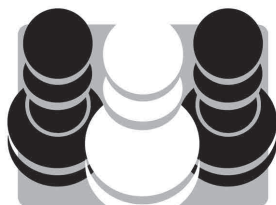


A Matter of Endgame Technique

By

Jacob Aagaard



Quality Chess
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You don't have to read everything!

Looking at a nine hundred page book may be a daunting experience. On the one hand, it is a lot of information, but on the other, it is a big challenge as well. At our online academy, www.killerchesstraining.com, we have daily classes, leading to 40-50 hours of chess training available each month. If you are a teenager with a deep passion for chess, this may be the greatest thing ever. But if you are a working professional, you may feel you are missing out, because there is no way you can ever watch even half the classes. Most find their own rhythm quite fast, but some do struggle with the idea of zoning in on the few things that are of especial interest to them and not feeling that they are losing out. We always wanted the academy to be a way to pool our resources so that our students can get the training they need, always, at an affordable price, thus making it available to everyone.

This book follows the same principle. Rather than looking to maximise income, it seeks to convey as much information as possible. In the process of writing it, I decided to give up on the idea of what a chess book usually looks like and allowed it to be its own thing. I am trusting readers to understand that this book is many things, and you do not have to read all of it, simply stick to the sections that pique your interest.

The book contains only six chapters, all of which could have been published as individual volumes. It is a book about technical play in the endgame, in all its facets, with two notable exceptions. This is not a book about rook endings, although a few examples of rook endings are included, and it is not a book about endgame theory, although a few examples do discuss this topic as well.

The original idea of the book was to include only examples where people misplayed their good positions, but as I got deeper into the writing of the book, this constraint became obviously artificial. The book still contains the idea that the endgame is difficult, and these are the ways we mess up, but it is only one dimension.

The themes and examples in this book are meant to be multidimensional. To some readers, a lot of the themes and ideas will be new, while others will be reacquainting themselves with existing knowledge. Learning something new is always a good thing. But so is the reminder of existing knowledge, particularly through new examples. Those readers who are following top tournaments religiously may recognise a few examples, especially from the last chapter. But the explanations and thematic investigation should still make them fresh and revealing. I don't use famous games to explain chess ideas. When I see a book full of examples I already know, because they have been in many books already, I mentally turn off. I do not want this experience for you.

The examples are as important as the themes

Learning anything involves a lot of repetition and looking at it from different angles. Most will know the principle of two weaknesses. But seeing a new example explaining it will only expand your understanding of the theme. In chess nothing is absolute. We have a lot of ideas and concepts that can help our decision making during the game. Evaluating the strategic reach of them better is an important part of improvement. No verbal explanation can fully cover the themes, they only make sense in context. For this reason, this book contains a lot of examples. Hopefully some of them will help you bridge the abyss between understanding a concept and seeing how it works on the board.

How to deal with the deep analysis in this book

It is common for readers of chess books to prefer verbal explanations over lots of variations. Often analysis is disregarded with the contemptuous description of “computer analysis”. Not always without justification. It is easy to press the space bar and fill the white spaces on the page.

This is not what has happened in this book. The variations are meant to be an illustration of possible play, or to explain the tactical or technical nuances of the games. I find that it is easy to make a statement and get the approval of the reader. Usually, those who read a book are willing to believe that you know what you are talking about and will accept the evaluations as valid. But I am not looking for approval. I am wishing for you to improve your game.

The variations and analysis in this book are thus illustrations and explanations and going through them will be a part of the educational process. The thematic explanation can be easy to follow conceptually, but without seeing what it means in practice, I doubt it will have any positive influence on your game. There are a few times where the variations will be quite extensive and if you want, you can skip them. The more experienced you are, the less this should be the case.

If you are a less experienced player and some variations seem overpowering, you should skip whatever you feel you need to skip. As with our academy, it is never the intention that everyone should understand everything, but that everyone will learn something.

If you can, I recommend that you go through the variations in your head. This is good for your training in visualisation in general and where chess should be played. If you need to play through the games on a board, I recommend that you still try to go through the variations in your head. Many strong players would never think of using a board when going through a book; others would not consider reading a book without it. Personally, I am somewhere in-between, depending on the book and my mood.

Why the games are truncated

A fellow author once explained to me his love of unannotated moves, as they reduced the need for him to work. This is probably one of the reasons I dislike them so much?

