

CHESS BOOTCAMP

**BEYOND
THE BASICS**

BENJAMIN KATZ



PLAY MAGNUS
GROUP OF COMPANIES

EVERYMAN CHESS

www.everymanchess.com

About the Author

Benjamin Katz is a National Chess Master from New York and a chess coach with over 20 years of experience coaching students of all ability levels throughout the United States. The teams and students that he has coached have won City, State and National championships. He takes pride in coaching students through the highs and lows of this incredible game.

Dedication

This book is the culmination of my experiences teaching chess. Coaching is an iterative process. What works for one student may not work for another and I am fortunate to have coached some incredible students along the way.

I would like to thank my family. To my father Alex for teaching me chess when I was 5 and taking me to countless tournaments and lessons. To my mother Larisa for her belief in me. To my sisters Alanna & Elissa who have been on this wonderful chess journey with me every step of the way, and finally to my wife Ronit and children Jonathan and Amalia, who inspire me to be my authentic self everyday.

Contents

About the Author	3
Foreword	5
Introduction	7
1 Four Fundamental Endgame Themes	10
2 Basic Tactics	54
3 Blunders	103
4 How to Win in the Endgame When You're Up Material	125
5 Defense	148
6 Chess Strategy Fundamentals: Pawn Structures	176
7 Fun Chess	195
8 Middlegame Strategy	223
9 An Opening Repertoire for White	255
10 An Opening Repertoire for Black	310
Solutions	346

Foreword

I've known Ben Katz ever since we were young teenagers, growing up in the suburbs of New York, playing chess in many of the same tournaments and, for a period of time, even studying with the same coach. Chess, as it often does, helped us kickstart a close friendship that has lasted many decades. Throughout this time, it's been exciting to see Ben grow as a person, fulfill his dream of becoming a US National Master, as well as to open up a successful chess school called 'Growing Minds Chess Academy'. Now finally to publish his manual of chess improvement for the improving chess player.

I am honored to be able to write a foreword to *Chess Bootcamp: Beyond the Basics*. I know how much work Ben has put into this material and, also, that going to the next level – breaking through a plateau – is a topic all of us have struggled with. Who hasn't hit a certain plateau, or multiple plateaus at some point in their chess career? It's one of the hardest things to get through and can often lead to loss of motivation and interest, even though what may be needed is just a different approach. I vividly recall when Ben hit his plateau and all the resources he tried to finally break through it. It demonstrated very impressive dedication and hopefully, with the publication of this work, it'll help save time and offer guidance to others in getting to the next level.

I should note that a key benefit that the reader gets with Ben, true to his personality, is full transparency and honesty, as well as the ability to make the complex seem simple. The advice he gives is something that he's used himself as a student, as well as with his own students of all ages. So he's seen what works and what doesn't, both from the practical utility of the concepts, as well as to how they're explained. This is just as important, and no matter how simple or complex the material, it is broken down to its core so the concepts are accessible to a wide range of students. Most students should find Ben's rules of 2 or 3, and his practical tips, very digestible.

The core of the book revolves around the fundamentals that aspiring students should understand regarding endgames, tactics, concepts and strategies. The book does provide a refresher on those basic endgames and tactics as well, to start off with the first principles. However, it quickly and methodically builds up to provide practical value even to those who have been playing for some time. For those readers who think the first chapters are too easy, I would urge them to flip through towards the middle to see if there's something that can be useful for their progress. I have no doubts that there is!

Dmitri Shneider

IM Dmitri Shneider is currently the Chief Financial Officer of the Play Magnus Group, and Chief Operations Officer of Chessable. He was previously a top-ranked junior in the United States for many years, and has represented the United States internationally in over a dozen World and Continental Youth Championships, winning several gold medals. He was awarded the Samford Fellowship as the top player under 25 in 2003.

Introduction

Having grown up in the former Soviet Union, where chess was held in high esteem, my father thought it would be beneficial to teach me the game. He taught me the rules when I was five years old and, shortly thereafter, I started playing chess at the Max Pavey Chess Club, which was then located in Mt. Kisco, New York, approximately an hour north of New York City.

He was not a very strong player at the time, but we read many books together, primarily by legendary trainers Bruce Pandolfini, Yasser Seirawan and Yuri Averbakh. To this day, I do not know how he found the time to teach me chess; he worked hard and would only have time to work on chess with me after he got home from work. Once I reached a level where my father could not teach me anything new, he found trainers who could help get me to the next level. My first trainer was Jack Collins, the friend and mentor of Bobby Fischer. I was in awe being in Jack's presence, and developed a special bond with his sister Ethel, with whom I share a birthday (March 19th). I looked forward to my weekly sojourns to Stuytown, in Manhattan. Coach Jack's former student, Grandmaster Bill Lombardy, was his neighbor and would often drop by during our lessons.

