

# MASTERING COMPLEX ENDGAMES

by

Adrian Mikhalchishin  
Oleg Stetsko



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Managing Editor  
Romain Edouard

Translation from the original Russian version  
Jan Rooze

Proofreading  
Daniël Vanheirzeele

Graphic Artist  
Philippe Tonnard

Cover design  
Iwan Kerkhof

Typesetting  
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e-mail: [info@thinkerspublishing.com](mailto:info@thinkerspublishing.com)  
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# KEY TO SYMBOLS

!	a good move
?	a weak move
!!	an excellent move
??	a blunder
!?	an interesting move
?!	a dubious move
□	only move
=	equality
∞	unclear position
∞	with compensation for the sacrificed material
±	White stands slightly better
∓	Black stands slightly better
±	White has a serious advantage
∓	Black has a serious advantage
+-	White has a decisive advantage
-+	Black has a decisive advantage
→	with an attack
↑	with initiative
↔	with counterplay
△	with the idea of
▷	better is
≤	worse is
N	novelty
+	check
#	mate



# FOREWORD

There are many great endgame books on the market, and almost all of them deal with the kind of technical positions which closely resemble theoretical ones.

Transferring complex and complicated endgames into theoretical positions is often what we need to do in chess, and for this we use various methods such as making the right exchanges, improving the King's position, exploiting the power of a passed pawn, and so on.

Nowadays, we usually play endgames with 30 seconds increment, and this forces us to improve our mastery of theoretical positions as well as our knowledge of the methods required in complex endgames.

This book by my friends IGM Adrian Mikhalchishin and IM Oleg Stetsko addresses the techniques and methods required to deal with complex endgames. This is quite a vast and important area, and I am confident that it will set the tone for many more books on the subject.

The Russian original, issued in 2012, was enthusiastically welcomed by Russian speaking trainers and amateurs alike. As a result, I know that even strong players will find very useful and exciting material in this book, for practical as well as educational purposes.

IGM Aleksander Beliavsky.





# INTRODUCTION

“The future belongs to the practical endgame!” predicted Emanuel Lasker in one of his lectures in 1936. Clearly, what he meant was, above all, achievements of the human mind. Many decades later, at a time when the thinking process is influenced by computer technology, one tends to forget these predictions by the great thinker.

In this respect, the assessment of modern developments in the game by the famous and highly experienced Grandmaster Evgeny Shveshnikov is quite relevant: “Chess is a very precise mathematical exercise, which you need to study from two angles: the opening and the endgame. A deeply analysed opening often leads directly to the endgame. The time that all openings will be given very precise evaluations is not far off, and when the right variation is chosen, then it will lead to a technical endgame.”

Grandmaster Pavel Eljanov agrees with him: “It is no secret that the term “opening preparation” in modern chess is hopelessly outdated, and it isn’t any more an objective representation. Analyses of some opening variations, not only those of leading professional players but also of amateur players who work hard and use the right analytical tools, go beyond

the middle game and stretch deep into the endgame.”

But such an approach to the game requires the right skills to convert the advantage reached, and, from the point of view of the player who became the victim of home preparation, it requires the right skills to defend the difficult positions which arise. In the opinion of Mikhail Botvinnik, these two factors represent the real art of the endgame.

As a result, and taking into account the importance of computer technology in chess, efforts to improve and perfect one’s technical skills take on special importance.

Within the framework of this particular book, is it impossible to provide recipes for all the situations which can arise in the course of a game. We will limit ourselves mainly to typical examples from the work of strong grandmasters, in the knowledge that specialised publications can be of great assistance in perfecting one’s skills.

But at the same time, we would like to emphasise that, even if the role of a trainer is invaluable for a student, he must do all the fundamental work

himself, and devote maximum effort as well as healthy pragmatism to this task.

In the competition between chess players of approximately equal strength conducting their fight with the highest concentration, the technical conversion of a small positional plus is often the only chance to victory.

The overall level of play which recently grew so remarkably, allows qualified chess players to engage quite credibly into a fight with opponents of much stronger practical skills, and with much more experience and knowledge.

That is why possessing the technique to convert even a small advantage is absolutely necessary to perfect a player's skill level.

With the modern technique of defence, games more often than not lead to an endgame. That is why it is so logical to devote maximum effort to the study of endgame theory.

