

CHESS PROGRESS

from beginner to winner

Erik M. Czerwin

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About the Author

Erik Czerwin is a high school teacher and chess coach. He is a self-taught player who has had great success teaching the game to his students since he began coaching in 2005. In 2007, he started a chess team at Marengo High School, and by 2012, the team won the Illinois Division 1A title, the first in school history. That year, the Illinois Chess Coaches Association elected Erik as the Coach of the Year. He then moved to Guilford High School and has recently started a new team there as well. With the help of other coaches, Erik has helped to expand chess to schools across the Northern Illinois region. He often volunteers to coordinate with community organizations where he teaches and encourages people of all ages and backgrounds to learn and play chess. Erik Czerwin lives, works, and plays in Rockford, IL.

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Acknowledgments

This book is dedicated to the MCHS Chess Teams from 2007-2012. Without your determination, drive, and faith in my coaching, we never would have achieved the mountaintop.

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Wherever you are Mike, thanks for those games on the front porch that one spring break. That was the beginning of this obsession. Thanks for introducing me to this game.

Thank you, especially, Nathan and Joanna; and most importantly, thank you, Tiffany.

Introduction

Welcome to chess. Chess is a game that brings many players satisfaction, exhilaration, and joy throughout their lives. Many casual players also find it confusing and too difficult to master. This book can help both beginning players and experienced players who wish to play more seriously. Using this book, a pure beginner can know absolutely nothing about chess and learn everything they need to know in order to compete with other serious players. A more experienced player can work through this book and discover new layers of the game that they hadn't considered or hope to consider with a new perspective. In both cases, players who work through this book should gain a solid foundation in all aspects of the game. This text provides everything a player needs to pick up any other chess study resource and be fully prepared to learn from it.

The lessons begin with the simplest possible position, the empty board, and progress to the most complex, the opening. By first examining the empty board, a player can begin to understand the intricacies of the game at their most basic level. Next, each piece is examined by itself as it relates to the board. After an explanation of the endgame and notation, the sequence continues by examining the three elements of chess strategy. This is followed by an explanation of the next simplest position, two kings on an empty board. After this, a single pawn is added. This sequence continues so that the player learns to incorporate each new fundamental concept in layers, progressing until the game reaches its most complex point, the first move.

Each section builds upon the previous one in such a way that, even on the first page, the student is learning the fundamentals that the top rated players use when forming their strategies and brilliancies. I've worked hard to introduce the most complex ideas in comfortable portions, gradually building a firm foundation for the reader. If a reader skips a section, he or she may miss a tiny nugget of information that is useful in a later section. On the other hand, each lesson is designed as a unique, complete package and may be read out of order.

My hope is that this book will provide a complete and solid foundation of chess fundamentals. I hope that all chess players find a deep love for the game; chess is an art form that can only really be discovered once one understands the basics. Chess has enriched my life in many ways, and I hope that this book can help you build a strong, enriching understanding of the game from the most fundamental building blocks to the most complicated strategies. Most importantly, I hope to share with you the captivating journey of learning this remarkable game.

Erik M. Czerwin,
Rockford, IL, July 2014

How to Use this Book

This book is designed for you, the reader, to work through the lessons, not just to read the words. While reading, you should use a complete chess set; each diagram should be set up on the board and the demonstration played out. As the demonstration is explained in the book, you should observe and study the demonstration on your board.

After each section, there is a series of exercises. These should be practiced on the board as well. Answers can be kept in a notebook and then checked after all of the practice exercises for that section have been completed. No peeking! The best study will only occur if you discover the answers for yourself. If, upon checking the solutions, you discover that you have answered incorrectly, you should try to figure out why you were incorrect before returning to the text of the book. This will ensure that your learning process is wholly yours. The best learning comes from within, not from the text of any book.