As a teen, I was introduced to Rafail Kloovsky, a Soviet émigré who had been friends with legendary Soviet players Leonid Stein and Mikhail Tal. I credit him with giving me the confidence I needed to transform from a middling, 1700-rated player with a waning interest in chess into a National Master interested in continual improvement.

The story of my own coaching philosophy cannot be told without mentioning the coaches who had a significant impact on my chess development and upbringing, as they laid the foundation of my own personal teaching philosophy.

This book draws primarily on my experience as a chess coach over the past 20 years. It focuses on the concepts that my students have successfully employed to break the beginner plateau. I have repeatedly seen first-hand how and why students get stuck, and realize how frustrating it is to be frozen at a certain level for a long period of time. Let us break this plateau together.

The ten chapters of this book contain what I have learned both as a student and as a coach – as a private coach and also a coach of one of the top chess teams in the United States. Many of these concepts were taught to me with such clarity by my former coaches that they have become a part of my own methodology. One of the first lessons my coaches passed on to me is the understanding that not every student is the same. What works for

one student will not necessarily work for another. I have tried to distill what I have seen work for every student, the core knowledge that everyone needs to improve. I have tried to keep the examples fresh, and most of them are from my students' own games that have not been published anywhere else. I have also incorporated examples from the games played by top players in the world, including those of the current world champion Magnus Carlsen, as these concepts are also omnipresent throughout their games.

The first eight chapters of this book focus on the core knowledge required to break the beginner plateau. These are concepts that have been the focus of my teaching philosophy and what I encourage readers to spend the most time on. My purpose here is to provide what students actually need to advance. There is a quiz consisting of 10 puzzles at the end of each chapter to help reinforce the key concepts.

The final two chapters offer a high-level opening repertoire for each side, ensuring that students reach an acceptable position after the first dozen or so moves.

I debated whether or not to include an opening repertoire in this book at all as my philosophy around openings has evolved over my coaching career. I never had a serious opening repertoire until I was rated around 1600, and was even able to go 6-1 at the National Scholastic Championships one year playing simple openings like the Italian Game for White and the Petroff Defense for Black! I therefore concentrated my studies primarily on tactics, which are typical patterns – such as forks, pins, discovered attacks – that win material.

When I started applying this approach with my students, I realized that it didn't work for everyone and students would often lose confidence when getting a poor position out of the opening, which was not what I experienced as a player.

Many coaches, parents, and trainers are in one of two opposing camps, either that openings are not important at all or that they should be the entire focus of a student's study routine. I am somewhere in the middle. I believe that having a solid opening repertoire is imperative for improving, but it is the other aspects of a student's game that must have priority.

My personal coaching system is built upon gaining an understanding of a handful of the typical positions of a high-level opening repertoire, with a greater focus on the other aspects of the game.

These repertoires are purposely at a high level. At the beginner level, I am attempting to humbly provide the reader with what I think they need to progress. A book that requires memorizing dozens of variations and sub-variations is not, in my opinion, of much use to an aspiring improver.

For White, the focus will be on winning against the Sicilian Defense and 1...e5, which are played in the vast majority of chess games.

For Black, the focus will be on the main lines I am recommending against 1 e4 and 1 d4.

Based on my experience, the ideal breakdown of a student's study time should be divided equally across the four main areas: openings, playing, calculation, and enjoyment. I understand how difficult it is to carve out dedicated study time. I am a parent of young

children, and it is hard for me to find study time.

Openings are important to understand, and our knowledge of them is constantly evolving. Anytime you play a game, it is important to review the opening to ensure that you played the correct move order.

Playing now is easier than ever with all the opportunities afforded by online chess. I recommend playing at a minimum time control of five minutes per player. The most important contribution to improvement is analyzing each game afterwards, preferably without the help of a chess engine. A chess engine will tell you what the best move is; however, it will not necessarily tell you *why* it is the best move. I used a chess engine after I had analyzed my games, where seemingly obvious tactics would flash before my eyes. I saw a significant jump in my rating when I built a database of my own games using the program *ChessBase*. I would painstakingly enter them into my computer. During the process of doing so, I jotted down notes of what I was thinking at certain points. Many times, there were unclear positions where I made a note to look at them in greater detail later with my coaches. This also helped me prepare if I was to face the same player again. I knew what opening they would likely play and would be ready for it. After lessons with a coach, I would go back into the database and enter any commentary and feedback they provided. I did not always remember everything, but closely reviewing my games hugely improved my understanding. It is so much easier to do this now with online play, there is functionality in every major chess server to download a PGN of your game, which you can add to your database.

Calculation exercises are indispensable for an aspiring chess player. This is an important chess muscle to train and one that requires being constantly being worked on. If there is insufficient time in your schedule to work on all the other areas, focus on calculation. There are many resources for these exercises, including the two I recommend highly: *Tactical Training* by Cyrus Lakdawala and *Chess Calculation for Kids and Club Players* by Romain Eduoard.