Bent Larsen said: “Save me from unannotated games!” So, if you are one of the few readers who at times ask us why we start the game halfway and don’t include the first 30-40 moves?

The answer is: the parts of the games that are relevant for the topic of the book are included. If you want unannotated games, you can find them everywhere. If the first 30 moves were included, too many would believe that they had to play through these moves and would be wasting time they should spend improving their endgame technique.

The organisation of the book

The six chapters are organised like this:

1. Endgame Elements

There are many small themes in the endgame. In this chapter we shall deal with a lot of them. Over the six months of writing this book, these are the main topics I could think of. To a strong player, most of them will be familiar, which is where the freshness of the examples is important. To a less experienced player, there will be a lot of new information.

2. Lack of Technique

In this chapter we shall look at common ways for things to go wrong. The core of the chapter is the big section on *allowing counterplay*, but on top of this, some topics are repeated from Chapter 1 and some topics are considered from both angles, such as *hanging on to material* and *overestimating dynamics*.

3. Fortresses

A topic unique to endgames and difficult to understand for a lot of the players I have worked with. It requires a special type of thinking, as rarely are the games decided on a move by move basis, but rather on schematic thinking and a special sensibility for fortresses.

4. Rook vs Bishop

In this chapter we shall go deeper into an endgame that most of the time ends with fortresses. This chapter definitely goes from the simple to the advanced, with details that will stretch the imagination of any grandmaster. The cornerstone game, Aronian – Dubov, is close to impossible to understand fully. I have done my best to do so, and explain what I have understood, but certainly not every aspect of this six-piece ending has been uncovered.

5. Exchanges

When and what to exchange is a difficult topic in chess and no less so in the endgame. In this chapter we shall debate this topic in depth, and why the strategic concept I was taught when I was younger is debateable. In going deep into this topic, I hope I can rescue you from some of the disasters that befell my friends.

6. Illustrative Games

The final chapter includes a few recent games and two lesser-known games that feature big endgame battles. The concept is to show the endgame in its natural habitat and go deep. I enjoy both small clear examples with one-dimensional explanations, and deep analysis of complicated games that tries to address all the elements we encounter on the battlefield.

The book has been designed to be read in order. Start at Chapter 1 and progress through the book. However, there will be many times where you encounter a point explained again, yet explained as if seen for the first time. This is intentional. Repetition is good. There is a lot of information in this book and as said, you do not have to read everything to benefit from it. And at times I presume you have not done so.

However, I hope you will find the themes and explanations revealing and want to read on.

A few general truths about the endgame

Throughout this book you will be faced with a lot of thematic ideas: some known for a hundred years, some obvious, but never really written about, and perhaps a few that I have noticed first. Above them are some general truths about endgame play, which are well established.

Most games are won or lost incrementally

Throughout this book, you will find many examples where one side has a significant advantage already. Either they will win with accurate play, or the other side is facing their last chance(s) to save the game.

This is not how most endgames work. Usually, one side enters the endgame with a slight advantage. This simply means that the other side has more problems to solve. In the last few decades, defensive skills have increased, but the experience is still that a slightly better position will lead to more than average results.

A big part of modern chess is to play for this technical advantage. At the top level, the days of big novelties out of the opening leading to large advantages are behind us. If you get any advantage out of the opening, it is a cause for celebration. In my generation there were a lot of players who loved the opening more than anything else and dived deep, trying to win or draw straight from the opening. When I talk to these people today, some of them feel that chess has been played out to some extent, and all there is left is to attempt some “bluff”. Chess changes throughout the ages and in our age technique is more important than it has been for a while.

Most blunders come from poor positions. So, if you want to rely on luck, you need to create it.

Throughout this book you will find examples where games are won slowly. One side manages to create a few problems for the opponent and keep up the pressure, until more mistakes occur.