The practice exercises are just for a brief review and application of the ideas presented in that section. In order to cement those ideas fully, I advise you to practice much more on your own. To guide that extra practice, after each series of exercises, I've provided a brief listing of drills that will help consolidate your understanding. If you work at these practice exercises repeatedly until you can do them automatically, then you will have fully cemented the ideas in your mind and you will be a much stronger chess player because of it. Doing this before moving on to the next section is the best way to learn and advance, while minimizing confusion and gaps in understanding.

It may seem like a slow, arduous process, and you may be anxious to “just play games”. However, you can always play chess along the way; in fact, it's a good idea to enjoy playing chess games as you progress through these lessons. After each lesson, you should notice new understanding enter your play and your perception of the game. This is a good way to practice. But don't get caught up in *just* playing games. Practicing games while you are still lacking fundamentals is actually practicing *poor* chess. Your goal should be to practice *strong* chess, which requires you to be the strongest chess player you can be. Going through the exercises and drills here is a good way to practice the fundamentals, just as a basketball player practices free throws, ball handling, jump shots, and defence separately; basketball players don't train by just playing games all the time, they break the game down into elements and practice each skill, just as you should with chess skills.

Once you have mastered the skills presented here, look in the back (Appendix A: Con-

tinuing Study) to find some tips on how to continue your chess studies. This book is only an introduction to the fundamentals of chess; once you master them, it will be important to continue studying, and those tips can help you understand how best to proceed for your personal chess goals.

Have fun, and remember: the more you put into learning these fundamentals, the stronger your foundation will be. The stronger your foundation, the stronger your chess play and the stronger your ability to learn from other sources.

Chapter Three

Applying the Elements of Chess Strategy

Principles of Exchanging Material

This section explores how to apply the elements of chess when choosing to exchange pieces. Understanding these principles can help players know how to convert material into position or time.

Fundamental Defence

This section establishes the five options for defence when a player's material or position is being attacked: *escape*, *remove*, *block*, *defend*, and *counter*. Having these options in mind is handy to prevent an instinctive reaction instead of a well-planned response.

Fundamental Tactics

This section introduces several of the most basic tactics that every chess player should have in mind when competing throughout the game. Tactics introduced are: *pins*, *skewers*, *forks*, *discovered attacks*, and *removing the defender*.

Fundamentals of Openings

The section explores how the elements of chess strategy apply in the first several moves of a chess game. The interaction of material, position, and time are critical in this stage of the game to help a player develop a winnable, or at least playable, position early on.

Principles of Exchanging Material

With a solid foundation in material, position, time, pawn structures, and space, it is time to turn attention to applying all of those ideas in actual play.

As each game progresses, material (pieces) will necessarily be exchanged, and it is important to understand how, where, when, and why to do this properly so the material can be converted into a stronger position. Understanding piece value can be important knowledge when considering exchanging material, but it is incomplete. There are four principles that can help guide players when deciding how, when, and where to exchange material. Understanding these principles can help a player decide to offer an exchange, avoid an exchange, or steer the game towards positions where exchanges will be beneficial to his own position.

The four guiding principles are to exchange when:

- ♠ you have a material advantage
- ♠ you have a spatial disadvantage
- ♠ it will strengthen the position of your pieces
- ♠ it will weaken the position of your opponent's pieces

Principle #1: Exchange when you have a material advantage

The first, and simplest, principle is that a player who has a material advantage should look to exchange material; conversely, a player who is at a material disadvantage should look to avoid exchanging material.

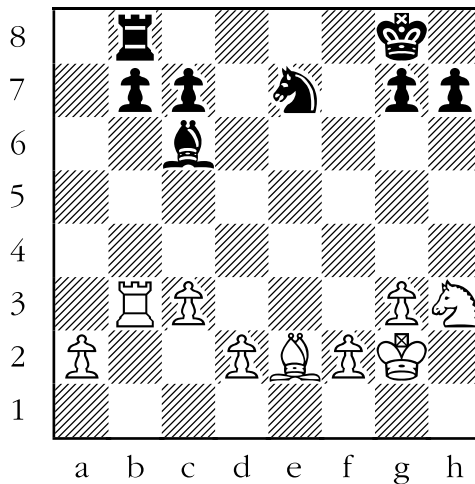
This principle can be understood in purely materialistic terms, first, and also in positional terms. At the beginning of the game, both players begin with 8 pawns (8), 2 rooks (10), 2 knights (6), 2 bishops (6), and 1 queen (9). This means each player begins with a total of 39 material points. If one player loses a single pawn, that player now has 38 material points, and his opponent has 39. This makes the material ratio 38:39. This gives the player with the one pawn advantage a very slight lead, only when considering the material value of the remaining pieces. However, this one pawn advantage may not translate into a strong positional advantage, as we've seen in earlier demonstrations. That pawn may be doubled, blocked, or unable to move making it less of an advantage than the material points would indicate.