Enjoyment: This is the best part of your study routine! I personally enjoy watching commentary by GM Yasser Seirawan on top-echelon games, as well as GM Hikaru Nakamura's Twitch stream. In truth, I don't learn a whole lot about chess from these but they enhance my appreciation for the game tremendously.

Breaking the beginner plateau requires a new skill set, which I hope that you will gain after reading this book. Each chapter contains attributes that will help you get to your goal of breaking the beginner barrier. Some of these may already be familiar to you, while others will be brand new. I wish you the best of luck as you embark on your journey to break the beginner barrier!

Benjamin Katz,
New York,
February 2022

Chapter Six

Strategy Fundamentals: Pawn Structures

Pawns, Pawns, Pawns!

I have always been fascinated with pawns. When I first began teaching chess to children and adults, I would always start with the pawn. I figured it would be the easiest piece to teach in that it's movement is the most basic and it is worth the least amount of material. In fact, it is the measuring stick of all material, being worth 1 point.

I was so wrong! Pawns are actually the most complicated pieces on the board. They have unique rules of their own that are not applicable to any other piece. Among these unique rules are the following:

- ♟ The only piece that cannot move backwards.
- ♟ The only piece that captures differently (diagonally, including *en passant*) than it moves (up).
- ♟ The only piece that can promote to a new piece, when it reaches the eighth rank.

In chess, you cannot take your move back. You can, however, return pieces to squares that they previously occupied. You cannot do this with pawns. Every move with a pawn is a committal decision. Since they cannot go backwards, every pawn move is truly valuable and needs to be thoughtfully considered.

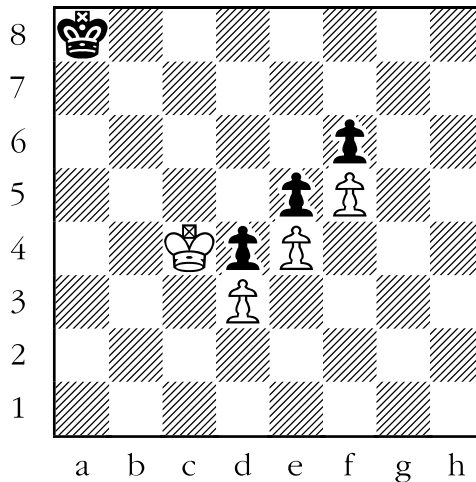
There are several strategic aspects of pawn play that are core principles of every chess game and therefore important to understand.

Principles

Pawn Chains

Pawn chains are two or more pawns that are connected to one another diagonally (i.e., all on light or all on dark squares). Since pawns attack diagonally, they support one another when they are in a chain.

In the example below, both sides have pawn chains. As a result, White cannot capture the pawn on d4 as it is being defended by the pawn on e5.

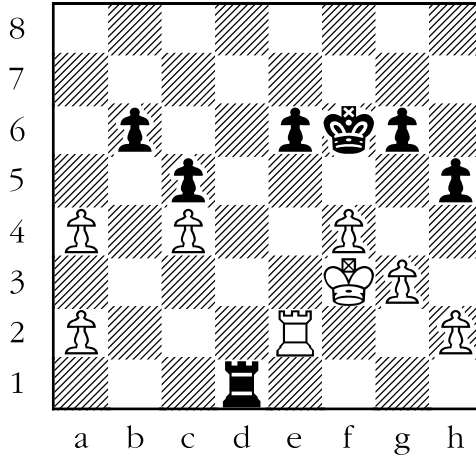


White's path to victory, therefore, is to go after the weak link in the pawn chain, which is f6, the backward pawn or *base* of the chain. After ♔d5, followed by ♔e6, White will capture the f6-pawn and Black will not be in time to stop them.

Isolated Pawns

An isolated pawn is one that does not have a friendly pawn on an adjacent file or next to it. This makes the pawn more vulnerable to being captured, since it cannot be part of a pawn chain.

From a game in 2020 between two of the top players in the world, Jan-Krzysztof Duda (White) and Levon Aronian (Black).



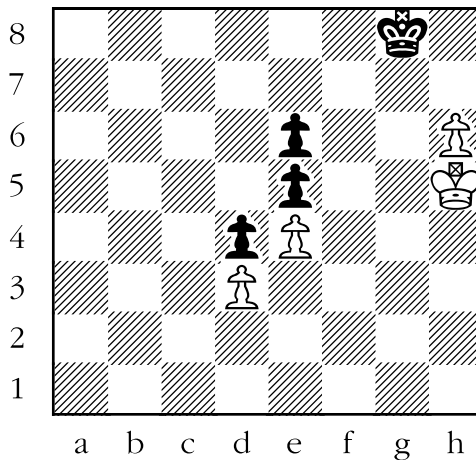
White has several isolated pawns, including the pawns on c4, a2 and a4. These are ripe for capturing, and Aronian wasted no time and played 35...♖c1!

