}}xb4.

But Black doesn’t have to prepare. He stole the initiative with 1 ... b3!, even though the pawn can be taken three ways.

The simplest lines are 2 \text{\textit{Q}}xb3 \text{\textit{Q}}xf3! and 2 cxb3 \text{\textit{H}}c8+ 3 \text{\textit{F}}b1 \text{\textit{Q}}xf3! (4 \text{\textit{Q}}xf3 \text{\textit{H}}xe4+ and ... \text{\textit{Q}}xf3), which favor Black.

The real test was 2 axb3. Black continued 2 ... a4!. It’s the mirror image of what happened on the kingside in the previous example, when White played g5-g6 and met ... hxg6 with h4-h5!.

After 2 ... a4, White tried to keep files closed with 3 b4. But on 3 ... a3 4 b3 Black would have opened the position with 4 ... d5!.

Instead, after 3 ... a3 White went for 4 \text{\textit{F}}b1 axb2 5 \text{\textit{Q}}xb2.

*Black to play*
Lasker's Vacating e4-e5

At the cost of a pawn Black has the more vulnerable king target. Next came 5 ... d5!, getting his e7-bishop into play and readying ... a4/... a8. If 6 cxd5 wxd5 he would threaten 7 ... a2+ and 7 ... f3.

White tried to close the position with 6 c3 dxe4 7 f4. But Black replied 7 ... xe5 8 b3 d3+ 9 xd3 exd3. He won eventually after 10 h1 g1 xg3 11 xg3 h4! since 12 cxb4 d5+ is death.

The sacrifices in this chapter tend to fall into two categories: There are those that wouldn’t occur to amateurs because they just seem so strange, such as the ‘impossible’ d4-d5 push and the Exchange sacks on e6 or f3. A second group of sacrifices are trade secrets because amateurs think the key moves require preparation: They feel that g5-g6 needs h4-h5. Others of this type are the unsupported g2-g4 advance, the Benko-like ... b5 – and Emanuel Lasker’s contribution to the science of sacrifice.

15 Lasker's Vacating e4-e5

Lasker made this sacrifice famous when he cleared a square for his knight at e4 in a famous endgame against Jose Capablanca, at St. Petersburg 1914. The push is much more common in a middlegame.

Ragozin – Noskov

Leningrad 1930

White to play

Black's last move, ... f6, was designed to neutralize the b2-g7 diagonal. He may have counted on being safe after 1 xf6 xf6 and
2 ... e5. Then he could meet 2 e5 dxe5 3 fxe5 with 3 ... ♕d4+ and 4 ... ♖xe5.

But White played the immediate 1 e5! and 1 ... dxe5 2 ♕e4!. If Black refuses the pawn, 2 ... ♖c7 3 fxe5 ♗c5, White’s attack wins with 4 ♗f6+! gxf6 5 ♕g4+ ♗h8 6 exf6. Or 3 ... ♗h8 4 ♖xh7 ♗xd3 5 ♖h5 ♗g8 6 cxd3.

Black tried 2 ... exf4 and then 3 ♖xf6+ ♖xf6 4 ♖xf4:

![Chess board diagram](image)

Black to play

Now ♖xf6 or ♖xf6 are on tap, and 4 ... ♗d5 would invite a sham sacrifice, 5 ♖xh7+! ♖xh7 6 ♕h5+ ♗g8 7 ♖xg7! ♖xg7 8 ♕g4+ ♗f6 9 ♕g5 mate.

Black can defend much better with 4 ... e5! and 5 ♖xe5 ♗d5. Then the two-bishop sacrifice fails. White might try 6 ♕h5 h6 7 ♖f3 instead.

Instead, Black created an escape route for this king with 4 ... ♗e8?. But this handed White another winning combination, 5 ♖xf6! gxf6 6 ♕g4+.

Black could resign after 6 ... ♗h8 7 ♕h4. He chose 6 ... ♗f8 and lost after 7 ♖a3+ ♗e7 8 ♖xh7 ♕b6+ 9 ♗h1 ♗e8 10 ♕d1! and ♕g8 mate.

Another common form arises when the sacrifice of the e-pawn prepares an advance of the f-pawn.
Lasker’s Vacating e4-e5

Short – Ni Hua
Beijing 2003

Black to play

White threatens $\mathcal{A}xf5$ and would win control of light squares for his minor pieces after $1 \ldots fxg4$ 2 fxg4 (or $1 \ldots f4? 2 \mathcal{A}xh7$).

Black made the dark squares more important with $1 \ldots e4!$. If $2 \mathcal{A}e2$, then $2 \ldots exf3$ and $3 \ldots \mathcal{C}e5$ is annoying. (After $3 \mathcal{A}xf3$ Black might prefer $3 \ldots fxg4$ 4 $\mathcal{A}xg4 \mathcal{W}xf1+$ 5 $\mathcal{W}xf1 \mathcal{A}xf1+$.)

White accepted the offer, $2 fxe4$. But $2 \ldots f4!$ revealed Black’s strategy: At the cost of a pawn he cleared e5 for his knight and obtained a powerful passed f-pawn. White’s bishop and knight, which would have been powerful after $1 \ldots f4$ or $1 \ldots fxg4$, have become idle spectators.

Play continued $3 \mathcal{D}e2 f3$ 4 $\mathcal{W}d2 \mathcal{D}e5$. (Even better was $4 \ldots f2!$, threatening $\mathcal{W}f3$ mate, and then $5 \mathcal{W}e3 \mathcal{D}e5$ followed by $6 \ldots \mathcal{A}xg4$ or $6 \ldots \mathcal{W}f3+ 7 \mathcal{W}xf3 \mathcal{A}xf3$.)

White to play

Black’s knight and f-pawn allowed him time to mobilize both rooks and he was winning after $5 g5 \mathcal{W}g6$ 6 $\mathcal{D}g1 \mathcal{A}g4$ 7 $\mathcal{B}b1 \mathcal{F}f7$ and $\ldots \mathcal{A}af8$. 
16 Passive Bishop Sacrifice

By passive we mean a non-forcing move that leaves a piece en prise. Consider the Sicilian Defense line that runs 1 e4 c5 2 \( \Box f3 \) \( \Box c6 \) 3 d4 cxd4 4 \( \Box xd4 \) \( \Box f6 \) 5 \( \Box c3 \) d6 6 \( \Box g5 \) e6 7 \( \Box d2 \) \( \Box e7 \) 8 0-0-0 0-0 and then 9 f4 h6:

![White to play](image)

There are several reasons why Black wants to see 10 \( \Box h4 \). He might prefer the bishop to be unprotected so that 10 ... \( \Box xe4 \) 11 \( \Box xe4 \) \( \Box xh4 \).

White has an alternative in 10 h4!? . The first point is that after 10 ... hxg5 11 hxg5 he can swing his queen to the h-file and threaten mate on h7 or h8, e.g. 11 ... \( \Box d7 \) 12 \( \Box xc6 \) bxc6 13 g4 and \( \Box h2 \).

And on 10 ... \( \Box xd4 \) 11 \( \Box xd4 \) hxg5 12 hxg5:

![Black to play](image)

White can meet 12 ... \( \Box g4 \) with 13 \( \Box e2 \) e5 14 \( \Box g1! \) exf4 and 15 \( \Box xg4 \), with the idea of \( \Box h2-h8 \) mate.
Passive Bishop Sacrifice

Moreover, 10 h4 is not just based on the wishful thinking that Black will open the h-file. After 10 ... \(\text{Qxd4} \text{ Qxd4} \text{ a6}, \) for instance, White can aim for \(\text{Qe2} \) and \(\text{g2-g4-g5}. \) This is stronger thanks to h2-h4. One GM game went 12 \(\text{Qe2} \text{ Wa5} \text{ Qf3} \text{ Qd8} \text{ 14 g4! Qd7} \) and then 15 \(\text{Qxb6 gxh6} \text{ 16 g5} \) with a fierce attack that eventually won.

The prime virtue of this sacrifice is that it allows you to ignore ... h6 when you really don’t want to retreat or trade the bishop. Here’s how a missed opportunity can ruin a game.

![Saidy – Fischer New York 1965 White to play](image)

The pin on the knight at f6 and the threat of e4-e5 gave White compensation for his pawn. But Black’s last move, ... h6, ‘put the question.’

White would be worse in the 1 \(\text{Qxf6} \text{ Qxf6} 2 \text{ Qxf6} \text{ gxf6} \text{ endgame}. \)

He stayed in the middlegame with 1 \(\text{Qd2} \) and 1 ... \(\text{Qbd7} \text{ 2 e5} \text{ Qd5}. \) But he was worse and after 3 \(\text{Qf5?} \text{ exf5}! \text{ 4 Qxd5} \text{ Qe8} \text{ 5 Qxc4?} \) he overlooked 5 ... \(\text{Qxe5!} \text{ 6 Qxd8} \text{ Qxc4+!} \text{ 7 Qxe8+} \text{ Qxe8+.} \) Black went on to win the ending after 8 \(\text{Qd1} \text{ Qd2} \text{ 9 Qxd2} \text{ Qe2+} \text{ 10 Qc1 Qxf2}. \)

White missed a chance to upset one of history’s greatest players because he didn’t know the passive sack, 1 h4!. If 1 ... hgx5 2 hxg5 Black can’t move his knight because he faces death on the h-file. Moreover, White could build up his attack since he is no rush to take on f6. For example, 2 ... \(\text{Qbd7} \) permits a strong 3 e5!. 

156
17 Benko – Less ... b5

Well before the Benko Gambit (1 d4 ♘f6 2 c4 c5 3 d5 b5!? 4 cxb5 a6), players on the Black side of a King’s Indian Defense or Benoni conjured counterplay by offering a pawn on b5:

![Chessboard Diagram]

Uhlmann – Geller
Palma de Mallorca 1970
Black to play

Black often plays ... e6 and ... exd5 in similar positions. But that would lose a pawn here (1 ... e6 2 dxe6 and 3 ♘xd6).

Black found 1 ... b5! and then 2 cxb5 axb5 3 ♘xb5 ♞b6. He can use the two half-open files to pressure pawns at a2 and b2.

He also threatens 4 ... ♘xe4 5 ♘xe4 ♞xb5. In fact, after 4 a4 he still has 4 ... ♘xe4 5 ♘xe4 ♞xb5! because 6 axb5 ♞xa1+ and ... ♞xh1 favors him.

White chose 4 ♗e2 and Black attacked the e-pawn with 4 ... ♞b4!.

![Chessboard Diagram]

White to play
The tactical problems are shown by 5 \( \text{xc}2? \text{xe}4 6 \text{xe}4?? \text{xc}3++.

White liquidated pawns and pieces, 5 e5 \( \text{b}5 6 \text{g}3 and then 6 ... \text{a}6! 7 \text{xa}6 \text{xa}6 8 \text{xd}6 \text{xd}6. Black prepared to pile on pressure with ... \text{d}7-b6, ... \text{b}8 or \text{fa}8 and then either ... \text{a}4 or ... \text{c}4.

The game saw 9 0-0 \( \text{xd}7 10 \text{ae}1 \text{yg}3 11 \text{h}xg3 \text{b}6. Black's threats include 12 ... \text{c}4 and 12 ... \text{xc}3 13 bxc3 \( \text{c}4.

Something had to fall. And when it did, 12 \( \text{d}2 13 \text{d}3 \text{fa}8 14 b3 \text{xc}3 15 \text{xc}3 \text{xc}3 16 bxc4 \text{xa}2 17 \text{xa}2 \text{xa}2, Black had a better rook, better minor piece and, after his king reached f5, a better king. He won.

