

**Tibor Karolyi**

# **Endgame Virtuoso Magnus Carlsen**

**His Extraordinary Skills Uncovered and Explained**

**New In Chess 2018**

# Contents

Preface .....	7
<b>Chapter 1</b> The junior years .....	11
<b>Chapter 2</b> The young superstar rises to the top .....	43
<b>Chapter 3</b> The world-class player.....	83
<b>Chapter 4</b> World number one.....	133
<b>Chapter 5</b> The World Champion .....	183
Postscript.....	261
Index of players .....	263
Endgame classification .....	265

## Preface

In 2014 I was lucky enough to be a second of Joshua Altman at the Reykjavik Open. I saw Henrik Carlsen (Magnus' father) playing in the event, so I asked if I could interview him. At the end of a very pleasant conversation, I gave him my *Endgame Virtuoso Anatoly Karpov* book as a present. I signed the book and wrote that very few players in the history of chess had a chance of reaching the great Soviet World Champion's level of endgame play. Under my signature I expressed my hope that Magnus would reach that level, and I wished him good luck. However, in no way did I think that in a few years' time I would write a book on Magnus' endgame play.

Magnus Carlsen is only in the middle of his career, but has already achieved so much. He has already become one of the game's all-time greats. He has achieved more than most World Champions by obtaining the highest title and defending it two times. He is the world number one on the FIDE rating list. Although his edge against his rivals is currently not that big, his previous lead over the world number two was one of the biggest ever.

Carlsen's extremely successful endgame play has been one of the key reasons for his success. But that is not the only reason why it is worth looking in great detail at his endgame play. I think the Norwegian grandmaster is the first World Champion who has never played an adjourned game – or if he has, it was at the very beginning of his career. Unlike older players, Carlsen did not acquire his endgame skill by analysing adjourned positions during nights with little sleep. On the other hand, he was able to learn a lot from endgame tablebases, so he surely knows many more six-piece positions than earlier champions.

A couple of great players have hailed him as the reincarnation of Karpov, and it is hard to argue with them, as they have actually played both Karpov and Carlsen. However, from my perspective, having written three books on Karpov and having already looked into Carlsen's endgames, I could see clear differences. When I worked in Singapore and told people that their country is similar to Malaysia, they were surprised. But while somebody like me who came from afar could see the similarities, those who live close to one another see the differences.

Of course, I believe that both Karpov and Carlsen are phenomenal in endgames, but I also think they are both lucky to have had their career

when they did. What do I mean by that? Karpov was not physically strong, and sometimes in his career he ran out of energy. I think having an adjournment after 5 hours served his interests; also, he had world-class grandmaster helpers. On the other hand, Carlsen plays a lot of sports and is, just like Fischer and Kasparov were, very healthy and physically strong. Therefore he can keep his concentration level longer than others, and wins some games by outlasting his opponents. Beliavsky said that Karpov and Carlsen are the only two players whose level of play does not decrease as the game goes on, but goes up. I am sure that Beliavsky is right, but I think Karpov would not have been able to keep his level up for another 2-3 hours after the first 40 moves. Carlsen can, as he has proved on many occasions. Being allowed an adjournment would have helped Carlsen's opponents to hold slightly worse positions a few times. I believe that Carlsen would be better able to adjust to the old system than Karpov would have been to the new one. As a side note, Carlsen's attitude reminds me very much of Beliavsky's, more than any other former great player. Neither of them cares much about what type of position they get – it can be tactical, complicated-positional, or an equal ending – they both want to fight.

When I started to work on Carlsen's endgames, studying the comments of various grandmasters in *New In Chess* magazine and ChessBase Megabase as well as in a number of books on Carlsen (listed in the Bibliography in the back of the book), and adding my own analyses, I was surprised to find that Magnus plays them quite differently from Karpov. The Russian World Champion rarely had to save difficult endgames; Carlsen has surely saved many more of those than Karpov. On the other hand, the Russian made fewer mistakes, but I think that is mainly because he had the chance to analyse the positions at home. Karpov caught the opponent's king more often, while Carlsen more often seems to take advantage of the very subtle choice between knight and bishop. Karpov liked to base his game plan on his exceptional endgame skill from the start of his career, while Carlsen only became an endgame monster in the middle of his teenage years.

Why devote a book to Carlsen's endgames when he is still very far from finishing his career? Because he has already produced so many fantastic endgames, and studying them will bring a lot of pleasure and instruction to many chess fans. I will review his best endgames in chronological order, so we can see how Carlsen developed his skill.

For many years, Karpov and Kasparov were the very best players in the world, and I followed their games like everybody else. But it was only

when I started writing books on their play and continuously worked on their masterpieces that I was able to more fully appreciate their tools and specialities. I am sure that focusing on Carlsen's endgame play will, in the same way, help us to discover new aspects of his endgame artistry.

Given the fact that I coach junior players, I am particularly devoted to investigating and analysing what makes junior players develop rapidly and to scrutinising the early years of great players. Therefore, in the chapter on the early years I will make some remarks on Carlsen's general play alongside my main focus, which is his endgame play. Simen Agdestein's excellent book on Carlsen, *How Magnus Carlsen Became the Youngest Chess Grandmaster in the World*, had a very wide target audience and did not go into great detail in his game commentary. Simen's desire to please non-chessplaying readers meant that he did not analyse variations, but restricted his comments to brief verbal points. Agdestein's book almost never entered into subjects like what openings Magnus chose. For chess experts and devoted chess trainers these small things would have been very interesting to read about. Magnus became one of the youngest grandmasters ever, so it is therefore very much worth scrutinising his chess in his early years. When covering the years after he stopped playing in junior events, I will concentrate exclusively on his exceptional endgame play.

Magnus' level of endgame play allowed him to beat Teimour Radjabov in the crucial game to earn the right to challenge Viswanathan Anand for the title of World Champion.

I asked Dennis Monokroussos whether he had an especially memorable Carlsen endgame. He answered: 'Not really – they all kind of blend together for me. They used to jokingly accuse Tal of "witchcraft" back in the day for winning the crazy tactical games he did. That's sort of how I feel about many of the endgames Carlsen has managed to win over the years.' I think this book will help chess fans to understand Magnus' magic in endgames and uncover some of his tools and methods.

