Nick Maatman

THE HIDDEN LAWS OF CHESS

NEW IN CHESS

VOLUME ONE

Mastering Pawn Structures

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Nick Maatman

The Hidden Laws of Chess

Volume One – Mastering Pawn Structures

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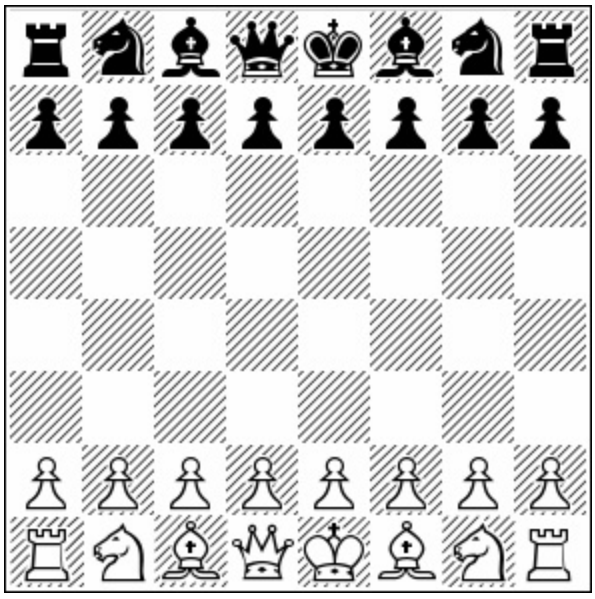
Explanation of symbols

The chessboard with its coordinates:



K King

Q Queen

R Rook

B Bishop

N Knight

! good move

!! excellent move

? bad move

?? blunder

!? interesting move

?! dubious move

checkmate

ch championship

zt zonal tournament

izt interzonal tournament

ct candidates tournament

tt team tournament

ol olympiad

m match

cr correspondence

Foreword

Nick and I have known each other for as long as I can remember. Although he is a few years older than me, we started playing chess competitively around the same time and we had many encounters about a decade ago. I still vividly recall the Dutch Youth Championships under 20 in 2013. I was leading the tournament after five rounds with the maximum score, but in the sixth round Nick caught up by defeating me. Eventually he won the event, while I finished second. That one still hurts! Already back then, Nick was good with words since in his winner's speech he consoled me by mentioning that I had played better chess than him.

From those battles across the board, we formed a close friendship. Over the years we spent a lot of time working on chess together, as well as speaking about various other topics. I have always had high regard for Nick's understanding of the game, while perhaps he is lacking some calculation skills to elevate his game to the next level. His playing style being positional in nature, I would often jokingly nickname him as a 'structure-guy', as his priority number one was to keep his structure intact. On the other hand, I have personally been favouring dynamic play instead, often playing with my pawn structure in ruins. Since this book is about understanding pawn structures, asking me to write the foreword surely has to be a major blunder!

Besides being an avid chess player, Nick always had a talent for writing and speaking. Having finished his studies in philosophy, he often has interesting and striking ideas about life and chess which he can bring across in an eloquent way. By writing a chess book he was able to combine his talents, so this decision definitely has to be a double exclamation move, compensating for the aforementioned blunder.

The road to chess improvement is a highly abstract one, and no one to this date has figured out what exactly is the best way to become a better chess player. What is certain is that chess is an extremely complicated game which cannot be solved by the most advanced computers, let alone humans. Since

we have limited processing capabilities, we can use heuristics or laws to guide us in the process of finding the best move. An understanding of the Hidden Laws of Chess is critical for laying a solid positional foundation.

I hope you will thoroughly enjoy this book, as Nick's writing makes it a very pleasant read. Do not forget to solve the exercises either, since challenging yourself is necessary to become a better player.

Jorden van Foreest,
Groningen, September 2022.

The Hidden Laws of Chess*

* My clubmate Tjeerd Santema suggested the alternative title: 'The Hidden Laws of Chess the government doesn't want you to know about'. Maybe I should have opted for a more 'clickbait' title instead!

Introduction

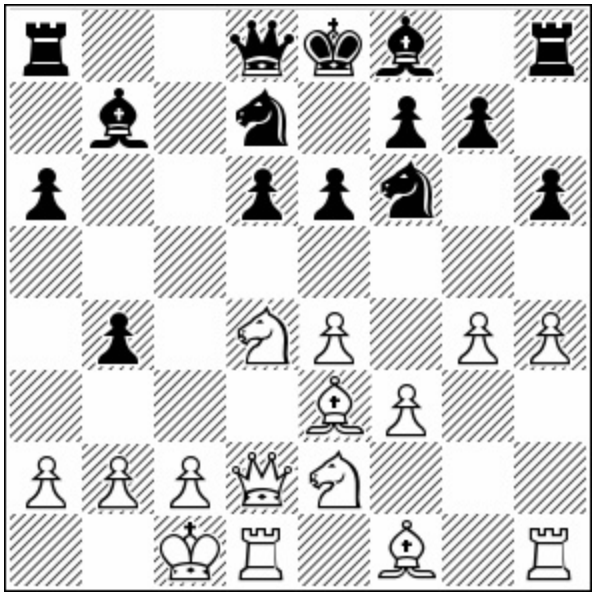
The wise know that we are barely evolved apes. – Alain de Botton

What does it mean to be wise? Psychologists agree that wisdom revolves around the integration of experience, knowledge, and a deep understanding of the uncertainties of life. Philosophers, on the other hand, have pointed out traditionally that wisdom is the best, highest, or deepest kind of knowledge. The wise have obtained an understanding of the Hidden Laws of reality.*

* In essence, the Hidden Laws of chess are analogous to the Hidden Laws of our Universe. Good play in chess supervenes on lawlike properties. Similar to the regularities in nature, the Hidden Laws of chess represent the regularities behind good moves in chess. Hence, a 'wise chess player' is one who masters the Hidden Laws of chess. The design of the cover reflects this analogy by displaying the universe.

Can wisdom be translated to the chessboard? In 2012, my compatriot IM Willy Hendriks published a wonderful book called *Move First, Think Later*. In this book, he criticises the way most chess instructors teach chess. Hendriks asserts that in our decision-making over the board, we see a move, then look for its ramifications and finally conclude whether it is good. In his view, many chess teachers have it backwards. They claim that you first have to look at the 'characteristics' of a position and that good moves flow from this process naturally. On Hendriks' account, the processes of spotting moves

and evaluating characteristics happen at the same time. Therefore, pretending that this is not the case is counterproductive.



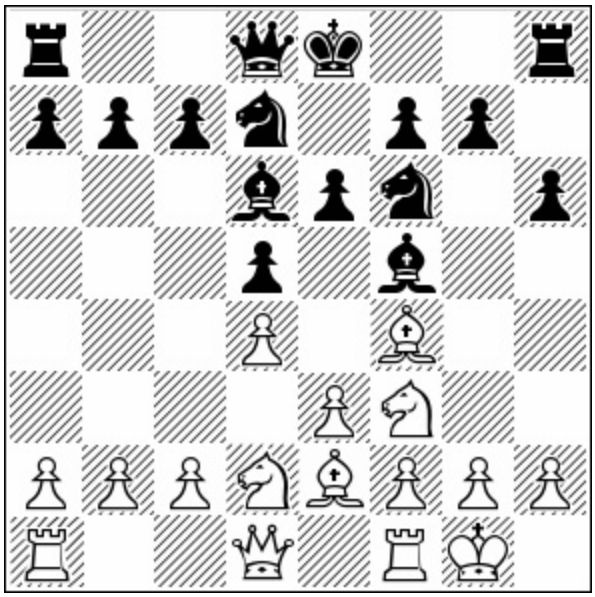
Hendriks is particularly critical of the way in which many chess authors have extracted chess wisdom. Let's look at the diagram given above. In this well-known position of the Najdorf Sicilian, White is setting up a pawn storm on the kingside. Black is supposed to react with 13...d5!, counterattacking in the centre. With correct play, this should lead to an approximately even game. Chess trainers would immediately shout: 'ah there we go again, the famous maxim: if your opponent attacks on the wing, counterattack in the centre!'. Obviously, this turns out to be good advice here. But is this maxim good advice in general? Hendriks set up an experiment. He drafted a selection of 110 games in which White played the move 17.g4 – a clear sign that White is aiming for an attack on the flank. In about two-thirds of the games, a counterattack in the centre was simply impossible. A counterattack in the centre was a bad idea in 22 cases, in 10 games it was all right, and it was the best idea in only 2 games. Thus, on Hendriks' account, what we can learn from the above chess position is not some form of chess wisdom, but rather that the key to the position is the move 13...d5!.

While I agree with Hendriks's skepticism with regards to certain chess maxims, I doubt that this is the full story. Even though I enjoyed his book a lot, in my humble opinion he was a little bit too harsh on respectable chess

authors such as IM Jeremy Silman. Aren't there any deeper truths to be discovered about the game of chess? Isn't there any room for language in chess? Let's turn to that question now.

Language in chess

On the chessboard, there is a battle between two armies of 16 pieces each. There is no language involved in the movement of the pieces. The quality of a move is determined by the value that it offers towards the end goal: delivering checkmate. When learning to play the game of chess, we quickly become aware of the value of the pieces. Pieces need to be preserved, as casualties allow your opponent's army to overwhelm yours. The different pieces have different abilities. More mobile pieces such as the queen are significantly more valuable than less mobile pieces such as bishops and knights. Chess scholars have established the comparative value of pieces. Most often, the pawn is attributed a value of 1, knights and bishops have a value of 3, rooks are valued as 5 and the queen gets a value of 9. This assessment has stood the test of time and proved to be useful from the beginner level all the way to the grandmaster level. Obviously, other positional considerations can alter these assessments, but most of the time these values prove to be extraordinarily accurate guidance. The comparative values of the pieces are part of our decision process when choosing moves. Still, it's an analysis based on numerical values. Is there any language involved in our decision process?



To answer this question, we need to have a deeper look into our decision process. How does one decide on a move? A primary process is calculation, which can be vocalised in the following way: if I move my knight from f3 to e5 he can take it with his knight, but if he does so, I take back with my pawn, forking his bishop and knight. Therefore, the exchange is satisfactory for me. This particular exchange is completely described in alignment with the laws of chess. A legal move is answered by a legal move, etc. The description contains one special term: a ‘fork’. But the term ‘fork’ is merely used as a shortcut to describe a situation in which a piece of little value attacks two pieces of higher value. The entire exchange is satisfactory because it furthers the goal of winning the game. Does this paint the full picture or is it more complicated?

The process of deciding upon moves is chaotic. We go back and forth between several possible continuations and sometimes discard an option for superficial reasons. Language fulfills an important function in this process. In our thought process, language plays two roles: it provides guidance to help us decide which moves deserve attention and it plays a role in our judgment. We need language to evaluate positions. The game of chess is extraordinarily complex. With our limited processing capabilities, it is often impossible to calculate variations all the way until mate. Therefore, we need to create heuristics. Chess players develop an understanding of the game over time that

lets them evaluate positions more and more accurately. Interestingly, even computers make use of these heuristics. Even the strongest chess computers have nowhere near the capabilities to give definitive assessments of middlegame positions. Computers also must apply judgment. Designers of chess computers have installed algorithms. Besides an assessment of the value of pieces, these algorithms contain parameters of factors such as space, mobility, king safety, threats, and imbalances. It is precisely the investigation of factors like space, king safety and imbalances that grants us access to the deeper truths of chess. These factors operate with a certain consistency. For instance, having a space advantage is most often favourable, while having an unsafe king is disadvantageous. Such claims are examples of the Hidden Laws of Chess.

What is a Hidden Law in chess? With a 'Hidden Law', I refer to the deeper structures that spring from a mere contingency of the rules of chess. This might sound like a mouthful of gibberish to you. What I mean is that there are certain patterns that underlie good play. Had the rules of chess been different, these hidden structures would have been different as well. On a surface level, there are Laws that comprise the comparative value of the pieces. On a deeper level there are Hidden Laws that encompass elements such as the importance of space, the quality of a pawn structure, the strength or weakness of an isolated pawn, the importance of a key square, etc.

How do these Hidden Laws compare to chess wisdom that has been captured in chess literature? To a certain extent there is overlap, but the Hidden Laws of Chess are recognizable when three features are present:

- they operate in a lawlike manner
- they operate under the surface
- they are context-dependent

With the ascription of 'a lawlike manner', I simply refer to the likelihood that a certain heuristic is applicable. When applying the Hidden Laws of Chess in this book, there is a reasonable probability that they provide good guidance in positions with certain features. The idea that a flank attack should be

answered by a strike in the centre is seldom good advice. So this principle doesn't operate in a lawlike manner. Hence, the banal chess wisdom that we saw earlier is excluded. In addition, the Hidden Laws of Chess are operating under the surface. In this sense, the Hidden Laws are distinct from what we might call the 'Obvious Laws' of chess. These Obvious Laws of chess include the benefits of development, the merits of king safety and the perks of capturing pieces. Indeed, the Hidden Laws and the Obvious Laws have in common that they are both operating in a lawlike manner, but the former are considerably more difficult to discover. You don't need to be a serious student of the game to extract the wisdom of the Obvious Laws of chess. Finally, the Hidden Laws are context- dependent. Good chess strategy may vary immensely in different types of positions. That's why this book is divided into eight chapters, featuring eight different types or aspects of pawn structures.

In this book, my objective is to explore these Hidden Laws of Chess. My goal is not to provide cheap wisdom of the sort that Hendriks warned us about, but to provide actionable tips and ideas that you can apply to elevate your game. Ideas that form the foundation for a solid positional understanding. A mastery of the Hidden Laws of Chess contributes to sound judgment – and sound judgment leads to good moves, which ultimately leads to better results.

In his work, Hendriks mentioned the work of another fine author: Dražen Marović. Marović tried to save the maxim: 'when attacked on the wing, strike back in the centre', by adding: 'only if you can!' An alternative solution would be to create a more modest formulation that includes a term such as 'sometimes'. Hendriks astutely points out that a weakening of these formulations makes the chess teacher less authoritative and less convincing. In sports coaching, there is a dilemma between honesty and not promising too much. Since I value honesty, I will immediately admit that the Hidden Laws that will be revealed in this book aren't categorical laws – they contain exceptions! And since we are now in the business of making confessions, I'd like to add another disclaimer. To improve in chess, it is still most effective to train chess patterns by solving (tactical) exercises, rather than focusing on the

positional aspects of the game. But if you already have a solid tactical foundation, or if you supplement the content of this book with doing tactics, I can guarantee that you will make progress. And remember, if this book somehow doesn't make you wiser about chess, perhaps you will learn something else. Maybe all chess teachers are charlatans after all?

Have a great read!

Nick Maatman,
Groningen, September 2022

Practice, Practice, Practice

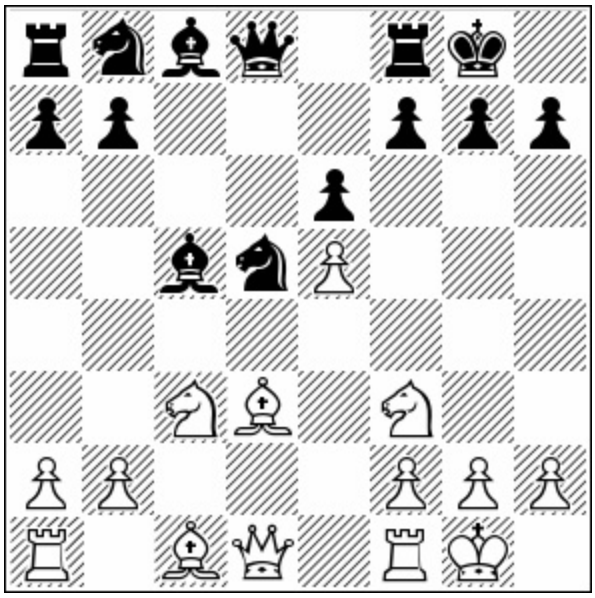
Practice is a vital part of chess improvement. This book offers you plenty of opportunities to put your chess-playing brain to work. Before each chapter, there will be a Preview Exercises section. In this section, you can test your prior knowledge of the topic at hand. The exercises feature important positions from the chapter and are numbered 1-6, so you can easily find the exercises and their solutions back as they are presented during the chapter. Note that these positions can be quite challenging, as they are mostly derived from grandmaster games. Next to the diagrams there are stars (ranging 1-5), where more stars indicates a higher level of difficulty. It is not a big deal if you have trouble finding the right answers because we will carefully discuss the answers in the chapter.

After each chapter, there is a Quiz section. Most exercises in the quiz feature positions that test your knowledge of The Hidden Laws that you have learned during the chapter, while some positions may contain tactical patterns in positions that feature a characteristic pawn structure. The exercises in the quiz again contain a number of stars that represents the level of difficulty.

On top of these exercises, I will challenge you on multiple occasions to find a solution to a position. These positions are followed by a Question and also supplemented with a number of stars, indicating their level of difficulty. If you want to extract the most value out of this book, pause and take your time! Note that you don't have to solve all the exercises at once, but you can also go back and forth between solving and reading.

Enough of these peripheral matters, let's start!

Chapter 1
Preview exercises



White to move
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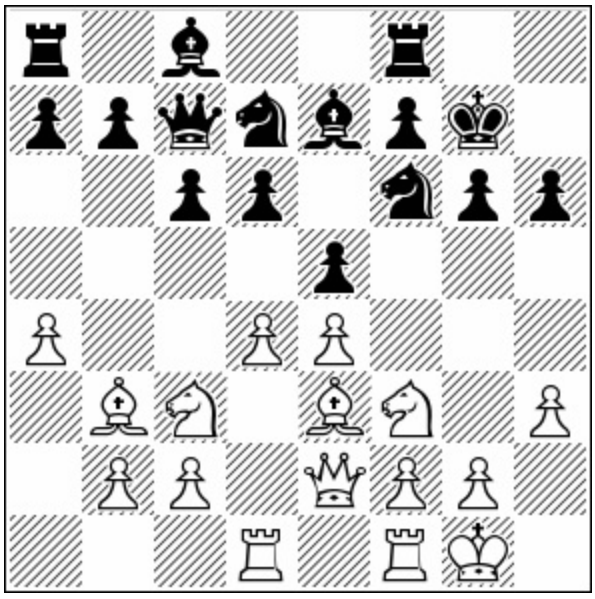

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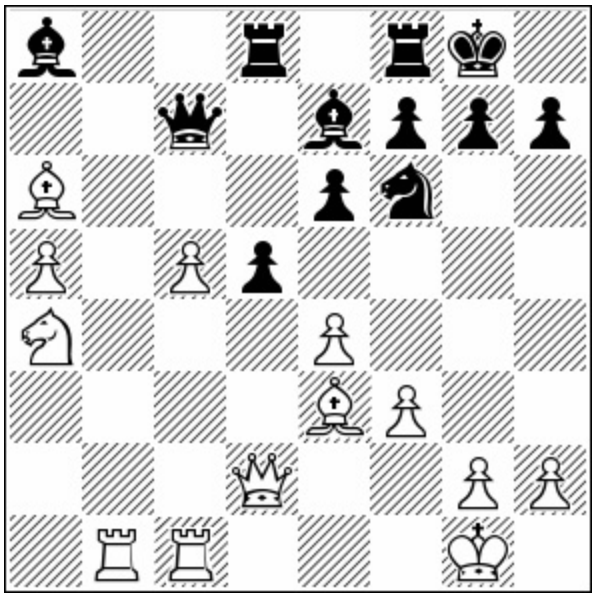

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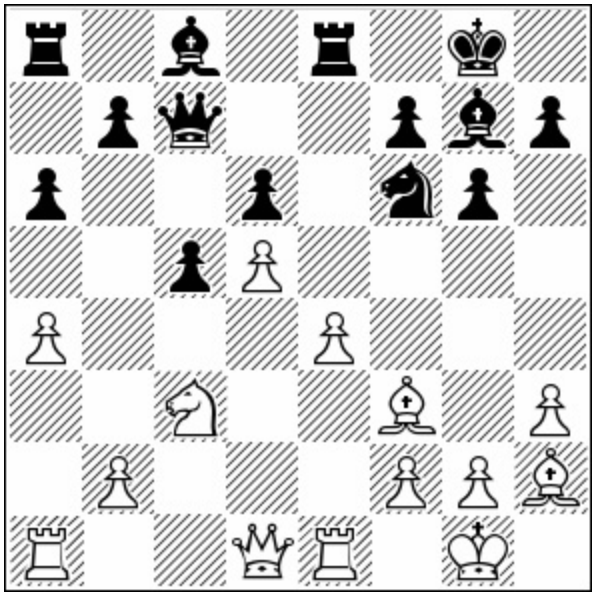

White to move
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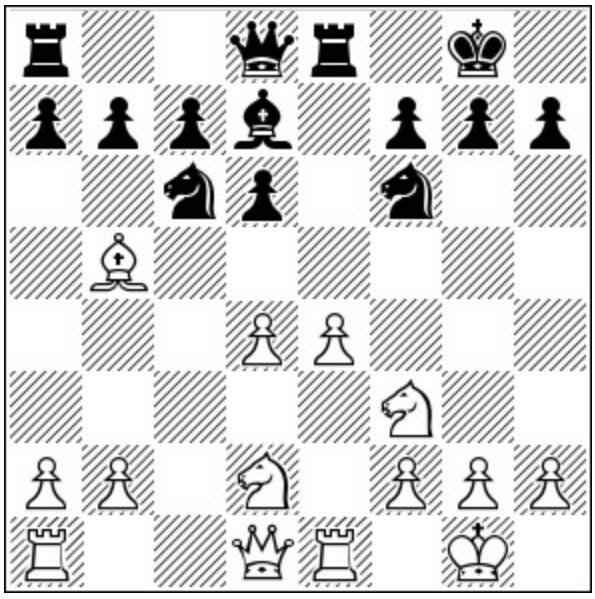
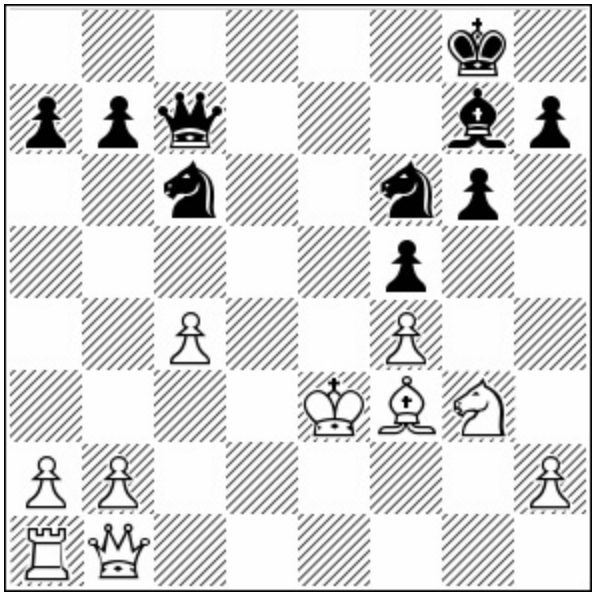


White to move
(go to the solution)



Black to move
(go to the solution)

Chapter 1

Space advantage

We've grown used to wonders in this century. It's hard to dazzle us. We've grown used to the idea of space, and perhaps we forget that we've only just begun. – Ronald Reagan*

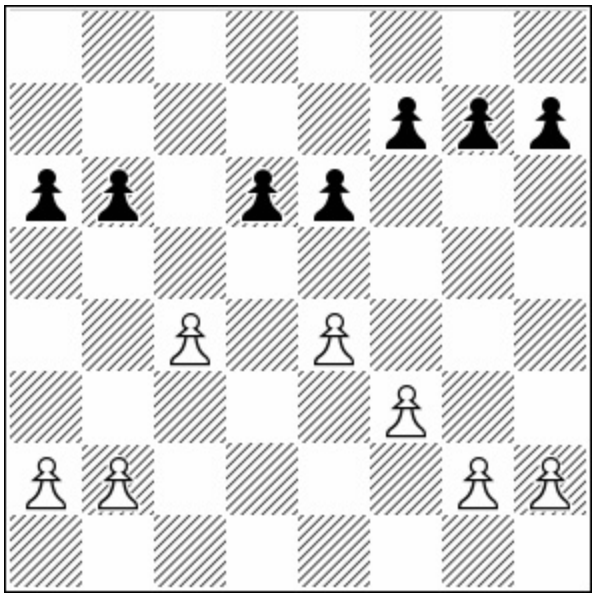
* Speech on the Challenger Disaster, January 28, 1986.

In the eighties, NASA continued their quest to explore space. This project encountered many setbacks. In 1986, seven astronauts went aboard a space shuttle on their mission to leave the atmosphere of the Earth and enter outer space. Their dreams ended in tragedy. Soon after the launch, the space shuttle exploded. No one survived. After another fatal mission in 2003, the Space Shuttle Program was abandoned altogether. Nowadays, space programs have developed a lot. Many scientists are already dreaming of a human visit to Mars.*

* The richest man on our planet, Elon Musk, is at the forefront of modern human endeavours in space. He seems to be not so fond of our ancient game, as he wrote: 'Chess is a simple game. Understandable when all we had to play with were squirrels and rocks, but now we have computers.' Grandmaster Hikaru Nakamura replied eloquently in his own style by saying: 'I literally don't care'.

Maybe one day we will colonise the universe.

Besides a way of describing all the regions of our universe, 'space' also became a common term in chess literature. In the realm of chess, the space consists of 'only' 64 squares. In the starting position, both players have limited influence over the chessboard. By focusing on quick development and a strategic employment of the pawns, influence increases rapidly. If one player controls a larger area of the board than the opponent, that player is considered to have a 'space advantage'.



Consider for a moment the above pawn structure. The aficionados will recognise the white structure as a Maroczy Bind, which is characterised by pawns on c4 and e4, while Black has a Hedgehog set-up. Typically, when Black opts for a Hedgehog set-up, he* operates on three ranks only.

> * Forgive me for my application of pronouns. Throughout the book, I have used ‘he’ if the player is male and ‘she’ if the player is female. In neutral circumstances, I opted for ‘he’, as the significant majority of the Playerbase in chess is male. The alternative ‘they’ sounds too politically correct for my taste, while continuously writing ‘he or she’ makes sentences cumbersome. This is not an academic work after all...

White on the other hand is granted a lot of space and he uses this to take command of the centre. White controls the first four ranks, while the 5th rank can be regarded as neutral territory. Hence, White enjoys a space advantage. Space is an important concept in chess. A surplus of space generally offers your pieces greater mobility compared to their counterparts, which can be deployed to squeeze the opponent. When Black employs the Hedgehog, he offers White a free space advantage, but he intends to eventually strike back. The main breakthroughs in Black’s arsenal that question White’s influence are ...b6-b5 and ...d6-d5. White will try at all costs to make these freeing moves unattractive.

In a well-played game of chess, a player slowly accumulates a range of advantages. One advantage forms the foundation for the next advantage. The opponent gradually loses all hope. A space advantage is a prime example of a foundational advantage that can be built upon. By seizing space, a player increases his or her area of dominance. This can come along with a wide range of perks, such as improved mobility and improved coordination. The effects of a space advantage are the topic of this chapter.

A disaster

In the first game, we look at what can happen if one side voluntarily gives up the centre. Black starts with a dubious opening that allows White to quickly launch a decisive attack.

Game 1 Various Openings
Alexei Shirov 2726
Piotr Kaczmarek 1870
Warsaw rapid 2008 (8)

1.d4 d5 2.c4 Nf6?

This move, which seems like a natural developing move, already turns out to be a substantial mistake.

3.cxd5! Nxd5 4.e4

Logically, White takes full command of the centre. However, many players opted here for the more cunning 4.Nf3 to sidestep Black's alternative on the 5th move.

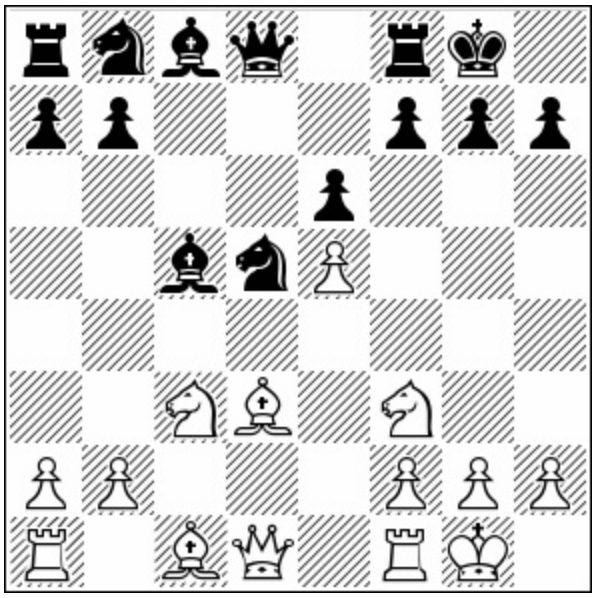
4...Nf6 5.Nc3 e6?!

This is too timid. The alternative 5...e5! gives Black reasonable counterplay, the point being 6.dxe5 Qxd1 7.Kxd1 Ng4, winning back the pawn. Instead, if White continues development with 6.Nf3, he retains the advantage.

6.Nf3 Be7 7.Bd3 0-0 8.0-0 c5

A valiant move. Black finally decides to strike back in the centre. Unfortunately, the punishment will be swift.

9.dxc5 Bxc5 10.e5 Nd5



White to move
(back to the exercises)

11.Bxh7+!

A classic tactic. Black's king is lured out of its basement to a place where it will be ripe for the slaughter.

11...Kh8

Of course, not accepting the sacrifice leaves Black's position hopeless. Capturing the bishop also leads to a quick demise: 11...Kxh7 12.Ng5+ Kg6 (12...Kg8 13.Qh5 is deadly) 13.Qc2+ f5 14.exf6+ Kxf6 15.Nce4+, winning back the piece with an ongoing attack.

12.Bd3 Nc6 13.Bg5 Nxc3 14.bxc3 f6 15.exf6 gxf6 16.Ne5!

Shirov concludes the game nicely. On the next move, the queen will slide in for a deadly check on h5.

1-0

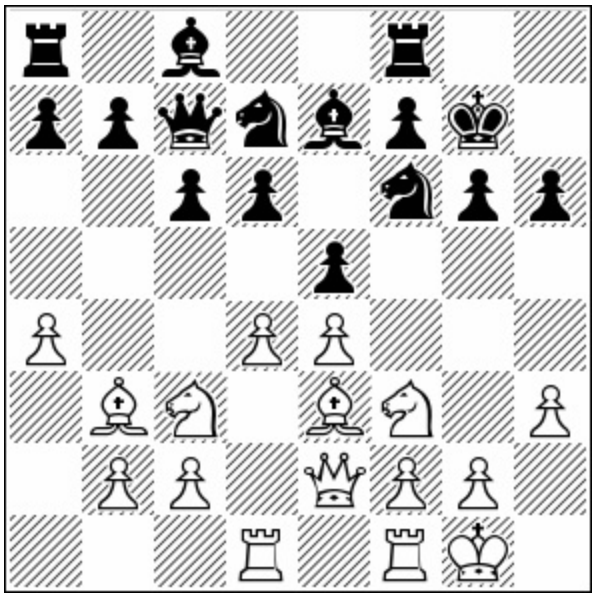
Obviously, watching a renowned player such as Alexei Shirov beating up an amateur player in this fashion might look a bit demotivating. But don't get discouraged! Disasters are bound to happen. Instead, we should take notice, evaluate, and come back stronger.*

> * Capablanca once pointed out: 'You may learn much more from a game you lose than from a game you win. You will have to lose hundreds of games before becoming a good player.' Naturally, this quote was a bit too cliché to include into the main text. Interestingly, Capablanca was so talented that you can even doubt whether he lost hundreds of serious games before becoming an elite player.

Tension & mobility

We will move on to a game of former World Champion Alexander Alekhine. He successfully used a space advantage to launch an attack on the kingside.

Game 2
Alexander Alekhine
Georg Marco
Stockholm 1912 (2)



White to move
(back to the exercises)

Clearly, things have gone wrong in the opening for Black. White has much smoother development, facilitated by his control over the centre. How can White capitalise on his advantage? If your pieces are already occupying prime positions, it often becomes increasingly difficult to figure out what to do next. Once the development phase is completed, players must come up with a 'plan'. Alekhine now comes up with a great idea that allows him to put more pressure on the black position.

13.Nh2!

White temporarily retreats the knight to free the f-pawn. Once the f-pawn gets involved, White's influence over the centre will increase even further.

13...Ng8?!

Black gets ready to answer with his own f-pawn. Unfortunately, he will be late to the punch. More active would have been 13...Nh5, stopping f2-f4. However, White can then continue effectively with 14.Ng4 followed by Qd2, harassing the pawn on h6.

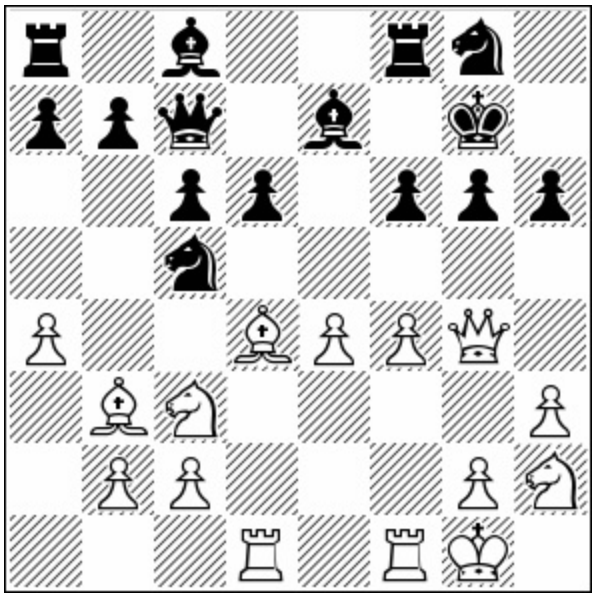
14.f4 f6

We now have a situation where White controls the tension. ‘Tension’ is one of those typical terms that obtained a special definition in the realm of chess. It is often referred to in positions that contain points of stress. You can find a description of typical chess terminology at the end of this book. In this particular instance, the tension is congregating on the e5-square. White can take on e5 with both his f- and d-pawns, while Black has the option to take on either f4 or d4. Here, White is governing the tension, as a capture by Black on either f4 or d4 is undesirable. Thus, White has all the control as he can decide at will when to release the tension.

15.Qg4 exd4

Black decides to release the tension anyway, but this capture concedes even more space.

16.Bxd4 Nc5



17.f5! Nxb3

After the alternative 17...g5, White wins with 18.Bxg8! Kxg8 19.Qh5. Notice

how Black's lack of space prevents him from mobilizing defenders.

18.Qxg6+

White comes away with an important pawn. Now he has a material advantage on top of a massive positional advantage. Alekhine converts without any problems.

18...Kh8 19.cxb3 Bd7 20.Qg3 Rf7 21.Ng4 Qd8 22.Ne2 Rg7 23.Nf4 Qe8 24.Qh4 Qf7 25.Rd3

White's space advantage allows him to easily mobilise more attackers, while Black is struggling to manoeuvre on the last two ranks.

25...Kh7 26.Ng6 Rxg6 27.fxg6+ Qxg6 28.Bxf6 Bxg4 29.Bxe7 Re8 30.Rxd6 Qg7 31.Bf6 Nxf6 32.Rfxf6 1-0

What can we learn from this game?

A space advantage often comes along with control of the tension. The side who controls the tension has a far wider range of options.

If the defending side decides to release the tension, this can easily lead to further deterioration.

Furthermore, a space advantage can be used as a starting point to launch a strong attack, as the attacker can mobilise pieces more easily.

Coordination

Sometimes, things are a little more subtle. My friend Max Warmerdam played a beautiful game on his way to his first Dutch Championship title. Warmerdam used his space advantage to split the enemy forces, which allowed him to create threats all over the board.

Game 3 Réti Opening
Max Warmerdam 2595
Erik van den Doel 2604

1.Nf3 d5 2.g3 Bg4 3.Bg2

Even these timid-looking opening schemes are nowadays employed from time to time to pose difficult questions.

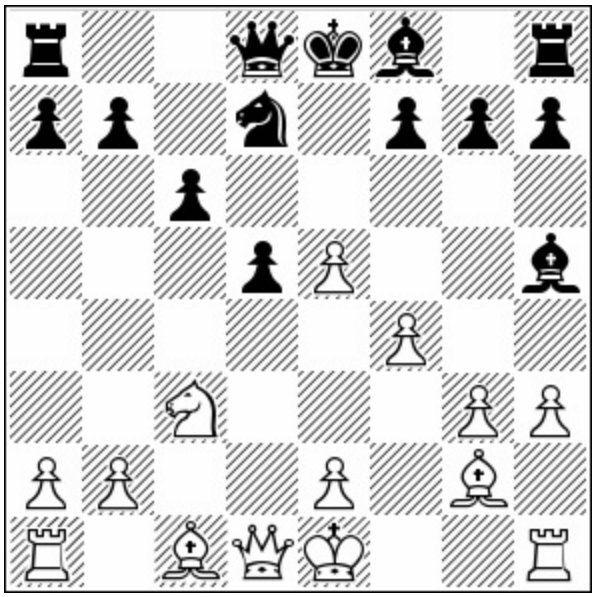
3...Nd7 4.h3

This forces Black to commit very early on. Either he goes for an inferior diagonal, or he gives up the bishop pair.

4...Bh5 5.c4 e6 6.d4 c6 7.cxd5 exd5 8.Nc3 Ngf6 9.Ne5!?