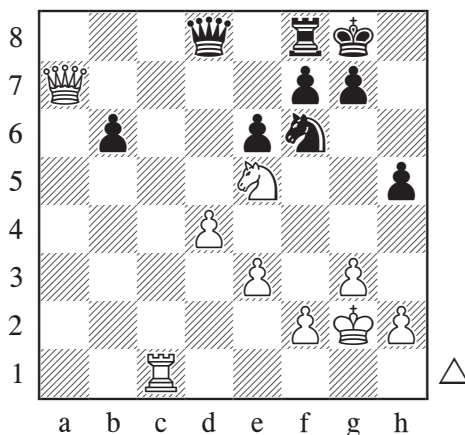
The zone of one mistake

This concept arises from Lev Psakhis and has become an important part of the thinking of Boris Gelfand, as we explained in *Technical Decision Making in Chess*. The idea is simple, yet powerful. What it focuses on, rather than looking for the objectively best line, or a forcing line leading to a win, is to get the opponent into an environment where he is likely to make fatal mistakes. This can be psychologically difficult, as those seeking control will tend to go for forcing lines. But, if you want your opponent to make mistakes, you need to give him enough rope to hang himself.

The following is an example of allowing the opponent to escape from the zone of one mistake.

Sam Shankland – Jordan van Foreest

Prague 2021



Sam played the timid:

27.h3?

The sort of move you make when you are disappointed with the outcome of your main intentions.

27...♞d5† 28.♔g1 ♘e4

Black has enough counterplay. The game took many twists and turns, before White won on move 62, but only because Black was trying to win the game along the way!

Stronger was:

27.♞b7!

This was the move Sam wanted to play on intuitive grounds. He was happy to continue squeezing after 27...♘d5, but was thinking that the intention behind Black's last move, 26...h5!?, was to be expansive on the kingside. He thus calculated the following variation:

27...g5!? 28.♞c7

28.♔g1! would be an additional option for White, keeping flexibility.

28...♞d5† 29.♔g1 ♞xb7 30.♞xb7 g4 31.♞xb6 ♘e4

The knight is aiming for g5. White is pressing, but Black will hold with decent defensive play.

But seeing this variation and to automatically extrapolate that the opponent was intending it and was confident in it, and that he would have defended the endgame well over the next 30 moves, was impractical. Better to allow the opponent to live in the zone of one mistake, than see your advantage die...

Depth of the analysis

This book has been deeply analysed and I have done the best I could to minimise mistakes. Please understand that there will never be such a thing as an error-free book and that the computers of 2030 will have a scope that cannot be matched by the computers of 2021. If you do find a mistake, please get in touch with the publisher and corrections will be made for future print editions – should there be any...

Using this book as an exercise book

I have written several exercise books and will write more in the years to come. Instead this is an instructional book and the positions are selected for their ability to explain the ideas and themes I want to cover.

However, there are those who will wish to use this book as an exercise book and I respect that. I do believe that “thinking” is the most important component in improving in this game of ours.

So, before each chapter I have created a list of exercises and marked them according to difficulty with a 1-5 assessment. As I have used many of the positions with my students, I hopefully have a realistic feeling for how difficult the exercises are...

With the inclusion of the stars and in an attempt not to make the book too long (I do get the irony of that) the idea of numbering the exercises has been abandoned. You can refer to them by their chapter number and page reference, if you need to remember where you were.

I should also say that the exercises are mixed. A lot of them require accurate play, but not all. There are positions with more than one reasonable way to play. There are positions where you should make a positional/technical decision, and there are positions you need to calculate. In some ways it simulates the experience of sitting at the board. You will not know how to approach the position. The only hint you are offered is how difficult it is. I offer this mainly because I know that some people will spend 20 minutes being confused, after seeing the solution in 30 seconds. And others will spend 30 seconds on positions that even seasoned GMs would need to take far more seriously.

Also, please accept that because this is not an exercise book, it is possible there are other sound ways to play than I have indicated in the text. Most often there will not be, but if you believe you have found an alternative solution, then check it and prepare to give yourself a pat on the back.

Chapter 2

Lack of Technique

Introduction

Finally, we have reached a chapter on *technique* in this book called *A Matter of Endgame Technique...*

As this is not a traditional endgame manual, and despite its immense size, I will not attempt to teach you all the techniques of the endgame. Rather, I will give you some examples of how strong players can mess up in the endgame and explanations of what happened. While there are holes in the skills and knowledge of all chess players, they are few and far between when we talk about grandmasters and super-grandmasters.