Dear reader, working through all of Carlsen's best endgames will be a long but fruitful journey, and we will touch on other aspects of his chess along the way. Please join me, for if you like endgames you will surely not be disappointed!

Tibor Karolyi  
Soltvadkert, May 2018

## CHAPTER 2

# The young superstar rises to the top

The most important thing of the years 2004-2006 is that Magnus became a professional player. Maybe the decision was made a bit earlier, however it was sealed in 2004. Playing in the same event and in the same hall with the very best professionals of the world must have given him motivation. He also got acquainted with the life of the elite players, and he surely liked it. Financially the risks surely disappeared. He was selected for the first time into the Norwegian Olympic team, and playing on board one would be a pleasant memory for the rest of his life. In a rapid KO event Magnus had a winning position against Garry Kasparov, but drew. In the World Cup he put up a great fight against Levon Aronian, one of the very best players. In 2006 he won the Wijk aan Zee B event – his first tournament win in an extremely strong event.

His openings and endgames improved a lot. In this book there are many games in which Carlsen defeated world-class players, and the first of these is his win over Nigel Short. In his game with Lie we can see that he was already an all-round endgame player as he managed to crack a fortress. In the Cheparinov game he showed some quite special imagination.

### 2004

FIDE rating (age 13 + 1 month, January 2004): 2484. World number 746.

Game 13

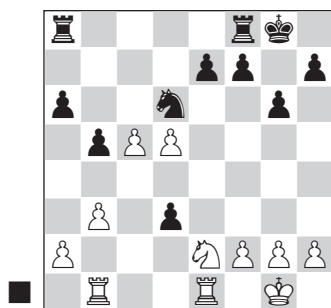
**Halldor Halldorsson**

2159

**Magnus Carlsen**

2484

Reykjavik 2004 (1)



**24...♘e4**

Carlsen keeps the knights on the board, at least for a while. After 24...dxe2 25.cxd6 exd6 26.♙xe2 ♖ac8 27.g3 Black would have a tiny advantage.

**25.♘f4 ♘xc5 26.♗bd1**

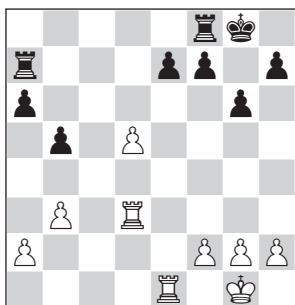
Taking the e-pawn is simpler. On 26.♙xe7 ♖fe8 (26...g5?! 27.b4!) 27.♙c7 ♖ac8 28.d6 the game will end in a draw.

**26...♗a7 27.♘xd3**

Halldorsson is ready to settle for a somewhat worse endgame with an isolated pawn.

White could have come up with an interesting pawn sacrifice here, which my computer found: 27.b4 ♖a4 28.d6! exd6 29.♖xd3 and White has enough compensation for the pawn, as he has pressure on the d6-pawn and the knight is out of play on a4.

**27...♖xd3 28.♖xd3**



**28...♖d8!**

Magnus makes sure that White will not be able to exchange the isolated pawn.

**29.♖ed1 ♖ad7 30.♖f1 ♖g7 31.♖e2 f5**

Black hopes to get closer to the isolated pawn.

**32.f4?!**

This takes the e5-square away from the black king. In this position 32.♖e3!, exchanging a pair of rooks, would help the defender, as the king would be able to assist the d5-pawn: 32...♖f7 33.♖e6 ♖d6 34.♖xd6 ♖xd6 35.♖d2 (35.♖d3) 35...♖f6 36.f4 and White can approach the centre.

**32...♖f6 33.♖e3 ♖c8!**

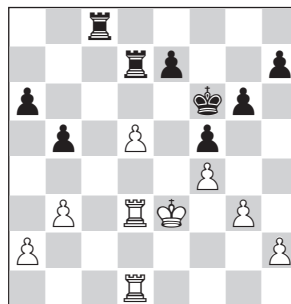
The rook will cause a lot of headaches along the c-file, and White will never be able to

neutralise it. Twenty-seven moves later, this rook will take White's key pawn.

If 33...♖d6!? 34.♖c1 e6 35.♖c6 and White probably holds.

**34.g3**

White waits, but he could instead have tried to exchange the isolated pawn: 34.d6 ♖c2 (if 34...e5 35.fxe5+ ♖xe5 36.♖f3 ♖c6 37.♖e3+ ♖f6 38.♖ed3 ♖c2 39.a3 White holds, as the black king cannot approach the d6-pawn) 35.♖1d2 ♖xd2 36.♖xd2 ♖xd6 (on 36...exd6 37.♖c2 ♖e7+ 38.♖f3 White looks sufficiently active) 37.♖xd6+ exd6 38.♖d4 ♖e6 39.b4 and White holds despite the pawn deficit because his king is strong in the centre.



**34...h6**

Carlsen wants to gain space on the kingside.

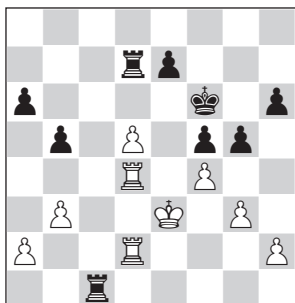
**35.♖d4**

Reducing the number of pawns should serve White's interests, so 35.h4 was preferable.

**35...♖c3+ 36.♖e2 g5 37.♖1d3 ♖c1 38.♖d1 ♖c8**

Magnus decides to tire his opponent for a while.

**39.♖e3 ♖c3+ 40.♖1d3 ♖c1 41.♖d2**



**41...g4**

Magnus gains space.

**42. ♖4d3 h5! 43. ♜e2 ♜c5 44. ♜ed2**

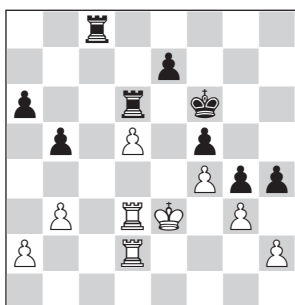
**♜d6 45. ♕e2 ♜c1 46. ♜d1 ♜c8**

**47. ♜1d2 h4!**

The h-pawn creates a dilemma for White.

