101 Chess Endgame Tips

Golden nuggets of endgame wisdom

Steve Giddins
101 Chess Endgame Tips

Steve Giddins
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Introduction

The endgame is probably the most neglected part of chess, especially from the point of view of the average player. There are several reasons for this. In the first place, many players take the superficially logical, but fallacious, view that it is better to study openings, since if one misplays the opening badly enough, one will not even survive into an ending. This may be strictly true, but only of very bad opening play. It does not need too much knowledge to enable one to play the opening reasonably well, and once one has achieved this, there is no good argument for ignoring endgames any longer.

Secondly, many players believe that endings are boring. I firmly believe that this is completely untrue, and, on the contrary, the endgame is the best and most enjoyable part of chess. I hope in this book to show why this is the case.

Thirdly, the traditional three-hour playing sessions in club and league chess have tended to militate against reaching very many endgames, and when one did get one, the chance to play it out was usually lost, due to the intervention of that dread figure, the adjudicator. Thankfully, this is one aspect of local chess which has changed for the better in recent years, and the replacement of adjourments and adjudication by quickplay finishes means that endgame technique is now more important than ever.

In writing this book, I hope to give the average player a good introduction to many important ideas and techniques in endings. The positions given include many basic, theoretical endings, and also a significant number of more complex positions, which illustrate more general points of technique. I hope that this material will not only improve the reader’s endgame play per se, but also stimulate further study. The material I can cover in a book of this size is of necessity limited, but there is a wealth of fine books on the endgame, and any player who wishes to study further has no lack of opportunity to do so.

Important Endgame Principles

Many important endgame principles are illustrated in the ensuing examples, but it will be useful here to summarise the main points of endgames:

- Material matters in endgames. This may sound trite, but it is an important point. Whereas in the middlegame, sacrificing material to open lines and activate pieces is a standard device, it is much less common in the endgame. While we shall see that tactics and combinations have their role in the endgame, it is usually only in rook (and some queen) endings that piece activity is more important than an extra pawn or two. So, within reason, it pays to be a miser in the endgame.

- In similar fashion, pawn-weaknesses tend to grow in importance in endings. In the middlegame, it is frequently a good idea to accept an isolated or doubled pawn, in order to activate one’s pieces and/or open lines. In the endgame, the simplified positions and (normally) absence of queens tend to make such dynamic play much more difficult to achieve, and consequently static weaknesses tend to be more important.

- We shall see much in this book on the subject of the ‘principle of two weaknesses’. One weakness is frequently not enough, and the key to winning many positions is to create a second weakness in the defender’s position, so as to stretch the defence to breaking point.

- The other cardinal endgame principle which I shall emphasize time and again is ‘do not hurry’. The endgame usually has a somewhat slower and less dynamic tempo than most middlegames, and this means that careful and slow manoeuvring is often the order of the day. Numerous good positions are spoilt by the player rushing things, when a small piece of preliminary care would have eliminated all of the opponent’s counterplay.

- Finally, it is important to have the right attitude to the endgame. There is a rather dreadful song, from the Hollywood musical Camelot, called How to Handle a Woman, the crux of the advice being “love her, simply love her”. I don’t know about women, but this is certainly the right way to approach the endgame. As I said above, the endgame is the best part of chess, containing a
wealth of depth and beauty, and the more one studies it, the more apparent this becomes. Regardless of any specific knowledge it may convey, if this book helps the reader to appreciate and develop a love for endgames, it will have done its job.

Steve Giddins
Rochester, November 2006

Symbols

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<thead>
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<th>Symbol</th>
<th>Meaning</th>
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<td>+</td>
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<td>++</td>
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<tr>
<td>#</td>
<td>checkmate</td>
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<td>!!</td>
<td>brilliant move</td>
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<td>!</td>
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<td>Ch</td>
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<td>zonal</td>
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<td>jr</td>
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<tr>
<td>tt</td>
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<tr>
<td>1-0</td>
<td>the game ends in a win for White</td>
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<tr>
<td>(1/2-1/2)</td>
<td>the game ends in a draw</td>
</tr>
<tr>
<td>0-1</td>
<td>the game ends in a win for Black</td>
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<tr>
<td>((n))</td>
<td>(n) th match game</td>
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<tr>
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<td>see next diagram</td>
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Bibliography

Many of the positions used in this book were taken from my own endgame files, collected over the past 20 or more years. Other specific references used include:
Fine: Basic Chess Endings
Panchenko: Teoria i praktika shakhmatnykh okonchanii
Belaviisky & Mikhailchishin: Winning Endgame Technique
Averbakh et al.: Comprehensive Chess Endings
Smyslov & Levenfish: Rook Endings
Shakhmatnye Byulleten, 1955-91
Shakhmaty v SSSR, 1946-91

I also drew on many individual players' game collections, notably those of Botvinnik, Smyslov and others.

Acknowledgements

Thanks are due to John Saunders, Editor of British Chess Magazine, for permission to reproduce some material, in modified form, which originally appeared in that journal. Gerard Welling's splendid chess library supplied at least one reference which would otherwise have eluded me, as also did Yochanan Afek, while the Gambit production team did their usual first-rate job. This book is dedicated to the memory of the late A.J. ('John') Smith, for his friendship, his incalculable contribution to my chess development, and above all, for passing on his own deep love of the endgame. Sorry I wasn't there at the end, John.
We are all taught at an early age that the shortest distance between two points is a straight line. However, there are some important differences between chessboard geometry and its Euclidean equivalent.

R. Réti
_Kagans Neueste Schachnachrichten_, 1921

White draws this hopeless-looking position, because the king march \( g7-f6-e5-f4-g3-h2 \) does not take any more moves than the straight route \( h7-h6-h5-h4-h3-h2 \). By using the former route, however, the white king is able to threaten to queen his own pawn, and thereby gain vital tempi.

1. \( g7 h4 \) 2. \( f6 b6 (D) \)

2...h3 3 \( e6 b6 4 d6 \) draws.

3 \( e5 x6 4 f4 \)

White draws because his indirect king march has forced Black to spend two tempi on ...\( b6 \) and ...\( x6 \).

This same idea crops up in many practical endings, such as the following:

Em. Lasker – Tarrasch
_Si Petersbourg 1914_

Tarrasch had exchanged into this position thinking that he was winning, since his king can stop the h-pawn, while he stands to promote a pawn on the queenside. Indeed, after 40 \( h4 g4 41 f6 c4 42 bxc4 bxc4 43 e5 c3 44 bxc3 a4 (D) \) the c3-pawn blocks the white king, and there is no way to stop Black’s a-pawn promoting.

However, after 40 \( h4 g4 \) Lasker played 41 \( g6! \) threatening 42 \( h5 \). After the forced 41...\( xh4 \) the white king had gained a tempo to return via a different diagonal, one which is not obstructed by White’s own pawns. He drew after 42 \( f5 g3 43 e4 f2 44 d5 e3 45 x5 d3 46 x5 c2 47 xa5 xb3 \( \frac{1}{2}-\frac{1}{2} \).
The Gentlemanly Art of Shoulder-Charging

Another aspect of the chessboard geometry seen in Tip 1 is the use of one’s own king to obstruct the enemy king’s path. By marching on an indirect path to its destination, the king can, as it were, ‘shoulder-charge’ the enemy king out of the way.

This same idea crops up in many endings, including some spectacular endgame studies. Here is a typical example:

Schlage – Ahues
Berlin 1921

In order to win, White needs to take the black a-pawn, without allowing Black’s king to get into the corner in time. In the game, he failed, and Black drew after 1 g6 c3 2 d6? d4 3 c6 e5 4 b7 d6 5 xa7 c7, etc.

However, by employing the shoulder-charging technique, White could have won by 2 d5! (D).

If White tries to bring his king to the queenside directly, he is defeated by a shoulder-charge by the black king; e.g., 1 g4? c2 f4 (or 2 f3 d3!) 2 d3 3 c5 c4 4 d6 b5 5 c7 a6 winning. White must be ready to meet ...xb6 by b4, without having his way blocked by the enemy king. There is only one narrow path to the draw, which involves reaching b4 via e1.

1 g3!! c2 2 f2! d2 3 f1! d1 4 f2 d2 5 f1 (D)

This prevents the black king from getting to d4, and wins a vital tempo. 2...b4 3 c6 c4 4 b7 d5 5 xa7 c6 6 b8 and White wins.

5...d3
The only remaining try.
6 e1 c4 7 d2 b5 8 c3 xb6 9 b4 and White has the opposition and draws.
Tip 3

A Royal Pas de Deux

Again, the only move to draw, keeping the distant opposition. 63 \textcolor{red}{\textit{c}}2? loses because the black king can go back to the kingside and penetrate there. After 63...\textcolor{blue}{\textit{e}}6 64 \textcolor{red}{\textit{c}}3 (64 \textcolor{blue}{\textit{d}}2 \textcolor{blue}{\textit{f}}6 65 \textcolor{red}{\textit{e}}2 \textcolor{red}{\textit{g}}5 66 \textcolor{red}{\textit{f}}2 \textcolor{red}{\textit{h}}4 wins for Black) 64...\textcolor{blue}{\textit{f}}6 65 \textcolor{red}{\textit{d}}4 \textcolor{red}{\textit{g}}5 66 \textcolor{red}{\textit{e}}5 \textcolor{red}{\textit{g}}4 Black wins. 63...\textcolor{red}{\textit{e}}5 (D)

In many king and pawn endings, it is vital to understand the distant opposition. Here, Jan Timman shows how to use the technique to draw a position a pawn down. White must maintain the opposition, else the black king will penetrate and win the e3-pawn. Black can get in either on the kingside or queenside, and White must cover both avenues of attack.

58 \textcolor{red}{\textit{g}}2!

The only move, taking the distant opposition. 58 \textcolor{blue}{\textit{g}}3? loses to 58...\textcolor{red}{\textit{g}}5 59 \textcolor{blue}{\textit{f}}2 \textcolor{red}{\textit{h}}4 60 \textcolor{red}{\textit{g}}2 \textcolor{red}{\textit{g}}4 61 \textcolor{blue}{\textit{f}}2 \textcolor{red}{\textit{h}}3, as Black gets in and wins the e3-pawn.

58...\textcolor{blue}{\textit{g}}7 59 \textcolor{red}{\textit{g}}1

59 \textcolor{red}{\textit{g}}3 also draws.

59...\textcolor{red}{\textit{h}}7 60 \textcolor{red}{\textit{f}}1 \textcolor{blue}{\textit{e}}6 61 \textcolor{blue}{\textit{e}}2 \textcolor{red}{\textit{d}}5 62 \textcolor{red}{\textit{d}}2 \textcolor{red}{\textit{d}}6 (D)

Black tries his last trap.

66 \textcolor{red}{\textit{c}}1!

Distant opposition is important, but so are elementary tactics! 66 \textcolor{blue}{\textit{a}}1? keeps the distant opposition, but loses to 66...\textcolor{red}{\textit{f}}4, promoting a pawn. \frac{1}{2}-\frac{1}{2}

After 66...\textcolor{blue}{\textit{a}}4 67 \textcolor{red}{\textit{c}}2! White retains the opposition.
Passed pawns can be manufactured in the most surprising of circumstances. For example, every beginner soon becomes acquainted with the following device:

Despite the symmetrical pawn-structure, White forces a winning passed pawn by 1 g6! fxg6 (or 1...hxg6 2 f6 gxf6 3 h6) 2 h6 gxh6 3 f6, and wins.

This is a very basic example, but such breakthrough tricks arise in many positions. Here are two examples from grandmaster practice.

42...f4! 43 d5
Or 43 exf4 h4 44 gxh4 g3 45 fxg3 e3, winning.

43...h4! 44 xe4
44 gxh4 g3 45 fxg3 fxg3 and again Black promotes a pawn.

44...f3 45 gxf3 h3 0-1

In both of the preceding examples, the defender’s pawns were on the second rank, but breakthroughs also occur in the middle of the board, as in the next case.

The Swedish GM casually played an incautious move:

47...g5??
White’s reply left him with a very red face:

48 g4!

White forces another passed pawn. White’s two widely-separated passed pawns are far stronger than Black’s three connected pawns, which can be stopped by the white king. The game ended:

48...hxg4 49 h5 f5 50 h6 f4+ 51 d2 g3+ 52 d2 e4 53 h7 1-0

So, the golden rule is: never forget about breakthrough possibilities!
More Pawn Breakthrough Ideas

The pawn breakthrough is such an important idea, and comes in so many forms, that it is worth seeing some more examples.

Again, White appears to be losing, since 41 g6? hxg6 42 hgx6 f6 is hopeless. However, a typical breakthrough tactic turns the tables:

41 h6! 1-0

The threat of 42 g6 is much stronger than its immediate execution. Black cannot stop a pawn promoting after 42 g6; e.g., 41...f4 42 g6 f6 43 gxh7, etc. This structure is quite common and should be remembered.

Were it not for an immediate breakthrough, White would be lost due to Black's outside passed pawn. As it is, though, he won after...

51 e5! fxe5

Forced, since after 51...d5 52 e6, White wins easily with his protected passed pawn.

52 g5 hxg5

Again, 52...d7 loses: 53 f6 e8 54 fxg7 f7 55 gxh6 b5 56 e4 b4 57 d3! and the white king stops both black pawns.

53 f6! 1-0

The h-pawn will queen.

V. Borisenko Belovba – Zvorykina
USSR women’s Ch (Riga) 1962

Here, a similar idea occurs. Black won by:

39...a4!

39...b4? 40 a4 achieves nothing, but now 40...b4 is a winning threat.

40 e4 b4 41 xd4 bxa3 42 c3 (D)

Capablanca – Ed. Lasker
London (offhand game) 1913

42...g5! 43 d4 xg4 0-1

White loses the d-pawn and then must move her king, with fatal consequences.
TIP 6

Don't Forget about Stalemate Resources

Stalemate ideas can often rescue an apparently hopeless position, and should not be forgotten.

44...\textit{\texttt{Wc7+}} 45 \textit{\texttt{Wb6+??}}
45 b6 wins.
45...\textit{\texttt{wxa8!}} (D)

Oops! As we shall see again in Tip 55, capturing is not compulsory in chess. 46 \textit{\texttt{Wxc7}} is stalemate, and White has no way to untangle his pieces.

46 \textit{\texttt{Ea6}} \textit{\texttt{Ec8+}} 47 \textit{\texttt{Ea5}} \textit{\texttt{Wc7}} ½-½

In the next, more modern, example, Black proves equal to the task.

The Ukrainian GM had previously been winning this game, but a time-trouble blunder had left him facing defeat. However, he showed the strength of character to find the only saving line, which involved trapping his own king on h4: 45...\textit{\texttt{g6}} 46 \textit{\texttt{xe5}} \textit{\texttt{g5}} 47 \textit{\texttt{e4}} h5 48 \textit{\texttt{e5}} \textit{\texttt{h4}} 49 \textit{\texttt{xf4}} (stalemate) ½-½.
Simplifying into a King and Pawn Ending

Simplifying to a king and pawn ending can frequently be the easiest way to realize an advantage. But it is essential to calculate the ending properly.

**Alekhone – Yates**  
*Hamburg 1910*

White won by precisely calculating the pawn ending:

40 $\text{e}5! \text{xe}5 41 \text{fxe}5 \text{e}7 42 \text{d}3! (D)

It is all about the opposition. Not 42 $\text{d}4? \text{e}6$, while 42 $\text{b}4$ leads only to an unclear queen ending after 42...$\text{e}6 43 \text{xb}5 \text{xe}5 44 \text{xa}4 \text{e}4 45 \text{b}4 \text{xe}3 46 \text{b}5 \text{f}4 47 \text{b}6 \text{f}3 48 \text{b}7 \text{f}2 49 \text{b}8\text{w} \text{f}1\text{w}. It was certainly not for this that White exchanged rooks at move 40!

**B**

42...$\text{d}7 43 \text{e}4 \text{f}4 44 \text{e}2 \text{e}6 45 \text{f}2! 1-0

45...$\text{xe}5 46 \text{f}3$ and White wins.

But miscalculating the pawn ending can be disastrous, as in the following tragic example:

**Aronin – Smyslov**  
*USSR Ch (Moscow) 1951*

White can win in many ways thanks to his powerful knight and Black’s bad bishop, but chose:

42 $\text{g}8 $\text{h}7 43 $\text{xg}7+? \text{xe}7 44 $\text{xe}7 \text{xe}7 45 \text{g}4 (D)

Things look hopeless, but Smyslov found a miraculous idea:

45...$\text{hxg}3! 46 \text{fxg}3 \text{g}4!!

Giving White a protected passed pawn!

47 $\text{h}4 \text{c}5 48 \text{e}2 \text{h}7 49 \text{d}3 \text{h}6

The point. If now 50 $\text{c}4?$, then 50...f5! 51 exf5 e4 and White actually loses. He can therefore make no progress.

50 $\text{c}3 \text{a}5 51 \text{cxb}4 \text{axb}4 \frac{1}{2}-\frac{1}{2}

This dropped half-point cost Aronin an Interzonal qualification, and haunted him for the rest of his career. He was never the same player again.
TIP 8

Knights Hate Rook’s Pawns

The knight is a piece whose activity is always severely curtailed when it is near the edge of the board. Because of the rook’s pawn’s proximity to the edge, knights have particular trouble fighting such pawns.

The knight is helpless against the a-pawn.
44 c3 a3 0-1

Kasparov – Adams
Linares 1999

This position is a simple example. White wins by 1 Qg7+! Qxg7 2 h6. The knight cannot stop the h-pawn, and after 2...Qf8 3 h7! nor can the black king.

Such tactical ideas frequently occur in practice, as in this exceptionally nice example:

Here too, with his king so far away, the defender’s lone knight proves unable to cope with the rook’s pawn.
61 Qd4 Qa6

After 61...Qa4 White wins in typical fashion: 62 Qc3 Qb2 63 Qd1! Qxd1 64 a4 Qb2 65 a5 Qg7 66 a6 Qa4 67 a7 Qb6 68 Qc5 Qa8 69 Qc6, etc. Such knight sacrifices are a common feature of these endings, and this is a device which is worth studying and remembering.
62 Qd5 Qg6 63 Qd4 Qf6 64 Qd6! Qf7 (D)
64...Qb8 65 Qc6 Qa6 66 Qb4 winning.

Bonner – Medina Garcia
Haifa OL 1976

Black forced a winning passed a-pawn by means of a spectacular tactical blow:
41...Qc3! 42 bxc3 a4 43 cxd4 cxd4

65 Qe6 1-0

After 65...Qb8 (65...Qe8 66 Qc7+) 66 Qc5 Qe8 67 Qc7 White wins.
Tip 9

Deflections

In knight endings, deflecting the enemy knight by a sacrifice is a typical device.

B

Barcza – Simagin
Budapest – Moscow 1949

This was the position reached after White’s sealed move, 42 \( \text{c6xa7} \). Despite White’s extra pawn, Black’s powerful passed d-pawn, supported by king and knight, give him all the winning chances. However, the path to victory is not easy, since White only needs to sacrifice his knight for the dangerous d-pawn and Black would already be unable to win most positions. Detailed adjournment analysis enabled Simagin to find a superb winning line, based largely on knight deflections.

42...d3 43 \( \text{f1} \) (D)

46...\( \text{d6!} \)
Again the only move; for example, 46...\( \text{e3?} \)
47 \( \text{b5 d2+} \) 48 \( \text{c2 e2} \) 49 \( \text{d4+} \) draws. It is essential to keep the white knight from the b5-square.

47 \( \text{d2} \)
47 \( \text{c6+} \) loses to 47...\( \text{c3} \) 48 \( \text{e7} \) (48 \( \text{e5 d2+} \) 49 \( \text{d1 e4} \) 50 \( \text{f3 f2+} \) wins for Black)
48...\( \text{d2+} \) 49 \( \text{d1 e4} \) 50 \( \text{d5+} \) \( \text{e4} \) 51 \( \text{e3+} \) \( \text{d3} \).
47...\( \text{e4+} \) 48 \( \text{c1 d2+} \) 49 \( \text{c2 e3} \) 50 \( \text{b5} \) (D)

43...\( \text{e3!} \)
The only winning move, threatening 44...d2, and forcing the reply. Lines such as 43...\( \text{d4?} \)
44 \( \text{b5+} \) \( \text{e3} \) 45 \( \text{a3!} \) d2 46 \( \text{c4+} \) \( \text{d3} \) 47

50...\( \text{a3+!!} \) 0-1
After 51 \( \text{xa3 e2} \) Black promotes his d-pawn.
**TIP 10**  

**Pawns on the Same Side**

Many 4 vs 3 endings on the same side are drawn (see Tip 42 for a discussion of the equivalent rook ending), but with knights, the ending is usually winning. Fine pointed this out many years ago in *Basic Chess Endings*, but did not have a practical example from GM play, and was forced to illustrate his point with a hypothetical case. His conclusions have since been confirmed by GM practice, the following being an example.

**Portisch – Ivkov**  
* Sarajevo 1962

White’s plan is simply to centralize his king and then create a passed pawn on the e-file.  
65 e4 d7 66 f4! (D)

It is important to stop Black exchanging pawns with ...g6. Generally speaking, the more pawns Black can exchange, the better his drawing chances.

66...d5 67 d6 d6 68 f4 d4 69 f2 f7 70 h4 e2 71 e2 e6 72 d2 d4 73 c3 a2+ 74 d4 d1 75 f5 f17 (D)

White has finished Stage 1, and now carries out Stage 2 – creating the passed pawn. Note how the excellently-placed knight on f5 ties down the black king.

76 e5 fxe5+ 77 fxe5 d6 78 d5 d3+ 79 d6 d4+ 80 d7 d5+ 81 c6 d6 82 d6 f4 83 e7 d6 84 g6 d8 85 d7 (D)

85...d4

Black is in zugzwang and must lift the blockade of the e-pawn, since 85...d4 loses to 86 h8+.

86 e6+ g8 87 e7 f6+ 88 d8 f7 89 d5+ 1-0
Tip 11  

Space is Important in Knight Endings

Knight endings are often said to be the closest to pure pawn endings. One respect in which that is the case is the importance of extra space, and a more active king.

![Chess Diagram]

Punnett – R. Bellin  
British League (4NCL) 2005/6

Material is equal and the pawns symmetrical, but White is lost, because he is too cramped and passive. Black won in systematic fashion, as follows:

44 \textit{c2}

After 44 exf4 d6 45 e2 f6, Black will regain the pawn and leave White with a weakness at d4.

44...f6 45 d2 f5 46 e2 e6 47 c3 g4 48 e2 \textit{(D)}

Black seizes the chance to penetrate even further.

51 f3?

Losing immediately, but 51 d1 g2 is zugzwang; e.g., 52 c3 x3 53 fxe3 f3+, etc. This tactical threat of ...x3 is another reason why the black knight stands so well on f5.

51...g2! 52 fxe4 f3+ 53 d2 f2 0-1
Tip 12

In the Footsteps of the Master

Botvinnik – Riumin
Moscow 1936

White has an extra pawn, and the c5-pawn is weak. White should be technically winning, but methodical, careful play is needed.

34  f2

Centralizing the king.

34...f5 35 f3 e5 36 d6 37 b2 d5 38 c4 c7 39 e2 e4 40 d2+ f5 41 f3 e5 (D)

Botvinnik writes: “Although White has the upper hand, it is not so easy to win the position. White therefore continues to wait, in the hope of some sort of inaccuracy on Black’s part – a method of play in the endgame which I observed in the play of Capablanca himself.”

42 c4+ d5 43 e2 e4 44 d2+ f5 45 f3 e5 46 g4

Taking f5 from the black king.

46...d5 47 h3 d8 48 e2 c7 49 d3 g3

Black loses patience. He should keep the bishop on d8, stopping g5. “The Capablanca method has worked!” (Botvinnik).

50 e4 e1 (D)
50...h4 51 c3+.

Botvinnik writes: “Although White has the upper hand, it is not so easy to win the position. White therefore continues to wait, in the hope of some sort of inaccuracy on Black’s part – a method of play in the endgame which I observed in the play of Capablanca himself.”

51 g5!

Forcing a second weakness on g6.

51...h6 52 e4

Now White has ideas of e4-f5-g6.

52...h4 53 c3+ e6

53...e6 54 b5.

54 c4 f6 55 b1 d6 56 a3 e6 (D)

56...e6 57 f5.

57 b5 a5 58 c7+ d7 59 d5 b2 60 b6+ c6 1-0

After 61 c4 and 62 f5, the white king enters decisively on the weak light squares – another triumph for the two-weaknesses principle.
**Tip 13**

**Exploiting a Positional Advantage**

![Chess Diagram]

White has a small advantage, in the form of better queenside pawns and slightly more space. It is not very much, but in the face of White’s fine play, a couple of inaccuracies are all it takes for Black to lose the position.