Consider how that balance shifts as more pieces are traded off. If the players trade off all the minor pieces, the material ratio becomes 26:27. If those exchanges also pulled off 3 pawns from each side, the ratio is 23:24. If the major pieces are then traded off, the ratio becomes 4:5; that is 4 pawns and a king versus 5 pawns and a king. The ratio is now much stronger for the player with that single pawn advantage, and it is much worse for the player with the one pawn disadvantage. Each trade made the gap wider and wider. If still more pawns are traded off, say 3 more from each side, the ratio is now 1:2. The player with two

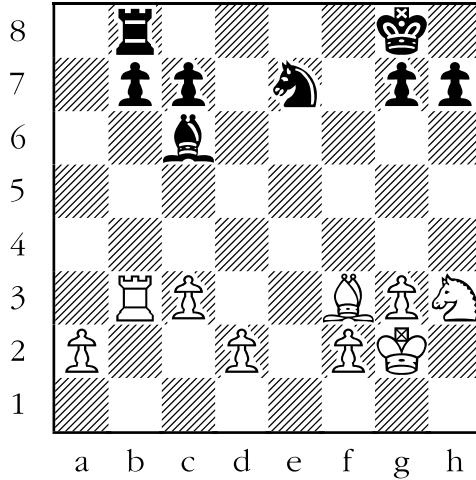
two pawns has a dominating position and will most likely be able to force the win. The player with only one pawn will be very lucky if he can escape with a draw.

Of course, this all depends upon the position of the remaining pieces. Assuming the players did trade to a 1:2 endgame, the player with only 1 pawn may be able to force a draw if he can trade his final pawn and get into a position to stop his opponent's final pawn from promoting (as demonstrated in the sections on *stalemate*, *critical squares*, and the *square of the pawn*). In this case, the material advantage can be neutralized. However, the principle remains a good principle since, as pieces are traded off, the player with the material advantage has more or stronger pieces, giving that player more control over the flow of the game. When the material advantage is more than a single pawn, this principle is even more applicable, since simplifying to a draw is much less likely.

Diagram #1 below is a simple demonstration of this principle in action. Black has checked White's king, and White can either escape or block. White has a material advantage (1 pawn), so blocking the check with his own bishop and offering a trade is beneficial to White's game (diagram #2). Exchanging bishops here would increase White's advantage, while it would also increase Black's disadvantage. Understanding this principle helps to guide the player's understanding of how to move and respond to threats.