The ... b5 sacrifice typically occurs in the opening or early middlegame when Black can exploit a lead in development. If White can coordinate his pieces smoothly, the sacrifice may backfire. For example, 1 d4 \( \text{f}6 2 c4 g6 3 \text{c}3 \text{g}7 4 e4 d6 5 \text{e}2 0-0 6 \text{g}5 c5 7 d5 b5 8 cxb5 a6.

White to play

This occurred in a 1967 game from the first issue of the Chess Informant – and 7 ... b5 was given a question mark without comment.

White replied 9 a4 and had little trouble making his extra pawn count after 9 ... \( \text{a}5 10 \text{d}2 axb5 11 \text{xb}5 \text{a}6 12 \text{ge}2 \text{bd}7 13 0-0 and then 13 ... \text{xb}5 14 \text{xb}5 \text{b}6 15 \text{c}2 \text{fc}8 16 \text{c}3.

But 7 ... b5 wasn't bad. Like many sacrifices, it required a vigorous follow-up, such as 10 ... \( \text{b}4 11 f3 \text{fd}7 12 \text{c}1 c4 with ... \text{c}5-b3 in mind.
**18 Piece-for-Pawns on b5**

There are two basic forms of this sacrifice and in both cases the aim is to acquire two or three passed queenside pawns in return for a piece.

One form arises in the Sicilian Defense when Black plays ... a6 and ... b5 and has a pawn at d6 that is not protected by an e-pawn.

![Chessboard diagram](image)

Adams – Pelaez
Innsbruck 1987

*White to play*

Typical moves in this kind of position are 1 g5, 1 \( \text{d3} \) and 1 a3. But here White has an extra option, a capture on b5. After he retakes \( \text{xb5} \) he attacks the queen and earns a third passed pawn as compensation.

White can sacrifice a bishop or knight on b5. He chose 1 \( \text{dxb5!} \) and play went 1 ... axb5 2 \( \text{xb5} \) \( \text{wc6} \) 3 \( \text{xd6+} \) \( \text{xd6} \) 4 \( \text{xd6} \) \( \text{xd6} \) 5 \( \text{xd6} \).

Now we can see that 1 \( \text{xb5+} \) would have been the wrong way to start because without a bishop on the board White would allow 5 ... \( \text{c4!} \).

![Chessboard diagram](image)

*Black to play*
Piece-for-Pawns on b5

White’s passed pawns aren’t as important as his edge in development. That was enhanced by the trade of queens and grew after 5 ... \( \text{bd}7 \text{ 6 g5! e7 7 d2 e8 8 e2 c7 9 h1d1.} \)

Black can hardly move a piece (9 ... \( \text{b6? c5+ and mates}; 9 ... \text{b7 10 xd7+}; 9 ... \text{b5 10 d3 and 11 b3 or 11 c4).} \)

Play went 9 ... \( \text{d8 10 a7 b7 11 c5+ e8 12 a4} \) and then 12 ... f6 13 gxf6 gxf6 14 f4! f7 15 h5+ g7 16 e7 resigns (16 ... g8 17 xd7).

The less common, but typically more dangerous, form of this sacrifice arises when queenside pawns are fixed: White pawns at b4, c5 and d4 facing Black ones at b5, c6 and d5.

White knew the pattern and had been thinking about a sacrifice for five moves. “Two passed pawns, advancing on enemy pieces, have brought me more than a dozen points in tournaments of various ranks,” he wrote of 1 \( \text{x}b5! \).

The pawns’ advance will be aided by the knight when it reaches d6. Black inserted 1 ... \( \text{xe5 2 fxe5 h6 3 c1}, \) then 3 ... \( \text{xb5} \) 4 \( \text{xb5}. \)

White pawns do a good job of taking squares away from Black pieces, so he stayed in the middlegame with: 4 ... \( \text{d7 5 d6 xa1} \) 6 \( \text{xa1 a8 7 c3}. \)

There was no way to stop b4-b5 and the game went 7 ... \( \text{f8 8 b5}. \)
Black’s best defense in such positions lies in blockading the pawns or giving up a piece for two of them, 8 ... ♗b8 9 c6?! ♙xc6.

Something similar could have arisen when the game went 8 ... ♙xd6 9 exd6 ♗a4. Then 10 c6 ♗xb5 11 cxb7 ♗xb7 12 ♗c7 and 12 ... ♗xc7 13 dxc7 ♗b6 would have held. In the end the game was drawn.

19 Razuaev’s h2-h4

One of the most unlikely of sacrifices arises in positions like this:

Black’s pieces don’t easily defend the kingside so 1 ♙d3 followed by 2 ♗c2 used to be common. After Black defended with ... g6, White shifted his queen, ♗d2-h6, and looked for a way to play ♗g5 and/or h2-h4.
Razuvaev's h2-h4

But GM Yuri Razuvaev proposed an immediate 1 h4! to save time and support g5. His main line ran 1 ... hx4 2 hx4 wh4 and now 3 w3.

By attacking the knight at c6 White wins time for e4. Analysis has found that 3 ... b7 4 e4 d8 5 h5 is best.

Then 5 ... a5 6 h4 wh4! 7 wh4 xc4 is a sound queen sacrifice and 6 g4! xc4 7 wh6 g6 8 h4 wh4 is nearly as good. That's one of several versions of the h2-h4 gambit that arise in this pawn structure. In practice the gambit is declined more often than it's accepted.

Sanguineti – Averbakh
Portoroz 1958
Black to play

White has just played 1 h4. Accepting the pawn, 1 ... hx4 2 hx4 wh4, is dangerous after 3 g5!.

This is shown by 3 ... g4 4 f3 h5 5 f2! followed by h1. Or 4 ... g3 5 f6, threatening h6 and mate on g7.

Black just ignored the h-pawn and met 1 h4 with 1 ... d6!. This stops White from transferring his queen to f4 and g4, followed by g5/h4-h5.

White could still try to make kingside threats with 2 h5 and then 2 ... a5 3 hxg6 hxg6 4 e5 followed by f4.

But he stumbled with 2 g5 a5 3 f3?. Black replied 3 ... g3! 4 h5 d6 and won after 5 hxg6 h2+ 6 f1 hxg6 7 e4 xe4 8 xe4 g3! 9 e3 c4.
20 The ♕f5 Hop

We examined the knight shift to f5 as a priyome. When the shift is discouraged by ... g6, White can insist on it.

White had been preparing 1 ♕f5!? gxf5 2 gxf5 in the previous dozen moves. He analyzed 2 ... ♕f8 3 h5, when the threat of 4 h6 would prompt 3 ... h6 4 ♕xh6 ♕xh6 5 ♘xh6 and 5 ... ♕e8.

Then 6 ♘xf6 would allow Black to defend with 6 ... ♕xh5 (7 ♘h6 ♕xf3). But White has other options, including 6 ♘g6 or 6 ♘h2.

But Black didn’t try to refute 1 ♕f5. He just replied 1 ... ♕f8 and turned his attention to the queenside. White needed a new idea and he passed up the best one, 2 ♕eg3 followed by 3 ♕h5!.

Instead, he played 2 ♕h6+? ♕xh6 3 ♕xh6 and his attack was stalled, since h4-h5 will be met by ... g5!, sealing the kingside.

This enabled Black to open the other wing after 3 ... ♘ab8 4 ♘c1 a4. He had the edge after 5 cxb4 ♘xb4 6 ♘c3 and won well after 6 ... ♘b7 7 ♘c2 ♘xb2 8 ♘xa4 ♘xg2 9 ♘xg2 ♘e7 10 ♘ xd7 ♘xd7 11 ♘b2 ♘xb2 12 ♘xb2 f5!.

The idea of trying to open the g-file with ♕f5 also appears in Sicilian Defenses and positions with a fianchettoed Black bishop, as in this from a King’s Indian Defense.
White has managed to open some kingside lines. But it won’t matter unless he gets his queen into play there. He would be worse after 1 c5xb4 axb4, for example, since the e4-pawn is falling.

In desperation, White tossed a piece, 1 c5f5? gxf5 2 gxf5. He dreamed of mates after g7g1 and d4d4. But Black safely took another pawn, 2 ... a5xb2. His king is safe on h8 or h7 (3 g7g1+ h7h7 4 d4d4 e5xd4 5 xdx4 6 xdx4 c5c2+).

White tried 3 f1f1 and resigned soon after 3 ... d7d7 4 b1 a5xa1 5 g7g1+ h7h8 6 xa1 e6.

21 Queenside Gambit

In 1 d4 d5 games, the Catalan and similar openings, Black often grabs a pawn with ... dxc4 and then protects it with ... b5. It may look like White is gambiting his entire queenside.

White typically challenges b5 with a2-a4 and Black defends with ... c6 and/or ... a6. Then it’s a strong pawn mass or weak pawn mess, depending on what happens next.

In the simplest form, 1 d4 d5 2 c4 dxc4 3 e3 b5?! then 4 a4! is strong, e.g. 4 ... a6 5 axb5 axb5?? 6 xa8 or 4 ... c6 5 axb5 cxb5?? 6 f3f3!. In more complex forms, tactics are more difficult to come by:
Queenside Gambit

Alekhine – Bogolyubov

World Championship 1929

White to play

Black traded off his better bishop to make his d5-knight a tower of strength. His c-pawn denies White’s bishop its best diagonal: No \( \text{Qd}3 \).

If White is going to justify his sacrifice, he must act quickly, with \( 1 \text{Qg5} \). He prepares \( 2 \text{Wh5} \) and, if \( 2 \ldots \text{g6} \), then \( 3 \text{Wh6 We7} 4 \text{Qxh7!} \) and \( \text{Wg7} \).

Note that \( 1 \ldots 0-0? \) fails to another thematic idea in such positions, \( 2 \text{Wb1!} \). White threatens mate on h7 as well as \( 3 \text{axb5} \). If Black gives back the pawn he has nothing to offset his weak squares and bad bishop.

The game went \( 1 \ldots \text{f6} 2 \text{exf6 Qxf6?} \) and White had a clear edge after \( 3 \text{Qe2 a6} 4 \text{Qf3!} \) (4 ... \( \text{Qd}5 \) 5 \( \text{Qc2} \) \( \text{g6} \) 6 \( \text{Qxh7!} \) or 4 ... \( \text{h6} \) 5 \( \text{Qh5+} \)).

To play this kind of position, Black must take risks. Here that means \( 2 \ldots \text{gxf6!} 3 \text{Wh5+ Cd7} \) followed by ... \( \text{We8} \), when White’s edge is minimal.

When the pawn structure is fluid, White usually wants to change it:
To safeguard his pawns, Black delayed development in favor of the bishop and queen moves. A natural plan for White is to prepare d4-d5, such as with 1 e4 a6 2 ∆c3.

But he can play more forcefully with 1 b3!? and 1 ... cxb3 2 wxb3. For example, 2 ... a6 3 ∆d1 ∆e7 4 ∆a3! ∆xa3 5 ∆xa3 with good play after ∆ab1 and ∆ac4. Or 2 ... wxb4 3 ∆b2 and 3 ... wxb4 4 wxb4 ∆xb4 5 axb5.

Black chose to develop, 2 ... ∆bd7. But 3 ∆e3! created a threat of 4 d5!. Black’s queenside would be collapsing after 3 ... ∆d5 4 ∆xd7 wxd7 5 ∆c3.

Instead, Black opted for 3 ... c5 and then 4 ∆xd7 ∆xd7.

He offered to give back the pawn (5 ∆xb7 wxb7 6 wxb5).