Many mistakes committed by grandmasters come about because they think that in a particular instance, the well-known strategic principles of the endgame are not important. Playing chess is constantly balancing a scale with understanding and well-trodden paths on one side, and raw calculation on the other. If we tip too much in either direction, we risk either being too dogmatic in our approach or ignoring strategic concepts developed over centuries. In this chapter, we shall first look at a few strategic principles and how their violation led to failure. Then we shall look at the importance of dynamics in endgames, first with situations where the players play too dynamically, then situations where they don't play dynamically enough.

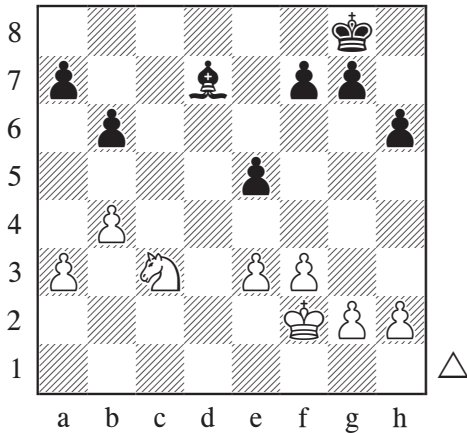
1. Opposition and triangulation

The first topic to deal with is as basic as it gets – the opposition.

The first example is a little-known game from the Soviet Union in the 1970s. White is a famous Russian Grandmaster, while Black at the time of the game was still a junior player and unrated. Later the player from Kyrgyzstan became an International Master. We enter the game after the exchange of queens. White has a slight advantage, as his king is a little more active, but with accurate play, Black should hold the draw. But Black's initial play is anything but accurate, giving White a big advantage.

Ratmir Kholmov – Vladimir Ilinsky

Riga 1975



27. ♖e2 ♜f8?

The first chance to make the draw is to create a pawn structure that works well with the bishop.

27...f6 28. ♔d3 b5! This is the ideal pawn structure. Black will leave the pawn on a7 so it does not become a weakness. The single weakness on b5 is easy to defend, and the white king will have no way to penetrate.

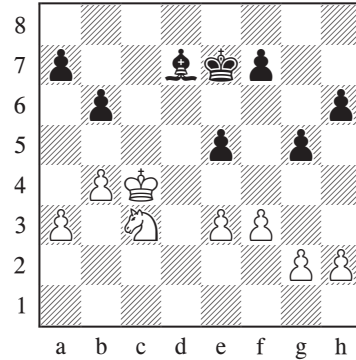
28. ♔d3 ♜e7 29. ♜c4

White has managed to put some pressure on Black, and it is now easy to succumb to desperation.

29... ♜d6?

Which Black does. The hope of drawing the pawn endgame is slim at best. Generally, I would only enter a difficult pawn endgame if I was on top of the implications, or if I had no other choice.

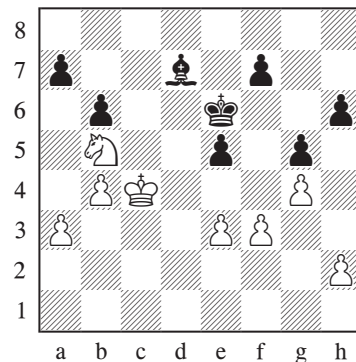
29...g5 would be a normal move. Putting the pawns on the opposite colour of the bishop. White has various tries and I considered four of them:



a) 30.a4 ♜c6 is not dangerous at all.

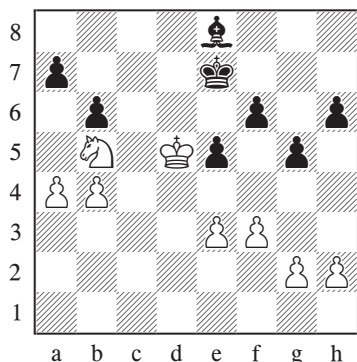
b) After something like 30. ♖b5, Black can play actively with 30... ♜e6† 31. ♔c3 ♜d7! 32. ♖xa7 b5, when the knight is sort of trapped. Why only sort of? Because 33.a4 bxa4 34.b5 is always there. But Black makes a draw quite easily: 34... ♜d6 35. ♖b4 a3 36. ♜xa3 ♜c5 37. ♖a4 ♖b6 38. ♖c6 ♜xc6 39.bxc6 ♜xc6 40. ♖b4 ♖d5 41. ♜c3 e4, for example. There are many ways for Black to defend. This is simply the one that seemed most natural to me.

c) 30.g4 looks quite natural, but Black is not in any trouble. 30... ♜e6!? The computer says that almost everything holds. But the actual experience at the board may be a bit more awkward. I like this move, as it contains a little trap: 31. ♖b5?