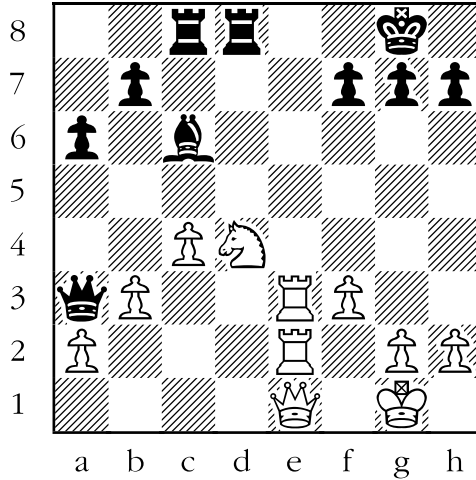


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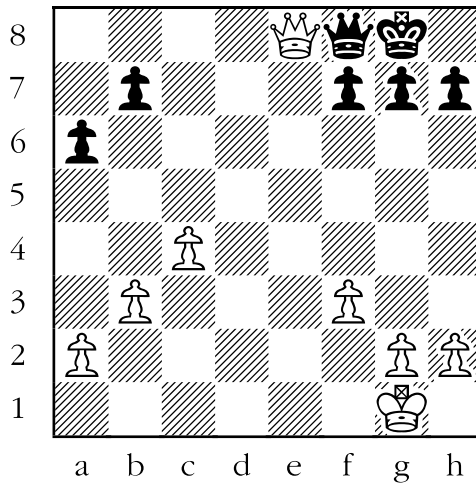


#2

Below (diagram #3) is another demonstration of exchanging material; this time an attack forces the exchange of material, leading to a winning position. White has a one pawn advantage and would like to play Re8+ and force the exchange of the rooks, but the black bishop covers the e8-square. With this in mind, White initiates an exchange sequence by capturing the bishop 1 Nxc6. Black is forced to recapture 1...bxc6. Then White can force the exchange with checks: 2 Re8+ Rxe8 3 Rxe8+ Rxe8 4 Qxe8+ Qf8. This is the key move (diagram #4); Black is forced to move the queen back to f8 and White can choose to capture the c6-pawn or exchange the queens. Exchanging queens would be fine since the resulting king-pawn endgame is winnable for White. His extra pawn will be enough to force the win. Keeping the queens on the board allows White to capture yet another pawn and look to exchange the queens later.



#3



#4

White's material advantage here allowed the more powerful pieces to force the exchanges that lead to a winning position for White. A great example of this principle.

Principle #2: Exchange material when you have a disadvantage in space

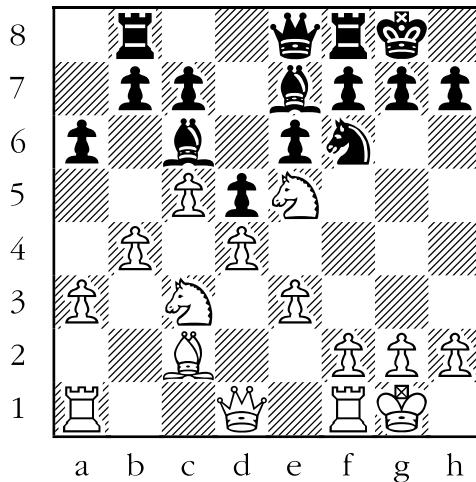
The second principle is to exchange material when you have a disadvantage in space; conversely, if you have an advantage in space, you should avoid exchanging material.

This principle is based on the mobility of pieces. When a player has a cramped position

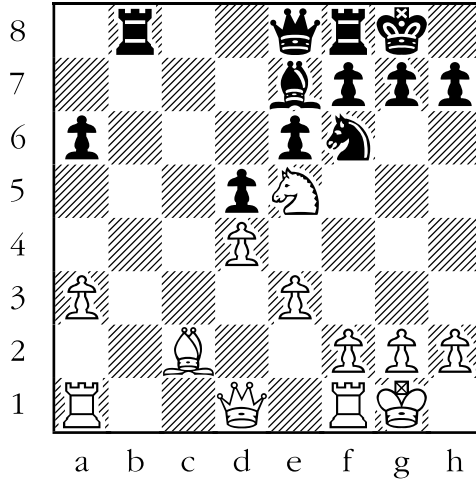
with very little space to manoeuvre, each piece within that cramped position takes up a square that the other pieces might like to use. Therefore, exchanging equal material will actually improve that player's position, giving the pieces room to move around and find strong posts. On the other side of the board, the player who has the advantage of space can easily manoeuvre his pieces to their best posts while enjoying the benefit that his opponent cannot easily respond to any threat. Therefore, this player would wish to avoid exchanges and thereby keep his opponent cramped.

In diagram #5 below, Black's entire army is distributed on his first three ranks save for the d5-pawn. His f6-knight enjoys some open space but, in general, his position is very cramped. White, on the other hand, enjoys a massive space advantage on the queenside.

