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Introduction

Solving chess puzzles is certainly one of the best ways to train your chess mind, no matter your playing strength. I often prepare puzzles for lessons or assign them as homework when working with my chess students. The purpose is to help them work on specific areas of their game, usually their perceived weaknesses. This Workbook aims to provide similar training for club players in the 1500-1800 Elo range. Even if you, dear reader, are 100-200 Elo points below or above this range, I am confident you will find most of the material in this book suitable for your needs.

Please keep in mind that the Elo ratings I refer to here and throughout the book are those used before the FIDE's proposed one-time rating increase in the January 2024 rating list for players rated below 2000. Therefore, if your 'old' rating was around 1580, for example, and the 'new' one in January 2024 is around 1750, the material in the book is aimed at your lower 'old' rating. By the same token, if your old rating was below 1200 but is close to or over 1500 after the one-time rating increase, you will likely find the material in the book more challenging than players rated 1500 before the rating change.

Training plan

This Workbook's format is similar to Volume 1 (aimed for 1800-2100 Elo) in that there are 40 exercises in each of the three key study areas: Tactics, Middlegame, and Endgame. However, I have emphasized the Visualization training module more in this volume since club players in the 1500-1800 rating range tend to have more consistent issues with this vital chess skill. Thus, 25 additional exercises in the Visualization Bootcamp chapter will help you work on your visualization. Therefore, there are 145 exercises in total.

Here is the outline of our training plan:

Training module/ Training method	Description of the training method	Chapter 2: Visualization Bootcamp (25 exercises)	Chapter 3: Tactics (40 exercises)	Chapter 4: Middlegame (40 exercises)	Chapter 5: Endgame (40 exercises)
Blindfold chess	Solve the exercise without visual aids (or with the help of an empty chessboard)	5 Static Visualization exercises + 20 Dynamic Visualization exercises			
Find the best move	Solve the exercise with visual aids, but not allowed to move the pieces		20 Find a Hidden Tactic (FHT) exercises	20 Find the Best Move (FBM) middlegame exercises	20 Find the Best Move (FBM) endgame exercises
Analysis	Solve the exercise while allowed to move the pieces		20 Tactical Analysis exercises	20 Piece Trade Decision exercises	20 Endgame Analysis exercises

You can probably tell from the table above that the exercises in this Workbook do not follow the standard ‘White to play and win’ format. Instead, I borrowed ideas from my previous two books, *How to Study Chess on Your Own* and the first volume of *The How to Study Chess on Your Own Workbook*, to create unconventional puzzles such as Dynamic Visualization, endgame analysis, and Find a Hidden Tactic (FHT). They will engage your mind in ways you may not be used to. More importantly, these training methods address typical mistakes you might be making in your games.

In the next chapter, I will elaborate on typical tactical, positional, and endgame mistakes of club players. You will also learn how the training methods and exercises in the Workbook can help you reduce corresponding errors. For example, a player who struggles with properly evaluating piece trades can tackle Piece Trade Decision exercises in the Workbook to improve his understanding and ultimately make better decisions in this area of his game.

Chapters 2 through 5 correspond to each of the four training modules listed above and serve as a training ground for rooting out the typical mistakes listed in Chapter 1. I will provide detailed examples and explanations of specific training methods in each chapter. They will prepare you to solve the exercises that follow.

Regarding the training material in the Workbook, the key difference compared to the previous volume is that most of the material comes from games of players in the 1500-2000 Elo range. The idea behind this approach is twofold. Firstly, you will probably have an easier time

relating to the mistakes or strong moves that other players of a similar level made than those of a super-GM. Secondly, finding solutions to the problems of other club players should be easier or more realistic than chess professionals. Exercises gradually increase in difficulty, although it is not an exact science. You might find specific puzzles less challenging than those preceding them. Still, I can guarantee that the first few exercises in every set will be less demanding than the last few.

Scores and grading

Two valuable features I kept in this volume are scoring and grading exercises. Below is the breakdown of scores you can get for particular exercises in the Workbook (for your convenience, I have denoted them in *italics*):

No credit = 0 points.

One point = 1 point; *Two points* = 2 points, etc.

Full credit usually stands next to an alternative, earning you the same points as the main line.

Extra credit/Additional point means you get additional points (one or two) if you find a specific (usually difficult) move or line.

Here is what the score field looks like in the Textbook (the number of points after the '/' denotes the maximum score for the exercise):

Your score = ____/5 points

Once you've completed the exercise, you can tally the points you earned for your solutions (you can make more than one point per exercise, particularly in the 'Analysis' exercises) and insert this number in the blank space like the one above.

If you'd like to find out how you did in the whole section (20 exercises) or the training module (40 exercises), all you need to do is add up the individual scores for each exercise to get the total score and compare it to the Grading scale at the end of the chapter. This quantitative analysis will give you meaningful feedback about your overall work.

What to take away from this Workbook

While the primary purpose of this Workbook series is to provide you with training material, the second purpose, and perhaps equally important, is to teach you. There are two channels for this:

1. through instructive examples; and
2. explanations of the solutions.

In both, I identify critical instructive aspects of the position and help you draw conclusions about them. For instance, all solutions in the Middlegame and Endgame analysis sections end with a ‘middlegame/endgame lesson’, a short piece of advice that can be easily remembered and applied in similar situations.

My chess students know I have often been guilty of giving them tough love when selecting puzzles for solving. My primary goal is to ensure the exercises are simultaneously challenging and instructive for your relative playing level. While finding the correct solution is the main task, understanding how to apply the proper thought process to solve similar problems in your games is just as important. If you want to improve at chess, solving chess puzzles should be less about satisfying your dopamine needs or stroking your ego and more about learning from them. I hope you embrace this growth mindset as you work through this Workbook.

Words of gratitude

Writing a chess book is not easy, but it feels satisfying and invaluable because you create something that can serve others for years to come. This is already my fourth book, and I am most grateful to the publisher Rimmelt Otten for continuing to believe in my potential as a chess author. I want to give special thanks to Frank Erwich for providing advice and help with the material in this and the previous volume of the Workbook. I also thank Veneta Petkova and her students, as well as Mark Waterfield, Camilla Avelino, and Johannes Rappazzo for testing the Workbook material. Finally, a big ‘Thank you!’ to my family for their continuous love and support on this journey.