The white rook is overloaded in this position. It cannot move to e4 to defend the c4-pawn, or Black will play ...♗c2. Aronian eventually won this game.

Doubled Pawns

Doubled pawns are two pawns of the same color that occupy the same file. They are generally considered a weakness, because they cannot defend one another, and as a result are more vulnerable to capture. Doubled pawns also create weak squares, most notably the square directly in front of the first pawn.

In some situations, when there is a pawn on an adjacent file, they may be considered strong. With everything in chess, there are always exceptions.



In this example, Black's e-pawns are doubled and cannot defend one another. This makes them perfect targets for being captured. White will win with ♔g6, followed by ♕f6.

Passed Pawns

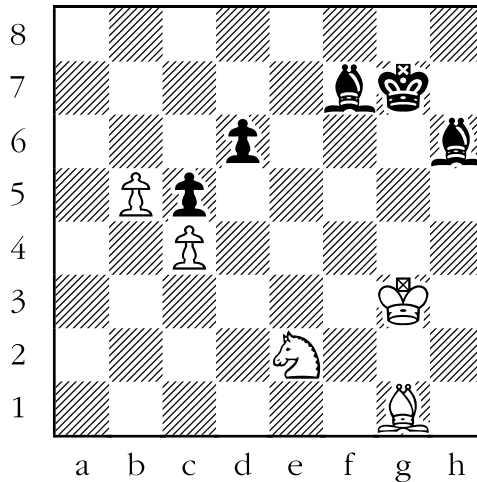
Much has been written about passed pawns throughout chess history.

"The passed pawn has a soul, desires, and fears." – J.H. Donner.

"There is nothing a player should fear more than an advancing passed pawn." – Ben Katz to his students.

"A passed pawn is a criminal which should be kept under lock and key. Mild measures, such as police surveillance, are not sufficient." – Aron Nimzovich.

A passed pawn is one that has no opposing pawns to prevent it from marching up the board to promote. It needs to be stopped by a piece. It is a great weapon, because a passed pawn can become a queen and, usually, when one side promotes to a new queen, they will win the game.



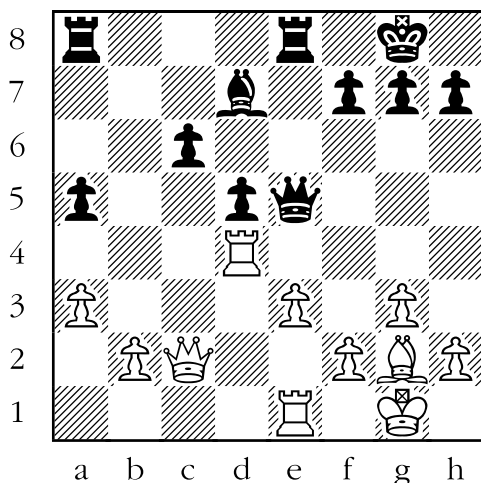
In this position, White has a passed pawn on b5. Based on the definition above this is a passed pawn because no opposing pawns can prevent it from promoting.

White to move will win the game by playing b6. Neither of Black's bishops nor their king will be in time to catch up with it before it promotes.

Backward Pawns

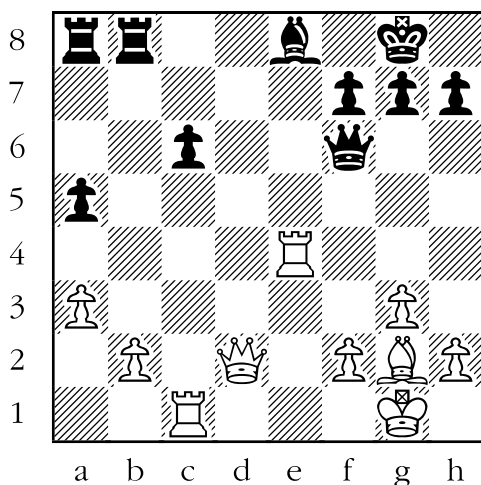
A backward pawn is often one that you should target. It is a pawn that is *behind* all pawns of the same color and cannot be safely advanced. One strategy to take off a backward pawn is to first "fix" it, to prevent it from moving. Once you have done that, you can try to target the weakness. Try to exploit not only the weakness of the pawn but also of the square or squares in front of it.

In the following game from 2016, the strong Polish GM Radosław Wojtaszek took advantage of the backwards c6-pawn in a game against Russian GM Pavel Tregubov.



Wojtaszek's strategy was to dominate the c-file with his queen and rook, thus fixing the pawn. Eventually, he will open the h1-a8 diagonal for his bishop and win the c6-pawn.