21 f3 £d7 22 £f2 £f5 23 £e3 £e7 24 £b4 £e5
25 £a4 £d6 26 £d3 £f6 27 £c5+ £e6

Sveshnikov recommends 27...£e7 28 £c4 (28 £b5 £d5! and the pawn ending is a draw) 28...£a6 as a tougher defence.

28 £b5! £d7 29 £e4 £c7 (D)
29...£e4? 30 £xe4 £xe4 31 £d4.

The threat was a6, followed by bxc6 and £b5xa7.

31 £b6+

This is better than 31 £xa6 £b8 32 £a2 £d5, followed by ...£a7.

31...£b7 32 £g3 £h5?!

In time-trouble, Black devalues his kingside pawns. A waiting move, such as 32...£d7, is a better try, when White would still face significant hurdles in converting his advantage.

33 £h4 £d7 34 £f4! exf4
34...£e4 35 £d4 and White penetrates.

35 gxf4 £f8

The only way to engineer some counterplay.

36 £c2 £g6 37 £d4 (D)

![Chess Diagram]

37...£xh4
37...£xf4? 38 £xf5 £g6 39 £e7 and Black is in zugzwang and must lose a pawn.

38 £e6 £c8?

Parrying the threat of 39 £d8+, but losing prosaically. Black’s best chance was in fact to allow White’s idea: 38...£g6 39 £d8+?! £a8!
40 £xc6 £h4 offers good drawing chances thanks to the power of Black’s h-pawn.

39 £xg7 £g6 40 £xh5

The rest is easy.

40...£d7 41 £d3 £c8 42 £e3 £e7 43 £g7 £d5+ 44 £f3 £e7 45 £e6 £d5 46 £d4 1-0
Activity is King

Kamyshov – Zagoriansky
Leningrad (Trade Unions) 1938

Although material is equal and the pawns symmetrical, White’s more active king and extra space decide the game.

37 h4 ♖h7 38 h5

This kingside pawn set-up, dubbed the quart-grip by Hans Kmoch, often arises in the Caro-Kann Defence. As this game shows, it can confer a significant advantage on White, who has a variety of line-opening and breakthrough ideas, such as g5 or f5.

38...♖c5 39 g5 ♖h7 40 ♕e4 ♖b6 41 ♕c4

The king is ideally placed here, defending the weakness on b3 and constantly threatening to attack Black’s weakness on a5. By contrast, the black king has to adopt a purely defensive role.

41...♖c6 (D)

42 ♖f6!

Never forget about tactics! The knight is coming to e8, winning a pawn.

42...♕e5
42...gxf6 43 gxf6 is winning for White.
43 ♕e8 hxg5 44 fxg5 ♕e4 45 h6 gxh6 46 gxh6 ♕g5 47 ♕f6 ♕f3 48 ♕g4 ♕g5 49 ♕d4 f5! (D)

Allowing his king to get across via d6. Against other moves, 50 ♕f6 and 51 h7 wins.

50 exf6
50 ♕f6? ♕f3+ and 51...♕xe5.
50...♕d6 (D)

Black has managed to stop the kingside pawns, but in a typical example of the two-weaknesses principle, White wins by turning his attention back to the weakness on the queenside.

51 ♕e5 ♕h7 52 ♕e4+ ♕d7 53 f7 ♕e7 54 ♕xa5

Curtains.
54...♕xf7 55 ♕c6 ♕g6 56 a5
and White won.
We have already encountered the concept of 'shoulder-charging', when one side's king gets in the way of its opposite number. The creation of a barrier, to prevent the enemy king from approaching the crucial area of the board, is another common endgame device.

This preserves the possibility to go to either d6 or a5, depending on which route the black king chooses.

1...\texttt{f7} 2 a4

The two variations then run as follows:

2...\texttt{e8} 3 a5 \texttt{d8} 4 \texttt{d6} \texttt{c8} 5 a6 (D)

This is a simple but classic example. Clearly, White's bishop needs to move out of the way of the pawn, but where? In order to win, White must prevent the black king from reaching the corner. Black has two possible routes to a8, either behind the d-pawn (f7-e8-d8-c8, etc.), or in front of it (f7-e6-d5-c6). Analysis shows that if he goes round the back, White can keep the black king out of the corner by the construction \texttt{d6/d6}, with the black king on c8. On the other hand, if the black king chooses the frontal route, he can again be kept out of the corner if White achieves the set-up \texttt{a5/d6} vs \texttt{c6}.

These considerations then supply White's only correct first move:

1 \texttt{a4}!!

On the other hand, if the black king chooses the frontal route, he can again be kept out of the corner if White achieves the set-up \texttt{a5/d6} vs \texttt{c6}.

White wins in both cases. If Black pushes the d-pawn, White simply brings his king across. Once Black has to move his king, he allows the a-pawn to queen.
Barrier Reefs (Part 2)

The type of barrier idea seen in Tip 15 often arises in more advanced form.

This involves three steps: put the white king on f8 (shutting out the black king entirely), the bishop on h5, and then bring the white king back to f6.

74  \textcolor{red}{\textit{\textbackslash a}f7}  \textcolor{red}{\textit{\textbackslash c}c4+}  75  \textcolor{red}{\textit{\textbackslash e}f8}  \textcolor{red}{\textit{\textbackslash d}d3}  76  \textcolor{red}{\textit{\textbackslash e}e8}  \textcolor{red}{\textit{\textbackslash e}e4}  77  \textcolor{red}{\textit{\textbackslash h}h5}  \textcolor{red}{\textit{\textbackslash d}d3}  78  \textcolor{red}{\textit{\textbackslash f}f7}  \textcolor{red}{\textit{\textbackslash e}e4}  79  \textcolor{red}{\textit{\textbackslash f}f6}  \\
Mission accomplished.

79...\textcolor{red}{\textit{\textbackslash d}d3}  80  \textcolor{red}{\textit{\textbackslash g}g6}  \textcolor{red}{\textit{\textbackslash e}e2}  81  \textcolor{red}{\textit{\textbackslash c}c2}  \textcolor{red}{\textit{\textbackslash h}h5}  \\
The final step is to get the white bishop to f7. Since the immediate 82 \textcolor{red}{\textit{\textbackslash b}b3?} \textcolor{red}{\textit{\textbackslash e}e8} draws, the black king must first be driven away from e8.

82 \textcolor{red}{\textit{\textbackslash a}a4!}  \\
A nice echo of move 68, placing Black in zugzwang.

82...\textcolor{red}{\textit{\textbackslash c}c7}  \\
Or 82...\textcolor{red}{\textit{\textbackslash e}e2}  83  \textcolor{red}{\textit{\textbackslash c}c4}  84  \textcolor{red}{\textit{\textbackslash g}g7}  \textcolor{red}{\textit{\textbackslash a}a2}  85  \textcolor{red}{\textit{\textbackslash c}c2}  \textcolor{red}{\textit{\textbackslash c}c4}  86  \textcolor{red}{\textit{\textbackslash g}g6}  and 87 \textcolor{red}{\textit{\textbackslash f}f7} winning.

83 \textcolor{red}{\textit{\textbackslash b}b3}  1-0  \\
84 \textcolor{red}{\textit{\textbackslash f}f7} wins.

The alternative defence 68...\textcolor{red}{\textit{\textbackslash c}c8} fails to another barrier: 69 \textcolor{red}{\textit{\textbackslash c}c2}  \textcolor{red}{\textit{\textbackslash b}b6}  70 \textcolor{red}{\textit{\textbackslash f}f5}  \textcolor{red}{\textit{\textbackslash a}a6}  71 \textcolor{red}{\textit{\textbackslash g}g4}  \\
\textcolor{red}{\textit{\textbackslash c}c7}  72 \textcolor{red}{\textit{\textbackslash e}e5}  \textcolor{red}{\textit{\textbackslash d}d8}  73 \textcolor{red}{\textit{\textbackslash f}f6}  \textcolor{red}{\textit{\textbackslash e}e8}  74 \textcolor{red}{\textit{\textbackslash g}g5}  \textcolor{red}{\textit{\textbackslash f}f8}  75 \textcolor{red}{\textit{\textbackslash h}h7!}  (D).

The black bishop cannot get to the e8-h5 diagonal in time: 75...\textcolor{red}{\textit{\textbackslash c}c4}  76 \textcolor{red}{\textit{\textbackslash b}b3}  77 \textcolor{red}{\textit{\textbackslash g}g7+}  \\
\textcolor{red}{\textit{\textbackslash e}e8}  78 \textcolor{red}{\textit{\textbackslash g}g6+}  \textcolor{red}{\textit{\textbackslash d}d7}  79 \textcolor{red}{\textit{\textbackslash f}f7} and White wins. 75...\textcolor{red}{\textit{\textbackslash e}e8} is a tougher defence, as 76 \textcolor{red}{\textit{\textbackslash g}g6??} allows 76...\textcolor{red}{\textit{\textbackslash c}c2}, but White wins by, e.g., 77 \textcolor{red}{\textit{\textbackslash g}g7}  \\
\textcolor{red}{\textit{\textbackslash e}e2}  78 \textcolor{red}{\textit{\textbackslash h}h6} \textcolor{red}{\textit{\textbackslash c}c4}  79 \textcolor{red}{\textit{\textbackslash b}b1} \textcolor{red}{\textit{\textbackslash e}e7}  (79...\textcolor{red}{\textit{\textbackslash f}f7}  80  \textcolor{red}{\textit{\textbackslash g}g6})  80 \textcolor{red}{\textit{\textbackslash g}g6}, etc.
**Tip 17**  
Bishop and Wrong Rook’s Pawn

It is well-known that bishop + rook’s pawn do not win if the bishop does not control the queening square and the black king can get in the corner. This classic ending shows White employing some fancy footwork to keep the black king out.

![Diagram](image-url)

L. Paulsen – Metger  
*Nuremberg 1888*

1 $\texttt{d4!}$

Not 1 $\texttt{c5}$? b6+, nor 1 $\texttt{c4}$? b5+, as occurred in the game, after which the black king reaches b7.

1... $\texttt{c6}$

1...b6 2 a6.

2 $\texttt{b6} \texttt{d6} 3 \texttt{c4} \texttt{e6} 4 \texttt{b4} \texttt{d6} 5 \texttt{b5} \texttt{d7} 6 \texttt{c5} \texttt{e8} 7 \texttt{a7} \texttt{c7}$

7... $\texttt{b6+}$ 8 $\texttt{xb6}$, or 7... $\texttt{b5}$ 8 $\texttt{a6}$.

8 $\texttt{b5} \texttt{d7} 9 \texttt{b8} \texttt{e8} 10 \texttt{f4} \texttt{d7} 11 \texttt{b6} \texttt{e8} 12 \texttt{g3}$

and White wins.

Sometimes, even getting the king in the corner does not draw (see following diagram).

Black had just swindled his opponent from a clearly lost position and was now congratulating himself on having apparently secured the draw. White cannot stop ...$\texttt{g5}$ and ...$\texttt{f5}$, leaving him with the wrong rook’s pawn, nor can he keep the black king from the corner. However, play continued:

![Diagram](image-url)

$\texttt{53 f1 g5} \texttt{54 xh3 f5 55 xg2! xg4}$

Else 56 $\texttt{h3}$ keeps the g-pawn.

$\texttt{56 d4 f6 57 e4 g7 58 c6 g6 59 e8+ f5 60 e3 e5 1-0}$

White has a simple plan: win the $\texttt{e6}$-pawn (by, for example, 61 $\texttt{a4} \texttt{f5} 62 \texttt{c2+} \texttt{e5} 63 \texttt{e4} \texttt{f6} 64 \texttt{d4} \texttt{g7}! 65 \texttt{c6}! \{65 \texttt{e5?} \texttt{h6} \texttt{and } ...\texttt{h5}\} 65... \texttt{f6} \{65... \texttt{h6} 66 \texttt{e8}\} 66 \texttt{e4},$ etc.) and then get a position akin to this:

![Diagram](image-url)

This would be a draw without the second black pawn on $\texttt{g5}$, but here 1 $\texttt{h7} \texttt{g3}$ (forced) 2 $\texttt{hxg3} \texttt{g4}$ (no stalemate!) 3 $\texttt{e4}$ wins, since White has transformed his $\texttt{h}$-pawn into a $\texttt{g}$-pawn.
**Tip 18**

**King at the Rear**

It looks as though the remoteness of Black's king will cost him the game because he cannot get his king in front of the pawn. Indeed, against Capablanca at New York 1916, Janowski resigned a very similar position. However, Black can hold by taking his king to the rear of the pawn, an important defensive technique in such positions.

81...\(\text{f}4!\) 82 b5 \(\text{e}4\) 83 \(\text{d}4\) \(\text{c}7\) 84 \(\text{c}5\) \(\text{d}3!\) (\(D\))

The crucial idea. The black king heads for \(c4\).

85 \(\text{c}6\) \(\text{c}4\) 86 \(\text{b}6\) \(\text{f}4\) 87 \(\text{a}7\)

Or 87 \(\text{d}8\) \(\text{e}3\).

87...\(\text{c}7!\)

\(1/2-1/2\)

White can make no progress.

However, this technique doesn't always draw. Here is a classic example.

---

Taimanov – Fischer

*Buenos Aires 1960*

L. Centurini

*La Régence, 1856*

White wins elegantly:

1 \(\text{h}4\) \(\text{b}5\)

Else \(\text{f}2\)-a7.

2 \(\text{f}2\) \(\text{a}6\) 3 \(\text{c}5!\)

A waiting move, but the only one. White wants to force the black bishop from \(h2\), but must not allow it to \(d6\).

3...\(\text{g}3\)

3...\(\text{f}4\) and 3...\(\text{e}5\) are the same.

4 \(\text{e}7\) \(\text{b}5\)

He must stop \(\text{d}8\)-c7.

5 \(\text{d}8\) \(\text{c}6\)

We have returned to the initial position, but with Black's bishop on a different square.

6 \(\text{h}4!\)

Gaining a vital tempo, the point of White's 3rd move. Note that if Black's bishop were on \(d6\), 6 \(\text{e}7\) \(\text{h}2\) draws, as there is no 7 \(\text{c}5\).

6...\(\text{h}2\) 7 \(\text{f}2\)

Now Black cannot stop the bishop reaching \(a7\):

7...\(\text{f}4\) 8 \(\text{a}7\) \(\text{h}2\) 9 \(\text{b}8\) \(\text{g}1\) 10 \(\text{g}3\) \(\text{a}7\) 11 \(\text{f}2!\) and White wins.
Good Bishop versus Bad

If 51 \( \text{c2} \), the black king gets in by 51...\( \text{a3} \) 52 \( \text{f2} \) \( \text{b4} \) 53 \( \text{d3} \) \( \text{b3} \), etc. The constant use of zugzwang enables the black king to inch its way in.

51...\( \text{b3} \) 52 \( \text{e1} \) \( \text{b2} \) 53 \( \text{f2} \) \( \text{c1} \) (D)

54 \( \text{e3}+ \)
54 \( \text{e2} \) \( \text{c2} \) is no better.
54...\( \text{d1} \) 55 \( \text{f2} \)
55 \( \text{f4} \) \( \text{b4} \) 56 \( \text{d2}! \) is a nice try, pointed out by Panchenko, but it does not save the game. Panchenko’s analysis continues 56...\( \text{e7} \) 57 \( \text{f4} \) \( \text{e1} \) 58 \( \text{e3} \) \( \text{b4} \) 59 \( \text{e5} \) \( \text{d2}+ \) 60 \( \text{d3} \) \( \text{g5} \) winning.

55...\( \text{a3} \) 56 \( \text{e3} \) \( \text{c1}+ \) 57 \( \text{d3} \) \( \text{d2} \) 58 \( \text{e3} \) \( \text{e1} \) 59 \( \text{f4} \) \( \text{f2} \) 60 \( \text{e5} \) \( \text{e1} \) (D)

The black king has come a long way over the past 16 moves, but he has penetrated to the very heart of White’s position.

61 \( \text{c3} \) \( \text{e2} \) 62 \( \text{b4} \) \( \text{f3} \) 63 \( \text{c5} \) \( \text{e4}! \) 0-1
Tip 20

How to Manufacture a Passed Pawn

White stands worse, because the d4-pawn blocks his bishop. Since the pawn-structure is symmetrical and he has no other weaknesses, he should still draw, but one error proves enough to lose.

25...h7 26 f1 g6 27 e2 b4 28 g3 f5 29 b2 g5 (D)

30 c1?
White’s only clear error, but it costs him the game. He presumably missed Black’s 31st. Salov gave 30 d3!, when 30...g4 is met by 31 h4, White would then have little to fear.

30...g4 31 hxg4+
Now 31 h4 e4 is hopeless for White.

31...xg4!
The key to Black’s plan. Now a subsequent ...f5-f4 will force gxf4, when Black’s passed h-pawn will decide the game. This device is well worth remembering. In the initial position, it seemed impossible for Black to create a passed pawn, but he has found a way.

32 d2 f5 33 e1 e7 34 d2
34 f3+ h3 does not help.

34...d6 35 e1 f4! 36 f3+
36 gxf4 xf4 37 f3 e7 and the h-pawn advances decisively.

36...h3 37 gxf4 g2! (D)

There is no defence to the plan of ...e7 and...

38 f5 e7 39 f6 xf6 40 xb4 h4 41 d6 h3 42 b4 (D)

42...e7!
A neat final touch, eliminating the b4-pawn. Instead, after the hasty 42...h4? (do not hurry!)

43 b5 g3? 44 xg3 xg3 45 b6 h2 46 b7 h1 w 47 b8=+ White even wins.

0-1
**Tip 21**  
The Principle of Two Weaknesses

One weakness is often not enough to lose, and opening up a second front is the key to winning many positions.

![Diagram](image)

Black has one weakness on d5, but by itself, that is not enough.

40 h6!

Creating a new weakness at h7. White now has ideas of getting his bishop round the back to g8, or sacrificing on g6. Miles assesses the position as drawn if Black can play 40...gxb5 41 gxh5 h6, since Black only has one weakness, which he can defend adequately.

40...gxb5 41 f4
Not 41 c3? cxe2.

41...d7 42 c3 d6 43 g5 c5 44 a3 (D)

47...d4+

Desperation. Passive defence with 46...e6 leads to another zugzwang after 47 a4 d6 48 d4 e7 49 c6 d6 50 b7, and White wins.

47 exd4+ d5 48 xf7+ e4 49 d5 xf4 (D)

Black seems to have achieved some counterplay, but a pleasingly thematic tactical blow on g6 shatters this illusion.

50 xg6! 1-0

Once again, the second weakness proves decisive. After 50...xg6 51 d6 e8 52 g6 White wins.
**Tip 22**

### Not-so-Distant Passed Pawn

In normal circumstances, a same-coloured bishop ending with an extra outside passed pawn is a fairly simple win. Here, however, Black’s task is more difficult, because his passed pawn is not far from the kingside and so does not deflect the white pieces far enough away (with an a- or b-pawn, for example, the win would be elementary). In order to win, Black needs to get his king to e3, which requires subtle play.

62 \( \text{Kf2} + \text{Ke3} \ 63 \text{Kb6} \text{d2} \text{Kf2} \text{d3} \text{Kb6} \text{f4} \text{Kf2} \text{e5} \) \( D \)

Preparing 67...\( \text{d4} \).

67 \( \text{g1} \) \( h4 \)!

Black’s plan is to sacrifice his bishop, so as to get his king amongst the white pawns. However, the immediate 67...\( \text{d4} \) does not win after 68 \( \text{h2} \) (even 68 \( \text{xd4} \) leads to a drawn pawn ending after 68...\( \text{xd4} \) 69 \( \text{xd2} \) \text{h4} \text{70} \text{g5} \) ) 68...\( \text{e3} \) 69 \( \text{g1}+ \text{xf3} \) 70 \( \text{xd4} \), so Black prepares the sacrifice by getting his h-pawn one square nearer to queening – another case of ‘do not hurry’.

68 \( \text{f2} \) \( \text{e3}! \) \( D \)

68...\( \text{d4} \) is still premature: 69 \( \text{xd4} \) \text{e3} \text{70} \text{g5}+ \text{xf3} \text{71} \text{xd2} \text{g3} \text{72} \text{d3} \text{g7} \text{73} \text{e4} \text{xe3} \text{74} \text{e3} \) and draws.

69 \( \text{g1} \) \( \text{d4}! \)

Now White no longer has the move 70 \( \text{xb4} \), this is decisive.

70 \( \text{xd4} \)

The main line is 70 \( \text{h2} \) \text{e3} \text{71} \text{g1}+ \text{xf3} \text{72} \text{xd4} \text{g3} \) \( D \).

Compared with the line beginning 67...\( \text{d4} \), Black’s h-pawn is a vital extra step forward. 73 \( \text{xd2} \text{h3} \text{74} \text{h2} \text{g3} \text{75} \text{e3} \text{g2} \text{76} \text{g5} \) h3 wins for Black.

70...\( \text{xd4} \) 71 \( \text{xd2} \) \text{e5} \text{72} \text{e3} \text{g5} \) 0-1
**Tip 23**

**The Crippled Majority**

The difference between having a healthy majority and one which is crippled, and cannot produce a passed pawn, can be enough to decide the game.

White's plan is to improve his bishop as much as possible, and then play g4, creating a passed pawn on the kingside.

40 \textit{c}3 \textit{d}6 41 \textit{g}5 \textit{e}5 42 \textit{e}7 \textit{d}4 43 \textit{d}8 \textit{c}3 44 \textit{b}6 \textit{b}4 45 g4 \textit{(D)}

This is a classic Exchange Lopez ending. White is effectively a pawn up, because his kingside majority is healthy, while Black's queenside majority cannot produce a passed pawn.

34 b3!

Keeping the enemy pawns doubled is the simplest approach. Winning a pawn by taking twice on b5 would allow unnecessary counterplay.

34...bxc4 35 bxc4 \textit{f}6 36 \textit{d}2 \textit{d}8 37 \textit{c}3 \textit{c}7 38 \textit{h}3 \textit{f}7 39 \textit{d}2 \textit{g}6 \textit{(D)}

\textbf{Rowson – Gormally}

\textit{Hastings 2003/4}

45...\textit{c}3

Sacrificing an unimportant pawn, rather than exchanging pawns on g4, which would allow the white king into e4. However, even this proves insufficient to hold the game.

46 \textit{xc}5 \textit{e}1 47 \textit{d}6 \textit{c}3 48 \textit{c}7 \textit{(D)}

White's final winning plan is to put the bishop on d8, exchange on h5, and then bring his king to the centre. Black cannot both stop the h-pawn and defend his own a-pawn (two weaknesses).

48...fxg4+ 49 fxg4 \textit{e}1 50 \textit{d}8 \textit{h}6 51 \textit{e}7 \textit{g}6 52 \textit{g}5 1-0

There is no defence to the white king's march.
Tip 24  

Pawns Don't Move Backwards

Emanuel Lasker wrote in his *Manual of Chess* that one should “…distrust a pawn move, and examine its balance sheet carefully”. Pawns do not move backwards, so any mistaken pawn advance is irreparable.

The key move. The advance ...b5 will leave White a very unpleasant choice.

26 \( \text{f}3 \) b5 27 axb5

This grants Black a potential outside passed pawn, but if he allows Black to exchange on a4, he will be unable to defend both the a4-pawn and the c4-square. Tartakower points out that Black also has the idea of playing ...b4, so White must guard against the black king’s entry on d4.

27...cxb5 28 g4 h6 29 h4 \( \text{d}7 \) \((D)\)

30 g5 hxg5 31 hxg5 a4 32 \( \text{f}4 \) a3 33 \( \text{b}1 \) \((D)\)

33...b4! 0-1

Black creates an opening on the queenside to allow his king to penetrate to b2. An example of how the smallest subtleties (here, the position of White's a-pawn) can make the difference between a win or a draw.
**Tip 25** The Power of Two Passed Pawns

In opposite-coloured bishop endings, setting up two passed pawns, at least two files apart, is often the key to winning.

Botvinnik sacrifices two pawns to get a second, distant passed pawn:

59...g5!! 60 fxg5 (D)

60 h×g5 h4 61 d6 f5 62 g6 g×g6 63 f5 f×f5 64 xxb3 g2 and Black wins.

In *Basic Chess Endings*, Fine quotes this position as a win for White after 1 f3 and 2 e6. In such positions, Black has to use his bishop to stop one pawn, and his king the other. White then simply brings his own king round to support the pawn which is stopped by the enemy bishop.

However, if one changes the position to put the f5-pawn on e5 instead, it is a draw. With the pawns so close together, the black king is able to help his bishop in stopping the advance of both pawns.