But White steered a more ambitious course with 5 d5 and his initiative eventually prevailed after 5 ... bxa4 6 wxa4 exd5 7 ∆c3! d4 8 ∆d5.
Black would also be in trouble after 5 ... exd5 6 ♢xd5 ♢xd5 7 ♢xd5 ♢d8 8 axb5 or 5 ... b4 6 dxe6 fxe6 7 a5 ♤a6 8 ♢xb7 and ♤xe6+.

**22 Kamikaze h4-h5**

We saw in Chapter One how h2-h4-h5 is a priyome to challenge ... g6. If Black guards h5 with ... ♤f6, the pawn push is a super-sharp sacrifice.

![White to play](image)

When this Sicilian Dragon position first appeared White tried standard attacking ideas such as g2-g4 to support h4-h5, and ♤h6. But 1 g4 is slow. And 1 ♤h6? ♤xh6 2 ♤xh6 allows 2 ... ♤xc3! 3 bxc3 ♤a5, an excellent version of the ... ♤xc3 sacrifice.

Then 1 h5! was found to be sound in view of 1 ... ♤xh5 2 0-0-0. White has a juicy target at h7 after 2 ... ♤c4 3 ♤xc4 ♤xc4 4 g4, for example, and a winning plan of ♤h6xg7 followed by ♤h6+ and g4-g5.

His attack is so quick after 4 ... ♤f6 5 ♤h6 that Black might consider the 5 ... ♤h8!? 6 ♤xf8 sacrifice that we will look at in a few pages.

There are several versions of the h4-h5 sacrifice. It can lead to heavier sacrifices, as in 1 d5 f5 2 g3 g6 3 h4 ♤f6 4 h5!? ♤xh5 5 ♤xh5! gxh5 when 6 e4 threatens ♤xh5 mate and gives White a strong attack.
Another version is:

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1 h5! \(\text{hxh5}\) 2 g4 turned out to be good, since Black’s knight
is exiled offside following 2 ... \(\text{hxf6}\) 3 g5 \(\text{hxh5}\).

That mattered after 4 \(\text{e4}\)! and 4 ... \(\text{b7}\) 5 \(\text{a4}\) put c6 under fire.
Black didn’t like 5 ... \(\text{c8}\) 6 \(\text{xa7}\) \(\text{a8}\) or 5 ... \(\text{b8}\) 6 \(\text{d5}\) \(\text{d7}\) 7 dxc6
\(\text{xc6}\) 8 \(\text{b5}\)!.\n
In the end he complicated with 5 ... \(\text{b5}\) 6 \(\text{xb6}\) \(\text{b6}\) and lost after
7 \(\text{b3}\) (7 \(\text{a3}\)! is better) \(\text{c8}\) 8 \(\text{xc6}\) \(\text{xc6}\) 9 \(\text{xc6}\)!
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\section*{23 Freeing the Bishop, ... \(\text{f4}\)\text{\textsuperscript{168}}} \n
The King’s Indian Defense is a curious animal. Black plays \(\text{g7}\) but often follows this by blocking the bishop with a pawn at e5.

One method of freeing the bishop is to maneuver a knight to f4,
even when White has two pieces attacking that square. At the cost of
a pawn, Black gets to play ... exf4!.
Kamsky – Kasparov
Manila 1992

Black to play

White met Black’s last move, ... \( \text{h}5 \), with g2-g4. He underestimated 1 ... \( \text{f}4! \). After 2 \( \text{x}f4? \) exf4 3 \( \text{xf}4 \) b5 Black would be strong on the dark squares, with ... \( \text{b}6 \) and ... \( \text{d}7-\text{e}5 \) coming up.

White acknowledged his error with 2 \( \text{c}2 \). Black left the gambit on the table with 2 ... \( \text{b}5 \) 3 \( \text{f}2 \) \( \text{d}7 \) 4 \( \text{e}2 \) b4 5 \( \text{a}4 \) a5!.

Allowing White to win the pawn and keep his dark-squared bishop this way is better than 5 ... \( \text{xe}2? \) 6 \( \text{xe}2 \), when Black’s initiative slows.

The game went 6 \( \text{xf}4 \) exf4 7 \( \text{xf}4 \) \( \text{e}5 \) and then 8 0-0-0 \( \text{c}4! \).

White to play

We can appreciate how ... exf4 improved Black’s chances. His threats include 9 ... \( \text{f}6! \) and 9 ... \( \text{d}7/... \) \( \text{xa}4 \).
Vacating c4 or c5

White tried to get his bishop to d4 but 9 ♜e3 ♜xe3 10 ♜xe3 ♜b8 gave Black an initiative that kept growing. He won after 11 ♛b3 ♙d7 12 ♙b1 ♜e8! 13 ♙b6 ♙b5 14 ♙d2 a4 and ... b3.

There are variations on the sacrifice in which Black plants a rook, not a knight, on f4. These offers may be accepted, refused or accepted at a later point, as the last example showed. The sack, whether of a pawn or the Exchange, works best when Black can then plant a knight on e5.

Atalik – Avrukh
St. Petersburg 1994

Black to play

After 1 ... ♜f4 2 ♜xf4 exf4 3 ♘xf4 Black obtained good play with 3 ... f5 and then 4 gxf5 gxf5 5 ♙d2 fxe4.

He would have gotten his pawn back after 6 fxe4 ♘xc3 7 ♙xc3 ♙h4+ 8 ♕g3 ♙xg3+ and 9 ... ♙e8.

White preferred 6 ♘xe4. But after 6 ... ♜e5! 7 ♜e2 ♘f5 and 8 0-0-0 ♘xe4! 9 fxe4 ♙h4 Black had ample compensation (10 ♕g3 ♙xe4 or, as the game went, 10 ♙hf1 ♙xf4! 11 ♙xf4 ♙xh2 and ... ♙h6).

24 Vacating c4 or c5

When an under-supported c-pawn advances to the fifth rank, it’s a sacrifice to blow open part of the center and vacate a key square.
Vacating c4 or c5

In this Modern Benoni position, White may have a solid edge if he can continue \( \text{\&}f3, \text{\&}c4, \text{a}2-\text{a}4 \) and \( \text{\&}e3 \). That’s why \( 1 \ldots \text{c}4 \) is popular. Black clears \( \text{c}5 \) for his knight, which would doom the pawn on \( \text{e}4 \). He stands well after \( 2 \text{\&}xc4 \text{\&}c5 \) or \( 2 \text{\&}f3 \text{b}5 \) (3 \text{\&}xb5? \text{\&}b6+).

In fact, the usual way to test \( 1 \ldots \text{c}4 \) is with \( 2 \text{\&}h1 \text{\&}c5 3 \text{e}5 \), with chances for both sides after \( 3 \ldots \text{dxe}5 4 \text{\&}xc4 \) or \( 3 \text{dxe}5 \text{\&}xe5 4 \text{\&}xc4 \).

There are various forms of this sacrifice, many of them surprising:

Dorfman – Hauchard
Meribel 1998

White to play

White appreciated the value of \( \text{\&}c4 \) and played another impossible-looking move, \( 1 \text{c}5 \)!. Then \( 1 \ldots \text{dxe}5 2 \text{b}5! \text{\&}b7 3 \text{\&}c4 \text{\&}c7? 4 \text{\&}f4! \) would regain his pawn favorably.

3 \ldots \text{\&}d7 4 \text{\&}d1 0-0 is also good for White in view of 5 \text{\&}xd7! \text{\&}xd7 6 \text{\&}xb6.
Dragon Bishop

Black opted for 1 ... bxc5 since 2 b5 a6 3 c4 c6 is more playable here (4 f4 e5). However, his a-pawn could not be held after 4 d2! and he eventually lost.

25 Dragon Bishop

One of the most common rook-for-bishop sacrifices is a passive offer. It’s a frequent feature of Sicilian Dragons with the odd-looking ... h8!.

Lobron – Kudrin
New York 1983
Black to play

White’s attack is coming together quickly, with a mixture of xg7 and h4-h5xh6, and perhaps e4-e5 thrown in.

Black managed to defend and attack with 1 ... h8!. After 2 xf8 xf8 his king position is safe and he has the upper hand on the queenside dark squares, with ... b8/ ... b4 in mind.

White played 2 h5 xh5 before taking the Exchange, 3 xf8 xf8. But he misjudged the consequences of 4 g4 g3 5 h3.

Instead of the expected 5 ... xf1 6 xf1 and 7 h1!, he faced 5 ... b8!. The Dragon bishop was unleashed, e.g. 6 xg3 b4. Then 7 b3 xc3 or 7 e3 d4 or 7 f4 xb2+ are bad and 7 d3 would be met by 7 ... e5! followed by ... xg3 or ... f4+.

Instead of this White played 6 a3 to stop ... b4. But he was lost soon after 6 ... e5! 7 f2 f4+ 8 b1 xf1 9 xf1 xa3 10 d1 e5! 11 c3 a6.
A better response by White occurred in a later game, 3 \( \text{d}d3 \text{b}b8 \) 4 \( \text{x}xh5! \) so that 4 \( ... \text{gxh}5 \) 5 \( \text{exd}5 \text{cxd}5 \) 6 \( \text{w}f4 \) threatens \( \text{w}xb8 \) and \( \text{w}g3+ \).

**Quiz**

Time once again to apply your know-how, this time the sacrificial kind. In each position you should be able to recognize the pattern of one of the sacrifices we’ve examined. First, identify the sacrifice and then try to work out variations at least three moves into the future.

20  Dreev – Cifuentes
Wijk aan Zee 1995
*White to play*

On 1 \( \text{g}g5 \) Black defends with 1 \( ... \text{f}f6 \). What else can White do?

21  Vydeslaver – Psakhis
Ramat Aviv 1998
*Black to play*

Natural moves include 1 \( ... \text{c}c6 \) and 1 \( ... \text{a}5/2 \) \( ... \text{b}4 \). What else?
Quiz

Is it too early for 1 ... e4?

Black seems to have a rock-solid extra pawn. What can White do?

There’s only one sacrificial idea here. How does it work?
Quiz

25 Tal – Gligoric
Portoroz 1958
Black to play

Do any sacrifices come to mind? How should White respond?

26 Grischuk – Dvoirys
Moscow 2002
White to play

It isn’t hard to figure out on which square White will sacrifice. But which piece is best to give up there?

27 Muratov – Spassky
Tallinn 1959
Black to play

What sacrifice occurs to you? What might happen in the next three moves if it’s accepted?
Chapter Four: Twenty Five Exact Endings

Some masters call them ‘theoretical’ endings. Others say they are ‘precise’ or ‘technical’ endings. We’ll call them ‘exact.’

What are they?

They are the endings that can be analyzed with absolute accuracy because there are so few pawns or pieces on the board. Every exact ending is either a forced win or a forced draw, often in just a few moves. None is a ‘White has the better chances’ type of ending.

Because of this you can not only learn but master them. You can be sure of playing the best moves and getting the maximum result regardless of how strong your opponent is. They are ‘ratings proof.’

They are worth your study time because they occur over and over – and because the right way to handle them is often counter-intuitive.

Kovalevskaya – Zhu Chen
Moscow 1994
White to play

White played the natural 1 f5+ but resigned after 1 ... ♕h7 because the pawns start falling (2 ♕h5 ♖h1+ 3 ♕g4 ♖f1! or 2 ♕g3 ♖f1 3 ♕g4 ♖f2!).
As soon as the game ended, Vladimir Kramnik, who was watching, told White that she could have drawn just by passing. If Black’s king captures the pawn on f4 the other pawns are free to advance, e.g., 1 \( \text{g3!} \text{g1}+ \text{h3} \text{f5} \text{h2} \text{a1} \text{g2!} \). On 4 ... \( \text{xf4} \) White draws with 5 \( g6 \) or 5 \( h7 \). This exact ending has been known since 1843.