If you have any questions or comments, don’t hesitate to contact me at dkuljasevic@gmail.com.

Davorin Kuljasevic
Plovdiv, August 2023

CHAPTER 1

Typical Mistakes of Club Players

While it does not contain any exercises, this chapter is essential to understanding what the Workbook is about. I recommend you study it carefully. It can help you identify to which degree typical shortcomings I will explore may be present in your play.

The themes on which the exercises in the Workbook are based correspond to the most typical mistakes players in the, broadly speaking, 1500-2000 rating range make. We can group them in the following way:

- 1) Calculation and tactical mistakes
 - a) Visualization mistakes
 - b) Poor tactical awareness
 - c) Blunders or missing your opponent's resources

- 2) Positional mistakes
 - a) Wrong piece trade decisions
 - b) Poor strategic decisions

- 3) Endgame mistakes
 - a) Big mistakes in theoretical endgames
 - b) Poor endgame technique
 - c) Wrong pawn or piece trades in the endgame

The mistakes listed above are often critical; that is, they tend to swing the evaluation of the position or the outcome of the game sharply. Hence, players at the 1500-2000 level should work on minimizing and eventually rooting out these mistakes to get their game to a higher level. We will see several instructive examples for each type of mistake and then discuss how to address them through training.

Before we move on, I want to stress that the idea behind this type of analysis is not to criticize the players who made those mistakes but to classify the mistakes and learn from them.

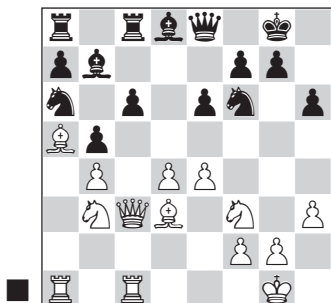
1) Typical calculation and tactical mistakes of club players

a) Visualization mistakes

Example 1

Training game between two club players

2022



White has sacrificed a pawn in the opening to get this typical bind on the Semi-Slav. His compensation is based on the stable space advantage. Feeling a little uncomfortable due to a lack of space, Black thought he saw a chance to break out with a thematic move:

17...c5??

This move was based on the following line:

18.bxc5 ♖xe4 19.♙xe4 ♙xe4

In the ideal world, the black bishop broke free, and he kept the extra pawn. However, he failed to visualize that after

20.♙xd8

his a6-knight remains undefended precisely because of the ‘activation’ of his light-squared bishop. Black focused on the implications of the central break so much that he failed

to visualize the simple threat to his knight when the bishop stopped defending it.

Inaccurate visualization can take many forms. For example, in the following game, Black had the right winning idea in the critical position but failed to visualize its consequences properly.

Example 2

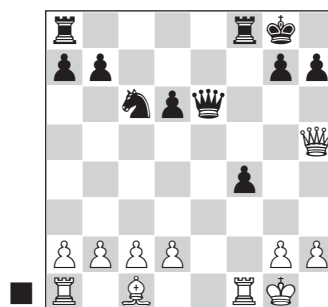
R. Johansson

1946

Ivar Josefsson

1655

Växjö 2023



Josefsson calculated a forced line:

14...♗d4! 15.c3 ♗e2+ 16.♙h1 ♗g3+!

17.hxg3 fxg3 18.♙xf8+

18.♙g1 also loses to 18...♙f5.

18...♙xf8

with unstoppable checkmate.

Unfortunately, he backed out of it.

He said: ‘I couldn’t see this position clearly when visualizing. Looking at it now, it’s crushingly winning, but I started getting unsure after 18.♙xf8.’

He was so close! However, hazy visualization gave him second thoughts and prevented him from pulling the trigger. Finally, he settled on 14...♖f6, a decent move that keeps a large chunk of Black's advantage, but not nearly as decisive as 14...♗d4. In the end, he even lost the game.

The visualization mistakes made in the previous two examples are typical. They contain several common elements:

1. There are many **'moving parts'**, i.e., pieces changing squares or getting traded. They make paying attention to tactical details trickier as you try to visualize new positions.
2. There are several **'status changes'** (I would like to credit my student Oren Livne for this term), i.e., new squares, files, and diagonals are cleared or attacked due to the move sequence. An excellent example of a status change is the a6-knight being suddenly undefended after 19...♗xe4 and attacked after 20.♗xd8 in the first example.

If you have had similarly frustrating experiences, there is no doubt: you should work on your visualization if you want to take an extra step forward in your game. Poor or inaccurate visualization will always haunt you in chess; there is simply no way around it.

Fortunately, many good resources in this area have become available in recent years. Books such as *Cognitive Chess* by GM Konstantin Chernyshov or online visualization tools such as the Visualization Booster on modern-chess.com come to mind. In the next chapter, I provide two modes of visualization training where you can put your blindfold chess skills to work. These are:

1. Static Visualization exercises – visualizing squares, diagonals, files, and knight geometry;
2. Dynamic Visualization exercises – visualizing 3-5 move sequences like the above examples.

b) Poor tactical awareness

To understand why this common and costly mistake usually happens, let's ask ourselves: how does one spot a chess tactic in the first place?

People are different, and so are their answers to this question, but I believe that for most of us, it starts by spotting a 'tactical trigger.' A tactical trigger is the most common condition before a tactic occurs. A list of common tactical triggers includes (but is not limited to):

1. Undefended pieces;
2. Pieces in contact (pieces that are under attack by the opponent's piece but not necessarily undefended);

3. Exposed king;
4. Exposed piece;
5. Geometry between the pieces (usually gives rise to forks, pins, skewers, discoveries, etc.);
6. Pawn promotion.

In my experience, many mistakes of club players that fall into this category are due to failing to spot one or more tactical triggers introduced by a new move. Let us examine a typical example.

Example 3

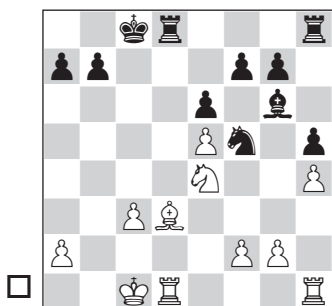
A. Lee

1556

J. Bumbak

1451

Scarborough WA 2023



After some simplifications in a Caro-Kann, the players entered this roughly balanced endgame. White thought it made sense to solidify his pawn structure with:

20.g3?