The classic practical example of creating a second, distant passed pawn is the following position:

60...d4+! 61 exd4 g3 62 a3

62 e7 xh4 63 g6+ g4 wins for Black.

62...xh4 63 d3 xg5 64 e4 h4 65 f3 d5+ 0-1

The black king marches to c2.

And here is another world champion, using the same idea:

The two queenside passed pawns are too close together, and another is needed, further away. Spassky won by:

46 h4! gxh4 47 g5 h3 48 c5+ xxc5 49 g6 h2
50 g7 e2 51 g8 w e1 w 52 w d5+ 1-0
**Tip 26**

The Power of Connected Passed Pawns

In the absence of two widely-separated passed pawns, the other main weapon in opposite-coloured bishop endings is to create two connected passed pawns.

Black does all he can to prevent White from carrying out his plan. White’s king is tied to f3, and he cannot play f4, because then he will never be able to force the capture ...gxh5; Black will simply leave his bishop on d1 and answer h5 with ...hxh5. White therefore needs to sacrifice the h-pawn, in order to force ...gxh5, but first he regroups his pieces.

45  
46  
47  

Smyslov – Stein

_USSR Ch (Moscow) 1969_

White has an extra pawn, and his two queenside pawns hold Black’s three. His winning plan is to set up connected passed pawns on the e- and f-files.

42 g4 hxg4

This is forced, else after gxh5 gxh5, White has his two connected passed pawns anyway.

43  

The point. He now intends to play h5, to eliminate the g6-pawn, after which the pawns on e4 and f3 will march home unopposed.

43...  

44  

45  

46  

47  

48  

If 48...d7, Smyslov gives the variation 49 h5! gxh5 50 f4 c5 51 bxc5 c6 52 d4 b5 53 f5 winning.

49  

50 h5! gxh5 51 1-0

There is no defence to the march of the connected passed pawns, while Black’s h-pawn is easily stopped by White’s bishop.
Tip 27

Barrier Reefs (Part 3)

We have seen two examples of barriers already. Here, two more are involved.

28 \( \text{Ke5} \)!

Winning another pawn, since after 28...dx5? 29 a6, the pawn queens. However, Black should still draw.

28...\( \text{d3} \) 29 \( \text{xd6 xe4} \) 30 a6 c5 31 \( \text{xc5 h5} \) 32 \( \text{f2 d3} \) 33 a7 \( \text{e4} \) 34 g3 \( \text{e6} \) 35 \( \text{e3} \) (D)

Despite his two-pawn deficit, Black is drawing. His bishop stops the queenside pawns, and his king can stop the white king from getting to the queenside to help. However, things are not so simple as they seem, and a casual move by Black now proves the decisive mistake.

35...\( \text{g2} \)?

35...\( \text{f5} \) would draw, since it keeps the white king back. Yanofsky then gives the illustrative line 36 \( \text{f8} \) g6 37 \( \text{d4 g2} \) 38 \( \text{c5 e6} \), drawing easily.

36 \( \text{f4!} \) g6 37 g4! hxg4 38 \( \text{xg4} \) (D)

38...\( \text{h1} \)

The attempt to bring the black king to the queenside to relieve the bishop fails after 38...\( \text{d7} \) 39 \( \text{g5 e4} \) 40 h4 \( \text{c8} \) 41 a8\( \text{W+} \) \( \text{xa8} \) 42 \( \text{xe6} \), when the two distant passed pawns win easily.

39 \( \text{g5 f7} \) 40 \( \text{d4 g2} \) 41 h4 \( \text{h1} \) 42 b4 \( \text{g2} \) 43 h5 \( \text{h1} \) 44 \( \text{f6!} \) \( \text{g2} \) (D)

White has achieved his desired formation and now shows his hand.

45 h5! gxh5 46 \( \text{f5} \) 1-0

The white king will reach c7, while his king and bishop also provide a barrier which Black’s king cannot cross; e.g., 46...\( \text{e8} \) 47 \( \text{e6} \), etc.
Tip 28

Pawn Placement

In most endings, one should place one’s pawns on the opposite-coloured squares from one’s bishop, so as to avoid creating a bad bishop. However, in opposite-coloured bishop endings, the defender should generally place his pawns on the same colour squares as the bishop, so that it can defend them, while the enemy bishop cannot attack them.

40 g7?

In his wonderful book *Learn from the Legends*, Mihai Marin shows that White could still just draw by 40 d2 xb2 41 xd1 c4! 42 g7+ c3 43 e2!, although very accurate play is required. After the text-move, Karpov wins by a breakthrough on the queenside.

40...c2 41 e5 h5 (D)

Ljubojević – Karpov
Milan 1975

35 h5?

Breaking the golden rule. 35 g5 and 36 f4 is correct.

35...gxh5 36 gxh5 f5+ 37 e3 d5

Now the white king is tied to defending his pawns. By the time he gets them both onto dark squares, the black king has penetrated.

38 h6 c4 39 f4 b3 (D)

The bishop is coming to b3.

42 f6 f7 43 e5 h3 44 g7 h5 45 f8 c4 46 g7 (D)

46...b4! 47 d4

If 47 axb4, then 47...c3! 48 bxc3 (or 48 xc3 a3) 48...c4!!, beautifully nailing the c3-pawn to the spot, after which the a-pawn queens.

47...c3 48 bxc3 bxa3 49 c4 a2 50 c5 b1 51 b4 a1 52 xal xal 53 c5 b2 54 c6 a3 55 c7 e6 56 c5 a2 57 d6 c8 0-1
TIP 29

Knight vs Bad Bishop

In blocked positions, bishops are usually a liability, and this is a drastic example. In a typical Nimzo-Indian pawn-structure, White has serious queenside pawn-weaknesses on a4, c4 and c3, and his bishop is badly obstructed. Even though White’s bishop is theoretically ‘good’, it is of little help.

29...a5!

Black fixes the a4-pawn, and there is no defence to ...c8-b6xa4. White’s bishop simply has no route to get behind the black pawns, for example to attack the base of Black’s pawn-chain at d6. He can only await events.

30 e2 c8 31 d3 b6 32 h4 xa4 33 c1 b6 (D)

Black’s only remaining problem is to find a way to penetrate White’s camp with his king, since just pushing the a-pawn by itself is not effective.

34 g4?

This makes Black’s task easier, since now the g-pawn will be fixed as another weakness. He should sit tight, although the position is still lost.

34...f7 35 d2 a4 36 c1 f6 37 a3 g5! (D)

Fixing the g4-pawn.

38 h5 e7

Now the final winning plan is clear. The knight will move to f6, forcing the white king to come to f3. Then Black’s king will penetrate on the queenside.

39 c1 d7 40 e2 f6 41 f3 d7 (D)

0-1

Black will play his king to a5 and then break with ...b5, winning easily. The white bishop remains helpless.
The Agile Knight

Although knights lack the range of bishops, their agility is nevertheless considerable, and should not be under-estimated.

Gheorghiu – Yusupov
Lucerne Wcht 1985

Black has a classic knight vs bad bishop position, but his king has no route into the white position.

45...f4! 46 e2
46 gxf4 d6 47 f3 gxf3 48 e3 f5+ 49 x f3 xd4+ 50 g4 xb3 and Black wins.
46...d6!

The knight is heading to f5, from where it will attack all of White’s weak pawns.

47 d3
47 f3 is trickier, but after 47...f5 48 fxg4 d4+ 50 d2 e5+ 51 e2 f3+ 52 f1 (Yusupov), Black should win.

47...f5 48 h5 fxg4 49 fxg4 d6 50 h6 g6!

Black’s last problem is meeting the threat of xb4, creating a passed a-pawn (knights hate rook’s pawns!). Thus, not 50...d6?? 51 xb4 and it is White who wins.

51 a2 xg3!

A finely calculated move. White’s a-pawn appears unstoppable, but Yusupov has it all worked out.

52 xb4 axb4 53 a5 (D)

How does the knight get back?
53...h5!!
A paradoxical move, stepping further away from the a-pawn.

54 e3
After 54 a6 f4+ 55 e3 e6 56 a7 c7 the knight gets back in time.

54...f6 55 f4 xh6 56 a6 d7 57 a7 b6
Once again, the black knight arrives just in time.

58 xg4 g6 59 f4 f6 (D)

60 g4 a8 0-1
Both 61 f4 h5 and 61 h5 f5 are easily winning for Black.
**Tip 31**

Knights are Better than Bishops at Attacking Weak Pawns

When there are weak pawns to attack, knights can often be better than bishops, even on an open board. This is largely because they can attack squares of either colour, unlike a bishop. Thus, the pawns cannot 'hide' from a knight, whereas they can sometimes do so from a bishop.

Putting another pawn on a light square and weakening g5. 28...g5 is better.

29 h4!
White immediately seizes the weakened g5-square.

29...c6 30 c3 e5 31 g3 b6 32 f4+
Now there is another weakness on g6.

32...d6 (D)

Gligorić – Trifunović
Budapest 1948

Black's isolated queenside pawns would be immune from attack by a white bishop on a4, whereas there is no hiding place from the knight.

26 d3! x3

Gligorić claims this is forced, else the c5-pawn falls immediately. However, this does not seem to be the case after 26...d6 27 c3 d5, which may well therefore be a tougher defence.

27 cxd3 d6 28 e3 f5? (D)

33 d1!
The knight is coming to c4, to drive back the black king.

33...d5 34 d2 d6
If 34...d4, the king will be driven back by e3-c2+, etc.

35 e3 d5?! 36 h5! f7 37 hxc6 e6
Now f5 is another weakness.

38 e3 e6 (D)

White has a winning advantage, which he converted instructively. For the remaining moves, see Tip 71.
Knights are Better than Bishops at Attacking Weak Pawns (Part 2)

We saw in Tip 31 that a knight is often better than a bishop at attacking weak pawns. This is another, even clearer, example.

23 \textcolor{red}{\textit{xf6}}! \textcolor{blue}{\textit{gx}f6} 24 \textcolor{blue}{\textit{b4}} \textcolor{blue}{\textit{f5}}
Botvinnik recommended 24...\textcolor{red}{\textit{d5}} as better, but Tal fails to understand that the knight is superior to the bishop.

25 \textcolor{blue}{\textit{b3}}
White wants to exchange the rooks, leaving a pure \textcolor{blue}{\textit{Q}} vs \textcolor{blue}{\textit{Q}} ending.

25...\textcolor{blue}{\textit{d3}+} 26 \textcolor{blue}{\textit{e1}} \textcolor{blue}{\textit{b6}} 27 \textcolor{blue}{\textit{a}c1} \textcolor{blue}{\textit{e4}} 28 \textcolor{blue}{\textit{f3}} \textcolor{blue}{\textit{xd1}+} 29 \textcolor{blue}{\textit{xd1}} \textcolor{blue}{\textit{xd1}+} 30 \textcolor{blue}{\textit{xd1}} \textcolor{blue}{\textit{d5} (D)}

30...\textcolor{red}{\textit{f5}} 31 \textcolor{blue}{\textit{d4}} \textcolor{blue}{\textit{d7}} is better, but White retains the advantage.

31 \textcolor{blue}{\textit{d4}} \textcolor{blue}{\textit{c5}}
Forced, in view of the threat of 32 \textcolor{blue}{\textit{e4}}, but now Black’s pawns are weakened further.

32 \textcolor{blue}{\textit{bxc5}} \textcolor{blue}{\textit{bxc5}} 33 \textcolor{blue}{\textit{b5}} \textcolor{blue}{\textit{a6}}
33...a5 34 \textcolor{blue}{\textit{c3}} \textcolor{blue}{\textit{c6}} 35 \textcolor{red}{\textit{c2}}, followed by \textcolor{red}{\textit{d3-c4}}, wins for White.

34 \textcolor{red}{\textit{c7}} \textcolor{red}{\textit{c4}} 35 \textcolor{blue}{\textit{e8}} \textcolor{blue}{\textit{f5}} (D)
Note the way the white knight is able to chase Black’s pawn-weaknesses from square to square, a perfect illustration of the knight’s superiority in such positions.

36 \textcolor{blue}{\textit{h4}}!
Do not hurry! 36 \textcolor{blue}{\textit{f6}+}?! allows counterplay by 36...\textcolor{red}{\textit{g7}} 37 \textcolor{red}{\textit{d7}} \textcolor{red}{\textit{f1}}.

36...\textcolor{blue}{\textit{f8}} 37 \textcolor{blue}{\textit{d6}}
Not 37 \textcolor{blue}{\textit{f6}!!} \textcolor{blue}{\textit{e7}} 38 \textcolor{blue}{\textit{d7}} \textcolor{red}{\textit{h7}}?? \textcolor{blue}{\textit{f6}} and Black wins.

37...\textcolor{blue}{\textit{f1}} 38 \textcolor{blue}{\textit{g3}} (D)

Despite the fact that the position is open and there are pawns on both sides of the board, the knight is much stronger than the bishop here, because it has weak pawns to attack.

See move 36!

38...\textcolor{red}{\textit{e7}} 39 \textcolor{blue}{\textit{xf5}+} \textcolor{blue}{\textit{e6}} 40 \textcolor{blue}{\textit{e4}} \textcolor{blue}{\textit{e5}} 41 \textcolor{blue}{\textit{d2}}

1-0
Bishop vs Knight on an Open Board

Gligorić’s 39...h6! offers better drawing chances after 40 d3 f5 41 c4 xh4 42 xc5 e5.

40 h5 h6 41 d3 e5 42 a8 (D)

Fixing g6, and setting up a potential passed pawn by a subsequent g4 and h5.

35...e4 36 e2 e5 37 f6 38 f4 f7 (D)

39 e3?
This inaccuracy endangers the win. 39 d5 g5+ 40 hgx5 xg5 41 c4 is better, when Black is in zugzwang and cannot prevent the white king from penetrating to the queenside.

39...g5?

42 d6
Black can win the h-pawn by 42 f4 43 c4 g4 44 f3+ h4 45 xc5 g4 46 e4 xh5 47 a4, but then his forces are too far from the queenside.

43 c4 g4 44 a4 g8 45 a5 h6 46 c4 (D)

Note how the bishop is able to influence events on both wings, whereas the knight is tied to blockading the h-pawn. This is the key to the bishop's superiority in positions with pawns on both wings.

46 g3 47 b5 g8 48 b1 h6 49 a6 e6 50 a2
50 xa7? c4 allows unnecessary counterplay (do not hurry!).

1-0
Fischer's Classic

Fischer gives a classic demonstration of the superiority of bishop over knight with pawns on both sides of the board. The winning task is complicated by several factors, notably the symmetrical pawn-structure and the fact that the kingside is blocked. On the other hand, Black's kingside pawns are fixed on light squares, with g6 being especially weak, and this eventually decides matters.

45 \text{d}3 \text{e}7 46 \text{e}8

Tying down the knight.

46...\text{d}5 47 \text{f}7+ \text{d}6 48 \text{c}4 \text{e}6 49 \text{e}8+ \text{b}7 50 \text{b}5 \text{e}8 (D)

With a small threat...

51 \text{c}6+

51 \text{xg}6?? \text{d}6# would be unfortunate.

51...\text{e}7 52 \text{d}5 \text{e}7 53 \text{f}7 \text{b}7 54 \text{b}3 \text{a}7 55 \text{d}1

Note how Fischer uses a series of bishop moves to lose tempi and gradually force Black into zugzwang. His first aim is to get his king to a6.

55...\text{b}7 56 \text{f}3+ (D)

56...\text{e}7

After 56...\text{a}7 any waiting move forces the white king's entry to c6.

57 \text{a}6 \text{c}8 58 \text{d}5 \text{e}7 59 \text{c}4 \text{c}6 60 \text{f}7 \text{e}7 61 \text{e}8

Zugzwang.

61...\text{d}8 (D)

62 \text{xg}6!

The crowning blow. White will win too many pawns.

62...\text{xg}6 63 \text{xb}6 \text{d}7 64 \text{xc}5 \text{e}7 65 \text{b}4 \text{axb}4 66 \text{xb}4 \text{c}8 67 \text{a}5 \text{d}6 68 \text{b}5 \text{e}4+ 69 \text{b}6 \text{e}8 70 \text{c}6 \text{b}8 71 \text{b}6 1-0

Immaculate play by Fischer, showing perfectly how to exploit the advantage of bishop over knight in such a position.
Tip 35

Knight on the Rim

Probably the knight’s biggest weakness is its lack of mobility near the edge of the board.

29 \texttt{h}e5!

Paralysing the knight. If it moves, the pawn ending is lost after the exchange. Consequently, Black is helpless, as White simply advances his queenside pawn-majority, while Black’s own kingside majority is crippled by the doubled pawn.

29...\texttt{h}h5 30 \texttt{d}d3 g4 31 b4 a6 32 a4 gxf3 33 gxf3 \texttt{h}h4 34 b5 axb5 35 a5! \texttt{h}h3 36 c6 1-0

The same idea of stalemating the knight on the edge of the board occurs in the next example.

48 \texttt{h}h5 \texttt{f}f8 49 g4 \texttt{d}d7 50 g5 hxg5 51 \texttt{x}g5 \texttt{g}g8 52 \texttt{d}d4 \texttt{h}h7 53 h4 (D)

53...\texttt{f}f8?

This allows the white king in immediately, but against other moves, White wins by h5-h6 and \texttt{g}g7, followed by the transfer of the king via b5 and c6, to promote the d-pawn.

54 \texttt{f}f6 1-0

Fischer – Addison
USA Open (Cleveland) 1957

Belavenets – Ilyin-Zhenevsky
USSR Ch (Tbilisi) 1937
**TIP 36**

The Triumph of the Two Bishops

40 \(\text{\textcopyright}3\)

Not 40 \(\text{\textcopyright}xe5?\) g5+, when Black would draw easily.

40...\(\text{\textcopyright}f8\) 41 \(\text{\textcopyright}d4\) \(\text{\textcopyright}f7\) 42 \(\text{\textcopyright}a5\)

Do not hurry! Before pushing the pawns, Ivanchuk improves his pieces to the maximum.

42...\(\text{\textcopyright}e5\) 43 \(\text{\textcopyright}b4+\) \(\text{\textcopyright}e8\) 44 \(\text{\textcopyright}c5\) \(\text{\textcopyright}g6\) 45 \(\text{\textcopyright}d2\) \(\text{\textcopyright}e5\) 46 \(\text{\textcopyright}d6\) \(\text{\textcopyright}a4\) (D)

47 \(f4\)

Beginning the process of driving Black's pieces out of the centre.

47...\(\text{\textcopyright}f7+\) 48 \(\text{\textcopyright}c7\) \(\text{\textcopyright}d7\) 49 \(\text{\textcopyright}b4\) \(\text{\textcopyright}a4\) 50 \(\text{\textcopyright}c4\) \(\text{\textcopyright}h8\) 51 g3 \(\text{\textcopyright}f7\) 52 h4 \(\text{\textcopyright}h8\) 53 \(\text{\textcopyright}d6\) \(\text{\textcopyright}g6\)

54 \(\text{\textcopyright}c2\) \(\text{\textcopyright}h8\) 55 \(\text{\textcopyright}c4\) \(\text{\textcopyright}g6\) (D)

56 \(e5\)

Finally creating a passed pawn.

56...\(\text{\textcopyright}xe5\) 57 \(\text{\textcopyright}xe5\) \(\text{\textcopyright}e7\) 58 \(e6\) \(g6\) 59 \(\text{\textcopyright}c5\) \(\text{\textcopyright}f5\)

60 \(\text{\textcopyright}d3\) \(\text{\textcopyright}e7\) 61 \(\text{\textcopyright}d6\) \(h5\) 62 \(\text{\textcopyright}e5\) \(\text{\textcopyright}f5\) 63 \(\text{\textcopyright}f6\)

\(\text{\textcopyright}c6\) 64 \(e7\) 1-0

\(\text{\textcopyright}c4\)-\(\text{\textcopyright}f7+\) follows.
There are not many endgame positions which a player needs to know by heart, but there are a few, mostly in rook endings. Here is one of them.

Capablanca – Menchik
Hastings 1929/30

This position is a draw, but Black must know how to defend. There are three rules to bear in mind:
1) Black’s rook stays at the side and threatens checks.
2) If permitted, the black king approaches the pawn.
3) Black must not allow the white king to reach the 8th rank, unless White first puts his rook there.

The correct defence is 55...b8! (Rule 3); e.g., 56 d7 (waiting; 56 e8 b7+) 56..a8 (also waiting) 57 d1 a7+ 58 e8 g6! (D) (Rule 2).

Now after 59 f7, Black draws by 59..a8+! (not 59..xf7?? 60 g1+ f6 61 f1+ – never forget tactics!) 60 e7 a7+ 61 e6 a6+.

Instead, the game provided an infamous comedy of errors. Play continued:
55 a6??
Breaking Rule 3.
56 d7??

56 f8+! g6 57 f7 f6 58 g8 wins.
56..a8!
Rule 3. Now the position is a draw once again.
57 e7 a6??
57..b8! (Rule 3) draws.
58 f8+!
This time, Capablanca finds the correct method of exploiting Black’s mistake.
58..g6 59 f7 a8+ 60 e8 a7 61 e6+ h7 (D)

62 e8??
62 e1 wins.
62 a8+ 63 e7 a7??
Incredible. 63..g7 (Rule 2) draws.
64 f6 1-0
After 64..a8 even on that form, Capablanca would presumably have found 65 e8.
The Importance of King-Shelter

As any good Christian will tell you, in life, sheltering the homeless is more important than accumulating material possessions. This is sometimes true in rook endings as well.

Without the black pawn on g5, the position is drawn, because Black would simply play 1...\e5f1 and then keep checking the white king from the rear. But here, the king is able to use Black’s g-pawn as a shelter from the checks, and this is enough for White to win.

47...\e5f2 48 \e5e6 \e5e2+

Forced, in view of the mate threat, but now the white king is allowed into g6.

49 \e5f5 g4 (D)

50 \e5g6! \e5f2 51 f7+ \e5f8 52 \e5b8+ \e5e7 53 \e5e8+ 1-0

The same idea cost a world-class player half a point here.

57...\e5b1? 58 \e5h5 \e5g1

Now the familiar breakthrough:

59 g5 fxg5 60 f5! \e5f8 61 f6 1-0

There is no defence to 62 \e5g6.

Larsen subsequently pointed out that Black could have drawn in the initial position by means of the preliminary 57...\e5b4! 58 f5, and only now 58...\e5b1 (D), since the breakthrough idea seen in the game is no longer possible.

For example, 59 \e5h5 (59 g5 \e5h1+) 59...\e5g1 and the ending after 60 \e5g6 \e5xg4+ 61 \e5xf6 \e5a4 is a theoretical draw, since Black’s king is on the short side of the pawn.
This position is a theoretical draw, but White must play accurately. In the game, White played a losing blunder:

78 \textit{\textipa{\texte}}e2??

Black now wins, using a process known as the Combined Method. This involves three steps:

1) Black advances his king as far as it can go (normally two squares diagonally in front of the pawn, in this case, a3).

2) His rook then steps up to d5, to defend the pawn, while keeping the white king cut off.

3) Then the black king attacks the enemy rook, and forces the pawn forward.

The game continued:

78...\textit{\textipa{\texte}}b5 79 \textit{\textipa{\texte}}b1+ \textit{\textipa{\texta}}a4 80 \textit{\textipa{\texte}}c1 \textit{\textipa{\texte}}b4 81 \textit{\textipa{\texte}}b1+ \textit{\textipa{\texta}}a3

Step 1 completed.
82 \textit{\textipa{\texte}}c1 (D)

Step 3.
84 \textit{\textipa{\texte}}c4 \textit{\textipa{\texte}}b3 0-1

Note that in the original position, the defence 78 \textit{\textipa{\texte}}c2?? would also lose, because the rook then has insufficient checking distance: 78...\textit{\textipa{\texte}}b5 79 \textit{\textipa{\texte}}b2+ \textit{\textipa{\texta}}a4 80 \textit{\textipa{\texte}}c2 \textit{\textipa{\texte}}b4 81 \textit{\textipa{\texte}}b2+ \textit{\textipa{\texte}}c3 (D), etc.

So how should White defend in the initial position? The simplest answer is 78 \textit{\textipa{\texte}}e4!, the point being that Black cannot carry out Step 2 of the Combined Method, because his rook does not have access to d5. For this reason, in such positions, the 3rd and 4th ranks are known as the Absolutely Safe Ranks, because the defender always draws if his king is on those ranks.
Tip 40

Know the Basics, Part 3

Tal – I. Zaitsev
USSR Ch (Riga) 1968

As we have discussed previously, in such positions, the 3rd and 4th ranks are the Absolutely Safe Ranks for the white king, while the 2nd rank is the Relatively Safe Rank. In the latter case, White draws only if it is his move.