There are dozens of exact endings. Only a professional like Kramnik has time to study them all. The good news is that you can compete against the vast majority of opponents – including masters – by learning the 25 most useful ones.

1 King + Pawn beats King

There are three exact endings with just two kings and a pawn that are worth knowing. Mastering them is fairly easy.

This one is important because it lies at the end of so many endgames that earlier had lots of pieces and pawns.

White wins regardless of whose turn it is. If it’s his move he can create zugzwang with 1 \( e6 \text{e8} \text{e7} \text{f7} \text{d7} \).

If it’s Black’s turn, 1 ... \( e8 \) and 2 \( e6?? \text{d8} \text{e7+} \text{e8} \) puts White in zugzwang – since 4 \( \text{e6} \) is stalemate.

But White wins by seizing the opposition, 2 \( \text{e6!} \). Then 2 ... \( \text{f8} \text{d7} \) or 2 ... \( \text{d8} \text{f7} \) allows him to advance the pawn safely.
King draws vs. King + Pawn

2 King draws vs. King + Pawn

When a player with an extra pawn trades down to K+P-vs.-K he hopes for Exact Ending 1 or something easier. But the defender wants a position like this.

First, Black seizes the opposition with 1 ... \textit{e7}!. Then comes 2 \textit{d5} \textit{d7} 3 \textit{e5} \textit{e7} 4 \textit{e6}.

The crucial move is 4 ... \textit{e8}!. This draws because 5 \textit{d6} \textit{d8} 6 \textit{e7+} \textit{e8} 7 \textit{e6} is stalemate.

Note that 4 ... \textit{d8}?? allows White to seize the opposition with 5 \textit{d6} – and create the winning position of Exact Ending 1.

3 The Rook Pawn Problem

When the only pawn on the board is a rook pawn it always creates an exception to rules. This is true of queen endings, rook endings, knight endings, bishop endings and, yes, pawn endings, too.
This occurred in a 1921 game that ended in a draw after 1 e6 c3 2 d6 d4 3 c7 and now 3 ... e5! 4 b7 d6 5 xa7 c7!.

White’s king cannot escape the cage he walked into (6 a8 c8). This is a position every would-be master must know.

Can you improve on White’s play? Yes, once you realize that the key to Black’s defense was 3 ... e5! (or 3 ... c5 and 3 ... d5).

White can win by throwing a shoulder block, 2 d5!, instead of 2 d6??.

Black can’t play 2 ... d4. The game would go 2 ... d3 (or 2 ... b4 3 c6) 3 c6 d4 and now 4 b7 c5 5 xa7. White wins because of 5 ... c6 6 b8! and 7 a7, or 5 ... b5 6 b7.

Here’s how the drawable K+RP-vs.-K case matters:

Morozevich – Adams
Wijk aan Zee 2009
Black to play

Black loses after 1 ... f3?? 2 xf5 g2 3 h4! xg3 4 g5 because his king can’t get in front of the pawn or catch White’s king in a cage.

But Black held with 1 ... h4!! since 2 gxh4 f4 would reach a drawn queen endgame after both players promote.

The key line is 2 xh4 f4! 3 gxf4 xf4. Black draws: 4 h5 f5 (shoulder!) 5 h6 g4 or 5 h4 f6 6 h6 f7 7 h5 g8.

Note that 1 ... e5 2 xh5 f4 would work after 3 gxf4+ xf4. But White would win with 3 g4! because he keeps a g-pawn, not an h-pawn.
The only other pawn ending you really need to know arises when there are two blocked pawns and a mutual zugzwang. Whoever moves loses.

If it’s White’s turn, 1 ♕f6 ♕xe4 is hopeless. Slightly better is 1 ♕g4 ♕xe4 2 ♕g3. But 2 ... ♕e3 3 ♕g2 ♕e2 and 4 ... e4 wins for Black.

The same goes for Black if it’s his turn: 1 ... ♕c5 2 ♕xe5 ♕c6 3 ♕e6 loses.

The problem for the kings is that they are too far advanced for defense. If Black’s king were at d6 in the diagram he could save the game by reaching Exact Ending 2 with 1 ... ♕d7 2 ♕xe5 ♕e7.

Here’s a similar situation:

If it’s White’s move he can blunder into Trebuchet with 1 ♕e6?? ♕c5.
But he can win with 1 ♞f6! and then 1 ... ♞c5 2 ♞e6.

Better after 1 ♞f6! is 1 ... ♞c7. But then 2 ♞e7! ♞c8 3 ♞xd6 leads to Exact Ending 1 (3 ... ♞d8 4 ♞e6 ♞e8 5 d6 ♞d8 6 d7).

The best answer to 1 ♞f6 is 1 ... ♞c7. But then 2 ♞e7! ♞c5 3 ♞e6.

And what if Black moves first? Then 1 ... ♞b5! is best.

White should again avoid 2 ♞e6?? ♞c5 as well as 2 ♞f6?? ♞c4!.

He can draw with 2 ♞e4! ♞c4 3 ♞e3 ♞xd5 4 ♞d3.

5 Lucena

This is the oldest of exact endings with just a king, rook and pawn against a king and rook. It’s a must-know because it arises a huge number of times when the player with the pawn has executed the cutoff (Technique 14 of Chapter Two).

If Black’s rook was on d2 (or e2, f2, etc.) White would win with 1 ♞a1! followed by 2 ♞a8 and the pawn queens.

But as it stands, White must drive the Black king away so he can move his own king. The immediate 1 ♞d1+ would work after 1 ... ♞c6? 2 ♞c8!.

But it fails after 1 ... ♞e7 2 ♞c7? because Black has plenty of checking distance, 2 ... ♞c2+ 3 ♞b6 ♞b2+ 3 ♞c6 ♞c2+ 4 ♞b5 ♞b2+.

The solution is to ‘build a bridge’ for the king. White plays 2 ♞d4! (instead of 2 ♞c7?).
White will eventually escape from checks by interposing his rook. For example, 2 ... \( \text{e}e6 \ 3 \text{c}c7! \text{c}c2+ 4 \text{b}b6 \text{b}b2+ 5 \text{c}c6 \text{c}c2+ 6 \text{b}b5 \text{b}b2+ 7 \text{b}b4! \).

A huge amount of book theory about rook endgames is based on whether Lucena can be reached. If you have, for example, a king, rook and two isolated pawns against a king and rook, the only way to win in most cases is to sacrifice one pawn and reach Lucena with the other.

Achieving Lucena often means getting your king in front of or next to the pawn. But if your opponent gets his king in front of it, then the outcome of the game may depend on whether he knows Exact Ending 6.

6 Philidor

If you have time to study only two exact rook endings, this and Lucena are the ones.
It’s tempting to defend with an active move, a check. But 1... ♗d1+?? is disastrous. After 2 ♗e6 White threatens 3 ♗a8+ ♗d8 4 ♘xd8+ ♘xd8 5 ♗f7 and the pawn queens.

Black can meet that threat with 2... ♗f8. But after 3 ♗a8+ ♗g7 4 ♗e7 he is headed to Lucena (4... ♗e1? 5 e6 ♗d1 6 ♗e8 ♗f6 9 e7 etc.)

Yet Black can draw in the diagram with a cutoff by rank, 1... ♗h6!. Then White cannot make progress with just king or rook moves.

So let’s assume 2 e6. White threatens to win with 3 ♗d6!. But 2 e6 also takes away a hiding square for the king.

Black can draw with 2... ♗h1! (or 2... ♗h2, etc.). When the White king moves Black will check along the files. The king has no place to hide.

Once you know the three steps: (a) put your rook on the third rank, (b) wait for the pawn to advance to that rank, (c) move the rook so you can give file checks – much of the mystery of K+R+P-vs.-K+R disappears.

You won’t have to agonize over positions like this.

White – who wrote a book on rook endgames – played 1 ♗f4. He expected 1... ♘xf4+ 2 ♗xf4, leading to drawn Exact Ending 2.

For example, 2... f5 3 ♗f3 ♘g5 4 ♘g3 f4+ 5 ♗f3 ♗f5 6 ♗f2 ♘g4 7 ♘g2 f3+ and now 8 ♗f1! ♘g3 9 ♘g1 f2+ 10 ♗f1 ♗f3 is stalemate.
When Philidor Fails

However, 1 f4?? lost because of 1 ... g5!. White must trade rooks, 2 xf5+ xf5. But this time he gets lost. Exact Ending 1.

For instance, 3 g2 e4 3 f2 f4 4 e2 g3 5 f1 f5 6 g1 f4 7 f1 and now 7 ... f3! 8 g1 e2 and the pawn queens.

But shouldn’t White be able to draw in the diagram? Yes, all he needed to do was remember the Philidor draw. He can reach it in several ways.

One is 1 g2 g5 2 b4 f4 and now 3 b3!. And then 3 ... g4 4 a3 (among other moves) b4 5 f2 f5 6 g2 f4 7 f2 b2+ 8 f1.

Once more, a Philidor. After 8 ... f3 9 a8! the draw is obvious.

7 When Philidor fails

If the defender’s rook fails to get to the third rank in time, he can find the enemy king and pawn on that rank. Then there are three different situations depending on which file the pawn lies. It’s definitely worth knowing the differences.

This is the case of a center pawn. The fastest win is to get the rook to h1 and threaten a check (or mate) on h8.

For example, 1 b1 c8 (nothing better) 2 h1 g8 and now 3 g1+! f8 4 e7+ wins. Or 3 ... h7 4 f7 threatening 5 h1 mate and 5 e7.

But suppose it’s a bishop pawn. Let’s move the key players one file to the right – White king goes to g6, his pawn shifts to f6 and the Black king takes one step to g8.
Then the win comes faster, with 1 \( \text{g7+} \), because of 1 ... \( \text{h8} \) 2 \( \text{h7+ g8} \) 3 f7+! \( \text{f8} \) 4 \( \text{h8+} \). Or 1 ... \( \text{f8} \) 2 \( \text{h7} \! \) and \( \text{h8+} \) (2 ... \( \text{g8} \) 3 f7+).

The third case arises when we shift the kings and pawns one more file.

With a knight pawn there is no forced win. Black can meet 1 \( \text{g7+} \) with 1 ... \( \text{h8}! \). White cannot make progress.

If you didn’t know that you might play 1 ... \( \text{f8}?? \). White can create Lucena after 2 \( \text{h7}! \) and 2 ... \( \text{a1} \) 3 \( \text{f7+ e8} \) 4 \( \text{g8} \) and 4 ... \( \text{h1} \) 5 g7/6 \( \text{f4} \).

**8 Anti-Philidor**

There are – unfortunately – other exact rook endings worth knowing. The first arises when you can’t carry out the first Philidor step in time.
We’ve seen this position before. If it were Black’s turn, you would know what to do, right?

But it is White’s move. If he plays 1 \( \text{Qe6?} \) Black replies 1 ... \( \text{Kh6+!} \) and they can shake hands on the draw.

However, White can play the tricky 1 \( \text{Qd6!} \) instead. This threatens to win with 2 \( \text{Aa8+ Qf7 3 e6+ Qf6 4 Qf8+!} \) and 5 e7.

It’s tricky because checks lose. On 1 ... \( \text{Kh6+??} \) 2 e6 Black gets mated or allows Lucena, 2 ... \( \text{Af8} \) 3 \( \text{Aa8+ Qg7} \) 4 \( \text{Qd7 Aa1} \) 5 e7 \( \text{Ad1+} \) 6 \( \text{Qe8} \) and wins.