While positionally desirable, this move shows a lack of tactical awareness. There has been a subtle status change in the position: the pawn's advance to g3 has opened the h1-a8 diagonal and created a point of contact for the black

knight. It adds another 'contact' (a type of tactical trigger) to this position. At this point, three contacts are present:

1. A direct vertical contact between ♖d8 and ♙d3;
2. A direct knight contact between ♞f5 and the g3-pawn;
3. An indirect diagonal contact between ♙g6 and ♞e4 and ♙d3.

These tactical triggers should prompt us to look for a way to exploit White's last move tactically.

20... ♞xg3!

Black did not take the tactical cue from the opponent's last move when he played 20... ♖d5?, going for the e5-pawn. White could have defended it elegantly with 21. ♖he1!, when Black would have nothing better than to go 21... ♖hd8 (since 21... ♖xe5?? loses to a discovered attack: 22. ♞d6+ ♞xd6 23. ♖xe5) 22. ♙c2, holding the balance.

21.fxg3

21. ♞xg3 loses to 21... ♖xd3 and 21. ♞d6+ to 21... ♖xd6 22. exd6 ♞xh1.

21... ♖xd3 22. ♞d6+!

This is White's best try. 22. ♖xd3 is met by 22... ♙xe4+.

22... ♙c7 23. ♖xd3 ♙xd3 24. ♞xf7

Despite returning the lost pawn, the endgame after

24... ♖f8 25. ♞g5

(or 25. ♞d6 ♖f2+)

25...♙c4

looks bad for White due to the multiple pawn weaknesses. Club players usually don't have a problem finding tactics with straightforward geometric features

or well-known patterns. However, the relatively complex sequence starting with 20...♘g3! escaped both players. The apparent solidity of the white position partly concealed it.

Another reason why non-obvious tactics like this one can be tricky to spot, is that during the game a player doesn't know a tactic exists in the first place. Contrast this to the typical puzzle-solving setting, where you know exactly when to look for a tactic and, sometimes, what the objective is (e.g., Black to move and win, deflection, checkmate, etc.).

You need to develop a keen recognition of tactical triggers or 'Tune Your Chess Tactics Antenna,' as Emmanuel Neiman called it in his book, to find such 'hidden' tactics in the heat of the battle. Since I don't believe the typical tactical puzzles are ideal for improving that aspect of your game, I have created Find a Hidden Tactic puzzles. They were already featured in the previous volume of the Workbook and were received positively by the readers, so including them in the 1500-1800 Volume was a no-brainer. More on them in Chapter 3: Tactics Training.

c) Missing the opponent's resources

Example 4

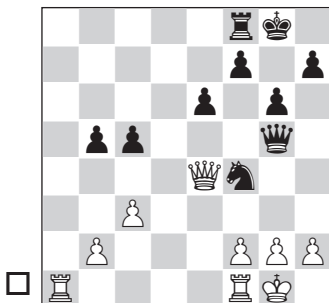
Johannes Rappazzo

1766

J. Scherler

1962

ch-SUI U16 rapid 2023



White shouldn't have problems converting his material advantage since he controls the a-file, and at

least one of the black queenside pawns will likely fall. However, he managed to throw the game in one move with:

25. ♖a8??

Instead, a little prophylaxis with 25.g3 was called for. After 25...♘d5 26.♖a5, followed by ♗fa1, White should have a technical job of converting the advantage.

He missed that after

25...♘h3+ 26.♙h1

his opponent has:

26...♘xf2+!

White resigned in view of

27. ♖xf2 ♚c1+

with a back-rank mate.

Exercises

Static Visualization exercises

Exercise 1: How many light squares are there in the set?

1. ~~e4~~ – ~~a2~~ – ~~f8~~ – ~~g1~~ – ~~g4~~ – ~~h8~~ There are 3 light squares in the set.
2. f3 – b7 – g7 – b1 – h3 – e6 There are 6 light squares in the set.
3. d8 – f7 – a3 – a5 – b5 – a7 There are 6 light squares in the set.
4. d6 – a8 – d2 – f1 – b8 – c8 There are 6 light squares in the set.
5. g8 – a6 – b3 – h6 – e3 – d1 There are 6 light squares in the set.
6. f5 – c3 – d4 – c5 – e2 – b6 There are 6 light squares in the set.

Exercise 2: How many dark squares are there in the set?

1. ~~d5~~ – ~~b4~~ – ~~g2~~ – ~~b8~~ – ~~d3~~ – ~~b5~~ There are 2 dark squares in the set.
2. h5 – c2 – g3 – d1 – f2 – h7 There are 6 dark squares in the set.
3. b3 – c6 – g8 – g5 – a1 – c4 There are 6 dark squares in the set.
4. f4 – c1 – g6 – c7 – e7 – e2 There are 6 dark squares in the set.
5. e3 – f6 – e1 – d7 – e5 – h4 There are 6 dark squares in the set.
6. h1 – c5 – h2 – e8 – a5 – a4 There are 6 dark squares in the set.

Exercise 3: Where do the file/rank and the diagonal intersect?

1. d-file and diagonal b8-h2: **d6**
2. fifth rank and diagonal a8-h1: **d5**
3. g-file and diagonal f8-a3: **No intersection**
4. sixth rank and diagonal a2-g8
5. first rank and diagonal a5-e1
6. b-file and diagonal a3-c1
7. second rank and diagonal a6-f1
8. h-file and diagonal d8-h4
9. d-file and diagonal g1-a7
10. seventh rank and diagonal e8-h5
11. a-file and diagonal h7-b1
12. eighth rank and diagonal a5-d8
13. c-file and diagonal f1-a6
14. fourth rank and diagonal a1-h8
15. third rank and diagonal a4-d1
16. e-file and diagonal h3-c8

Exercise 4: Please name the connecting squares on the bishop's route. Please note that more than one solution is possible in certain instances.