In this case, even though his king is cut off by two files, White is still able to draw, thanks to the fact that Black’s pawn is on the knight’s file. White needs to get his rook in front of the pawn, with maximum checking distance (i.e. to g1) and also to keep his king on one of the Absolutely Safe Ranks. Since his king is already on one of them, he should attend to the rook’s position, with 73 h1+, after which he draws in standard fashion by 73...g5 74 d3 e8 75 h1+ g6 76 g1 (D).

Now 76...e5 77 d4, etc.

Instead, Tal played a highly plausible move: 73 d3??

However, he had to resign after Black’s reply:

77...e5 78 d3 f5 (because the pawn is on the knight’s file, a slightly amended version of the normal Combined Method is needed) 79 d4 e4+ 80 d3 g4, etc.
Tip 41  When Two Extra Pawns Don’t Win

The English grandmaster Mark Hebden once told me that he learned about basic rook endings by studying this ending of \( \text{R}+\text{rook’s pawn+bishop’s pawn} \) vs \( \text{R} \), a classic case where most positions are drawn, despite White’s material advantage. Since it is so instructive, we shall examine it in detail.

With wonderful clarity and lucidity, Botvinnik summed up the essential points of the ending as follows:

1. White wins if the black king gets cut off on the back rank, so the defender must avoid this.

2. When the pawns reach f5 and h5, the black king should be on f7.

3. If the threat is to drive it to the back rank, it goes to g7, so as to have h6 available.

4. Black’s rook is generally best around a1, so as to have the chance of harassing the white king both from the flank and the rear.

Bearing the above rules in mind, let us now see how they work out in practice:

\[
\text{W} \\
79 \text{h}\text{a}6+ \text{f}7 \text{a}8 \text{g}4 \text{h}b4+ 81 \text{f}4 \text{h}b2 82 \text{h}5 \text{g}7 83 \text{g}g6+ \text{f}7 84 \text{g}g5 \text{h}b1 (D)
\]

\[
\text{W} \\
85 \text{c}5
\]

If 85 h6, Rule 4 again comes to Black’s rescue: 85...\text{h}a1! (but not 85...\text{g}1+? 86 \text{f}5 \text{h}1 87 \text{g}7+! \text{f}8, when the king has been driven to the fatal 8th rank and 88 \text{g}6 wins) 86 h7 \text{g}1+ (only now, since White no longer has a rook check on g7) 87 \text{f}5 \text{h}1 draws.

85...\text{f}6 86 \text{c}6+ \text{g}7!

Rule 3. Instead 86...\text{f}7? loses to 87 \text{g}5 \text{g}1+ 88 \text{f}5 \text{h}1 89 \text{c}7+, because the black king again ends up driven to the back rank.

87 \text{g}5

Threatening 88 \text{c}7+, so...

87...\text{g}1+! 88 \text{f}5 \text{h}a1! (D)

Again following Rule 4. Having secured its king from being driven back, the rook returns to its best post. Instead, 88...\text{h}1 is unthreatening, as it puts the rook out of play (no flank attack), but even this draws after, e.g., 89 h6+ \text{h}7 90 \text{e}5

Gligorić – Smyslov
Moscow (Chigorin mem) 1947

70 \text{g}2 \text{a}4 71 \text{h}2 \text{g}6 72 \text{g}2 \text{a}1

Following Rule 4. For a long time Black can simply keep his rook on a1, taking time out to check on g1 whenever the white king occupies a threatening position on the g-file.

73 \text{g}3 \text{g}1+ 74 \text{g}2 \text{h}1 75 \text{f}4+ \text{f}6 76 \text{g}4 \text{g}6 77 \text{a}2 \text{g}1+ 78 \text{f}4 \text{h}b1 (D)

Again, Rule 4.
\( \textbf{He1+ 91 \textit{f6} \textit{h6}} \). This shows that Black has some choice in how he holds this ending.

92 \textit{He5} \textit{Ha4} 93 \textit{Hd5} \textit{Hf1} 
This draws, but 93...\textit{Hb1} (Rule 4) is the most thematic course.

94 \textit{Hd4} \textit{Ha1}! 95 \textit{Hd6} \textit{Ha5}+ 96 \textit{Hg4} (D)

96...\textit{Ha1} 
96...\textit{Hb5} also draws.

97 \textit{He6} \textit{Hg1}+ 98 \textit{Hf5} \textit{Ha1} 99 \textit{Hh6}+ \textit{Hh7}! 100 
\textit{Hd6} \textit{Ha2} 101 \textit{Hg5} \textit{Hg2}+ 102 \textit{Hf6} \textit{Hxb6} 103 
\textit{He7}+ \textit{Hh7} 104 \textit{f5} \textit{He2}+ 105 \textit{He6} \textit{Ha2} 106 \textit{f6} 
(D)

106...\textit{Ha8}!
This essential move reaches a standard draw.
For more on this position, see Tip 37.

107 \textit{He7} \textit{Hh6} 108 \textit{He1} \textit{Ha7}+ 109 \textit{He7} \textit{Ha8} 
110 \textit{Hd7} \textit{Hh7} 111 \textit{Hd1} \textit{Ha7}+ 112 \textit{He6} \textit{Ha6}+ 
113 \textit{Hd6} \textit{Ha8} 114 \textit{Hd4} \textit{Hg8} 115 \textit{Hg4}+ \textit{Hf8} 
\frac{1}{2}-\frac{1}{2}

This may all seem at first sight to be a lot to learn, but actually, the Botvinnik rules are effectively all one needs to know, as I hope this excellent practical example demonstrates.
**Tip 42**

**Pawns on the Same Side**

**Petrosian – Keres**  
**USSR Ch (Moscow) 1951**

Many rook endings with pawns on one side are drawn. This 4 vs 3 structure is typical. The key defensive idea for Black is to get his pawn to h5, as he has already succeeded in doing here.

32 h4

32 h3 and 33 g4 just leads to simplification, which is the main point of Black’s pawn set-up.

32...Hf5+ 33 Kg2 Ha5 34 Kh3 Ha4 35 Bd2  
36 Kb2 Kh6 37 Kh5 Ha2 38 Kg2 Ha4 39  
36 Kh5 Ha4 40 Kh4 Ha2 (D)

51 g4

There is no other way for White to make progress.

51...hxg4 52 fxg4 Kg7 53 Kg5 Hf1 54 He4  
Hf3 55 h5 gxh5 56 gxh5 f6+ 57 Kg4 Hf1 58  
H6+ Kh6 59 e6.

\(\frac{1}{2} - \frac{1}{2}\)

Against the f7-g6-h5 set-up, there is one plan at White’s disposal that needs to be known in more detail.

**S. Ionov – Karasev**  
**Leningrad Ch 1983**

41 f3

The only plan is to create a passed e-pawn.

41...He2 42 e4 He1 43 Hb6+ Kh7 44 Ha6  
Hb1 45 Hc6 Kg1

Tying White to the defence of g3.

46 He2 Kg6 47 Ha2 Kg7 48 He2 Kg6 49  
He3 Kg7 50 e5 Hf8 (D)

This ending is very similar to the one from the better-known game Piket-Kasparov, Internet 2000. White threatens 56 e6. Black can defend with his rook, either from the e-file, or from the a-file. Only one is correct.

55...Ha6!
In the game, Black chose 55...\textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}}3? and lost after 56 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{g}}}5 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}}2 57 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{e}}}7! \textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}4} 58 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{e}}}}6! (the point) 58...\textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}6} 59 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{e}}}x}6 fx6 60 h3! \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{f}}}7} 61 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{h}}}6} \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{f}}}6} 62 g4 h4 63 g5+ \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{f}}}5} 64 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{g}}}7} \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{f}}}4} 65 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{g}}}6} e5 66 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{f}}}6} e4 67 g6 e3 68 g7 e2 69 g8=\textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}7} 70 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{g}}}4}+ 1-0 (in view of 70...\textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}e}}3 71 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{e}}}6}+). It is important to note that if the h-pawns were missing (i.e. if the position were 3 vs 2), this king and pawn ending would be a draw, so it would not matter which defence Black adopted when White threatened e6. With the h-pawns on the board, however, only the defence from the a-file works.

56 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}7} \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{b}}}6} 57 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{g}}}5}

Now 57 e6 is met by 57...\textit{\textcolor{blue}{\texttt{\textbackslash \textbf{f}}}6}! 58 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{f}}}7}+ \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{e}}}6}, drawing.

57...\textit{\textcolor{red}{\texttt{\textbackslash \textbf{b}}}5}!

Stopping e6.

58 f5 gxf5!

58...\textit{\textcolor{blue}{\texttt{\textbackslash \textbf{x}}}e}5? leads to a lost pawn ending after

59 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}x}5 f6+ 60 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{f}}}4} fxe5+ 61 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}xe}5 gxf5 62 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{f}}}5}.

59 e6

59 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{f}}}xe5} \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{a}}}5} 60 h4 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{b}}}6} 61 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{g}}}5} \textit{\textcolor{red}{\texttt{\textbackslash \textbf{f}}}8} and 59 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{x}}}h}5 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{f}}}8} 60 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{a}}}7} \textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}5} are also drawn.

59...f4+! 60 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{x}}}f}4 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{f}}}6}

with a draw.

If the defender cannot get his pawn to h5 (or h4 in the case of White being the defender), the defence is much more difficult, if not hopeless, as many practical examples have shown.

White's position is cramped by the black h-pawn.

45...g5

The plan is to push the pawn to g4, and White can scarcely contemplate stopping this by 46 h3, because of the resulting weakness on g3.

46 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{h}}}2}

46 g4+ leads to a lost 2 vs 1 position after

46...hxg3+ 47 hxg3 g4 48 fxg4+ \textit{\textcolor{red}{\texttt{\textbackslash \textbf{x}}}g}4.

46...g4! 47 fxg4+

47 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{c}}}2} gxf3 48 gxf3 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{f}}}4}, followed by ...f5, ...h3 and ...\textit{\textcolor{blue}{\texttt{\textbackslash \textbf{h}}}1} wins for Black (Kasparov).

47...\textit{\textcolor{red}{\texttt{\textbackslash \textbf{x}}}g}4 (D)

Now the e-pawn is passed.

48 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{b}}}6} \textit{\textcolor{red}{\texttt{\textbackslash \textbf{a}}}2}+ 49 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{g}}}1} f5 50 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{g}}}6}+ \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{f}}}4} 51

\textit{\textcolor{blue}{\texttt{\textbackslash \textbf{h}}}6} \textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}3} 52 h3 e4 53 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{x}}}h}4 f4 54 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{h}}}8} \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{a}}}1}+ 55

\textit{\textcolor{red}{\texttt{\textbackslash \textbf{h}}}2} \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{f}}}2} 56 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{f}}}8}

56 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{e}}}8} f3 57 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}e}4 (D) (57 gxf3 e3!).

B

Now 57...\textit{\textcolor{blue}{\texttt{\textbackslash \textbf{h}}}1}+! wins.

56...f3 57 h4 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{g}}}1} 58 gxf3 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{g}}}2}+ 59 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{h}}}1} e3!

60 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{e}}}e}8 \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{g}}}3} 61 \textit{\textcolor{red}{\texttt{\textbackslash \textbf{h}}}2} \textit{\textcolor{blue}{\texttt{\textbackslash \textbf{x}}}f}3 0-1

\textit{\textcolor{red}{\texttt{\textbackslash \textbf{B}}} B}

\textit{\textcolor{blue}{\texttt{\textbackslash \textbf{B}}} B}

\textit{\textcolor{red}{\texttt{\textbackslash \textbf{H}}} Harandi – Vaganian}

\textit{\textcolor{blue}{\texttt{\textbackslash \textbf{H}}} Rio de Janeiro IZ 1979}
Defence from the Side

Although a rook generally belongs behind a passed pawn, it is sometimes better at the side. Here are two cases where the defender uses this idea.

J. Vančura
28 Rijen, 1924

Defending from the rear loses, because the white king hides on a8: 1...\texttt{a1}? 2 \texttt{e8} \texttt{f7} 3 \texttt{e2} \texttt{b1}+ 4 \texttt{c6} \texttt{a1} 5 \texttt{b7} \texttt{b1}+ 6 \texttt{a8} \texttt{a1} 7 \texttt{a7} \texttt{b1} 8 \texttt{c2} \texttt{e7} 9 \texttt{c8} \texttt{d6} 10 \texttt{b8} \texttt{a1} 11 \texttt{b7}, etc.

However, Black draws by using his rook from the side:
1...\texttt{f5}+! 2 \texttt{b4} \texttt{f6}!

Rather than give further, unnecessary, checks, the rook ‘fastens on’ to the pawn, tying down the white rook.

3 \texttt{c5} \texttt{e6} 4 \texttt{b5} \texttt{e5}+!

The moment White’s king defends the pawn, threatening to free his rook, Black checks it away and then resumes his surveillance of the pawn.

5 \texttt{b4} \texttt{e6}! 6 \texttt{c5} \texttt{f6} 7 \texttt{a7} \texttt{a6}

7...\texttt{f7}?? loses to 8 \texttt{g8}+, but after White’s last move, there is no longer a hole on a7 for the white king, so Black can switch to defence from the rear.

8 \texttt{b5} \texttt{a1}

with a draw.

This Vančura technique is exceptionally valuable, and is applicable in many other positions. Here White is two pawns down, but could still draw by appropriate use of Vančura’s idea. However, he lost as follows:

66 \texttt{g2}

Moving his king in the wrong direction, but the damage is not fatal yet. Mark Dvoretsky showed that White can draw more simply by going directly for the Vančura technique: 66 \texttt{b5} \texttt{d6} 67 \texttt{f5} \texttt{a1} 68 \texttt{h2}?? \texttt{a4} 69 \texttt{f4}! (fastening on to the dangerous a-pawn) 69...\texttt{a3} 70 \texttt{f3}! \texttt{c5} 71 \texttt{b3} \texttt{c4} 72 \texttt{f3} \texttt{b4} 73 \texttt{f4}+!, etc.

66...\texttt{d6} 67 \texttt{f2} \texttt{a2}+ 68 \texttt{e1}?

This is the losing move, as it exposes the king to possible checks on h2 and makes it impossible for him to set up the Vančura defence in time. He could draw by 68 \texttt{f1} or 68 \texttt{g1}, keeping his king in the corner and leaving the rook to do the work of stopping the a-pawn; e.g. 68 \texttt{g1} \texttt{a1}+ 69 \texttt{h2} \texttt{a4} 70 \texttt{hxh4} \texttt{a3} 71 \texttt{h3}! \texttt{c5} 72 \texttt{g3}, etc.

68...\texttt{a1}+ 69 \texttt{e2} \texttt{a4} 70 \texttt{h6}+ \texttt{e5} 71 \texttt{h5}+ \texttt{f6} 72 \texttt{f2} \texttt{a3} 73 \texttt{g2} \texttt{c1} 74 \texttt{a5} \texttt{c3} 0-1
**Tip 44**

**The Strength of the Rook at the Side**

Keeping the a-pawn as far back as possible, while he prepares his play.

36 $\text{d}e3 \text{e}5!$

Now Black has enough play to draw.

37 $\text{d}e4$

37 fxe5+ is similar: 37...$\text{d}xe5$ 38 $\text{d}d3$ $\text{d}d5$

39 $\text{c}c3$ $\text{c}e6$ 40 $\text{b}b4$ $\text{e}5$ draws.

37...$\text{xf}4$ 38 $\text{xf}4$ $\text{xe}6$ 39 $\text{xe}4$ $\text{g}5!$ (D)

---

Here, it is the stronger side who benefits from using his rook at the side of his passed pawn, rather than behind it.

35 $\text{xa}1$??

The question marks are Yusupov’s own. He follows the usual rule, but here it fails to win. Instead, there was a simple win by 35 $\text{e}4!$, since the rook can also defend White’s kingside pawns; for example, 35...$\text{xa}6$ 36 $\text{e}2$ $\text{f}5$

37 $\text{e}5+$ $\text{g}4$ 38 $\text{g}5+$ $\text{h}3$ 39 $\text{a}5$ (D), followed by the march of the white king to the queenside.

---

Note how the white rook both defends the a-pawn, and protects the kingside pawns against the black king’s raid.

35...$\text{xa}5$!

Black correctly exchanges pawns at every opportunity, a typical defensive device.

40 $\text{hx}g5$ $\text{hx}g5$ 41 $\text{f}3$ $\text{a}5$ (D)

---

42 $\text{e}1+$ $\text{f}5$ 43 $\text{e}4$

With its tail between its legs, the rook returns to its rightful position, but already too late. The position is completely drawn.

43...$\text{e}5$ 44 $\text{e}3$ $\text{a}5$ 45 $\text{a}3$ $\text{e}5$ 46 $\text{e}3$

$\text{e}6$ 47 $\text{e}2$ $\text{d}6$ 48 $\text{f}2$ $\text{e}6$ 49 $\text{d}3+$ $\text{d}5$

50 $\text{a}3$ $\text{e}6$ 51 $\text{e}3$ $\text{h}4$ 52 $\text{g}4$ $\text{f}6$ 53 $\text{f}4$ $\text{g}6$

54 $\text{f}3$ $\text{g}5$ 55 $\text{a}2$ $\text{h}3$ $\frac{1}{2}$. $\frac{1}{2}$
Tip 45  
The Strength of the Rook at the Side (Part 2)

Afek – Timman
Amsterdam 2002

This is another case where the rook proves more effective alongside a passed pawn than behind it. Black’s passed pawn is the more dangerous, but subtle play is required in order to win.

44...\textcolor{red}{\textbf{\textit{\texttt{\textbf{h}}\texttt{b}}}}5!

Freeing the black king to go to b3. Instead, 44...\textcolor{red}{\textbf{\textit{\texttt{\textbf{b}}}}\texttt{b}}4 would lose a tempo, and in such a position, every tempo is vital.

45 \textcolor{red}{\textbf{\textit{\texttt{\textbf{d}}}}\texttt{d}}8
45 \textcolor{red}{\textbf{\textit{\texttt{\textbf{c}}}}\texttt{e}}5 \textcolor{red}{\textbf{\textit{\texttt{\textbf{x}}}}\texttt{x}}5 46 dxe5 \textcolor{red}{\textbf{\textit{\texttt{\textbf{b}}}}\texttt{b}}5 wins for Black.
45...\textcolor{red}{\textbf{\textit{\texttt{\textbf{d}}}}\texttt{b}}3! 46 d5 a4 47 d6 \textcolor{red}{\textbf{\textit{\texttt{\textbf{b}}}}\texttt{b}}6! (D)

50 \textcolor{red}{\textbf{\textit{\texttt{\textbf{h}}}}\texttt{x}}g4 \textcolor{red}{\textbf{\textit{\texttt{\textbf{h}}}}\texttt{x}}g4 51 \textcolor{red}{\textbf{\textit{\texttt{\textbf{g}}}}\texttt{g}}3 a2 52 \textcolor{red}{\textbf{\textit{\texttt{\textbf{a}}}}\texttt{a}}8 \textcolor{red}{\textbf{\textit{\texttt{\textbf{x}}}}\texttt{x}}d7 53 \textcolor{red}{\textbf{\textit{\texttt{\textbf{b}}}}\texttt{b}}8+
53 \textcolor{red}{\textbf{\textit{\texttt{\textbf{g}}}}\texttt{x}}g4? loses to 53...\textcolor{red}{\textbf{\textit{\texttt{\textbf{d}}}}\texttt{d}}4+ followed by 54...\textcolor{red}{\textbf{\textit{\texttt{\textbf{a}}}}\texttt{a}}4.
53...\textcolor{red}{\textbf{\textit{\texttt{\textbf{c}}}}\texttt{c}}2 54 \textcolor{red}{\textbf{\textit{\texttt{\textbf{a}}}}\texttt{a}}8
54 \textcolor{red}{\textbf{\textit{\texttt{\textbf{c}}}}\texttt{c}}8+ \textcolor{red}{\textbf{\textit{\texttt{\textbf{d}}}}\texttt{d}}1 55 \textcolor{red}{\textbf{\textit{\texttt{\textbf{a}}}}\texttt{a}}8 \textcolor{red}{\textbf{\textit{\texttt{\textbf{d}}}}\texttt{d}}2 and ...\textcolor{red}{\textbf{\textit{\texttt{\textbf{c}}}}\texttt{c}}1-b1 is winning for Black.
54...\textcolor{red}{\textbf{\textit{\texttt{\textbf{b}}}}\texttt{b}}3
54...\textcolor{red}{\textbf{\textit{\texttt{\textbf{d}}}}\texttt{d}}3+ 55 \textcolor{red}{\textbf{\textit{\texttt{\textbf{g}}}}\texttt{x}}g4 \textcolor{red}{\textbf{\textit{\texttt{\textbf{b}}}}\texttt{b}}2 56 \textcolor{red}{\textbf{\textit{\texttt{\textbf{x}}}}\texttt{x}}a2+ \textcolor{red}{\textbf{\textit{\texttt{\textbf{c}}}}\texttt{c}}2 (Nunn) looks like an easier win.
55 \textcolor{red}{\textbf{\textit{\texttt{\textbf{b}}}}\texttt{b}}8+ \textcolor{red}{\textbf{\textit{\texttt{\textbf{c}}}}\texttt{c}}4 56 \textcolor{red}{\textbf{\textit{\texttt{\textbf{c}}}}\texttt{c}}8+ \textcolor{red}{\textbf{\textit{\texttt{\textbf{b}}}}\texttt{b}}5 57 \textcolor{red}{\textbf{\textit{\texttt{\textbf{a}}}}\texttt{a}}8 (D)

57...\textcolor{red}{\textbf{\textit{\texttt{\textbf{d}}}}\texttt{d}}2!
Avoiding a stunning trap: 57...\textcolor{red}{\textbf{\textit{\texttt{\textbf{d}}}}\texttt{d}}3+? looks as though it wins immediately, in view of 58 \textcolor{red}{\textbf{\textit{\texttt{\textbf{x}}}}\texttt{x}}g4? \textcolor{red}{\textbf{\textit{\texttt{\textbf{d}}}}\texttt{d}}4+, followed by 59...\textcolor{red}{\textbf{\textit{\texttt{\textbf{a}}}}\texttt{a}}4. However, White has the fiendish trick 58 f3!!, when 58...\textcolor{red}{\textbf{\textit{\texttt{\textbf{f}}}}\texttt{x}}f3+ 59 \textcolor{red}{\textbf{\textit{\texttt{\textbf{g}}}}\texttt{g}}2! draws – Black has two extra pawns, but loses both of them. Do not hurry – look out for every tactical trick!
58 f4 \textcolor{red}{\textbf{\textit{\texttt{\textbf{g}}}}\texttt{xf}}3 59 \textcolor{red}{\textbf{\textit{\texttt{\textbf{f}}}}\texttt{xf}}3 \textcolor{red}{\textbf{\textit{\texttt{\textbf{c}}}}\texttt{c}}4 60 \textcolor{red}{\textbf{\textit{\texttt{\textbf{e}}}}\texttt{e}}3 \textcolor{red}{\textbf{\textit{\texttt{\textbf{h}}}}\texttt{h}}2 61 \textcolor{red}{\textbf{\textit{\texttt{\textbf{a}}}}\texttt{a}}7 \textcolor{red}{\textbf{\textit{\texttt{\textbf{c}}}}\texttt{c}}3 0-1
Karpov’s Masterclass

46 \( \text{c4!} \)

The key idea. The rook steps up to escort the a-pawn, while maintaining its influence on the kingside.

46...\( f5 \) 47 \( a4 \) \( f6 \) 48 \( a3 \) \( e5 \) 49 \( c5+! \) (D)

Continuing the same process as at move 46.

49...\( e4 \) 50 \( a5 \) \( h4 \) 51 \( a4 \) \( f4 \) 52 \( c4+! \)

A subtle manoeuvre, which gains a tempo.

52...\( e5 \) 53 \( b4 \) \( d5 \) 54 \( b5+ \) \( e4 \) 55 \( b6 \)

\( f4 \) 56 \( a6 \) \( g4 \) 57 \( a5! \) (D)

57...\( g3 \)

57...\( gxh3 \) is also met by 58 \( b4+! \).

58 \( b4+ \) \( e5 \) 59 \( f3 \) \( f4 \) 60 \( e4+ \) \( f5 \) 61 \( e2 \)

\( f6 \) 62 \( b6 \) 1-0

If 62...\( b8+ \) then 63 \( c7 \) \( f8 \) (63...\( b1 \) 64
\( a2 \) \( c1+ \) 65 \( d6 \) \( c8 \) 66 \( a7 \) \( a8 \) 67 \( a5 \) is
winning for White) 64 \( a7 \) \( f7+ \) 65 \( b6 \) \( f8 \) 66
\( b7 \) \( f7+ \) 67 \( a6 \) \( f8 \) 68 \( b2 \) wins.