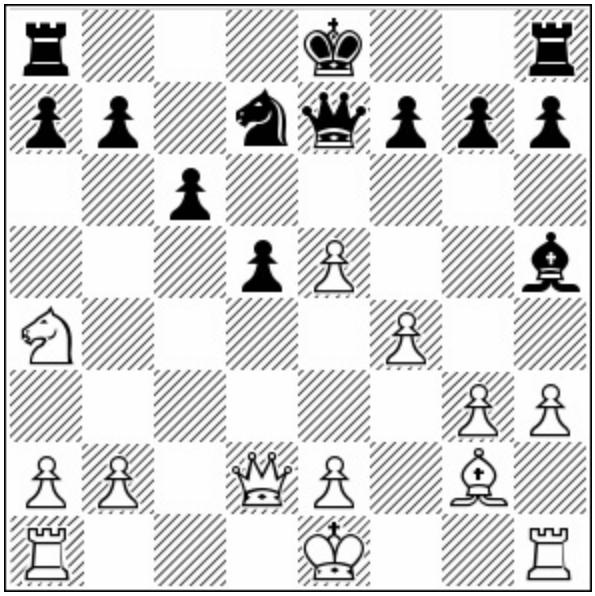
Very interesting. White opts to command the centre before finishing his development. The threat is now to strengthen the knight with 10.f4. Nepomniachtchi employed this scheme successfully in the Candidates Tournament against Duda, Madrid 2022.

9...Nxe5 10.dxe5 Nd7 11.f4



11...f5?!

The start of Black's problems. He was probably uncomfortable about the prospects of the bishop on h5. However, there was no need to worry yet as Black had a solid alternative: 11...Bc5! 12.Na4 (the bishop must be kicked out, otherwise White can never castle) 12...Bb4+ 13.Bd2 Bxd2+. This is the first time that we see this important defensive idea. If you are lacking space, it is often a good idea to exchange pieces. With less pieces on the board, the side with the space advantage finds it more difficult to create threats. Here, it still looks dangerous for Black. So how can he solve the issues of the bishop on h5? As it turns out, Black has a very neat tactical solution: 14.Qxd2 Qe7!. Black prepares ...f7-f6.



analysis diagram

Now, the immediate attempt to trap the bishop fails beautifully: 15.g4?! (better is 15.0-0 f6 16.e6 Qxe6 17.e4 d4 18.Qxd4 0-0, with a marginal advantage for White) 15...Qh4+ 16.Kf1 Bg6 17.f5?? Bxf5!. White cannot really recapture due to the horizontal pin across the fourth rank.

12.Qc2

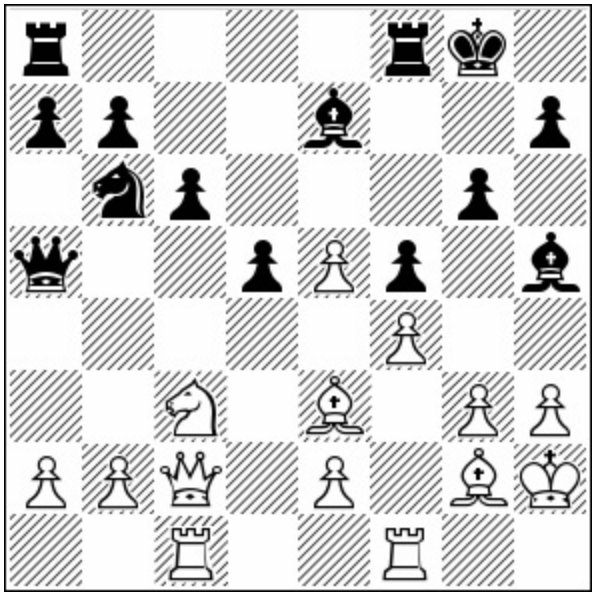
A flexible move, which leaves Black guessing where White is going to put his king.

12...g6?!

Now, the bishop remains stuck on h5, cut off from the rest of Black's army. Remarkably, there is no immediate plan for White to trap the bishop, so he needs to resort to positional play.

12...Qb6 is an interesting alternative. Here, 13.Qxf5 is very greedy (the calm 13.Bd2 is preferred, after which White maintains an advantage): 13...Bg6 14.Qg4 Bc5. The black position has come to life at the cost of a pawn. Suddenly, the white position becomes very difficult to play and it won't be easy to prove an advantage.

13.Be3 Qa5 14.Rc1 Be7 15.0-0 Nb6 16.Kh2 0-0



The differences in coordination are visible. Due to White's space advantage – which springs from the protected passed pawn on e5 – he was able to disconnect the black pieces. Now, it's White's job to further improve his position without giving his opponent any hope for counterplay.

17.Rfd1 Rad8 18.Bf2 Kh8 19.a3 Nc4 20.Rd3

White makes a series of prophylactic moves whilst preparing to advance on the queenside with b2-b4.

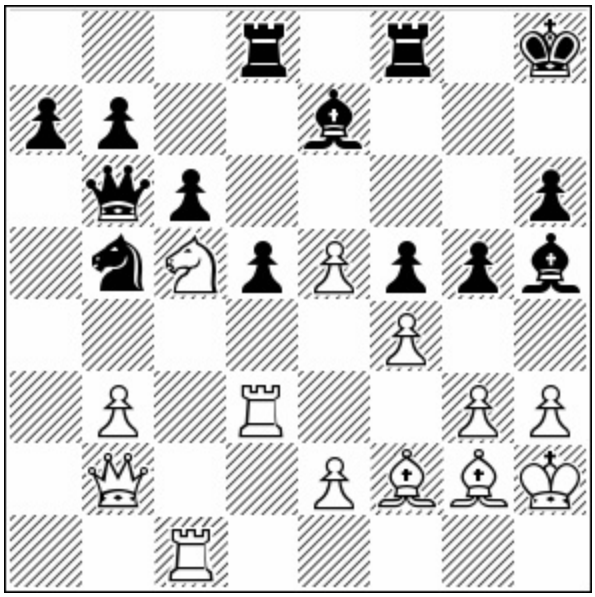
20...g5

Black is finally organizing some counterplay. However, an assault on the white king is unrealistic, as half of Black's army is standing on the wrong side of town.

21.Na4 h6 22.b3!

Warmerdam now invests a pawn to further displace the black pieces.

22...Nxa3 23.Qb2 Nb5 24.Nc5 Qb6!



Even though Van den Doel has been on the ropes for the entire game, he shows his class here by defending tenaciously. Obviously, it is dangerous for a queen to stand in the line of sight of an enemy rook or bishop, but when the situation is delicate, risky operations are mandatory.

25.b4!

Further securing the knight and cutting off the diagonal towards a3. Interestingly, prophylactic moves that protect the bishop, such as Kg1 or Bg1, give Black a way back into the game, for instance: 25.Bg1 d4! 26.Ne6 Ba3, winning back the exchange. So here we see why obstructing the

diagonal towards a3 is crucial.

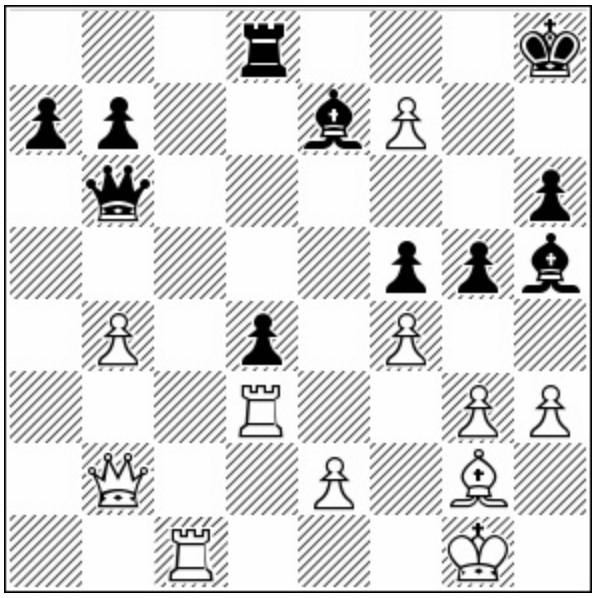
25...Rf7 26.Kg1 Rg8 27.Ne6 d4 28.Nxd4

White has finally won back the pawn, while he continues to dominate the position. Warmerdam, who played a superb game up to this point, now has some trouble finishing off.

28...Nxd4 29.Bxd4 c5 30.e6+?

Allowing unnecessary complications. The simple 30.bxc5 Qxb2 31.Bxb2 would have been sufficient for victory.

30...cxd4 31.exf7 Rd8



At the cost of an exchange, Black has finally generated some coordination and activity. Obviously, White is still winning with correct play, but anything can happen in time trouble...

32.e3 Bf6 33.Rc5 Bxf7 34.exd4 gxf4 35.gxf4?

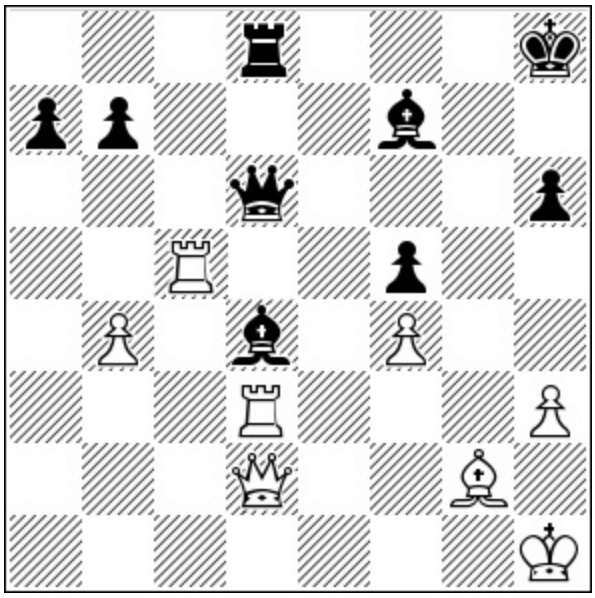
The mistake that gives it all away. Suddenly, all Black's pieces are coordinating beautifully, which makes up for the material deficit. Apparently,

35.Qd2! retained a winning advantage. White will take back on f4 on the next move without allowing any concrete counterplay.

35...Qd6?

Black misses his chance. 35...a5! would have caused problems for White: 36.Rxa5 (on 36.Rxf5, there is 36...Bg6!, winning back the exchange) 36...Rxd4 37.Qf2 Qxb4 38.Rxf5 Rxd3 39.Rxf6 leads to an equal endgame.

36.Qd2 Bxd4+ 37.Kh1



White is totally back in control. The pin on the d-file is decisive.

37...Bxc5 38.Rxd6 Rxd6 39.Qc3+ Bd4 40.Qc7 1-0

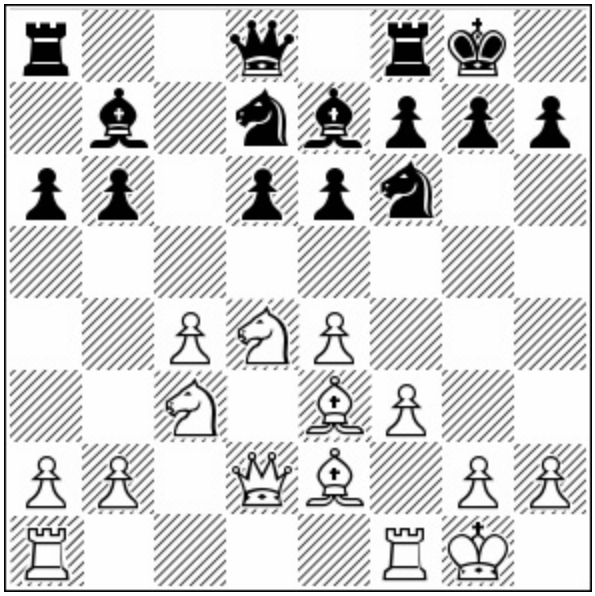
A nice game by Warmerdam. Ingenious play in the opening and early middlegame granted him a promising position. White's central pawn formation split the enemy forces. Black's lack of space made him struggle to find active ideas. In the meantime, White was able to manoeuvre around freely, which allowed him to seize the initiative on the queenside. Often, if you defend well, you will get an opportunity to make a comeback. Van den Doel indeed put up quite some resistance, but when his opportunity came on move 35, he missed it.

Hedgehog

Let's move on to the Hedgehog, a set-up that we briefly discussed in the introduction of this chapter. The structure is known for its intricacies around the acquisition of space. We look at an effective strategy for White.

Game 4 English Opening
José Cuenca Jimenez 2512
Renier Gonzalez 2451
Guatemala City 2019 (7)

1.c4 c5 2.Nf3 Nf6 3.d4 cxd4 4.Nxd4 b6 5.f3 Bb7 6.e4 d6 7.Nc3 e6 8.Be3 a6 9.Qd2 Nbd7 10.Be2 Be7 11.0-0 0-0



We have reached a classical Hedgehog position. This set-up can arise from a variety of openings. In this game, we started with an English Opening, but this exact position also regularly arises from the Sicilian. White now shows a very effective plan.

12.a4!

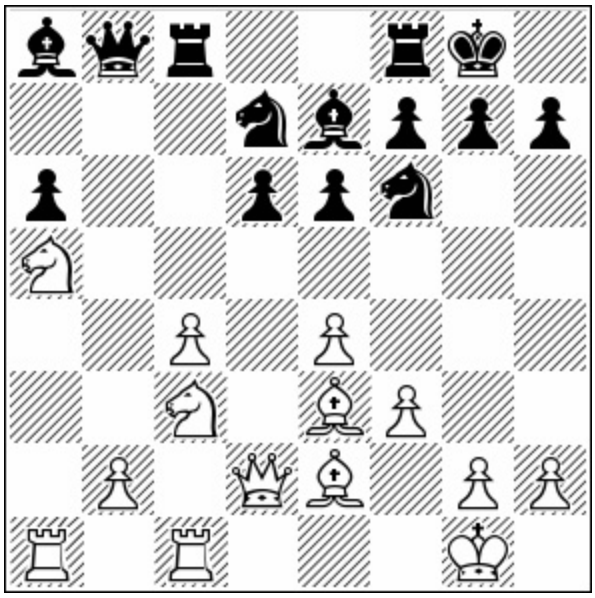
The start of a scheme that has become more and more popular. White intends to temporarily sacrifice a pawn with a4-a5 and then manoeuvre the knight

around to a5. Then, Black will have less control over the dark squares and he will be left with a vulnerable pawn on the a-file.

12...Qc7 13.Rfc1

An essential preparatory move that is part of the scheme. Some players prefer to start with 12.Rfc1 and follow up with 13.a4. Usually, this just leads to a transposition.

13...Rac8 14.a5! bxa5 15.Nb3 Qb8 16.Nxa5 Ba8



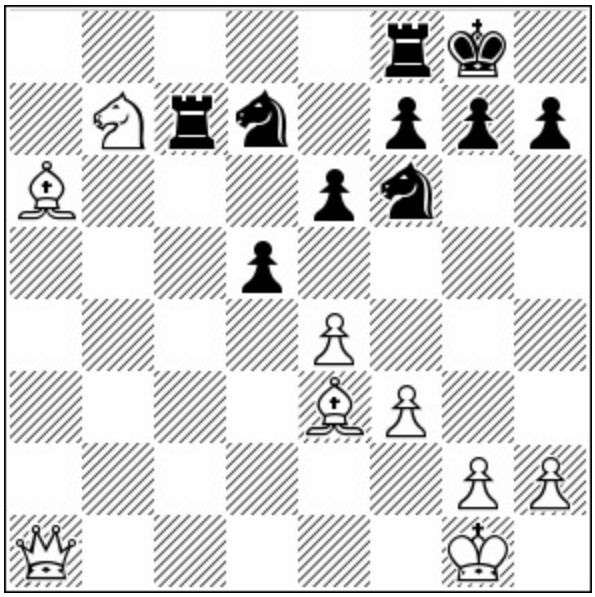
17.b4!?

White continues his expansion on the queenside.

17...Ne5?!

Black should initiate a tactical skirmish with 17...d5! (17...Qxb4?? 18.Rcb1 traps the queen), which is Black's principal resource in the Hedgehog. Suddenly, all Black's pieces are activated and the whole board is on fire. The next sequence looks quite forcing and in the end Black seems to survive: 18.c5!? (shutting down the bishop on e7, forcing Black to take with the

queen) 18...Qxb4 19.c6 Bxc6 20.Bxa6 Rc7 21.Rcb1 Bb7! (Black must sacrifice the queen. 21...Qd6?!, preserving the queen, seems dubious on account of 22.exd5. Now, after either 22...Nxd5 or 22...exd5, White plays 23.Nc4!, trapping the queen as it is caged in by Black's own pieces. Hence, the only viable capture is 22...Bxd5. The line continues 23.Nb5 Qxa6 24.Nxc7. White ends up an exchange for a pawn and should have reasonable winning chances) 22.Rxb4 Bxb4 23.Nxb7 Bxc3 24.Qa2 Bxa1 25.Qxa1.



analysis diagram

After all the skirmishes, we have reached a peculiar material imbalance. 25...Ra8 26.Qf1 (White must step out of the pin immediately, otherwise he risks losing) 26...dxe4 27.Nd6 exf3 28.Bb5. White should still be slightly better, but Black is so solid that he should be able to hold.

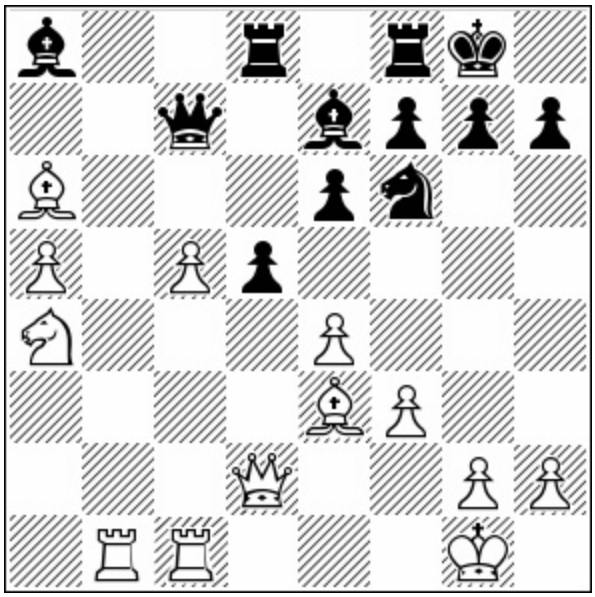
18.Rab1 Nc6

18...d5!? is still possible, but it is already less convincing than on the previous move. 19.exd5 Bxb4 20.Qd4!. White has strong centralised pieces and the pin on the b-file is annoying. 20...Qd6 21.dxe6 Qxd4 22.Bxd4 Bxa5 23.Bxe5 fxe6 24.c5!. The dust has settled. White has a nice positional advantage, and he went on to win in Parligras-Wang Shen, Changsha 2019.

19.Na4!

White correctly identifies the weakness of the b6-square. Black missed his chance to free himself and now he is struggling for space.

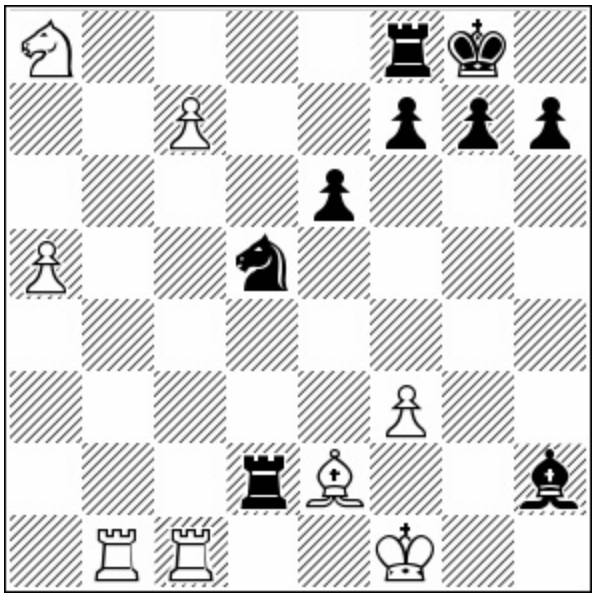
19...Nxa5 20.bxa5 Qc7 21.c5! d5 22.Bxa6 Rcd8



White to move
(back to the exercises)

23.e5!

This denies all activity connected to the push of Black's d-pawn. Shutting down the a8-bishop and threatening 24.Bb6 with 23.c6 was also good, but not nearly as convincing as the move played in the game. For instance: 23...dxe4 24.Bb6 Qxb6+ 25.Nxb6 Rxd2 26.Nxa8 exf3 27.gxf3 Bd6 28.c7 Bxh2+ 29.Kf1 Nd5 30.Be2



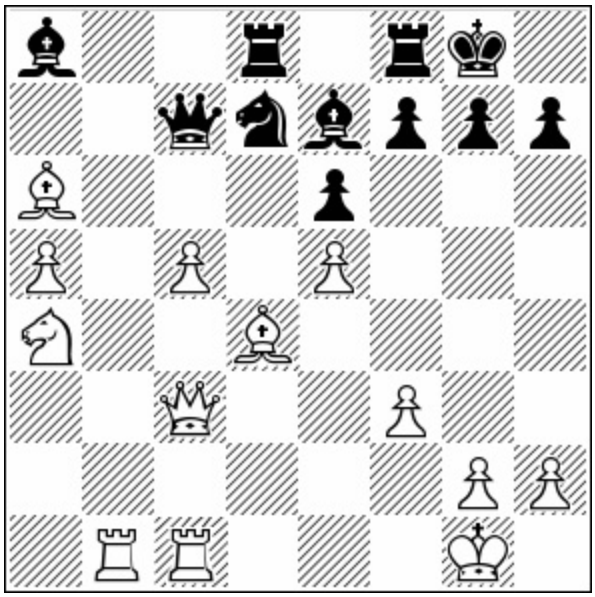
analysis diagram

30...Bg3!. Very subtle. What's more, Black can even allow White to promote: 31.Rb3 (after promotion with 31.c8=Q? Ne3+ 32.Kg1 Rxe2, White cannot do anything against the perpetual check on g2 and h2) 31...Nxc7 32.Nxc7 Ra2 33.a6 h5!. Black still maintains quite a lot of counterplay, even though he is down a piece. White needs to show strong technique to win.

23...d4

Capturing the e-pawn won't bring salvation: 23...Qxe5 24.Bf4 Qf5 25.c6 e5 26.c7, and the c-pawn is too strong. Black will lose a decisive amount of material.

24.Bxd4 Nd7 25.Qc3



White is two pawns up and everything is well protected. Cuenca Jimenez had no trouble bringing the full point home.

25...Nb8 26.Bb5 Nc6 27.Bxc6 Qxc6 28.Qc4 Bg5 29.Rc2 Qd7 30.Bf2 Qc7 31.c6 Qxe5 32.c7 Rc8 33.Nb6 1-0

White opted for a very interesting plan on the queenside with a2-a4-a5 and Rfc1 that is worth remembering. Thereafter, Black failed to respond energetically with 17...d5!. Cuenca Jimenez managed to solidify his space advantage and Black was gradually squeezed.

Exchanges in the Benoni

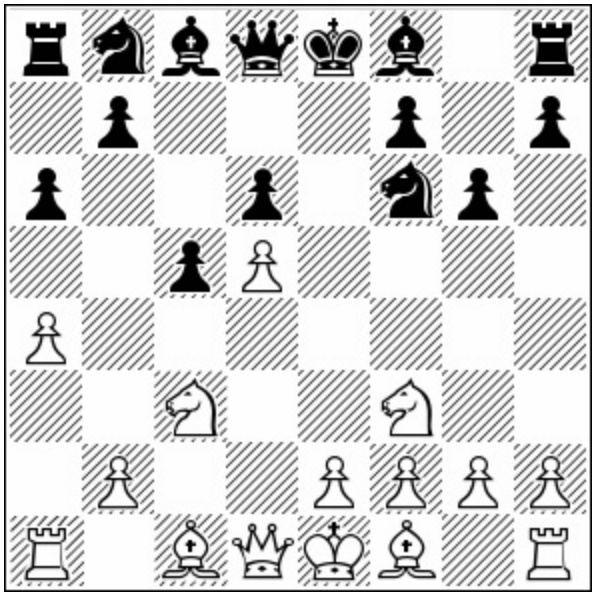
We will now look at two games that arise from the Benoni Defence. In the first game, White starts with a cunning pawn move that has a cramping effect on the black pieces. In the second game, White's move-order is less accurate, which gives Black the opportunity to achieve his strategic goals.

Game 5 Benoni Defence
Alexey Dreev 2606
Vladimir Malakhov 2676
Villarrobledo 2007 (9)

1.d4 Nf6 2.c4 e6 3.Nf3 c5 4.d5 exd5 5.cxd5 d6 6.Nc3 a6 7.a4

An important move in this type of pawn structure. White must immediately stop Black's expansion on the queenside.

7...g6



8.h3!

An insidious idea. This move looks like a terrible loss of time on first sight. Aren't we taught to finish our development first? The point will be revealed in a couple of moves.

8...Bg7 9.e4 0-0 10.Bd3 Re8 11.0-0

White has completed his development, while Black is starting to feel the problems arising from his lack of space. How should Black develop his queenside? Here, we can see one general rule of thumb at work in positions where one side has a space disadvantage. The side that is lacking space desperately wants to exchange pieces to generate more breathing room. Since the push ...b7-b5 has been thwarted, Black must find different avenues of improvement. Notice the importance of the pawn on h3, as it is stopping a black bishop from coming to g4. Black would love to put both his queen's bishop and his queen's knight on d7, but that is against the rules. The white

pawn structure has a cramping effect on the black pieces.

11...Nbd7

Black naturally opts to develop the knight, but this move completely suffocates the bishop.

12.Re1 Qc7

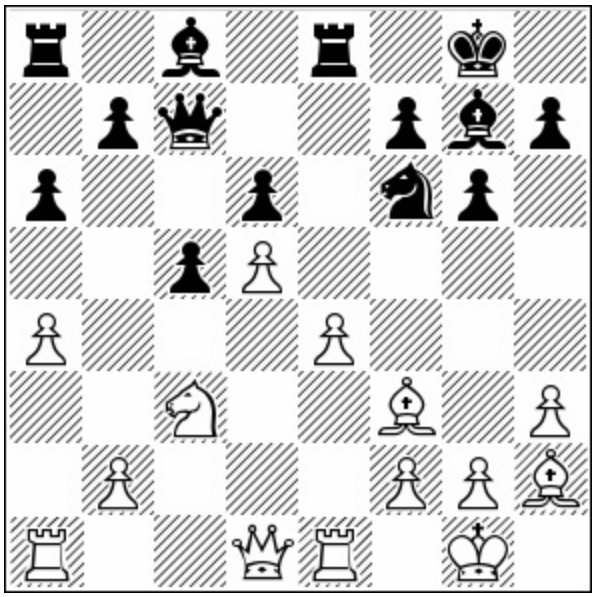
12...Ne5!? is an interesting move that insists on an exchange of pieces. Still, this move offers White ways to fight for an advantage: 13.Nxe5 Rxe5 14.Bf4 Re8 15.Qd2 Nh5. The exchange of knights hasn't really solved Black's problems. Black still lacks a good option for the light-squared bishop, while White has easy ways to improve his position. For instance: 16.Bh2 Be5 17.Bxe5 Rxe5 18.f4 Re8 19.g4, with a massive space advantage.

13.Bf4 Nh5 14.Bh2 Ne5 15.Be2!?

Dreev accepts that one pair of knights will be eliminated, but he wants to trade on his own terms.

15...Nxf3+ 16.Bxf3 Nf6

Black has managed to exchange one pair of pieces, but now White is the one who can punch first.



White to move
(back to the exercises)

17.e5! dxe5 18.d6!

According to my database, this position has been reached 40 times. In those games, White scored a convincing 82.5% of the points.

18...Qb6 19.Bxe5

Dreev has recovered the pawn. The far advanced pawn on d6 will act like a thorn in Black's side.

19...Be6 20.a5!

Precise play by Dreev, as the black queen will be further displaced.

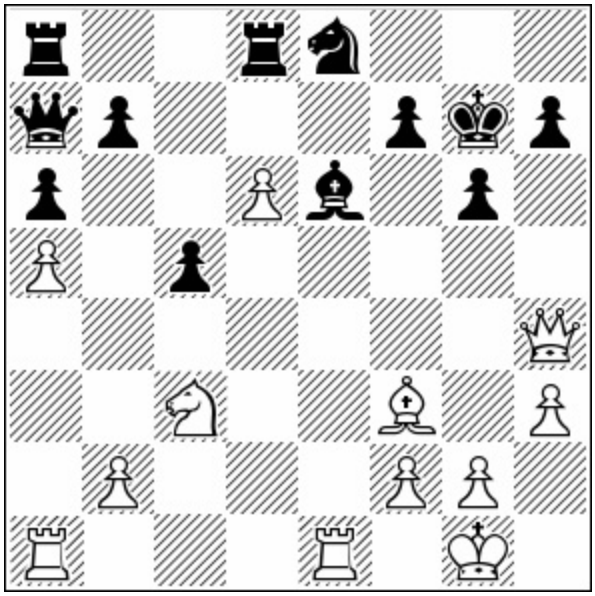
20...Qa7

20...Qxb2? 21.Nd5 would be immediately fatal.

21.Qa4 Red8 22.Qh4!

Great vision. Notice the mobility of Dreev's pieces. The queen creates threats all over the board.

22...Ne8 23.Bxg7 Kxg7



24.Rxe6!

A lovely exchange sacrifice that rips open the black king's position. After eliminating Black's only well-placed piece, he will be left without any activity.

24...fxe6 25.Qe7+ Kg8 26.Qxe6+ Kh8 27.Nd5 Ng7

Black can't really grab the pawn, for instance 27...Rxd6 28.Qe5+ Kg8 29.Ne7+ Kf8 30.Re1! (threatening 31.Qh8+) 30...Rf6 31.Nd5 and White wins.

28.Qe5 Re8 29.Qc3 Rad8 30.Nc7 Rg8 31.Bd5

White now wins back the exchange while he continues having more active pieces and a safer king. In the ensuing phase, Dreev's technique proves to be sufficient.

31...Rxd6 32.Bxg8 Kxg8 33.Re1 Qb8 34.Re7 Rd1+ 35.Kh2 Qf8 36.Qe5!

Total domination. Dreev won on move 53.

1-0

Dreev conducted the entire game expertly. The subtle 8.h3 cramped the black queenside.

Moving the pawn to h3 is an important resource in White's arsenal to restrict Black's pieces and solidify a space advantage. Once a space advantage is established, it is important that pieces are preserved, as the defending side will have trouble employing all of his pieces effectively.

Even after Black managed to exchange one pair of knights, Dreev was ready to increase the pressure immediately. The white d-pawn moved forward, and all of the black pieces were pushed back. A well-timed exchange sacrifice eliminated Black's only active piece. Dreev finished the game clinically.

In the next game, White's move order is less precise. This gives Black the opportunity to realise strategically desirable exchanges, leading to comfortable development.

Game 6 Benoni Defence
Zdenko Kozul 2575
Branko Damljanovic 2535
Cetinje 1990 (3)

1.d4 Nf6 2.c4 c5 3.d5 g6 4.Nc3 Bg7 5.e4 d6 6.Nf3 0-0 7.Bd3 e6 8.0-0?!

This move-order is nowadays considered to be harmless. 8.h3!? once again came into consideration, to prevent the black bishop from accessing the g4-square.

8...exd5 9.cxd5 Bg4!

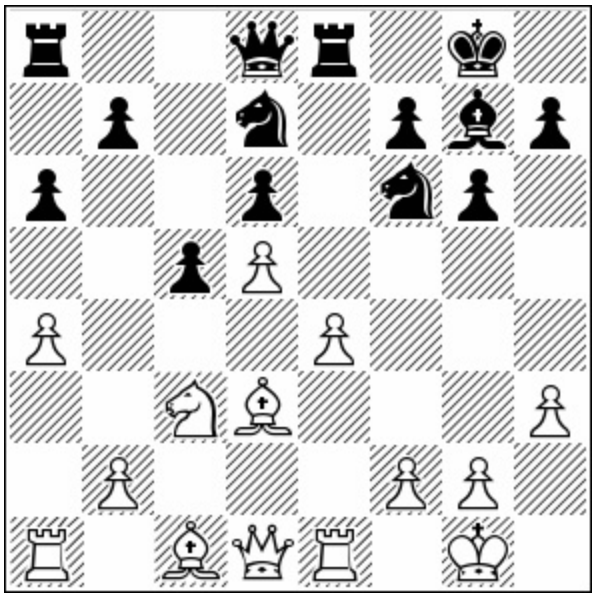
The point of Black's play. The exchange of pieces is a great way to combat a

space advantage. Yes, Black gives up the bishop pair here, but in return he will get smooth development and great squares for his pieces.

10.h3 Bxf3 11.Qxf3 Nbd7 12.Qd1

This is too prophylactic. Indeed, after other moves Black could play ...Ne5 with tempo, but the move that is played in the game leaves Black even more flexible. More logical was 12.Bf4.

12...Re8 13.Re1 a6 14.a4



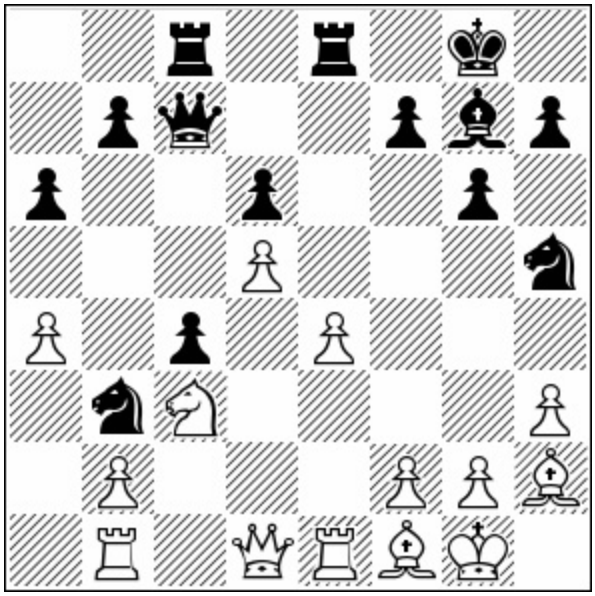
14...Rc8!

The Serbian grandmaster shows great understanding. He is preparing an advance of his c-pawn, after which he can target the weakened light squares on b3 and d3.

15.Bc4 Ne5 16.Bf1 c4 17.Be3 Ned7!?

Very creative. After White's last move, the e4-pawn is not defended sufficiently. Black now decides to reroute the knight.

18.Qc2 Nc5 19.Bf4 Nh5 20.Bh2 Nb3 21.Rab1 Qc7 22.Qd1?

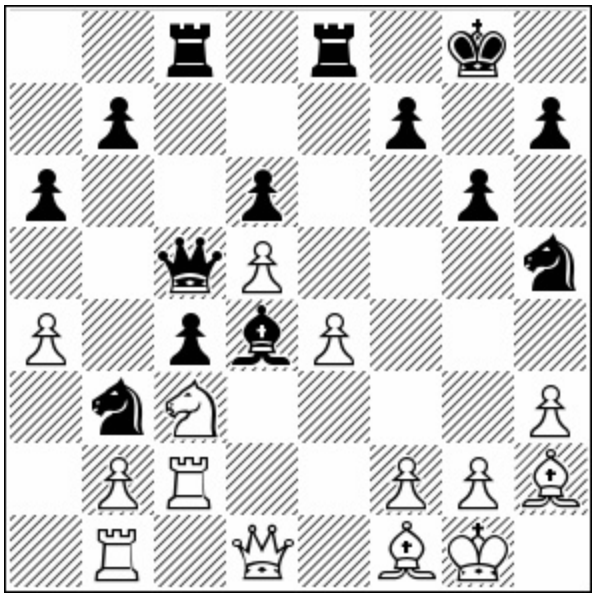


By inaccurate play in the opening, White allowed Black to reach comfortable equality. Now, Black is gradually seizing control. After the superior 22.f4, White would still have some trumps of his own. At present, Black grabs the initiative and White will be completely on the defensive.

22...Bd4!

The tide is shifting. The space that is controlled by the white centre is useless. Conversely, Black is controlling the key squares b3, d4 and d3, whilst setting up an attack on the f2-pawn at the same time.

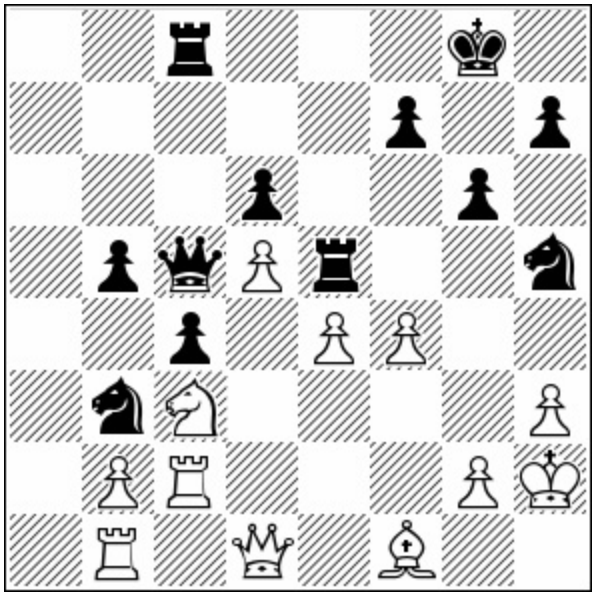
23.Re2 Qc5 24.Rc2



24...Be5?!

This move doesn't completely spoil the advantage, but more in line with his previous play would have been an expansion on the queenside with 24...b5.

25.Bxe5 Rxe5 26.Kh2 b5 27.axb5 axb5 28.f4



28...Ree8!

Damljanovic is back on the right track, and he is not falling for White's

devious trap. 28...Nxf4? 29.Qg4! Nh5 30.Nxb5! would have allowed White back in the game.

29.g3 b4 30.Na2 Rxe4

The white position is falling apart.

31.Qf3 Rce8 32.Qf2 Qa5 33.Nc1 Nxc1 34.Rbxc1 c3!

Good technique. Black forces a breakthrough on the queenside, completely tying down White.

35.bxc3 b3 36.Rb2 Re3 37.g4 Ng3 38.Bg2 Re2 39.Rxe2 Nxe2 40.Qe1 Qa4 41.Rb1 Nxf4

A dominating display. Damljanovic showed tremendous understanding of the Benoni pawn structure.

0-1

This was a clear example of how a space advantage can be combated.

> By exchanging key pieces, a space advantage can be neutralised. With limited material on the board, a lack of space is less discernible.