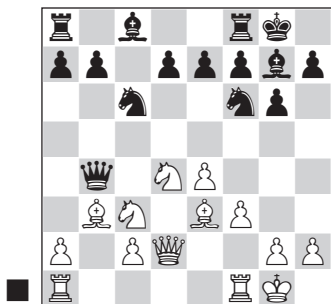
1. d6 – **f8/f4** – h6 – **f8/g5** – e7 – **f6** – h8 – **c3** – d2
2. d5 – ___ – c2 – ___ – b7 – ___ – e8 – ___ – f1
3. a2 – ___ – d7 – ___ – a8 – ___ – d1 – ___ – c8
4. a3 – ___ – d8 – ___ – e1 – ___ – a7 – ___ – b4
5. c6 – ___ – b1 – ___ – g4 – ___ – c4 – ___ – g2
6. f8 – ___ – b8 – ___ – e1 – ___ – a3 – ___ – g3
7. g8 – ___ – d3 – ___ – a8 – ___ – c8 – ___ – g6
8. h2 – ___ – c5 – ___ – f4 – ___ – d8 – ___ – h6
9. b1 – ___ – e8 – ___ – b7 – ___ – f5 – ___ – g2
10. a8 – ___ – f5 – ___ – a2 – ___ – b5 – ___ – f3
11. a1 – ___ – d2 – ___ – g1 – ___ – a1 – ___ – d6

Exercise 5: Please name the connecting squares on the knight's route.

1. e3 – **c2** – a1 – **b3** – c5
2. b2 – **c4** – d2 – **e4** – f2
3. a8 – **c7** – **e6** – g5 – **f3** – e1
4. b4 – ___ – c7 – ___ – f8
5. h6 – ___ – d8 – ___ – d4
6. a6 – ___ – e4 – ___ – h1
7. f3 – ___ – b1 – ___ – d5
8. g4 – ___ – d7 – ___ – ___ – a1
9. h2 – ___ – g1 – ___ – f2 – ___ – g3
10. a2 – ___ – d5 – ___ – a8
11. g2 – ___ – e6 – ___ – c6
12. h7 – ___ – h5 – ___ – h3 – ___ – h7
13. d4 – ___ – e5 – ___ – f6 – ___ – g7
14. h1 – ___ – ___ – ___ – a6
15. a8 – ___ – c8 – ___ – ___ – f2
16. f5 – ___ – d1 – ___ – a4 – ___ – c8 – ___ – f5
17. h1 – ___ – ___ – b2 – ___ – ___ – e8 – ___ – a6
18. c3 – ___ – a3 – ___ – a1 – ___ – c1

Dynamic Visualization exercises

Dynamic Visualization – Exercise 1



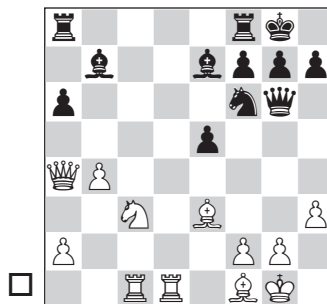
Please visualize the position after the following sequence of moves:

11... ♖xe4 12. ♜xc6 ♜xd2

13. ♜xb4 ♜xf1

- A) What is the material balance?
- B) How many white pieces are under attack?
- C) Can White safely play 14. ♙d2 ?

Dynamic Visualization – Exercise 2



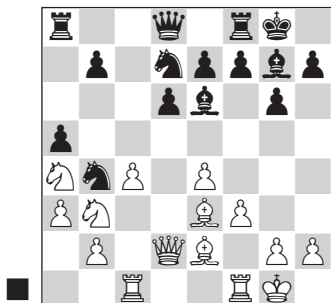
Please visualize the position after the following sequence of moves:

20. ♜d7 ♜xd7 21. ♚xd7 ♙xg2

22. ♙xg2 ♙xb4

- A) What is the material balance?
- B) Please provide the positions of the white and black minor pieces.
- C) Can the a8-rook be captured?

Dynamic Visualization – Exercise 3

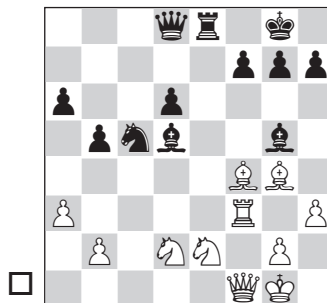


Please visualize the position after the following sequence of moves:

16...b5 17.axb4 bxa4 18. ♜xa5

- A) What is the material balance?
- B) Please provide the positions of all the white queenside (a- to d-file) pawns.
- C) Please provide the positions of all the black queenside (a- to d-file) pawns.

Dynamic Visualization – Exercise 4

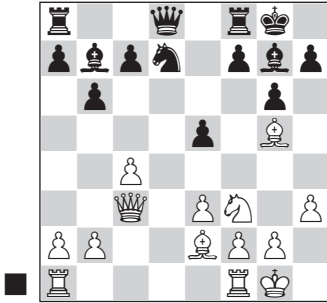


Please visualize the position after the following sequence of moves:

23. ♜c3 ♙xf3 24. ♚xf3 ♙xf4 25. ♚xf4

- A) What is the material balance?
- B) Please provide the positions of the remaining white and black pieces (without the pawns).
- C) Is 25... ♜d3 a safe move for Black?

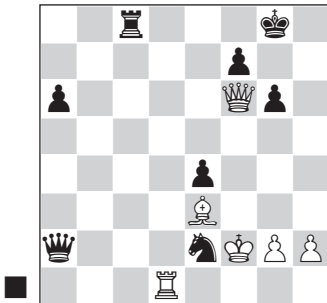
Dynamic Visualization – Exercise 5



Please visualize the position after the following sequence of moves:
13...e4 14. ♖xd8 ♗xc3 15. bxc3 exf3 16. ♗xf3 ♗xf3 17. gxf3 ♖axd8

- A) Provide the positions of the remaining white and black pieces (without the pawns).
- B) What is the material balance?
- C) Does White have any doubled pawns? If so, please provide the squares of the doubled pawns.

Dynamic Visualization – Exercise 7

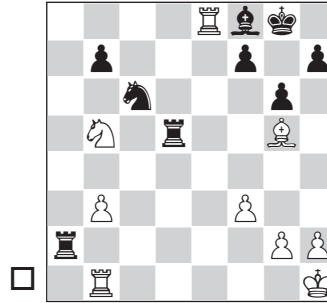


Please visualize the position after the following sequence of moves:
33... ♖c3+ 34. ♖d2 ♗xd2+ 35. ♗xd2 e3+

What is the best move for Black after:

- A) 36. ♗xe3 ?
- B) 36. ♗xe3 ?
- C) 36. ♗f3 ?