A marvellous ending by Karpov.
**Tip 47**

Shoulder-Charging

We have seen the technique of shoulder-charging in king and pawn endings. Here, we see how a knowledge of this idea can be vital in other endings as well.

It is clear that Black will have to sacrifice his rook for the b-pawn. The result will then depend on whether he can draw the resulting ending of \( \text{Diagonal} \) vs \( \text{Diagonal} \). In the game, Bogoljubow played a losing mistake:

70...\( \text{g4?} \) 71 b7 f5 72 b8\( \text{w} \) \( \text{xb8} \) 73 \( \text{xb8} \) f4 74 \( \text{d5} \) f3 75 \( \text{e4} \) (D)

75...f2 76 \( \text{f8} \) \( \text{g3} \) 77 \( \text{e3} \) 1-0

It is obvious that White won because his king was able to come back via d5 and e4, to assist the rook in stopping Black's f-pawn. However, Black could have prevented this, had he played...

70...\( \text{e4!} \) (D)

Like 70...\( \text{g4?} \), this move frees the f-pawn, but unlike 70...\( \text{g4?} \), it also blocks the return path of the white king. Black then draws easily after a line such as the following:

71 b7 f5 72 b8\( \text{w} \) \( \text{xb8} \) 73 \( \text{xb8} \) f4 74 \( \text{e5} \) f3 75 \( \text{f8} \) \( \text{e3} \) (D)

76 \( \text{c4} \) f2 77 \( \text{c2} \) \( \text{e2} \) 78 \( \text{e8}+ \) \( \text{d}1! \)

The shoulder-charging role played by the black king in this last line is clear. Note that Black's error here cost him a vital half-point in a game for the world championship — proof enough, if any be needed, of the importance of thoroughly understanding basic endgame principles.
Keep the Furthest Pawn

Marjanović – Mochalov
Minsk 1982

It is clear that White will soon be defending an ending of rook vs two connected pawns. In such passed-pawn races, the defender will have to give up his rook for one pawn (the more advanced), and use his king to stop the other. It therefore makes sense to push the pawn nearest the defender’s king, and retain the one furthest away. Here, that means Black should push the f-pawn and keep the g-pawn.

60...hxg3!
Correct! Not 60...g3? 61 b7 ½f3 62 b8=½ ½xb8 63 ½xb8 g2 (D).

Compare the previous diagram. Here, it is the g-pawn which will be left after the white rook gives itself up, and the white king is a crucial step further away from it. 65 ½f8 (65 ½b1 ½f3! 66 ½b3+ ½g2 wins for Black) 65...½g2 66 ½e4 g3 67 ½e3 ½f1=½ 68 ½xf1 ½xf1 and Black wins.

61...f4 62 ½h5 ½h1 63 b7 ½h8 64 ½c7!
Black wins after 64 b8=½ ½xb8 65 ½xb8 f3. 64...f3! 65 ½h5!
White defends very ingeniously, but Black is still able to win.

65...½g8 66 ½f5 ½g8 67 ½g5 ½f8 68 ½f5 ½xf5! 69 b8=½ f2 (D)

Now 64 ½g8 f4 65 ½d5 ½f2 66 ½e4 draws, as the white king is able to stop the f-pawn.

61 ½g5!
The toughest defence. By comparison with the last note, Black wins in the line 61 b7 ½f4 62 b8=½ ½xb8 63 ½xb8 f3 64 ½d5 f2 (D).

This is winning for Black, as White will eventually run out of checks.

70 ½d7+ ½f4 71 ½b3+ ½f3 71...½h4 promotes at once.
72 ½b8+ ½g2 73 ½b2 ½h1 74 ½h8+ ½g1 75 ½d4 g3 76 ½e7 g2 77 ½e6 ½h3 78 ½d5 ½h1 79 ½g4 ½d3+ 80 ½e4 g1=½ 0-1
Passed Pawns Mean Counterplay

As any textbook will tell you, the result of a rook ending with the generic structure of three pawns each on the kingside, and an extra passed a-pawn, generally depends on the location of the rooks. If the stronger side’s rook is behind his passed pawn, he is usually winning (Alekhine-Capablanca, Buenos Aires Wch (34) 1927 is the classic practical example quoted in most textbooks). Conversely, with his rook in front of the passed pawn, he is usually unable to win.

Since these basic principles are so well-known, and so readily available in endgame textbooks, we shall deal in this book only with some interesting exceptions.

47...hxg4?!
White now obtains a potential passed pawn, but even after the superior 47...f5 48 gxf5 gxh5, White has a target on h5 to aim at with his king, and the win is already seriously endangered.

48 fxg4+ f5 49 h4!
Now the passed h-pawn gives enough counterplay to draw.

49...d5 50 h5 gxh5 51 gxh5 (D)

With his rook behind the pawn, Black should win this position. However, it is easy to go wrong in such positions, and Botvinnik shows how to make the most of the defender’s resources.

45 a4!

Holding back the passed pawn for as long as possible. See Yusupov-Timman (Tip 44) for a similar example.

45...g5?! 46 f3 f5?
This allows a tactical trick. He should go back with his king to h6 and come out via g7.

47 g4+! (D)

51...e6 52 h6 f7 53 g4!
This and the next move secure the draw. White makes maximum use of his passed pawn to secure counterplay.

53...f8 54 f4 a6 55 g4 a7 56 f4
f8 57 xf6 a4 58 f2 h7 59 e2 xh6 60 f2 e5 61 e3 1/2-1/2
**Tip 50**  
The Exception that Proves the Rule

Unzicker – Lundin  
*Amsterdam OL 1954*

Here, with the white rook in front of the pawn, the position would usually be drawn, but this is an exception, because of the badlyplaced black king. White has a simple, forcing winning plan:

49 a7!

This ties the black rook to the a-file. Now the plan is to march the white king all the way to h6!

49...a2+

This allows the white king out, but if Black marks time, the king just marches along the rank to b2 and then out. Black can never take on f3 because his rook cannot leave the a-file, thanks to White’s last move.

50 d3 (D)

Black’s other problem is that his king cannot leave f5 because of a rook check followed by the pawn queening. For the same reason, he cannot play ...g5, when hxg5 would leave Black no recapture. He therefore can only watch and wait.

50...a1 51 d4 a5 52 c4 a3 53 c5 (D)

53...a1

53...a6 54 b5 would achieve nothing. He cannot prevent the white king from penetrating all the way to h6.

54 d6 a3 55 e7 a6 56 f7 a3 57 g7 a1 58 h6 (D)

The white king has completed his long march. Now the final step is to sacrifice the a7-pawn and win Black’s kingside pawns.

58...a6 59 b8 a7 60 b5+ e6 61 xg6 a8 62 xh5 g8 63 g4 h8+ 64 g6 1-0

White wins after 64...xh4 65 b6+ and 66 xf6.
Tip 51  

More Chances with a Knight's Pawn

Again, White’s rook is in front of the pawn, and this position should be a draw. However, with a b-pawn, White has more winning chances than with an a-pawn. This is because in order to support his passed pawn, the white king has to travel one file less far over to the queenside. This in turn means that he will be one move faster in getting back to the kingside, after Black has been forced to sacrifice his rook for the b-pawn.

40 $\text{f}1$ $\text{h}2$ 41 $\text{e}1$ $\text{f}6$ 42 $\text{f}3$ $\text{h}3$ 43 $\text{d}2$ $\text{f}xf3$ 44 $\text{c}c2$ (D)

45 $\text{xf}7+$ is already a threat.

44...$\text{h}5$?

The losing move. Black can draw by means of 44...$\text{e}3!$ 45 $\text{c}7$ $\text{e}8$ 46 $\text{b}7$ $\text{b}8$ 47 $\text{d}3$ $\text{f}5!$ 48 $\text{xf}7+$ $\text{g}4$ 49 $\text{f}4+$ $\text{xg}3$ 50 $\text{b}4$ $\text{g}5$ !.

45 $\text{c}7$ $\text{b}5$ 46 $\text{b}7$ $\text{e}6$

46...$\text{f}5$ 47 $\text{c}3$ $\text{g}4$ 48 $\text{c}4+$ $\text{xg}3$ 49 $\text{b}4$ wins for White.

47 $\text{c}3$ $\text{f}6$ 48 $\text{c}4$ $\text{h}1$ 49 $\text{c}5$

Threatening 50 $\text{c}6+$ and 51 $\text{b}6$.

49...$\text{f}5$ 50 $\text{d}7!$ (D)

50...$\text{c}1+$

50...$\text{g}4$ 51 $\text{d}4+$ $\text{xg}3$ 52 $\text{b}4$, winning, is the point of White’s last move.

51 $\text{d}6$ $\text{h}1$ 52 $\text{c}7$ $\text{c}1+$ 53 $\text{d}8$ $\text{h}1$ 54 $\text{c}8$ $\text{g}4$ (D)

55 $\text{d}6$ $\text{g}5$ 56 $\text{xf}6$ gxh4 57 gxh4 $\text{g}xh4$ 58 $\text{g}6$!

The final touch, preventing the black king from unblocking his own h-pawn.

58...$\text{h}3$ 59 $\text{c}7!$ 1-0

59...h4 60 $\text{b}6$ wins for White, while after 59...$\text{xb}7+$ 60 $\text{xb}7$ h4 he loses by tempo: 61 $\text{c}6$ $\text{h}2$ 62 $\text{d}5$ h3 63 $\text{e}4$ $\text{h}1$ 64 $\text{f}3$ h2 65 $\text{a}6$, etc. If the white king had started on $\text{a}7$, this line would draw for Black.
Never Forget about Stalemate

Stalemate defences do not only occur in king and pawn endings. Here are three examples of grandmasters dropping half-points in rook endings, through missing stalemate resources.

In his day, Ossip Bernstein had tangled with the likes of Lasker and Capablanca, so he had learnt a thing or two about both endings and tactical trickery. Smyslov played:

59...b2??

His wily veteran opponent now lost no time in snapping off the pawn:

60 axb2! g4
60...h2+ 61 f3 xb2 stalemate.
61 f1 ½-½

White blundered with...
55 b2?
55 c2 is correct.
55...b4?

Missing his chance. Black could have drawn by 55...xh5!, thanks to the trick 56 a5+ b4! 57 xh5 stalemate.
56 b6+ c5 57 xh6

and White won.

This mutual oversight is all the more reprehensible for the fact that the same trick had previously occurred in a famous game:

90 g7??

90 f7 wins, although it still requires quite a bit of work. One line runs 90 g4 91 e7 c3 92 e6 xh4 93 d5 g4 (Black’s king can’t make it back in time) 94 d4 c8 95 c4 f5 96 e2 (White is just in time to cut off the black king) 96 d8+ 97 c5 (White can win this position by using the Combined Method – see Tip 39 for more details) 97 c8+ 98 b5 b8+ 99 a6 c8 100 c2 e6 101 b7 c5 102 b6 and the c-pawn advances.
90 g4 91 h2
91 d4+ h5!? (91 f5 92 c4 c7+ 93 f8 e5 94 g4 f5 also draws) 92 c4 xc4! was the point White had missed. Now he loses a pawn and can only draw.
91 g3 92 h1 x2 93 h5 c7+ 94 f6 c6+ 95 f7 c7+ 96 e6 c6+ 97 d5 h6 98 e4 g2 99 h4 g3 100 h1 g2 ½-½
**Tip 53**

**Triangulation**

![Chessboard Diagram](image)

Tal – Spassky  
*Riga Ct (3) 1965*

King triangulation is a standard technique in king and pawn endings. However, its use is not confined to such endings. Here, we see it employed to clinch matters in a rook ending. With a solid extra pawn on the kingside, Black has every hope of winning. The immediate threat is 51...c5, so White’s first move is forced.

51 d4 c6 52 c3 f7  
The rook takes up its ideal position, behind the passed pawn.

53 d3 f5 54xf5 gxf5 (D)

55 e8  
The white king will have to blockade the f-pawn, so the white rook comes back to defend the c4-pawn. The alternative plan of using the rook to stop the f-pawn is hopeless after 55 g8 f4 56 g2 f3 57 f2 c5 58 c3 f4, etc.

55...f4 56 c2 c5 57 e4 (D)

Temporarily holding everything, but the black king can penetrate further.

57...d4 58 f3 c5 59 f2 c3 60 e2  
60 f3 d3 is zugzwang immediately.

60...f3 61 f2 c2 62 h4 h5 63 e4 d3 64 h4 (D)

Further direct progress does not appear easy, since Black’s rook is tied to defending h5 and f3. However, with White to move, this position would already be zugzwang and so Black only needs to transfer the move to White. He achieves this by a king triangulation:

64...d2 65 e4 c3! 66 h4 d3 0-1  
White must lose his rook, or allow the f-pawn forward.
**Tip 54**

**New York 1924 Revisited**

The classic game Capablanca-Tartakower, New York 1924 showed the power of a passed pawn on the 6th rank, supported by king and rook. Capablanca sacrificed two pawns to reach such a position, and duly won. Here is a more modern and even more spectacular example of the same idea.

![Chess board](image)

**Pelletier – Rozentalis**

*Erevan OL 1996*

41...g4!!

The more obvious 41...f4 does not work, because of 42 gxf4 gxf4 43 e5 e3 44 fx e3 fxe3 45 a4 b2 (D).

![Chess board](image)

47 f6

Or 47 b4 f3 48 a1 f2+ 49 g1 g2+ 50 h1 xg3 51 f1+ e2 52 f4 f3 winning.

47...f3 48 f4+ xg3 also does not help. 47...f3 48 a1 g2! (D) 0-1

![Chess board](image)

Now 46 b4! opens the 3rd rank for the white rook: 46...e4 47 a8! d3 48 a3+ d2 49 a1 and White holds.

42 e4 43 e2 44 g3 45 f3 e3

Black wins after both 49 f7 e2+ 50 e1 e3 51 f8 g1+ and 49 e1 e2+ 50 e2 fxe2 e2 51 f7 f2+.

A beautiful ending by Rozentalis.
Don’t Get in a Huff

One important difference between chess and draughts (checkers) is that, in chess, capturing is not forced. This can have important consequences.

Now White has no choice but to make the exchange himself on e6, since the laws of chess unfortunately do not permit him to ‘huff’ the black rook from the board, much as he would like to!

$$47 \text{ dxe6+ } \text{ xe6 (D)}$$

Black now has the opposition and draws. The remainder of the game is a suitable addendum to the ending Timman-Yusupov (Tip 3), as the two kings dance a small pas de deux.

$$48 \text{ d3 d7!}$$

Keeping the distant opposition. 48...d6? 49 d4 c6 50 c5 bxc5+ 51 c4 wins for White, as does 48...f5? 49 c5! bxc5 50 c4.

49 c3 c7 50 b4 axb4+ 51 xb4 c6 52 b3 d6 53 c2 c6 54 d3 d6 55 c3 c5 56 b3 d6 57 b4 c6 (D)

$$58 \text{ c5 bxc5+ 59 bxc5+ b6 60 d5 a5 61}$$

$$\text{ xe5 xa4 62 c4 ½-½}$$
Tip 56

The Active Rook

As noted in the Introduction, in most endings material counts, and it is rarely worth giving up pawns in order to activate pieces. However, in rook endings, the activity of the rook is critical, and can make the difference between success or failure. This frequently outweighs purely material considerations.

35...\text{c}2 36 \text{b}5
Stopping 36...f4 and 37...f3.

36...\text{g}4! (D)
Renewing the threat. Black’s advantage in piece activity (both rook and king) makes up for his material deficit.

37 h3+
The only chance, but now Black secures a passed h-pawn, which is a new source of counterplay.

37...\text{x}h3 38 \text{x}f5 \text{x}h2 39 \text{f}4
39 a4 \text{a}2 40 a5 \text{g}4 41 \text{e}5 \text{f}3, threatening \text{e}2+, is a draw.

39...\text{x}a2 40 \text{x}e4 (D)

40...h5!
Using his trumps. Despite his extra pawn, White cannot win, because Black’s pieces are all so active.

41 c4 \text{g}2 42 \text{f}4 \text{c}2 43 \text{h}4 \text{f}3 44 \text{d}1
\text{xf}2 45 c5 \text{e}3 46 \text{x}h5 \text{d}4 \frac{1}{2}-\frac{1}{2}

Tarrasch – Rubinstein
San Sebastian 1911
**Tip 57**

**Another Active Rook**

This is another example where Black saves an apparently hopeless position by active play. It seems that he has no hope, since he is already one pawn down and White threatens $54 \text{c}4$ followed by $55 \text{f}4$. Lasker solved the problem by giving up another pawn to tie White’s pieces down to defend:

$54...\text{e}4! 55 \text{e}5$

There is no other way to make progress, since after $55 \text{c}4 \text{a}4$ Black creates counterplay with his a-pawn.

$55...\text{f}6 56 \text{x}a5 \text{c}4! 57 \text{a}6+ \text{e}5 58 \text{a}5+ \text{f}6 59 \text{e}6+ \text{e}5 60 \text{a}5+ \text{f}6 61 \text{a}2 \text{e}5 (D)$

Although White has two extra pawns, the passive placing of his pieces prevents him from realizing the advantage. His king is tied to defending g3, and he cannot free his rook without losing the c-pawn. Once that pawn goes, most of the resulting 2 vs 1 positions will be drawn, thanks to the fact that the pawns are all on one flank.

$62 \text{b}2 \text{c}3+ 63 \text{g}2 \text{f}6 64 \text{h}3 \text{c}6! (D)$

Avoiding a sneaky trap. The obvious $64...\text{f}4$ loses to $65 \text{b}3! \text{x}c2 66 \text{f}3$, when White will reach a theoretically winning ending, with two connected passed pawns.

$65 \text{b}8$

White has no other way to make progress, but the resulting position with two pawns against one is a draw.

$65...\text{x}c2 66 \text{b}6+ \text{g}7 67 \text{h}5 \text{c}4 68 \text{h}6+ \text{h}7 69 \text{f}6 \text{a}4 (D)$

$\frac{1}{2}-\frac{1}{2}$

White has no way to make progress, since $70 \text{x}f5 \text{x}h6$ is a dead draw. A perfect complement to Tip 56.
We have just seen two examples where rook activity enabled the defender to save an apparently hopeless position. Here, it is the stronger side which is able to win, simply because he has the more active rook.

38...\textit{d}d7

Miles understands that passive play will probably lose, and he must therefore seek counterplay. If he just waits, White has options such as h6, with a potential threat of \textit{c}c8-h8, or \textit{g}g5 and \textit{c}c6.

39 \textit{h}xb5 \textit{d}d3 40 \textit{b}b7+ \textit{f}f6 41 \textit{h}xh7 g5+ 42 \textit{f}f3 \textit{e}x\textit{a}3 43 \textit{a}2 \textit{a}2 44 \textit{a}a6+ \textit{f}f5 45 g4! (D)

Activating the white king.

45...fxg4+ 46 \textit{x}xg4 \textit{g}2+ 47 \textit{b}b3 \textit{b}b2

47...\textit{a}a2 48 h6 wins for White.

48 \textit{e}x\textit{a}4 \textit{e}e4 49 \textit{g}g3 (D)

49...\textit{b}b1

He also loses after 49...\textit{x}x3 50 h6 \textit{b}b1 51 \textit{a}3+ \textit{e}4 52 \textit{g}4, and the rook can interpose on g3 and h3.

50 h6 \textit{g}1+ 51 \textit{f}f2 \textit{h}1 52 \textit{a}a6+ \textit{d}5 53 \textit{g}3 \textit{h}4 54 \textit{g}6 \textit{e}e4 55 h5 \textit{f}f5 56 \textit{c}c6 \textit{e}e4

57 \textit{f}f2 \textit{e}e7 58 b6 \textit{b}b7 59 \textit{g}3 1-0
Tip 59

When Similar is Not the Same

Drawing on one’s experience of analogous positions from the past is highly valuable, but one must always take account of the specific details of each position. Here, Botvinnik managed to salvage an unlikely half-point by so doing.

\[ \text{\$c3 \$xe4 4 \$d2 \$f4 5 \$e2 \$xg5 6 \$f2 \$h4, etc.} \]

Here, however, the extra h-pawns mean that the pawn ending is drawn after

43...\text{\$c7 44 \$xc3! \$xc3+ 45 \$xc3 \$xe4 46 \$c4 \$f4 47 \$d4 \$g4 48 \$e5 \$xh4 49 \$f6+ (D).} \]

Despite the material equality, White is struggling to draw, because Black has the outside passed pawn, supported by his rook.

49...\text{\$g4 50 \$xg6 h4 51 \$f6 h3 52 g6 h2 53 g7 h1\$w 54 g8\$w+ and draws. Euwe is therefore forced to seek another path, but is unable to win.} \]

44 \text{\$e3!}

Simpler than 44 \text{\$xc3 \$xe4.}

44...\text{\$d4 45 \$xc3 \$xe4+ 46 \$f3 \$xh4 47 \$c6! \$f4+ (D)}

47...\text{\$f5 48 \text{\$c5+ \$e6 49 \text{\$c6+ also leads to a draw.}}}

43...\text{\$d8+}

An almost identical position, but without the h-pawns (and with reversed colours and wings) had been reached in Em.Lasker-Rubinstein, St Petersburg 1914 (the only difference was the ‘black’ rook being on ‘c5’). Lasker had played 1...\text{\$c7, after which 2 \$xc3 loses: 2...\$xc3+ 3}

48 \text{\$e3 \$e4+ 49 \$f3 \$f5 50 \$f6+ \$xg5 51 \$xg6+ 1/2-1/2}

A valuable lesson in taking the specifics of every position into account.
Seizing Space

It would be better to activate the rook by 35 $\text{xe}4$, planning 36 $\text{xb}4$.

35...f5!

Continuing his space-gaining activity on the kingside, and also stopping the $\text{e}4$-b4 defence.

36 h3

See the note to move 34. White prepares to exchange off the h-pawn before it becomes fixed.

36...h5 37 $\text{f}3$ g4+ 38 hxg4 hxg4+ $(D)$

39 $\text{f}4$?

This loses immediately. A tougher defence was 39 $\text{e}2$ $\text{c}2+$ 40 $\text{e}1$ $\text{b}2$ 41 b4 b5 42 $\text{xa}3$ $\text{ha}2$ $(D)$.

However, Black still has excellent winning chances with the plan of ...$\text{f}6$, ...e5 and ...f4. Note how Black’s kingside pawn advances have created targets in White’s kingside.

39...$\text{c}2$ 40 f3 $\text{f}2$ 0-1
As emphasized in the Introduction, weak pawns tend to grow in significance in the endgame.

27...g5 28 f4 gxf4+ 29 gxf4 ♆x5 30 ♆x5 ♆d1!
Active play is again the best defence. Against 30...♗b6, White plays 31 ♆e5, followed by ♆f3-g3-h4.
31 ♆x6 ♆h1 32 b4 (D)

Black’s split queenside pawns mean that he will always have to suffer here, as Capablanca demonstrated in a number of similar double-rook endings. Benko follows the procedure typical of such positions.

Step 1: tie Black down to his weaknesses.
17 ♇c4 ♇d6 18 ♇a4 ♇a8 19 ♇c1 a6 20 b3 ♆b7 21 ♇b4+ ♆c7 22 ♇g4
Step 2: provoke a second weakness on the kingside.
22...g6 23 ♇h4 h5 24 ♇f4 f5 25 ♇c5 ♇b8 26 ♆a5 ♆b5 (D)

Looking for activity.
27 ♆fa4!
Better than 27 ♆x6 ♆e5+ 28 ♆f3 g5, when the rook on a6 is temporarily out of play.

32...♗d7?!!
Benko recommends 32...♗xh2, not fearing 33 b5 cxb5 34 ♆xe6, when Black can create counterplay by 34...♗h3+ 35 ♆f2 ♆a3.
33 ♆d4 ♆d1+?
The last try was 33...♗xh2 34 ♆c5 e5!, securing e6 for the black king, when Black should be able to draw.
34 ♆e5 ♆d5+ 35 ♆f6 ♆d4 36 e3 ♆xb4 37 ♆a3 ♆e4 38 ♆d3+ ♆c7 39 h4 (D)

White’s vastly more active king decides matters.
39...♗b6 40 ♆g5 ♆b5 41 ♆b3+! ♆c5 42 ♆xh5 ♆c4 43 ♆b2 ♆c1 44 ♆g5 ♆d5 45 ♆h2 1-0
Tip 62

Evading the Checks

The ending of queen and pawn vs queen is one of the most complicated in chess, and there is no space to examine it in detail here. What we can do, however, is to show an example of the main techniques in such endings.