To do so, studying the works of the greatest endgame theorists is a very good way to master the secrets of this part of the game, and it is appropriate to recall the following recommendation by Jose Raul Capablanca: "Those who want to study chess must first of all take up the endgame, and only after having studied endgames properly should they move on to the opening, as well as to the middle game in connection with the endgame."

However, it is precisely the endgame which often represents the Achilles heel of many chess players. Exactly in this phase of the game, many more mistakes are being made than in the middlegame. There are several reasons for this: on the one hand insufficient understanding of fixed positions, and on the other hand poor mastery of typical methods and techniques of converting a complex position into a simpler one, or even into a theoretical endgame, which may be said to be a win or a draw.

Anyhow, a young chess player who wants to be a professional, and even more so a grandmaster, must have been educated to at least master those technical endgames which represent the ABC of chess. This is particularly important because nowadays, when all games are being played until the end, the thinking time available to play the endgame is very limited.

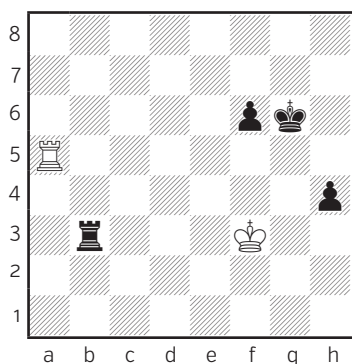
This is why, in order to achieve the best results in competitive chess, special attention must be given to the study of endgames, and most of all to a thorough knowledge of technical positions, with the technique of playing them as it were on automatic pilot.

This requires painstaking and sometimes boring work, which is not at all easy for often impatient youngsters, and therefore it is not a coincidence that younger players find it quite difficult to play endgames.

For example, it is very instructive to see how the brightest star of young players, Magnus Carlsen, perfected his technique of playing endgames. As a teenager, unlike Robert Fischer, he had many problems in this phase of the game, but today his skills of converting an advantage remind us precisely of Robert Fischer, and they rarely disappoint.

By studying his endgame skills, it is useful to look at the mistakes made by the young Carlsen, who at the age of 14 obtained the title of Grandmaster.

### M. Carlsen – L. Aronian World ch., Tripoli 2004



As is well known, in Rook endgames with f and h pawns, the weaker party has realistic chances for survival, and the fact that Carlsen couldn't save the game because it was a rapid game played for a tie-break, is no excuse. The status of a Grandmaster obliges him to know the key positions of this type of endgame.

In endgames of this type, the best squares for the King are f2 and g2. Therefore, 66. ♔g2 suggests itself, with the idea of blocking the h-pawn, and leaving the Rook to give checks sideways or from behind, and the best square from where to do so is a8.

However, the 14-year old Grandmaster was tempted by ideas of stalemate and played **66. ♔g4?! allowing 66... h3**. As winning this pawn would lead to a lost pawn ending, stopping the pawn now became even trickier. The game continued **67. ♖g5+?**

This move is again linked with the rather naïve hope of a stalemate after 67...fxg5? But taking the Rook is not forced, and it gets stuck in an unfortunate position as a prelude to defeat. It was however possible to defend by with 67. ♖a2 f5+ 68. ♔f4, planning 68... ♖b8 69. ♖a6+ ♔h5 70. ♔g3 ♖b3+ 71. ♔h2 or immediately 69. ♔g3 ♖h8 70. ♔h2

**67... ♔f7 68. ♖h5 ♔e6 69. ♖h8 ♖c3 70. ♔f4 ♔f7 (70... ♖c2!) 71. ♔g4 ♔g6 72. ♔f4 ♖c2!**

This technique of conversion is instructive. Whereas 73. ♖xh3 ♖f4+ leads to the exchange of Rooks, the pawn continues its course, and the black King completes his manoeuvre.

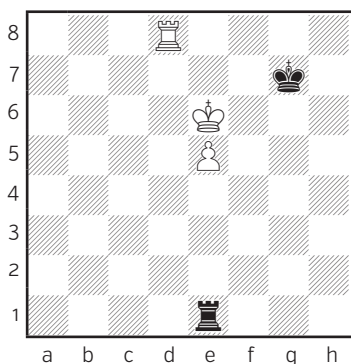
**73. ♔g3 h2 74. ♔f3 ♔f5 75. ♖h5+ ♔e6 76. ♖h8 ♔e5 77. ♖e8+ ♔d4 78. ♖d8+ ♔c3 79. ♖h8 ♖d2 80. ♔g3 ♔d3 81. ♔f3 ♔c2 82. ♔g3 ♔d1**

White resigns.