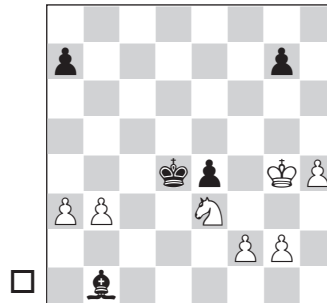
Dynamic Visualization – Exercise 6



Please visualize the position after the following sequence of moves:
29. ♖c3 ♗xg2 30. ♖xf8+ ♗xf8 31. ♗h6+ ♗e8 32. ♖xd5

- A) What is the material balance?
- B) Where are the black rooks?
- C) Can Black safely play 32... ♖e2 ?
How about 32... ♖d2 ?

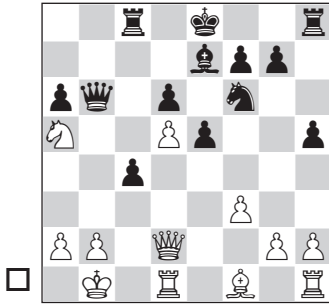
Dynamic Visualization – Exercise 8



Please visualize the position after the following sequence of moves:
63. ♖f5+ ♗c3 64. ♖xg7 ♗xb3 65. h5 ♗xa3 66. h6

- A) What is the material balance?
- B) Provide the positions of all the remaining pieces and pawns.
- C) Can Black prevent the promotion of the white h-pawn?

Tactical Analysis – Example 1



In this position, White has a choice between two captures, **17. ♖xc4** and **17. ♙xc4**.

Please take 5-10 minutes to analyze them according to the guidelines laid down above.

Your analysis should reveal that **17. ♖xc4**

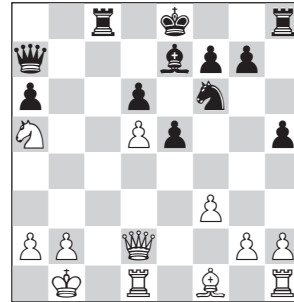
is the correct choice. If this were a scored exercise, you would get one point for providing this as your solution.

The alternative **17. ♙xc4??** looks very tempting since White would get a big positional advantage if he could get in ♗a5-c6 next. However, this move is a blunder. Black can utilize the contact with ♗a5 and ♙c4 by playing **17... ♜c5!**, which prevents ♗a5-c6 and wins a piece for Black. You would get one point for finding this refutation, but no credit if this was your choice and you missed the refutation (**17... ♙d8** would be the wrong way to do it because of **18. ♗c6±**). **18.b4 ♜xa5 0-1** (44) Chiang-Porta Campos, Caldas Novas 2011.

Black's best reply is **17... ♛a7!**

because it keeps the a6-pawn protected. You would get extra credit (one point) for analyzing this continuation. Any other move, such as **17... ♛c5**, gets no credit since it allows **18. ♗a5±** with either **♙xa6** or **♗a5-c6** to follow.

The analysis below is not essential, but it has some significance in proving that Black is doing okay: **18. ♗a5**



18... ♜c5!

Reminding White about his weak d5-pawn.

19. ♗c6 ♛d7 20. ♙xa6 ♗xd5

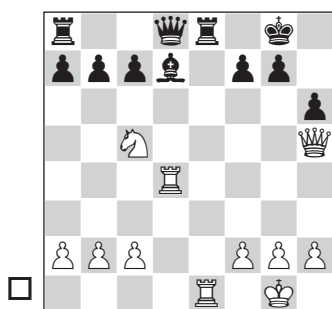
21. ♗xe7 ♛xe7=

The maximum score for this puzzle is three points (one for seeing that **17. ♖xc4** works; one for finding why it doesn't, i.e., the refutation of **17. ♙xc4**, and one for finding **17... ♛a7!** in your analysis of the **17. ♖xc4** line). In other words, the moves you analyze are not mutually exclusive when it comes to points you can earn on the exercise. It's just as important to analyze the wrong line as the correct one.

In most Tactical Analysis exercises, you will have two or a maximum of

three options to analyze. However, in the following practice example, we will need to examine as many as five candidate moves to arrive at the right solution. Please note that this example is fairly challenging. I include it to illustrate a step-by-step analysis process when more than one logical candidate move is involved. You may not get this situation too often in your games, but it's good to be aware of the proper mechanics if you do.

Tactical Analysis – Example 2



White to play and win

White has a nasty pin on the d7-bishop, but with his last move, ...f8-e8, Black is trying to escape by counterattacking White's back rank. Let's start our analysis with the most straightforward candidate move:

A) 21. ♖xe8+ ♜xe8

The back-rank problem for White is obvious here, and Black has unpinned.

22. h3 ♘c6

You get one point for concluding Black is okay in this line. We can reject this candidate and move on.

B) 21. ♜ed1, the next logical move, reinforces the pin and avoids the mate on e1. However, Black has two defenses against it:

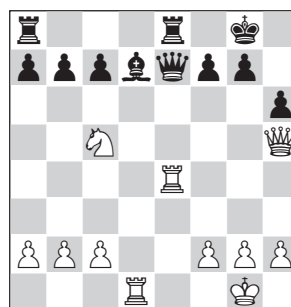
21... ♜e7

(one point), and 21... ♜f6!? (also one point) 22. ♖xd7 (22. ♘e4 ♜f5=)

22... ♜e5!, winning the piece back.

23. ♘e4 ♜xe4 24. ♖xc7 ♜ae8=.

22. ♜e4



22... ♙g4!!

You would get extra credit (two points) for finding and analyzing this strong move. Alternatively, 22... ♙e6 23. ♘e6 fxe6 saves the piece, but doesn't equalize fully (one point).

23. ♜xg4

White also gets nowhere after 23. ♖xe7 ♙xh5= or 23. ♖xg4?? ♜e1+.

23... ♜xc5=

C) 21. ♜d1

is another sensible idea, covering the back rank and increasing pressure on d7. However, it fails, as well, this time to:

21... ♖e1+ 22. ♜xe1 ♜e8!

(one point) and Black forces an equal endgame:

23. ♜xe8+ ♖xe8! 24. f3 ♙c6=

D) Next, we could try to avoid the back-rank issues altogether with:

21. ♖f1!?