**48. ♕e3?!**

Halldorsson waits, giving a free hand to Magnus to build up his position. After 48.gxh4 ♜h8 49. ♕f1 ♜xh4 50. ♕g2 it would be hard for Black to make progress. Transferring the rook to e5 would keep the position balanced. Also after 48. ♜e3 ♜c5 49. ♜e5 h3 50. ♕e3 White probably holds.



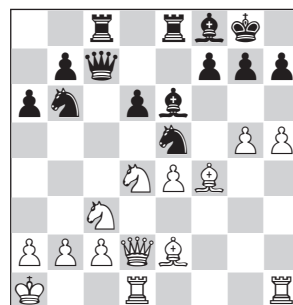
**48...h3!**

Such a pawn is always menacing as it gets so close to promotion. Getting this far is an accomplishment.

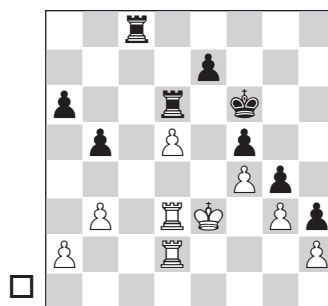
It is worth citing what Carlsen said regarding the following position in the post-game analysis of his win against Nakamura at Wijk aan Zee in 2011:

**Magnus Carlsen  
Hikaru Nakamura**

Wijk aan Zee 2011 (8)



Nakamura played 19...♙c5, which is probably a horrible move. Hikaru suggested 19...g6, and Magnus said he had considered 20.h6 in response, which will give him a trump in the endgame and keep Hikaru's bishop away from g7. It is remarkable that Carlsen was thinking ahead about the possible endgame while the players were still so deep in the middlegame.

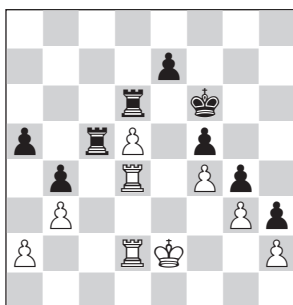




**49. ♖e2 ♜c5 50. ♞d1 b4**

Carlsen takes the opportunity to gain some space on the queenside as well.

**51. ♞d4 a5 52. ♞1d2**



**52... ♔f7!**

Carlsen begins the process of transferring the king to the queenside.

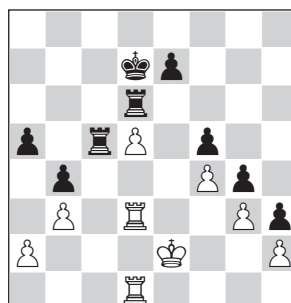
**53. ♞2d3 ♖e8 54. ♞d2 ♖d7 55. ♞4d3 ♜c1**

With 55...a4!? Black could have attempted to open the a-file: 56. ♞e3 (White cannot play 56.bxa4 ♞a6 because he loses a pawn; alternatively, if he tries 56.♖e3 axb3 57.axb3 ♞a6 58.♖e2 ♞a1 then Black is able to invade) 56...axb3 57.♞xb3 ♞b6 58.a3 ♞c3 59.♞xb4 ♞xb4 60.axb4 ♞b3 and Black has achieved a probably winning position.

**56. ♞d1**

Instead of this, White should have approached with his king straight away. After 56.♖e3 ♞h1 (56...♞c5 57.♖e2) 57.♖d4 ♞e1 58.♖c5 White would have had some counterchances.

**56... ♜c2+ 57. ♞1d2 ♜c5 58. ♞d1**



**58... ♖c7**

Black could have played 58...♞a6 59.♞1d2 a4 60.bxa4 ♞xa4, which also wins.

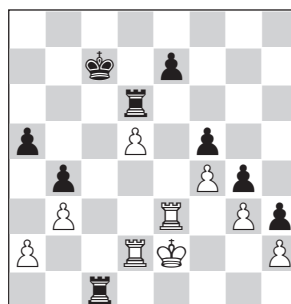
**59. ♞1d2**

If 59.♞e3 ♞c2+, or 59.♖e1 ♞d8 60.♖e2 ♖d6 61.♞e3 ♞dc8 62.♞e6+ ♖d7 63.♞e5 ♞c1 and Black wins.

**59... ♜c1 60. ♞e3**

A) On 60.♖e3 ♖b6 61.♖e2 ♖c5 62.♖e3 (62.♞e3 ♞h1) 62...e6 63.dxe6 ♞xe6+ 64.♖f2 ♞h1 White would be lost;

B) After 60.♞d1 ♞xd1 61.♖xd1 (61.♞xd1 ♞d7 62.♖e3 ♖d6 63.♖d4 ♞c7 and Black is winning) 61...♞d7 62.♖c2 ♖d6 63.♞e3 ♖xd5 64.♞e5+ ♖d4 65.♞xf5 ♖e3 Black's invasion is lethal.



**60... ♞h1**

Carlsen's strategy prevails. He wins the key h2-pawn. The rest is easy.

**61.** ♖xe7+ ♔d8 **62.** ♖h7 ♖xh2+  
**63.** ♕e3 ♖xd2 **64.** ♕xd2 ♖xd5+  
**65.** ♕e2 ♖c5 **66.** ♕d3 ♖c3+ **67.** ♕d4  
 ♖xg3

White resigned.

In this game, Carlsen created an isolated pawn in his opponent's camp. He then proceeded to gain space with his pawns, pushing the h-pawn all the way to h3, and manoeuvred his king around the board nicely. Later he was ultimately able to eliminate White's h-pawn.