Black was able to find effective squares for his pieces. This allowed him to slowly make progress, and the white position ultimately fell apart.

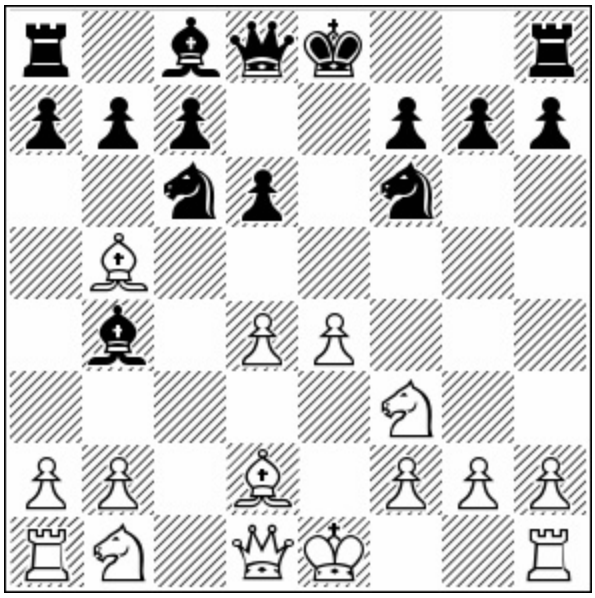
Let’s have a look at another game that neatly summarises the topics we have seen so far. In the opening, Azeri grandmaster Radjabov mixes up the move-order, granting his opponent full rein over the centre.

Game 7 Ruy Lopez
Anish Giri 2761
Teimour Radjabov 2753
Stavanger 2022 (9)

1.e4 e5 2.Nf3 Nc6 3.Bb5 Nf6 4.d3 Bc5 5.c3 d6

Radjabov enters a sideline in this Anti-Berlin Variation of the Ruy Lopez. This move doesn't have a great reputation, as it allows White to strike first in the centre. Far more common is 5...0-0, which appears to blunder a pawn, but it has been well-established that 6.Bxc6 bxc6 7.Nxe5 d5! offers Black very good compensation.

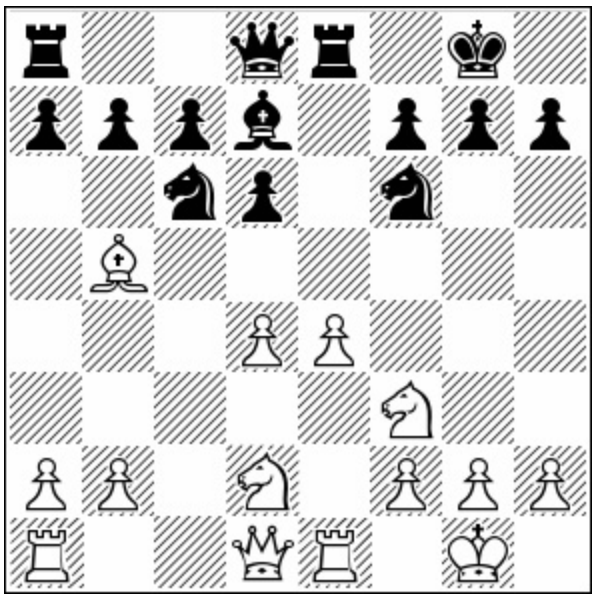
6.d4! exd4 7.cxd4 Bb4+ 8.Bd2



8...Bxd2+?

This natural capture is the start of Black's troubles. We discovered that an exchange of pieces is beneficial for the side who is lacking space. However, this doesn't mean that it fully neutralises a space advantage. The disadvantage is merely alleviated. In this case, White will have very smooth development on top of his central control. In return, Black has very little to offer, and he will have a hard time developing counterplay. Correct is 8...0-0, unpinning the c6-knight. White now doesn't have the option to castle himself, as that would leave the e4-pawn hanging. Still, after 9.Bxc6 Bxd2+ 10.Nbxd2 bxc6 11.0-0, White is slightly better.

9.Nbxd2 Bd7 10.0-0 0-0 11.Re1 Re8



White to move
(back to the exercises)

12.h3!

Déjà vu! A very useful move in these structures. White continually restricts Black's options. Now, Black no longer has the move ...Bg4 available, which would facilitate a further reduction of material.

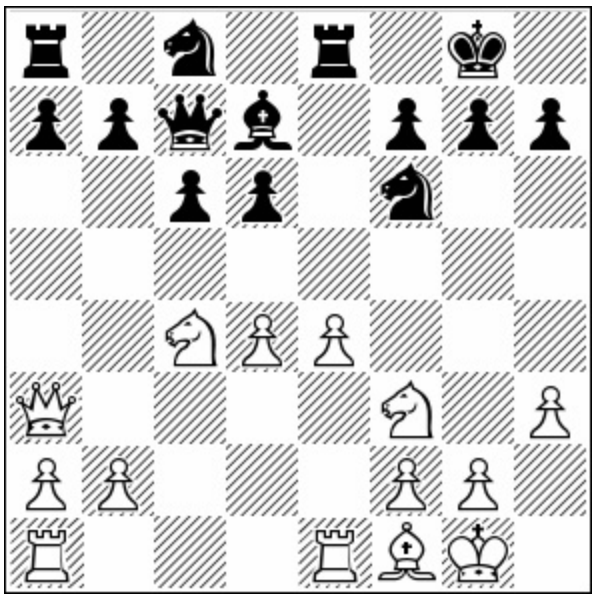
12...Ne7 13.Bf1!

Giri shows his mastery over the Hidden Laws. It appears that the black bishop is much more active on d7 than its counterpart on f1, so why not exchange it? Giri has identified that the bishop is also standing in the way of Black's other pieces. For instance, Black now doesn't have the opportunity to connect the rooks with ...Qd7. Furthermore, Giri has recognised that the white bishop can easily rejoin the battle at a more opportune moment. A move like Bf1 really makes little sense without an understanding of the Hidden Laws. Apparently, we cannot make judgments based merely on the quality of two opposing pieces. Chess is a complex game, and it requires an

analysis of the entire context. Since Giri possesses a space advantage, he benefits from a more ‘crowded’ board.

Note that both 13.Bc4 and 13.Bd3 are legitimate alternatives. Interestingly, these moves also obey the same Hidden Law of space. However, 13.Bc4 has the downside that it runs into the pawn push with ...d6-d5, and Bd3 is vulnerable to a potential ...Ne7-g6-f4. Hence, Giri’s move is the most flexible.

13...c6 14.Qb3 Qb6 15.Qa3 Qc7 16.Nc4 Nc8



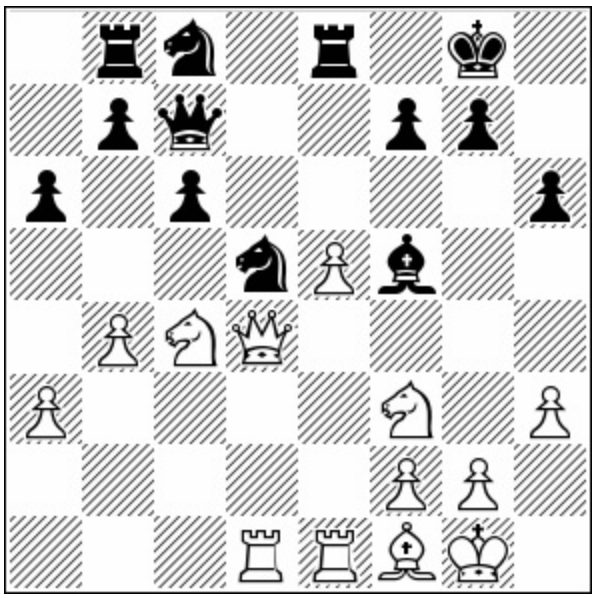
17.e5!

White’s pieces are coordinating excellently. Giri finds the perfect moment to continue his march in the centre, with one of the black knights making an awkward impression on c8.

17...dxe5 18.dxe5 Nd5 19.Rac1 h6 20.b4 Qd8 21.Qb2 Rb8 22.a3

Notice Giri’s patience. He recognises that Black is completely devoid of counterplay and therefore he uses his turns to improve his position ever so slightly.

22...a6 23.Rcd1 Qc7 24.Qd4 Bf5



25.Nh4!

Conventional chess wisdom teaches us that ‘a knight on the rim is dim’. Well, grandmasters like Anish Giri are aware that such maxims are obsolete. Indeed, the greater part of White’s army is ideally placed, so Giri instead focuses on following more useful advice, which is ‘improve your worst placed pieces’. Together with White’s bishop, the f3-knight is a prime candidate. White’s position now offers several possibilities. He prepares to include the bishop again with Bd3 and flirts with the idea of f2-f4.

25...Bh7 26.Bd3!

Finally, White offers a trade, as the exchange of bishops enables the strong threat of Nf5.

26...b5

At last, Black tries to generate some activity, but is left with a backward c-pawn, a hassle that will be looked at in more detail in Chapter 3.

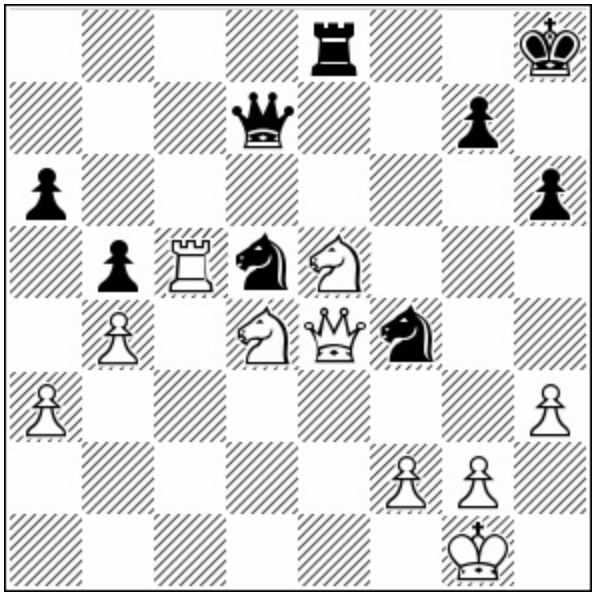
27.Bxh7+ Kxh7 28.Na5 Nce7 29.Rc1

A couple of moves ago, White was eyeing the weak d6-square. Radjabov had to employ an awkward defence with a knight on c8. Now, Giri is redirecting his attention to the vulnerable pawn on c6, once again illustrating the flexibility that a space advantage grants.

29...Rbd8 30.Qe4+ Kh8 31.Nf3 Qd7 32.Rc2 Ng6

The pressure on the c6-pawn was mounting and Radjabov finally yields. Giri now collects a pawn, while retaining the other advantages. He goes on to convert comfortably.

33.Nxc6 Rc8 34.Rec1 Ngf4 35.Ncd4 Rxc2 36.Rxc2 f6 37.Rc5 fxe5 38.Nxe5



38...Nc3 39.Rxc3 Qxd4 40.Nf7+ 1-0

A single slip by Radjabov in the opening put him on the back foot. Giri seized control over the centre and secured a space advantage. Notice how Giri wasn't relying on any special tactics to convert the advantage. He merely focused on improving his position one step at the time. Radjabov couldn't develop any counterplay during the entire game, and in the end a collapse

was unavoidable. I am just in awe when these top grandmasters sometimes make chess look so easy, even when they are facing a formidable opponent. Aren't you, too?

Overextension

There is one more topic left to discuss in this chapter: is a space advantage always a blessing or is it sometimes a curse? We have seen how space can be used to generate great mobility. In these instances, the dominating side has full control over a large area. But are there perhaps ways to damage this area?

Let's start with an analogy to the game of soccer. In soccer, many strong teams play extremely aggressively. In possession, all players are standing very high up the field. In defence, constant pressure is put on the ball. This strategy creates a space advantage that appears to be like a space advantage in chess. A large area is being covered that restricts the mobility of the opponent. Does this strategy have a weakness? Definitely. By standing very high up the field, the space between the keeper and the defender is weakened, leaving the team at risk to a counterattack. When the ball is lost, an enemy player can shoot a deep pass into that space. A fast attacker is quick to enter this space, creating dangerous opportunities to score. Thus, by grabbing a lot of space, a larger area must be covered, leaving some areas vulnerable.

The idea of having too much space to defend can be translated to the game of chess. It bears a name.

> 'Overextension' occurs when a side is extending beyond a reasonable point. Grabbing space is only justified if the entire area can be defended. If an area is left vulnerable, a swift counterattack may occur, which could lead to a total collapse.

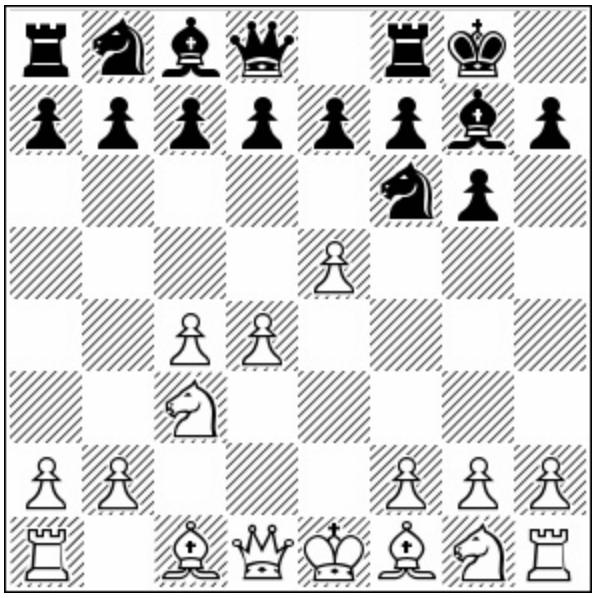
This is exactly what happens in the following game. Former World Champion Bobby Fischer, one of the greatest players of all time, lures his opponent forward to set up a devastating counterattack.

Game 8 King's Indian Defence
René Letelier

Bobby Fischer
Leipzig ol 1960 (8)

1.d4 Nf6 2.c4 g6 3.Nc3 Bg7 4.e4 0-0 5.e5?!

White is clearly taken off-guard by the tricky move-order used by his illustrious opponent. Usually, Black starts with 4...d6 before castling, avoiding this pawn advance in the centre. White concluded that Fischer's move-order deserved punishment. A decision he probably started regretting soon after...



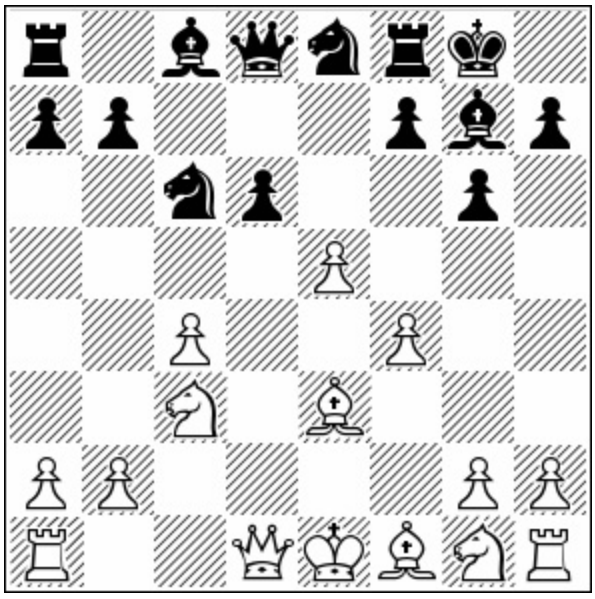
5...Ne8 6.f4 d6 7.Be3 c5!

After giving up a lot of space, Black now starts to contest it. The white centre already feels extremely vulnerable.

8.dxc5 Nc6!

With a small lead in development and a vulnerable white pawn structure, this pawn sacrifice is completely justified.

9.cxd6 exd6



10.Ne4?

The real start of White's problems. You really cannot afford to move the same piece multiple times if you are under so much pressure. Better was 10.Nf3, which would still have maintained the balance.

10...Bf5 11.Ng3 Be6 12.Nf3 Qc7

Interestingly, despite White's space advantage it is Black who controls the tension in the centre. It is as if the laws of the universe are suddenly reversed. Fischer postpones a capture on e5, since White can never really take on d6 as that would make the black pieces too active.

13.Qb1

Let's compliment White at least for his courage and creativity. Fischer was less impressed...

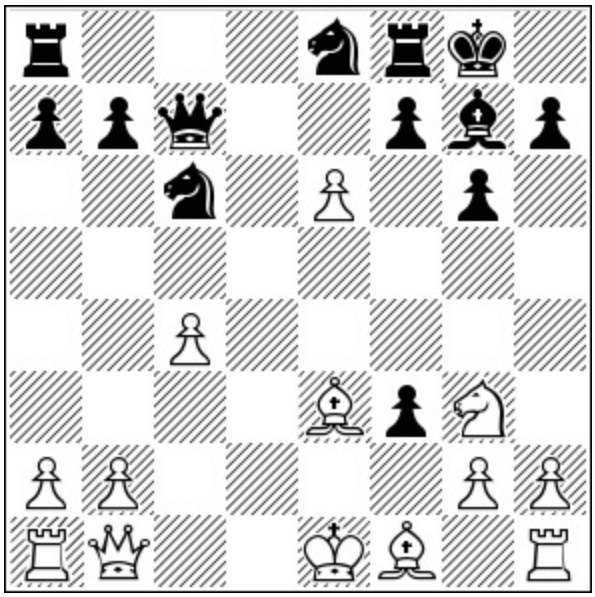
13...dxe5

The centre opens with devastating consequences.

14.f5 e4!? 15.fxe6

15.Qxe4 gxf5 16.Qf4! would have been a little more tenacious. Nevertheless, the endgame should be winning for Black after 16...Qxf4 17.Bxf4 Bxb2 18.Rb1 Bc3+.

15...exf3

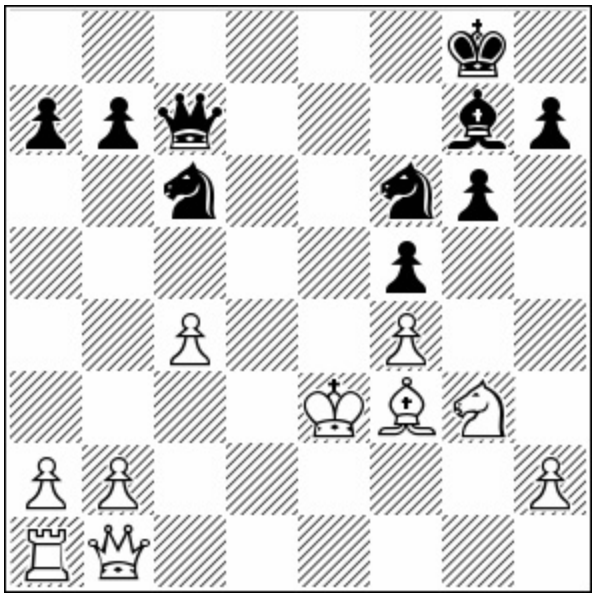


White is longing back to the days when the sun was shining brightly over his centre. Fischer has summoned a tornado, and White's space advantage has completely evaporated. Suddenly, the white king is feeling more and more uneasy.

16.gxf3 f5! 17.f4 Nf6 18.Be2 Rfe8 19.Kf2 Rxe6 20.Re1 Rae8

Fischer's play is natural and logical. Sometimes, simple moves are sufficient.

21.Bf3 Rxe3 22.Rxe3 Rxe3 23.Kxe3



Black to move
(back to the exercises)

23...Qxf4+!! 0-1

What a way to finish the game!

White's strategy in the opening was too optimistic. Letelier grabbed all the space that was offered to him. However, Fischer accurately assessed that White's amassed territory was vulnerable and White quickly paid the price. A space advantage is only valuable if the acquired space can be adequately defended.

Now that we have grown used to the ideas of space, it is time to put these ideas to the test by solving a couple of exercises. The recommended way to solve exercises is by means of visualization. What I mean by this is to solve an exercise by moving pieces in your mind without physically moving them on a board. This is a downside of many tactical training programs: you can usually just enter in a move for a lack of alternatives by a process of elimination. Unfortunately, real games aren't like that. By solving an exercise from the start, you'll train your visualization. This is a vital element of chess calculation. Practising visualization is a process that chess coaches also refer to as 'sitting on your hands'. Since some exercises in this book are quite

difficult, it can be beneficial to mix up your strategies. If you find yourself struggling to find the answer, consider setting up a board with real pieces and move towards the critical positions.

The Hidden Laws of Space

• A space advantage can generate more mobility, which allows pieces to create threats all over the board;

• The side with a space advantage usually controls the tension. By releasing the tension, the defending side often concedes more space;

• A space advantage leads to differences in coordination. With a lack of coordination, it is harder to create threats and defend key areas;

• A good rule of thumb: if you have more space, keep all the pieces on the board!

• Vice versa, if you lack space, an exchange of pieces can alleviate the disadvantage;

• To preserve pieces on the board, prophylactic moves such as h2-h3 (or a2-a3) can be effective countermeasures to restrict the opponent;*

> * When formulating the Hidden Laws of chess, I sometimes use non-specific descriptions like 'can be effective'. Such advice appears to be meaningless. In chess, the Hidden Laws are rarely absolute. A move like h2-h3 can sometimes be very effective, while it can also be a waste of time. By including this Hidden Law, I encourage you to be alert to these ideas in positions that fit the theme of the chapter. For instance, in other positions, such as Open Sicilians with opposite-castled kings, you would rather not touch the pawns in front of your king at all.

• Against a Hedgehog set-up, an effective plan is a2-a4-a5!;

• Be careful of overextension! If the converted space cannot be defended properly, an area may become vulnerable. This could ultimately lead to a total collapse.

Quiz

Show in Text Mode

Exercise 1
Radoslaw Barski 2412
Reinhold Pawlowski 2077
Katowice 2017 (3)

White to move

White has built a strong centre. Can you figure out the best continuation?

Show/Hide Solution

Exercise 1

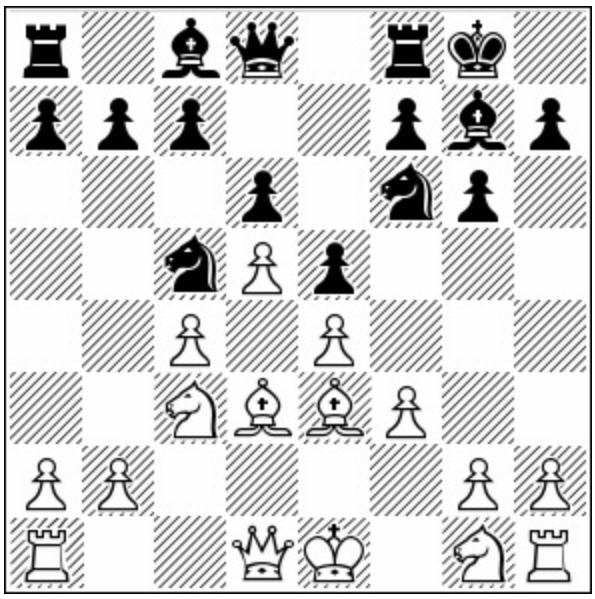
9.h3! is correct. White must prevent 9...**B**g4, as a pin on the f3-knight would significantly weaken White's control over the d4-square.

Exercise 2

Richard Keresztes 2254

Hou Qiang 2345

Kecskemet 2012 (7)



White to move

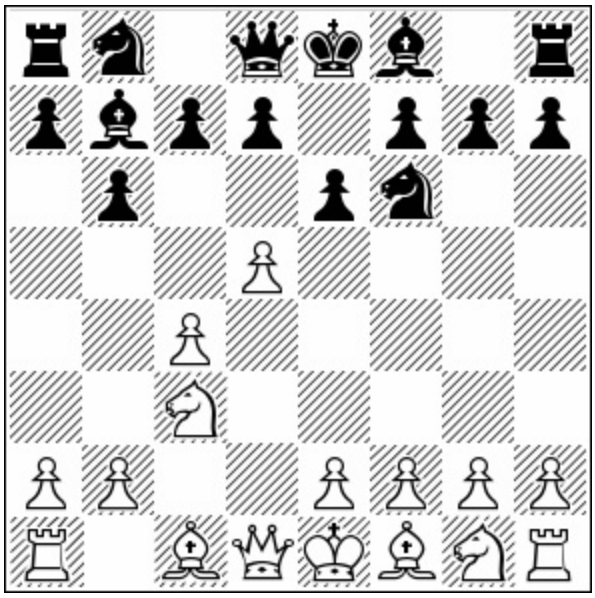
The advanced pawn in the centre grants White a space advantage. How would you proceed?

Show/Hide Solution

Exercise 2

With a space advantage, it is important to preserve pieces. Therefore, **9.Bc2!** is correct.

Exercise 3
Dariusz Swiercz 2620
Jaan Ehlvest 2535
Berlin Wch Rapid 2015 (8)



White to move

What is the critical move in this theoretical position?

Show/Hide Solution

Exercise 3

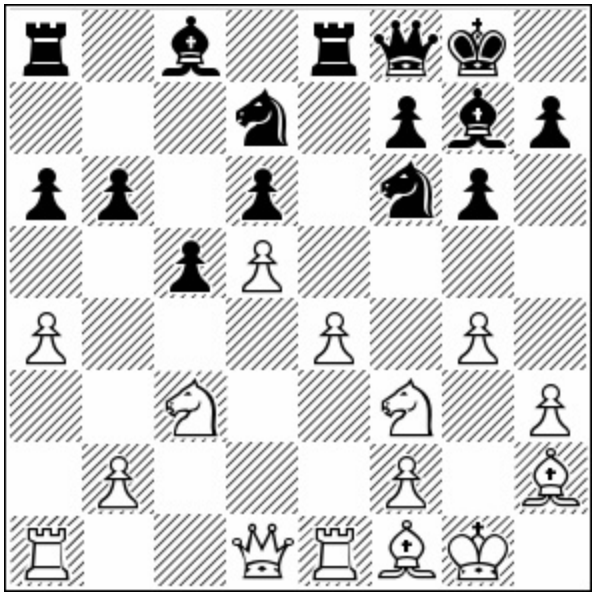
Critical is **5.a3!**. White must avoid 5...**B**b4 to solidify his advanced centre.

Exercise 4

Alexander Khuzman 2475

Nigel Davies 2500

Vrnjacka Banja 1991 (8)



White to move

It is clear that White has the upper hand. How should White continue?

Show/Hide Solution

Exercise 4

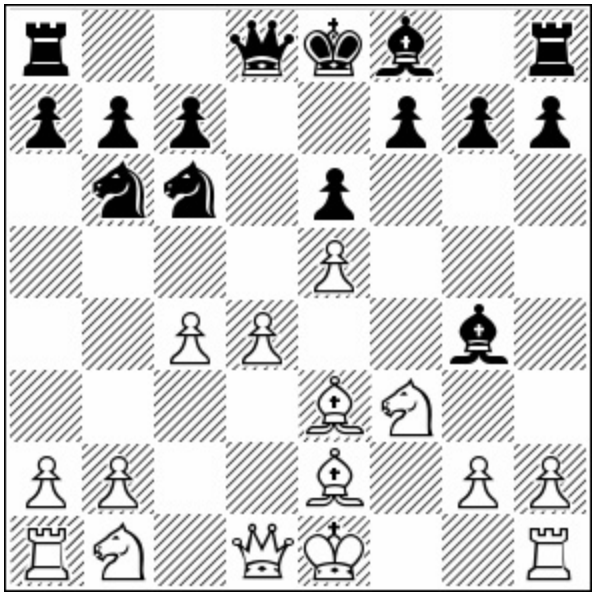
17.Nd2! The best way to improve the position involves an advance of the f-pawn. **17...Rb8 18.f4**.

White is dominating on the kingside and won in convincing fashion.

Exercise 5

Xu Yi 2507

Aleksander Hnydiuk 2394
Titled Tuesday Chess.com blitz 2022 (6)



Black to move

White has built a large centre. How should Black respond?

Show/Hide Solution

Exercise 5

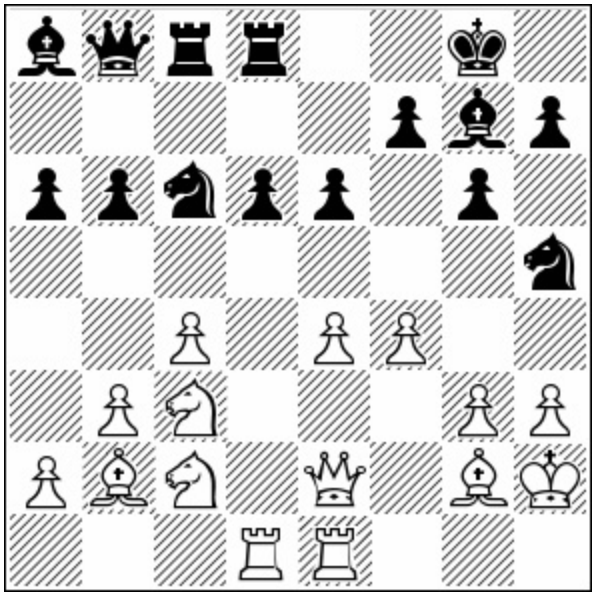
White has overextended himself. After his inaccurate ninth move, Black can take advantage. **9...Bxf3!**. Giving up a bishop for a knight voluntarily is regularly regarded as a sin in chess, but there is a clear reward in this position. **10.Bxf3 now drops a pawn to 10...Nxc4. Therefore, the game proceeded 10.gxf3 Qh4+ 11.Bf2 Qf4!**. The queen occupies a dominant foothold on f4. White now must choose between multiple evils. **12.c5 completely surrenders control over the d5-square, while other moves drop the d-pawn to 12...0-0-0.**

Exercise 6

Milan Vukic 2495

Mihai Suba 2455

Vinkovci 1977



Black to move

White has expanded on both the kingside and the queenside. How should Black respond?

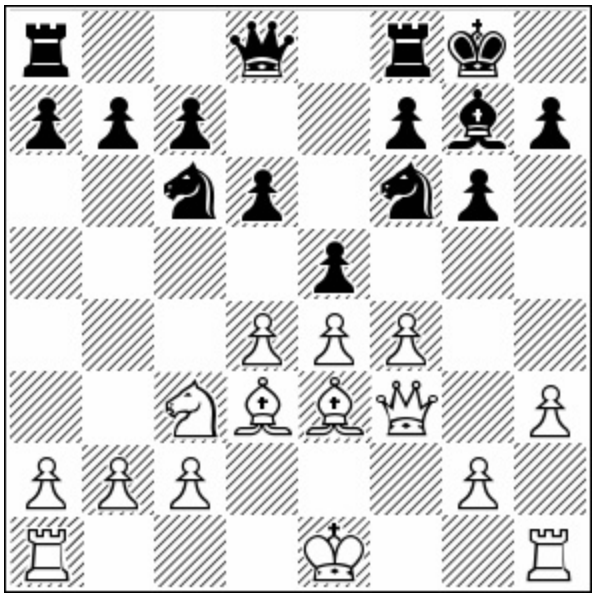
Show/Hide Solution

Exercise 6

Black should strike with **29...b5!**, putting pressure on the c-pawn. After **30.cxb5 axb5**, lines have opened in Black's favour and he enjoys a pleasant position.

Exercise 7

Bobby Fischer
Pal Benko
New York ch-USA 1963/64 (10)



White to move

Black's last move **9...e5** generated a lot of tension. Can you figure out Fischer's next two moves?

Show/Hide Solution

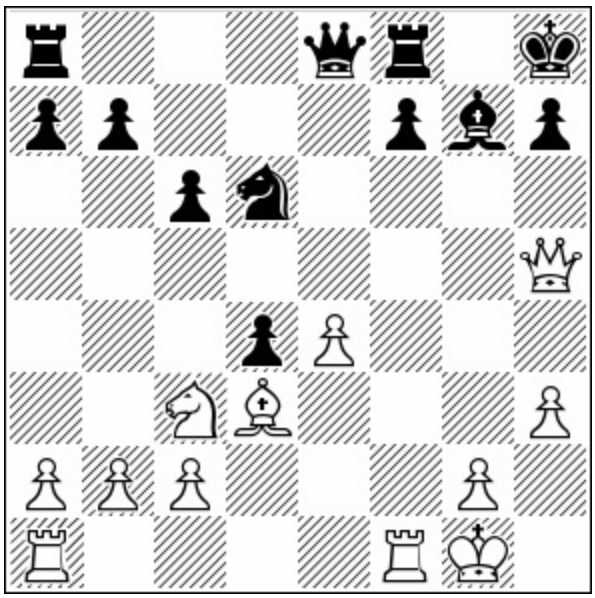
Exercise 7

10.dxe5! dxe5 11.f5! is correct. White clarifies the situation in the centre and creates a nice space advantage on the kingside. This will grant him attacking chances later.

The alternative 10.d5? is not good. Black plays 10...exf4! 11.Bxf4, and now both 11...Nb8!? and 11...Nd4 offer Black a good deal of chances. Black has great control over the dark squares, and the white centre has become immobile.

Another alternative, 10.fxe5 dxe5 11.d5, is a little better than the aforementioned option, but after 11...Nd4, Black has a strong central knight. White will only have a slight advantage.

Exercise 8
Bobby Fischer
Pal Benko
New York ch-USA 1963/64 (10)



White to move

Nine moves later, they reached this position. How should Fischer continue the attack?

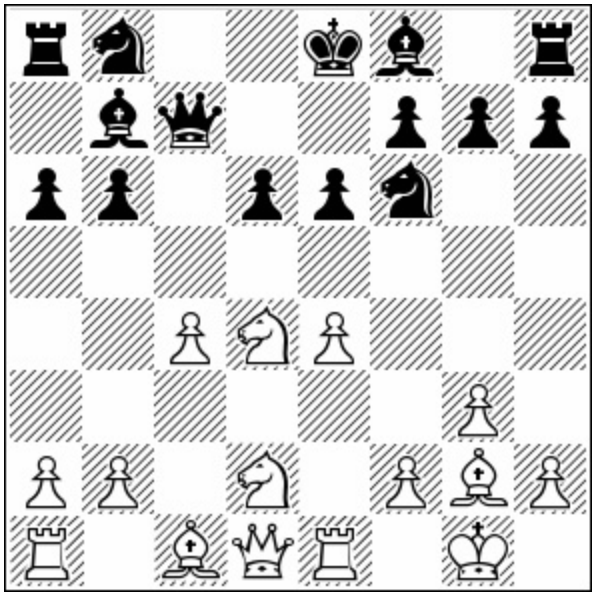
Show/Hide Solution

Exercise 8

19.Rf6!! is devastating. It's a typical tactic that prevents the advance of Black's f-pawn. Now, **19...Bxf6 loses to 20.e5 and mate is unstoppable.**

Instead, the game continued 19...Kg8 20.e5 h6 21.Ne2 1-0. Black has no moves. At the very least, the knight on d6 will drop. Interestingly, other alternatives on move 19 would not have yielded White any advantage.

Exercise 9
Valery Salov 2680
Anatoly Karpov 2735
Wijk aan Zee 1998 (7)



White to move

White managed to set up a Maroczy Bind against Black's Hedgehog. What is the best continuation?

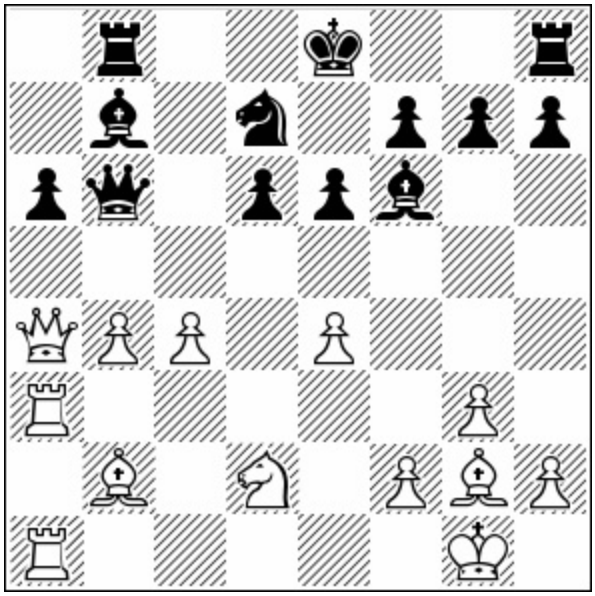
Show/Hide Solution

Exercise 9

11.a4! Salov shows excellent understanding of the pawn structure. He intends

to go a4-a5 and N2b3. Afterwards, a6 will be isolated, the a1-rook will be activated and Black's control over the dark squares will be reduced. For instance, 11...Be7 12.N2b3 0-0 13.a5 Nbd7 14.axb6 Qxb6 15.Na5, with a great position. Grabbing the pawn with 12...Qxc4? is simply irresponsible: 13.a5 Nbd7 14.axb6 Nxb6 15.Na5 Qc7 16.Nxb7 Qxb7 17.e5!. The diagonal opens with devastating effect. 17...Nfd5 18.exd6 Bxd6 19.Nxe6!. White's position is so good that he can initiate gallery play. 19...fxe6 20.Rxe6+ Be7 21.Bg5, and Black won't survive the pins. Instead, the game continued **11...Nc6 12.Nxc6 Bxc6 13.a5 Rb8 14.axb6 Qxb6 15.Re3!**, with an overwhelming positional advantage. The rook swings over to harass the queen and target a6.

Exercise 10
Valery Salov 2680
Anatoly Karpov 2735
Wijk aan Zee 1998 (7)



White to move

Salov kept up the pressure nicely. Ten moves later we reached this position.

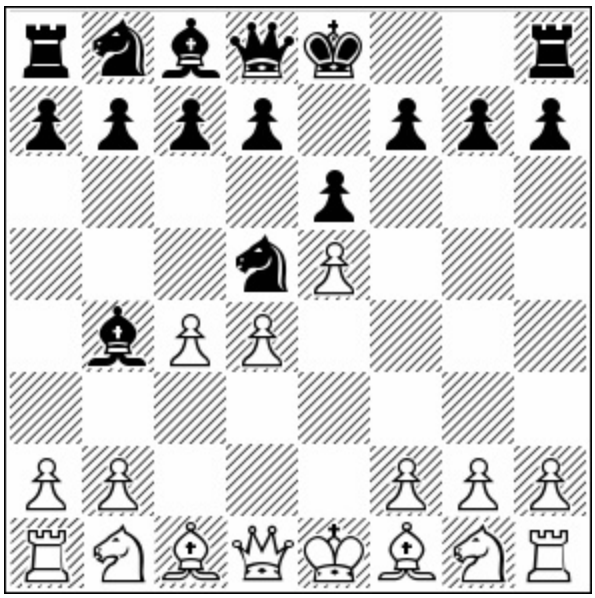
How did Salov continue?