White seems completely winning at first. However, another problem pops up. Black can unpin with a tempo by playing:

21... ♖f6!

(21... ♖e7? 22. ♖d1+–), when

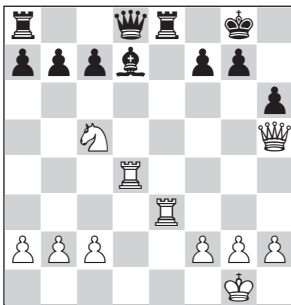
22. ♜xd7 ♜e5

(one point) helps him win back the sacrificed piece. None of White's replies gives him more than a slight advantage. For example:

23. ♘e4! ♜xe4 24. ♜xc7±

E) After running through the most obvious candidate moves, we realized that Black has two sources of counterplay – the back-rank mate and the e-file (via ... ♖f6/... ♜e5). Is there a way to protect the back rank while simultaneously covering the e-file?

21. ♜e3



How about this? Let's analyze Black's options:

21... ♜xe3

The alternatives are 21... ♜e7 22. ♖e2 ♜xe3 23. ♖xe3+– (the back rank is covered) and 21... ♖f6 22. ♜xd7+–.

There is no ... ♜e5 now!

22. ♜xe3

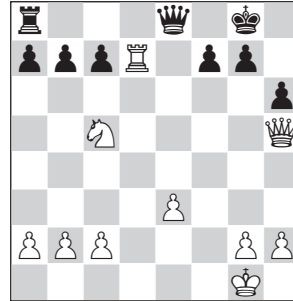
The back-rank issue is finally solved!

22... ♖e8

This move is Black's only chance.

23. ♜xd7

You would get two points if you analyzed up to here.



You could earn extra credit if you analyzed any of the following lines:

23... b6!

The only way not to remain down a piece.

23... ♖xe3+ amounts to only a few spite checks after 24. ♘f1 ♖f4+ 25. ♖f3 ♖c1+ 26. ♜d1+– (one extra credit point for analyzing up to here). Black gets two pawns for the piece, but it should not be enough in this position.

Still, after

24. ♜d3 bxc5 25. ♖xc5

(one extra credit point) White would have a good chance to win this position with an extra pawn because of the opponent's poor queenside structure.

The maximum score on this exercise is ten points. It shows that you get credit primarily by focusing

on the width of your calculation tree. While important, analyzing the right solution until the end is secondary in this type of exercise. For example, you would earn a lower score if you analyzed only the best move 21.♙e3! in depth and skipped all other candidate moves than if you analyzed most of the five candidates but missed 21.♙e3. This way, I would like to help you avoid a typical ‘tunnel-vision’ approach to the calculation that

can result from solving too many ‘White/Black to move and win’ types of puzzles. This tendency can sometimes lead to the ‘long variation-wrong variation’ calculation, where one wants to find the ‘right’ line in virtually every position. If you get into this habit, you will likely start missing something evident on the first or second move due to overreliance on depth over width.

By contrast, the previous example showed us what a properly structured, thorough tactical analysis looks like. To recap:

1. We considered all the logical, relevant candidates on the first move;
2. We tried to refute them by focusing on the most resourceful replies of our opponent;
3. We focused on one line at a time and analyzed particular lines until we exhausted the forcing moves and could reach a logical conclusion. The underlined part is critical to good analysis and will bring you many extra points in this exercise.

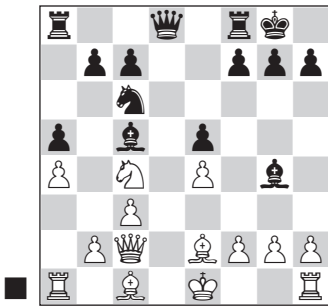
In the actual game, you will not have the luxury of moving the pieces as you do here. However, the analytical home practice of this sort will help you structure your calculation process. You will miss fewer relevant candidate moves and your opponent’s resources with the proper analytical framework.

In conclusion, always look for how your opponent could refute the move you are considering. As we have seen here, even if it seems like the ‘right’ move, it could have a tactical problem.

Good luck with the following exercises!

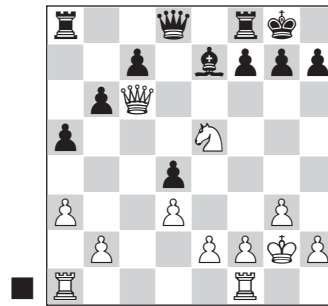
Piece Trade Decision exercises

Piece Trade Decision – Exercise 1



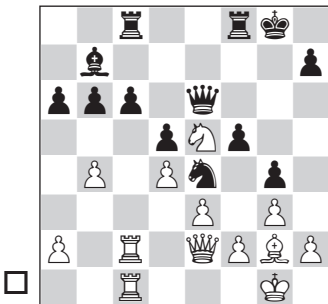
Is it better for Black to trade the light-squared bishop with $12... \text{Qxe2}$ or to keep it with $12... \text{Qe6}$?

Piece Trade Decision – Exercise 2



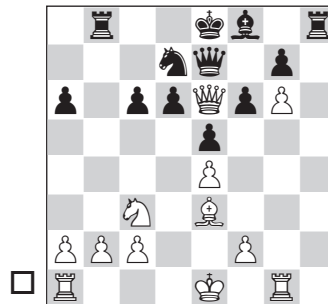
Is it better for Black to trade the queen with $19... \text{Qd6}$ or to keep it with $19... \text{Qd6}$?

Piece Trade Decision – Exercise 3



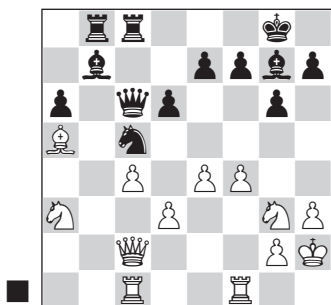
Is it better for White to trade the bishop with $24. \text{Qxe4}$ or to keep it with $24. \text{f3}$?

Piece Trade Decision – Exercise 4



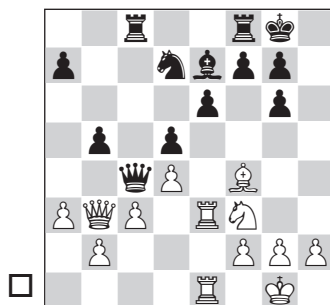
Is it better for White to trade the queen with $18. \text{Qxe7+}$ or to keep it with $18. \text{Qc4}$?