Game 14

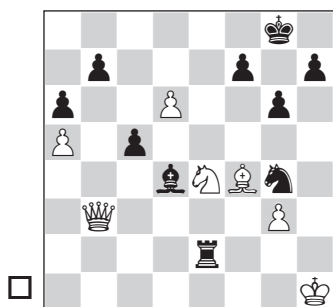
**Magnus Carlsen**

2552

**Kjetil Lie**

2430

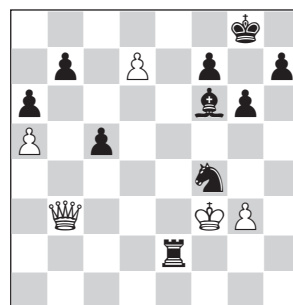
Molde 2004 (9)



**37.** ♖f6+!!

Although this position is not quite an endgame yet, I could not resist showing this spectacular move by Carlsen, which enables him to avoid mate.

**37...** ♕xf6 **38.** d7 ♖f2+ **39.** ♕g2 ♖d3+  
**40.** ♕f3 ♖xf4



**41.** ♖xb7

This fancy move cleverly ignores the hanging knight on f4 and is a strong choice. However, it also gives the opponent an extra option. At some point, Black will have to give up the bishop for the d-pawn, but the question is whether or not Black can get the a-pawn too – if he is able to get rid of both White's a- and d-pawns, the rook will have the opportunity to set up a strong fortress on the kingside.

Instead, White could have taken the knight: 41.gxf4! ♖d2 42. ♖xb7 ♕g7 43. ♖xa6 ♖xd7 44. ♖b5! (the queen does not allow a check on d3) 44... ♖d1 45.a6 ♖a1 46. ♖b7. White does not give Black time to sacrifice the bishop for the a-pawn, and therefore White wins.

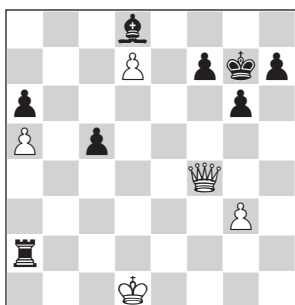
**41...** ♖a2 **42.** ♖b8+ ♕g7 **43.** ♖xf4  
 ♖a3+

Unluckily for Lie, the a5-pawn is poisoned. 43... ♖xa5 is met by 44. ♖xf6+ ♕xf6 45.d8 ♖+, winning the rook.

**44.** ♕e2

The king has to stop the rook from reaching the d-file.

**44...** ♖a2+ **45.** ♕d1 ♖d8



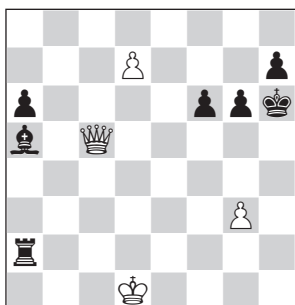
**46. ♖e5+ f6**

Lie faced a tough decision. Either he moves his king in front of his pawns, where it will be vulnerable in a fortress situation, or he weakens the pawn structure a bit. After 46...♔h6 47.♖h8 ♕xa5 48.♖f8+ ♔h5 49.♖xc5+ ♔h6 (if 49...g5 50.♖d5 ♖a1+ 51.♔e2 Black would live dangerously) 50.♖f8+ ♔h5 51.d8♖ ♕xd8 52.♖xd8 it is hard to tell whether this is a draw or not.

**47. ♖e8 ♕xa5 48. ♖e7+!**

Magnus forces the king to move ahead of the black pawns. Winning the bishop would not be sufficient: 48.d8♖ ♕xd8 49.♖xd8 ♖f2 and Black holds.

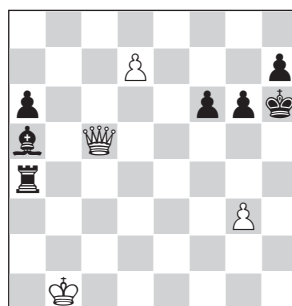
**48... ♔h6 49. ♖f8+ ♔g5 50. ♖xc5+ ♔h6**



**51. ♔c1!**

Good play by Magnus. Instead of winning the bishop hastily, he instead looks for the best circumstances to do so. After 51.♖xa5 ♖xa5 52.d8♖ ♖f5 53.♖f8+ ♔g5 I believe Black holds.

**51... ♖a1+ 52. ♔c2 ♖a2+ 53. ♔b1 ♖a4**



**54. ♔b2**

Magnus sets up a zugzwang.

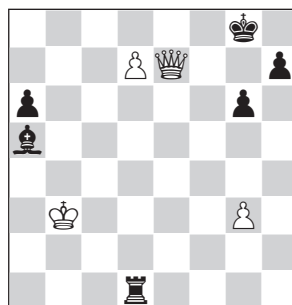
**54... ♔g7**

If 54...g5 55.♖c6 ♖b4+ 56.♔a3 ♔g6 57.d8♖ White wins the rook.

**55. ♔b3 ♖a1 56. ♖e7+ ♔g8 57. ♖xf6**

Taking the pawn is an achievement. But still, if Black sacrifices the bishop for the d-pawn and the rook can get close to the black king, Black will have a good fortress.

**57... ♖d1 58. ♖e6+ ♔f8 59. ♖e8+ ♔g7 60. ♖e7+ ♔g8**



**61. ♔c4!**

Carlsen now wants to use his king to take away squares from the bishop.

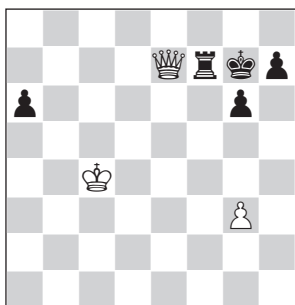
**61... ♖f1!**

The rook threatens to return to f8.

**62.d8 ♚+**

Carlsen has to win the bishop. The ensuing position is drawn, but of course Magnus tries to win the queen versus rook ending.

**62... ♔xd8 63. ♚xd8+ ♔g7 64. ♚e7+ ♖f7**



**65. ♚e5+ ♖f6**

Lie plans to make room around his king by pushing his pawns. However, 65... ♔g8, simply not moving the kingside pawns, should also suffice.

**66.g4 h6 67. ♔d5**

Magnus gets his king closer to Lie's king.