Quite curiously, 2 years later, Carlsen found himself again in a theoretical draw.

### L. Aronian – M. Carlsen

Tal Memorial, Moscow 2006



Carlsen knew and previously already applied the typical way of defending similar positions, namely as a “trailer” to the pawn with 69...♖e2! But instead of this, he chose a lateral attack by the Rook, and this proved more difficult.

69...♖a1 70.♔e7 ♖a5 71.e6 ♖a7+  
72.♞d7 ♖a8 73.♞d6 ♖a7+??

When attacking sideways, it is a big mistake to cede the 8<sup>th</sup> rank! Black’s only defence was 73...♔g6.

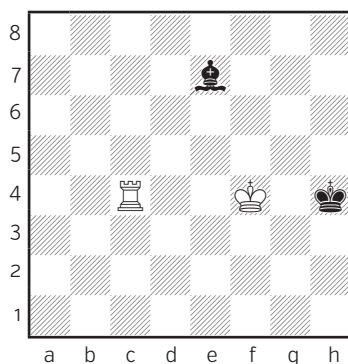
74.♔e8

Black resigned.

Equally instructive are Carlsen’s errors in a textbook endgame of Rook vs. Bishop, where one must know the fundamental principles of defence.

### C. Pedersen – M. Carlsen

Gausdal 2005



93...♔h5?!

The right technique is to direct the King to the corner opposite to the colour of the Bishop, i.e. by playing 93...♔h3.

94.♔f5 ♔d8??

One mistake not seldom generates another, with disastrous consequences. The position could be held with 94...♔h6.

95.♖c8

Black resigned.

In the modern practice of defence, there are many examples where at-

tack and defence match each other quite well, and where very subtle ideas by the attacking player are being answered by equally subtle defensive replies.

When the game ends in a draw, then for the defender such a result may be equivalent to a win. It happens quite regularly that games end in a draw because one imprecise move throws away the fruits of many hours of work as the final part of the game is played with very limited thinking time. Such an outcome isn't only due to lack of time, but also to poor mastery of the technique of converting an advantage, which shows how important it is to continuously perfect one's technique.

It is however not our intention to handle every aspect of the problem. Rather, we will focus on the technique of play required in those types of positions which occur in complex endgames.

In doing so, the outcome of the games, which may have ended in a win for one of the players, is of less interest to us than the kind of full-blooded fight

which may develop when a player is unable to convert his positional advantage.

In this book, we collected examples of complex endgame, which in most cases never appeared in endgame manuals. A number of these games belong to chess history, but we will study them from a modern point of view. A lot of space is devoted to the practice of contemporary grandmasters, and we make use of analyses which have been published in chess publications like the Russian Journal "64", to which the authors regularly contribute.

In the examples we will discuss, the stronger party always had a hard time converting his small advantage, and in some cases even very experienced grandmasters were let down by their technique.

But this is also a learning experience, and those who study the secrets of complex endgames can learn quite a lot from the kind of struggle characterised by very profound plans, surprising clues, and sometimes even real paradoxes.



# CHAPTER 1.

## WEAKNESSES IN THE PAWN STRUCTURE

The list of key signals of positional advantage, as formulated by the first World Champion, Wilhelm Steinitz, included a better pawn structure, weak squares in the opponent's camp, a pawn majority on the queenside, the control of open files, the better mobility of minor pieces, and the advantage of the pair of Bishops. The addition of a number of small advantages can tilt the balance of the position and represent a strong case for the realisation of a positional advantage. Steinitz furthermore emphasised that the one who has the advantage must attack in order not to lose it.

In the struggle for pre-eminence, one of the most important signals of a positional advantage in the above list is the pawn structure. One can say that this is of key importance, because, as Jose Raul Capablanca emphasised, in a well conducted endgame, pawns are almost always the decisive factor. This is why he advised to give proper attention, already during the middle game, to the endgame, and to decide quite early on which pieces should be exchanged, and which ones should be kept on the board.

The placement of the pawns is one of the main criteria to assess a position, and this is tightly linked with

the presence of weak squares, which can be convenient stepping stones for piece penetration. The most problematic damage to a pawn structure is the formation of uncoordinated pawns, or "pawn islands". When your opponent has this kind of pawns, this may justify going for victory. Pawn islands usually require very tough defence, and the more islands there are, the more difficult it is to defend the position.