Piece Trade Decision – Exercise 5



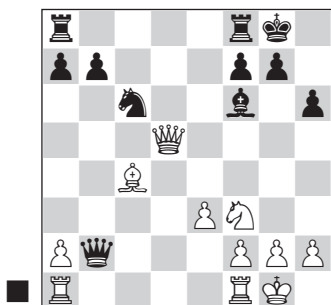
Is it better for Black to trade the queen with **22...♙a4** or to keep it with **22...♘e6**?

Piece Trade Decision – Exercise 6



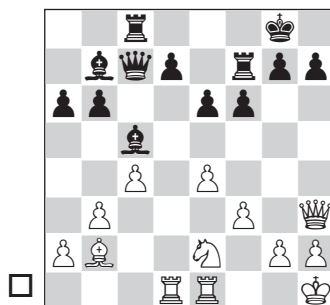
Is it better for White to offer the queen trade with **20.♘d2** or to avoid it with **20.♙d1**?

Piece Trade Decision – Exercise 7



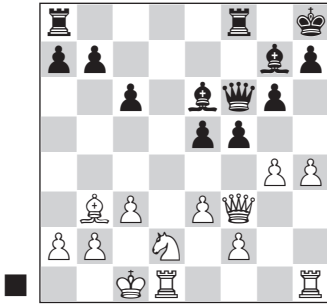
Is it better for Black to trade the queen for two rooks with **16...♙xa1** **17.♖xa1 ♘xa1** or to keep the queen with **16...♙a3**?

Piece Trade Decision – Exercise 8



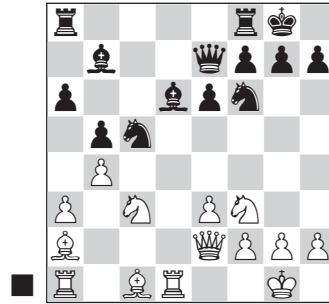
Is it better for White to trade the queen with **23.♙g3** or to keep it with **23.♘d4**?

Piece Trade Decision – Exercise 9



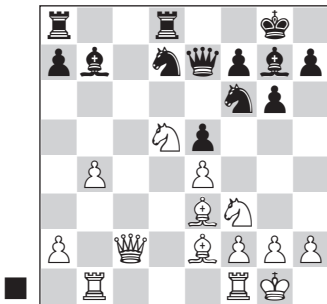
Is it better for Black to trade the queen and win a pawn with **16...fxg4** or to keep it with **16...e4** ?

Piece Trade Decision – Exercise 10



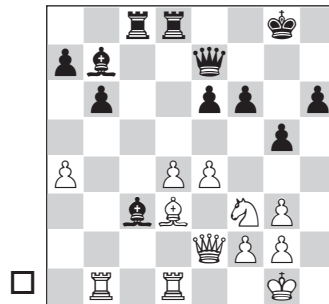
Is it better for Black to offer a knight trade with **15...♞ce4** or to play **15...♞cd7** preparing a knight trade with **16...♞e5** ?

Piece Trade Decision – Exercise 11



Which piece-trade scenario is better:
A) 15...♞xd5 16.exd5 ♙xd5; or
B) 15...♙xd5 16.exd5 ♞xd5 ?

Piece Trade Decision – Exercise 12



Is it better for White to trade the bishop with **23.♙a6** or to keep it with **23.♙c4** ?

CHAPTER 5

Endgame Training

The two types of exercises in the Endgame Training chapter: Endgame Analysis and FBM Endgame, follow the formats you are already familiar with from the corresponding exercises in Chapters 3 (Tactical Analysis) and 4 (FBM Middlegame).

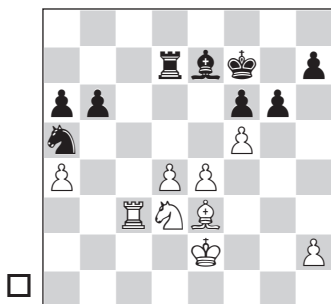
Endgame Analysis

By analogy with Tactical Analysis, your task will be to analyze two (or sometimes three) moves in a given position and determine which is the best. However, the difference is that the candidate moves in Endgame Analysis are not necessarily refutable as in the Tactics section. The main goal here is to apply your knowledge of endgame techniques and theoretical positions to produce the right solution. Please note that you can move the pieces as you attempt to solve the exercises.

As usual, you will earn points for your analytical work, as well as for providing the right move. The solution to every puzzle is summed up with an **ENDGAME LESSON**, a fundamental endgame guideline or technique worth remembering. In places, I will repeat critical endgame lessons to drive home the point.

We start with some warm-up examples to highlight two basic endgame principles.

Endgame Analysis – Example 1



White has a promising pawn mass in the center, and it is time to put

it to work. What is a better way to create a passed pawn: **34.fxg6 hxg6 35.e5** or **34.e5** at once?

You are free to take 5 to 10 minutes to analyze this position by moving pieces on the board.

After analysis, hopefully, you have arrived at the following conclusions:

34.fxg6+?! hxg6 35.e5

is worse than the alternative, because it allows Black to contain the e-pawn. You get *one* point if this is your preferred choice. You also get *one additional* point if you have analyzed any of the equalizing lines for Black below.

Since White plans to go ♖d3-f4 next, the most natural reaction is:

35...g5

However, it is also possible to allow ♖f4 and still keep the balance. Both 35...♖b7!? 36.♗f4 fxe5 37.dxe5 g5 38.e6+ ♕f6 39.♙d4+ ♕f5 and the risky-looking 35...♕e6!? 36.♗f4+ ♕f5 do the job.

36.exf6 ♙xf6 37.♗e5+ ♙xe5

38.dxe5 b5=

The right move is

34.e5!

which forces

34...gxf5 35.♗f4!