Donchenko – Miles
Dubna 1976

70 \( \mathbb{W}d6+ \), 70 \( \mathbb{W}c1+ b2 \).
70...\( \mathbb{W}a2 \) 71 \( \mathbb{W}f7 \) \( \mathbb{W}e1+ \)?
Black throws away the win by allowing the white king to reach the 6th rank. 71...\( \mathbb{W}a3 \) is correct, when White has no checks thanks to the crosscheck on b4.
72 \( \mathbb{W}h3? \)
See move 64. Both 72 \( \mathbb{W}g5 \) and 72 \( \mathbb{W}h5 \) draw.
72...\( \mathbb{W}e4 \) 73 \( \mathbb{W}a7+ \) \( \mathbb{W}b1 \) 74 \( \mathbb{W}g1+ \) \( \mathbb{W}c2 \) 75 \( \mathbb{W}h2+ \) \( \mathbb{W}c3 \) 76 \( \mathbb{W}e7+ \) \( \mathbb{W}d2 \) 77 \( \mathbb{W}a5+ \) \( \mathbb{W}e2 \) (D)

63...\( \mathbb{W}b3 \) 64 \( \mathbb{W}h4? \)
In such positions, the defender’s king should usually head for the furthest corner from the pawn, so as to reduce the scope for crosschecks. Hence 64 \( \mathbb{W}h6 \) is correct.

64...\( \mathbb{W}c5 \) 65 \( \mathbb{W}g2+ \) \( \mathbb{W}a3 \) 66 \( \mathbb{W}a8+ \) \( \mathbb{W}b4 \) 67 \( \mathbb{W}b7+ \) \( \mathbb{W}a4 \) 68 \( \mathbb{W}a8+ \) \( \mathbb{W}a5 \) 69 \( \mathbb{W}c6+ \) \( \mathbb{W}a3 \) 70 \( \mathbb{W}f3 \)

78 \( \mathbb{W}a1 \)
78 \( \mathbb{W}b5+ \) \( \mathbb{W}d3+. \)
78...\( \mathbb{W}d3+ \) 79 \( \mathbb{W}h4 \) \( \mathbb{W}c4+ \) 80 \( \mathbb{W}h3 \)
80 \( \mathbb{W}h5 \) \( \mathbb{W}b5+ \) followed by 81...\( \mathbb{W}b2 \).
80...\( \mathbb{W}d2 \) 81 \( \mathbb{W}a7 \)
81 \( \mathbb{W}b2+ \) \( \mathbb{W}c2 \) 82 \( \mathbb{W}a3 \) \( \mathbb{b}2 \) and Black wins.
81...\( \mathbb{b}2 \) 0-1
King Safety is the Key

Alekhine – Reshevsky
Amsterdam (AVRO) 1938

In this typical structure, with an extra outside passed pawn, the result usually depends on the safety of the white king. If his king is secure from checks, the win is generally straightforward, since the queen can itself force the passed pawn home. However, if the white king is exposed, as here, the task is greatly complicated, and indeed there may be no win at all. Alekhine was unable to win this position.

44 \texttt{wa2} \texttt{g8} 45 \texttt{a4} \texttt{wc6} 46 \texttt{a5} \texttt{wa6} (D)

This is where we see the importance of White’s exposed king. If it were adequately protected, White could win simply by 47 \texttt{wa4} followed by \texttt{wb4-b6}, queening his pawn. However, in this position that would allow Black to counterattack against the white king and force perpetual check, so White has to seek other ways to strengthen his position.

47 \texttt{g4} \texttt{g5} 48 \texttt{f2} \texttt{wd6} 49 \texttt{f1} \texttt{wa6+} 50 \texttt{g2} \texttt{g7} (D)

White’s only plan is to bring his king to the queenside to support the pawn, but first he centralizes his queen so as to maximize its influence.

51 \texttt{wb2+} \texttt{g8} 52 \texttt{wb8+} \texttt{g7} 53 \texttt{we5+} \texttt{g8} 54 \texttt{f2} \texttt{wa7+} 55 \texttt{e2} \texttt{wa6+} 56 \texttt{d2} (D)

56...\texttt{wc4}!

This excellent move secures the draw. Black prevents the enemy king from coming across to the queenside, and White can make no further progress.

57 \texttt{f5} \texttt{wd4+} 58 \texttt{e2} \texttt{wb2+} 59 \texttt{d3} \texttt{wb3+} 60 \texttt{e2} \texttt{wb2+} 1\frac{1}{2}-1\frac{1}{2}
**Tip 64**  
**King Safety is the Key (Part 2)**

Here, we see another example of the theme of king safety in queen and pawn endings.

40 \( \text{W}d7 + \text{g8} 41 \text{W}c8 + \text{h7} 42 \text{W}xa6 \)

White has a potential outside passed pawn, but it is his better-protected king which is the key factor. Note that doubled pawns are often strong defensively, as is the case here.

42...\( \text{W}g5 + 43 \text{f1} \text{W}xh5 44 \text{W}d3+! \) (D)

Once again, the doubled f-pawns do an excellent job of protecting the white king.

46...\( \text{h5} 47 \text{W}d5 + \text{h7} 48 \text{W}d1! \)

A nice idea. White drives the black queen into passivity.

48...\( \text{Wh2}?! 49 \text{b4} \text{h4}?! \) (D)

The f-pawns shelter the white king and prevent Black from setting up a perpetual. In the meantime, White can get on with his plan of creating a passed pawn on the queenside.

44...\( \text{g8} \)

Not 44...\( \text{W}g6 45 \text{W}e4! \), when Black would soon be forced into a lost pawn ending.

45 a4 \( \text{h1} + 46 \text{e2} \) (D)

50 \( \text{W}f1! \)

A very cute position. The black queen is caught in the box, and cannot get out, either to harass the white king, stop White’s potential passed a-pawn, or to get out of the way of its own h-pawn.

50...\( \text{g5} \)

50...\( \text{h3} 51 \text{a5} \text{bxa5} 52 \text{bxa5} \text{W}g2 53 \text{a6} \text{leaves Black powerless,} \)

51 \text{a5} \text{bxa5} 52 \text{bxa5} \text{g4} 53 \text{a6} 1-0
**TIP 65**

**Exchanges to Realize a Material Advantage**

The normal rule when material up is to exchange pieces, not pawns. This is one illustration.

White has an extra exchange but Black is active. In a previous game Knaak-Postler, E.German Ch (Frankfurt Oder) 1977, which had reached this very position, White tried to hang on to the d5-pawn with 30 exb4?, but Black developed such piece activity that he even went on to win after 30...e4 31 h2 xc3 32 xa7 f5! 33 h4 f6! 34 xc6 d6 35 xe1 f8 36 xh7?? xd5, etc. In the present game, White demonstrated the correct plan.

30 xa7! (D)

Exchanges enhance White's material advantage, especially exchanging Black's last rook. When you are in an exchange up, exchanging off the opponent's remaining rook is often the best policy, and that is what White prepares to do here.

30...f5 31 fa1 e4

White wins after 31...xd5 32 c7, threatening xa8+.

32 xa8 xa8 33 xa8+ f7 (D)

Without his rook, Black's activity is much less threatening and it is already clear that only White has winning chances here.

34 na3! xc3 35 d6 e6 36 xc4 e4 37 xe8+! d7

If 37...d5, then 38 d7 xc4 39 d8 w xd8 40 xd8 wins, because the black king is cut off.

38 h8 f6 39 e5+ e6 (D)

40 d7 e3+

40...xd7 41 e8+ e7 42 xc6 is winning for White.

41 f1 b6 42 xg6 hxg6 43 d8 w xd8

44 xd8

and White won.
Tip 66

Rooks are Better than Knights – Usually!

Here Black faces the crucial choice. The text-move leads to a mating-net, but if he runs with his king, he loses to an exchange sacrifice, as Seirawan’s analysis shows: 94...\(\text{e}6\) 95 \(\text{h}2+\) \(\text{d}5\) 96 \(\text{e}7\) and now either 96...\(\text{b}1\) 97 \(\text{f}7\) \(\text{f}5\) (97...\(\text{c}2\) 98 \(\text{e}6\) and \(\text{xg}6\)) 98 \(\text{e}5+\) \(\text{d}4\) 99 \(\text{x}f5\) \(\text{gxf}5\) 100 \(\text{g}6\) winning, or 96...\(\text{g}7\) 97 \(\text{f}7\) \(\text{h}5\) 98 \(\text{e}5+\), followed by \(\text{x}f5\) and \(\text{g}6\).

95 \(\text{b}2\) \(\text{e}6\) 96 \(\text{c}3\) (D)

Endings with an extra exchange, but all the pawns on one side, are often difficult to win, all the more so as the number of pawns gets smaller. Many observers thought this one was drawn, but during the second adjournment, Kasparov analysed a forced win. Ultimately, Black loses because he faces a fatal dilemma with his king. If it stays in the corner, it is vulnerable to mating threats, while if it runs away, White can set up a winning exchange sacrifice on f5. Black is also handicapped by his knight’s bad position on the edge of the board.

89 \(\text{a}7\) \(\text{g}4\) 90 \(\text{d}6\) \(\text{h}3\) 91 \(\text{a}3\) \(\text{g}4\) 92 \(\text{e}3\) \(\text{f}5\) 93 \(\text{c}7\) \(\text{f}7\) 94 \(\text{d}8\) (D)

Zugzwang. He must allow the white rook a decisive penetration.

96...\(\text{f}5\)

96...\(\text{f}4?\) loses on the spot to 97 \(\text{f}3\).

97 \(\text{e}7+\) \(\text{f}8\) 98 \(\text{e}5\) \(\text{d}3\) (D)

99 \(\text{a}7\) \(\text{e}4\) 100 \(\text{c}7\) \(\text{b}1\) 101 \(\text{d}6+\) \(\text{g}8\)

102 \(\text{e}7\) 1-0

\(\text{c}8+\) and \(\text{e}5\) leads to mate.
When Two Pieces are Better than One

38 \texttt{\textcolor{red}{\texttt{d3}}} \texttt{\textcolor{red}{f7}} 39 \texttt{\textcolor{red}{axb5}} \texttt{axb5} 40 \texttt{\textcolor{red}{g2}} \texttt{\textcolor{red}{d6}} 41 \\
\texttt{f3} \texttt{h5} 42 \texttt{\textcolor{red}{f1}} \texttt{h4} (D)

\begin{center}
\textbf{Szily – Keres} \\
\textit{Budapest 1952}
\end{center}

Rook + pawn vs two pieces is usually about equal, but much depends on the specifics, and who has the initiative. Here White should play 35 f4, getting his pawns moving, when he would have reasonable chances of holding the game. Instead, he plays passively and allows Black to demonstrate the superiority of the two pieces.

35 a4? g5!

Now Black’s knight occupies a secure central outpost, from which it cannot be dislodged. In addition, White’s e-pawn is fixed on e4, obstructing his bishop.

36 \texttt{\textcolor{red}{\texttt{d1}}} \texttt{\textcolor{red}{e7}} 37 \texttt{\textcolor{red}{c1}} \texttt{\textcolor{red}{c6}} (D)

\begin{center}
\textbf{B}
\end{center}

53...\texttt{\textcolor{blue}{g6}}!

Now both the f3- and h3-pawns are fixed as weaknesses.

43 \texttt{\textcolor{red}{\texttt{h1}}} \texttt{\textcolor{red}{e6}} 44 \texttt{\textcolor{red}{\texttt{a6}}} \texttt{\textcolor{red}{d7}} 45 \texttt{\textcolor{red}{\texttt{a5}}} \texttt{\textcolor{red}{c7}} 46 \\
\texttt{\textcolor{red}{\texttt{a1}}} \texttt{\textcolor{red}{c8}} 47 \texttt{f2} \texttt{\textcolor{red}{b6+}} 48 \texttt{\textcolor{red}{g2}} \texttt{\textcolor{red}{b7}} 49 \texttt{\textcolor{red}{d1}} \texttt{\textcolor{red}{c7}}

The minor pieces continue to render the enemy rook impotent.

50 \texttt{\textcolor{red}{\texttt{f2}}} \texttt{\textcolor{red}{b6}} 51 \texttt{\textcolor{red}{\texttt{c3}}} \texttt{\textcolor{red}{a5}} 52 \texttt{\textcolor{red}{d4}} \texttt{\textcolor{red}{b4}}

Now we see yet another downside to White’s 35th move – it weakened his b3-pawn.

53 \texttt{\textcolor{red}{\texttt{e2}}} (D)

\begin{center}
\textbf{B}
\end{center}

53...\texttt{\textcolor{blue}{g6}}!

Now both the f3- and h3-pawns are fixed as weaknesses.

43 \texttt{\textcolor{red}{\texttt{h1}}} \texttt{\textcolor{red}{e6}} 44 \texttt{\textcolor{red}{\texttt{a6}}} \texttt{\textcolor{red}{d7}} 45 \texttt{\textcolor{red}{\texttt{a5}}} \texttt{\textcolor{red}{c7}} 46 \\
\texttt{\textcolor{red}{\texttt{a1}}} \texttt{\textcolor{red}{c8}} 47 \texttt{f2} \texttt{\textcolor{red}{b6+}} 48 \texttt{\textcolor{red}{g2}} \texttt{\textcolor{red}{b7}} 49 \texttt{\textcolor{red}{d1}} \texttt{\textcolor{red}{c7}}

The minor pieces continue to render the enemy rook impotent.

50 \texttt{\textcolor{red}{\texttt{f2}}} \texttt{\textcolor{red}{b6}} 51 \texttt{\textcolor{red}{\texttt{c3}}} \texttt{\textcolor{red}{a5}} 52 \texttt{\textcolor{red}{d4}} \texttt{\textcolor{red}{b4}}

Now we see yet another downside to White’s 35th move – it weakened his b3-pawn.

53 \texttt{\textcolor{red}{\texttt{e2}}} (D)

Note how the black minor pieces prevent the white rook from penetrating. In such endings, the rook needs to develop activity, and here it is unable to do so.

53...\texttt{\textcolor{blue}{g6}}!

Do not hurry! The b3-pawn is not going anywhere. The text-move threatens 54...\texttt{\textcolor{red}{\texttt{b6+}}} and 55...\texttt{\textcolor{red}{\texttt{f4+}}}.

54 \texttt{\textcolor{red}{\texttt{f1}}} \texttt{\textcolor{red}{\texttt{b6+}}} 55 \texttt{\textcolor{red}{\texttt{d3}}} \texttt{\textcolor{red}{\texttt{e5+}}} 56 \texttt{\textcolor{red}{\texttt{c2}}}

56...\texttt{\textcolor{blue}{xf3}} 57 \texttt{\textcolor{red}{\texttt{d6}}} \texttt{\textcolor{red}{\texttt{c7}}} 0-1
The Value of Knowing Your Theory

The only other thing Black needs to know is that he should meet 61...\texttt{xf7} not with 61...\texttt{xf7}? 62 \texttt{xf6} winning, but with 61...\texttt{g7}! preventing the white king from getting to f6.

61...\texttt{d5} 62 \texttt{f5} \texttt{f7} 63 \texttt{e5} \texttt{b3} 64 \texttt{c7+ f8} 65 \texttt{b7} \texttt{c4} 66 \texttt{b4} \texttt{a2} 67 \texttt{f5} (D)

Szabo – Botvinnik

Budapest 1952

A knowledge of basic endgame theory can often enable a player to save a seemingly lost position. Here, Black had been defending for the entire game, and appears hopelessly placed. But Botvinnik now produced an exchange sacrifice:

51...\texttt{xa5!} 52 \texttt{d7+ xd7} 53 \texttt{xa5 xg4}

He knew this position to be a theoretical draw, even without the h-pawn.

54 \texttt{e3 e6} 55 \texttt{f4 c4} 56 \texttt{a7 h5} 57 \texttt{g5 h4} 58 \texttt{hxh4 b3} 59 \texttt{g5 c4} (D)

This exact position was analysed as a draw by del Rio as far back as 1750! White cannot make progress, because \texttt{g6} is always met with a bishop check.

60 \texttt{c7 a2} 61 \texttt{c1}

Szabo continues to manoeuvre, but if Black knows the basic position, it is easy to draw.

67...\texttt{d5} 68 \texttt{g6 f7+ 69 g5 d5} 70 \texttt{h4 b3} 71 \texttt{h8+ f7} 72 \texttt{h7+ f8} 73 f7 (D)

Having done his best impression of the Grand Old Duke of York, Szabo makes his last try.

73...\texttt{e7}!

See the note to move 61.

74 \texttt{g6 c4}

But not 74...\texttt{c2+??} 75 \texttt{g7} winning.

75 \texttt{g7 b3} 76 \texttt{f8++ xf8} 77 \texttt{f6 e8} 78 \texttt{e7+ d8 1/2-1/2}
Tip 69

Drawing with Rook vs Rook and Bishop

\[
\text{W: } \text{Rook vs Rook and Bishop}
\]

This ending has been known for many years to be a theoretical draw, but in practice the defender frequently loses. Ulf Andersson won it against GMs twice in the space of a year, while English GM Keith Arkell has apparently won the position 16 times out of 16! It is therefore worth being familiar with the drawing technique, which is not really all that complicated.

87 \(\text{e7}\) 88 \(\text{f1}\) 89 \(\text{g1}\) 90 \(\text{e7}\) \(\text{b1}\) 91 \(\text{e6}\) 92 \(\text{a4}\) \((D)\)

The key defensive formation, known as the Cochrane Defence. The rook pins the bishop from behind. Black just waits, and when the white king goes to one side, the black king goes to the other.

106 \(\text{d4}\) 107 \(\text{b4}\) 108 \(\text{d2}\) 109 \(\text{d3}\) 110 \(\text{h1}\) 111 \(\text{h1}\) 112 \(\text{b4}\) 113 \(\text{c3}\) 114 \(\text{a1}\) 115 \(\text{c1}\) \((D)\)

116 \(\text{a1}\)

116 \(\text{c4}\) is met by 116...\(\text{b4+}\), so White cannot strengthen his position.

116...\(\text{b3}\) 117 \(\text{g1}\) 118 \(\text{c2}\) 119 \(\text{g5}\) 120 \(\text{h5}\) 121 \(\text{c5}\) 122 \(\text{d3}\) 123 \(\text{a5}\) 124 \(\text{a1}\) \(1/2-1/2\)

The defender cannot avoid his king being driven to the edge of the board, but this is not fatal.

92...\(\text{e3}\) 93 \(\text{c5}\) 94 \(\text{d5}\) 95 \(\text{d6}\) 96 \(\text{e5}\) 97 \(\text{d5}\) 98 \(\text{a3}\)
When Two Rooks Beat a Queen

Two rooks roughly balance a queen, but with equal pawns, the rooks are usually stronger. This is especially true if there are weak pawns to attack, since the rooks can double up and attack them more times than the queen can defend. This is a typical example.

46...\texttt{a6} 47 \texttt{wc3 a4}
Black wants to get a rook to f4 or f6.
48 \texttt{wc6 b6 a6} 49 \texttt{we8+ wh7} 50 \texttt{wb5}
50 \texttt{we5+ wh6} helps Black.
50...\texttt{b4} 51 \texttt{wb4 ad5 (D)}

52 \texttt{wb3}
Or 52 \texttt{f4 ad3+ 53 df2 a2+ 54 de1 wh3,}
etc.
52...\texttt{ad6} 53 \texttt{wc4 ad3} 54 \texttt{df2 xa3} 55 \texttt{wc5}
\texttt{a2+ 56 de3 df6!}
Step 1 complete. Now he just needs to get the other rook attacking f3.
57 \texttt{wb4}
Stopping ...\texttt{a4-f4.}
57...\texttt{a6} 58 \texttt{dg2 xf4} 59 \texttt{wb2+ af6 (D)}

Mission accomplished. Now f3 falls and Black forces a winning pawn ending.
60 \texttt{we5 xf3} 61 \texttt{wa1 xf1} 62 \texttt{we3 xfl2+ 63}
\texttt{dh3 xfl3+ 64 wxf3 xfl3+ 65 df3 xfl6 0-1}
It is often the case that the most effective way to realize an advantage is to transform it into an advantage of a different kind. Many weaker players tend to cling on to a certain advantage for dear life, whereas giving it up for some other benefit is often the best strategy.

39...d6 40 dxc5+ dxc5 41 a4!

Taking b5 under control and preparing to drive the black king back with b4+.

41...d6 42 b4 a6 43 d4 (D)

We saw the earlier part of this ending in Tip 31. Thus far, the weak pawn on c5 has been the cornerstone of White’s advantage, yet he now played:

39 d4! (D)

Exchanging off Black’s weakness. The idea of this surprising move is to open a path for the white king to reach d4, and ultimately, c5 or e5. Such transformations of an advantage are typical, but require good judgement and confidence – one can look rather silly if the intended benefits fail to materialize!

43...h5 44 c4+ e6 45 c5 e8 46 a5 a4 (D)

47 e3!

The final step. The knight comes to d4, attacking f5 and supporting a breakthrough by b5.

47...b5 48 c2 e7 49 d4 d7 50 b5 axb5 51 a6 e8 52 a7 b7 53 xb5 d7 54 d4 e4 55 xf5! 1-0
10 \textit{e}3!

Only in the endgame is White’s advantage in pawn-structure significant. With queens on the board, Black has much more chance to work up active counterplay, but once the position simplifies to an ending, White will have a freer hand to attack Black’s weaknesses. The text-move also stops ...\textit{c}5.

10...\textit{wx}d1+?! 11 \textit{wx}d1!

The correct recapture. The king is going to \textit{c}2.

11...\textit{e}5 12 \textit{wc}2 \textit{e}7 13 \textit{e}e2 0-0? (D)

13...f6 is correct. The king belongs in the centre on \textit{f}7.

21 \textit{b}4!

Preparing to activate the king. It is obvious at a glance how far from the action the black king is, bearing out the note to move 13.

21...\textit{f}6 22 \textit{wb}3 \textit{wf}7 23 \textit{b}5!

We have already seen this idea in Tip 71. Although White exchanges off Black’s weak pawn, it is more important that he opens lines for his own king.

23...\textit{d}8 24 \textit{bx}c6 \textit{xc}6 25 \textit{xd}8 \textit{xc}5 26 \textit{bb}8 \textit{gg}6

After 26...\textit{cc}7 27 \textit{db}5 \textit{xd}7 28 \textit{aa}8 \textit{bb}7 29 \textit{bb}4 White wins a pawn.

27 \textit{bb}7 \textit{cc}8 28 \textit{a}4! \textit{h}5 29 \textit{f}3 \textit{cc}6 30 \textit{dd}7 a6

31 \textit{dd}5 \textit{a}5 (D)

32 \textit{b}4!

Typical prophylaxis. Getting his pawns off the 2nd rank reduces Black’s counterplay.

32...\textit{a}6 33 \textit{e}4 \textit{e}6+ 34 \textit{bb}5 \textit{cc}2 35 \textit{ee}3

32...\textit{bb}2+ 36 \textit{xx}a5 \textit{hh}7 37 \textit{ff}5 1-0

38 \textit{cc}7 will be decisive.
Tip 73

Transforming an Advantage

A remarkable transformation manoeuvre. It may have seemed that White gave up his bishop-pair to weaken Black’s pawns, but now he promptly exchanges off the freshly-created weakness on d5. He does so because this is the only way to get his king in. As noted in Tip 71 above, confidence is important in such situations. The player must trust his judgement, and not worry about how he will look if the hoped-for benefits do not materialize.

28...dxe4+ 29 fxe4 d7 30 d5 h5? (D)
30...d8! 31 e5+ xe5 32 xe5 would still leave White very few winning chances.

White has only a very small advantage – the two bishops and a little more space.

17 xd8+
The plan is to exchange all the rooks and then to activate his king.

17...xd8 18 c1 d7 19 h5!
Stopping Black’s intended ...f6. A typical defensive idea when the opponent has the bishop-pair is to exchange one’s own bishop for its opposite number. White takes steps to prevent this.

19 xc1+ 20 xc1 b6 21 f1 a6 22 d3 c6 23 e4 g6 24 e2 f8 25 d3 e8 26 h2 d5 (D)

27 xd5! exd5 28 e4!

The knight ending gives White excellent winning chances, thanks to his extra space and more active king, and he duly went on to win.
The Perils of Passivity

Flohri – Pirc
Bad Podebrady 1931

In endings, passive play is frequently fatal. Here, Black stands worse because of his isolated d-pawn and inferior bishop, but with accurate play he should still be able to hold. Instead, he plays too passively and allows Flohr to strengthen his position unopposed.

31...d7?
Black should try to place his pawns on dark squares, so 31...a5! is correct.