The game continued **25 ♖c1 ♜e8 26 ♛d2 ♙e8 27 e4 dxe4 28 ♜xe4 ♛f6**



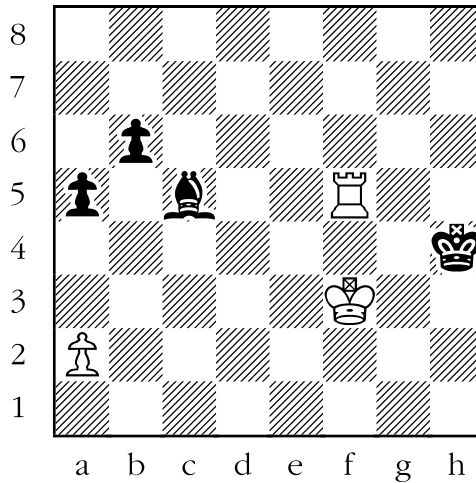
And he succeeded in making this pawn even weaker, going on to win this game.

Capablanca Pawn

The Capablanca pawn is a term that I have not been able to find anywhere else in chess literature. It was coined by my coach Rafail Klovsky and I've started using this term in all my chess lessons.

It is when you fix a backward pawn along with another pawn in the endgame, controlling two pawns with one pawn. It's a powerful concept that you will likely encounter in your games.

This, the oldest example presented in this book (from 1846!) still perfectly illustrates this point. Staunton, the legendary English chess master has a superior position, with a rook and a pawn against a bishop and two pawns.

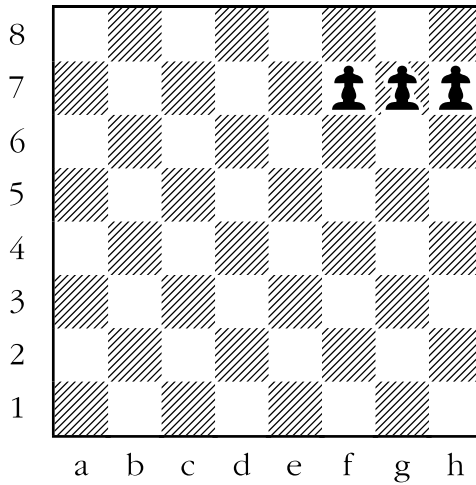


In this position, he eliminated all of Black's potential counterplay with the strong move **49 a4!** This prevented Black from ever advancing his pawns, and Staunton won several moves later by cutting the black king off on the g-file, and moving his king onto c6, planning a timely sacrifice of the rook on b6.

Typical Pawn Structures

In many of the pawn structures you will encounter in your games, the enemy king has castled kingside; this happens in the majority of games. There are then four main structures I have been able to identify. It is important to have a foundational understanding of these as you will see these patterns frequently.

Structure One

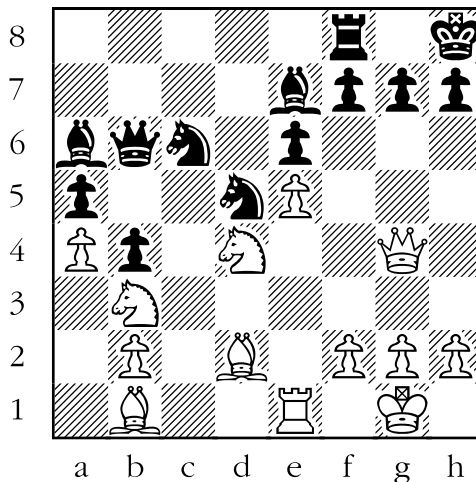


This is the traditional pawn structure that occurs when your opponent castles kingside; it is the most frequent one you will encounter.

The most common strategy to attack this structure is to create a weakness that forces one of the pawns to move, which would result in one of the subsequent structures.

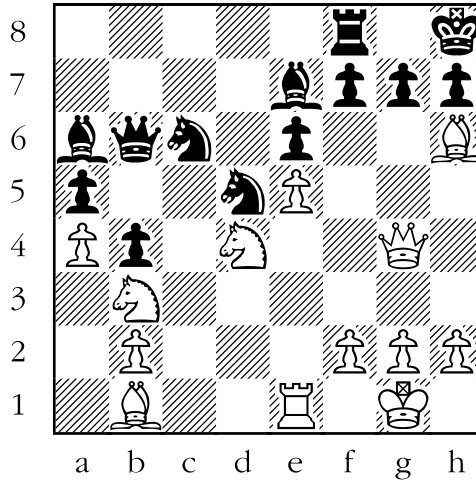
The key to ensuring that this strategy will work is the exchange of a piece along the sixth rank (for White) or the third rank (for Black), normally occupied by a knight. Having one less defender makes the enemy position significantly weaker and the king more isolated.

In these types of positions, the plan of attack is to throw all your pieces at the king and find a timely sacrifice. A young, pre-elite Magnus Carlsen exploited this brilliantly in a game in 2005. His brilliance was already in evidence even this early in his professional career.