Black would like to exchange some pawns, open up the game, and exchange material. If he can achieve this, his bishops would be more free to move around. White, however, wishes to keep as many pieces on the board as long as he can, so that he can use his time to build an unstoppable attack while Black bounces around looking for a way to make something happen.



#5



#6

Diagram #6 shows the same position, except that two pawns and a minor piece have been taken away from each side. The difference in mobility is dramatic. Black has gained a ton of space on his queenside that he can use to manoeuvre his pieces to strong posts. White's spatial advantage has disappeared with the exchange of equal material.

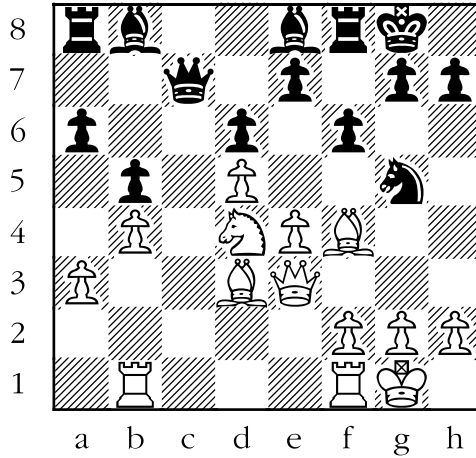
This principle is based on the idea that material can be converted either to position or time. In this case, Black converted 5 material points (1 minor piece and 2 pawns) into an improved position. On the other side of the board, White's desire to keep material on the board was based on the understanding that, for White, the best potential of his pieces could be achieved before (time) Black would be able to manoeuvre within his cramped position. Again, the elements of chess strategy dictate the game-play.

Principle #3: Exchange material when it will strengthen the position of your pieces

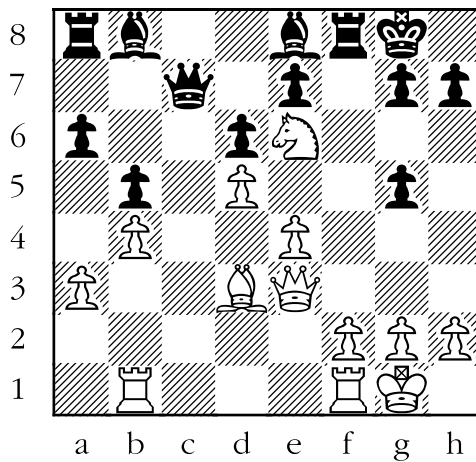
The third principle is to exchange when it will improve the position of your pieces; conversely, if your pieces are well positioned, you should avoid exchanging them.

This principle is again based on converting material into position, but this time in a very concrete way. When your pieces are not placed well, your position is weak, and your opponent will attack those weaknesses. If a player can exchange material in a way that allows his pieces to take up stronger positions (such as on an outpost, attacking a target, etc), then the exchange is a wise choice. In contrast, when a player's pieces are well placed, exchanging those strong pieces is a poor choice. Strong pieces should remain on the board as long as possible to inflict as much damage as possible. If an opponent plays to capture the well-positioned piece, the player should look to avoid the trade, or else defend it such that another piece will recapture and make strong use of the post.

In diagram #7 below, the white knight would love to make use of the tremendous e6-outpost, but it is currently guarded by the black g5-knight. White could play 1 Ne6, but after Black captures 1...Nxe6 and White recaptures 2 dxe6, White will have doubled e-pawns and Black's position will be fine, since White's knight is not bearing down on his position. White can avoid this weak exchange by making a much stronger exchange, trading his dark-squared bishop for Black's knight. White's f4-bishop is slightly cramped by Black's pawn structure anyway, so it is a little weak. By exchanging it for the black knight, White opens up the outpost for the knight to become very well positioned. After 1 Bxg5 fxg5 2 Ne6, White has a tremendously powerful knight sitting on e6, attacking squares all over Black's position (c7, d8, f8, g7, g5).