Show/Hide Solution

Exercise 10

21.e5! White opens the position while the black king still stands in the centre. If Black plays **21...dxe5, White wins with 22.Rd3! Bc8 23.Bc6 Qc7 24.Ne4. The game went 21...Bxe5 22.c5!**. The point behind White's previous move. The black pieces will be overloaded. **22...Qc7**. Instead, **22...dxc5 gives up the defence of the bishop. 23.Bxe5 dxe5 24.Bxb7 Rxb7 25.c6!**. This fork is decisive. **25...Nb6 26.Qxa6 Qxc6 27.Nc4 Rb8 28.Nxb6**. White won a piece, and Karpov resigned a couple moves later. An absolute highlight of Salov's career.

Exercise 11
Eugenio Torre 2565
Fernandito Pialan
Greenhills 1989



White to move

How should White deal with the check?

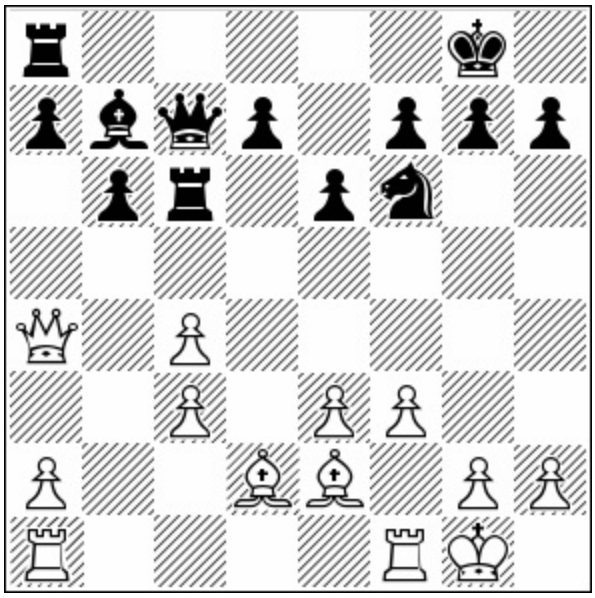
Show/Hide Solution

Exercise 11

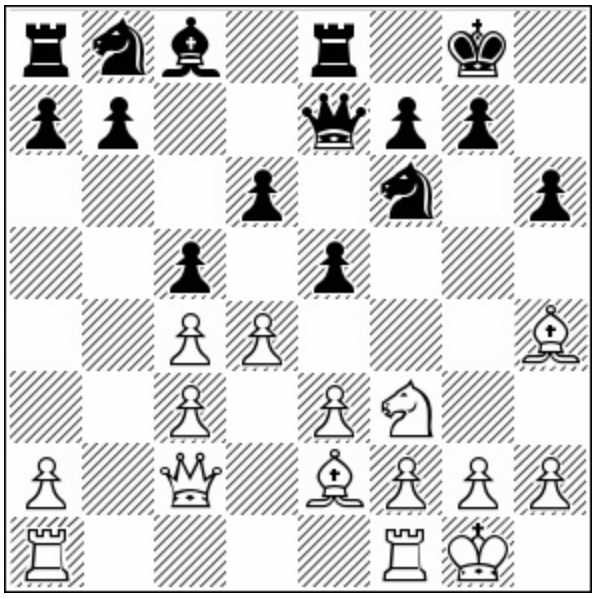
A fun one! The legendary Filipino grandmaster played 5.Nd2?, securing a favourable trade, which yields him a significant advantage. Unfortunately, he missed a cunning move that would have won straightaway.

The only move that is in accordance with the Hidden Laws of Chess is the stunning 5.Ke2!!, as it avoids trades while keeping a space advantage. After the knight moves away, the bishop will be trapped. For instance, 5...Nb6 6.c5! Nd5 7.a3 Ba5 8.b4, and the bishop has nowhere to go.

Chapter 2
Preview exercises



Black to move
(go to the solution)



White to move
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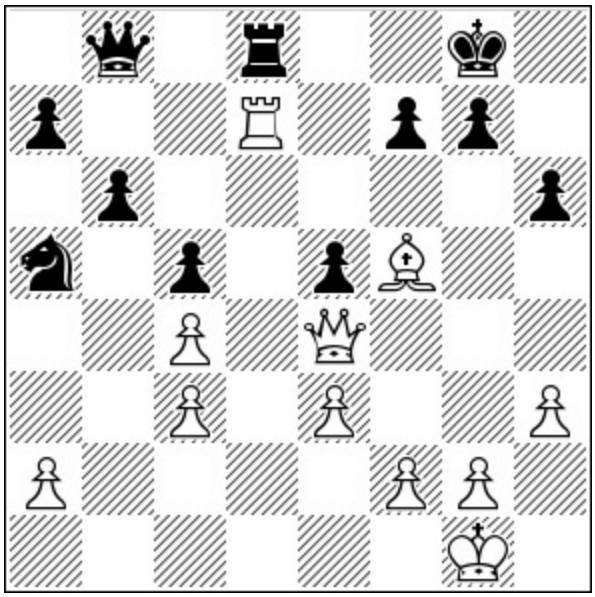
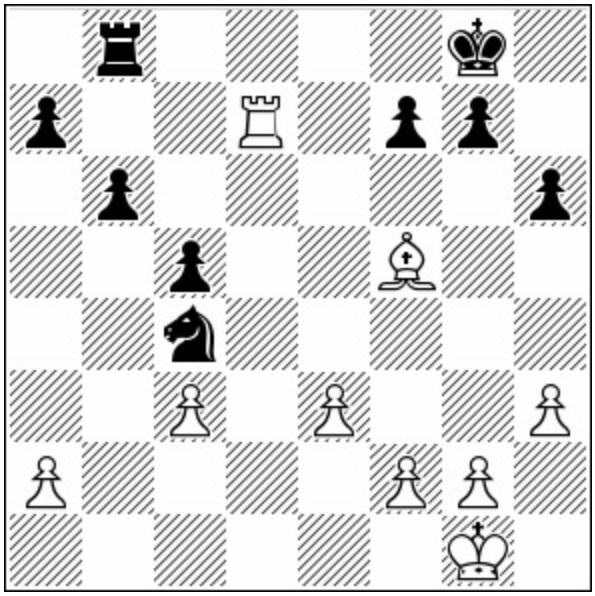


White to move
(go to the solution)



White to move
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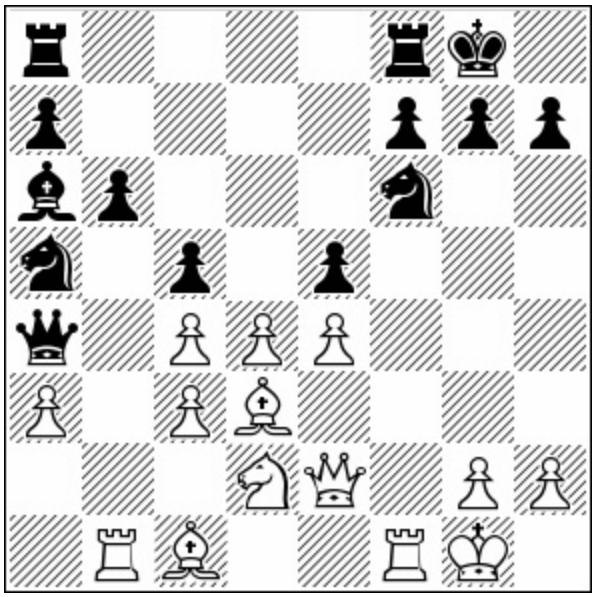

White to move
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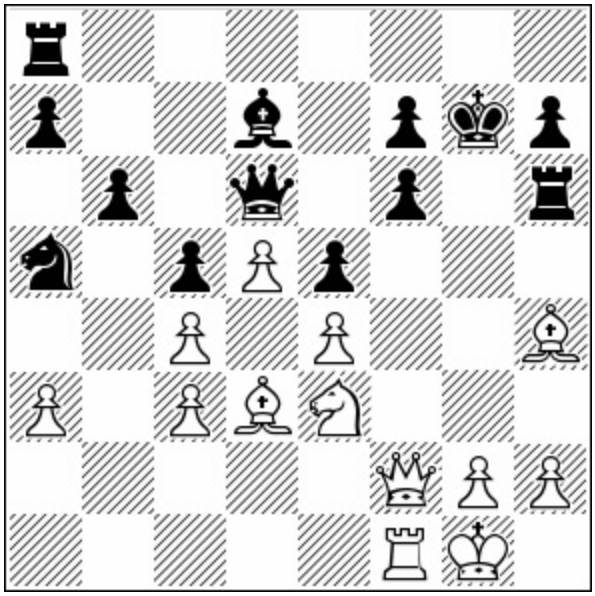

White to move
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Chapter 2

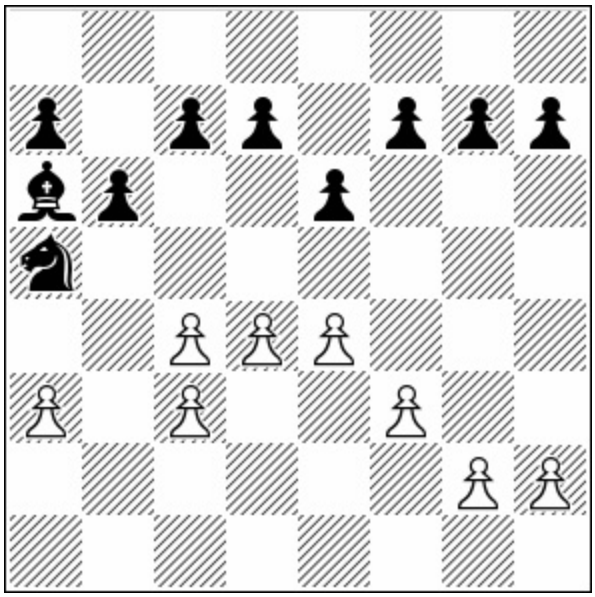
Doubled pawns

If a man could have half of his wishes, he would double his troubles. – Benjamin Franklin

It is time to introduce the doubled pawn. The doubled pawn describes the presence of two pawns of the same colour on the same file. Doubled pawns, does that mean double fun? Well, contrary to the presence of a space advantage, the presence of doubled pawns is more double-edged.*

> * Anish Giri thinks that doubled pawns aren't so doubled-edged. He tweeted: 'Doubled pawns are bad and don't let them tell you otherwise.' Well, a cynic would point him to his game against Van Foreest in Chapter 2. But with Giri you never know if he truly means it or if he is just being provocative. At least he is always entertaining!

Doubled pawns appear in a large variety of forms.



A well-known situation appears in the Nimzo-Indian, pictured in the above diagram. While doubled pawns are usually regarded as a weakness, inflicting them often comes at a price. The Sämisch Variation of the Nimzo-Indian is

known for its imbalance, as Black is causing damage to the white pawn structure at the price of his bishop pair. This creates an interesting battle of dynamics versus statics. Black is targeting the vulnerable pawn on c4, which cannot be defended by other pawns, while White will build a large centre and target the enemy king. Another dynamic that a doubled pawn creates is that a file gets opened without paying the cost of a pawn. Rooks love to jump into these semi-open files as these can be used as an avenue for attack.

Exploiting a weakness

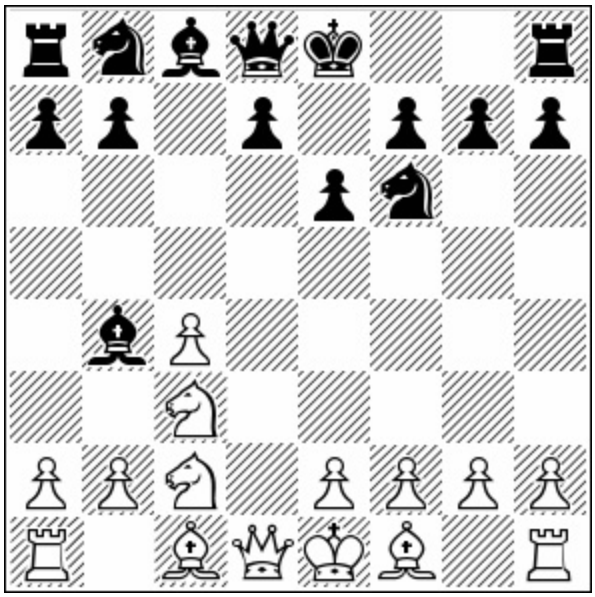
In the first game of this chapter, we will observe former World Champion Anatoly Karpov at his best. He damages the enemy pawn structure early on, giving him a clear target.

Game 1 English Opening
Josip Rukavina
Anatoly Karpov
Leningrad 1973 (14)

1.c4 Nf6 2.Nc3 e6 3.Nf3 c5 4.d4 cxd4 5.Nxd4 Bb4 6.Nc2?

This is a thematic idea in these structures, but here the move is clearly premature.

6.g3 and 6.Bd2 are more common ways for White to approach this position.



6...Bxc3+ 7.bxc3 Qa5 8.Nb4

An indisputable sign that something went wrong for White. It is move eight and White has already invested four moves in his king's knight. The white pawn structure is horrendous. The pawns on c3 and c4 are not only doubled, but they are also isolated, which implies that no other pawns can support them. Another useful rule of thumb concerns the number of pawn islands.

> Having fewer pawn islands is usually advantageous, as pawns of the same pawn island can support each other.

In this case, Black has two pawn islands (the pawns on a7/b8 and d7/e6/f7/g7/h7), while White has three (a2, c3/c4 and e2/f2/g2/h2). To compensate for the weakness, White needs to dominate the dark squares. In this case, the bishop would be tremendous on the a3-f8 diagonal. Unfortunately, the alternative move 8.Ba3 comes at the cost of a pawn, and in a position without queens there is not going to be enough compensation: 8...Qxc3+ 9.Qd2 Qxd2+ 10.Kxd2 b6!, preparing to bring the knight to c5 and neutralizing the white bishop.

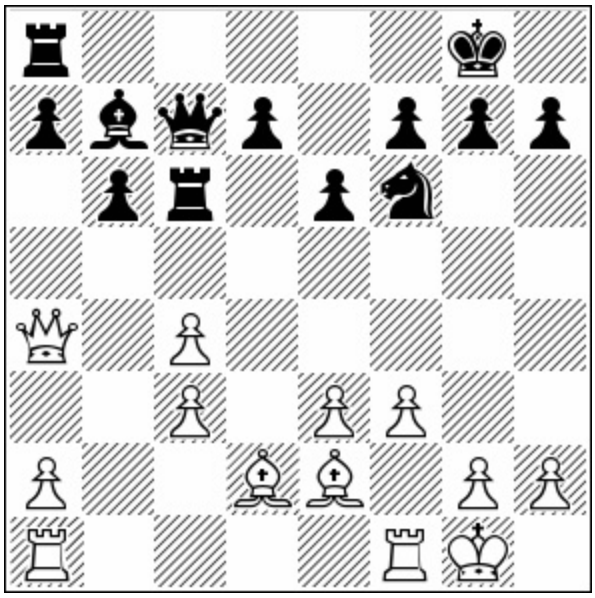
8...0-0 9.e3 b6 10.Be2 Bb7 11.0-0 Rc8

Karpov has made a career out of converting small advantages. Now, he is lining up his pieces against the c4-pawn. His main job is to prevent White from getting counterplay. The weak pawns are ultimately going to fall.

12.f3 Nc6 13.Qb3 Qe5

A fascinating move. White has no way to harass the queen in the centre of the board.

14.Nxc6 Rxc6 15.Bd2 Qc7 16.Qa4



Black to move
(back to the exercises)

Question: Take your time to contemplate the position. Black is in amazing shape, as the static weakness on c4 cannot be resolved. Still, for the moment White is holding on because the e2-bishop is doing a good job fulfilling its defensive duties. How can Karpov make serious progress?

16...a5!

A counterintuitive move as it severely weakens the b6-pawn. However,

Karpov sees the value of getting his bishop to a6, thus justifying this committal move fully.

17.Rfb1 Ba6 18.Rb2 Bxc4 19.Bxc4 Rxc4 20.Qb5

Black has not only won a pawn, but also maintains a positional advantage given the clear target on c3. Note how the difference in number of pawn islands still persists.

20...Rc6 21.e4 d6

Karpov sees no need to rush. More direct would have been 21...d5!.

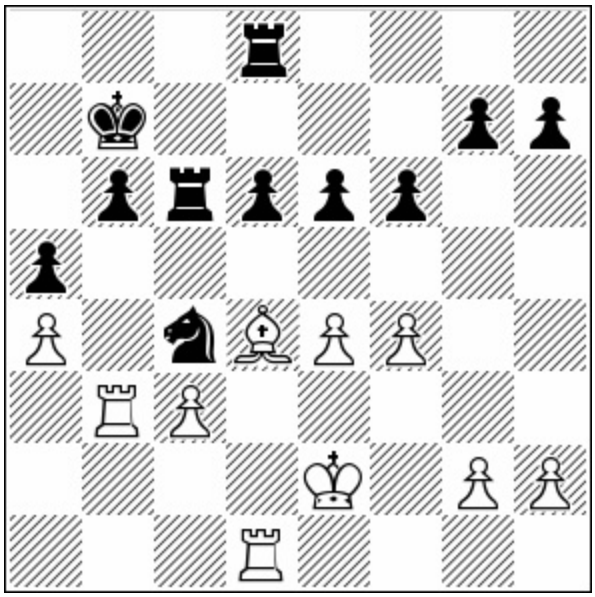
22.Qg5 Nd7 23.Qe7 Ne5 24.Qxc7 Rxc7 25.Rb5 Nc4

With such a dominating knight, Black will have no trouble converting this endgame.

26.Bc1 Rac8 27.Rab1 Rc5 28.Kf1 Kf8 29.Ke2 Ke7 30.R5b3 Kd7 31.a4 Kc7 32.Bf4 Kb7

Notice how Karpov takes his time to improve his position before taking action. The king is brought to the queenside to prepare an advance of the pawns.

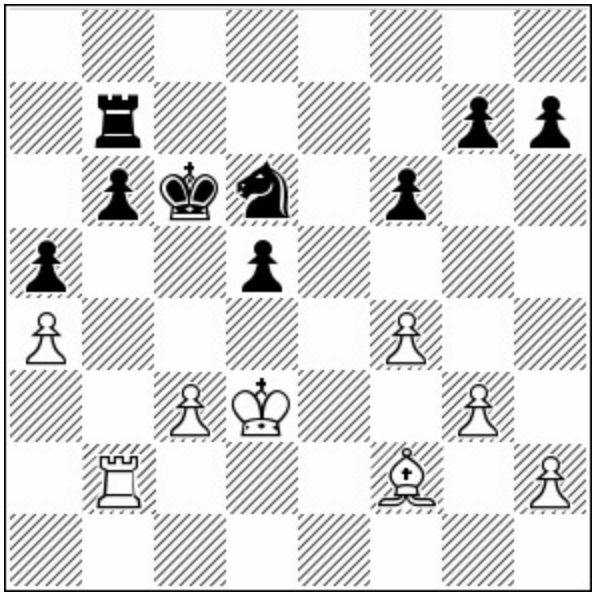
33.Be3 R5c6 34.Bd4 f6 35.Rd1 Rd8 36.f4



36...d5

After a lot of careful manoeuvring, Black finally deems the time ready to become active. His patience was one of the qualities that made Karpov such a renowned World Champion.

37.Bf2 Rcd6 38.Bc5 Rc6 39.Bf2 Rdd6 40.exd5 Rxd5 41.Rxd5 exd5 42.Rb5 Re6+ 43.Kd3 Kc6 44.g3 Re7 45.Rb1 Rb7 46.Rb5 Nd6 47.Rb2



47...b5!

Excellent technique. Karpov finally decides to open the queenside. The a-pawn will now be unstoppable. Notice how Karpov has completely dominated White on the light squares. This clearly reveals the shortcomings of the bishop, as it can only compete for half the squares on the board. In endgames with a closed nature, the knight is simply a much more potent piece. White has been completely deprived of any counterplay.

48.axb5+ Rxb5 49.Re2

Rukavina concluded further resistance would be futile. Indeed, the a-pawn will decide the game.

0-1

A convincing game by Karpov. White's erratic opening play put him on the back foot from the start, and he wasn't given any chance to resurge. The doubled pawn on the c-file proved to be a painful Achilles' heel.

Doubled pawns aren't always a source of concern. In particular, a capture by a pawn on the edge of the board usually doesn't result in a deterioration of the pawn structure. Rather on the contrary, a capture of the a2-pawn on b3 can activate the a1-rook on its starting square. We are about to see how doubled pawns can have completely different ramifications.

Game 2 Scotch Opening
Alexander Morozevich 2590
Alexei Bezgodov 2520
Tomsk 1998 (7)

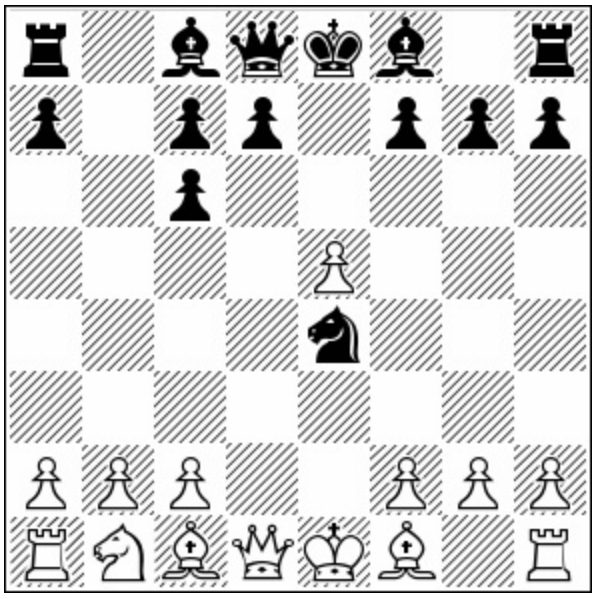
1.e4 e5 2.Nf3 Nc6 3.d4 exd4 4.Nxd4 Nf6 5.Nxc6

In this popular variation of the Scotch Opening, White rapidly inflicts damage to the black pawn structure. This hasn't deterred players from entering this variation on the black side. In return, Black obtains a small lead

in development.

5...bxc6 6.e5 Ne4?!

This continuation is rarely played, and for good reason. Far more common is 6...Qe7 7.Qe2 Nd5, which we will see in Chapter 3.



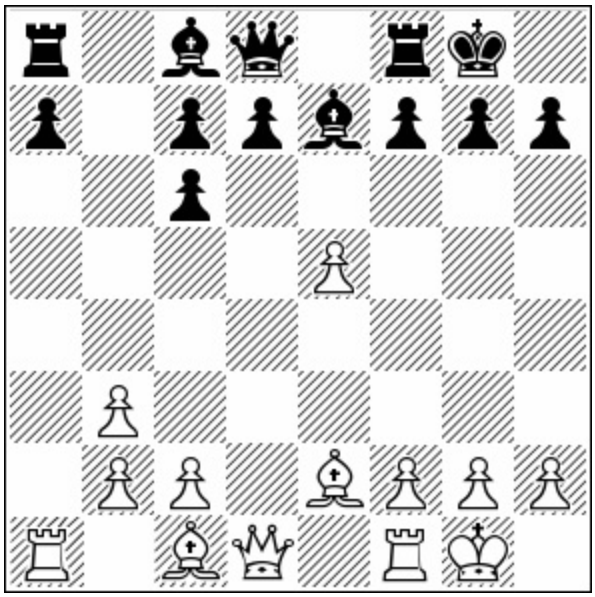
7.Nd2!

Grandmasters of Morozevich's calibre know what to do if their opponents enter obscure variations.

7...Nc5 8.Be2 Be7 9.0-0 0-0 10.Nb3 Nxb3?!

Now, Morozevich gets a doubled pawn as well, but the differences in quality are stark. Preferable was 10...a5, with a moderate advantage for White.

11.axb3



A capture towards the centre by the a- or h-pawn isn't regarded as disadvantageous. Here, White's pawn configuration on the queenside hasn't lost much of its flexibility. Moreover, it will be difficult for Black to target this pawn formation, as the pawns can easily support each other. The upside for White is the activation of the a1-rook. The rook suddenly obtains a beautiful semi-open file. Notice how once again the rule of pawn islands comes into play. The pawn on a7 has been isolated and becomes a constant worry. Imagine for a moment that the a8-rook and a7-pawn move one step to the right; the situation wouldn't be nearly as problematic for Black.

11...d5 12.exd6?!

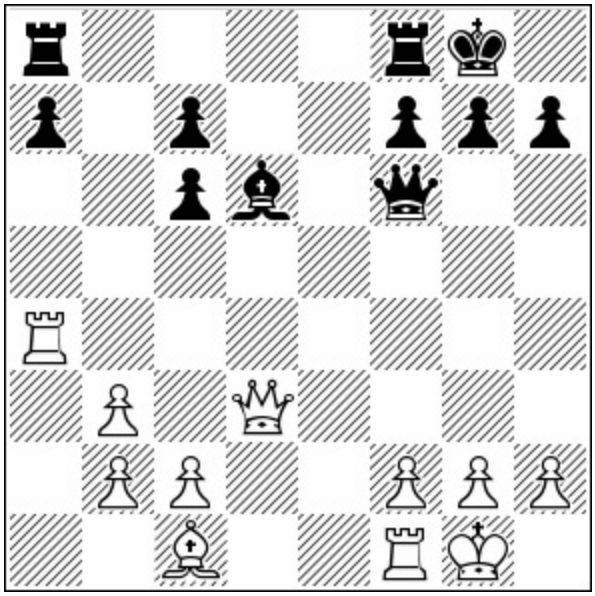
Not a terrible move, but Morozevich could have capitalised on his advantage even further by playing 12.Bd3. The threat of playing f4-f5 and starting a kingside attack forces Black's hand. 12...f5 13.f4 Bc5+ 14.Kh1 Be6 15.Bd2, with an overwhelming positional advantage.

12...Bxd6?!

As we will see now, doubled pawns are particularly vulnerable if they are isolated. Black has terrible weaknesses on a7, c7 and c6, while the white pawns that are part of the triangle on the queenside are mutually supportive.

It is a mystery why Bezgodov didn't opt for 12...cxd6. Black should have taken the opportunity to undouble the pawns. Yes, White still maintains the upper hand, but in the game the situation on the queenside becomes far more precarious.

13.Ra4 Bf5 14.Bd3 Bxd3 15.Qxd3 Qf6



16.g3!

A nice prophylactic move, stopping any attacking ideas towards the h2-pawn and taking further control over the f4-square. Positionally, we are taught to put our pawns on the opposite square of our bishops, but when queens, bishops and kings are all involved, it is usually the other way around.

16...Rfe8 17.Kg2 Bc5 18.Rf4 Qe6 19.Rd1 Bd6 20.Rc4!

Positionally, Black is bankrupt. The pawn structure on the queenside is beyond repair. While the white pieces can manoeuvre around freely, the black pieces have to constantly fulfill defensive duties. In the long-term, Black cannot keep everything together.

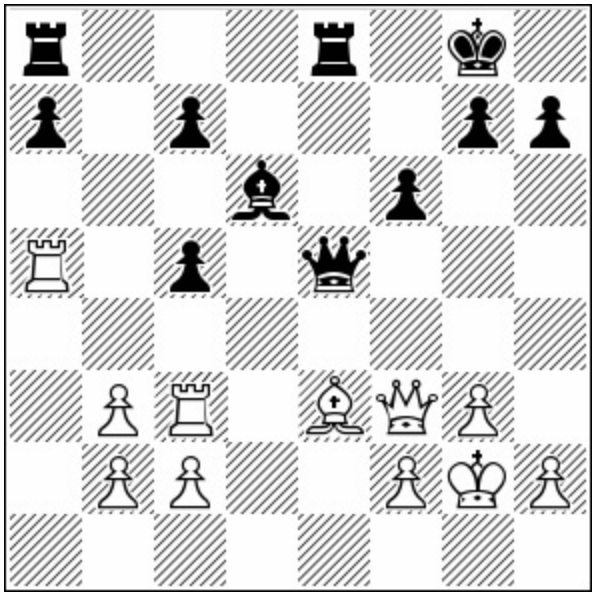
20...c5

This is forced. The black bishop is witnessing these developments in despair.

21.Qf3 Rab8 22.Bd2 f6 23.Ra1 Rbd8 24.Be3 Qe5 25.Rc3

Very patient play by Morozevich. Notice how comfortably he can defend his pawn formation.

25...Ra8 26.Ra5



26...Qe4 27.Bxc5

The first pawn falls, and the other pawns will soon fall victim too. In this case, it doesn't really matter which pieces are exchanged. All pieces are capable of exploiting weaknesses of this magnitude.

27...Qxf3+ 28.Kxf3 Be5 29.Re3 Bxb2 30.Rxa7 Rxe3+ 31.Kxe3 Rxa7 32.Bxa7

After the dust clears, White is only up a single pawn, but his active king guarantees victory.

32...Kf7 33.Kd3 Ke6 34.b4 c6 35.Bd4 Bc1 36.Be3 Bb2 37.Kc4 Kd7

Black resigned, not waiting for 38.c3, trapping the bishop. Instead, after 37...Be5 38.Bf4, Black's choice is between moving the bishop back or going into a losing pawn endgame.

1-0

All doubled pawns are equal, but some doubled pawns are more equal than others!*

* I hope you recognised this piece of Orwellian wisdom!

Morozevich astutely exemplified the importance of a healthy pawn structure.

The game allows us to extract two more Hidden Laws.

A doubled pawn on the b- or g-file that is the result of a capture towards the centre is generally not regarded as a weakness.

Doubled pawns are particularly vulnerable if they are also isolated.

Undoubling

The next example is one of my favourite games to discuss during coaching sessions. We will see another former World Champion at work: Mikhail Botvinnik. In this game, Botvinnik masterfully combines exquisite strategy with fine tactics. He showcases that doubled pawns aren't necessarily a weakness, but that they can also be used as an asset. I especially appreciate how Botvinnik remains flexible between several plans in the early stages of the game. If you want to extract the maximum value from this game, take some time at every diagram and try to diligently figure out Botvinnik's plans.

Game 3 Nimzo-Indian Defence
Mikhail Botvinnik
Vitaly Chekhover
Leningrad 1938 (4)

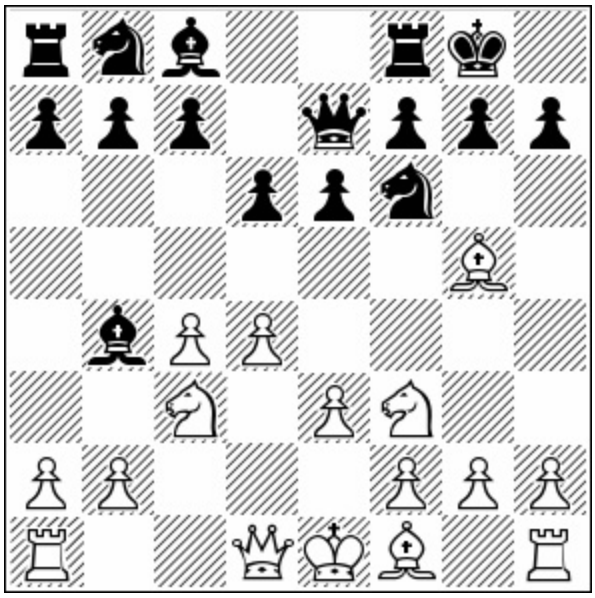
1.d4 Nf6 2.c4 e6 3.Nc3 Bb4 4.Nf3

The Nimzo-Indian is known for its doubled-edged positions in which Black gives up his bishop pair to force a doubling of White's c-pawns. That's why players who prefer a calmer and more positional approach often opt for the move 4.Qc2, as that avoids a doubling of the pawns.

4...0-0

Notice how Black doesn't give up the bishop immediately. Instead, he waits for White to play the move a2-a3 first, as that would *waste* an important tempo.

5.Bg5 d6 6.e3 Qe7



White to move

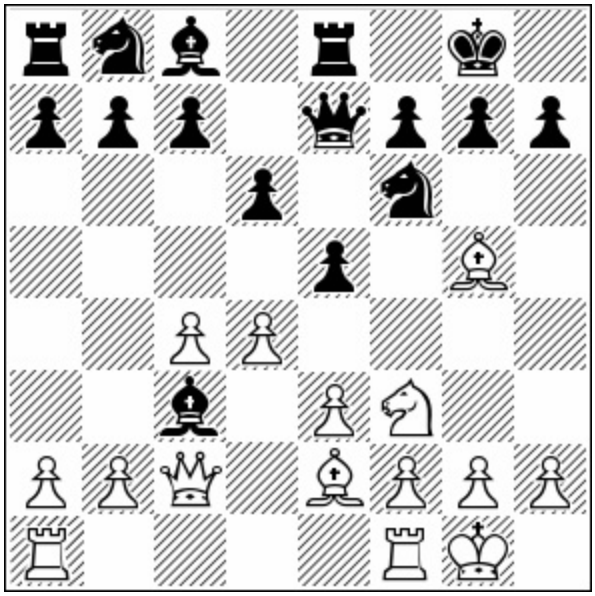
Question: This is where I usually ask my first question during coaching sessions. How should White finish his development?

7.Be2

Why didn't Botvinnik play 7.Bd3 ? Aren't we supposed to develop our pieces as actively as possible? Well, sometimes there are other considerations. In

this case, Botvinnik is anticipating Black's next moves. By employing the bishop on d3, you risk running into a fork after Black plays the logical 7...e5. The knight on c3 isn't contributing to the defence of the e4-square because of the pin. If you instead advocated to bring out the queen to either c2 or b3, you score some points too.

7...e5 8.Qc2 Re8 9.0-0 Bxc3



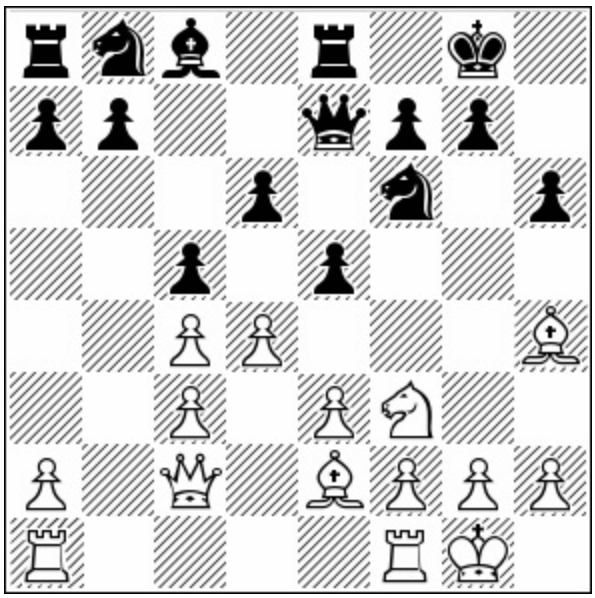
White to move

Question: How should White recapture?

10.bxc3!

Of course, the title of the chapter gave the answer away already. 10.Qxc3 isn't significantly worse, but the move played in the game is more challenging. 10...Ne4!. Black initiates a forcing sequence that severely reduces the material. 11.Bxe7 Nxc3 12.bxc3 Rxe7 13.c5! Nc6! (Black must first overprotect e5 before he can threaten to take on c5; 13...dxc5? 14.Nxe5 leads to a sizable advantage for White) 14.cxd6 cxd6 15.Rfd1, with an equal position.

10...h6 11.Bh4 c5



White to move
(back to the exercises)

Question: Another critical moment arises. Can you figure out a plan for White? Try to think of a scheme of moves that you would like to execute, rather than merely suggesting a move that looks natural.

12.Rae1!

The difficulty in these types of closed positions is to figure out a concrete plan that goes beyond merely putting pieces in the proper places. Botvinnik has a clear idea in mind about how he wants to proceed during the next couple of moves. He is preparing Nd2 after which he intends to increase the pressure on the black centre by playing f2-f4!. After executing these moves, the rooks are on ideal squares. A rook is required on e1 before this plan can be carried out. The immediate 12.Nd2? would fail to 12...exd4!, as the bishop on e2 is left unprotected.

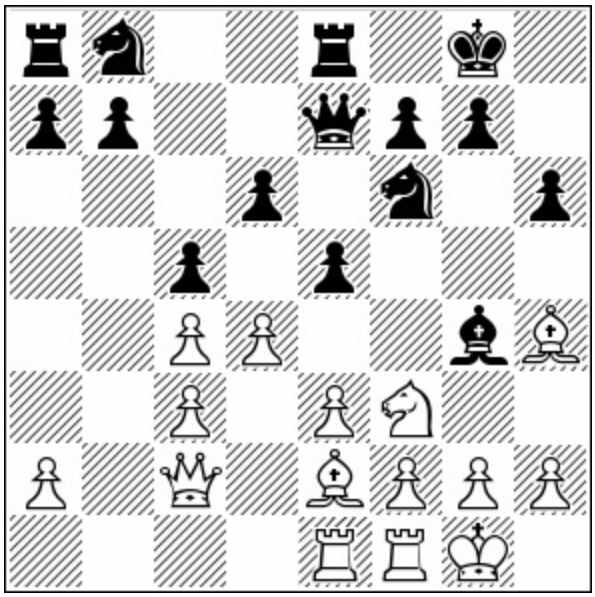
A) A move such as 12.Rab1 looks logical, but it doesn't really contribute to White's ideas in the long term. Black can just continue his development with

12...Nbd7, while it is unclear what White's next moves are going to be;

B) 12.h3! is a worthy alternative. If you advocated this move, you probably paid good attention in Chapter 1. Depriving the black bishop from g4 is an interesting way to fight for an advantage.

12...Bg4!