The key differences compared to the similar variation with 34.fxg6 hxg6 included are that:

1. White has won a tempo by forcing 34...gxf5; and
2. Black doesn't have the defense with ...g6-g5 anymore.

You get two points for choosing this line over the alternative and one extra credit point for analyzing any of the following lines:

35...fxe5 36.dxe5

White has a powerful passed pawn in the center. To add insult to injury, his bishop opens up, too, so after

36...♕g7

(36...♖b7 doesn't help in view of 37.e6+ ♕g7 38.♙d4+ ♙f6 39.♗h5+), he gets his pawn back with

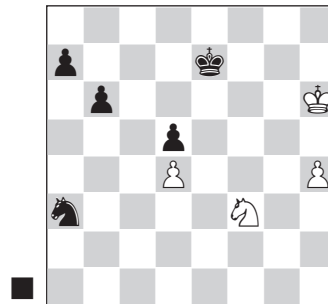
37.♙xb6 ♙b4 38.e6!+-

and White soon prevailed thanks to his passed pawn in Sethuraman-Lalith, Makati Ach 2018.

ENDGAME LESSON

One of the most basic endgame lessons is that passed pawns are crucial in the endgame. It is often worth sacrificing material to create a passed pawn, as the threat of pawn promotion forces the opponent to make concessions in giving up activity or material. The maximum score for this example is 5 points (a maximum 3 points for the 34.e5 line and a maximum 2 points for the 34.fxg6 line).

Endgame Analysis – Example 2



Despite the extra pawn, Black (to play) needs to tread carefully because the opponent has a dangerous outside passer. We have a choice between two logical moves, **33...♕f6** and **33...♗c4**.

This kind of endgame usually requires deeper analysis, because we need to determine whether either side can force or prevent a pawn promotion. Therefore, feel free to spend up to 20 minutes on it to ensure you have covered all bases.

Your analysis should reveal that the correct continuation is

33...♔f6!,

using the well-known ‘shouldering’ technique that limits the mobility of the opponent’s king. There is very little wiggle room for the white king now.

Despite the obvious importance of time in endgames with pawn races, spending a tempo on this defensive move is well worth it, because it considerably slows down the opponent’s passed pawn. You earn two points for this decision and one extra point for analyzing any of the following lines.

34.h5 ♖b5

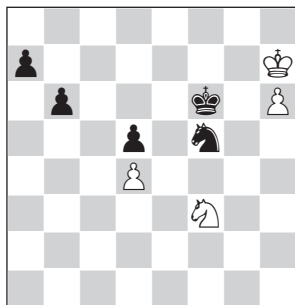
The alternative 34...♗c4 is just as good as the text.

35.♕h7 ♗d6!

Black is still in no rush to push his pawns. He wants to immobilize the opponent’s passer first, and the rest will fall into place.

36.♕g8

36.h6 is met by 36...♗f5!–+,



analysis diagram

completely neutralizing the pawn with the coordinated activity of our king and knight. After this, Black

can start pushing his queenside pawns.

36...♗e4!

And Black gets a nearly winning position on account of the following variation:

37.h6 ♕g6! 38.h7 ♗f6+

On the other hand,

33...♗c4?

would be a mistake (getting one point), because it allows White to get his king from the edge with

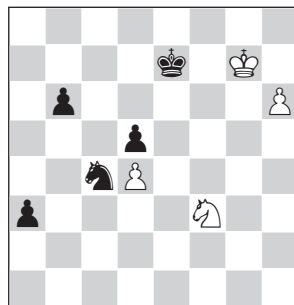
34.♕g7,

threatening to push the h-pawn all the way. You get one point for analyzing how this plays out in one of the following lines:

34...a5

Alternatively, Black can try to stop the pawn with 34...♗d6 35.h5 ♗e8+, but 36.♕g6! ensures that he cannot approach it with his king. White holds a draw after 36...a5 37.h6 ♗f6 38.♗e5 a4 39.♗c6+ ♕e6 40.♗d8+ ♕e7.

35.h5 a4 36.h6 a3



Both pawns are about to be promoted. The ensuing queen endgame is drawish.

37.h7 a2 38.h8♖ a1♖ 39.♖f8+ ♕d7=

ENDGAME LESSON

The king’s activity is another fundamental aspect of the endgame that sets it apart from the middlegame. Shouldering is an effective technique that allows us to

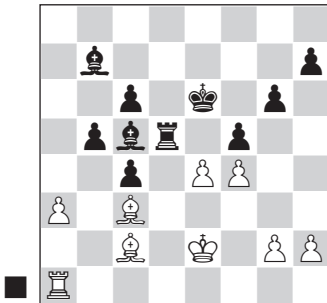
limit the opponent’s king’s mobility while improving our own.

The maximum score for this example is 5 points (maximum 3 points for the 33...♔f6 line and maximum 2 points for the 33...♘c4 line).

Find the Best Move in the Endgame

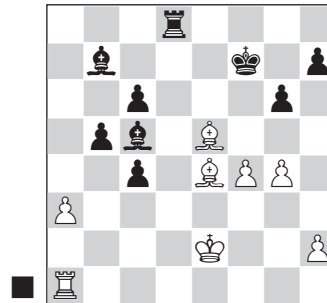
The final section in the book contains FBM Endgame exercises. As with the FBM Middlegame exercises, you will have a set of critical positions taken from a game between two club players. The only difference is that you will use your endgame skills to solve dilemmas:

FBM Endgame – Example 1



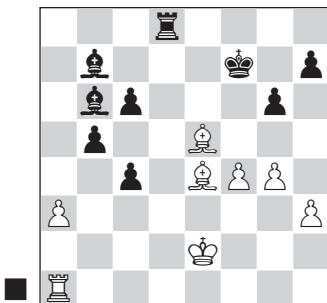
Which continuation is better, 34...fxe4 or 34...♖d8 ?

FBM Endgame – Example 2



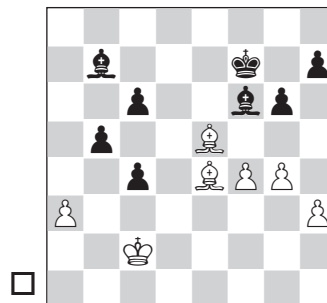
Which continuation is better, 37...♘b6 or 37...♖a8 ?

FBM Endgame – Example 3



Which continuation is better, 38...♘a5 or 38...♘c5 ?

FBM Endgame – Example 4



Is it better for White to trade the bishops with 42.♘xf6 or to keep them with 42.♘d6 ?