#7



#8

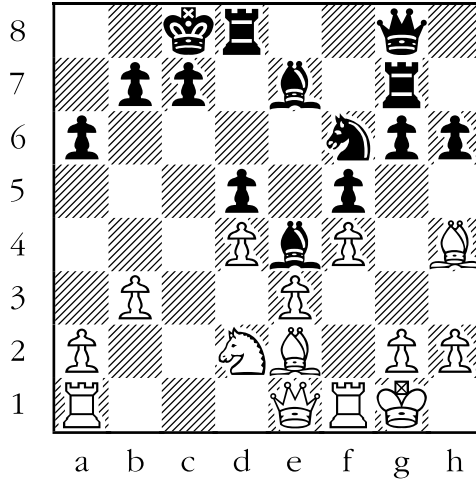
In diagram #8, after the black queen has moved (2...Qb7) to avoid being captured by the white knight, White may be tempted to take Black's f8-rook immediately, winning the exchange. However, following principle, White should avoid this trade. The knight is doing a wonderful job holding squares in Black's position. If the knight is traded for the rook, White will have gained material but will have lost hold of the outpost and the squares the knight influences from that outpost. White should, instead, look to increase pressure on Black's position, perhaps by taking the g5-pawn by Qxg5, threatening checkmate on g7. Black will have to defend this threat, perhaps with g6. If Black ever moves to capture the knight (...Bd7 or ...Bf7), White can then capture the rook anyway; waiting to capture the rook allows White to continue building the strength of his own position. This principle is a key demonstration of the concept that well-placed material is usually worth more than the material value alone.

Principle #4: Exchange when it will weaken the position of your opponent's pieces

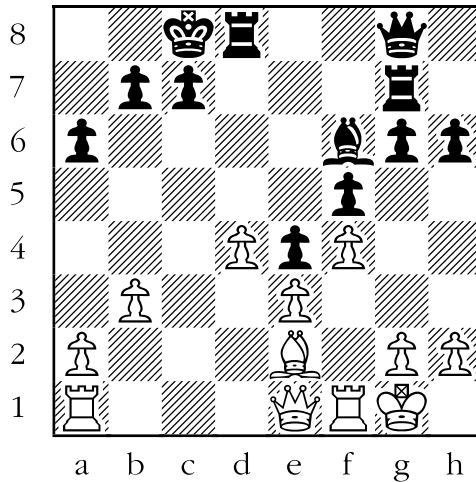
The fourth principle is to exchange when it will weaken the position of your opponent's pieces or eliminate strongly placed pieces from your opponent; conversely, if your opponent's pieces are not well positioned, avoid exchanging in a manner that will allow them to reach strong posts.

This principle is the same as the third principle, but from the other side of the board. When your opponent has a powerfully placed piece, it will be a thorn in your position as long as it is allowed to remain. Also, if your opponent is capable of moving a piece into a strong position (weak square, outpost, hole, etc), as soon as he does, that piece will become a thorn in your position, so it would be advisable to exchange material if that does not allow this unfortunate event to take place.

In diagram #9 below, Black has a very well-placed bishop on the e4-outpost. White would like to exchange the d2-knight for that bishop. If Black recaptures ...dxe4, that would close the centre pawns and White, in theory, would like to have kept his knight. Black can also recapture with ...Nxe4. That would only trade a decent white knight for a strong black bishop, while allowing Black to make his knight very strong on the e4-outpost. So White needs to find a plan that prevents the knight from reaching e4 yet still removes the bishop on e4. If White can accomplish these two goals, his position will have gained strength, while Black's will have lost a lot of momentum.



#9



#10

Using his knowledge of these principles, White can make the following exchanges: 1 Bxf6 Bxf6 2 Nxe4 dxe4 (diagram #10). White is left with a strong, mobile bishop without constantly having to safeguard the piece posted on e4. Black has no pieces that can reach the d3-outpost, and his remaining bishop is not nearly as valuable as the two pieces that were just captured. White has succeeded in exchanging equal material to reduce the strength of his opponent's position, thereby strengthening his own position.