The pawn situation does not just result from the battles fought in the middle game, but it also depends on the choice of opening systems. The enormous progress made in the modern technique of converting an advantage requires to pay very close attention to the status of an opening. Not seldom, opening variations end up in the archives because of the uncomfortable pawn formations which result from them, and which lead to very difficult endgames. Nevertheless, in modern tournament practice, where fighting for the initiative takes special importance, the choice of the opening variation is often determined by the pragmatic fight for a result: a win with White, or a draw with Black. With these tactical considerations, the defending side tends to go for simplifications and often

forces an early exchange of Queens, and in the process he may weaken his pawn structure without worrying too much about it. When then the issue of transposing to a complex endgame arises, possessing the technique of converting a positional advantage takes on even more importance.

A classic example of play against a weakened pawn structure is the next game, played by two outstanding specialists of positional play.

### T. Petrosian – M. Botwinnik

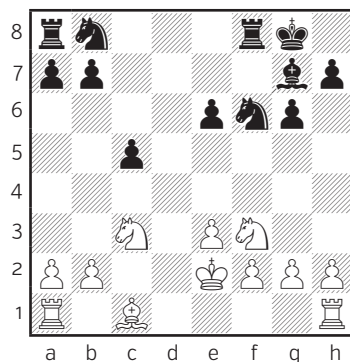
Moscow 1963

Gruenfeld Defence – D94

1.c4 g6 2.d4 ♘f6 3.♗c3 d5 4.♗f3  
♙g7 5.e3 o-o 6.♙e2 dxc4 7.♙xc4 c5  
8.d5 e6

This move deserves several comments. We see here a typical approach in modern chess: Black agrees to an early exchange of Queens in spite of the obvious worsening of his pawn structure as he considers this fact insufficient for a win by White. Of course, by proposing a Queen exchange, Mikhail Botwinnik is convinced that he will be able to compensate for what looks like small positional concessions. But exactly these concessions create a strong positional motif for a stable advantage. The alternatives were 8...a6 or 8...♗bd7, which lead to complicated play.

9.dxe6 ♔xd1+ 10.♔xd1 ♙xe6  
11.♙xe6 fxe6 12.♔e2



In the complex endgame which arises, White has a stable advantage because of a better pawn structure, with his two pawn islands vs. three for Black. This is how Tigran Petrosian assessed this factor: “White’s pawns give a better impression, first of all because of Black’s isolated pawn on e6. Of course it is not easy to imagine how White can create the necessary threats to conquer that pawn. However, the organic defect of an isolated pawn consists not only in the fact that it can be attacked, but also because the square or squares in front of it can be used as stepping stones for the opponent’s pieces”.

12...♗c6

This is a critical moment. No doubt many players would make such a natural move. Further developments will show though that already at this point, Black should have looked at ways to neutralise White’s possibilities. The most active plan was 12...♗d5 (which



brings ♖g7 into play) 13. ♖e4 ♗d7 14. ♗fg5 ♗c7 15. ♜d1 ♜ad8 16. ♗d6, and even if the evaluation of the position is unchanged, Black's plight is not as difficult as in the game. Taking into account the important role of the e4-square, Gary Kasparov proposed to prevent the Knight manoeuvre to g5 with 12...h6! Then, admittedly, e4 can be reached with 13. ♗d2 ♗d5 14. ♗de4 ♗xc3+ 15. ♗xc3 ♗c6, but now the black pieces work better together, and White has a harder time strengthening his position.

13. ♜d1

Stronger is 13. ♗g5! because now Black can prevent that move with 13...h6!

13... ♜ad8?!

Black hurries to take the d-file, but this doesn't succeed and it permits White to carry out favourable simplifications. In the endgame which arises, it was better to bring the King closer to the centre of events with 13... ♖f7 and then ♖e7.

14. ♜xd8 ♜xd8 15. ♗g5! ♜e8 16. ♗ge4 ♗xe4

More flexible was 16...b6!? 17. ♗xf6+ ♖xf6 18. ♗e4 ♖e7 19. b3 e5 20. ♖b2 ♜d8 21. f3 ♖f7, and although the black Bishop is forced to defend, it is not easy for White to enter the black position.