**67...g5 68. ♚c7+ ♖f7 69. ♚c3+ ♔g8**

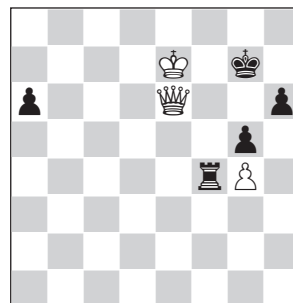
**70. ♔e6 ♖f4 71. ♚e5 ♔h7**

I think 71... ♖f7 was the simplest. It cuts off the king, although with the a-pawn on the board Lie's move works as well.

**72. ♔e7**

This is the right square for the white king.

**72... ♔g8 73. ♚e6+ ♔g7**



**74. ♚f5**

A pretty move, but Black still has the a-pawn.

**74...a5 75. ♚e5+ ♔g8 76. ♚xa5**

Carlsen takes the a-pawn. Black has a good fortress, but there are pitfalls to avoid. Usually zugzwang is the greatest threat against a fortress.

**76... ♔h7??**

Losing; 76... ♖f7+! was the only move.

Black must not tolerate the king on e7. After 77. ♔e6 many moves would do, but 77... ♔g7 is the simplest.

**77. ♚d5 ♔h8 78. ♚d6**

78. ♚d3! wins much faster.

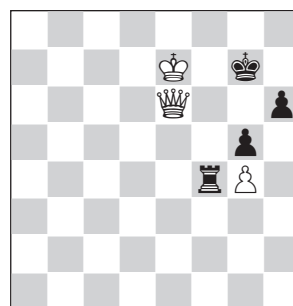
**78... ♔g7 79. ♚e6**

Magnus now tries to bring about this position with White to move.

**79... ♔h7 80. ♚d7 ♔g8 81. ♚c8+**

**♔h7 82. ♚e6 ♔g7**

Accomplishing his aim.



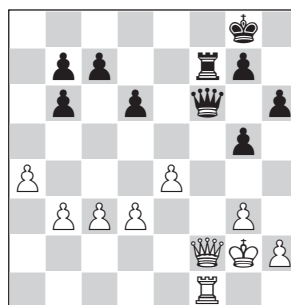
**83. ♖f5!**

This nice-looking move sets up a decisive zugzwang.

**83... ♖a4 84. ♖f7+ ♔h8 85. ♖e8+ ♔g7 86. ♖f7+ ♔h8 87. ♖g6 ♖b4 88. ♔d8 ♖b7**

Black resigned.

This game illustrates that Carlsen had already developed his all-round endgame skills successfully. He played well against the fortress idea, used his king excellently, and set up the final zugzwang in an instructive manner.

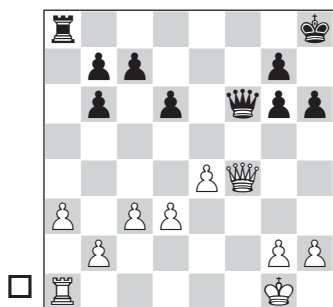


Game 15

**Magnus Carlsen**  
**Severin Papa**

2567  
2397

Lausanne 2004 (2)



**22. ♖f1**

Carlsen is somewhat better in this position, as he has a slight space advantage and Black has doubled pawns.

**22... ♖f8 23. ♖f2**

Magnus does not want to give up the f-file.

**23... ♔g8 24. g3 g5 25. ♔g2 ♖f7 26. a4 ♖f8 27. b3 ♖f7**

**28. b4**

Magnus gains space.

**28... ♔f8 29. ♖xf6**

29.d4!? was an alternative worth considering.

**29... gxf6**

Taking with 29... ♖xf6 should be worse in principle, as this pawn ending is more likely than not to be losing. After 30. ♖xf6+ (on 30. ♖a1 ♔e7 31. a5 bxa5 White's advantage would be insignificant) 30... gxf6 Black is clearly worse, but has some chances, because it is not certain that White's king can invade:

A) After 31. ♔f3 h5! 32. d4 (32.g4 h4) 32... ♔e7 33. d5 (on 33. ♔e3 ♔e6 34. ♔d3 f5! Black holds) 33... ♔f7 34. g4 (34. ♔e3 ♔e7) 34... h4 35. ♔e3 ♔e7 36. ♔d4 ♔d7 37. ♔c4 ♔e7 38. ♔b5 ♔d7 White should not be able to penetrate;

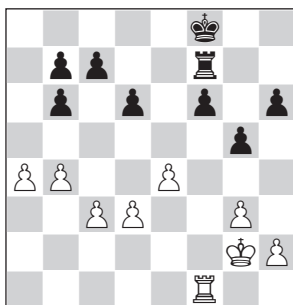
B) 31.g4! stops ...f6-f5, which could be strong if White moves his king to the queenside:

B1) 31... ♔e7 32. d4 and now:  
B11) 32...c6 33. b5 ♔d7 34. ♔f3 ♔c7 (34...c5 35. ♔e3 ♔c7 36. ♔d3 ♔d7 37. ♔c4 ♔e6 38. h3 ♔e7 39. dxc5 dxc5 40. ♔d5 and White wins) 35. ♔e3 ♔d7 36. bxc6+ bxc6 37. ♔d3 ♔c7

38.♖c4 ♗b7 39.d5 ♖c7 40.dxc6  
♗xc6 41.♗d4 and Black is in a  
lethal zugzwang;

B12) 32...♖e6 33.♖f3 ♖f7 34.♖e3  
♗g6 35.♗d3 h5 36.h3 hxg4 37.hxg4  
♖f7 38.a5 bxa5 39.bxa5 c6 40.c4  
♖e7 41.d5 c5 42.♖c2 and White's  
king will invade.

B2) 31...♖f7 32.d4 ♗g6 33.d5 (after  
33.♖f3 h5 34.h3 hxg4+ 35.hxg4  
♖f7 36.♖e3 ♖e7 Black appears to  
survive) 33...♖f7 (if 33...h5 34.gxh5+  
♖xh5 35.♗g3 g4 36.♖f4 White  
wins) 34.♖f3 ♖e7 35.♖e3 ♗d7  
36.♗d4 ♖e7 (36...b5 37.a5) 37.♖c4  
♗d7 38.♖b5 ♖c8 39.a5 and White  
can penetrate.