And 1 ... \( \text{Ad1+??} \) also loses, to 2 \( \text{Qe6}. \)

But there’s a subtle way to draw and it features a move that wouldn’t occur to many players. After 1 \( \text{Qd6!} \) Black must play 1 ... \( \text{Qe1!}. \)

The point is that he doesn’t allow e5-e6 (2 \( \text{Aa8+ Qf7 3 e6+ Axe6+} \)).

White has a better try in 2 \( \text{Qe6!} \), threatening \( \text{Aa8} \) mate. Then Black’s rook is out of position to check along the third rank.

But he can still draw with 2 ... \( \text{Af8!} \) and then 3 \( \text{Aa8+ Qg7} \). He has to know that 4 \( \text{Qd6} \) must be answered by 4 ... \( \text{Qf7!} \), stopping e5-e6. Draw.

9 Short Side

One more question about the last ending. Why did Black’s king go to f8 and not d8?
The reason is that there is a long side and a short side of the board depending on the pawn. In this case, Black’s kingside is short – there are three files to the right of the pawn, and – the queenside is long.

In general, the defender wants to be able to check on the long side. His rook wants maximum checking distance. Therefore his king goes to the short side so it won’t get in the way.

If it were White’s turn he would win with 1 \texttt{g1+!} because he either forces Lucena or something equally good. For example, 1 \ldots \texttt{h6} 2 \texttt{e8 b8+} 3 \texttt{f7} and 4 \texttt{e7} and wins.

But since it’s Black’s turn he can draw with 1 \ldots \texttt{b7+!} 2 \texttt{d6 b6+} 3 \texttt{d7 b7+} 4 \texttt{d8 b8+} 5 \texttt{c7 b2}.

Black is temporarily out of checks, but he threatens to win the pawn with his king (\ldots \texttt{f6}). White’s only winning try is the cutoff, 6 \texttt{f1!}.
But 6 ... a2! stays on the long side of the pawn. In fact, it’s a bit longer now that Black can check on the a-file. He draws: 7 e7 a7+ 8 d6 a6+ 9 d5 a5+ 10 c4 e5 or 10 d4 a8.

10 King cut off by Rank

In Chapter Two we saw how difficult it is to defend an endgame when your king is cut off by a rook’s control of a file. He often has a harder time when he is cut off along a rank.

If Black’s king were at d6 he would get it in front of the passed pawn and draw. But as it stands, he can’t. And his rook is locked in a losing mismatch with White’s king and pawn. For example, 1 ... a8 2 b5! a1 3 b4 b1+ 4 a5 a1+ 5 b6 and Lucena is not far off.

Or 1 ... b7 2 a4! and Black lacks checking distance (2 ... a7+ 3 b5 b7+ 4 a5 a7+ 5 b6 and 6 b5).

Better is 1 ... c8 2 b5 c5! because a rook trade leads to Exact Ending 2. But 3 h4+ d5 4 b4 wins in view of 4 ... d6? 5 h6+. The key line runs 4 ... c8 5 h6! when the Black king is cut off again (5 ... a8 6 b6 and wins).
It’s important to know this kind of position because it’s counter-intuitive. The defender’s king often runs too far:

Black played 1 ... \( \texttt{b3?!} \) and allowed a drawable position after 2 \( \texttt{c1!} \) \( \texttt{h3} \) 3 \( \texttt{b1+} \) \( \texttt{c4} \) 4 \( \texttt{xxb7} \). (For the rest, see Quiz position 17 in Chapter Two.)

What he underestimated was 1 ... \( \texttt{b6!} \). After 2 \( \texttt{cxb6} \) \( \texttt{xb6} \) White’s king is useless in stopping the c-pawn, e.g. 3 \( \texttt{c1} \) \( \texttt{d4+} \) 4 \( \texttt{e5} \) \( \texttt{c5} \).

His king would cut be off along both the d-file and fifth rank. After 5 \( \texttt{b1+} \) \( \texttt{c6} \) Black would win quickly if he can play 6 ... \( \texttt{h4} \) and ... \( \texttt{c4} \), ... \( \texttt{c5} \), ... \( \texttt{c3} \), ... \( \texttt{c4} \) etc.

White can try 6 \( \texttt{h1} \) but Black wins because the king is still cut off along the d-file, e.g. 6 ... \( \texttt{d8} \) 7 \( \texttt{c1} \) (else 7 ... \( \texttt{c4} \) \( \texttt{e8+} \)) 8 \( \texttt{f5} \) \( \texttt{b5} \) 9 \( \texttt{b1+} \) \( \texttt{c4} \) 10 \( \texttt{c1+} \) \( \texttt{b4} \) 11 \( \texttt{b1+} \) \( \texttt{a3} \) 12 \( \texttt{c1} \) \( \texttt{c8} \) 13 \( \texttt{e4} \) \( \texttt{b2} \) and ... \( \texttt{c4-c3} \).

### 11 Another Rook-Pawn

When the only pawn in a rook ending is an a-pawn or h-pawn then you can forget about Lucena, Philidor, the short side and all the rest. This helps explain why:
Another Rook-Pawn

White to play

White needs to support the pawn’s advance with his king. Therefore 1 \texttt{b6 b1+} 2 \texttt{a7} makes sense. But 2 \texttt{... c7!} seals another cage.

White cannot make progress, e.g. 3 \texttt{h8 a1} 4 \texttt{h7+} and now 4 \texttt{... c8} or 4 \texttt{... c6} draw.

You should know the position after 2 \texttt{... c7}. You should also know when Black loses because his king is too far away.

White to play

White wins with 1 \texttt{b8}. For example, 1 \texttt{... a1} 2 \texttt{b7 e7} 3 \texttt{a7 b1+} 4 \texttt{c6!} and the checks end after 4 \texttt{... c1+} 5 \texttt{b5 b1+} 6 \texttt{c4 c1+} 7 \texttt{d3 d1+} 8 \texttt{c2}.
Tired of rook endings? Well, there’s good news. This is the last exact rook ending you need to know.

When the player with a rook-pawn has his rook in front of it – and the defender’s rook is behind – then pushing the pawn to the seventh rank is a huge decision. This is illustrated by:

White to play

This is a win after 1 a7! because White threatens 2 e8+ followed by 3 a8(!!). You should know this position – as well as the similar ones with the Black king on g4, f5 or another square that leaves it open to a check.

You should also know the trick that wins if Black plays 1 ... f7. Then 2 h8! threatens to queen. After 2 ... x7 White cops the rook with a skewer, 3 h7+ and 4 x7.

You should also know a related position: If the pawn is at a7 and the Black king is on g7 or h7, Black to play can draw regardless of where White’s king is.

The reason is that when White’s king tries to get to b6 Black just checks him away on the files. White lost his hiding spot at a7.
Rook vs. Bishop

From this we learn that the critical position arises when the rook pawn is on the sixth rank. The final exact K+R+P-vs.-K+R ending is:

\[
\text{Black to play}
\]

It's not the position as much as the principle you should know.

Black has correctly gotten his king to the safety zone of g7-h7. But if it were White's move he would play 1 \( \text{e}4 \) since 1 ... \( \text{f}7 \) 2 \( \text{d}5 \) \( \text{e}7 \) allows 3 a7! and 4 \( \text{h}8 \)! as we saw above.

In the diagram, a composition by Jan Vancura, we have an unusual drawing technique: Black's king is on a very short side, so to speak, and his rook can draw by getting to the third rank, 1 ... \( \text{f}1 \) + 2 \( \text{e}4 \) \( \text{f}6 \)!

This is drawn because the rook will shuttle along the third rank until the king gets close to the pawn – 3 \( \text{d}5 \) \( \text{b}6 \) 4 \( \text{c}5 \). Then the rook returns to the f-file so that he can check along the ranks.

After 4 ... \( \text{f}6 \)! 5 \( \text{b}5 \) White threatens to win with 6 \( \text{b}8 \) (or 6 \( \text{c}8 \), 6 \( \text{d}8 \)) and 7 a7. But 5 ... \( \text{f}5 \)!+ foils him and draws.

13 Rook vs. Bishop

This is the only winning Exchange-up ending you need to know.
Rook vs. Bishop

White wins

If it is Black’s move he is in zugzwang (1 ... ♕h8 2 ♖xf8 mate).
If it is White’s move, he wins by making a pass such as 1 ♖b8.

But this is a win only in this corner, or the opposite one around a1.
If the Black king had been forced to a8, he would draw by posting
his bishop at a7 or b8. There is no zugzwang.

Knowing the correct corner is crucial when the defending king is
more centrally located and has a choice of retreats. The player with
the rook must try to use tactics and mate threats to force it to the
losing corner.

Breyer - Tarrasch
Berlin 1920

White has three moves that force a win. Curiously, the fastest is
1 ♖h3!. If the bishop retreats to f4, White can reply 2 ♕c3! and
threaten ♕c8 mate. Then 2 ... ♕d6 3 ♕c8+ ♕f8 leads to the winning
position (4 ♖a8!). And 2 ... ♕f8 allows the pin 3 ♖f3!. Other
defenses also fail: 1 ... ♕c7 2 ♕c3 or 1 ... ♕e5 2 ♕e3.
Queen beats Pawn

14 Queen beats Pawn

The queen can win against a lone pawn, even one supported by a king, if the queen or his king can occupy a square in front of the pawn. Failing that, the queen can win if it can force the defending king in front of the pawn.

White to play

White’s king is five squares away from being able to help the queen. But White wins time with 1 ♞f4+. Then on 1 ... ♞g1, Black blocks his pawn and White can begin the king march (2 ♞g7).

A better defense is 1 ... ♞e2 but then 2 ♞g3! forces 2 ... ♞f1 and that allows 3 ♞f3+. Black must either lose the pawn or block it.

After 3 ... ♞g1 White plays 4 ♞g7. The process is repeated until the White king can help capture the pawn, e.g. 4 ... ♞h1 5 ♞h3+ ♞g1 6 ♞g6 and 6 ... ♞f2 7 ♞h2 ♞f1 8 ♞f4+ ♞e2 9 ♞g3! ♞f1 10 ♞f3+ ♞g1 11 ♞g5 etc.

There are also some trick positions in which the White king is close enough to allow the defender to queen. But they are too rare to study.

15 Pawn draws vs. Queen

There are two exceptions to what we just looked at. One is:

194
The difference is that 1 \( \texttt{g3+} \) fails to 1 ... \( \texttt{h1!} \). White cannot improve the position of his pieces. And if he takes the pawn it’s stalemate.

Something similar occurs if we put the pawn at h2. Everything else remains the same. After 1 \( \texttt{g3+} \) \( \texttt{h1} \) a new stalemate is created. If White releases the stalemate, such as with 2 \( \texttt{h3} \) or 2 \( \texttt{f3+} \) or 2 \( \texttt{f4} \), Black moves his king and threatens 3 ... \( \texttt{h1(\texttt{f})} \).

### 16 Rook vs. Pawn

In most cases, a king and rook defeat a king and pawn thanks to the techniques of Chapter Two, such as the cutoff and shoulder blocking.

But in this example, the Black king got far enough ahead to draw – provided that he knows that White has a trick and he has a counter-trick.
**Rook vs. Knight Pawn**

After 1 a2+ Black loses with 1 ... f1?? 2 f3. He must play 1 ... e1. Then White can threaten mate with 2 e3! so that 2 ... f1?? 3 a1 mate.

However, Black has a saving under-promotion, 2 ... f1(2)+!. As long as he keeps the knight close to his king, he can draw (3 f3 d2+; 3 d3 g3! 4 h2 f1!).

**17 Rook vs. Knight Pawn**

There is a special case worth knowing and it involves a knight pawn. Let’s see how we reach it from a typical position.

White starts with a shoulder, 1 d4! and then 1 ... f3! 2 d3!. Then after 2 ... g3 and 3 f8+! g2 4 e2 White closes in.