Chekhover finds the only move that stops Botvinnik's plan. After the intended 13.Nd2, he will play 13...Bxe2 14.Rxe2 exd4. With an unprotected rook on e2, White cannot take back twice.



White to move

Question: After his plan is thwarted, White needs to think of a new plan. How should he proceed?

13.Bxf6!

White gives up the bishop pair voluntarily so he can make use of a small tactic.

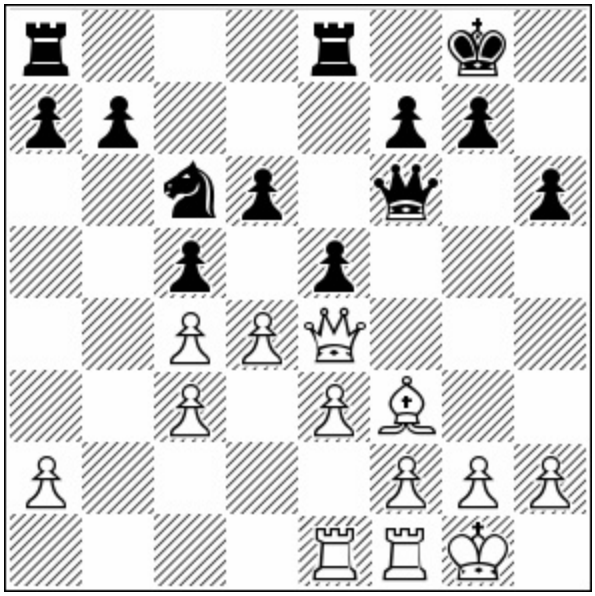
13...Qxf6 14.Qe4

The mark of excellent players is that they put their opponents into positions where they can make mistakes. Here, Chekhover has a difficult choice to make. He must simultaneously defend b7 and solve the problem of the bishop on g4.

14...Bxf3?!

A slight inaccuracy allows Botvinnik to execute his plan. Retreating the bishop with 14...Bc8 was more tenacious, even though White might still be able to fight for an advantage with the aforementioned plan of 15.Nd2! followed by f2-f4.

15.Bxf3 Nc6



White to move

Question: Botvinnik must have accounted for the knight move. Now, his plan of advancing with f2-f4 is completely off the table. What did he have in mind here?

16.dxc5!

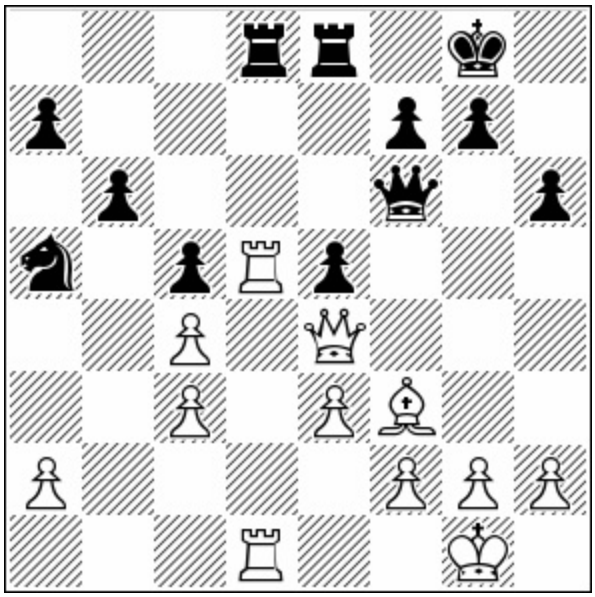
After the elimination of the light-squared bishop, Black has no good way to guard the d5-square. The doubled pawns act as pillars to support a complete command over the central squares. It is true that Botvinnik will have more pawn islands and isolated doubled pawns on the c-file, something which is generally frowned upon. But here it is not very problematic. White will occupy the d5-square with a rook, and an exchange on d5 will grant White the opportunity to repair his structure with cxd5.

16.d5? would be a grave positional mistake. The knight will reroute to e7, after which White will be left with a terrible bishop and a weakened pawn structure. The small space advantage doesn't account for anything in this position.

16...dxc5 17.Rd1 Rad8 18.Rd5

Black will now be forced into passivity. Notice how the doubled pawns are strong, rather than weak. Black has no way to attack the weaknesses, while any capture on d5 will solve all of White's structural issues.

18...b6 19.Rfd1 Na5



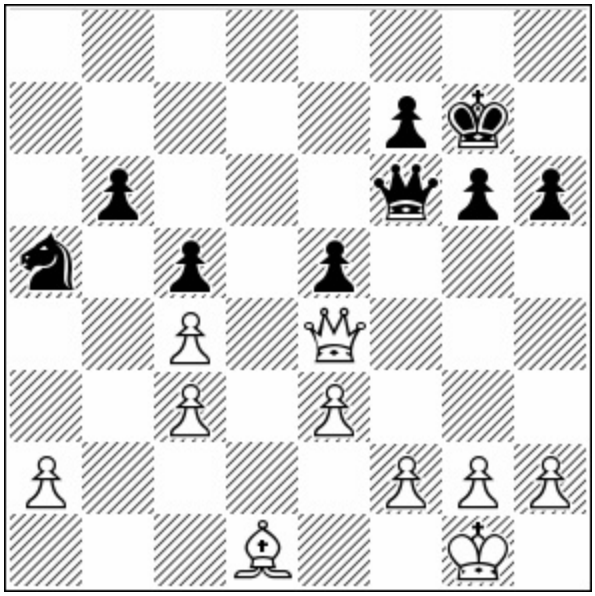
White to move

Question: Botvinnik has significantly improved his position over the last couple of moves. Still, Black is very solid and White needs to find a way to tear Black apart somehow. How would you handle this position?

20.h3

A typical move that grandmasters love to make from a position of strength. Botvinnik figures that Black cannot do anything productive, so he improves his position further by giving his king an escape square, avoiding any mating patterns on the back rank. However, this move turns out to be Botvinnik's only mistake from an objective point of view.

A) 20.Rd7 is a more direct move that maintains an advantage. White is threatening to simply grab the a7-pawn. Black may respond with 20...g6, an important defensive move that solves Black's back rank issues. Yes, Black has already played ...h7-h6, but since White can easily cover h7, it is sensible to create an escape square on g7 as well: 21.Rxa7 Rxd1+ 22.Bxd1 Rd8 23.Ra8 Rxa8 24.Qxa8+ Kg7 25.Qe4.



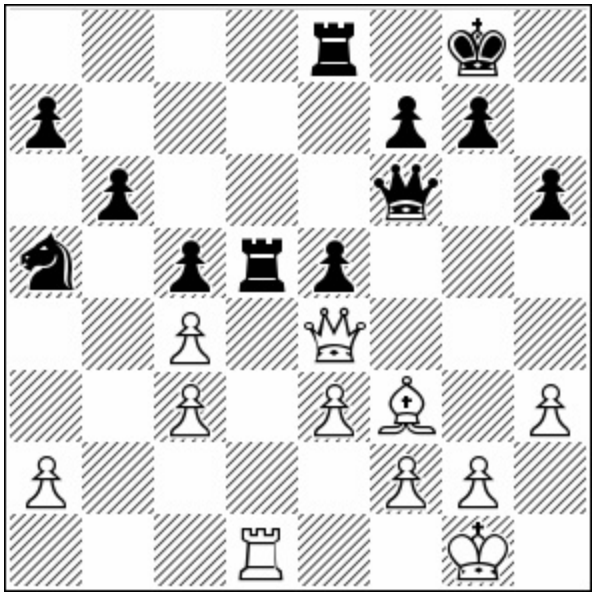
analysis diagram

White is a pawn up and maintains some advantage, but due to his bad pawn structure, it will be difficult to convert this position;

B) The surprising 20.h4! is the best move and it secures a large advantage. Its main point is to stop Black from playing 20...g6, as it will be met by 21.h5!. After 21...g5, Black's king's position would be severely weakened. Instead, after 20...Rxd5 things would continue similarly to the game. Admittedly, this is some complicated stuff, and it is no wonder that it didn't cross Botvinnik's mind. Of course, in hindsight and while staring at the latest iteration from Stockfish, things can look extremely obvious...

20...Rxd5?!

Black gets impatient and decides to release the tension in the centre. However, he misses an important defensive resource. After 20...g6, his position would have been extremely hard to crack. It even turns out to be impossible for White to make any concrete progress: 21.Rd7 (21.Qd3 Nc6 keeps everything together) 21...Rxd7 22.Rxd7 Rd8 23.Rxa7 Kg7. White is a pawn up, but the weakened pawn structure and Black's active rook on the d-file totally compensate for this.



21.Rxd5!?

A fascinating choice. Rather than solving his structural issues, Botvinnik decides to keep up the pressure. 21.cxd5 would have been a good move, too.

During coaching sessions, students were worried that the black knight would occupy the d6-square, securing a perfect blockade. Unfortunately, this doesn't work out tactically: 21...Nb7?! (a move such as 21...Rd8 is better, even though White still maintains some initiative after 22.d6!, crushing Black's hope of achieving the perfect blockade) 22.Qa4!, with a double attack on a7 and e8, preserving an advantage.

21...Qe7

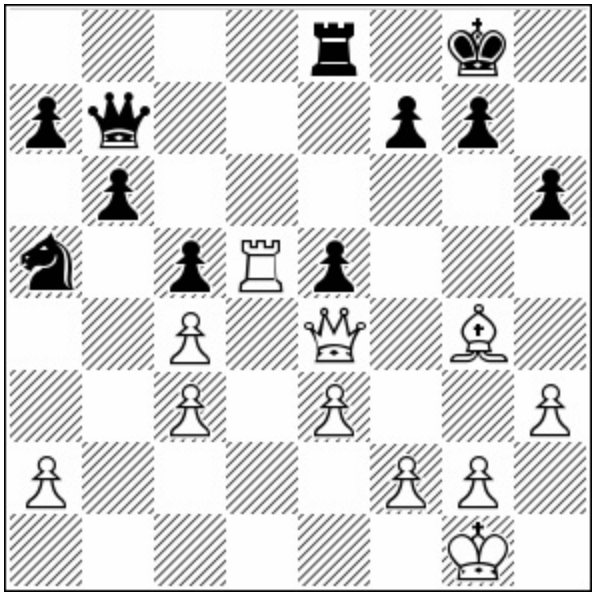
Now Botvinnik is fully back in the driver seat. He finds an excellent series of moves that cracks the black set-up. Once again, the best defence would be 21...g6!. Its key point is that after 22.Qd3 Kg7 23.Rd7, Black can play 23...Re7 since the back rank is fine.

22.Bg4!

Threatens infiltration with 23.Rd7.

22...Qb7

Temporarily stopping the infiltration by pinning the queen.



White to move

Question: What is the best way to increase the pressure? Try to support your suggestion with some concrete calculation.

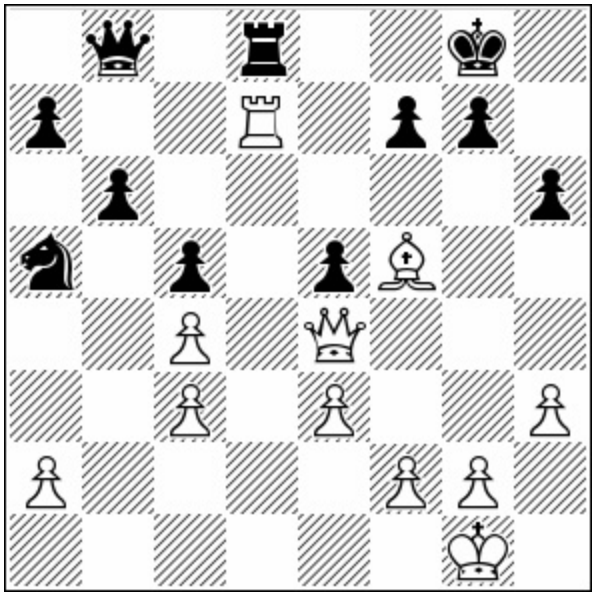
23.Bf5!

An important move, protecting the queen while also maintaining all threats.

23...Qb8

After some kung fu, Black must concede that the white rook infiltrates on d7. Let's once again consider 23...g6. Sometimes, the variations that lie under the surface play a decisive role in the outcome of a game. Can you spot what Botvinnik had in mind after this compelling defensive idea? 24.Bxg6!. Logical, but it needs to be calculated with great precision. 24...fxg6 25.Qxg6+ Kf8. The only move that guards the rook. Now White has a single winning move. 26.Rd6!. Of course, White needs to involve all his pieces in the attack. The check on f6 leads to a decisive material advantage. Importantly, 26...Re7 27.Rd8+ swiftly leads to mate.

24.Rd7 Rd8



White to move

(back to the exercises)

And now, the coup de grâce:

25.Qxe5!!

A stunning move that needed to be calculated in advance. All other moves lead to an elimination of the rooks, offering White no advantage.

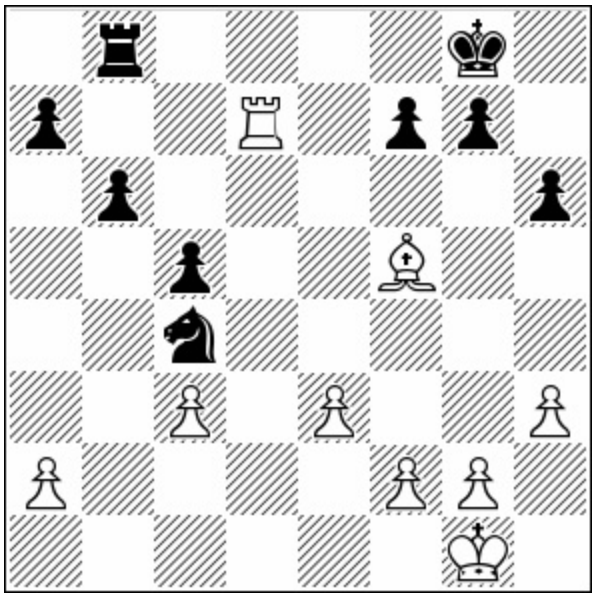
25...Nxc4

25...Qxe5 26.Rxd8+; 25...Rxd7 26.Qxb8+. Both moves lead to mate. Notice how Black feels the issue of his troubled back rank.

26.Qxb8!

The doubled pawn has been traded for the e5-pawn. Botvinnik now finds the right transition into the endgame. Yes, material is equal, but the white rook totally dominates its counterpart, while the black knight is no match for the white bishop.

26...Rxb8



White to move
(back to the exercises)

27.Be4!

Once again Botvinnik shows his patience. The bishop moves towards d5, the best square on the board. White is much more interested in the f7-pawn than the a7-pawn, as the f-pawn is a key defender of the black king. Instead, 27.Rxa7?! Rd8 gives Black some hope to defend.

In the endgame, activity often outweighs material gain.

27...Na3 28.Bd5 Rf8

The black rook is forced into complete passivity. Botvinnik's next task is to activate the king and exploit his pawn majority on the kingside. On the other hand, the black pawn majority on the kingside isn't going anywhere.

29.e4

29.Rxa7?? Nb5!. It is never too late to blunder!

29...a5 30.c4 b5 31.cxb5 Nxb5 32.e5 a4 33.f4 Nd4 34.Kf2 g5 35.g3 gxf4 36.gxf4 Ne6 37.Ke3 c4 38.f5 Nc5 39.Rc7 Nd3 40.e6 fxe6 41.fxe6 1-0

A true gem of a game. Botvinnik marvelously displayed how doubled pawns can be turned into assets. In the middlegame, he gained full control over the important d5-square. The idea of undoubling the pawns had a crippling effect on the black position. Chekhover was faced with a challenging task. He could hold on to his superior pawn structure by waiting passively, or he could give up the tension in the centre but thereby also solve White's structural issues. This brings us to a key lesson:

Undoubling pawns can alleviate structural problems and turn doubled pawns into assets.

Unexploitable pawns

We will now continue our investigation of the Nimzo-Indian and look at another approach for White to mitigate the negative aspects of doubled c-pawns by pushing a different agenda.

Game 4 Nimzo-Indian Defence
Jorden van Foreest 2702
Anish Giri 2772
Wijk aan Zee 2022 (11)

1.d4 Nf6 2.c4 e6 3.Nc3 Bb4 4.a3!?

White enters the Sämisch Variation of the Nimzo-Indian and forces the black bishop to capture at once. This clarifies the situation on the queenside and gives both sides a clear strategic aim. Black tries to target the weak c4-pawn, while White intends to command the centre and launch an attack on the kingside. Previously, top-level experts opined that Black obtains an easy game, and this variation had become completely obsolete as a result. Van Foreest, who generally tends to open 1.e4, was facing the task of finding a promising opening to play against Giri – a challenging task, since Giri is known for being the best prepared player in the world. Choosing the Sämisch Variation turned out to be a brilliant one and will likely revive interest in this ancient variation.

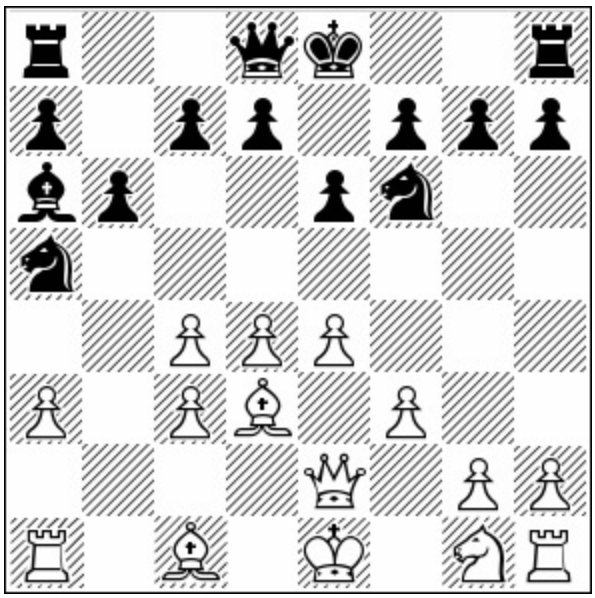
4...Bxc3+ 5.bxc3 b6 6.f3

This move is required if White wants to build a large centre.

6...Nc6 7.e4 Na5 8.Bd3 Ba6

So far, Black plays a typical scheme. It is precisely this configuration that deterred players from entering this variation from the white side. Black immediately targets the weakness on c4.

9.Qe2



9...d6

Giri is taken completely off-guard by his compatriot. His set-up after d6 may already be slightly dubious. More in line with Black's previous play would have been 9...c5. The idea is to place the rook on c8 and the queen on c7, and thereby increase the pressure on the c4-pawn. In practice, White hasn't been able to show any advantage.

10.f4! Qd7

10...d5!?. This deeply counterintuitive move that hasn't been played before might be Black's salvation. 11.exd5 Qe7!. The point behind the previous move. Black temporarily sacrifices a pawn, but he will win it back and force an endgame: 12.dxe6 Qxe6 13.Qxe6+ fxe6 14.Nf3 0-0 15.Ke2! c5 16.Ne5 Rac8 17.Be3 cxd4 18.Bxd4 Bxc4 19.Nxc4 Nxc4. Black has finally regained the pawn and obtains a fair share of chances.

11.Nf3 Qa4

The idea of lining up the pieces on the a-file is common in this variation. The

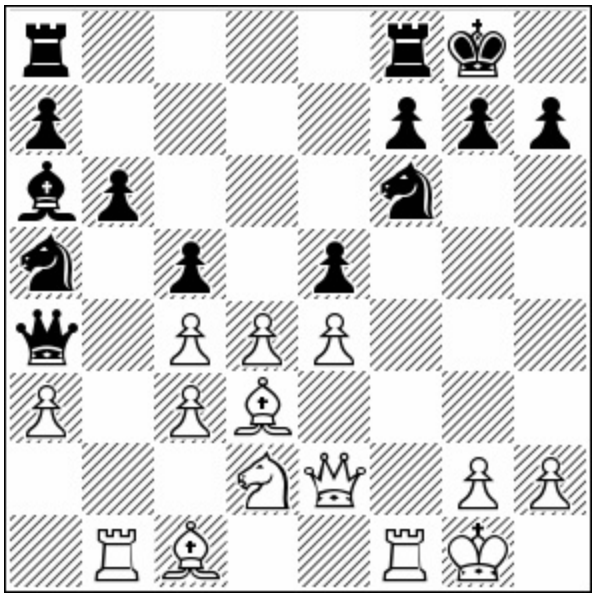
majority of Black's army is targeting White's main weakness on c4. Unfortunately for Black, White is well-prepared for this set-up as he will be able to hold on to all his pawns.

12.Nd2 e5 13.0-0

White is enjoying a lovely centre while he has everything under control on the queenside. Furthermore, he controls the tension in the middle of the board, as both ...exd4 and ...exf4 are highly undesirable for Black.

13...0-0 14.fxe5 dxe5 15.Rb1 c5

Giri is trying hard to fight back in the centre.



White to move
(back to the exercises)

16.Rxf6!

A superb exchange sacrifice. White forces a doubled pawn and rips open the black king's position. Even though White hasn't really mobilised any attackers yet, he rightly judges that Black has an even more difficult time mobilizing defenders.

16...gxf6 17.Qf3 Qc6 18.d5 Qd6 19.Nf1!

Van Foreest spots the outpost on f5, and the knight is heading for this square quickly.

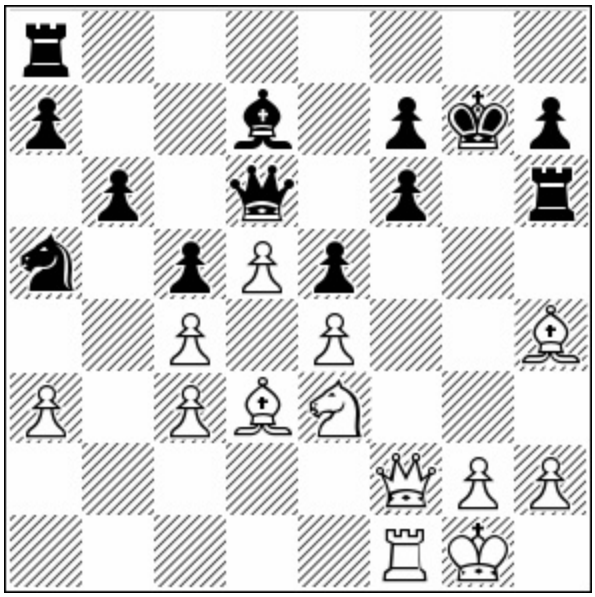
19...Kh8 20.Ne3 Bc8 21.Bd2

Bishops don't thrive in closed positions, but Van Foreest shows that they can still be effective. The light-squared bishop controls all counterplay by protecting c4 and preventing ...f6-f5, while the dark-squared bishop is heading for h4.

21...Rg8 22.Be1 Rg6 23.Bh4 Rh6 24.Qf2

Calm and collected. Now, White is ready to play Rf1 after which the pressure on the weak f6-pawn reaches critical levels.

24...Bd7 25.Rf1 Kg7



White to move
(back to the exercises)

26.Be2!

Van Foreest arranges his pieces beautifully. With this move, his only inactive piece gets an offensive duty as it is heading for either square g4 or h5.

26...Rg6 27.h3 Bxh3

Black takes the bait. It is hard to suggest other moves, as the alternatives would allow 28.Bg4.

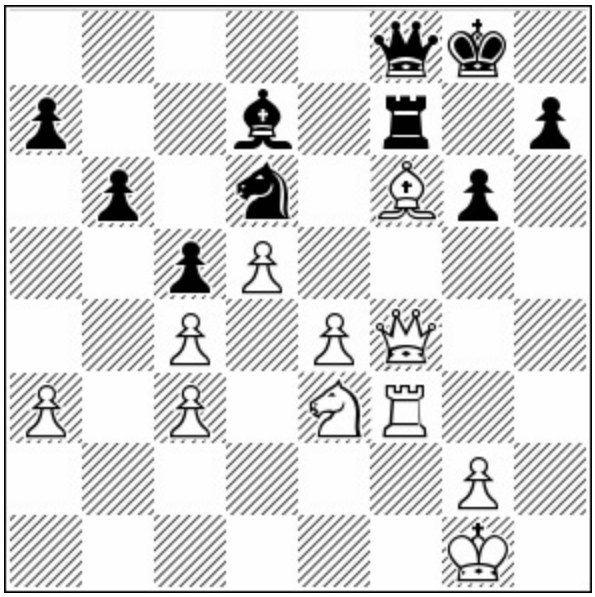
28.Bh5

After the rook is eliminated, the f6-pawn falls.

28...Bd7

28...Rh6 29.Qg3+ Kf8 30.Rf5 is a fun line that forces resignation.

29.Bxg6 fxg6 30.Bxf6+ Kg8 31.Qh4 Rf8 32.Rf3 Rf7 33.Qg5 Qf8 34.Qxe5 Nb7 35.Qf4 Nd6



36.e5

The pawn centre continues its march with devastating effect. So here you already get a brief preview of Chapter 6!

36...Ne8 37.d6 Nxf6 38.exf6 Qe8 39.Nd5 Qe1+ 40.Kh2 Qd1 41.Ne7+ Kh8 42.Rh3

A neat move to finish the game. If 42...Bxh3, 43.d7! wins, as the white queen is about to give a deadly check on b8.

1-0

A splendid game by the young Dutchman. A smart opening choice was followed up with strong attacking play. Van Foreest showed that doubled pawns are only a weakness if they can be exploited. In the game, Black's attempts to target the doubled pawns were neutralised. In the meantime, Van Foreest built a large centre that served as a starting point for an attack. In the later stages of the game, the weakness on the queenside wasn't felt at all since all attention was shifted to the kingside. This is a concept that will be applied in the next game too when we will see the current World Champion Magnus Carlsen in action.

Game 5 Sicilian Defence
Fabiano Caruana 2820
Magnus Carlsen 2862
Wijk aan Zee 2015 (6)

1.e4 c5 2.Nf3 Nc6 3.Bb5 g6 4.Bxc6 dxc6!?

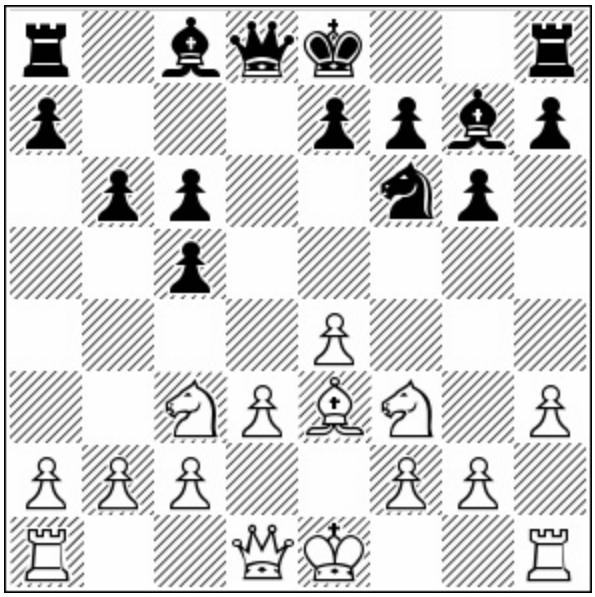
In the Rossolimo Variation (isn't that name beautiful?) of the Sicilian, White often decides to define the course of the game early by exchanging his bishop for the knight voluntarily. In this set-up, the capture away from the centre is played most often. The idea is to take control over the key square d4 and thereby stop White's expansion in the centre.

5.d3 Bg7 6.h3

This cautious move plays a role in a large variety of openings. The slow nature of the position gives both sides time to play moves with a strategic

aim, rather than focusing on quick development.

6...Nf6 7.Nc3 b6 8.Be3



8...e5?

Very surprising. Even the World Champion can mess up a move order. Maybe we should feel less anxious about our own mistakes now...

9.0-0?

And Caruana misses his chance! 9.Nxe5! leads to a winning advantage for White: 9...Nxe4 10.Qf3!. This multipurpose move creates huge problems. It is unsurprising that White won all five games that entered this position:

A) 10...Bxe5 11.Qxe4 f6 12.Bf4 Kf7 13.Bxe5 Re8 14.0-0-0 Rxe5 15.Qxc6, with an extra pawn and the far safer king;

B) 10...f5 11.Nxc6 (11.Bf4 was played in all five games and it is sufficient too, although the capture seems even stronger) 11...Bxc3+ 12.bxc3 Qd7 13.dxe4 Qxc6 14.Qg3! 0-0 15.0-0 Ba6 16.Rfe1 fxe4 17.Rad1. White has a winning initiative. Black is behind in development and too vulnerable on the dark squares.

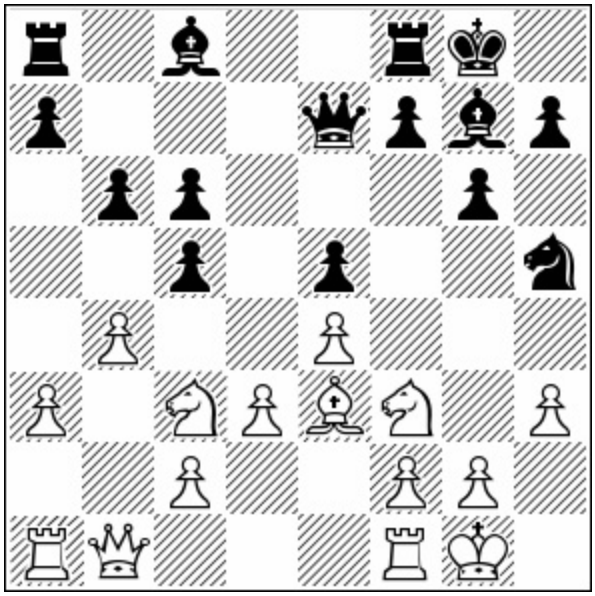
9...0-0 10.a3

Now, we enter normal territory again. The purpose of this little move is to prepare b2-b4. This might look counterintuitive at first sight. Why would Caruana allow Black to get rid of his doubled pawns? Well, sometimes there are other positional aspects that come into consideration. Here the exchange of White's a-pawn for a black c-pawn offers White multiple advantages. First of all, White welcomes an open a-file for the rook on a1. Secondly, the white pieces are more ready for a battle on the queenside. The bishop is already ideally placed and White's king's knight could jump over if that's required. On the other hand, Black is dealing with an inactive bishop on g7, as it is merely staring at his own pawn. Note that the exchange on b4 would leave White with the more compact pawn structure. All the white pawns continue to be part of a single chain, while the black pawns are split up into two islands.

10...Qe7 11.Qb1

This move seems very creative, but it is in full harmony with Caruana's strategic aim of advancing the b-pawn.

11...Nh5 12.b4

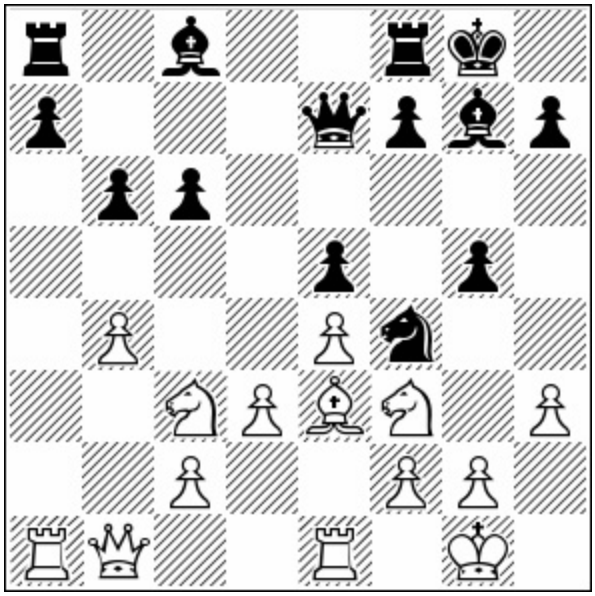


Black to move

Question: A critical position. White has achieved his strategic goal on the queenside. How should Carlsen react?

12...f5!

A bold decision by the World Champion. Carlsen allows a further deterioration of his queenside, but he claims that his kingside attack will make up for it. 12...cxb4 is possible too, but Black needs to follow it up extremely dynamically: 13.axb4 Nf4 14.Re1 (14.Bxb6!?, playing for tactics, leads to a forced draw: 14...Bxh3! 15.Bc5 Qd7 16.gxh3 Qxh3 17.Ne1, and Black gives perpetual check) 14...g5!?.



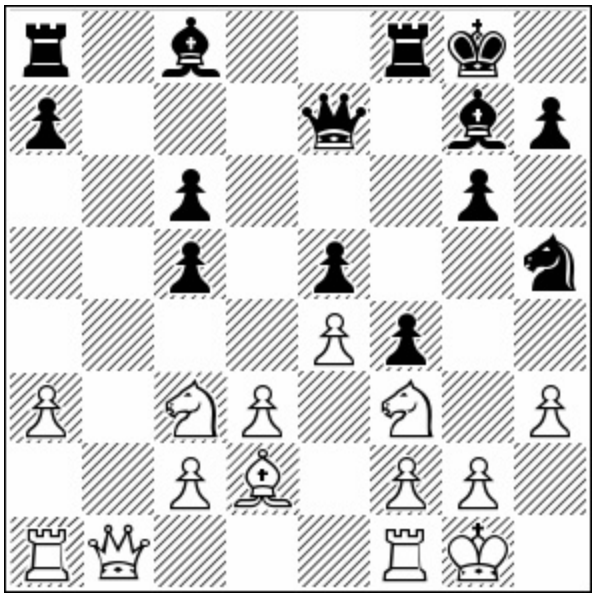
analysis diagram

By playing actively, Black forces White to focus his army on the kingside. (A slow but natural looking move such as 14...Be6?! gives White the opportunity to reap the fruits of his play: 15.Bxf4! exf4 16.e5 c5 17.b5 f6 18.exf6 Qxf6 19.Ra4! Qf5 20.Ne4, with a positional advantage. In particular, the pawn on a7 is a constant worry. Furthermore, White has superior coordination. A knight that is standing on a strong outpost can often

compensate for the bishop pair) 15.Nh2 Be6 16.Ne2 h6 17.Ng3 Qd7!.

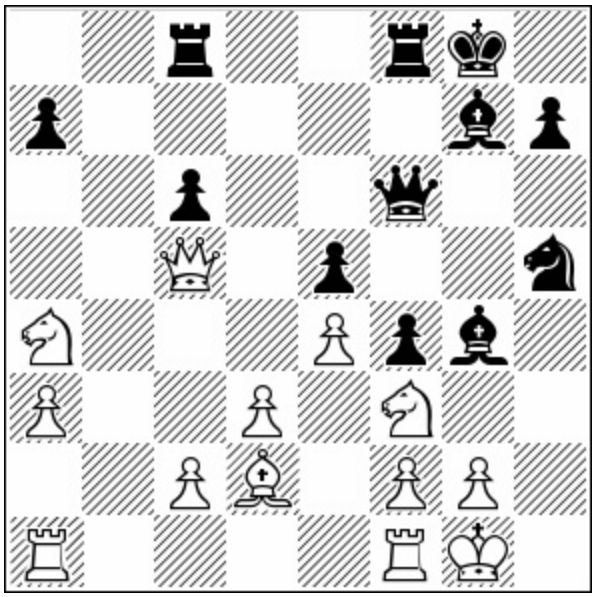
The constant threat of a sacrifice on h3 keeps White at bay. Black should eventually achieve his fair share of chances.

13.bxc5 f4 14.Bd2 bxc5



Strategically, Black is bankrupt. The black pawn configuration on the queenside is extremely loose, and it won't be a surprise if White can start collecting soon. Still, Carlsen rightly judges that the pawn structure isn't the only thing that matters. What is a pawn even worth if you are checkmated? By committing fully to the attack, Black is willing to ultimately sacrifice his entire queenside. He has his eyes on the prize.

15.Qb3+ Be6 16.Qa4 Rac8 17.Qa5 g5 18.Na4 g4 19.hxg4 Bxg4 20.Qxc5 Qf6

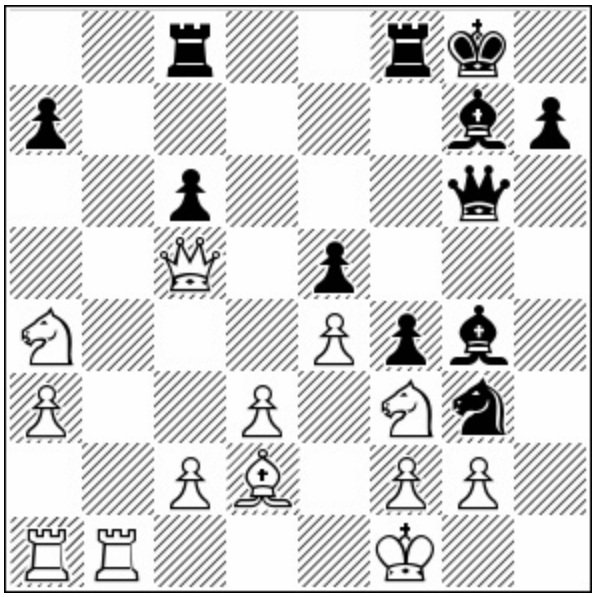


White has collected a pawn, but the situation on the kingside becomes increasingly alarming.

21.Nh2?

21.Rfb1! was likely the best defence. White needs to give the king space to flee to the centre. The ensuing situation is so complicated that even modern engines have difficulty understanding what is going on. Don't be discouraged by the complexity of the game. Sometimes, it is best just to watch in awe. A selection out of the possible variations:

A) 21...Qg6 22.Kf1 Ng3+!