As you can see, Black's king is still protected by his three pawns. But without any pieces defending him, he is in danger. Magnus starts to pry open the black kingside in a direct manner.

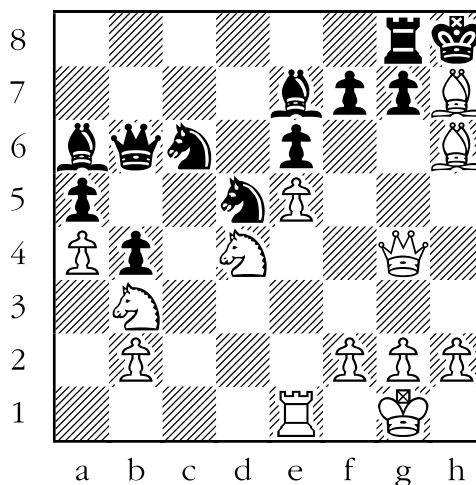
23 ♖h6!



A shocking move which looks bad at first, but the idea is quite clear. If 23...gxh6, then 24 ♖e4 continues the attack on the king. Notice that one of the king's protectors is now gone, and the simple move 24...g6 is no longer possible since the pawn is no longer on g7. Black can still defend, but their position is going downhill fast.

In the game, Black played 23...♖g8. Then came another shot:

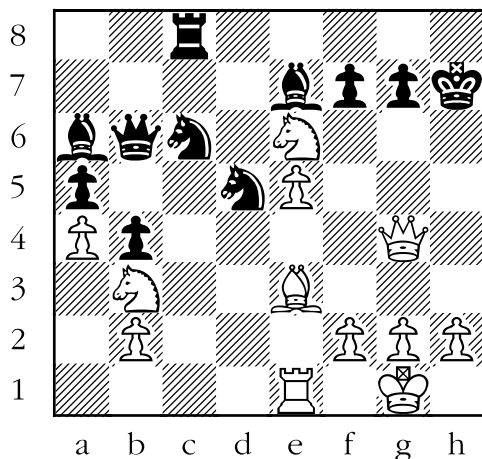
24 ♖xh7!



Bang! Both of White's bishops are under attack, and Black is objectively lost here. The

kingside has no defense.

The game continued 24...♔xh7 25 ♕e3 ♖c8 26 ♘xe6

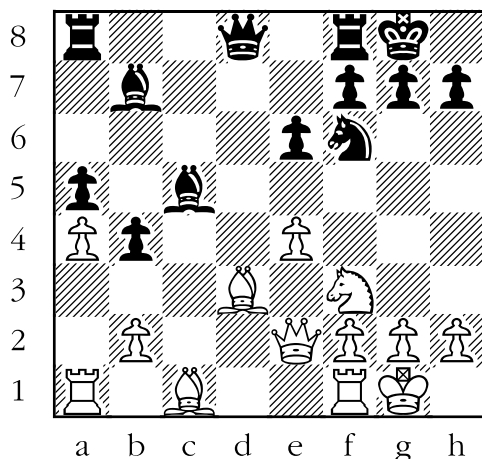


White now threatens both mate and the queen. Black gave up the queen and eventually lost six moves later.

Another idea that is important to understand is the *Greek Gift* sacrifice. The Greek Gift is a common tactical theme in which one side sacrifices their bishop by capturing the rook's pawn of a castled king position (White playing ♕xh7+ or Black playing ...♗xh2+) and that often leads to a checkmate or a winning position.

Coach Jack Collins showed me this specific example in one of our early lessons and it stuck with me. I wrote down the names of the players and was able to look it up years later!

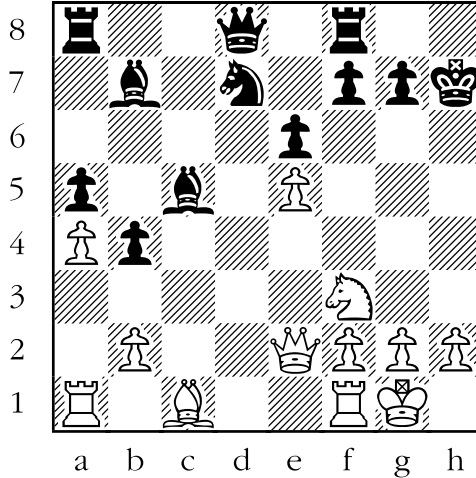
In 1930, in a game between German International Master Carl Ahues and strong British player William Winter, Ahues executed one of the best Greek Gift sacrifices I have ever seen.



One of the rules for this sacrifice to work is for there to be no piece on the enemy's sixth rank. So, let's kick that knight out.

16 e5! ♞d7 17 ♙xh7+! ♚xh7

This is the Greek Gift. You know how this story ends.



18 ♞g5+

This move is critical as it gets more pieces into the attack, in particular the queen.