Black clears a path for his pawn, 4 h2. White has three winning moves. Let’s consider one of them, 5 h8+, and then 5 g1 6 f3 g2 7 g8. This reaches the same position as 5 f3 g2 6 h8+ g1 7 g8.
Rook draws vs. Queen

This is the exact position you should know. If you were Black you should not resign because you still have a trick, 7 ... ♙h1.

The point is 8 ♙xg2?? is stalemate. And if you were White you would win with 8 ♙f2!.

18 Rook draws vs. Queen

Computers have shown us that this ending, once thought to be an easy win for the queen, is actually much tougher.

When the player with the queen wins it is because he can pick off the unprotected rook through a double attack or because he can force the king and rook to an edge of the board and create zugzwang.

But the defender can save some positions thanks to stalemate.

White is threatening 1 ♙c8+ and 2 ♙xb7+.
**Queen beats Rook**

But Black can draw with 1 ... $\text{h7}+$! followed by checks along the second rank.

The White king cannot escape by crossing to the queenside (2 $\text{g2}$ $\text{g7}+$ 3 $\text{f3}$ $\text{f7}+$ 4 $\text{e4}$ $\text{e7}$+).

And if he reaches f6 or h6 there are stalemate tricks, 4 $\text{g4}$ $\text{g7}+$ 5 $\text{f5}$ $\text{f7}+$ 6 $\text{g6}$ $\text{g7}$+.

![Diagram](image)

White to play

And now 7 $\text{f6}$ $\text{g6}+$! 8 $\text{xg6}$ or 7 $\text{h6}$ $\text{h7}+$! 8 $\text{xh7}$ are stalemates.

**19 Queen beats Rook**

In some endgames, such as K+R-vs.-K+N, the defender must keep his pieces close together as we saw in Exact Ending 16. But computers have taught us that in K+Q-vs.-K+R, the defender lasts longer if the rook can check from a distance.

If the rook remains close to the king, an exact ending can arise:

![Diagram](image)

White to play
If it were Black’s move he would be in zugzwang. For example, 1 ... \textit{\textsc{b}b1} 2 \textit{\textsc{w}c7+} \textit{\textsc{a}a8} 3 \textit{\textsc{w}h7!} and 3 ... \textit{\textsc{c}c1+} 4 \textit{\textsc{b}b6} wins because of mate threats.

Another version is 3 ... \textit{\textsc{b}b8}. Then White has several ways to win, such as 4 \textit{\textsc{w}f5}, which threatens mate on a5, e.g. 4 ... \textit{\textsc{b}b2} 5 \textit{\textsc{w}a5+} \textit{\textsc{b}b8} 6 \textit{\textsc{w}e5+!} and picks off the rook.

But it’s not Black’s move in the diagram. So White wins by losing a move. He does it by triangulating with the queen, 1 \textit{\textsc{w}e5+} \textit{\textsc{a}a7} (1 ... \textit{\textsc{c}c8?} 2 \textit{\textsc{w}e8} mate) 2 \textit{\textsc{a}a1+!} \textit{\textsc{b}b8} 3 \textit{\textsc{a}a5!}.

The initial position has been recreated with Black to move: 3 ... \textit{\textsc{b}b7} 4 \textit{\textsc{e}e5+} \textit{\textsc{a}a8} 5 \textit{\textsc{a}a1+} \textit{\textsc{b}b8} 6 \textit{\textsc{b}b1+!} and \textit{\textsc{w}xh7} or 3 ... \textit{\textsc{f}f7} 4 \textit{\textsc{e}e5+} and \textit{\textsc{w}e8+}.

What about positions in which the rook is not protected by the king? In most cases, it’s still a win. But you have to work it out yourself. You look for the queen moves that lead to a double attack that wins the rook. There is no exact ending for them.

\textbf{20 Bishop and Pawn beat Bishop}

When there is only one pawn in a bishop endgame, the outcome is a win only when the bishops control squares of the same color – not ‘bishops of opps’ – and the defending bishop cannot maintain control of a square in front of the pawn. For instance:

\begin{center}
\textbf{White to play}
\end{center}

To win White must force the Black bishop off the c8-h3 diagonal. He can do that by putting his own bishop on c8.
Bishop draws vs. Bishop and Pawn

He starts with 1 \( \text{b5} \) followed by \( \text{a6-c8} \). That will force Black’s bishop to find another square that controls c8.

So we can foresee 1 \( \text{b5} \) \( \text{g4} \) (pass) 2 \( \text{a6} \) \( \text{h3} \) 3 \( \text{c8}! \) and now 3 ... \( \text{f1} \) 4 \( \text{g4} \) forces 4 ... \( \text{a6} \).

But White can win by getting his bishop to b7 – 5 \( \text{f3} \) and 6 \( \text{b7} \). And since the defensive diagonal is so short, White can also win with 5 \( \text{e2}! \).

Note that Black’s king was a bystander. Suppose it had gotten into a better position, e.g. 1 \( \text{b5} \) \( \text{c5}! \) 2 \( \text{a6} \) \( \text{b6} \) 3 \( \text{c8} \) \( \text{f1} \) 4 \( \text{g4} \) \( \text{a6} \).

Black controls b7 with two pieces. And 5 \( \text{e2} \) fails to 5 ... \( \text{b7} \).

So is this a draw? No, 5 \( \text{f3}! \) is zugzwang (5 ... \( \text{c5} \) 6 \( \text{b7}! \) or 6 \( \text{e2} \)).

21 Bishop draws vs. Bishop and Pawn

You should also know how to draw similar situations, in which the pawn is on another file and the bishop has better defensive diagonals.

It’s the same basic process, except that this time White gets his bishop to d8. The difference is that Black does not fall into zugzwang.

After 1 \( \text{b4} \) \( \text{d5}! \) 2 \( \text{a5} \) \( \text{c6} \) 3 \( \text{d8} \) \( \text{e1} \) 4 \( \text{g5} \) \( \text{a5} \) the winning tries 5 \( \text{f4} \) and 5 \( \text{d2} \) fail because of 5 ... \( \text{b6}! \).
22 ‘Wrong’ Bishop and RP

A king, bishop and pawn can beat a lone king in all cases but one. The exception occurs when the pawn is a RP and the bishop is the ‘wrong’ one. It doesn’t control the queening square of the pawn.

White’s king could be anywhere on the board (except h7 and h8) and the outcome would not change: Black draws with 1 ... ♗g8 and 2 ... ♗h8.

Once again a RP is unique. With any other pawn, White would advance his king, deny Black the square next to the queening square and win.

But in this case, Black will get to play ... ♗h8. Then if White replies ♗f7, it’s stalemate.

Many amateurs – and even some masters – think a ‘wrong’ bishop guarantees a draw. Not true. The bishop can win in cases like this:
Black’s king is two moves away from g8 or g7. If it gets there, the game will be drawn. But he can’t get there if White finds 1 \( \text{e}6! \) and 2 h6!.

The key line runs 1 \( \text{e}6! \) e7 2 h6! f6 (2 ... xe6 3 h7) and now 3 f5!.

The point is that White’s bishop can get to h7 and together with the pawn and White king, Black will be locked out of the drawing zone.

The win is obvious after 3 ... g5 4 h7! . And it’s clearer after 3 ... f7 4 f7! f6 5 g4.

The White king will reach g6 or f6 when Black’s king is at f8. That will put Black in zugzwang. He must allow g7 followed by a bishop move and h6-h7-h8(\( \text{b} \)).

### 23 Drawn Bishops of Opps

If you have the only two pawns on the board you may be able to win despite opposite colored bishops. There are two general cases: when the pawns are separated and when they are connected.

When the pawns are separated the defender wants his bishop on a diagonal that controls the next square in front of both pawns.

![Diagram of chessboard with bishops and pawns](image)

If it’s White’s turn, he can get his king to d7. But Black can draw by staying in step with him: 1 f5 d4 2 e6 c5 3 d7 b6.

There are no zugzwang possibilities then. And note that 2 f4 fails to 2 ... e3 and 3 ... xf4.
But suppose it is Black’s move. Then he may lose after 1 ... \( \text{h2}?? \) 2 \( \text{f5} \) \( \text{d4} \) 3 f4! and 4 c7 (or 2 ... \( \text{b8} \) 3 \( \text{e6} \) \( \text{d4} \) 4 \( \text{d7} \) and 5 c7.

Also lost is 1 ... \( \text{d6}?? \) 2 \( \text{f5} \) \( \text{d4} \) 3 \( \text{e6} \) \( \text{c5} \) 4 \( \text{d7} \). It’s zugzwang.

You should know the one-diagonal principle and realize there should be a safe square for the bishop. It is 1 ... \( \text{c7}! \). That draws after 2 \( \text{f5} \) \( \text{d4} \) 3 \( \text{e6} \) \( \text{c5} \) 3 \( \text{d7} \) \( \text{b6} \).

24 Winning Bishops of Opps

When the defender’s bishop cannot stop both pawns on a single diagonal, the possibility of a mismatch grows. If the pawns are separated by two files or more, he can lose a king race.

Once again we have a c-pawn and an f-pawn. But this time White will win by getting his pawn to f7. Black’s bishop can’t watch both pawns.

Black’s king cannot make up for that. After 1 \( \text{e6} \) \( \text{b4} \) 2 f6 \( \text{a5} \) (2 ... \( \text{e8} \) 3 c7!) White plays 3 f7 \( \text{b4} \) and then 4 \( \text{f6} \) followed by \( \text{g6-g7} \).

If 4 ... \( \text{f8} \) 5 \( \text{g6} \) \( \text{e7} \) White wins in various ways, including 6 \( \text{d5} \) \( \text{d6} \) 7 \( \text{h7} \) and \( \text{g8} \).
25 Bishops of Opps, Connected Pawns

When the pawns are connected, there is a greater opportunity for them to advance safely because one pawn can protect the other.

What you should know is the best defensive setup – and how to beat an inferior one.

White will win if he can support e5-e6 with his king. For example, 1 \textcolor{red}{\textbf{\ldots}}. \textcolor{blue}{\textbf{c}2+ 2 \textcolor{red}{\textbf{f}4} \textcolor{blue}{\textbf{d}3}\textcolor{red}{\textbf{?}} 3 \textcolor{red}{\textbf{g}5} \textcolor{blue}{\textbf{c}2} 4 \textcolor{blue}{\textbf{b}4+} \textcolor{red}{\textbf{f}7} 5 \textcolor{red}{e}6+ and 6 \textcolor{red}{f}6 wins.

Even if the Black bishop controls e6, White will win if his king gets to d6 or f6 to support the advance: 1 \textcolor{red}{\textbf{\ldots}}. \textcolor{blue}{\textbf{b}3}\textcolor{red}{\textbf{?}} 2 \textcolor{red}{\textbf{g}5+} \textcolor{red}{\textbf{f}7} 3 \textcolor{blue}{\textbf{d}4!} \textcolor{blue}{\textbf{a}2} 4 \textcolor{blue}{\textbf{c}5} \textcolor{blue}{\textbf{b}3} 5 \textcolor{red}{\textbf{d}6} and 6 \textcolor{red}{e}6+.

What you need to know is that the bishop should be in front of the pawns so that it controls e6 but also attacks f5.

After 1 \textcolor{red}{\textbf{\ldots}}. \textcolor{blue}{\textbf{d}7}\textcolor{red}{\textbf{!}} White’s king cannot go to his left (2 \textcolor{red}{\textbf{d}5} \textcolor{blue}{\textbf{x}f5}) and he draws. It’s that simple.

And that’s all of the exact endings you should know.