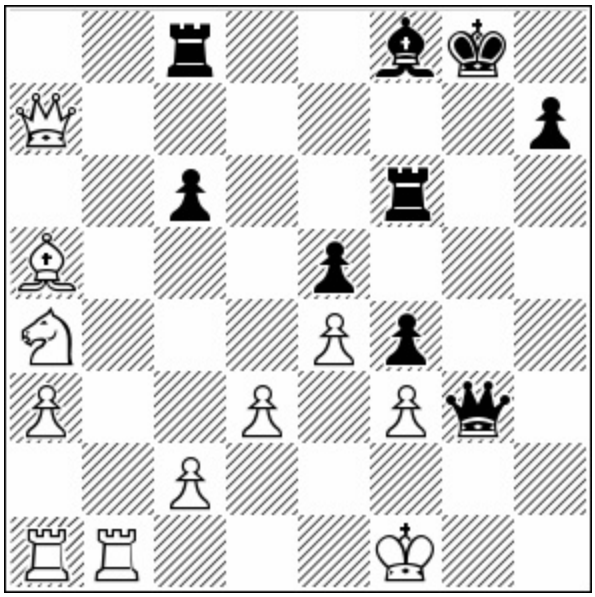


analysis diagram

23.Ke1 (White cannot allow the opening of the f-file: 23.fxg3? fxg3 24.Ke2 Qh5 25.Rf1 Qh2! 26.Qg1. It's a bad sign if you must resort to such defensive ideas. Still, Black must tread a narrow path if he wants to win: 26...Rxf3! 27.Rxf3 Bxf3+ 28.Kxf3 Rf8+ 29.Ke2 Rf2+, and Black is forced to give up the queen)

23...Rf7!. A fascinating prophylactic move. While the entire board is burning, Black takes time to make a calm move with his rook, stopping a check on c4, protecting a7 and freeing the f8-square for the bishop. 24.Bb4! a5!? 25.Bxa5 Bf8 26.Qc4 Be6 27.Qc3 Nxe4! 28.dxe4 Qxe4+ 29.Kf1 Qxa4 (of course, there was a knight loose on a4!) 30.Ng5 Qc4+ 31.Kg1 Rf5 32.Nxe6 Qxe6 33.Qb3 Re8 34.Qxe6+ Rxe6, and we somehow return to calmer waters. Material equality has been restored and the ensuing endgame is about even. To say that chess is a difficult game is a gross understatement!;

B) 21...Bxf3 is possible too: 22.gxf3 Qh4 23.Kg2 (23.Kf1? Ng3+! 24.fxg3 fxg3 wins) 23...Rf6 24.Bb4 a5!? (deflecting the bishop) 25.Bxa5 Bf8 26.Qa7 Ng3! 27.fxg3 Qxg3+ 28.Kf1



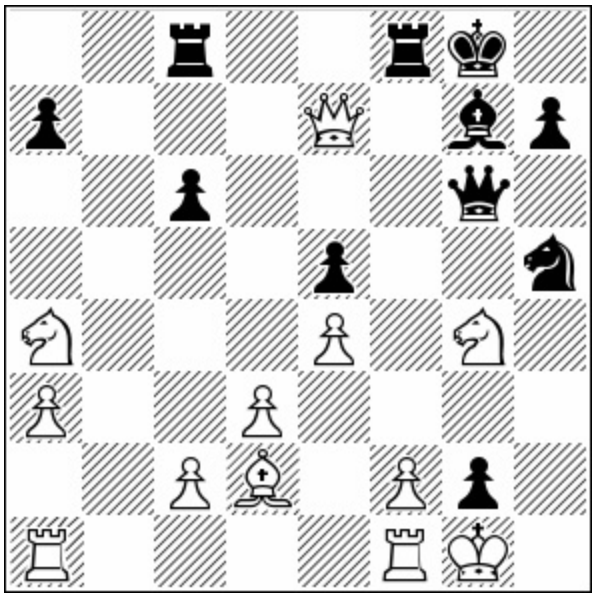
analysis diagram

28...Ra8!!. Simply stunning. 29.Qf2 (29.Qxa8?? Rh6!, with a mating attack) 29...Qxf2+ 30.Kxf2 Rxa5 31.Nb2 Bc5+ 32.Ke2, and if anyone is better it is Black.

21...f3

Carlsen continues his attack forcefully. Still, opting for the simpler 21...Qg5 was preferable: 22.Nxg4 Qxg4, and White needs to engage in great gymnastics if he wants to defend this position with 23.Qe7! Kh8 24.f3 Qg6 25.Qh4 Ng3 26.Rfe1 Qd6 27.Bc3 (a check on d4 cannot be allowed) 27...Rf7!. Black obviously has the upper hand with his strong knight on g3 and a passive white queen.

22.Nxg4 Qg6 23.Qe7 fxg2



24.Rfb1?

24.Rfe1! Qxg4 25.Qg5! was correct. Black either has to allow an exchange of queens or he has to give up the g2-pawn. Both options lead to equality. What is the difference in the game?

24...Qxg4 25.Qg5 Qe2!?

Ah, you may think that this is why White needs a rook on e1. Well, it is slightly more subtle.

26.Qe3!

White doesn't mind a repetition.

26...Qg4 27.Qg5

We all know what Carlsen thinks about a repetition of moves. If he finds an alternative, he goes for it!

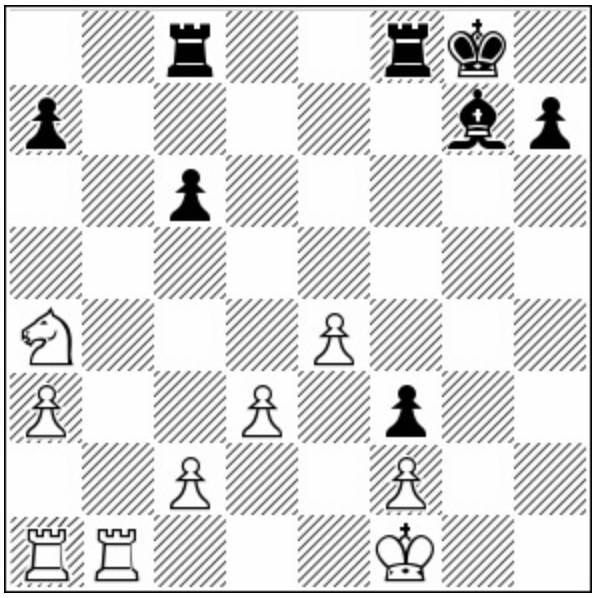
27...Qxg5! 28.Bxg5 Nf4!

Even without queens on the board, the white king continues to suffer.

29.Bxf4

Now imagine that White has a rook on e1, and he could play Re3!. So that's why 24.Rfe1 was preferable.

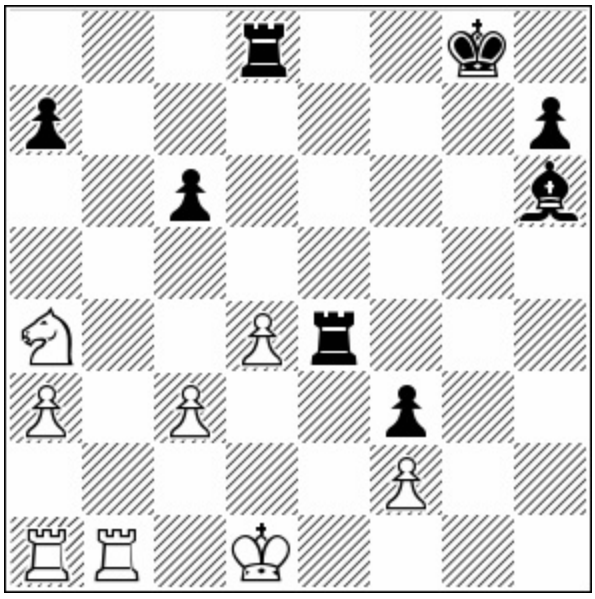
29...exf4 30.Kxg2 f3+ 31.Kf1



31...Rf4!

Carlsen finds the most convincing way to finish the game. He is not even interested in the corner rook on a1. On square f4, the rook is threatening mating ideas with ...Rh4, while simultaneously targeting pawn e4.

32.c3 Rd8 33.d4 Bh6 34.Ke1 Rxe4+ 35.Kd1



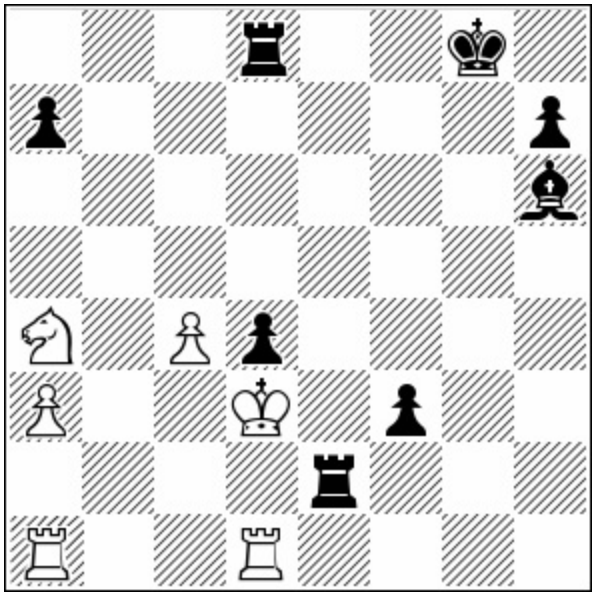
35...c5!

Surgical precision. White's defences are collapsing.

36.Kc2

36.Nxc5 Re2 is crushing, but why did Carlsen need to insert ...c7-c5 first? With a knight on a4, White could answer ...Re2 with Rb2!.

36...cxd4 37.Kd3 Re2 38.c4 Rxf2 39.Rd1 Re2



White started the endgame up a pawn. Now he is down two pawns. Furthermore, his king is unsafe while his remaining forces are all over the place.

0-1

A tremendous attacking game by the World Champion. Of course, he is known for his brilliant endgame technique, but here he showed that he is also capable of playing in a riskier style. This game must have inspired Carlsen to employ the Sveshnikov Sicilian against Caruana in their World Championship Match in 2018.

Doubled pawns are often a weakness, but by shifting attention to different areas of the board, the weakness may not be felt. Carlsen was burning bridges on the queenside, but the ongoing attack on the kingside kept Caruana on the ropes. Caruana managed to escape into an endgame, but this offered no solace.

We now conclude our journey across the valley of the doubled pawns.

The Hidden Laws of Doubled Pawns

• When evaluating the quality of a pawn structure, a good rule of thumb is to count the number of pawn islands. Having fewer pawn islands is favourable;

• Isolated doubled pawns are particularly vulnerable;

• Doubled pawns on the b- or g-files, brought about by a capture towards the centre, are generally not problematic;

• By threatening to undouble pawns, a doubled pawn can be turned into an asset, rather than a weakness;

• A potential upside of a doubled pawn is that it can create a semi-open file without paying the price of a pawn. Rooks thrive on these semi-open files;

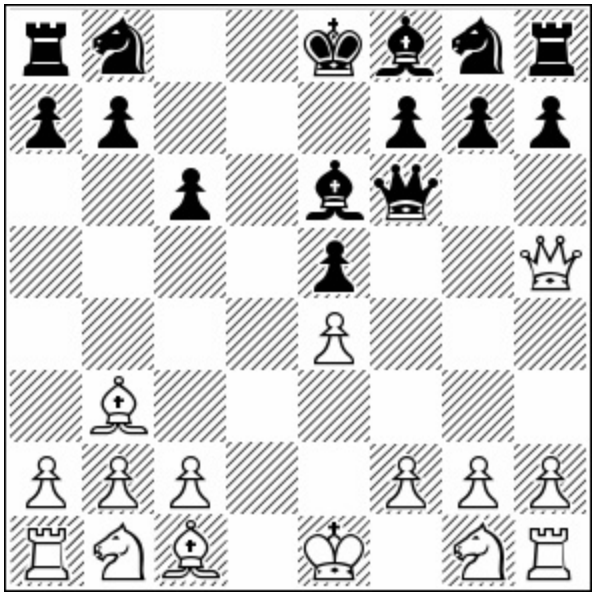
• The exploitation of an enemy doubled pawn generally costs time and effort, which gives the opponent an opportunity to create threats elsewhere on the board. By shifting attention to another side of the board, the weakness of a

doubled pawn can be rendered meaningless.

Quiz

Show in Text Mode

Exercise 1
Oleksandr Bortnyk
Le Tuan Minh
Lichess.org blitz 2021 (13)



White to move

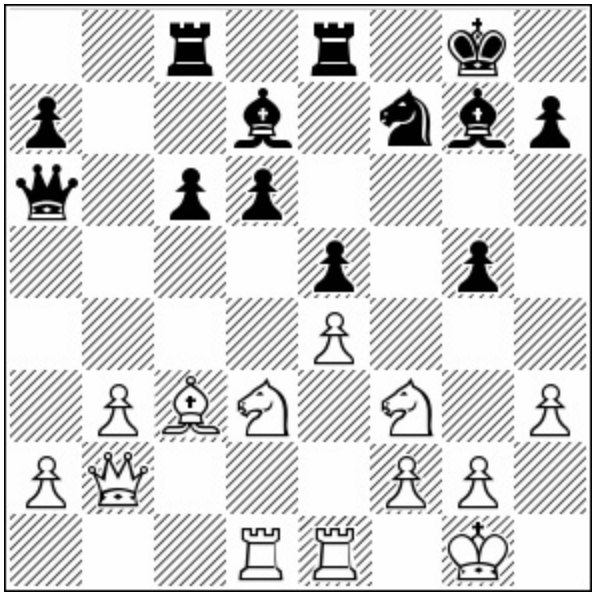
How should White proceed?

Show/Hide Solution

Exercise 1

After **1.Bg5! Qg6 2.Qxg6! hxg6 3.Bxe6 fxe6**, the black structure is in ruins and White is winning.

Exercise 2
Vladimir Akopian 2678
Ruslan Ponomariov 2743
Moscow 2002 (4.4)



White to move

Black's last move 21...g5 looked a bit careless. Can White take advantage?

Show/Hide Solution

Exercise 2

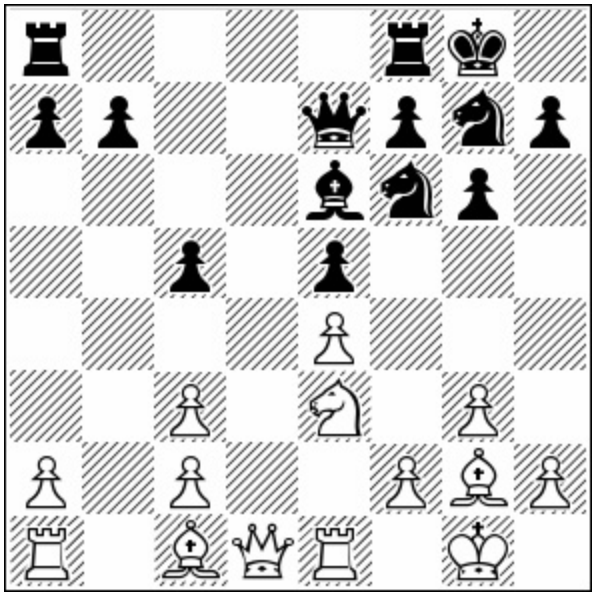
White has a winning tactic with **22.Nc5!**, forking Black's queen and bishop. Therefore, Black is obliged to take. **22...dxc5 23.Rxd7**. With an active rook on the seventh rank and a spoiled black pawn structure, White is completely winning.

Exercise 3

Mikhail Botvinnik

Vasily Panov

Leningrad ch-URS 1939 (9)



White to move

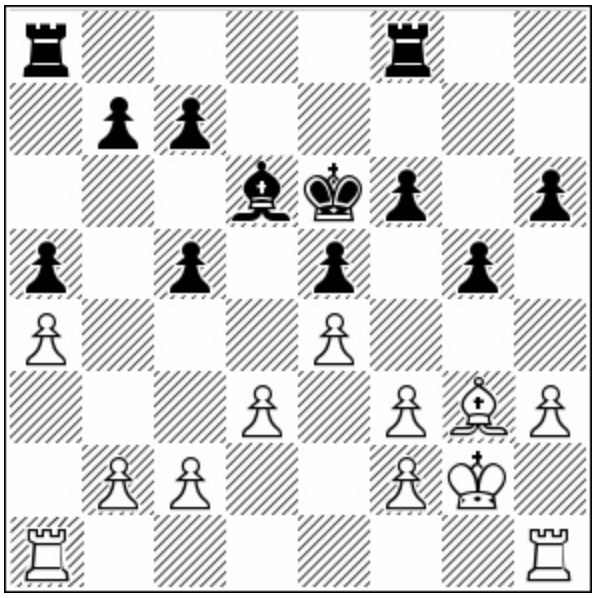
What should White play, and how would you evaluate the situation?

Show/Hide Solution

Exercise 3

White is winning after **19.c4!**. Botvinnik applies a very similar strategy to his game against Chekhover. White threatens to occupy the centre with 20.**N**d5, and this will most likely allow White to undouble his pawns. Moreover, White has the possibility of opening the position for his bishop pair with f2-f4. White won convincingly.

Exercise 4
William Winter
José Raúl Capablanca
Hastings 1919 (5)



White to move

How do you evaluate this position?

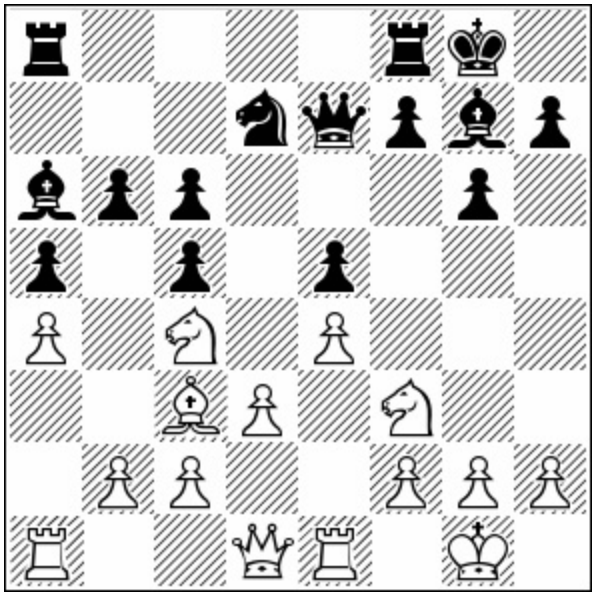
Show/Hide Solution

Exercise 4

Doubled pawns and immobile bishops. How do we assess the situation? We look at the potentiality of the pieces. The peculiar configuration on the kingside ensures that the white bishop will never participate in the game. Black's bishop also doesn't look inspiring, but it will join the battle once the c-pawns start moving. Black will practically be up a piece. Kasparov suggested that 19.c4 is White's best defence, claiming that Black's bishop will be caged in permanently as well. But I am not sure whether this is true. Black still has a promising plan with ...Rfb8, ...c7-c6 and ...b7-b5.

My personal assessment is that patient defence starting with 19.Kf1 is White's best bet. In any case, White's task is a difficult one, practically speaking. Capablanca went on to win comfortably.

Exercise 5
Boris Gelfand 2703
Loek van Wely 2654
Plovdiv Ech-tt 2003 (6)



White to move

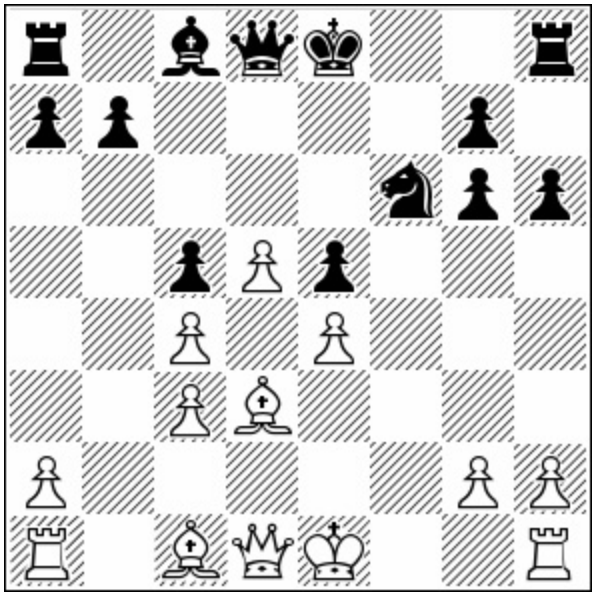
How should White proceed?

Show/Hide Solution

Exercise 5

14.b3! is correct. If White wants to play for an edge, he must avoid leaving the pawn structure almost totally symmetrical after 14...Bxc4 15.dxc4. Gelfand discourages Van Wely from capturing on c4 as he can now respond bxc4, creating a clear target on b6. Hence, White maintains a sound pawn structure.

Exercise 6
Boris Spassky 2660
Bobby Fischer 2785
Reykjavik Wch 1972 (m/5)



White to move

Both sides have doubled pawns. How would you assess the current situation?

Show/Hide Solution

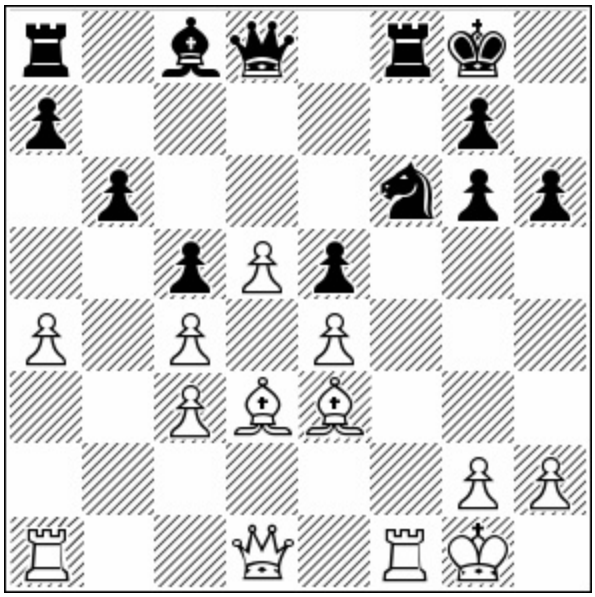
Exercise 6

This is a tough one! It's a position from the famous Match of the Century between Fischer and Spassky.

In the game, Spassky played the natural **14.Be3**.

Another logical move would be 14.0-0. How do we assess the position? One would perhaps point to White's bishop pair and protected passed pawn in the centre. However, these characteristics can't be marked as an advantage in this position. The knight is a flexible piece in closed positions and the value of White's bishop pair is reduced, as White's light-squared bishop can't make any active contributions. Moreover, White's passed pawn isn't really an asset, as it cannot be pushed. On the other hand, Black can later try to advance the pawn formation on the queenside. If anyone is better here, it is Black because his position is more flexible.

Exercise 7
Boris Spassky 2660
Bobby Fischer 2785
Reykjavik Wch 1972 (m/5)



Black to move

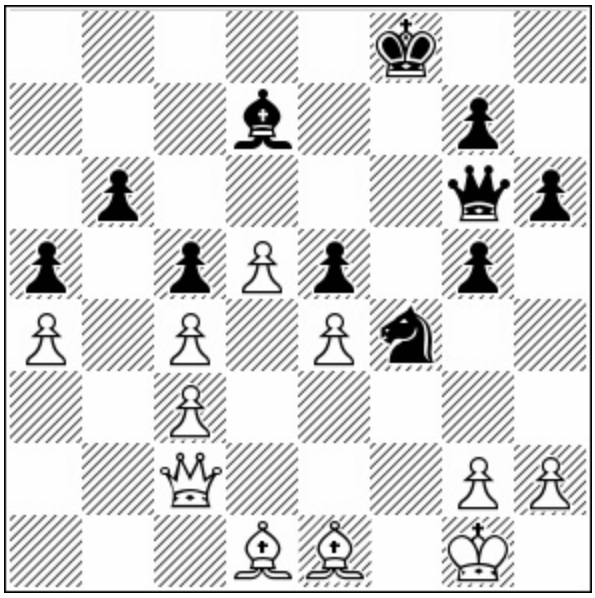
A couple moves later they reached this position. Spassky had just played 16.a4. How does Fischer react?

Show/Hide Solution

Exercise 7

16...a5! is correct. Remember the Hidden Law about pawn islands? Spassky was threatening to get rid of his pawn island with a4-a5. If Black wants to win, White's a-pawn must be fixed on a4. The fact that Black's b-pawn becomes a backward pawn isn't really problematic, as it can hardly be attacked.

Exercise 8
Boris Spassky 2660
Bobby Fischer 2785
Reykjavik Wch 1972 (m/5)



Black to move

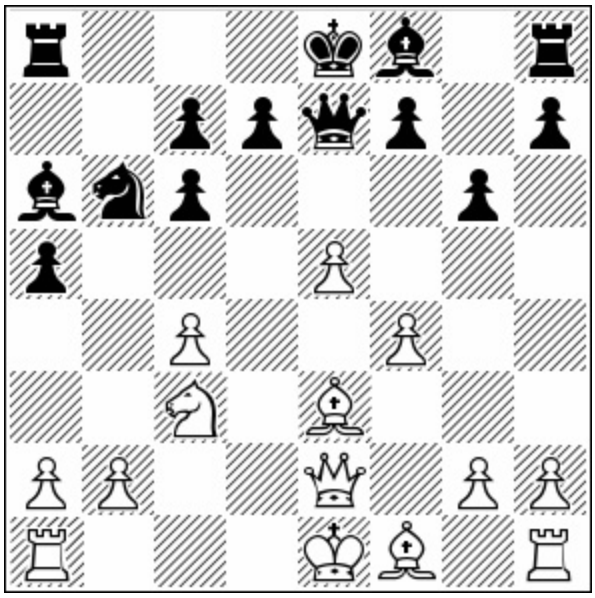
Fischer conducted the game expertly and he slowly gained the upper hand. Can you spot a good continuation?

Show/Hide Solution

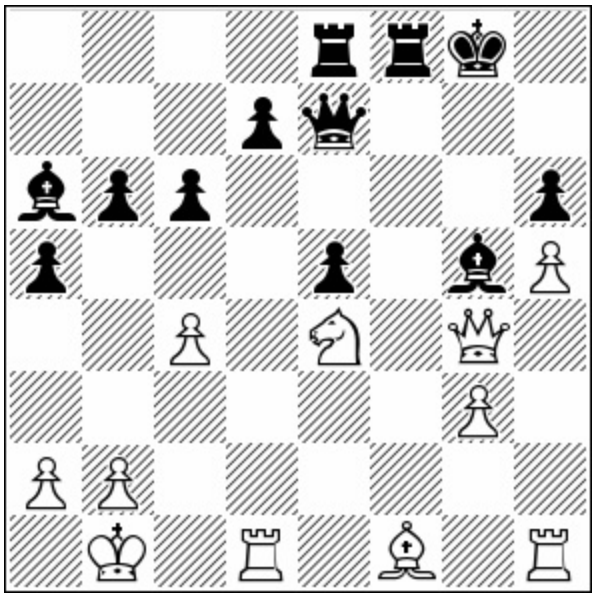
Exercise 8

27...Bxa4! At last, the fixed a-pawn goes down. Spassky resigned. After 28.Qxa4 Qxe4, the double attack on the bishop and the g2-pawn is decisive, as 29.Kf2 runs into 29...Nd3+. A beautiful game by Fischer, definitely worth studying!

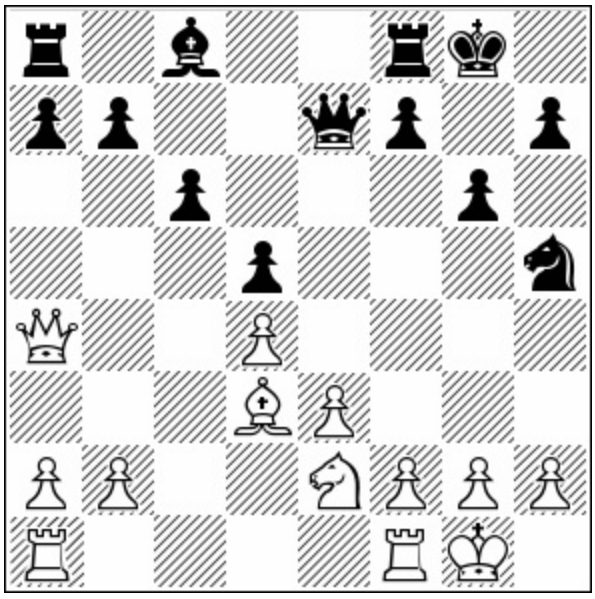
Chapter 3
Preview exercises



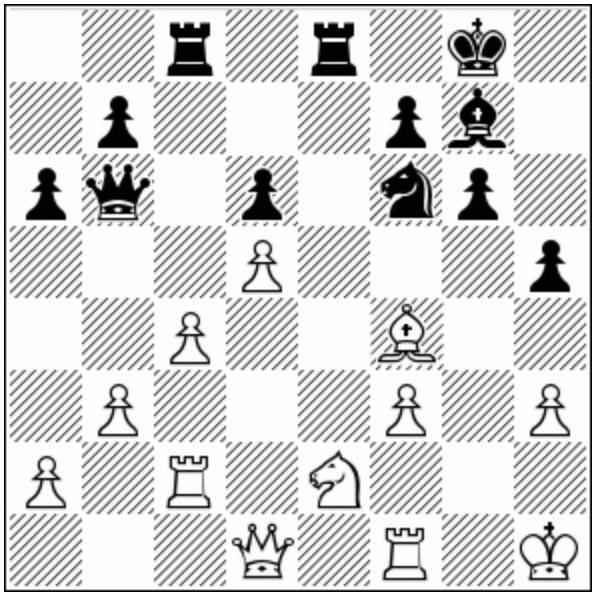
White to move
(go to the solution)



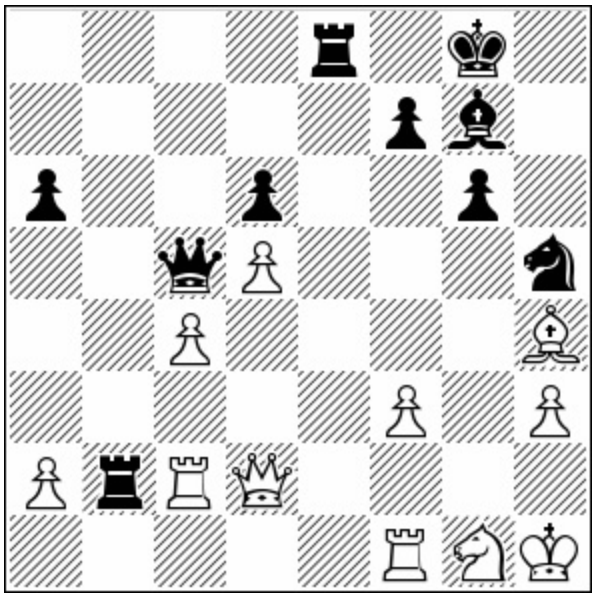
White to move
(go to the solution)



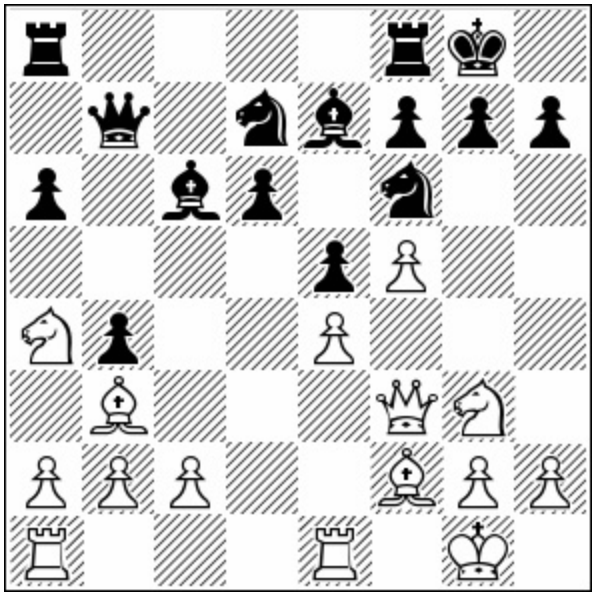
White to move
(go to the solution)



Black to move
(go to the solution)



Black to move
(go to the solution)



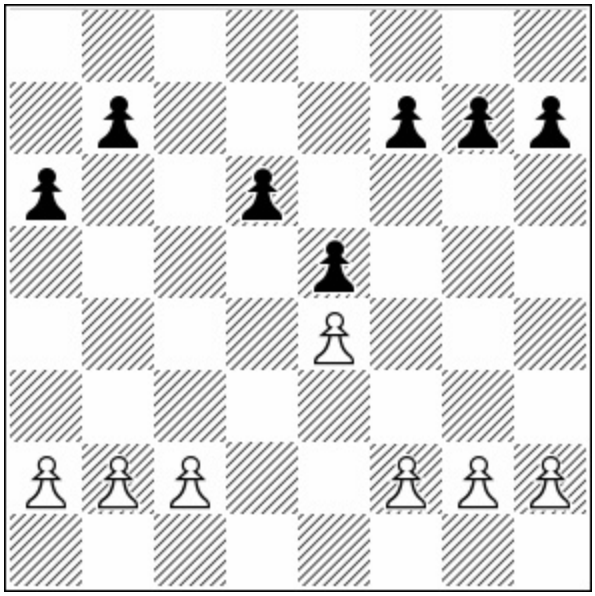
Black to move
(go to the solution)

Chapter 3

Backward pawn

Tactics is knowing what to do when there is something to do; strategy is knowing what to do when there is nothing to do. – Savielly Tartakower

We are moving on to a less doubled-edged topic: the backward pawn. During the Enlightenment, moral progress was made, and we established that all humans are equal. This principle does not apply to pawns. What is the most noteworthy victim? It is the backward pawn. A backward pawn is a pawn that has fallen behind its allied pawns on neighbouring files. Moreover, a backward pawn typically cannot be advanced safely. Hence, a backward pawn is a weak one, and it lacks opportunity. Having a backward pawn reduces the mobility of your pawn formation and it gives your opponent a permanent target.

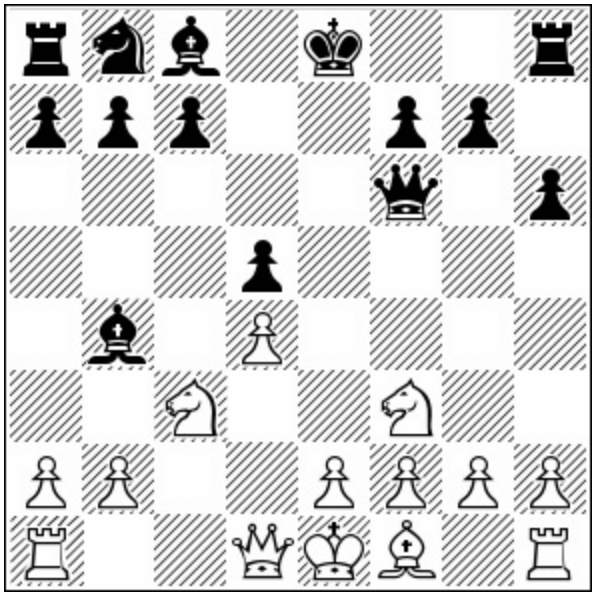


One opening that regularly features a backward pawn is the Najdorf Sicilian. The pawn structure is visible in the above diagram. White's pawn on e4 reduces the mobility of the backward pawn on d6, as an advance of that pawn would simply allow White to capture it. Hence, White obtains a strong outpost on the d5-square, and Black will have a vulnerable spot on d6. Still,

this hasn't stopped players from entering this opening, as the backward pawn is well-defended by a bishop on e7. In return, Black generally has a fair share of counterplay on the semi-open c-file. We will start off with some more problematic cases of backward pawns and revisit the Najdorf later in the chapter. We will first continue our study of Magnus Carlsen, who expertly exploited a backward pawn in the enemy camp.

Game 1 Nimzo-Indian Defence
Magnus Carlsen 2862
Levon Aronian 2797
Rotterdam 2015 (5)

1.d4 Nf6 2.c4 e6 3.Nf3 d5 4.Nc3 Bb4 5.cxd5 exd5 6.Bg5 h6 7.Bxf6 Qxf6



8.Qa4+

A thematic move in the Ragozin. You might correctly point out that the white queen isn't ideally placed on a4. Why would White spend a tempo on a move that is not very useful, while Black can simply answer with a developing move? The point is to force the knight out to c6, where it is blocking the c-pawn. Therefore, it will be complicated for Black to create counterplay with ...c7-c5 or protect the d-pawn with ...c7-c6.

8...Nc6 9.e3 0-0 10.Be2

A cautious move. The more active 10.Bd3 runs into 10...Bg4!.

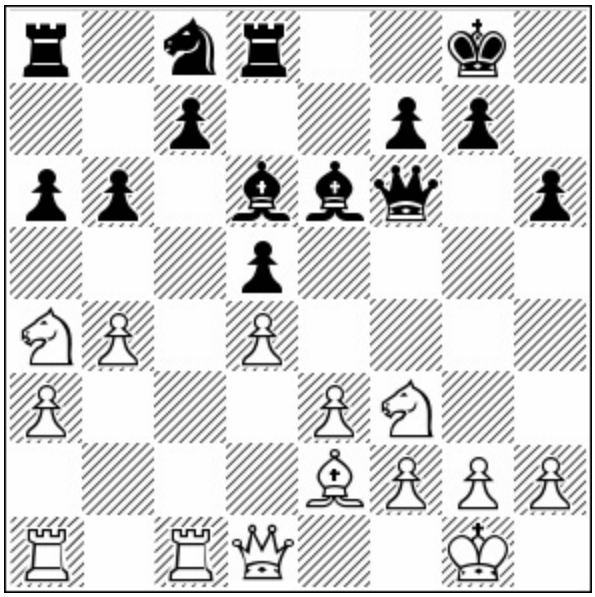
10...Be6 11.0-0 a6 12.Rfc1!? Bd6 13.Qd1 Ne7

Both sides are executing their own strategic agenda. White is preparing play on the queenside, while Black is rearranging his pieces in the centre and contemplates an assault on the kingside.

14.a3 Rfd8

This move is a bit mysterious. Instead of creating threats of his own, Aronian is reacting to what Carlsen is doing. This is often not a good sign. Something like 14...Rfe8 15.b4 Nf5 16.Na4 h5!? appears to be more in the spirit of the position. But who am I to judge the moves of a superstar like Levon Aronian?

15.b4 Nc8 16.Na4 b6



Aronian continues his reactionary chess. It is understandable that he doesn't want to allow a white knight on c5, but now a position with a backward pawn has arisen. This gives Carlsen a clear strategic aim. His objective is to keep the c7-pawn stranded. A characteristic of a backward pawn is that the square

in front of it is extremely vulnerable. Black has lost the ability to control c6 with pawns. It is also unrealistic that the c-pawn can be pushed forward. By pushing the c-pawn to c5, Black could reclaim the territory behind it, but for the moment the c5-square is firmly under White's control. In the ensuing moves, White revolves his entire strategy around the weakness of the black c-pawn.