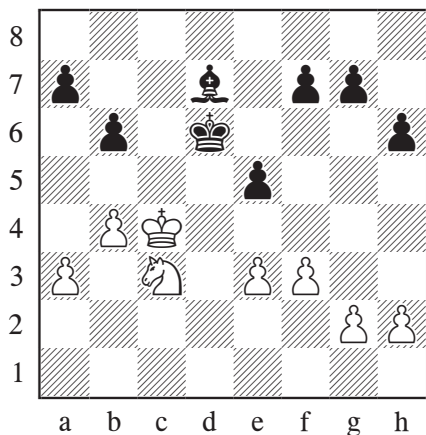


31...e4! 32.fxe4 ♔e5 33.♖c3 ♕xg4 34.♗b5 ♕c8! Black wins. The distant passed pawn on the kingside decides.

d) You might guess that Black was afraid of 30.♗d5, but natural play holds everything together: 30...f6 31.a4 ♕e8 Black can solidly wait. White has no real threats. 32.♗b5



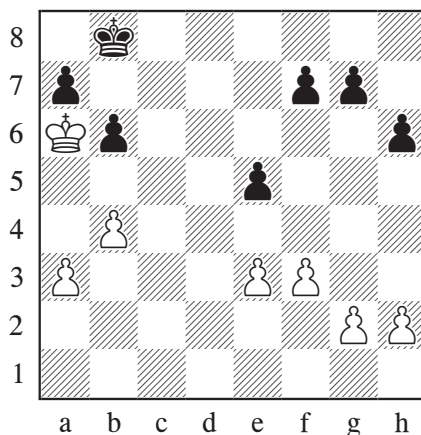
32...♗d7! A nice little trick. 33.♗xa7 ♕f7† 34.♗e4 ♕g6† with perpetual check.



30.♗b5†!

White is eager to grab this chance.

30...♕xb5† 31.♗xb5 ♗c7 32.♗a6 ♗b8



White is obviously winning. But it is still possible to ruin it. The natural strategy would be for White to improve his position to the maximum and then work out the specifics of how to win the game. But with his next move, Kholmov made things harder for himself.

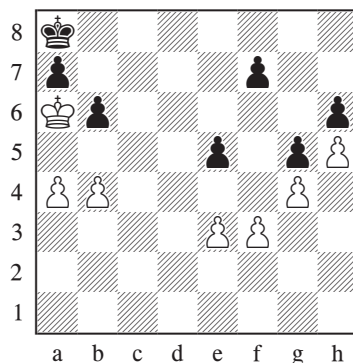
33.f4!:

Not objectively bad, but making things a lot harder is, well, bad.

33.g4!?

This was a stronger move. If Black plays ...g5, White has h2-h3 in reserve for later.

33...♗a8 34.h4 g5 35.h5 ♗b8 36.a4 ♗a8



The critical moment where White has to find a win. Luckily there are two.

37.♔b5

Later on, we will see that 37.a5 bxa5 38.bxa5 ♔b8 39.♔b5 ♔b7 wins because of 40.♔c5 ♔a6 41.♔b4! ♔b7 42.♔b5 and Black has been triangulated.

37...♔b7 38.♔c4 ♔c6 39.f4! exf4

39...f6 40.b5† ♔d6 41.f5 and White wins.

40.exf4 f6

40...gxf4 41.g5 and White wins. The white king is within the quadrant and the black king is not.

41.fxg5 fxg5 42.♔d4 ♔d6 43.♔e4 ♔e6 44.b5 Zugzwang. White wins.

33...exf4 34.exf4 ♔a8?!

Black returns the favour.

He could have provided a lot of resistance with:

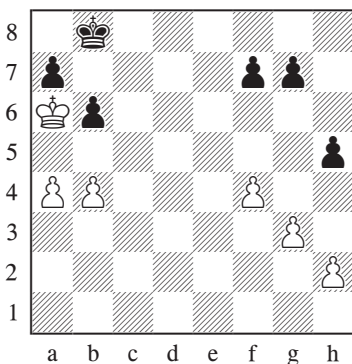
34...h5!