Quiz

Now that you’ve digested those diagrams it’s time to see how well you can apply what you’ve learned.
28 Coull – Stanciu
Thessaloniki 1984
White to play

White recognized the power of a shoulder block, 1 ♖d4 ♖f5 2 ♗c4 ♗e5 and resigned. Was that a wise decision?

29 Gelfand – Leko
Jermuk 2009
White to play

What are White’s winning chances?

30 Chandler – Ward
Redbus 2002
White to play

How can White draw?
31 Lyangov – Polovodin
Asenovgrad 1985
White to play

Black’s rook looks badly placed on h4. Can he defend after 1 \texttt{d6}?

32 Burn – Spielmann
San Sebastian 1911
White to play

Compare 1 \texttt{xc6}, 1 \texttt{g8+} and 1 \texttt{g6}.

33 Reshevsky – Najdorf
Lugano 1968
Black to play

Is this a win or a draw?
Quiz Answers

1 Black's queen bishop lacks a good square. He equalized with the bishop tour, 1... \( \text{g4}+! \) 2 f3 \( \text{h5} \) and ... \( \text{g6} \).

Play went 3 h4 0-0 4 g4 \( \text{g6} \). Then on 5 \( \text{xg6} \), the irregular recapture, 5 ... fxg6! followed by ... \( \text{ae8} \) is best. This favors Black because of his play along the e- and f-files.

2 White has greater winning chances with a knight shift, 1 g4! \( \text{g6} \) 2 \( \text{h4}! \). After 2 ... \( \text{c6} \) he was careful to avoid 3 \( \text{xe6} \) because this is another case when 3 ... fxg6! helps Black.

White’s superiority was clear after 3 \( \text{h5}! \) \( \text{d8} \) 4 \( \text{f3} \) \( \text{e8} \) 5 h4! \( \text{xf5} \) 6 exf5! \( \text{c8} \) 7 g5 and he eventually won.

3 The priyome is 1 ... b4 so that a White knight move allows 2 ... \( \text{d5}! \).

But here it turns out disastrously, 1 ... b4?? 2 exf6 bxc3 3 \( \text{xf6} \), since 3 ... \( \text{xf6} \) 4 \( \text{xf6} \) is hopeless.

The game ended with 3 ... \( \text{b7} \) 4 \( \text{xf7}+ \) \( \text{h8} \) 5 \( \text{g8}+! \) resigns (5 ... \( \text{xf8} \) 6 \( \text{g1}+ \) \( \text{h8} \) 7 fxe7+ or 5 ... \( \text{xf8} \) 6 fxe7+ \( \text{g7} \) 7 \( \text{g1} \)).

4 If you relied on calculation, you might start with 1 ... \( \text{h7} \). That threatens ... \( \text{xf4} \) and might lead to 2 g5 hxg5 3 hxg5 e5.

But White can make a promising sacrifice with the endangered g-pawn. 4 g6! fxg6 5 \( \text{xf6} \) and \( \text{d5}! \).

It’s better to rely on an anti-g4 priyome and look at 1 ... d5!. Then 2 exd5 \( \text{xa3}! \) 3 bxa3 allows Black to retake 3 ... \( \text{xd5}! \).

White’s kingside would be vulnerable after 4 \( \text{xd5} \) exd5 5 cxd5 \( \text{h4} \) or 4 cxd5 \( \text{xc3} \) 5 dxe6 \( \text{xf3} \) 6 \( \text{xf3} \) fxe6.

Instead, the game ended in a draw after 4 cxd5 \( \text{xc3} \) 5 \( \text{d4}! \) \( \text{xa3} \) 6 g5 hxg5 7 hxg5 e5! 8 fxe5 \( \text{xf5} \).
Quiz Answers

5 The c-file is closed half-way but 1 ... \( \text{c5} \) prepares the Philidor Ring.

After 2 \( \text{ch}f1 \text{b}5 \) White faced the prospect of 3 ... b4. Then 4 cxb4 \( \text{dx}b4 \) would make his d-pawn a target. But allowing ... bxc3 is even worse.

White stopped the b-pawn's advance with 3 a3. The drawback is 3 ... \( \text{c}4! \). That forced an exchange of pieces because both 4 ... \( \text{dx}b2 \) and 4 ... \( \text{dx}d2 \) were threatened. After 4 \( \text{dx}c4 \) bxc4:

![Chess Diagram]

White to play

Because of 3 a3 White cannot play b2-b3 or b2-b4 without losing at least one pawn. This meant Black was free to pile up against b2 with his rooks, 5 \( \text{e}3 \text{a}6! \) 6 g3 \( \text{b}6 \) 7 \( \text{a}2 \text{a}8 \) 8 \( \text{f}3 \text{a}5! \) 9 \( \text{g}2 \text{ab}5 \). He eventually won.

6 It looks like 1 a4 b4 2 \( \text{a}2 \) is well-timed in view of 2 ... a5 3 \( \text{c}7! \) followed by \( \text{c}2 \) and \( \text{fc}1 \) (or \( \text{c}1-d3 \)) with a clear advantage.

But 1 a4? was met by 1 ... g5! and after 2 \( \text{d}2 \text{b}4 \) 3 \( \text{a}2 \text{a}5 \) there was no \( \text{c}7 \). Black had greater space and superior chances after 4 \( \text{f}3 \text{b}6 \) 5 b3 f5 6 \( \text{h}5 \text{f}6 \) 7 \( \text{fd}1 \text{e}7 \) 8 e3 \( \text{fc}8 \).

Better was 1 \( \text{fd}1 \) because 1 ... \( \text{b}6 \) allows 2 \( \text{xb}5! \) and 3 \( \text{c}7 \).

And on 1 ... \( \text{f}6 \), the priyome works, 2 a4! with an edge.

7 A case can be made for 1 ... h5 (and 2 g5 \( \text{g}4 \)). Or for ... \( \text{b}8-a8 \) in preparation for the ... \( \text{xc}3 \) sacrifice.

But better is fighting for e5 with 1 ... g5!. Black would have the edge if the offer is declined (2 \( \text{ad}1 \text{xf}4 \) 3 \( \text{xf}4 \text{e}5 \)).
The real test is 2 fxg5 hxg5 3 \( \text{h}xg5 \). Then 3 ... \( \text{\#}e5 \) prepares ... \( \text{\#}c4 \), ... \( \text{\#}xf3+ \) or a capture on g4.

White played 4 \( \text{\#}f4 \) and Black had a good option in 4 ... \( \text{\#}fd7! \) 5 \( \text{\#}xe7 \) \( \text{\#}xe7 \) and ... \( \text{\#}cg8 \).

Black preferred 4 ... \( \text{\#}h7 \) to get the knight to f8. He was rewarded by 5 \( \text{\#}h6? \) \( \text{\#}g8 \) 6 \( \text{\#}ad1 \) \( \text{\#}g6 \) 7 h3? \( \text{\#}f6! \) and wins.

Better was 5 \( \text{\#}xe7 \) \( \text{\#}xe7 \) 6 \( \text{\#}g2 \) \( \text{\#}f8 \) with mixed chances.

8 After 1 a4! and 1 ... bxa4 2 bxa4 Black would be worse following 3 \( \text{\#}d2 \). If Black contests c4 with ... \( \text{\#}b6 \) the knight is driven back by a4-a5!.

Also bad is 1 ... b4? 2 \( \text{\#}b1! \) \( \text{\#}b6 \) 3 \( \text{\#}bd2 \) \( \text{\#}e7 \) 4 a5! \( \text{\#}a8 \) 5 \( \text{\#}c4! \).

His best try is a sacrifice, 1 ... c4!. White should not allow 2 ... b4 and 3 ... c3. So we can examine 2 axb5 axb5 3 bxc4 and then 3 ... b4! with a passed pawn (4 \( \text{\#}a2? \) b3!).

Black would have good compensation after 4 \( \text{\#}b1 \) \( \text{\#}c5 \) 5 \( \text{\#}bd2 \) \( \text{\#}d7 \) followed by ... \( \text{\#}a4 \) or ... \( \text{\#}a4 \). Also 4 \( \text{\#}a4 \) \( \text{\#}c5 \) 5 \( \text{\#}xc5 \) \( \text{\#}xc5 \) followed by ... \( \text{\#}b6 \) or ... \( \text{\#}g4 \).

9 This is a good time for 1 ... h5!. White would be over-extended after 2 g5 \( \text{\#}h7 \) 3 h4 g6 and ... f6.

The best try is 2 gxh5! \( \text{\#}xh3 \) 3 \( \text{\#}h2 \) but Black is better after 3 ... \( \text{\#}h7 \).

Instead, White chose 2 \( \text{\#}h2 \), to maintain the pawn on g4. This surrendered control of the kingside dark squares – 2 ... hgx4 3 hxg4 \( \text{\#}c8! \) 4 f3 \( \text{\#}h7! \) 5 \( \text{\#}g3 \) \( \text{\#}g5 \) 6 \( \text{\#}f5 \) \( \text{\#}d8 \).

Black’s initiative won after 7 ... g6 followed by ... \( \text{\#}g7/ \) ... \( \text{\#}h8 \).

10 Yes, because of play along the f-file in connection with \( \text{\#}d5 \).

After 2 ... d6 he played 3 \( \text{\#}d5! \) so that 3 ... \( \text{\#}xd5 \) 4 \( \text{\#}xd5+ \) \( \text{\#}h8 \) 5 \( \text{\#}g5! \) and then 5 ... \( \text{\#}e8 \) 6 \( \text{\#}xf8+ \) \( \text{\#}xf8 \) 7 \( \text{\#}h5 \).

Instead, Black tried 3 ... h6 to stop \( \text{\#}g5 \). But this permitted 4 \( \text{\#}d3! \), with a winning threat of 5 \( \text{\#}xh6 \) gxh6 6 \( \text{\#}g6+. For example, 4 ... \( \text{\#}h8 \) 5 \( \text{\#}xh6! \) gxh6 6 \( \text{\#}g6 \) \( \text{\#}g4 \) 7 \( \text{\#}e4 \) \( \text{\#}xf1 \) 8 \( \text{\#}xf1 \) \( \text{\#}g8 \) 9 \( \text{\#}f8! \).
Quiz Answers

11 White can force a trade of rooks with 1 $\text{b5!!}$ and create an outside passed pawn after 1 ... $\text{xb5}$ 2 $\text{xb5}$.

Black can try to blockade with 2 ... $\text{d4}$ and 3 ... $\text{b6}$. But White breaks it with 3 $\text{a5}$ and 4 $\text{b6}$ or 3 $\text{e2}$ and 4 $\text{e3}$.

Black lost after 2 ... $\text{f8}$ 3 $\text{d4}$ $\text{a5}$ 4 $\text{e8}$ 5 $\text{b7}$ $\text{a7}$ 6 $\text{c7}$ and queens.

12 He could have won with 1 $\text{c7}+$! and 1 ... $\text{f7}$ 2 $\text{xf7}$+ $\text{xf7}$ 3 $\text{b5!!}$ and the knight is dominated. If 3 ... $\text{e7}$ 4 $\text{g4}$ $\text{d7}$, White converts to a won pawn endgame (5 $\text{xd7}$ $\text{xd7}$ 6 $\text{h5}$).

13 The conversion 1 ... $\text{xe4}+$! 2 $\text{xe4}$ $\text{xf6}$. White’s king is cut off.

He tried 3 $\text{a4}$ with the idea of a4-a5 and $\text{c4-c5-c6}$. But Black replied 3 ... $\text{a5}$ 4 $\text{c5}$ (4 $\text{b5}$ $\text{d5}+$! and ... $\text{f5}$ wins) and now 4 ... $\text{e7}$!.