### 30.♖f5!

The rook stands well on the 5th  
rank.

### 30...♖e7?!

An automatic move. Normally  
one should centralise the king  
in endgames, but here it has a  
drawback. After 30...♖g7! 31.♖f3  
♖g6 (if 31...♖f8 32.♖b5 ♖a8 33.a5  
bxa5 34.♖xa5 ♖e8 Black is only a  
bit worse) 32.c4 (if 32.♖b5 f5 or if  
32.g4 h5 will be the answer) 32...♖f8  
Black should be able to hold.

### 31.♖f3 ♖f8?!

Papa wants to be active with  
his rook, but he should have  
consolidated first. After 31...h5!  
32.h4 ♖g7 33.♖e3 (33.♖b5 ♗d8) 33...  
c6 (33...♖g8 is also possible) 34.d4  
♖g6 White is clearly better, but  
Black is probably not lost yet.

### 32.♖g4!

Carlsen invades with the king.

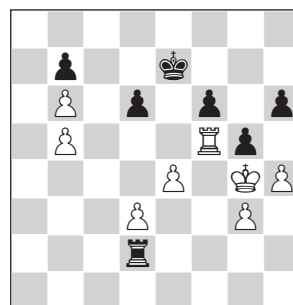
### 32...♖a8 33.a5 c5

Papa sacrifices a pawn for active  
play for his rook. It is too late to  
use his king to stop White from  
penetrating: 33...♖f7 34.♖h5 bxa5 (if  
34...♖g7 35.axb6 cxb6 36.♖b5 wins)  
35.♖xa5 ♖xa5 36.bxa5 ♖g7 37.d4 c5  
38.dxc5 dxc5 39.c4 ♖h7 40.h4 gxh4  
41.gxh4 ♖g7 42.♖g4 ♖g6 43.h5+  
♖g7 44.♖f5 and White wins.

### 34.axb6

Carlsen again has a pawn two  
squares from promotion. Such a  
pawn is almost always a source of  
danger for the opponent.

### 34...cxb4 35.cxb4 ♖a4 36.b5 ♖a2 37.h4 ♖d2



### 38.♖f3

With his last three moves, Carlsen  
has done his best to keep as many  
pawns on the board as possible.  
Now his king is ready to invade.

### 38...♖f7

If 38...♖b2 39.♔h5 ♖xb5 40.♔xh6 ♖xb6 41.♔g6 White wins.

### 39.♔h5 gxh4??

In general, the weaker side seeks to decrease the number of pawns, but this time this has terrible consequences as it removes a target for Black:

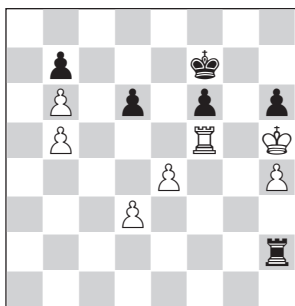
A) On 39...♔g7? 40.d4 ♖xd4 41.♖c3 wins;

B) Black should attack the b-pawn at once – 39...♖b2! and now:

B1) 40.♔xh6 gxh4 41.gxh4 ♖xb5 42.♖f5 ♖xb6 43.h5 ♖c6 44.♖b5 b6 45.d4 (45.♔h7? ♖c5!) 45...♖c4 46.♖xb6 ♖xd4 47.♖b7+ ♔e6 48.♔g7 ♖xe4 would be equal;

B2) 40.♖f5 ♖g2! (here is the difference, as Black can attack this pawn) 41.♖f3 (if 41.♖d5 ♖xg3 42.♖xd6 ♔e7 43.♖d4 ♖h3 Black is doing fine) 41...♖b2 42.♔xh6 gxh4 43.gxh4 ♖xb5 White is still better, but Black probably holds: 44.♖g3 (if 44.d4 or 44.♖f5, 44...♖xb6 can be played) 44...♖xb6 45.♖g7+ ♔e6 46.d4 (46.♖g2 ♔f7) 46...♖b1 47.h5 d5 48.exd5+ ♔xd5 and Black gets away with it.

### 40.gxh4 ♖b2 41.♖f5 ♖h2



### 42.d4

Now White threatens to play 42.e5.

### 42...♖e2

On 42...♖h1 43.e5 wins or if 42...♔e6 43.d5+ ♔e7 44.♖f3 ♖e2 45.♖c3 ♖xe4 46.♖c7+ and White wins.

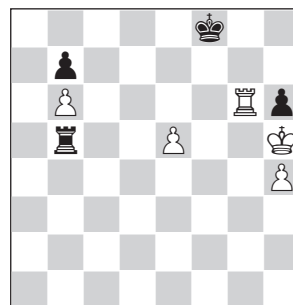
### 43.♖f4 ♖b2

After 43...♔g7 44.♖g4+ ♔h7 45.♖g6 ♖xe4 46.♖xf6 ♖xd4 47.♖f7+ ♔g8 48.♖xb7 ♖d5+ 49.♔g6 White's b-pawn will promote.

### 44.e5

44.♔xh6 ♖xb5 45.♖g4 would win as well.

### 44...dxe5 45.dxe5 ♖xb5 46.♖xf6+ ♔g7 47.♖g6+ ♔f8



### 48.♔xh6 ♖xe5

The Lomonosov tablebase proves that White wins here.

### 49.♖f6+ ♔e7 50.♔g6 ♖e4 51.h5

The h-pawn cannot be stopped.

### 51...♖g4+ 52.♔f5 ♖h4 53.♖h6 ♔d7

### 54.♔g5 ♖h1 55.♖g6 ♖g1+ 56.♔f6

### ♖h1 57.h6 1-0

Carlsen kept up the tension on the f-file, later gaining space on the queenside and obtaining a pawn close to promotion. Finally he was able to invade decisively with his king.