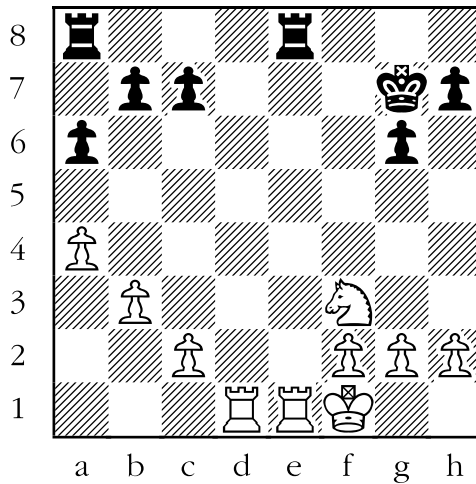
To conclude, the four guiding principles are to exchange material when:

- ♠ you have a material advantage;
- ♠ you have a spatial disadvantage;
- ♠ it will strengthen the position of your pieces;
- ♠ it will weaken the position of your opponent's pieces.

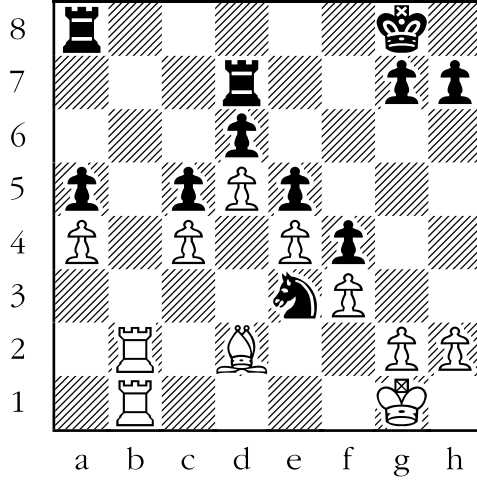
Following these principles can help you understand why, how, where, and when to exchange material to make your position stronger. It can also help you avoid making exchanges that will help your opponent build his position. All of the previous fundamental ideas and structures bear on these principles. Use them wisely and you will dominate the board.

Exercises

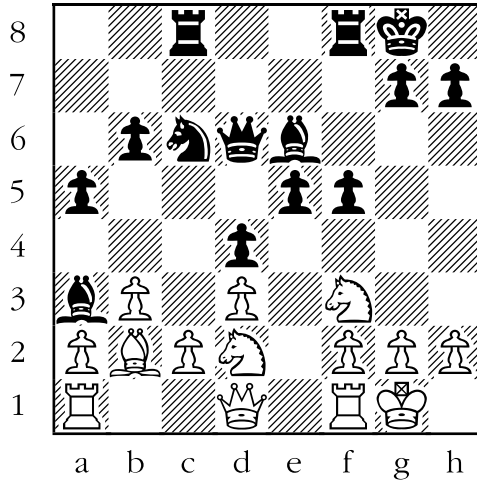
Should White trade pieces, why or why not?



#1

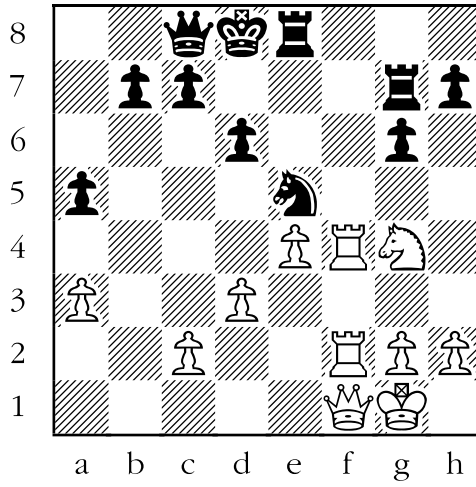


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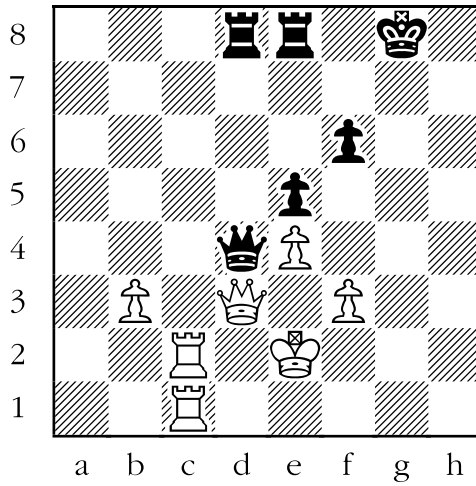