32 a5!
Now b7 is weak.

32...dxe6 33 b4 dxc7 34 d3 e8 35 f4 d7 36 e2 e8 37 h3 (D)

37...c6?
Again too passive. In such positions, the defender must fight for space and not allow the ‘clamping’ of his kingside. 37...h5 was essential.

38 g4!
Now the h7-pawn is a target.

38...f6 39 c5 e8 40 g5! c7 41 d3 e8 42 h3 d7 43 d4 c7 44 e2 c8 45 h4 e8 46 h5 d7 47 h6 (D)

Since move 37, Black has just sat on his hands, while White has made huge space gains and fixed another weakness at h7. As a result, his advantage has now reached decisive proportions.

47...e7 48 f3 e6 49 h3 d6 50 c5 c8 51 e4 (D)

Another example of the now-familiar device of exchanging off Black’s weak pawn in return for opening lines. The white bishop can now attack Black’s weaknesses.

51...dxe4 52 xex4 c7 52...c7 53 d4 and the white king marches in on e5.

53 xex7+ xex7 54 xex7 e6 55 xa6 xf4 56 c4 1-0
Tip 75
A Lesson in Not Hurrying

Flohr – Bondarevsky
Leningrad/Moscow (training) 1939

White stands better – his minor piece is superior, the pawn on h7, despite being a passed pawn, is just a weakness and White has a potential minority attack on the queenside. Nevertheless, to exploit such an advantage requires outstanding technique, and Flohr gives a true masterclass. The most important thing to notice is how slowly and patiently he conducts the ending. There is no hurry, since Black has no active counterplay, so White can take his time and seize every little advantage, no matter how insignificant it may appear.

54 b4 a5 55 h1 f6 56 h2 g5 57 a4 g7 (D)

58 a5!
Aiming to provoke ...a6, leading to a fixed weakness at b7. By contrast, the standard minority-attack break 58 b5?! is ineffective here, as Black is well placed to meet it by 58...cxb5 59 axb5 c7, with counterplay.

58...c7 (D)
Black prepares counterplay with ...b6 and ...c5.

59 h6+!
Do not hurry; seize every little advantage! White’s plan is h1–c1, but first flicking in this check slightly worsens the position of the black pieces.

59...g6 60 h1 h5?! Passive. Shereshevsky recommends 60...b6 61 c1 e8.

61 c1 a6
 Forced, since 62 a6 was a threat, but now the b7-pawn is fixed as a weakness and White has the plan of transferring his knight to c5.

62 h1 g7 (D)

63 h2!
See move 59. The plan is h4, but first he puts Black in a kind of zugzwang and again
forces a slight deterioration in his piece positioning.

63...c7

Here, the rook is less active than on the open g-file. It may not matter – indeed, as the game goes, it probably does not – but it is a small extra plus for White at no cost, so why not have it anyway?

64 Hh6+! (D)

The same idea as in the previous note.

64...g6 65 Hh4

Flohr reasons that the bishop is slightly worse on g6 than f5.

65...f5

Bondarevsky seems to agree, and can find nothing better than to return it to that square. White’s 64th move has thus won a tempo.

66 e4 dxe4 67 fxe4 g6 68 f4+ e6 (D)

There is no hurry for d3-c5, so Flohr first improves his king’s position.

69...g7 70 d3 w6 71 c5 e7 72 f8 c7 73 e5 e8 74 xe8 xe8 75 f4 b6 (D)

76 a4!

Suppressing counterplay. This keeps the black king out and the rest is easy.

76...bxa5 77 bxa5 f7 78 c5 c4 79 g5 e2 80 h6 d8 81 xh7 e7 (D)

82 g6

The final stage is to transfer the white king to the queenside.

82...f1 83 f5 h3+ 84 e4 g2+ 85 e3 f1 86 d2 f7 87 c3 g6 88 h4 f5 89 b7 1-0

The king comes in and wins the queenside pawns. A marvellous endgame tour de force by Flohr, and a model example of patient, immaculate technique.
**Tip 76**

**Positional Alchemy**

39 g4!
Another typical idea – fixing pawn weaknesses.
39...\(\text{e}7\) 40 \(\text{g}2\)
Threatening \(\text{g}3\)-h3, and so tying down the black king.
40...\(\text{f}8\) 41 \(\text{f}4\) \(\text{d}8\) 42 \(\text{g}3\) \(\text{d}7\) \((D)\)
This move allows the white king in, but if 42...\(\text{e}7\), then 43 \(\text{f}5\) \(\text{c}8\) 44 \(\text{h}3\) \(\text{h}8\) 45 \(\text{d}4\) \(\text{d}6\) 46 \(\text{h}5\) and the threat of h4 and g5 wins material.

Here we see another typical example of transforming an advantage. The main thing one notices about White’s position is his two bishops, but...

36 \(\text{e}7!\) \(\text{d}7\) 37 \(\text{x}f6\) \(\text{gx}f6\)
White has given up the bishop-pair, but has broken up Black’s kingside pawns. Even more importantly, he has removed the only black piece which is capable of defending the weak dark squares c5 and b6. Now Black must constantly worry about the white king penetrating on those squares. Together with his weak kingside pawns, these two weaknesses prove too much.
38 \(\text{e}3\) \(\text{f}8\) \((D)\)

43 \(\text{d}4!\)
Not fearing the discovered check, the white king penetrates through the weakened dark squares.
43...\(\text{f}5\)
43...\(\text{x}g4+\) 44 \(\text{c}5\) is similar.
44 \(\text{c}5\) \(\text{fx}g4\) 45 \(\text{b}6\)
The king has penetrated decisively on the weak dark squares, a direct result of the exchange on move 37.
45...\(\text{c}8\)
Or 45...\(\text{c}8\) 46 \(\text{c}7\) \(\text{e}8\) 47 \(\text{f}5\) \(\text{h}5\) 48 \(\text{h}3\) winning.
46 \(\text{xb}7\)
Now it is all over.
46...\(\text{h}5\) 47 \(\text{xa}6\) \(\text{d}4\) 48 \(\text{b}6\) \(\text{h}4\) 49 \(\text{x}g4!\)
\(\text{xd}3\) 50 \(\text{f}5\) \(\text{h}3\) 51 \(\text{c}5\) \(\text{d}7\) 52 \(\text{a}6\) \(\text{xf}5\) 53 \(\text{xb}4\) \(\text{g}7\) 54 \(\text{a}7\) \(\text{a}3\) 55 \(\text{b}7\) \(\text{c}8+\) 56 \(\text{b}8\)
1-0
**TIP 77**

**The Importance of Calculation**

Calculation of short, concrete variations is integral to good technique.

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**Kotkov – Dvoretsky**  
*Moscow Ch 1972*

54...\(\text{a3+}\) is obvious, but does not solve the problem of the black king being cut off on the a-file. Clearly, Black would prefer first to liberate his king with 54...\(\text{h5}\). The only question is whether White can exchange on h5 and then win the d5-pawn. Answering this question requires a little concrete calculation.

54...\(\text{h5}\)! 55 \(\text{a1+}\)

It turns out that White cannot exchange rooks: 55 \(\text{xe5}\) 65 \(\text{c3}\) \(\text{c2+}\) 67 \(\text{d2}\) (D).

---

The white pawns appear dangerous, but Black wins by 60...\(\text{a5!}\) 61 \(\text{e7}\) \(\text{e4+}\) 62 \(\text{f2}\) \(\text{d6}\). This simple line is not difficult to calculate (Dvoretsky records that it only took him about three minutes). Given that the game continuation is obviously good for Black (his king is freed), no further thought is necessary to decide on 54...\(\text{h5}\).

55...\(\text{b7}\)

Liberating his king has significantly eased Black’s technical problems, and he went on to win as follows:

56 \(\text{f2}\) \(\text{h2}\) 57 \(\text{e3}\) \(\text{h3}\) 58 \(\text{f2}\) \(\text{h2}\) 59 \(\text{e3}\) \(\text{h3}\) 60 \(\text{f2}\) \(\text{h4}\) 61 \(\text{e6}\) \(\text{c7}\) (D).

---

62 \(\text{a8}\) \(\text{h3}\) 63 \(\text{g8}\) \(\text{e7}\) 64 \(\text{b8}\) \(\text{d6}\) 65 \(\text{g1}\) \(\text{c3}\) 66 \(\text{e3}\) \(\text{c2+}\) 67 \(\text{d2}\) (D).

---

67...\(\text{g3!}\)

Not 67...\(\text{b1?}\) 68 \(\text{e2}\) \(\text{h2}\) 69 \(\text{c1!}\).

0-1

A simple but neat example of how a little calculation can simplify a technical task.
Concrete Play

40 \texttt{\textit{c}5!}

The same policy. Rather than exchanging the rooks, which of course would win easily enough, Kaev uses tactics to force the knight back to \texttt{f5} and so maintain the bind. Do not allow unnecessary counterplay!

40...\texttt{\textit{f}5} 41 \texttt{\textit{b}6} a4 42 b3 (D)

42...\texttt{\textit{axb}3} 43 axb3 \texttt{\textit{ex}7} 44 \texttt{\textit{c}5!} \texttt{\textit{f}5} 45 b4!
\texttt{\textit{h}7} 46 \texttt{\textit{c}2} \texttt{\textit{h}6} (D)

Black is completely bound hand and foot, and has no defence to the following breakthrough, which sets up a winning passed pawn on the queenside.

47 c4 \texttt{\textit{d}4+} 48 \texttt{\textit{d}3} bxc4+ 49 \texttt{\textit{xc}4} 1-0

A fine example of meticulous care in a winning position. Yes, White had many ways to win, but such precision is always best, no matter how overwhelming the position.
Another classic technique in the endgame is thinking in terms of schemes.

Vaganian - Postny
Moscow 2004

Vaganian: “Black thought he had a fortress, since the white king cannot penetrate to the queenside. But my plan is simple: the king goes to g5, the exchange ...hxg4 is forced, then the white pawn goes to h6 and forces an entry for the white king via f6.” Vaganian does not worry at this stage about how to achieve the desired set-up, but first determines where he wants his pieces.

36 f3 $\textsf{h}7 37 g4 hxg4
This exchange is forced sooner or later.
38 fxg4 $\textsf{g}6 39 h5+ $\textsf{h}6 40 $\textsf{f}8 $\textsf{a}5 41 $\textsf{g}3 $\textsf{b}7 (D)

42 $\textsf{f}3
“White needs to eliminate the e3-pawn. Then a check from c1 will secure the g5-square for the white king.” (Vaganian). Only now does White concern himself with exactly how to achieve his scheme.

42...$\textsf{d}8 43 $\textsf{e}2 $\textsf{b}7 44 e4 $\textsf{d}xe4 45 $\textsf{e}3 $\textsf{h}7 46 $\textsf{e}7 $\textsf{h}6 47 $\textsf{xe}4 $\textsf{h}7 48 $\textsf{f}4 $\textsf{h}6 49 $\textsf{f}8 $\textsf{d}8 50 $\textsf{g}3 $\textsf{b}7 51 $\textsf{b}4 $\textsf{d}8 52 $\textsf{a}3 $\textsf{b}7 53 $\textsf{c}1+ $\textsf{h}7 54 $\textsf{g}5 $\textsf{g}8 55 $\textsf{a}3 $\textsf{h}7 (D)

56 $\textsf{h}6! $\textsf{g}8 57 $\textsf{e}7!
57 $\textsf{f}8? gxh6+ 58 $\textsf{x}h6 $\textsf{h}7 59 $\textsf{f}8 $\textsf{g}8 60 $\textsf{b}4 $\textsf{g}7 is a draw. “Therefore White waits until the black knight is on a dark square; only then does the white king get to f6.”
57...$\textsf{a}5 58 $\textsf{f}8!! (D)

58...$\textsf{c}6
58...gxh6+ 59 $\textsf{x}h6 $\textsf{h}7 60 $\textsf{f}8 $\textsf{g}8 61 $\textsf{b}4! (the point, gaining a tempo to allow the white king to reach f6) 61...$\textsf{b}7 62 $\textsf{f}6 and White wins.
59 $\textsf{b}7 gxh6+ 60 $\textsf{x}h6 $\textsf{a}5 61 $\textsf{f}6 $\textsf{a}4 62 $\textsf{c}1 $\textsf{f}8 63 $\textsf{a}3+ $\textsf{e}8 64 $\textsf{d}6 1-0
Bad bishops are often good defenders of weaknesses, and the winning plan therefore may occasionally involve exchanging off the opponent’s bad bishop, paradoxical as this may seem.

51...f5? 50 g4 h5! (D)

This loses tactically, but exchanging allows Black to show his idea. Larsen gives the following illustrative variation: 51 xh5 xh5 52

White is in zugzwang and must lose a pawn, in view of 57 d3 e2. Note how vulnerable his weak pawns are (especially e4), now that the bishop does not protect them.

White's bishop is now trapped, and he lost on move 75.

Here is another classic example of the same theme:

Petrosian played 18 c5! exchanging off Black’s bad bishop. He went on to win a long ending, where the weakness of the black pawns (e.g. f6) proved decisive.
Now Black must also watch for the white king entering via d3-e4-f5, etc. See also Tip 12 for a similar example.

36...\textbf{Dd6}

36...\textbf{Db6} 37 \textbf{Cc2} \textbf{Dc8} 38 \textbf{g4} \textbf{Db6} 39 \textbf{Dd3} \textbf{Dd5} 40 \textbf{h3}+ \textbf{Cc5} 41 \textbf{Ce4} (D), winning, is a typical example of the importance of the second weakness.

37 \textbf{h3}!

Now that the black knight has been diverted to defend the second weakness, White returns to his queenside plans.

37...\textbf{f5} 38 \textbf{aa4} e4 39 \textbf{Cc2} (D)

39...\textbf{Cc4}?

A blunder, but even after 39...\textbf{Db6} 40 \textbf{b4} axb4 41 \textbf{xb4} White is winning, as Black cannot cope with the twin threats of the a-pawn’s advance and the white king penetrating into the kingside.

40 \textbf{b3} 1-0

He loses the a-pawn for no compensation.
In general isolated pawns are a weakness and are a disadvantage in endgames, as we have seen many times already in this book. However, part of the charm of chess is that every rule has its exceptions, and really strong players are adept at finding and exploiting these. Here is a case where White voluntarily chooses to have his queenside pawns broken up.

\[ \text{\textbf{Xxd4}} \, 21 \text{\textbf{Xxf7}} \, \text{gxh6} \, 22 \, \text{g3} \, \text{\textbf{Xd2}}, \text{Black's rook would have been able to take the a- and b-pawns on consecutive moves. In the game, however, it will take the rook one extra move to eliminate both white queenside pawns. In addition, White is able to use the b-file.} \]

\[ 22 \text{\textbf{Xb1}} \, \text{\textbf{Xg5}} \]

\[ 22...\text{b6} \, 23 \text{\textbf{Xxa7}} \, \text{\textbf{Xd3}? loses to 24 \text{\textbf{Xa8+}}.} \]

\[ 23 \text{\textbf{Xh4! \, Xb5}} \, 24 \text{\textbf{Xxb5}} \text{\textbf{cxb5}} \, 25 \text{\textbf{Xxh7}} \, (D) \]

White's passed pawns are much quicker. He won as follows:

\[ 25...\text{\textbf{Xd1+}} \, 26 \text{\textbf{Xh2}} \, \text{\textbf{Xd2}} \, 27 \text{\textbf{Xxh6}} \, \text{\textbf{Xxa2}} \]

See the earlier note!

\[ 28 \text{\textbf{h5}} \, \text{\textbf{Xxf2}} \, 29 \text{\textbf{Xh8+}} \, \text{\textbf{Xc7}} \, 30 \text{\textbf{h6}} \, \text{\textbf{Xb6}} \, 31 \text{\textbf{Xh3 a5}} \, (D) \]

The ending is going to be a race between White's kingside pawns and Black's queenside counterplay. If White had played 20 \text{\textbf{Wxd4?!}}

\[ 32 \text{\textbf{g4}} \, \text{\textbf{b4}} \, 33 \text{\textbf{cxb4}} \, \text{\textbf{axb4}} \, 34 \text{\textbf{Xe8}} \, \text{\textbf{Xf1}} \, 35 \text{\textbf{Xg2}} \]

\[ \text{\textbf{Xf7}} \, 36 \text{\textbf{g5}} \, \text{\textbf{Xf5}} \, 37 \text{\textbf{h7}} \, \text{\textbf{Xxg5+}} \, 38 \, \text{\textbf{Xf3}} \, \text{\textbf{Xh5}} \, 39 \text{\textbf{h8W}} \, \text{\textbf{Xxh8}} \, 40 \, \text{\textbf{Xxh8 1-0}} \]
More Breakthroughs

In Tip 5, we saw some tactical pawn breakthroughs in king and pawn endings. The same idea also occurs in other endings.

Black had been suffering in a slightly worse position for the whole game.

59 \( \text{xf6} \) \( \text{xa7} \) 60 h5 \( \text{a6}?! \)

Now Black’s position appears lost. 60...gxh5
61 gxh5 \( \text{a6} \) is a better try, although Black is still struggling to save the game. Now White produced the familiar breakthrough idea, thereby securing a decisive passed pawn on the h-file.

61 g5! hxg5 62 h6 \( \text{xa5} \) 63 h7 \( \text{d8} \) 64 \( \text{xf7} \) b5 65 cxb5 (D)

Here, Korchnoi gave his time-troubled opponent a very nasty shock:

36...g4!

This forces a passed h-pawn.

37 hxg4 h3 38 \( \text{c2} \)

The only hope was 38 f3 h2 39 \( \text{f2} \), although after Korchnoi’s 39...a5! Black should still win.

38...\( \text{e4+} \) 0-1

After 39 \( \text{d2} \) \( \text{c1!} \) the first rank gets blocked and the h-pawn queens.

65...\( \text{xb5} \)

After 65...cxb5, White wins by 66 \( \text{g7} \) \( \text{h8} \)
67 d5 g4 (67...b6 68 d6 \( \text{c6} \) 69 d7 and 70 \( \text{g8} \) 68 d6 g3 69 d7 g2 70 \( \text{xg6} \).

66 \( \text{b7}+! \) \( \text{a6} \) 67 \( \text{g7} \) \( \text{h8} \) 68 \( \text{e4} \) \( \text{b5} \) 69 \( \text{f3} \) \( \text{c4} \) 70 \( \text{d7} \) \( \text{d3} \) (D)

Karpov – Hort
Tilburg 1979

71 \( \text{g4} \) \( \text{xb7} \) 72 \( \text{xh7} \) \( \text{xd4} \) 73 \( \text{d7+} \) 1-0

After 73...\( \text{e5} \) (trying to shoulder-charge the white king – see Tip 2) 74 \( \text{g7} \) c5 75 \( \text{xg6} \) c4
76 \( \text{xg5+} \) \( \text{d4} \) 77 \( \text{f3} \) White wins.
I was present at this game, and after heavy exchanges in the opening, many in the audience (as well as Ernst, I suspect) expected a quick draw. However, after Smyslov’s next move, it became clear that White has a serious advantage. Rooks and bishops tend to work well together in such positions.

20 g4!
Seizing space and preparing to open lines on the kingside.

20...h6 21 h4 a7
He hopes to exchange all the rooks on the c-file, but White does not oblige.

22 Hc1! Hg7 23 f4 Hc5 24 h5 (D)

27...Ha7
27...Hc7 loses control of the c-file after 28 b4 Hc3 29 Hc1, with decisive effect.

28 Hd4 a5 29 e5 Hc8 30 Hc1 Hb6
30...b6 31 f5 is winning for White.

31 Hc5 dxc5+ 32 Hxc5 Ha4+ 33 Hd4 Hxb2 (D)

33...Hc8 34 d6 wins for White.

34 Hb5!
Now the knight is trapped in enemy territory. The rest is just a mopping-up exercise.

34...a4 35 d6 exd6 36 exd6 Hd8 37 d7 He6
38 He1 a3 39 Hc3 Ha8 40 He8 Ha4+ 41 Ha4 1-0

It is hard to believe that the initial position is lost for Black, but even harder to pinpoint what he did wrong thereafter.
Workmanlike Technique

38...\textit{\textbf{a}}c7 39 \textit{\textbf{a}}5 \textit{\textbf{d}}d6+ 40 \textit{\textbf{d}}d5 \textit{\textbf{c}}c8
After 40...\textit{\textbf{b}}xa5 41 \textit{\textbf{x}}xb7+ \textit{\textbf{c}}c8 42 \textit{\textbf{b}}b5 the a-pawn is weak.
41 \textit{\textbf{a}}xb6 \textit{\textbf{f}}6?! (D)
Missing his one and only chance, which was 41...\textit{\textbf{c}}xb6; e.g., 42 \textit{\textbf{e}}e5 \textit{\textbf{c}}c7 43 \textit{\textbf{e}}e5+ \textit{\textbf{d}}d7 44
\textit{\textbf{x}}xb7 \textit{\textbf{d}}d2 with counterplay (Simagin).

42 \textit{\textbf{f}}f3 \textit{\textbf{e}}e7 (D)
Winning a pawn in view of 43...\textit{\textbf{h}}6 44 \textit{\textbf{f}}f7.
43...\textit{\textbf{c}}c7 44 \textit{\textbf{e}}e5+ \textit{\textbf{b}}b8 45 \textit{\textbf{x}}xb7 \textit{\textbf{d}}d5+ 46
\textit{\textbf{f}}f3 \textit{\textbf{e}}e7 (D)

47 h4!
Preparing h5, to free the bishop. Black has lost a pawn and still has no counterplay.
47...\textit{\textbf{b}}b6 48 \textit{\textbf{h}}h5 \textit{\textbf{c}}c7 49 h5 \textit{\textbf{a}}a6 50 c4 \textit{\textbf{g}}xh5
51 \textit{\textbf{c}}c5 \textit{\textbf{d}}d4 52 h3
The rest is easy.
52...\textit{\textbf{c}}c6 53 \textit{\textbf{e}}e3 \textit{\textbf{d}}d8 54 \textit{\textbf{e}}e4 \textit{\textbf{a}}a5 55 \textit{\textbf{c}}c2
h4 56 \textit{\textbf{h}}h5 \textit{\textbf{e}}e8+ 57 \textit{\textbf{d}}d2 \textit{\textbf{g}}g8 58 \textit{\textbf{x}}xb4 h5 59
\textit{\textbf{x}}f4 \textit{\textbf{b}}x4 60 \textit{\textbf{b}}x4 \textit{\textbf{x}}xg2 61 \textit{\textbf{xf}}6+ \textit{\textbf{a}}a7 62 \textit{\textbf{c}}c3
\textit{\textbf{g}}g4 63 \textit{\textbf{f}}f4 \textit{\textbf{b}}b7 64 \textit{\textbf{b}}b4 1-0


Tip 86

A Two-Bishops Masterclass

20 ał6 ąd8 21 b4 exb4 22 axb4
Now Black must guard the c-file against entry by the white rooks.
22...ałc8 23 ałe2 ałe6 24 ałf2 ałac8 25 ała1 ałc6 26 ała6 (D)

26...ałb8
26...ałc7 27 ałhc1 ałd7 28 ałb5 leaves Black badly tied up, since the attempt to free himself tactically fails: 28...ałxb4? 29 ałxd7 ałd3+ 30 ałg3 ałxc1 31 ałxe6+ winning.
27 ałb5 ałxb4 28 ałxa7+ ałg8 29 ałe7 ałf7 30 ała1
Preparing to double on the 7th, while the b6-pawn is doomed.
30...ała8 31 ałd7 ałd8 32 ałxa8 ałxa8 33 ałxb6 (D)

White has won a pawn, and retains the bishop-pair. The remaining moves can be seen in Tip 36.
Tip 87

Appearances can be Deceptive

\[
\begin{array}{c}
\text{W} \\
\text{B}
\end{array}
\]

Andersson – Gheorghiu
Moscow IZ 1982

Superficially, this simplified, symmetrical structure may look drawish, but White’s superior piece activity actually gives him a near-decisive advantage. He controls both open files, his knight is more active, he has penetration squares along the 6th rank, and his king is nearer to the centre. Andersson, the great endgame grinder, wins in a canter.

20 \text{\textit{d}}d6 \text{h}6 21 \text{e}4
Taking the squares d5 and f5 from the black knight.

21...\text{\textit{e}}8?! 22 \text{\textit{f}}3 \text{\textit{a}}8
Black is struggling for a constructive plan. He settles on ...a5 and ...b5, but he could have saved a tempo by playing this last move.

23 \text{\textit{c}}c3 a5 24 \text{\textit{d}}d1! (D)

The use of tactics to maintain the advantage is a key element in good technique. Now grabbing the pawn by 31...\text{\textit{c}}xa2? loses to 32 \text{\textit{f}}8+ and \text{\textit{f}}7+.