Game 16

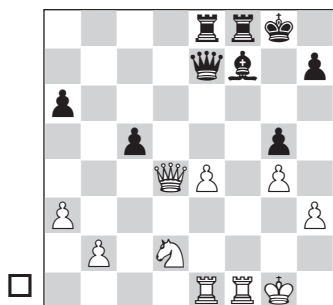
**Magnus Carlsen**

2581

**Nigel Short**

2687

Hoogeveen 2004 (3)

**29. ♖f6**

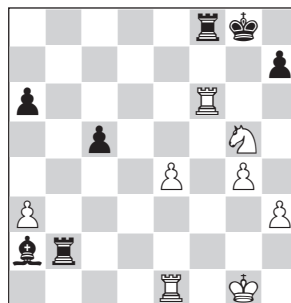
Carlsen shows respect for the former World Championship finalist and decides to exchange queens. However, White would have won faster with the queens on the board.

I think several former World Champions, such as Alekhine, Tal and Kasparov, would have kept the queens on and would have played 29. ♖c3!? instead. Conversely, Capablanca and Petrosian would probably have swapped queens here. After 29... ♕g6 30. ♖xf8+ ♖xf8 31.e5 Black's position is about to fall apart.

**29... ♖xf6 30. ♖xf6 ♖b8 31. ♗f3 ♖xb2**

Other moves were no better here.

After 31... ♕g6 32. ♖xf8+ ♗xf8 33. ♖e2 h6 34.h4 White has a convincing advantage. Or after 31... ♗g7 32. ♖c6 ♕e8 33. ♖c7+ ♖f7 White would have good winning chances.

**32. ♗xg5 ♕a2****33. ♖xf8+!**

Taking the pawn by 33. ♗xh7? is tempting but wrong because of 33... ♖d8!, when Black gets ready to double his rooks on the second rank.

**33... ♗xf8 34. ♗xh7+**

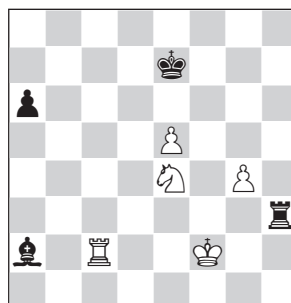
Carlsen wins the second pawn, but the win will not be easy as Black's rook is more active than White's and Short's bishop is better than the knight.

**34... ♗e7 35. ♗g5 c4 36. ♖c1 ♖b3****37. ♗f2 c3**

After 37... ♖xa3 38.h4 ♖b3 39.h5 ♖b1 40. ♖c3 White should win.

**38.e5 ♖xa3 39. ♗e4**

Carlsen exchanges the h-pawn for the c-pawn.

**39...c2 40. ♖xc2 ♖xh3****41. ♖c7+!**



This check justifies the exchange of pawns. Black's king is pushed back.

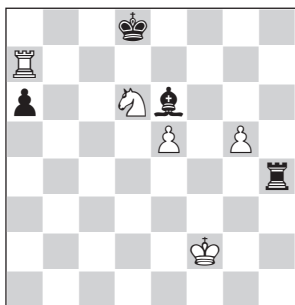
**41...♖d8 42.♞a7 ♕c4?**

Under normal conditions, one is supposed to defend a piece with the least possible force. However, this time, defending the pawn with 42...♞a3! was stronger. The point is to attack the e5-pawn from a5: 43.♘c5 (on 43.♘d6, 43...♕d5 would resist. Or if 43.g5 ♞a5 44.♖g3 ♞xe5 45.♖f4 ♞e6 Black will probably be able to sacrifice the bishop for White's last pawn) 43...♞c3 (if 43...a5 44.g5 ♞c3 45.♘e4 Black will not survive) 44.♞xa6 ♞xc5 45.♞xa2 ♞xe5 46.♖g3! and White wins after 46...♖e7 47.♞f2.

**43.g5**

Although White's pawns are not connected, they are strong, as the rook and the knight can assist them well.

**43...♞h4 44.♘d6 ♕e6**



**45.g6!**

The g-pawn is too strong.

**45...♞g4**

If 45...♞h5 46.g7 ♞xe5 47.♘f7+ wins.

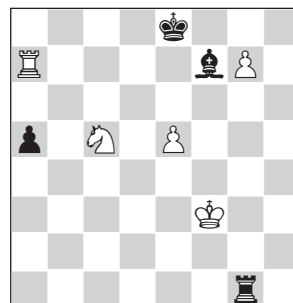
**46.g7 46...a5**

Or 46...♞g6 47.♘e4, winning.

**47.♖f3 ♞g1**

47...a4 48.♘b7+ ♖e8 49.♘c5 ♕f5 50.♞a8+ ♖f7 51.e6+ ♖xg7 52.e7 and White wins.

**48.♘b7+ ♖e8 49.♘c5 ♕f7**



**50.♘e4!**

This knight hop is effective.

**50...♞xg7 51.♘d6+ ♖f8 52.♞a8+**

**♖e7 53.♘f5+ ♖d7 54.♞a7+ 1-0**

There is no fork with ...♕d5+.

Carlsen showed considerable respect for his world-class opponent by going for an endgame instead of relying on his attacking chances. Carlsen won material and obtained a winning position, but a lot of his playing strength was required to convert the advantage. He used his knight very well for tactical operations.

In 2004, more of Carlsen's games were decided by tactical means. In slow games, he usually did even better.

In the 2004 Wijk aan Zee tournament, he prepared some very sharp lines and managed to hurt his opponents in these games, but he often played positionally. In his endgames he had hardly any draws. It is interesting that, in general,

he already played endgames at an extremely high level. At the FIDE World Championship tournament he made Aronian work very hard to eliminate him, although in the final game Magnus was not able to hold the theoretically drawn f- and h-pawn rook ending.

Regarding his choice of openings for White, very little had changed since 2003. Magnus still played 1.e4 somewhat above 50 percent of the time, and he varied the main lines. His win/loss percentage decreased somewhat, but that can be explained by the stronger opposition he faced. In closed openings, he scored somewhat

better, although the Trompowsky did not work for him, as he did not even score 50 percent with it. As Black, the Sicilian remained his main weapon. He varied the same lines as earlier, increasing the number of Najdorf games slightly. His score with 1...e5 was interesting. He won 2 out of 2 in the Ruy Lopez, but against other openings, such as the Italian and the Scotch, he scored minus 2. Against the closed openings, he reacted the same way as in 2003. In roughly half of his games, he employed the Nimzo-Indian and the Queen's Indian, and he also played the King's Indian and the Grünfeld with mixed results.