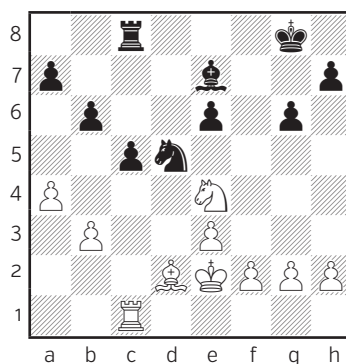
17. ♗xe4 b6 18. ♜b1 ♗b4

With the idea of winning a tempo after 19.a3 ♗d5 for the transition of the Knight to f6.

19. ♖d2! ♗d5

19... ♗xa2? 20. ♜a1 ♗b4 21. ♖xb4 cxb4 22. ♜xa7 with a clear advantage for White.

20.a4 ♜c8 21.b3 ♖f8 22. ♜c1 ♖e7



23.b4!

An important moment. Black managed to defend the weakness on e6, so that in order to convert his positional advantage, White must create a second weakness as defending two weak pawns against skilful handling by attacking pieces is much more difficult.

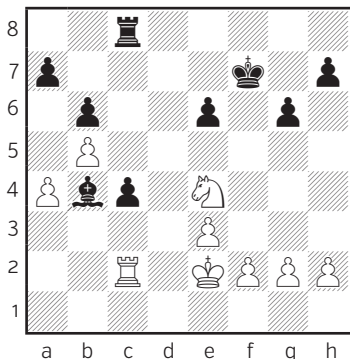
23...c4

This pawn move is needed. In case of the passive 23... ♖f7 24. ♜c4! h6 25. bxc5 bxc5 26.a5! White would increase his advantage.

24.b5! ♖f7?

Botvinnik continues to play passively. Modern strategy of defence requires to look for active counterplay. This could have done with 24... ♙a3! 25. ♖c2 c3 26. ♙xc3 ♖c4! 27. ♙d3 ♖xa4, and although White keeps an advantage, the activity of his Rook allows Black to hold the defence after 28. ♙d2 ♙e7 29. ♖c6 ♖a3+ 30. ♙c2 ♙f7 or 28. ♖a2 ♖xe4 29. ♖xa3 ♗xc3 30. ♙xc3 ♖e5 31. ♖xa7 ♖xb5 32. ♖b7 ♖c5+ 33. ♙d3 b5 with a “fireproof” Rook endgame (variations by Kasparov). Now White blockades the passed pawn.

25. ♙c3! ♙a3 26. ♖c2 ♗xc3+ 27. ♖xc3 ♙b4 28. ♖c2



28... ♙e7?

This game shows how difficult it is to defend this type of positions, even for the world's top players. Black continues to limit himself to passive defence, and this enables White to gradually increase his advantage. However, 28... e5 29. ♗d2 c3 30. ♗e4 ♙e6 could have eased the black defence, for example 31. ♙d3 ♖d8+ 32. ♙c4 ♖d2! 33. ♙b3

♖xc2 34. ♙xc2 ♙d5 35. ♗xc3+ ♙c4 36. ♗e4 ♙e7, when it is not easy for White to convert his extra pawn.

29. ♗d2! c3

The pawn could not be saved with 29... ♙xd2 30. ♙xd2 ♙d6 31. ♙c3 ♙c5 32. ♖d2 threatening ♖d4 and ♖d7.

30. ♗e4 ♙a5 31. ♙d3 ♖d8+ 32. ♙c4 ♖d1 33. ♗xc3 ♖h1?

By going for the pawn, Black allows White to strongly increase the activity of his King. Black's last chance was to go for a Rook endgame with 33... ♙xc3 34. ♙xc3 ♖h1 35. h3 ♙d7.

34. ♗e4!

White returns the pawn for complete domination by his forces.

34... ♖xh2 35. ♙d4 ♙d7 36. g3

The rest is a matter of technique.

36... ♙b4 37. ♙e5 ♖h5+ 38. ♙f6 ♙e7+ 39. ♙g7 e5 40. ♖c6 ♖h1 41. ♙f7! ♖a1 42. ♖e6 ♙d8 43. ♖d6+ ♙c8 44. ♙e8 ♙c7 45. ♖c6 ♖d1 46. ♗g5 ♖d8+ 47. ♙f7 ♖d7+ 48. ♙g8

Black resigns.