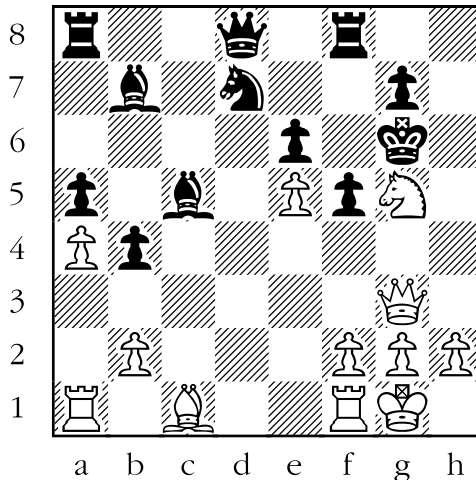
18...♚g6

If 18...♚g8, then 19 ♖h5 is lights out.

19 ♖d3+

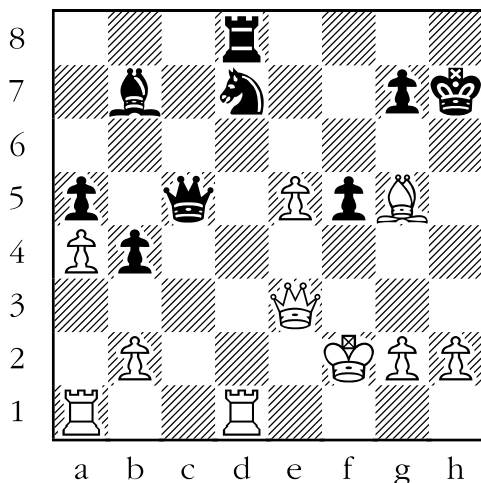
Perhaps 19 h4 is better with a threat of h5+, forcing the black king to h6, after which all sorts of discovered checks would follow.

19...f5 20 ♖g3



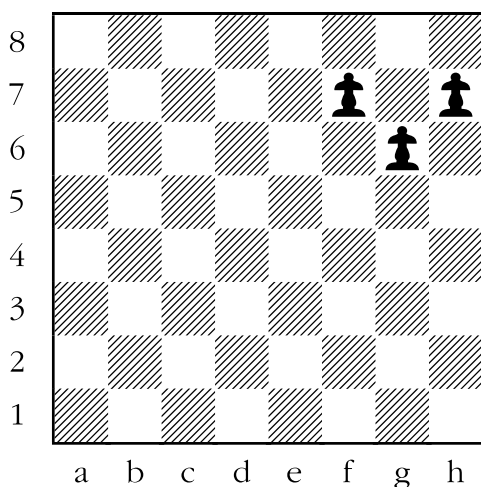
Taking stock of this position, White has a huge threat of ♖xe6+ , the black king is weak, and the pressure has been cranked up on Black. With this much pressure, they are all the more likely to fall apart.

The game concluded **20...♗e7** (to escape the threat of losing the queen) **21 ♖d1** (inviting more friends to the party) **21...♖ad8** **22 ♖xe6+ ♔h7** **23 ♖xd8 ♖xd8** **24 ♙g5 ♙xf2+** **25 ♙xf2 ♗c5+** **26 ♗e3**



And Black threw in the towel; they are down a lot of material and have an inferior position to boot.

Structure Two



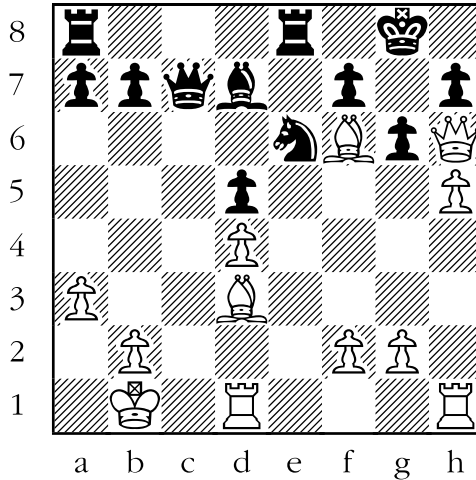
As soon as a structure like this appears, without a defending bishop on g7, a thought

should pop into your head. How can I get a queen on g7 to checkmate them?

This is a giant, gaping hole in their position, and it is important to capitalize on it immediately. The dark squares around a king on g8 are extremely weak.

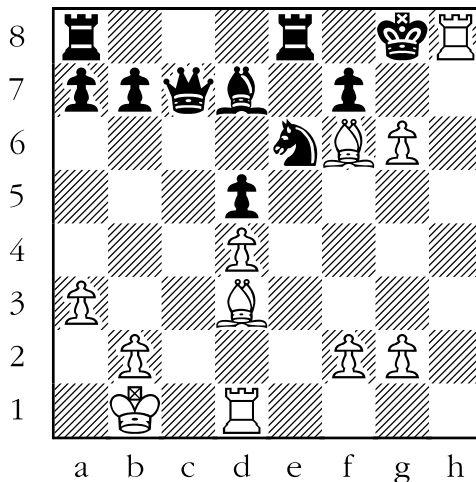
Example 1

In the following position, from a game I played in 2010, I succeeded in taking full advantage of the weaknesses on the dark squares by plopping a bishop on f6 and a queen on h6.