#### **Carlsen's results in 2004**

Wijk aan Zee, C-Group 1st place 10½/13 GM norm  
 Aeroflot Open, Moscow 5½/9 GM norm  
 Reykjavik Open 33th-43th place 4½/9  
 Reykjavik Rapid Championship 3/5  
 World Knockout Championship Tripoli Round 1 Aronian-Carlsen 1½-½  
 Norwegian Championship, Molde 1st-2nd place 7/9  
 Politiken Cup, Copenhagen 4th-14th place 7½/10  
 Norwegian Championship, Play-off Ostenstad-Carlsen 1-1 silver medal  
 Young Masters, Geneva: Alekseev-Carlsen 2½-1½, Carlsen-Papa 1½-½, Carlsen-Lagno 4-2  
 Gausdal Classic 5th place 5/9  
 Chess Olympiad, Calvia (Board 1) 3/5  
 Hoogeveen 4th place 2/6  
 Spanish Team Championship, eliminated in the last 16 Kasparov-Carlsen 1½-½  
 Dubai Open 2nd-11th place 6½/9 GM norm  
 Malmö/Copenhagen 3rd place 5½/9  
 Norwegian Teams 2½/9  
 Drammen Smartfish Masters 9th-10th place 3/9

# Endgame classification

(numbers refer to games)

This classification of Carlsen's endgames may help those players who have problems in certain kinds of endgames. Is there any chess player who has never spoiled a winning endgame with a material advantage? Carlsen's masterpieces are helpful in this regard.

A few words of clarification:

\* Any one game in the classification scheme we present below may contain multiple elements. For example, it is possible that there was a zugzwang and also a mating attack, but even control of an open file could have been an important factor. In these cases, the game will appear under more than one heading.

\* Often endgames never crystallise into clear rook endings, as both sides retain a bishop or a knight. These games are not placed under a specific heading but come under rook endings due to the influence of the rooks.

\* Sometimes there is reference to opposite-coloured bishops, although there were still rooks on the board. In these cases, the bishops would have had a decisive effect on the outcome.

\* The classification may also refer to motifs which only occurred in the analysis (not the game itself).

Carlsen applied many different skills in his endgames. However, the fact that there is a balance between his implementation of these tools shows how versatile he is.

## **Pawns**

2

## **Knights**

17, 25, 33, 42, 54, 60, 77, 86, 87, 90

## **Bishops**

35

## **Opposite-coloured bishops**

18, 19, 30, 31, 36, 38, 40, 56, 57, 63, 64, 74

## **Bishop versus knight**

9, 10, 16, 23, 27, 29, 41, 43, 44, 51, 52, 66, 71, 72, 76, 78, 79, 81, 84

## **Rooks**

10, 11, 23, 27, 28, 45, 46, 48, 59, 85

## **Four rooks**

2, 3, 6, 9, 31, 33, 44, 74, 77, 86, 87, 90

## **Exchange (rook vs minor piece)**

9, 53, 62, 66, 75, 80, 82, 88

**Queens**

43, 55, 76

**Queens and rooks**

67, 69, 73, 79, 88, 89

**Queen against pieces**

14, 19, 91

**Two pieces versus rook**

20, 26, 34, 40, 58, 80

**Pawns versus minor pieces**

5, 8, 23, 37, 49, 54, 82

**Attacking the king**

12, 16, 19, 26, 28, 29, 31, 38, 43, 47, 58,  
63, 64, 67, 76, 88, 91

**Passed pawns**

3, 12, 14, 16, 23, 24, 26, 28, 30, 34, 39,  
41, 44, 45, 54, 55, 57, 60, 62, 64, 68,  
72, 75, 77, 78, 80, 82, 83, 85

**Converting a material advantage**

7, 8, 9, 10, 11, 12, 15, 16, 18, 26, 30, 32,  
38, 40, 46, 47, 48, 49, 50, 54, 55, 56,  
58, 60, 64, 65, 69, 71, 74, 75, 84, 87,  
88, 89

**King centralization**

17, 31, 33, 48, 75, 89

**King manoeuvre**

10, 11, 12, 13, 15, 17, 18, 23, 24, 25, 26,  
28, 30, 36, 37, 41, 45, 49, 51, 53, 54,  
55, 56, 59, 61, 64, 65, 69, 70, 71, 80, 81  
82, 84, 87, 91

**Fixing pawns**

35, 51, 77, 86, 89

**Rooks on the seventh rank**

3, 5, 9, 11, 16, 23, 26, 28, 29, 31, 34, 44,  
47, 48, 51, 57, 64, 68, 72, 73, 75, 78, 85,  
91

**Space advantage**

7, 13, 15, 17, 19, 21, 22, 33, 38, 43, 45,  
59, 61, 63, 66, 70, 83, 87, 89, 90

**Zugzwang**

30, 35, 36, 51

**Exchanging**

2, 7, 17, 41, 42, 48, 49, 56, 65, 67, 71,  
72, 84

**Open file**

2, 3, 5, 12, 15, 20, 21, 31, 32, 33, 38, 48,  
61, 62, 67, 68, 73, 78, 86

**Pawns on one side**

5, 8, 10, 46, 51

**Pin**

15, 23, 63, 86

**Pawn race**

6, 22, 24, 34, 52, 85

**Pawn promotion**

14, 22

**Two bishops**

18, 32, 35, 38, 63, 81

**Hunting down a piece**

53, 71

**Building a fortress**

14

**Doubled pawns**

2, 37, 49, 83

**Cutting off the king**

20, 46, 68, 69

**Intermediate check**

1, (11,) 26, 44, 46, 47, 71

**Pawn as outpost**

3, 4, 13, 15, 19, 20, 28, 29, 39, 59, 62,  
72, 76, 79

**Isolated pawn**

13, 37, 40, 48, 68, 79

**Stalemate**

50, 91