White is inside the square after 5 $\text{xe7}$ $\text{xe7}$ but would lose his a-pawn. The game ended with 5 $\text{d4}$ $\text{e5}+$ 6 $\text{d6}$ $\text{f5}$ 7 $\text{e4}$ $\text{g6}$ (8 $\text{e6}$ $\text{f4}$).

14 Black created a fortress with 1 ... $\text{xf6}!$ and 2 $\text{xf6}+$ $\text{d7}$.

The g-pawn isn’t needed to draw. White won it after 3 $\text{f7}+$ $\text{c6}$ 4 $\text{b3}$ $\text{e5}$ 4 $\text{xg4}$ $\text{d7}$.

There is no zugzwang because Black can shift his rook back and forth between c5 and e5. White’s king cannot cross the fifth rank. His queen cannot create a passed pawn or give itself up favorably for the rook.
**Quiz Answers**

15 It’s different because of a **blockade**, 1 ... \( \square g4! \), and **stalemate** (2 \( \square xg4 \)). White gave up one pawn but Black stopped the other, e.g. 2 \( \square c4 \) \( \square h2+ \) 3 \( \square e4 \) \( \square f1! \) 4 \( \square e3 \) \( \square xg3+ \) 5 \( \square e5 \) and now 5 ... \( \square h5 \) is one way to draw.

16 The **breakthrough**, 1 f5!, wins (1 ... gxf5 2 g6 e5+ 3 \( \square e3 \) \( \square e6 \) 4 b5).

Black tried 1 ... e5+, hoping to draw after 2 fxe6 \( \square xe6 \) 3 gxf6 g5 or 2 \( \square e4 \) gxf5+ 3 \( \square xf5 \) fxg5 4 \( \square xg5 \) \( \square e6 \) 5 \( \square xh5 \) \( \square f5 \) (shoulder) and ... e4.

But White has the simple 2 \( \square e3! \) gxf5 3 g6 and 3 ... f4+ 4 \( \square d3 \) \( \square e6 \) 5 b5!.

17 White can achieve the **checking distance** with 1 \( \square c7! \) \( \square x c5 \) 2 \( \square b1! \).

It doesn’t help Black to cut off the king by a rank with 2 ... \( \square h7+ \) 3 \( \square e8 \) since the Black king can’t advance the pawn alone, 3 ... \( \square d5 \) 4 \( \square d1+! \) \( \square e4 \) 5 \( \square c1 \) draws (5 ... \( \square h6 \) 6 \( \square c7 \)). No better is 2 ... \( \square d4 \) 3 \( \square d1+ \) \( \square e3 \) 4 \( \square c1! \).

In the game White lost after 1 \( \square e5?? \) \( \square x c5 \) 2 \( \square e4 \) \( \square c4 \) 3 \( \square e3 \) \( \square c3 \) 4 \( \square c7! \) \( \square e6+! \) 5 \( \square f4 \) \( \square c4 \) 6 \( \square f5 \) \( \square h6 \) 7 \( \square e4 \) c5 and so on.

18 No. That allows White to enlarge his more advanced majority on the other wing. Black lost after 1 ... \( \square x f4?? \) 2 \( \square x a5 \) \( \square g3 \) 3 \( \square b5 \) \( \square x h4 \) 4 a4 \( \square x g5 \) 5 a5 \( \square f 6 \) 6 a6 \( \square e3 \) 7 \( \square c6 \) g5 8 b4 because b4-b5-b6 will queen.

Black could draw with 1 ... \( \square b4! \) 2 \( \square a4 \) \( \square e1 \), e.g. 3 f5 gxf5 4 \( \square x f 5 \) \( \square d2 \).

19 He **sacrificed to create a passed pawn**, 1 \( \square g8! \). Then on 1 ... \( \square e4 \) White could win with 2 \( \square e6 \) and \( \square c8 x b7 \).

Instead, Black took the piece, 1 ... \( \square x g8 \), and after 2 \( \square x b7 \) he tried 2 ... \( \square c4 \) 3 c6 \( \square d5 \). He was hoping for 4 \( \square x a 6 \) \( \square x c6 \).

But White won with 4 \( \square b6 \) \( \square d8 \) and 5 f6! gxf6 6 h6, a **breakthrough**. Black’s bishop was overworked after 6 ... \( \square e4 \) (to stop 7 h7) and the game ended with 7 \( \square b7 \) – zugzwang – 7 ... \( \square e7 \) 8 \( \square x a 6 \) \( \square f 7 \) 9 \( \square b6 \) resigns.
Quiz Answers

20 The sacrifice 1 c5! bxc5 2 dxc5 Qxc5 (not 2 ... Qxc5 3 Qxd7 and 4 Qxc5) is strong after 3 wxc2.

Black’s knight is threatened and cannot get back to defend the kingside because 3 ... Qd7 4 Qd2 costs a piece.

After 3 ... Qa6 4 Qg5! g6 and 5 wa4! White either gets a decisive attack (5 ... Qb8 6 Qh4) or wins material (5 ... Qb4 6 Qxd6! Qxd6 7 Qe4).

21 It’s an excellent time for 1 ... Qxc3! 2 bxc3 Qc6 since the e4-pawn is doomed (3 Qd3 Qa8 4 Qg5 Qxe4! 5 Qxe4? Qxe4 and Black wins in view of discovered check, 6 Qxe7 Qf2+ 7 Qg1 Qh3 mate).

The game went 3 Qg5 Qxe4 4 Qxe7 Qxe7 and 5 f6 Qb7! 6 fxg7 Qc8 7 Qg4 Qd2 8 Qf2 Qxg2+ 9 Qxg2 Qxc3 with more than enough compensation.

22 No, because after 2 dxe4 dxe4 3 Qg5 Black gets a fine initiative with the Spielmann idea, 3 ... e3!. Then comes 4 fxe3 h6 5 Qge4 Qg4!.

Black would be winning after 6 Qf3? Qxd1+ 7 Qxd1 f5! (8 Qc3 Qf2+).

The game turned in his favor after 6 Qb3! Qxd1+ 7 Qxd1 Qf5 (7 ... f5 8 h3) 8 Qe1 Qb4 9 Qd4 0-0-0!.

23 White can push 1 d5. Or he can sacrifice a pawn with b2-b3, either immediately or after 1 axb5 cxb5.
In case of 1 b3 and 1 ... b4 White would get reasonable compensation with 2 a5!  \( \text{\textit{w}}c7 3 \text{\textit{d}}a4 \) followed by \( \text{\textit{d}}b6 \) and d4-d5.

In the game, Black played 1 ... \textit{exb3} 2 \textit{wxb3} \textit{d}d7 and White emerged with the better game after 3 d5 \textit{exd5}? (3 ... \textit{c}c5 4 \textit{wb1 \textit{e}e7} is better) 4 \textit{exd5} \textit{d}c5 5 \textit{wb4} \textit{d}d7 6 \textit{wh4}.

24 After 1 d5! Black loses with 1 ... \textit{exd5}?? 2 \textit{wh7+} and 3 \textit{h8 mate}. So 1 ... \textit{exd5} and 2 \textit{g5} were played.

The threat of 3 \textit{xf6} and \textit{wh7+} is powerful, e.g. 2 ... g6? 3 \textit{xe7}! \textit{xe7} 4 \textit{xf6} or 2 ... \textit{e}e4 3 \textit{xe4} \textit{dxe4} 4 \textit{xe4} g6 5 \textit{wh4}.

25 Black got play with 1 ... \textit{f4}!. White can’t accept the pawn because 2 \textit{xf4} \textit{exf4} threatens ... \textit{xc3} (and 3 \textit{b2}? \textit{a}a4+! 4 bxa4? \textit{xb4+} is death).

He replied 2 h5!. Then 2 ... gxh5 would allow 3 \textit{xf4}! \textit{exf4} 4 \textit{hg1}! and \textit{xg7+} with an attack.

Black played 2 ... \textit{xf5} instead and White seized the initiative with 3 \textit{f2} \textit{f4} 4 \textit{g4}, threatening \textit{f6+}. A fighting draw followed 4 ... \textit{d7} 5 \textit{wh2} \textit{h5} 6 \textit{e}e2 \textit{xc1}+ 7 \textit{xc1} \textit{b5} and ... \textit{b3+}.

26 Best was 1 \textit{dxb5}! \textit{axb5} 2 \textit{xb5}!. He wants a knight on b5 so he can capture on d6 or threaten a check at c7, e.g. 2 ... d5 3 \textit{c}c3!.

The second point came after 2 ... \textit{xa2} 3 \textit{b1} \textit{a}8 4 \textit{xd6}+ \textit{xd6} 5 \textit{xd6}.

\[ \text{Black to play} \]

White has two pawns for the knight but he also has \textit{b5}! coming up. Black’s best may be 5 ... \textit{a5} 6 \textit{b4} \textit{a}8 (not 6 ... \textit{a}4? 7 \textit{xb6!}) and 7 \textit{b5} \textit{b}8.
Instead, he played 5 ... a4? 6 b5 e7. But 7 d4! forced a win of material. Black resigned soon after 7 ... e5 8 d5 c3+ 9 bxc3.

27 The passive sack, 1 ... a5!, makes sense. If White ignores the knight Black will continue his attack with ... exf3 and ... f5 or ... b5?.

The game went 2 axb4 axb4. Black would have been winning after 3 xe4 xe4 4 fxe4? g4! because of ... xa1+.

Instead, 3 b1 a1 4 d2 was played and Black had ample compensation following 4 ... exf3 5 gxf3 xd5 and 6 e4 xe3 7 xe3 e6.

28 No, because 3 c3! xd5 4 d3! leads to the drawn Exact Ending 2.

29 Black’s bishop has one good defensive diagonal and that’s not enough. White begins with the shouldering 1 c6! and follows with a5-a6. Black played 1 ... d3 2 g5 c4 3 e7 e3 to stop h5.

But he couldn’t stop g6 and he resigned after 4 a6 a7 5 d8! b8 6 c7 a7 7 b7.

30 White already has his king in place for a Philidor position and 1 a5! would get him closer to it.

After 1 ... f3 2 a3+ g4 White can draw with a rook pass such as, 3 b3. King moves and even 3 h5 also work. The h-pawn is irrelevant.

But White played 1 h8? f3 and missed an opportunity to reach the short side with 2 g1! d1+ 3 h2. Once again the position is a draw, even without the h-pawn, because White has time for checks such as a8-a2+.

31 Yes. Checking distance doesn’t matter here: 1 ... e4! draws in view of 2 e6 d4+! or 2 e6 f8! a8+ g7 4 d6 f7! as in Exact Ending 8.

32 All three draw. But 1 g8+? d7 just helps Black and 1 xc6? e6+! is an instant Philidor.

The best try is 1 g6!. Then 1 ... b4+ 2 xc6 b8! gets Black’s king to the short side and allows him to draw.
Black blundered with 1 ... $e7? and White could have won with 2 $g8+ $d7 3 $b7, intending $c8. Black’s king is on the long side and he loses after 3 ... $e1 3 $g7+ $d8 4 $xc6 $c1 5 $g8+ $e7 6 $c8.

But White also erred, with 2 $xc6+? and Black created a Philidor after 2 ... $b8! 3 $h6 $b7+ 4 $c6 $c7+ 5 $d6 $b7! and 6 ... $c6+.

33 It’s a draw if Black gets to the short side, with 1 ... $e7! 2 $h7+ $f8 and 3 $f6 $g8!. Then on 4 $a7 Black can draw in a variety of ways, including 4 ... $b1 followed by rank checks.

In the game Black played 1 ... $e8?? and lost to 2 $f6 $d7 3 $h7+ $e8 4 $h8+ $d7 5 $f8 and $g7.
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