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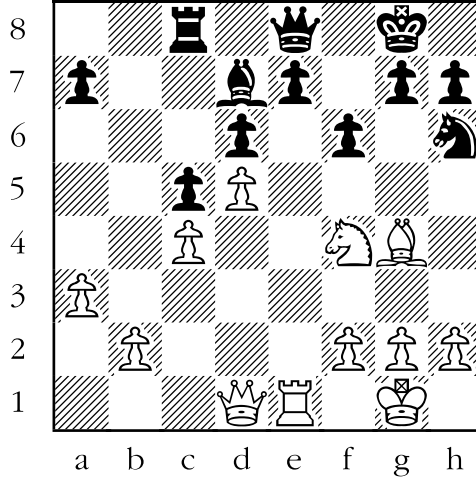
Should White trade pieces, why or why not?



#4

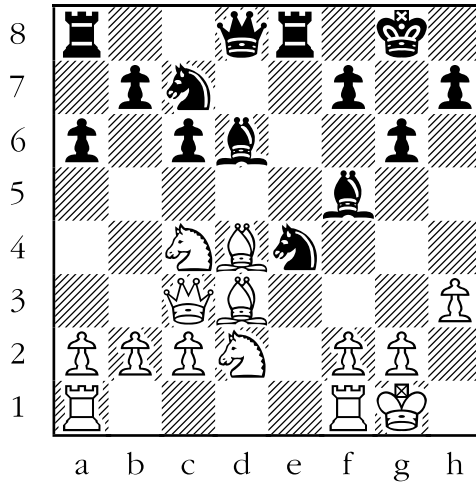


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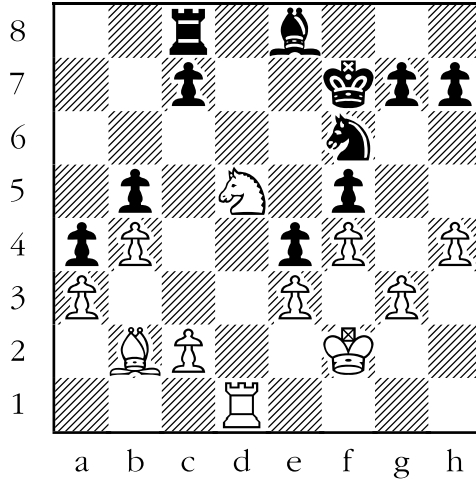


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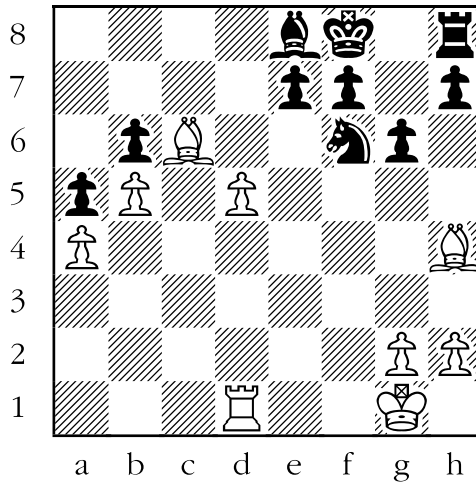
Which piece should White trade and why?



#7



#8



#9

For further practice, find and play through some high-level chess games. Each time the players exchange material, try to determine which principle (or principles) of trading was (or were) used to initiate the exchange. Take this one step further so that whenever a player moves a piece into tension with another, stop the game and consider whether you believe the trade should occur and why; compare your predictions to the subsequent moves.