17.Nb2!

The knight has done its job on a4, so it is heading for d3. On d3, the knight threatens to move on to e5 and it prevents counterplay originating from ...c7-c5.

17...Ne7

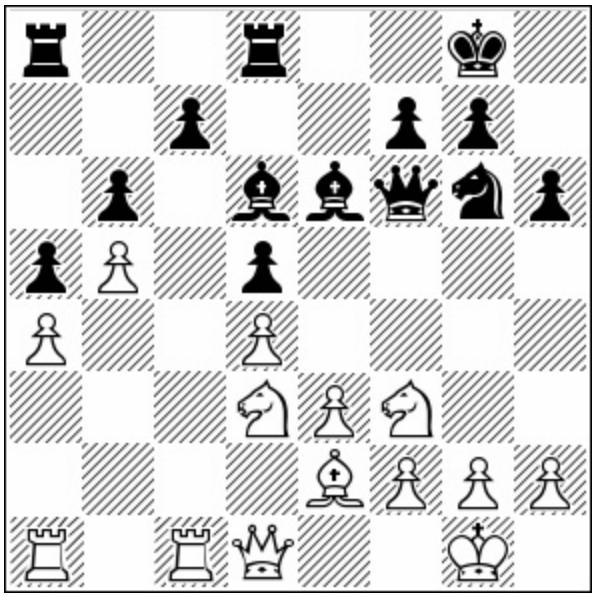
A) 17...c5?! 18.bxc5 bxc5 19.dxc5 Qxb2 20.cxd6 Nxd6 21.Nd4 isn't really a desirable exchange for Black. Yes, he got rid of his backward pawn, but he would then be left with a terrible version of a position with an isolated d-pawn. This kind of structure will be discussed in more detail in the next chapter;

B) 17...Bf5!? seems the most tenacious. The point is that 18.Nd3 can be met by 18...b5!. After this counterintuitive move, the c5-square is weakened eternally, which means that the c-pawn isn't going anywhere. However, Black's control over c4 fully compensates for that. After 19.Nc5 Nb6 20.Nd2 Nc4, Black finds an outpost of his own, which makes it really hard for White to make headway on the queenside.

18.Nd3 Ng6

Aronian has prevented White from accessing e5, but he will now have very few trumps to execute an agenda of his own. Carlsen isn't running out of fuel yet and he will slowly but surely be able to improve his position.

19.a4 a5 20.b5

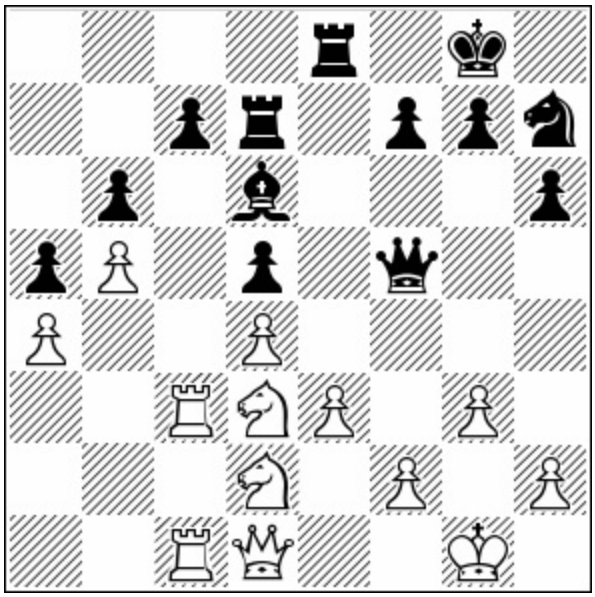


The weakness has been fixed. It is clear that Carlsen has the upper hand. Black has no compensation for the backward pawn, and it will be virtually impossible to get rid of it. Still, Black isn't down any material, and a single weakness is often insufficient for victory. Can Carlsen win?

20...Re8 21.Rc3 Bf5 22.Rac1 Rad8 23.Nd2 Rd7 24.g3 Nf8 25.Bg4!

Great technique. An exchange of pieces may alleviate the defects of a space advantage, but it won't solve the issue of a backward pawn. On the contrary, after pieces start disappearing, Aronian will have an even harder task to keep everything protected.

25...Nh7 26.Bxf5 Qxf5



Tip: an effective strategy to use in slightly better positions is to apply the *principle of two weaknesses*. The defending side is often capable of defending one weakness, but by creating multiple vulnerabilities, the defence can be overloaded.

27.Qf3!

Vintage Carlsen. He has such a keen eye for identifying the correct exchanges. Here, he is not afraid to swap the queens. Indeed, the weakness on c7 would remain, while it will be even more difficult for Black to develop counterplay.

27...Qg5?!

Understandable. Aronian doesn't want to suffer in an endgame against Carlsen, but this move allows White to make further progress.

28.h4! Qe7

Do you notice the difference? Only two moves ago, the black queen was standing actively on f5. Now, she sees her counterpart reigning on the kingside. Who says that mind games don't play a role in chess?

29.Rc6 Nf6 30.Nf4 g6 31.h5!

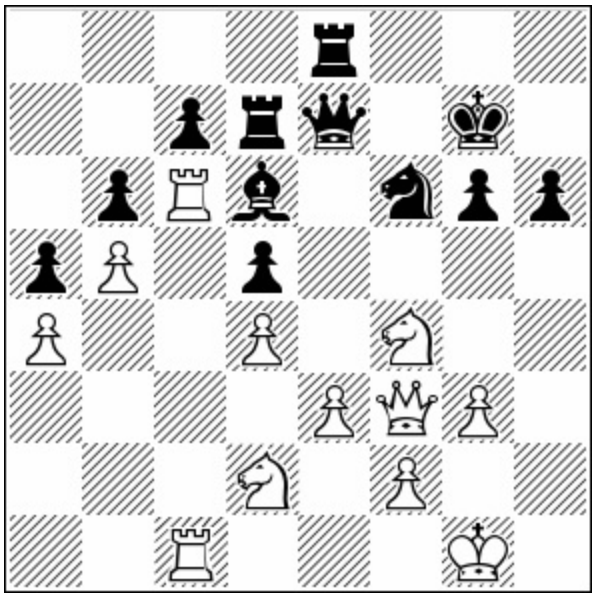
Excellent strategy, forcing Black to make another concession. Notice Carlsen effectively applying the principle of two weaknesses. As mentioned, c7 is already very weak. Yet, this weakness isn't sufficient for victory, as the black bishop does a great job defending it. Therefore, operations must be started on a second front. Note that the rushed 31.Nxd5? would have spoiled the advantage after 31...Nxd5 32.Qxd5 Bxg3!.

31...Kg7

31...g5?! 32.Nxd5!. How can the insertion of a single pawn move make a difference? 32...Nxd5 33.Qxd5 Bxg3 34.Qf3 Bd6 35.Nc4. Here, the white pawn on h4 isn't hanging, while Black has weaknesses on f5 and h6. Furthermore, White is threatening to take on d6 and then on b6. Black can't keep it all together: 35...Rb8 36.Qf5 Kg7 37.e4 Bf4 38.Ne5! Bxe5 39.dxe5 Rbd8 40.Kg2!. Black no longer has any active moves available, so White might as well improve the position to the maximum. 40...Re8 41.R1c3 Red8 42.Rf6, with a winning position. Either Rf3 or Rcc6 is going to be decisive on the next move.

32.hxg6 fxg6

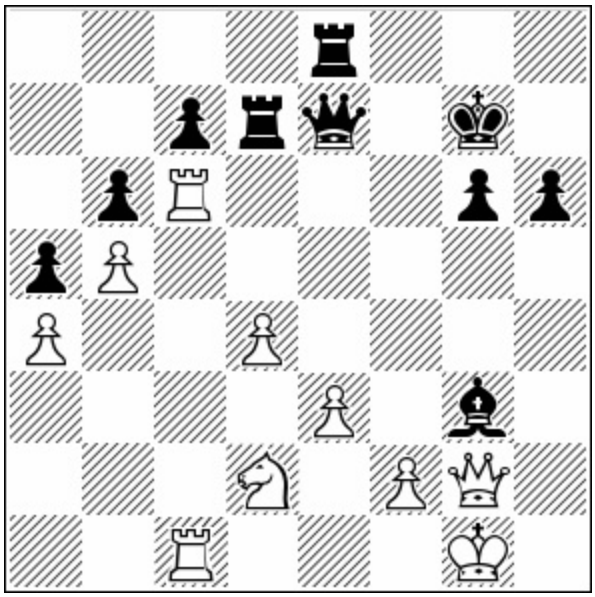
This exchange leaves the black king more vulnerable.



33.Nxd5

Somehow, the computer recommends 33.Qh1!?. I wonder if this move even entered Carlsen's mind. The remarkable idea is that Black is in a sort of zugzwang, e.g. 33...Red8 34.Qh3 Re8 35.Nd3 h5 36.Nf3 Qe4 37.Nde5 Rde7 38.Ng5 Qf5 39.Qxf5 gxf5. The black pawn structure is in ruins, and White can start collecting soon: 40.Ngf3 Ng4 41.Nh4 Kf6 42.Nd3 Re4 43.Nf4, winning as d5 is about to fall.

33...Nxd5 34.Qxd5 Bxg3 35.Qg2!



We are entering a new phase. The tactical skirmish appears to have left White's king somewhat exposed, but there are no black pieces ready to take advantage of this. Besides a weakness on c7, Black now also suffers from a weakness on g6.

35...Bd6 36.Nc4 Rf8 37.Ne5!

The finish requires some calculation. Obviously, Carlsen is ready for the task.

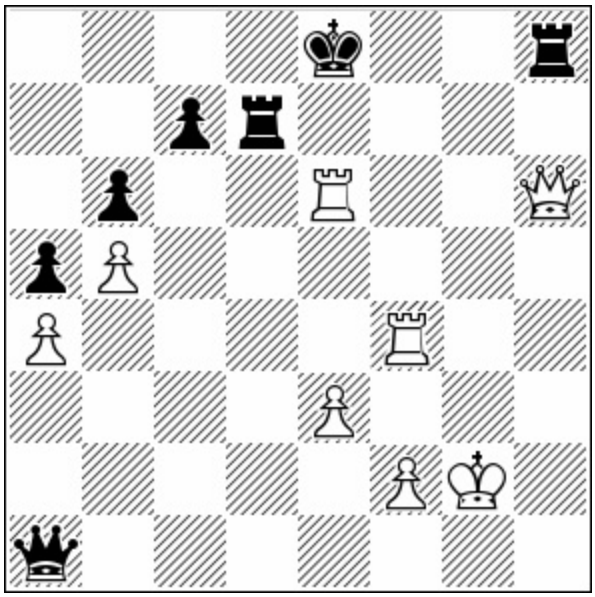
37...Bxe5

After other moves, Black loses at least the exchange.

38.Qxg6+ Kh8 39.Qxh6+ Kg8 40.dxe5 Qxe5 41.Rg6+ Kf7

The king must attempt a walk towards the safety of his pawn shelter. 41...Rg7 42.Rxg7+ Qxg7+ 43.Qxg7+ Kxg7 44.Rxc7+ is hopeless.

42.Rc4! Qa1+ 43.Kg2 Rh8 44.Rf4+ Ke8 45.Re6+



45...Re7

There is also 45...Kd8 46.Qf8+ Rxf8 47.Rxf8#.

46.Rxe7+ Kxe7 47.Re4+

Aronian throws in the towel before Carlsen can show his last point:

A) 47...Kf7 48.Qe6+ leads to a quick mate;

B) 47...Kd7 48.Rd4+!. The point. White disconnects Black's queen and rook. After 48...Qxd4, White has the intermediate check 49.Qc6+;

C) 47...Kd8 48.Rd4! Qxd4 49.Qg5+!. Gorgeous geometry. Isn't chess wonderful?

1-0

In chess, it is often good to be the one who is calling the shots. Johan Cruyff, the most famous Dutch soccer player, once said: 'If we have the ball, they cannot score'.*

> * A couple more pieces of Cruyffian wisdom that apply to chess as well: 'Whoever makes the fewest mistakes wins.' – 'Playing chess is very simple, but playing simple chess is the

hardest thing there is.' – 'Quality without results is pointless. Results without quality is boring.'

He would have been a brilliant chess player! This piece of Cruyffian wisdom appears to apply to chess too. If you are the one who is calling the shots, your opponent is merely reacting. And if you are only reacting, you aren't creating threats. Aronian's play against Carlsen was a little bit too passive. Instead of executing a plan on the kingside, Aronian was reacting to Carlsen's ideas on the queenside. Since Carlsen was already stronger on the queenside anyway, Aronian was only able to delay White's progress, but he couldn't prevent it altogether. This allowed Carlsen to deliver a strategic masterclass. Aronian's backward pawn on c7 was a source of misery that infected his entire position. After fixing the weakness, Carlsen's second objective was to control the kingside as well. He was able to create a second weakness and the advantage was sufficient for victory.

A foothold

We will now revisit the Scotch Opening. The main line of the Scotch is known for its doubled pawns, but not for a backward pawn. In the opening stage, White makes an extraordinary decision as he trades off several (dis)advantages and alters the course of the game.

Game 2 Scotch Opening
Jorden van Foreest 2691
Nigel Short 2626
Malmö 2021 (3)

1.e4 e5 2.Nf3 Nc6 3.d4 exd4 4.Nxd4 Nf6 5.Nxc6 bxc6 6.e5 Qe7 7.Qe2 Nd5 8.c4 Nb6

This time around we enter a main line. Also very popular is pinning the c-pawn first with 8...Ba6.

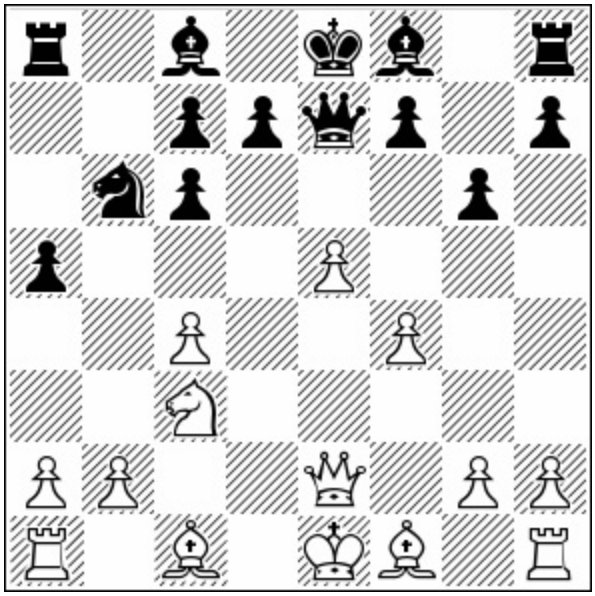
9.Nc3 a5

The second most common continuation. Usually, Black opts for 9...Qe6, freeing the dark-squared bishop.

10.f4!?

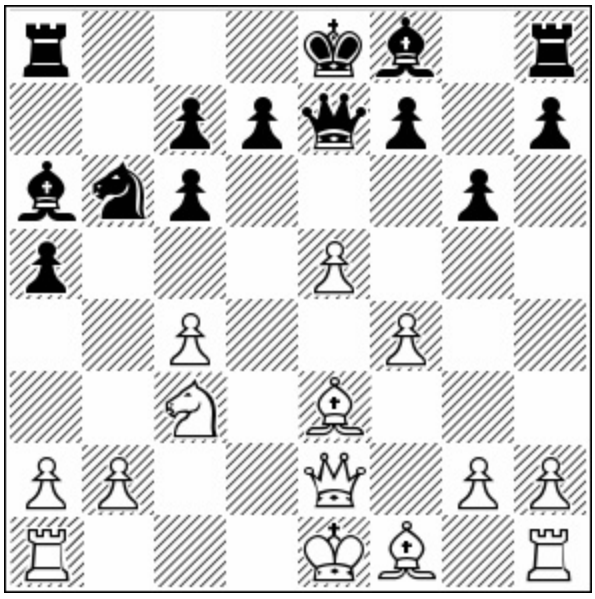
Even in this uncommon variation, Van Foreest has an idea prepared.

10...g6?!



Once again a strong grandmaster is taken off-guard by the opening preparation of the Dutchman. It is not surprising why World Champion Magnus Carlsen wanted Van Foreest in his team of seconds. This move is often part of the black scheme in the Scotch, but here it doesn't equalise. The plan of going ...Bg7 doesn't really work well in conjunction with ...a7-a5, giving White a valuable extra tempo. 10...Ba6 11.b3 0-0-0!? seems like a better way to play. On the next move, Black strikes in the centre with ...d7-d5!?, leading to a dynamic position. At least all these moves are in full harmony.

11.Be3 Ba6



White to move
(back to the exercises)

Question: Try to put yourself in White's shoes for a moment. You have prepared the game all the way up to move 10. Now, you realise that your opponent played a move that wasn't in your notes, suggesting it may be inferior. How would you try to take advantage?

12.Bxb6!!

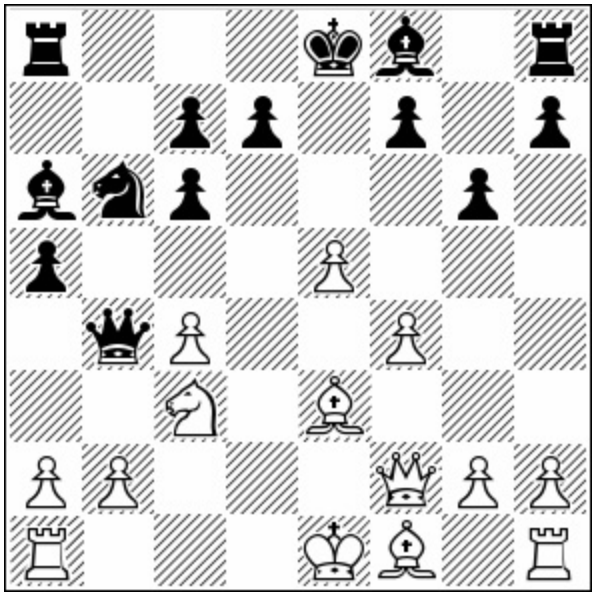
I was truly impressed when I witnessed this move. In Chapter 2, we learned about the weaknesses of doubled pawns and how they can be especially problematic if their presence creates multiple pawn islands. Furthermore, you probably knew something about the value of the bishop pair already. Here, Van Foreest throws all conventional wisdom out the window. He voluntarily gives up a great bishop on e3 for a shabby-looking knight on b6 and on top of that he repairs the black pawn structure. What did Van Foreest notice that made him commit to this decision?

It is all about the pawn that's *left behind* on d7 and the gaping hole this creates on d6. Van Foreest accurately assesses that the creation of a backward pawn outweighs all other factors in this position.

For the sake of completeness, let's consider two alternatives:

A) 12.b3?! protects pawn c4, but severely weakens the dark squares on the queenside. Black should get good chances after 12...Bg7, aiming to open the position with ...f7-f6!;

B) Giving a pawn with 12.Qf2!? is interesting too. Now, 12...Nxc4 13.Bd4! leads to a very promising position. White will follow up with 0-0-0 and obtain excellent piece play. However, instead of accepting the pawn, Black can try to muddy the waters with 12...Qb4!.

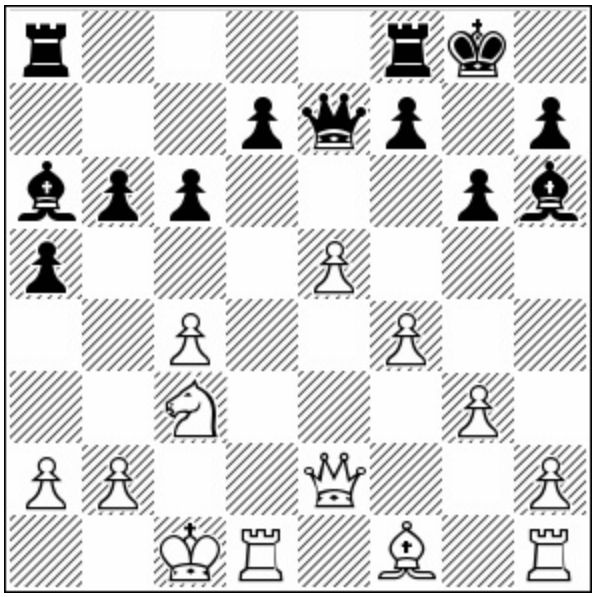


analysis diagram

Here, White should probably enter a forcing variation with 13.c5 Nd5 14.a3 Qb3 15.Nxd5 cxd5 16.Bxa6 Rxa6 17.0-0 Bg7. White has a clear edge; however, the situation in the game is more clear-cut.

12...cxb6 13.0-0-0 Bh6 14.g3 0-0

Another critical moment arises. It is clear that White has great control over the d6-square, which severely limits Black's options. Now, White needs a plan to further capitalise on his advantage.



15.h4!

Van Foreest opens a second front on the kingside. The h6-bishop especially starts to feel uneasy.

A) 15.Rd6?, occupying the outpost, looks logical, but it fails for tactical reasons. Black counters with 15...f6!, threatening to take on e5 and thereby reducing White's influence over the d6-square. White has no way to get an advantage: 16.Bh3 fxe5 17.Rxd7 Qc5 18.Na4 Qxc4+ 19.Qxc4+ Bxc4 20.Nxb6 Bd5!, with an equal endgame;

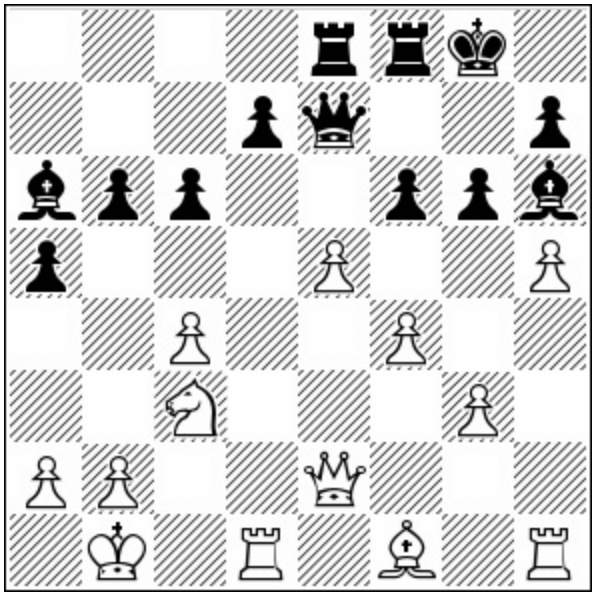
B) If you were in favour of the prophylactic 15.Kb1!, sidestepping the pin on the f4-pawn, you earn full points too! See 15...f6 (15...Rae8 is no longer pragmatic. White can simply continue with 16.Ne4, with a huge attack. The key difference is that Black no longer has the tactical resource ...Qxe5!) 16.exf6 Qxe2 17.Bxe2 Rxf6 18.Rxd7. Black has the bishop pair as compensation for the pawn, but White has great chances to win this position.

15...Rae8 16.Kb1?!

Sometimes, prophylaxis can be a bit too slow. Every tempo matters in a position of opposite castling. There was no need to wait. Instead White should have played 16.h5! g5 (now this reply is forced. After other moves,

the capture on g6 is immediately decisive) 17.Kb1 Kh8 (17...f6 18.Ne4 transposes back to the game, while Black is deprived of a key alternative). Here, White can already win an exchange with 18.Ne4 gxf4 19.gxf4 Bxf4 20.Nf6 Bxe5 21.Nxe8.

16...f6 17.h5

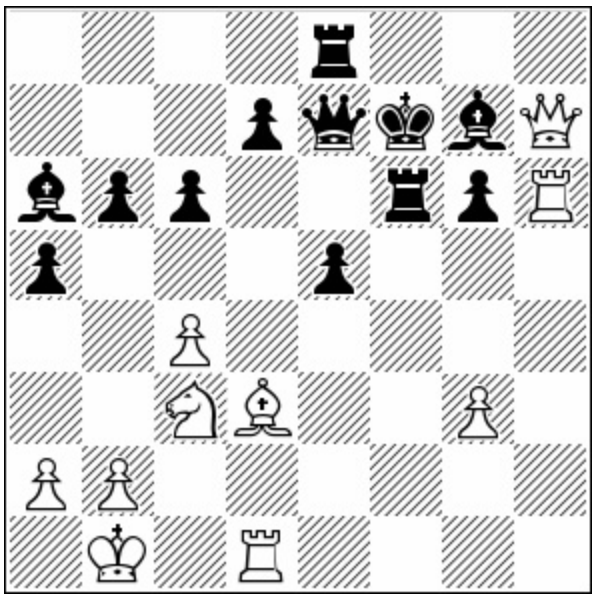


17...g5?

After another mistake, the situation becomes untenable. By making too many pawn moves in front of his king, Black allows the position to open up, favouring the side with the safer king. Currently, Black appears to be slightly better developed, but that picture is deceiving. The bishop on a6 will have a difficult time contributing to the battle, while all of White's pieces can easily be mobilised.

Interestingly, even very suspicious positions often turn out to be defensible: 17...fxe5 18.hxg6 Bg7! is a great attempt to defend this position. Now, taking on h7 with the pawn is undesirable, as the pawn can be used as a shelter. 19.f5! is White's best try. By leaving the pawn on e5 alive, the activity of the black army is greatly diminished: 19...hxg6 20.Qh2 (20.fxg6 looks scary, but after 20...e4, the white knight can no longer join the attack. Attempts to go

for mate on h7 fail, because Black can always hide on f8 by moving the f8-rook. White's problem is that he can't break through on the dark squares) 20...Rxf5 21.Qh7+ Kf7 22.Rh6 Rf6 (treading a very thin line) 23.Bd3



analysis diagram

23...d5!. With active play, the bishop on a6 is included in the battle. Notice how Black can activate the backward pawn on d7 in the variations where he can save himself:

A) 24.Bxg6+ Kf8 25.cxd5 Rd8! leaves White without a good follow-up. The situation on the kingside looks dire, but Black has enough defenders. 26.Ne4 Rxd5 27.Rhh1, and it is White who must be careful already. After other moves, Black can play ...Bd3+, with decisive effect. 27...Rxd1+ 28.Rxd1 Rf1 29.Qh5. After the rook trade, the position is balanced. The strong knight on e4 and the weak black king guarantee that White is not worse, but there is no longer any fire power to deliver mate;

B) 24.Rxg6 Kf8 25.Rxf6+ Bxf6 26.Qg6 Qf7 27.cxd5 Bxd3+ 28.Qxd3 cxd5 29.Nxd5, with some pull due to the safer king, but Black should be able to hold.

18.Ne4!

Black is forced into an awkward situation. A capture on e5 gives up control over square g5.

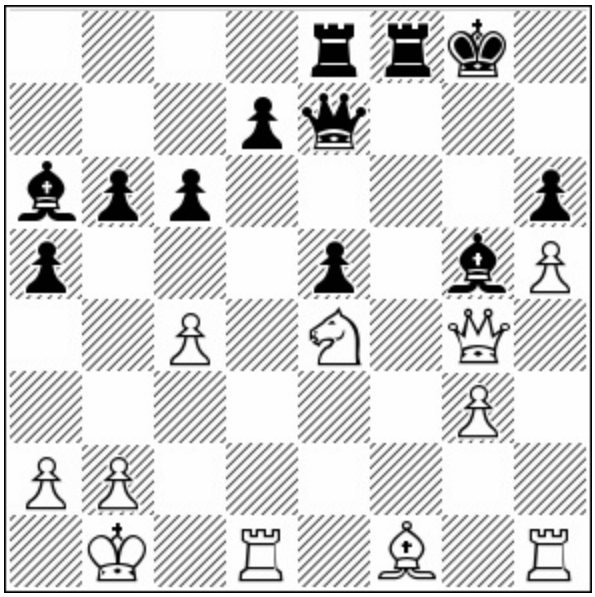
18...fxe5

The alternatives weren't really satisfactory either:

A) If 18...gxf4, 19.Nxf6+ is decisive;

B) 18...d5!? was interesting, but 19.Nd6! wins at least the exchange. If Black moves the rook, he allows 20.Nf5, winning a piece.

19.fxg5 Bxg5 20.Qg4 h6



White to move
(back to the exercises)

Question: Another critical situation arises. For the moment, the black bishop is keeping the king secure. How can White increase the pressure?

21.Rd6!

Of course. The rook finally occupies the hole on d6. The threat is to take the pawn on h6. Black is completely devoid of counterplay. None of his pieces

fulfill an active role, but the most unsettling aspect is that he has no pawn breaks. Since White lost his advanced pawn on e5, the d6-square is no longer an outpost. But the hole is still extremely vulnerable. I would like to coin a new term that captures this situation: a *foothold*.

> A foothold is the name for a square in front of an enemy backward pawn. This square is particularly vulnerable, as it can no longer be protected by opposing pawns. Occupying a foothold with a piece is a strong strategy, as it fixes the backward pawn.

21...Kh8 22.Bd3 Bc8

This move illustrates Short's desperation. The bishop returns to its starting square where it stares at the pawn that is the cause of all of Black's misery.

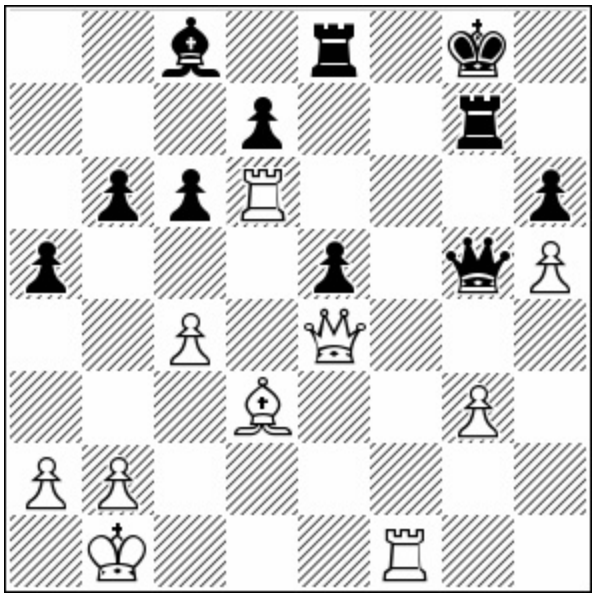
23.Rd1 Rg8 24.Nxg5!

White doesn't mind trading pieces if this means that an important defender is eliminated. Black is essentially playing without a bishop.

24...Qxg5 25.Qe4 Rg7 26.Rf1

The position plays itself.

26...Kg8



All of White's pieces are in prime attacking positions. Still, Van Foreest needs to find a way to break through.

27.c5!

A check on c4 would be lethal. Furthermore, the d6-square transforms into an outpost again.

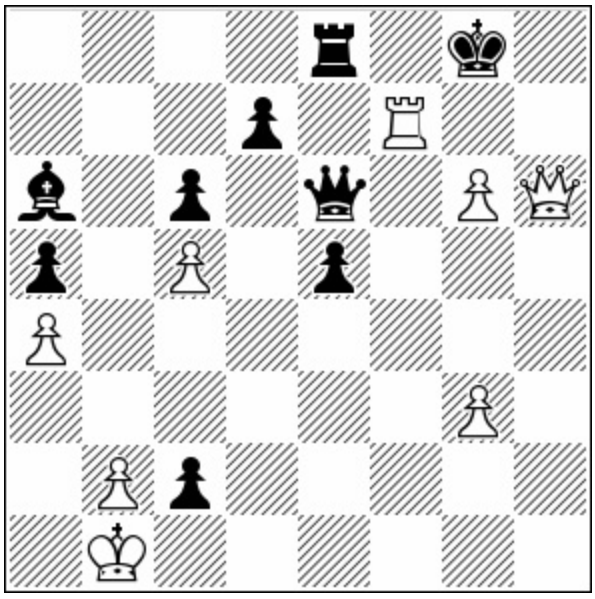
27...b5 28.a4 Ba6 29.Rg6 Rxg6 30.hxg6 Qe7 31.Rf7 Qe6 32.Qh4

The pawn on h6 is about to fall and Black can do nothing about it.

32...b4 33.Bc2!

An important move, preserving the bishop and not allowing any counterplay. Van Foreest calculated the following sequence nicely.

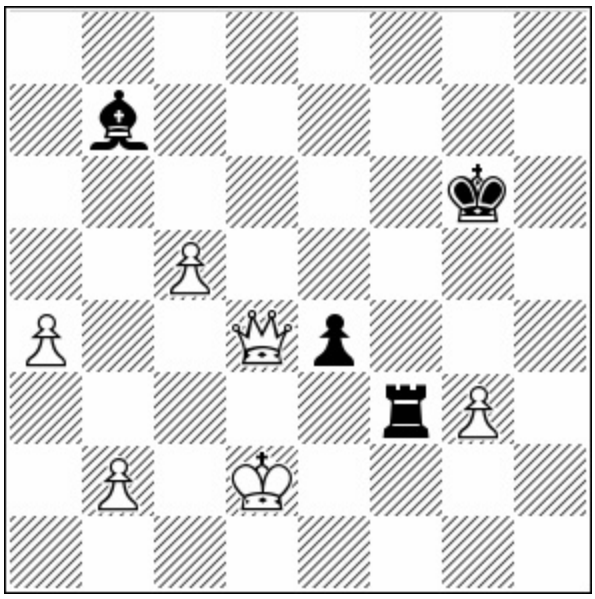
33...b3 34.Qxh6 bxc2+



35.Kc1!

There are no checks! Black now must give up his queen if he wants to avoid mate. Short could have safely resigned here, but he decided that his opponent needed to show his technique.

35...Qxf7 36.gxf7+ Kxf7 37.Qh5+ Kf8 38.Qf5+ Kg7 39.Qxd7+ Kf8 40.Qxc6 Bc8 41.Qe4 Kg7 42.Kxc2 Kf6 43.Qc6+ Kf7 44.Qc7+ Kf6 45.Qxa5 e4 46.Qc3+ Kg6 47.Qe3 Rf8 48.Kd2 Bb7 49.Qd4 Rf3



50.b4!

A practical way to finish the game. White gives up the queen because the bishop won't be able to stop the avalanche on the queenside.

50...Rd3+ 51.Qxd3 exd3 52.b5 Be4 53.c6 Kf6 54.a5 Ke7 55.a6 Kd6 56.a7 Bxc6 57.bxc6 1-0

A single pawn of his own ruined Short's day. Van Foreest occupied the weak square in front of the backward pawn at the right moment and he was able to completely paralyse the black position.

In this book, a large variety of strategic guidelines are discussed. Matters become complicated when those different guidelines collide. Of course, there is no concrete hierarchy of laws. The magnitude of a weakness shouldn't be judged in isolation. Instead, the ramifications must be evaluated in accordance with the context. Still, some weaknesses are worse than others. In the last two games, we could observe the terrible consequences of a backward pawn. The main downsides of doubled pawns are that they are inflexible and can easily become targets. Contrary to doubled pawns, a backward pawn can have a suffocating effect on a position.

> The suffocating effect of a backward pawn can paralyse an entire position. Hence, a backward pawn can often be regarded as a greater evil than similar strategic deficiencies.

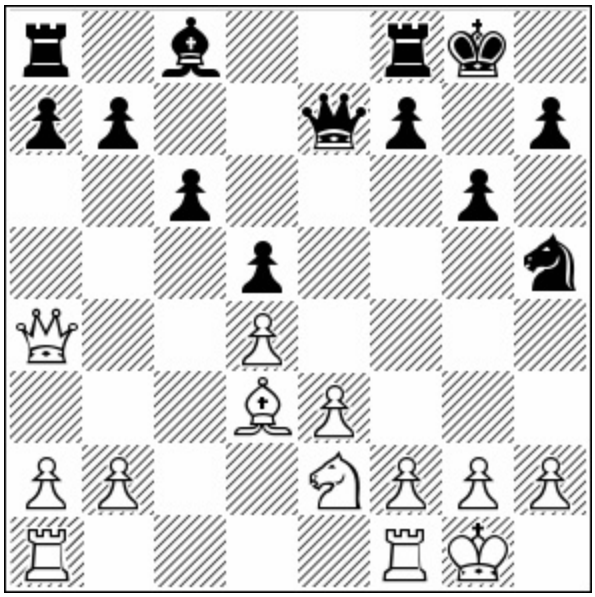
This clarifies why Van Foreest judged the advantages of creating an enemy backward pawn of higher value than the accompanied negative effects of his 12th move. Admittedly, the ability to make these assessments correctly requires exceptional intuition. It takes a lot of training to cultivate. Let us therefore just appreciate it when these decisions are made correctly!

Minority attack

The next game of this chapter features the famous Carlsbad structure. This structure is characterised by one side missing the c-pawn and the other side missing the e-pawn.

A common plan in the Carlsbad is the minority attack, the aim of which is to create a backward pawn in the enemy camp.

Game 3
Robert Byrne
Erich Eliskases
Helsinki Olympiad 1952 (1)



White to move
(back to the exercises)

We have here a position that emerged from a Queen's Gambit Declined. The pawn structure that manifests on the board is so common that it has its own name: the Carlsbad Structure. This structure is named after a city in the west of the Czech Republic, which held an elite tournament in 1923. In that tournament, this variation of the Queen's Gambit appeared multiple times.

The Carlsbad Structure features two common plans for White. The main plan is an advance in the centre with e3-e4, often first prepared by f2-f3. This plan will be discussed in Chapter 6. The other plan features in this game.

14.b4!

The start of a minority attack. White's plan is to push b4-b5 and then exchange on c6, creating a backward pawn.

14...a6

Black stops the advance temporarily, but he can't stop it indefinitely.