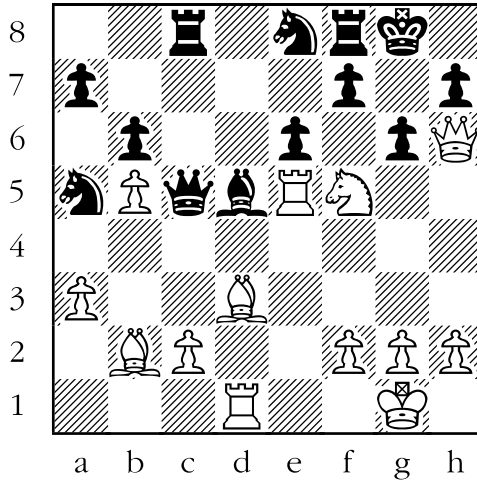
It is a truly scary position for Black. With White to play, what is the final knockout blow? Remember to look for all checks, captures, and threats.

Answer: White wins with the stunning sacrifice 22 ♖xh7+! ♔xh7 23 hxg6+ ♔g8 24 ♜h8 mate.



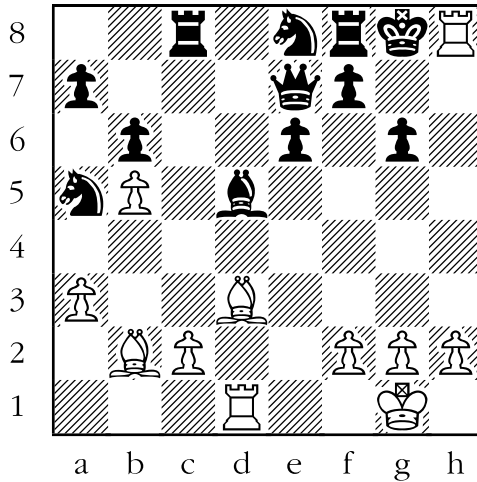
Example 2

I was inspired by a game the very strong player Rudolf Spielmann played in 1929.

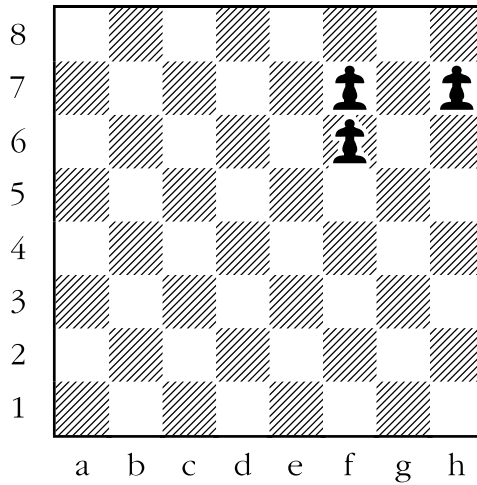


It is slightly different in that White does not have a bishop on f6, but the bishop on b2 is nearly the same thing, right? How did he finish off his opponent here?

Answer: The idea is similar, but it is not quite set up just yet. At the moment White's knight is in the way. So he moved it: 25 ♖e7+!! ♜xe7 and followed up with 26 ♜xh7+!! ♜xh7 27 ♜h5+ ♜g8 28 ♜h8 mate.



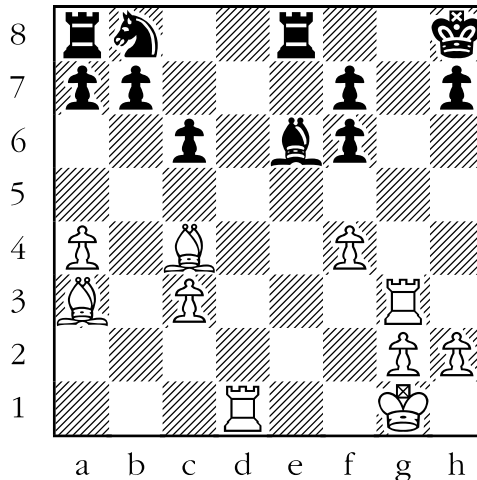
Structure Three



This is normally an advantageous structure for White. A position like this, assuming there is a black king on g8, means that Black is very exposed and White should look for a way to threaten checkmate. In such positions, rooks and queens are even stronger than they are normally because there is an open g-file to work with.

Example 1

An example from the father of Russian Chess, Mikhail Chigorin, in his Russian Championship match of 1901 against Sergey Lebedev.



White to move and win. Notice that the white rook on g3 fully controls the g-file, and the black king cannot move anywhere. You should look for a check.