The winning line is very narrow for White and the chance that Kholmov would have found it is not big.

35.g3! ♔a8

There are other attempts, but at this point I shall not spam you with variations.

36.a4 ♔b8



37.f5! ♔a8 38.a5! bxa5 39.♔xa5! ♔b8 40.♔b5 ♔b7 41.♔c5 ♔c7 42.♔d5 ♔d7 43.♔e5 ♔c6 43...♔e7 44.f6† gxf6† 45.♔f5 is elementary. White will quickly win a pawn and then the game.

44.f6 g6 45.b5†! ♔c5 46.h4

Black is in zugzwang and White wins.

35.a4?!

35.g4!

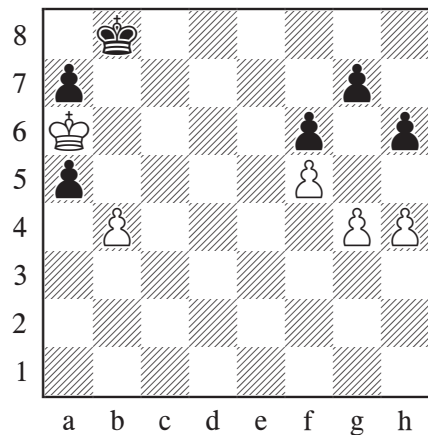
35...♔b8

35...h5! still loses, but was worth a try.

36.g4 ♔a8 37.h4 f6 38.f5!

Securing a tempo move on the kingside.

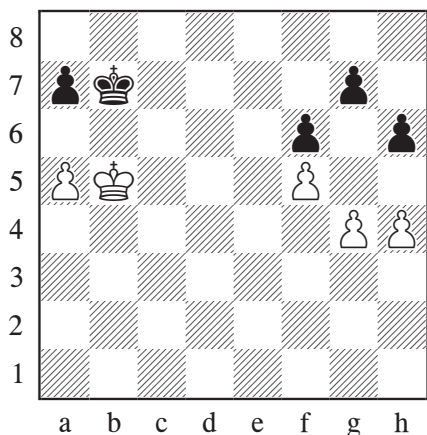
38...♔b8 39.a5 bxa5



40.bxa5?!

40.♔xa5! would have been a lot easier. A possible winning line could be: 40...♔b7 41.♔b5 ♔c7 42.♔c5 a6 43.♔d5 ♔b6 (43...♔d7 44.h5 and the reserve tempo comes in handy. Black is in zugzwang and can only decide which side of the board he wants to lose on.) 44.♔e6 ♔b5 45.♔f7 ♔xb4 46.♔xg7 a5 47.g5 White wins. He will promote with check on f8 and not even have to win a queen ending.

40...♔a8 41.♔b5 ♔b7



42.a6†?

The first real mistake.

The winning line was based on triangulation.

42.♔c5! ♕a6

42...♔c7 43.♔d5 ♔d7 44.a6 wins easily.

43.♔b4 ♔b7 44.♔b5!

The triangulation is complete.

44...♔c7 45.♔c5 ♔b7

45...♔d7 46.♔d5 a6 47.h5 and White wins.

46.♔d5 ♔a6 47.♔e6 ♔xa5 48.♔f7 ♔b5

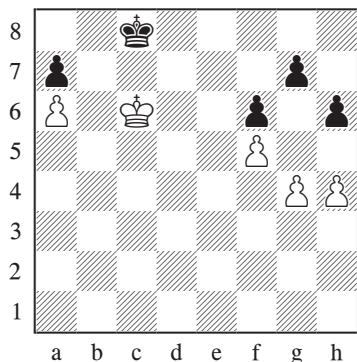
49.♔xg7 a5 50.g5

White arrives first, winning.

42...♔c7?

Black misses the chance to save the game.

42...♔b8!! 43.♔c6 ♔c8



Keeping the opposition from the 8th rank. Talk about the last line of defence!

The key point is that 44.h5 ♔d8 45.♔b7 ♔d7 46.♔xa7 ♔c7 leads to a well-known fortress.

43.♔c5 ♔d7 44.♔d5

Black is in zugzwang and White wins.