31...\text{\textit{e}}7 32 \text{\textit{g}}8 \text{\textit{d}}6 33 \text{\textit{d}}d8+ \text{\textit{e}}7 34 \text{\textit{a}}8 \text{\textit{x}}a2 35 \text{\textit{x}}a5 (D)

White is a pawn up with the better position. The rest is easy.

35...\text{\textit{c}}c3 36 \text{\textit{d}}d3 \text{b}4 37 \text{\textit{a}}6 \text{\textit{b}}5 38 \text{\textit{c}}c6+ \text{\textit{d}}7 39 \text{\textit{d}}d4 \text{\textit{x}}d4 40 \text{\textit{a}}d4 \text{\textit{e}}7 41 \text{g}4 1-0
Tip 88

Overcoming the Blockade

P.H. Nielsen – Harikrishna
Hastings 2002/3

42 h3 \(\text{f8}\) 43 f3 \(\text{wc7}\) 44 g4 \((D)\)

44...hxg4 45 fxg4!
The decisive moment. Instead of the routine capture towards the centre, White takes the other way, setting up a potential outside passed pawn on the h-file. This pawn will stretch the defences to breaking point (the two-weaknesses principle). We have already seen other examples of non-routine handling of pawns, so as to create a passed pawn; for example, Khalifman-Salov, Tip 20.

45...\(\text{wc5}\) 46 \(\text{dt3}\) \(\text{wb4}\) 47 \(\text{we2}\) \(\text{wa3}\) 48 \(\text{wd3}\) \(\text{wb4}\) 49 h4! \(\text{de8}\) \((D)\)

\[\]

34 h3 \(\text{df5}\) 35 \(\text{wd3}\) \(\text{cd6}\) 36 \(\text{ce2}\) \(\text{we1}\) 37 \(\text{dx3}\) \(\text{we5}\) 38 \(\text{we3}\) 39 \(\text{wd4}\)

White patiently improves the position of his pieces. It is clear that Black can never exchange queens, so he is forced to give ground.

39...\(\text{g8}\) 40 \(\text{a4}\) \(\text{wd7}\) 41 \(\text{we5}\) h5

White has patiently probed for a few moves, and now starts the decisive advance.

\[\]

50 \(\text{wd4}\) \(\text{wa3}\)
50...\(\text{xb3}\) 51 d6 wins for White.
51 h5 gxh5 52 gxh5 \(\text{g8}\) 53 \(\text{we5}\) \(\text{f8}\)
53...\(\text{dx6}\) 54 h6.
54 \(\text{de4}\) f5 55 \(\text{g5}\) \(\text{df6}\) 56 \(\text{xf5}\) \(\text{wh6}\) 57 d6 \(\text{xf5}\) 58 d7 \(\text{wd6+}\) 59 \(\text{we3}\) \(\text{we7+}\) 1-0
Not waiting for 60 \(\text{we6+}\) \(\text{f8}\) (or 60...\(\text{xe6+}\) 61 \(\text{xe6}\)) 61 \(\text{d8}\) \(\text{w+}\), winning.
**Tip 89**

**Squeeze Play**

31...exf5 32 e5 dxe5
Forced, else g6 drops, but now White has a powerful passed e-pawn, which proves decisive.
33 dxe5 (D)

33...b4+
The pawn will be lost anyway after d4-c5.
34 axb4 axb4+ 35 d7 d6 36 b3 c6 37 c5 (D)

37...e8?
Losing immediately. 37...f3 is far tougher, but even then, Marin’s analysis suggests that White is winning. He plays g8-h7, and then forces the exchange of the e-pawn for that on g6. In the resulting position, he can drive the black king back and get his own king to e5, with decisive effect. Averbakh analysed a similar 2 vs 1 position many years ago.
38 e6 1-0
It is zugzwang, as the bishop has no safe square.

Aronian – Svidler
Morelia/Linares 2006

This position looks harmless for Black, but this is not so.
17 g4!
We have seen this idea several times already in this book. White sets up a squeeze on the kingside.
17...h6 18 h4 a5 19 g5 hxg5 20 hxg5 xc1 21 xc1 xc8 22 xc8 xc8 23 e5
Black’s kingside pawns are fixed on light squares, and f7 is weak.
23...b7 24 a3 c6 25 g4 b8 26 d2 c5 27 c3 d7 28 f4 a5 29 e4 b5 30 c2 (D)

30...f5?!
Black loses patience. There are no direct threats, so he should sit tight.
31 exf5!
31 gxf6+ is more natural, but Aronian sees that the time is ripe to enter a bishop ending.
The Power of the King

42 f4 e4 43 \(\text{Nh3}\) f8 44 \(\text{f1}\) a4 45 f5 \(\text{e8}\) (D)

46 \(\text{f4}\)

The king enters the fray. The black king cannot come to e7, because it must keep guard on White's queenside pawn-majority — another example of the principle of two weaknesses in action.

46...\(\text{f7}\) 47 \(\text{e3}\) b6 48 \(\text{xb6}\) \(\text{xb6}\) 49 \(\text{e5}\) \(\text{e5}\) 50 h5+!

Deflecting the enemy king, and allowing a decisive penetration.

\(\text{xe5}\) 51 \(\text{d6}\) (D)

The white king cannot be prevented from helping itself to a whole piece after the 52 \(\text{e7}\), trapping the knight or forking two pieces.

51...\(\text{h5}\) 52 \(\text{e7}\) \(\text{g6}\) 53 \(\text{fxg6}\) \(\text{xg6}\) 54 \(\text{d6}\) \(\text{b4}\) 55 \(\text{xd5+}\) \(\text{c4}\) 56 \(\text{e5}\) \(\text{d3}\) 57 \(\text{f4+}\) 1-0

The power of the king as an active piece is one of the main characteristics of the endgame. Here, the white king marches right into the heart of the black position and nets a whole piece.

38 \(\text{g5}\) \(\text{d7}\) 39 e4 e5

Black tries to confuse matters rather than wait passively, but on this occasion, this may be the wrong approach. If he sits tight, his king can protect the central squares and prevent the white king from entering the position. It is not then obvious how White can win.

40 \(\text{e3}\) \(\text{c2}\) 41 \(\text{exd5}\) \(\text{xd5}\) (D)

Now the downside of Black's 39th move is clear. The exchange on d5 has given White a potential outside passed pawn on the queenside, which proves vital as play proceeds.
Calculate Your Way to Victory

Black must keep the b3-pawn blocked. After 49...a3? White frees his bishop by 50 b4! \(a\)xb4 51 \(b\)b3 \(b\)b2 52 \(d\)d1 and draws.

50 \(d\)d3 (D)

After 50 a4 \(c\)1 the bishop is lost.

50...\(b\)1!

Karpov had to see this move, and the next, before trading rooks. Both 50...\(c\)1 51 \(e\)2 \(e\)7 52 b4! and 50...\(xa\)2 51 \(c\)2 only draw.

51 a3 \(c\)1!! 52 \(e\)2 \(xa\)3 (D)

The key to Black’s winning idea is that the white bishop is extremely short of squares.

53 b4

The only way to save the bishop, but by comparison with the line given in the note to Black’s 49th move, here White has had to give up the a-pawn as well, which proves fatal.

53...\(xa\)4 54 \(a\)4 \(b\)2 55 \(d\)1 \(b\)3 56 \(c\)6 \(a\)1 0-1

Beautiful play by Karpov.
**Tip 92**

**Fighting for Space**

In many endgames, it is important to fight for space, and not allow one's position to be clamped by an enemy pawn advance.

With the threat of breaking in down the h-file (two weaknesses).

41...\(\text{Bd}6\) 42 \(\text{Bh}1\) \(\text{(D)}\)

**Stein – Bronstein**  
*Moscow (Alekhine mem) 1971*

Although an exchange for a pawn down, White stands better, because of his passed d-pawn and Black's weaknesses on a5 and c5. Even so, Black should be able to draw with correct defence.

37...\(\text{Bf}6\)?
Too passive. It is essential to fight for space in such positions, so 37...h5 gives Black much better survival chances.

38 g4! \(\text{(D)}\)

Simply comparing with the starting position shows how much progress White has made in the past five moves.

42...\(\text{Bd}6\) 43 \(\text{Bh}4\) \(\text{Ba}8\) 44 \(\text{hxg}6\) \(\text{fxg}6\) 45 \(\text{Bf}4+\) \(\text{Bf}7\)
Else the white rook goes to f6 and then c6.

46 \(\text{Bxf}7+\) \(\text{Bxf}7\) 47 d6+ \(\text{Be}8\) 48 \(\text{Bd}5\) \(\text{Bc}8\) 49 \(\text{Bc}6+\) \(\text{Bf}7\) 50 \(\text{Bc}4\) \(\text{(D)}\)

The white pieces dominate and he will simply pick off the c5-pawn and then win with his two passed pawns. Note how passive Black's position has been, ever since he allowed White to clamp the kingside.

50...\(\text{Bc}6\) 51 \(\text{Bxc}5\) \(\text{Bxc}5\) 52 \(\text{Bxc}5\) \(\text{Bf}8\) 53 \(\text{Bd}5+\) \(\text{Bd}7\) 54 f3 \(\text{Bh}8\) 55 \(\text{Bc}6+\) \(\text{Be}6\) 56 b6 \(\text{Bd}8\) 57 b7 \(\text{Bb}8\) 58 f4 1-0
**Tip 93**

The Importance of Playing On

28...\textit{a}7 29 \textit{d}6d2?! (D)

White fails to find anything to do, and soon loses the initiative.

29...b4 30 axb4 \textit{b}b4!

A few vacillating moves by White have given Black a large advantage already.

31 \textit{a}a1 \textit{b}xb4 32 \textit{a}a3

White is terribly passive after 32 \textit{a}a2 \textit{c}c4.

32...a4 33 \textit{a}a2 \textit{c}c4 34 \textit{b}b1 \textit{f}f1 35 \textit{a}a2 \textit{b}ab7 (D)

36 \textit{c}c2?!

Collapsing immediately. 36 \textit{f}f2 keeps White on the board.

36...\textit{x}xb2 37 \textit{x}xa4 \textit{c}c7! 38 \textit{f}f2

38 \textit{c}c1 \textit{c}c3+ 39 \textit{d}d4 \textit{x}xd2+ 40 \textit{xc}3 \textit{d}d1 is equally hopeless for White.

38...\textit{b}b5 0-1

An object lesson in the advantage of playing on in equal positions.

"You don’t win by resigning", the saying goes. One can add to this that you don’t win by agreeing draws either. An equal position is not the same as a drawn position, and many games have been won by a determined player grinding on in an objectively equal position. This is a case in point. With a near-symmetrical, heavily simplified position, many players would be tempted to shake hands, but Topalov just plays on, and the result is that a world-class player loses as White inside 20 more moves.

21 \textit{d}6d4 \textit{e}e8 22 \textit{c}c1 a5 23 f3 \textit{e}e7 24 e4 \textit{d}e8 25 a3 g5 (D)

Securing e5 for his knight.

26 \textit{c}c3 \textit{e}e5 27 \textit{d}d4 \textit{a}6 28 \textit{d}d6?!

It is better to exchange knights by 28 \textit{d}d3.
The Outside Pawn-Majority

Black’s rook is the more active, so he avoids its exchange.
33 h3 d1+ 34 c2 g1 (D)

Black’s rook is the more active, so he avoids its exchange.
33 h3 d1+ 34 c2 g1 (D)

F. Olafsson – Benko
Bled/Zagreb/Belgrade Ct 1959

This may appear a fairly equal position, but in fact Black’s superior kingside pawn-structure gives him the advantage.
25...f5 26 f2 f7 27 e3

Note that he cannot himself exchange pawns because of 27 exf5? g3+! and Black wins the exchange.

27...fxe4 28 fxe4 (D)

Now the 2 vs 1 kingside majority promises Black an outside passed pawn, whereas White’s own passed e-pawn is easily controlled by Black and constitutes more of a weakness than a strength.

35 d2 g5 36 h6+ f7 37 d3 g3+ 38 e2 g2+ 39 d3 g4 40 e5
White’s passed e-pawn is no use at all, so he trades it off to get at Black’s queenside pawns.

40...xe5 41 xxe6 g3 42 e3
A sad necessity, as 42...xd2+ was a threat.

42...xb2 43 a4
White hopes to exchange the queenside pawns and sacrifice his bishop for the g-pawn, so as to reach g vs f, but Benko is too alert to allow this.

43...b4 44 xb4 g2 (D)

The rest is easy.

45 e4 e2 46 f3 xex3+ 47 xg2 xh3 48 b5 d6 49 f2 e6 50 e2 d5 51 a8 e4
52 a6 c5 53 c6 e3+ 54 xd2 e7 0-1
White loses both of his pawns.
Tip 95

Too Brutal

Tartakower – Asztalos
Budapest 1913

31...e8 32 d2 d7 33 c2 e8 34 b2 d7
Black is totally helpless, and can only await developments.
35 a3 e8 36 a4 d7 (D)

37 a8!
Preparing the road for the king. The immediate 37 a5 d8+ gets nowhere, so the bishop first manoeuvres to b6, to shelter the white king.
37...e8 38 a7 d7 39 b6 d4 (D)
Tartakower shows that further passive play by 39...a8 loses after 40 a5 b7 41 c5+ e8 42 c7, followed by b6.

He has to keep the knight out of f6, else he loses the h7-pawn.
30 e5 d7 31 e2
Bringing the white king into Black’s position is the final step. The king is ultimately heading for b6.

40 e4 e8 41 e5 d7 42 f2 1-0
The knight comes to e4 and wins the c5-pawn. In the first volume of his best games collection, Tartakower recalls that he was at first awarded a special prize for this game, but the judges later changed their mind and took it away, on the grounds that the game was too brutal!
The Minority Attack

This advance is the climax of Black’s minority attack.

34 bxa3

34 \textbf{b}1 is better, although still bad after 34...axb2 35 \textbf{x}xb2 \textbf{c}c3+ 36 \textbf{e}e2 \textbf{x}xg3 37 \textbf{x}xb4 \textbf{g}4.

34...\textbf{c}c3+ 35 \textbf{e}e2 \textbf{x}xa3 36 \textbf{d}d4 \textbf{x}xa2 37 \textbf{x}xb4 \textbf{x}xe2 38 \textbf{x}xe2 \textbf{c}c2+ 39 \textbf{e}e3 \textbf{c}c3+ 40 \textbf{f}f2 \textbf{c}c6 41 \textbf{b}b8 (D)

Many endings arising from the Sicilian Defence favour Black, because of the half-open c-file and a potential minority attack on the queenside. This position, although it actually arose from a French Defence, shows the typical Sicilian endgame. White’s problems are exacerbated by his advanced kingside pawns, which are vulnerable to a black rook getting round the back. That may not seem very likely at present, but Yanofsky soon manages it.

23...\textbf{h}c8 24 \textbf{c}c1 \textbf{e}c5 25 \textbf{e}e2 \textbf{h}b8 26 \textbf{d}d2 \textbf{a}a4 27 \textbf{d}d3 \textbf{d}d7 28 \textbf{d}d4 \textbf{b}b5

Exchanging the bishop which defends the c2-pawn.

29 \textbf{x}xb5+ \textbf{x}xb5 30 \textbf{f}f1 \textbf{b}c5 31 \textbf{d}d3 \textbf{e}c4 32 g3 a4 33 \textbf{c}c1 (D)

41...\textbf{d}d7

41...\textbf{c}c5! wins; e.g., 42 \textbf{b}b7 \textbf{d}d4 43 \textbf{x}f7 \textbf{e}e4 44 \textbf{f}f6 \textbf{c}c2+ 45 \textbf{e}e1 d4, etc., but Yanofsky is in no hurry. He can always return to this plan later.

42 \textbf{f}f8 \textbf{e}e7 43 \textbf{a}a8 \textbf{c}c7 44 g4? (D)

Hastening the end, but White knew that passive play was hopeless anyway.

44...\textbf{c}c2+ 45 \textbf{e}e3 \textbf{h}xg4 46 \textbf{a}a7+ \textbf{f}f8 47 f5 \textbf{g}xf5 48 \textbf{f}f4 \textbf{c}c4+ 49 \textbf{g}g5 g3 50 \textbf{f}f6 \textbf{e}e8 51 \textbf{x}f7 g2 0-1
Tip 97

Attacking the King

Naturally, direct attacks on the enemy king are relatively uncommon in endgames, but the absence of queens does not invariably preclude a kingside attack, as Kramnik demonstrates here.

If 40...f6, then 41 \(\text{Af}5+\) \(\text{Ef}7\) 42 \(\text{Ag}1\) \(\text{Ff}8\) 43 \(\text{Ah}7\) is crushing. In this, as in other variations, the power of White's bishop-pair is central.

41 \(\text{Ah}4\) (D)

Black is somewhat tied up, but his queenside weaknesses are defended adequately, and it is not easy for White to make further progress on that side of the board. Kramnik therefore sacrifices a pawn to convert his space and mobility advantage into a direct attack on the black king.

36 \(g5!\) \(\text{hx}g5\) 37 \(\text{hx}g5\) \(\text{Axg}5\) 38 \(\text{ce}6\) \(\text{Ec}8\) 39 \(\text{Ah}1\) \(\text{Gg}8\) 40 \(\text{Aal}\) (D)

41...f6
Or 41...\(\text{Gh}7\) 42 \(\text{Ah}1\) \(\text{Ef}8\) 43 \(\text{Ee}4\) \(g6\) 44 \(\text{Ad}5\) \(\text{Dd}8\) 45 \(f4\) and Black has no defence to \(f5\).
42 \(\text{Gg}1\) \(\text{Ff}7\) 43 \(\text{Ad}5!\)
Avoiding the nasty trick 43 \(f4?\) \(\text{Gh}3!!\). Tactical alertness is always important!
43...\(\text{Ee}8\) 44 \(\text{Nh}8+\) \(\text{Ff}8\) 45 \(f4\) \(\text{Ge}6\)
45...\(\text{Gh}7\) 46 \(\text{Gg}8\), or 45...\(\text{Ff}7\) 46 \(\text{Cc}6+\).
46 \(\text{Ff}3\)
46 \(\text{Ax}e6\) \(\text{Ax}e6\) 47 \(\text{Gg}7\) wins, but there is no hurry – Black is so tied up that he can hardly move a piece without dropping something.

46...f5 (D)

Simply threatening to double rooks on the h-file.

40...\(\text{Ec}e6\)

47 \(\text{Gg}6!\) \(\text{Ec}5\) 48 \(\text{Ax}g7\) \(\text{Af}7\) 49 \(\text{xf}8\) 1-0
Black loses a rook after 49...\(\text{xf}8\) 50 \(\text{xf}8+\) \(\text{xf}8\) 51 \(\text{Gg}8+\).
Tip 98

The Power of Zugzwang

Zugzwang is an important element in many endings, and is often the simplest way to clinch a position. Here, we see Fischer using the weapon to perfection, to wrap up a decisive positional advantage.

Now White’s passed d-pawn will decide the game.

27...\(f7\)

After 27...\(\text{d}7\), Fischer gives 28 \(\text{c}7\) \(\text{b}6\) 29 \(\text{b}3\) \(\text{h}8\) 30 \(\text{xa}6\) \(\text{xd}5\) 31 \(\text{xd}5\) \(\text{xd}5\) 32 \(\text{a}7\) winning.

28 \(\text{b}3\) \(\text{f}7\) (D)

White pursues his initiative energetically, taking advantage of the passive and uncoordinated black pieces.

29 \(\text{d}6!\)

If 29...\(\text{b}5\), then 26 \(\text{b}3\) \(\text{f}7\) 27 \(\text{c}6\) \(\text{c}7\) 28 \(\text{a}5\) followed by 29 \(\text{a}4\), when the a6-pawn will fall.

29...\(\text{b}5\)

30 \(\text{b}8\)

31 \(\text{bb}7\)

32 \(\text{dxc}7\) \(\text{c}8\) (D)

\(33\) \(\text{b}3!\)

After this, no black piece can move: rook and king moves allow \(\text{b}8\), and knight moves allow \(\text{e}6\). Black is therefore reduced to pawn moves, and when these run out, he will be in zugzwang.

33...\(\text{a}5\) 34 \(\text{a}4\) \(\text{h}6\) 35 \(\text{h}3\) \(g5\) 36 \(\text{g}4\) \(\text{fxg}4\) 37 \(\text{hxg}4\) 1-0
Passed Pawns are the Key

Passed pawns are one of the key elements in endgames. We have already seen various methods of manufacturing passed pawns, and here is another. The position looks solid and one would expect a long period of manoeuvring, but instead White finds a tactical means to strike immediately (never forget tactics!) and set up a winning passed pawn on the c-file.

16 e5!! dxe5
Now the queenside pawns become rampant, but allowing exd6 is also unpleasant.
17 h5 fxe5 18 c5 d7 19 d5 e6 20 e7+ g7 21 c6 bxc6 22 bxc6 b6 23 c7 d7 24 fd1 (D)

This position arises by force after 16...dxe5, and it is easy to see that White has a decisive positional advantage. The pawn on c7 ties Black hand and foot and will sooner or later result in significant material losses.

24...a4 25 d6 f6 26 xb6 x7 27 b7 f6
Both 27...d7? 28 c8 w axc8 29 d1 and 27...d6 28 a6 d7 29 d1+ c6 30 xd7 xd7 31 c8 w++ lose.
28 c6! c6 29 b8 e8 30 c1 (D)

30...xb8
Black must lose material; e.g., 30...d7 31 x8 a8 32 a6 c8 33 b1! x6 34 b8.
31 cxb8 w xb8 32 xc6
Now White wraps up easily.
32...b2 33 c4 h5 34 h4 g5 35 hxg5+ xg5 (D)

36 h2 b4 37 b3 a5 38 a6 b5 39 a7 f6 40 a4 1-0
Don't Forget Combinations!

Here is another example of the importance of tactics and combinations in endings. White has a substantial space and mobility advantage, but it is not apparent how he can actually break through, since the black knight is playing a key defensive role. Kramnik supplies the answer – a combination!

35 $d8+ $xd8 36 $xd8+ $b7 37 $c3

Black is totally passive, so White first improves his king.

37...$a6 38 $d3! $c7 39 $e4 $b7 40 $d1 $c8 41 $d8+ $b7 (D)

now ready to strike with the decisive breakthrough.

46 $f6!!

This is White's idea. The piece sacrifice creates a passed h-pawn, which proves decisive. 47 $xg7, followed by 48 h6 is a threat – knights hate rook's pawns!

46...g6

The main line is 46...gx6 47 exf6 $e8 (the knight cannot get to g6 – 47...$h4 48 $g4! $fx5 49 $g5 and h6 wins) 48 $xc8 $xc8 49 $g5+$d7 50 h6 $xh6 51 $xh6 e5 (D) and now White wins the pawn ending:

52 $h7! (triangulation) 52...e4 (52...$e6 53 $g7 a3 54 f3 zugzwang) 53 $g7 $e6 54 a3 zugzwang.

47 hxg6 fxg6 48 $g5 1-0

A fine example of the importance of combinations and accurate calculation in endgames.
The positional draw is a concept familiar from the world of endgame studies, where some astonishing examples are to be found. The idea arises much less often in practice, but it should not be forgotten, as it can sometimes enable precious half-points to be salvaged from apparently hopeless positions.

49...g6?! At once Black commits an inaccuracy. Botvinnik gives 49...h5! 50 @b8+ (50 c6 @c3 51 @b7 @h6 52 @d7 @g4 53 @xd6 @c1+ 54 @g2 @c2+ is also winning for Black) 50...@h7 51 @f8 dx@c5! 52 @xf7 exf4 53 @xf4 @xe4, when Black should win the rook ending, since White's pawns are too weak.

50 c6 @c3 (D)

White's position is lost, but with some help from his opponent, he manages to escape by means of a positional draw.

48 c5!
The only chance, using Black's back-rank weakness to set up a passed c-pawn (passed pawns mean counterplay!). After 48 @f2 @d8, the knight comes to c5 and White has no counterplay at all.

48...@xe3 49 @xb2 (D)

Threatening 50 @b8+.

51 @b7! @g7?
Now it is a draw. There is still a win by 51...@f8! 52 @b8+ @g7! 53 @b7 f5! 54 fxe5 dxe5 55 exf5 gxf5 56 @d7 (56 c7 @f6) 56...@f8! 57 c7 @e8, etc.

52 c7
Now it is a draw, as Black cannot free his king and knight without allowing c8w, and his rook is tied to the c-file.

52...@c2 53 @g1 h5 54 h4 @c4 55 @g2 @c2+ 56 @f1 @c4 (D)

½-½