44...♔e7 45.♔c6

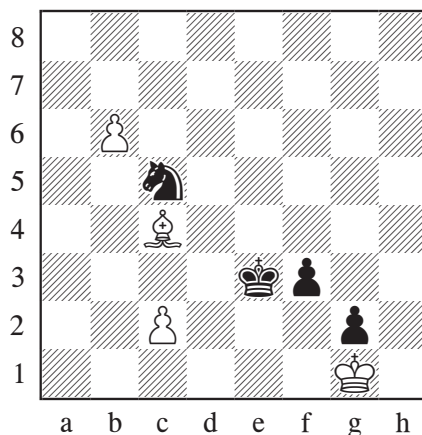
1-0

There are several points to be made about this game. Black lost because he entered a dangerous pawn ending and then played it sub-optimally. Perhaps he believed himself to be already lost when he missed the last chance to hold. White got his chance and then played quite poorly. First he failed to strengthen his position on move 33. Then on move 40 he chose to have an a-pawn, rather than a b-pawn. Finally, he failed to find the triangulation manoeuvre that would still have won the game, giving his opponent an undeserved chance to hold. Or maybe he failed to see the defence that his move allowed. We can only speculate.

Let's see another example of triangulation.

Francis Alard – Jacques Porte

Vitrolles 2000



Draw agreed?

1/2-1/2

Obviously, this will not do. Let's see the winning triangulation.

52...♙f4!

The winning move.

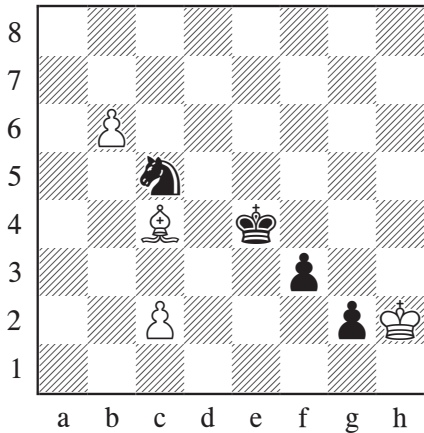
Black can also play 52...♞b7, but after 53.♙d3, all he can do is repeat the position. The knight cannot do triangulation.

However, should White play 53.♙d5?, Black will win with a nice idea: 53...♙e2 54.♙c4† ♙e1 Once the knight protects the g2-pawn, it is game over. 55.♙a6 ♞d6 56.♙d3 ♞f5! 57.b7 ♞e3 58.b8=♚ f2† 59.♙h2 g1=♚† 60.♙h3 ♚g2† 61.♙h4 ♚g4#

53.♙h2!

Forced because of the mate arising after ...♙g3.

53...♙e4!!



We can now see that the bishop is ideally placed on c4. White can either move the bishop now, or on the next move. It makes no difference.

54.♙g1 ♙e3

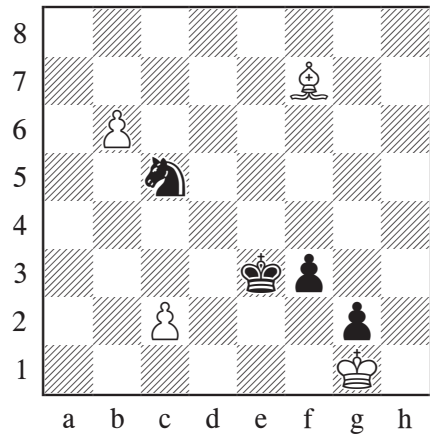
Black has managed to pass the move to White, who is now in zugzwang.

55.♙f7

The critical try. White is preparing to meet 55...♙e2 with 56.♙h5, preventing the advance of the f-pawn. Black would then do best to go back with 56...♙e3, aiming to repeat the position, after which he could win as detailed below.

Putting the bishop on the other diagonal is out of the question. After 55.♙b5 ♞e6, Black will defend the g-pawn and queen his pawns with check.

55.c3 loses in various ways, most entertainingly with Black repeating the triangulation manoeuvre. But this is not a study, so the position of the pawn stems from prior action and not to diminish the number of winning lines for Black.



55...♙d3!!

The absolute highlight of this endgame. Black is threatening ...♞f4, so White has to accept the sacrifice.

56.cxd3 f2†

It was still possible to blunder with 56...♙e2?!, when 57.♙h5 wins for White.

57.♙xg2 ♙e2

Black queens the pawn and wins the game.

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