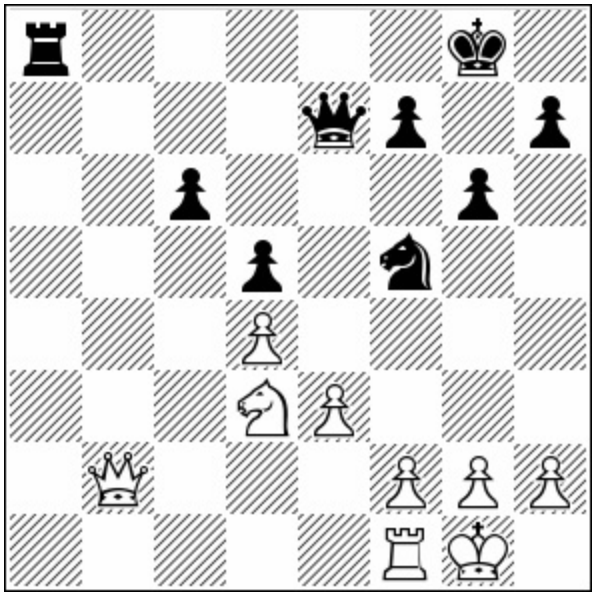
15.Qb3 Be6 16.a4 Rfc8 17.Qb2!?

An interesting prophylactic move. White wants to avoid a position where b4-b5 can be answered by ...c6-c5.

17...Ng7 18.b5 axb5

18...cxb5!? is an intriguing way to avoid the backward pawn. Still, after 19.axb5 a5 20.b6!, I like White's chances. The passed a-pawn feels more like a weakness than an asset. Furthermore, White has a space advantage and more active pieces.

19.axb5 Bf5 20.Nf4 Bxd3 21.Nxd3 Nf5 22.Rxa8 Rxa8 23.bxc6 bxc6



White's plan has worked out fantastically. Black is saddled with a terrible weakness on c6. With only one weakness, Black certainly has chances to

hold, but he will have to suffer for the remainder of the game.

24.Rc1 Nh4 25.Qe2

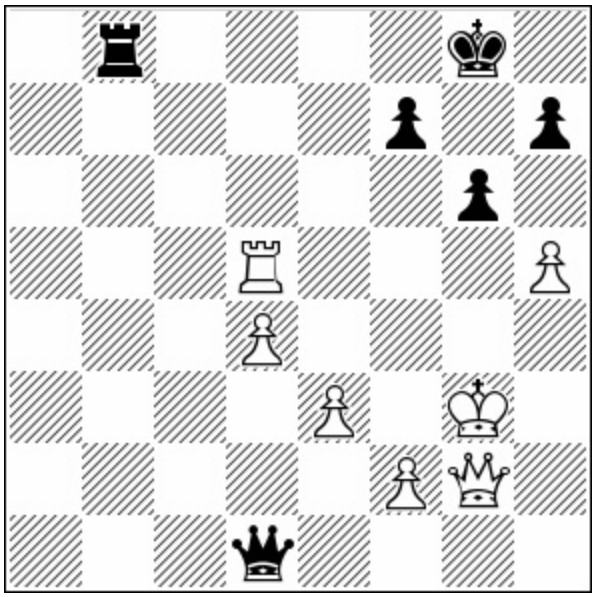
White wants the queen to contribute to the defence of the king, but he had an interesting alternative available.

A) 25.Rxc6? Nxg2! is a sweet combination Black is banking on: 26.Kxg2 Qe4+ 27.Kg3 Qxd3. Since White doesn't have any immediate threats, Black should be fine in this position with equal material;

B) 25.Qb6!?, going after the backward pawn on c6 at once, is an attractive alternative. Still, after deep analysis, the conclusion is that Black can hold. If you don't have any affinity for some dazzling computer variations, you might want to skip ahead: 25...Nxg2! (obviously, Byrne wanted to avoid this tactical shot by playing Qe2. After the inferior 25...Qe4, White obtains a much better version of the game: 26.Ne1 Rc8 27.Qb7 Qe8 28.Nd3. Black is extremely passive, so White's winning chances are great) 26.Kxg2 Qe4+ 27.Kg3 Qxd3 28.Qxc6 (contrary to Variation A, White has some immediate threats, putting Black under pressure) 28...Rd8 29.Qf6 Rf8. Black's rook is forced into passivity. Can White capitalise? Let's consider two options:

B1) 30.Qf3. Great geometry. The pawn on d5 comes under fire and will be hard to defend: 30...Qb5! (the only defence. Black admits that he won't be able to defend d5 successfully, so he must counterattack. If 30...Rd8?, 31.Rc7 is crushing) 31.Rc5 Qf1 32.Rxd5. White has won a pawn, but Black can now become active: 32...Rb8!. (the only move that draws. It took me some effort to figure out why the identical-looking 32...Ra8 fails)

B11) 33.h4!? Qg1+ 34.Qg2 Qd1 35.h5.



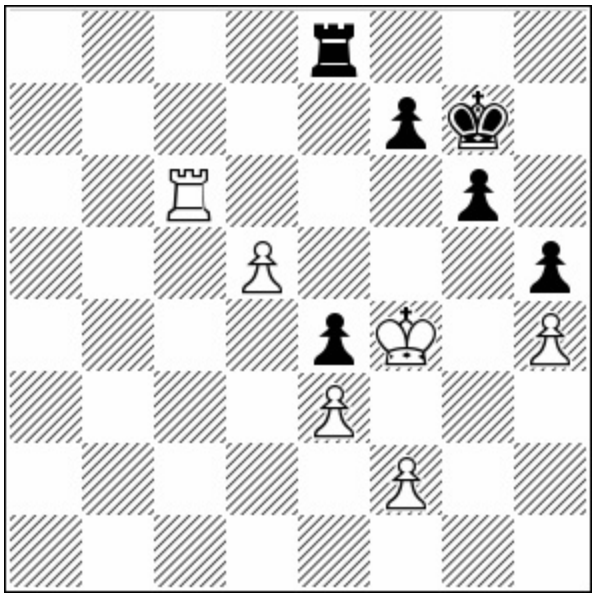
analysis diagram

Now the threat of 36.h6, creating a mating net, is huge. Still, Black is not running out of hope: 35...Rb6!! 36.h6 f5 37.Kf4 Qh5!. Somehow White has no mate. Since h6 is about to drop, White should now force perpetual check. Why was 32...Rb8 required? In case of 32...Ra8, the black rook would now stand on a6, and White could force checkmate with Rd8 and Qb7. Mystery solved!;

B12) 33.Rd7 Qg1+ 34.Qg2 Qb1! (the only move again, can you believe it? The rook needs to be protected. Check e.g. the alternative 34...Qc1? 35.Rxf7!! Kxf7 36.Qd5+, and no matter where the king goes, the black rook will always drop, leaving White with an easily winning endgame) 35.Qd5 Qg1+, and White can't make progress.

B2) 30.h4!? h5! 31.Qf3. Now, the defence with ...Qb5 and ...Qf1 won't be appropriate since White has additional defensive options. But somehow Black can flee into a rook endgame now: 31...Qe4! (31...Qb5 32.Rc5 Qf1 33.Rxd5 Qg1+ 34.Kh3 Qf1+ 35.Kh2, and the white king is safe) 32.Qxe4 dxe4 33.Kf4 (33.Rc5, with the idea of Re5, looks interesting, but after 33...Rb8 34.Re5 f5 35.Re7 Rb2, Black has enough activity) 33...Re8 34.Rc6!?. The black e4-pawn is weak and the white king is far more active.

Still, this is not sufficient to win: 34...Kg7! 35.d5.



Black to move

analysis diagram

Question: White is threatening to go after the e4-pawn. Can you figure out the only move that draws?

35...f6!. It turns out Black can even allow a pawn endgame down a pawn. The key idea is that Black wants to set up a fortress with ...Re5!. 36.Re6 (36.Rc4 Re5 37.Rd4 Kf7 38.d6 Re8 39.d7 Rd8 40.Kxe4 Ke6, and the white pawn drops too) 36...Rxe6 37.dxe6 Kf8 38.Kxe4 Ke7 39.Kd5 g5!. Now, it finally becomes clear why the inclusion of h2-h4 and ...h7-h5 is good for Black. It gives him a chance for an immediate breakthrough. With pawns on h2 and h7, the pawn endgame would be hopeless. This clarifies why Black couldn't allow an exchange of queens in Variation B1.

These variations really illustrate the high margin of error in chess. Even after a couple of small inaccuracies, a position often remains in drawish territory with perfect defence. Really grave erorrs are required to push a position over the line into winning territory. Maybe our own flaws are in fact creating the beauty in chess. With smart play, we can force our opponents into inferior positions where mistakes are bound to happen. This is exactly what happens

here. Rather than entering forcing variations, Byrne instead opts to pose more practical problems.

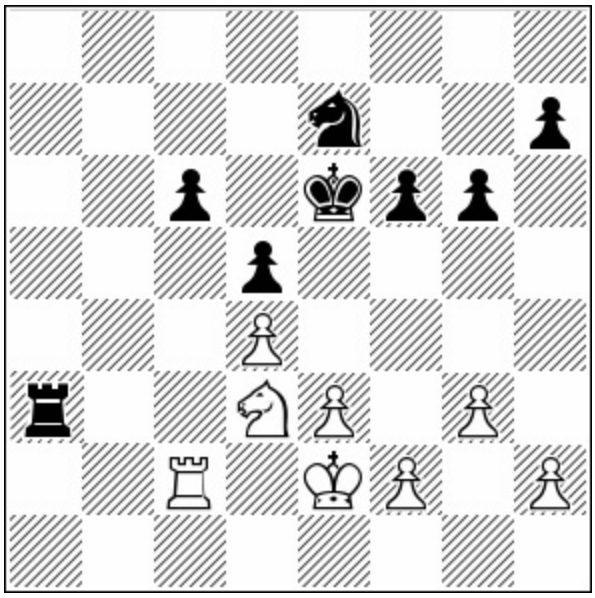
25...Ra3 26.g3 Qe4 27.Ne1 Nf5 28.Qc2!

Very practical play by Byrne. Without queens on the board, White no longer has to worry about the safety of his king.

28...Qxc2?!

28...Ne7 was preferable. White is still better, but he doesn't have a clear path forward. If White decides to exchange on e4, Black is simply too active.

29.Rxc2 Ne7 30.Kf1 f6 31.Ke2 Kf7 32.Nd3 Ke6



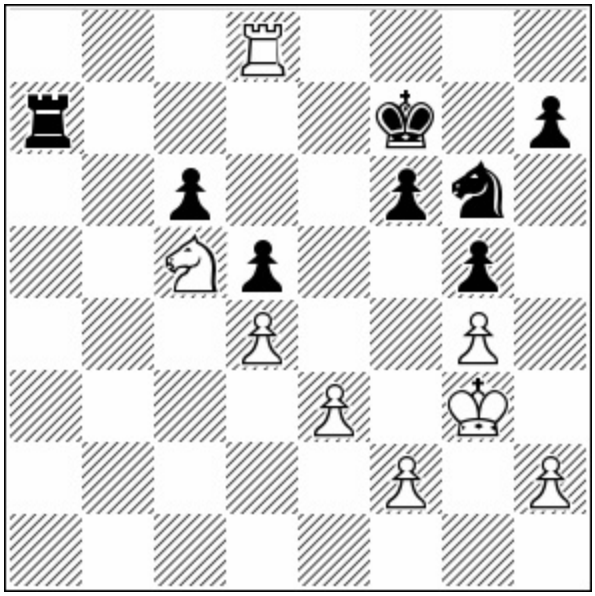
33.g4!

White wants to grab space all over the board. Black appears to be active at the moment due to the flexible rook on the a-file, but he has no active plans due to the weakness on c6. White can slowly try to make progress and ultimately provoke Black into making errors.

33...Ra7 34.Rb2 g5 35.Rb8 Kf7 36.Rh8 Kg7 37.Rd8 Rc7?

Rooks need to breathe! This move may very well have been the decisive mistake. The rook needs to stay on the a-file, preferably on a2.

38.Nc5 Kf7 39.Kf3 Ng6 40.Kg3 Ra7



41.Rd6!

Great technique by Byrne. The white rook acts like a true infiltrator. Its counterpart is forced back into passivity, and the entire black position will be paralyzed.

41...Rc7

If 41...Ne7?, 42.Nd7! Ng8 43.Nb8! wins. Knights are underrated pieces!

42.Na6 Rc8 43.Rd7+ Ne7 44.Nc5 Ra8 45.Rd6 Ra1

Black tries to play actively again, but now White crashes through on f6.

46.Nd7! f5 47.Ne5+ Kg7 48.h3 fxg4 49.hxg4 Rc1 50.Re6 Ng6 51.Rxc6 1-0

A minority attack was executed successfully, putting Black on the back foot.

The ensuing endgame was hard to defend, and with great technique Byrne managed to achieve victory.

Transforming the weakness

Having observed three games where a backward pawn led to a positional disaster, it is now time to move to situations where the defending side can find counterplay. We will visit the Najdorf Variation of the Sicilian, perhaps the most popular variation in the entire game of chess! In the Najdorf, Black often takes on a backward pawn voluntarily. Obviously, if Black is willing to play with a backward pawn in thousands of games, it can't be all that bad, right? Let's have a look.

Game 4 Sicilian Defence
Viswanathan Anand 2769
Garry Kasparov 2851
Linares 2000 (4)

1.e4 c5 2.Nf3 d6 3.d4 cxd4 4.Nxd4 Nf6 5.Nc3 a6

Kasparov stayed faithful to the Najdorf throughout his entire career. Due to his tremendous experience, he wasn't afraid to enter this opening against anyone. In this game, Kasparov showcases his incredible understanding of the Najdorf structures.

6.Be2

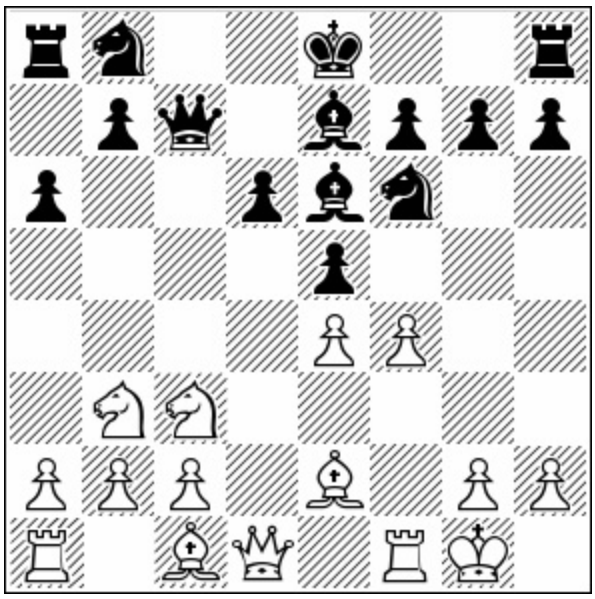
A modest but respectable approach. The most popular continuation is the English Attack, starting with 6.Be3. Nowadays, a lot of attention has shifted back to the most aggressive move 6.Bg5, followed by a gambit of the b2-pawn if Black answers with 6...Qb6. The ensuing position is one of the most complex in the game. The variation is particularly suited for those who love deep opening preparation. Interestingly, White has tried 34 different continuations on the 6th move, 21 of which may be regarded as serious attempts. Those serious attempts include odd-looking moves such as 6.a3,

6.Qd3 and in particular 6.Rg1!?. The calmer approach that is played in this game is of course very natural and not so theory-heavy.

6...e5

There we go – with this thematic thrust in the centre, Black leaves his pawn on d6 behind.

7.Nb3 Be7 8.0-0 Be6 9.f4 Qc7



10.Nd5?!

A common move in the Najdorf. White occupies the strong square on d5, following conventional wisdom that the square in front of a backward pawn can be employed as a foothold. The intricate aspect of the move is that it allows Black to change the nature of the position. After other moves, Black ideally tries to get rid of the weakness by achieving ...d6-d5!, a theme that we will also see in the next game. A sample line: 10.f5 Bc4 11.a4 Nbd7 12.a5 0-0 13.Be3 (13.g4!? is a logical continuation for White that hasn't been played before in a serious game. Stockfish is suddenly very enthusiastic for White. So, if you want a free novelty, there you go!) 13...b5 14.axb6 Nxb6 15.Kh1 d5!. Black achieves the desirable breakthrough and obtains a comfortable

position.

10...Bxd5!

Obviously, with his queen under attack, Black had to react. In the Najdorf, Black usually decides to give up the bishop for the knight, creating an unbalanced situation where he is fighting against the bishop pair. The main downside of a capture with the knight is that the bishop comes under attack immediately. Losing a tempo is something that Black cannot afford at this stage.

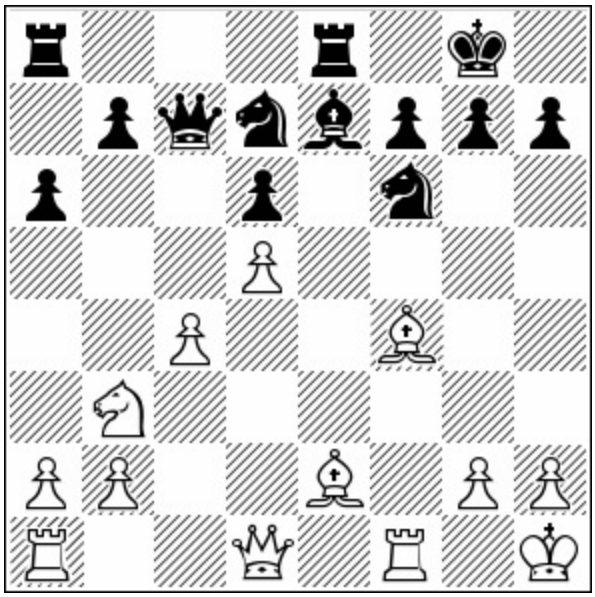
11.exd5

The structure in the centre has transformed. Yes, Black still has a backward pawn on d6, but since White no longer has access to the weak square in front of it, the situation isn't nearly as worrisome. In general, footholds should be occupied by pieces, rather than pawns.*

> * As Siegbert Tarrasch already pointed out: 'Weak points or holes in the opponent's position must be occupied by pieces not pawns.'

What are the bonuses for White that made Anand enter this variation? Besides the bishop pair, White also has a space advantage. Still, the situation is quite similar to Kozul-Damljanovic, the second Benoni game in Chapter 1. Since one pair of pieces has been exchanged, the space disadvantage is not very unsettling for Black. He has access to enough good squares for his pieces. Another benefit for Black is that he is the one controlling the tension in the centre. A capture on e5 grants a beautiful outpost to the black knight.

11...Nbd7 12.c4 0-0 13.Kh1 Rfe8 14.Be3 exf4 15.Bxf4



At first sight, White appears to have a promising position. He has the bishop pair, more space, more activity, and a queenside pawn majority to work with. Still, Kasparov is completely in his element. Black has no real weaknesses. The pawn on d6 can be defended comfortably. White's space advantage is also a bit deceiving, since Black has firm control over the dark squares, making it hard for White to achieve anything tangible.

15...Bf8!

Superb understanding of the pawn structure. The bishop is heading for g7, while Black is taking further control over e5, preparing to move a knight in the centre.

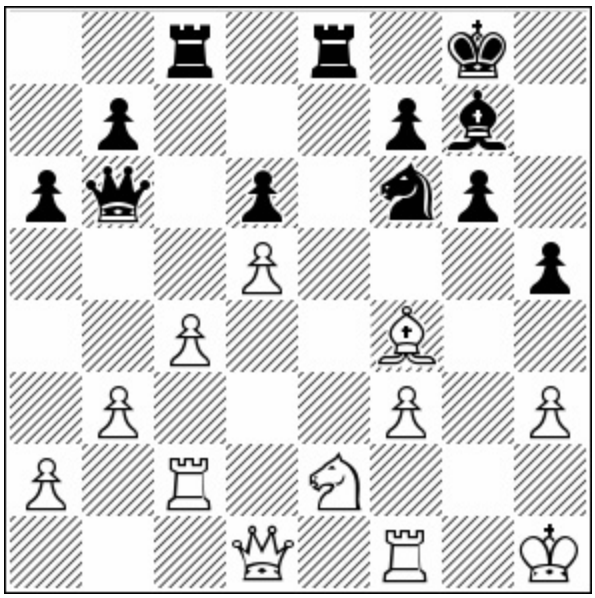
16.Rc1 Qb6 17.Rc2 g6 18.Bf3 Rac8 19.Nc1

White's manoeuvres are slow, and it is not even clear where he is aiming at. Kasparov is slowly grabbing the initiative.

19...Ne5 20.b3 h5

Vintage Kasparov. He is active all over the board. After securing the dark squares, Kasparov is now increasing his control over the light squares.

21.h3 Bg7 22.Ne2 Nxf3! 23.gxf3



Black to move
(back to the exercises)

It is hard to pinpoint where Anand went wrong, but he suddenly finds himself in a terrible situation. Black has well-placed pieces, while the white pawn structure is in ruins. Now, Black must find a way to capitalise on his advantage.

23...Qc5!

Outstanding. The plan is to play ...b7-b5 and create a weakness on c4. The c4-pawn is now pinned, due to the awkward position of the rook on c2.

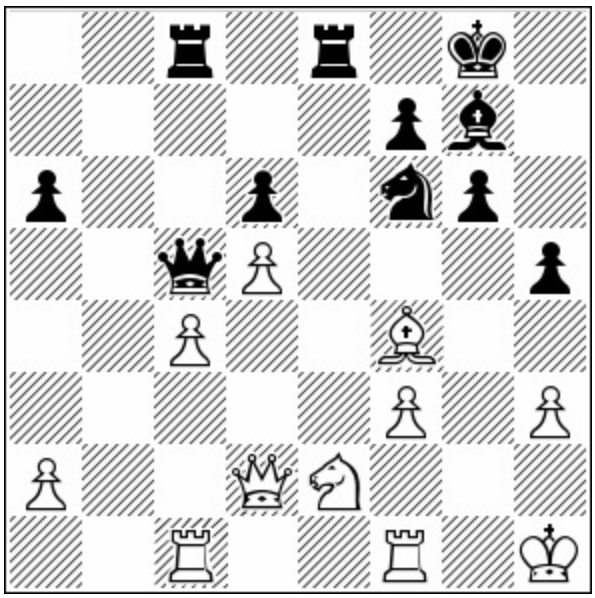
24.Rc1 b5

Obviously, Black goes for the pawn advance anyway.

25.Qd2

25.cxb5 Qxb5 26.Nc3 Rxc3! 27.Rxc3 Nxd5, and the white position falls apart, as 28.Rc4 Nxf4 29.Rxf4 Re2 is devastating.

25...bxc4 26.bxc4



The situation has changed 180 degrees! Suddenly, it is not Black but White who suffers from a backward pawn.

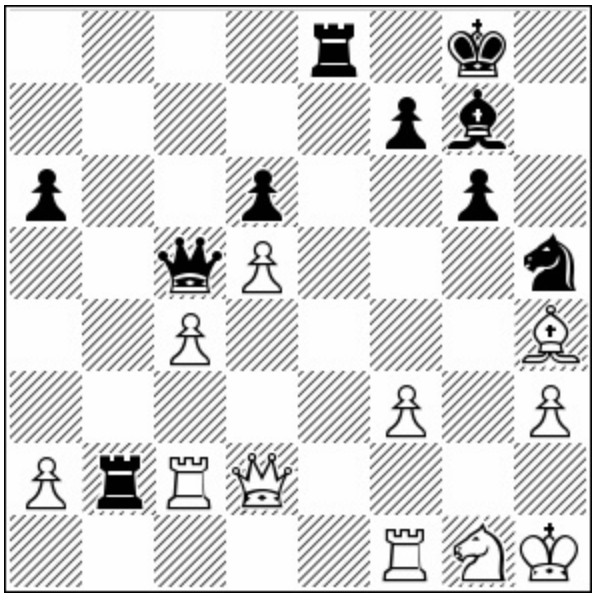
26...h4

Kasparov conducts the game perfectly. He now vacates the h5-square for the knight.

27.Bg5 Nh5 28.Bxh4 Rb8 29.Ng1

29.Rc2 runs into 29...Qc8!, switching over to the other side: 30.Ng1 Qf5. The queen is a powerful piece! White has no constructive moves left.

29...Rb2 30.Rc2



Black to move
(back to the exercises)

Question: Can you spot the tactic that allows Kasparov to cash in?

30...Qxc4! 31.Rxc4 Rxd2 32.f4 Rxd5 0-1

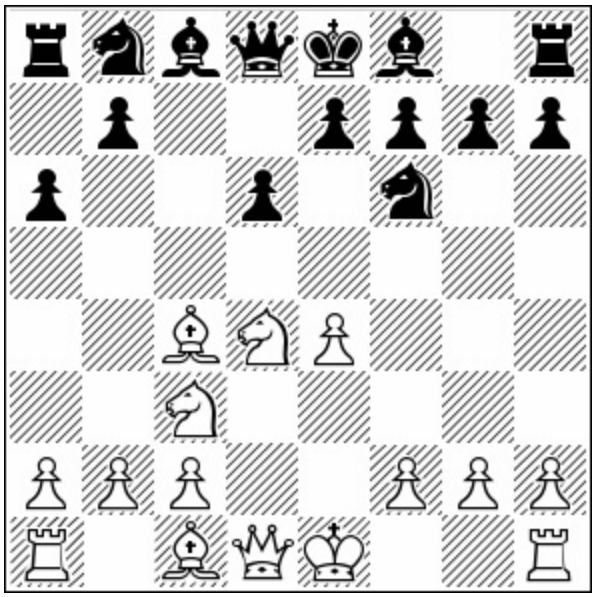
A perfect game of chess. Somehow, it doesn't pop up regularly in collections of Kasparov's best games. This one was perhaps not the flashiest, but in terms of quality it must have been one of the most impressive games of Kasparov's long and successful career. Anand broke the Hidden Law that footholds should be occupied by pieces rather than pawns. Even though the idea of capturing with a pawn on d5 is a common one in the Najdorf, in this particular position it is of questionable value. Similar to the last Benoni game of Chapter 1, Black's disadvantage in space wasn't felt at all. On the contrary, Kasparov found excellent squares for his pieces. By pushing ...b7-b5 later on, he managed to turn the tables and burden White with a backward pawn. Ultimately, the weaknesses in White's camp could no longer be defended. Kasparov executed his strategy impeccably against a formidable opponent.

We will now return to Bobby Fischer. His career featured many highlights,

but the next game is not one of them. At a young age he played a game against Mikhail Tal, the Wizard of Riga. This was a game that he probably wished to forget quickly.

Game 5 Sicilian Defence
Bobby Fischer
Mikhail Tal
Bled/Zagreb/Belgrade Candidates 1959 (13)

1.e4 c5 2.Nf3 d6 3.d4 cxd4 4.Nxd4 Nf6 5.Nc3 a6 6.Bc4



The move that bears Fischer's own name nowadays. While this move still enjoys a dedicated fanbase, it hasn't become nearly as popular as the three main alternatives Be3, Bg5 and Be2.

6...e6

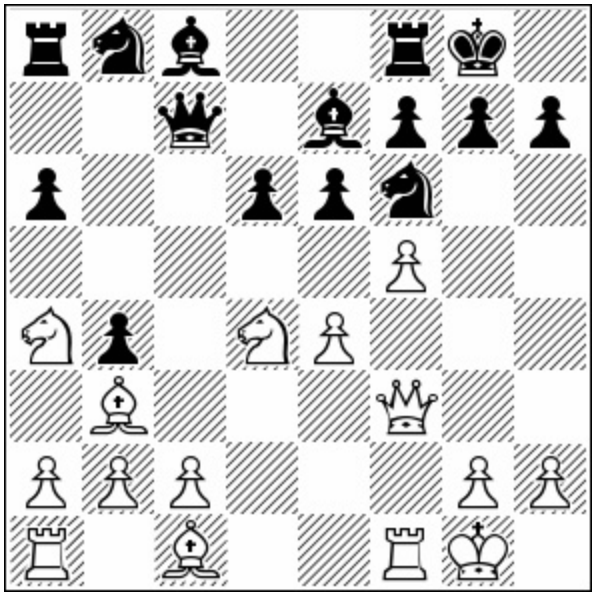
Naturally, with a white bishop staring down the a2-g8 diagonal, the more enthusiastic 6...e5 is off the table.

7.Bb3 Be7 8.f4 0-0 9.Qf3 Qc7 10.0-0 b5 11.f5

11.e5?! isn't effective, as 11...dxe5 12.fxe5 Nfd7 leaves the pawn on e5 too

vulnerable. If the white queen doesn't control her impulses and devours the rook on a8, she will be put in a cage after ...Bb7.

11...b4 12.Na4



12...e5!

Black steps forward in the centre, harassing the central white knight. We now return to the common pawn structure with a backward pawn on d6. This time though, the circumstances are extremely favourable for Black.

13.Ne2 Bb7

White also has a backward pawn in the middle of the board, and contrary to its counterpart, it is lacking defenders.

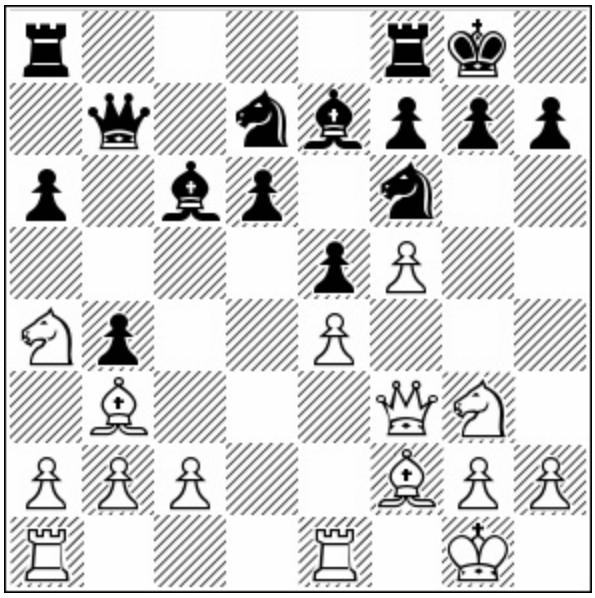
14.Ng3 Nbd7 15.Be3 Bc6!

Setting up a battery with the bishop in front.

16.Bf2 Qb7 17.Rfe1

Well, White managed to cling to his centre pawn, but now he is in for an

unpleasant surprise.



Black to move
(back to the exercises)

17...d5!

As always, the Wizard of Riga conducts the game with great energy.

Tal gets rid of his weakness and blasts the position open, which significantly favours the side with the better-placed pieces.

18.exd5 Nxd5 19.Ne4 Nf4 20.c4 g6

It is move 20 and Fischer is staring at a total mess. What a sight to behold!

21.fxg6 f5!

Tal continues to channel his energy into full force!

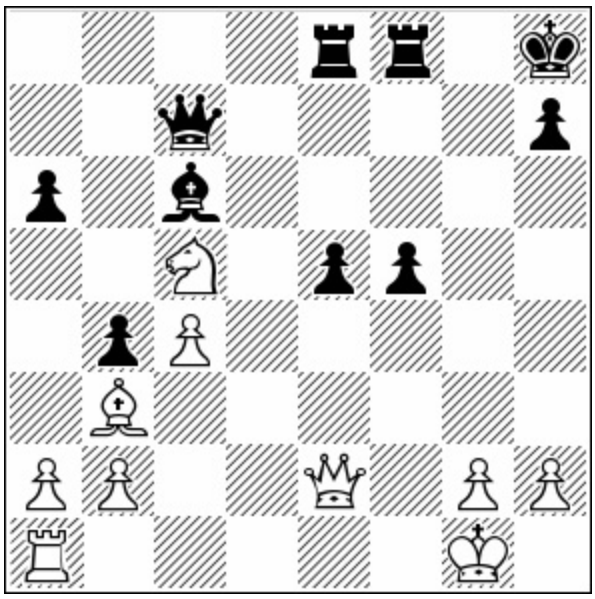
22.g7

Fischer finds a way to save his piece. Unfortunately, it doesn't make his position any brighter.

22...Kxg7 23.Qg3+ Kh8 24.Nec5 Nxc5 25.Bxc5 Bxc5+ 26.Nxc5 Qc7 27.Qe3 Rae8!

Why not protect everything first before making another step forward? The difference in activity is enormous. White does not have a good way to protect g2.

28.Re2 Nxe2+ 29.Qxe2



29...Bxg2!

Gallery play. Tal must have enjoyed himself during this game.

30.Nxa6 Qa7+ 31.Kxg2 Rg8+ 32.Kh3 Qg7

There is no need to take the knight if you can also go for mate.

33.Bd1 Re6 0-1

Demolishing Fischer in such a convincing fashion was quite an achievement, especially since Fischer was already knocking on the doors of the world elite at that time. The advance ...d6-d5 had a liberating effect on the black position. All the black pieces came to life wonderfully and the white centre

collapsed. If your opponent has a backward pawn, usually the liberating advance must be prevented at all costs.

The Hidden Laws of Backward Pawns

• A backward pawn is a terrible weakness, but it is generally not sufficient for victory. Therefore, it can be useful to apply the principle of two weaknesses by attacking on a second front;

• The square in front of a backward pawn is a foothold that can be occupied effectively by pieces;

• Since a backward pawn is so detrimental, it is often worth it to give up multiple other advantages to saddle your opponent with one;

• In the Carlsbad structure, the minority attack is a typical plan to burden your opponent with a backward pawn;

• Initiating an exchange on the square in front of the backward pawn and forcing a pawn to occupy the foothold is an effective defensive method. This alteration of the structure can be favourable for the defending side, as the opponent loses access to a foothold, and he will also lose a vigorous semi-open file;

• Most importantly, the defending side can liberate himself by pushing the backward pawn forward.

Quiz

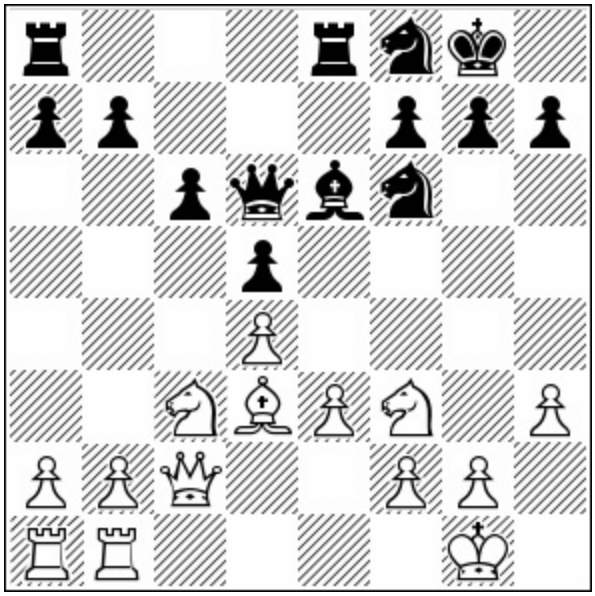
Show in Text Mode

Exercise 1

Samuel Reshevsky

George Treysman

New York ch-USA 1936 (12)



Black to move

Reshevsky just played the creative **14.Rfb1!?**. Can you explain the idea behind this move?

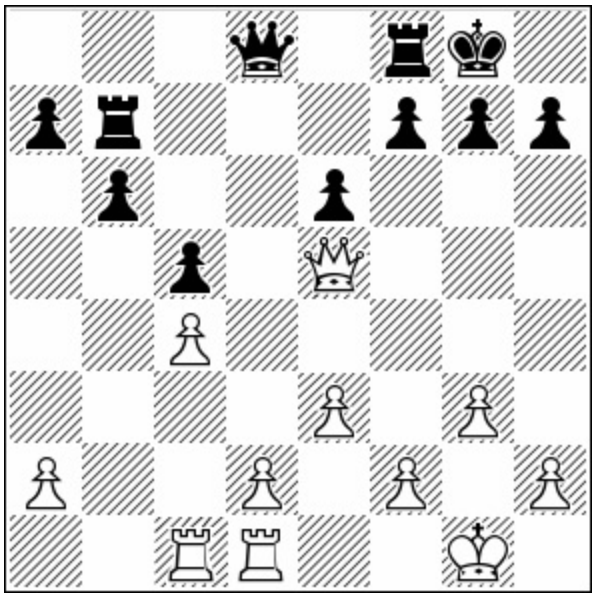
Show/Hide Solution

Exercise 1

Reshevsky prepares a minority attack, an effective strategy in Carlsbad structures. He intends to play b2-b4-b5 and then capture on c6 to create a backward pawn in the black camp.

Exercise 2

Viktor Kortchnoi 2625
Michael Adams 2715
Tilburg 1998 (2)



Black to move

What should Black play?

Show/Hide Solution

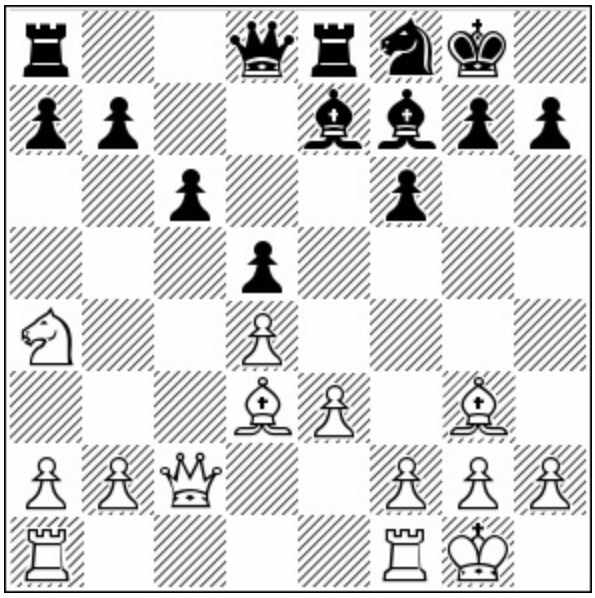
Exercise 2

The only move that preserves an advantage is **19...Qd3!**. Footholds must be occupied by pieces. The point is that **20.Rc3 allows 20...Qe2, causing chaos in the white camp.**

The alternative 19...Rd7 looks natural, but it allows White to equalise with 20.d4.

Exercise 3

Mikhail Tal 2625
Vladimir Savon 2595
Baku ch-URS 1972 (10)



White to move

Tal is famous for his sacrificial attacking chess, but from time to time he found himself in positional battles as well. What did he play here?

Show/Hide Solution

Exercise 3

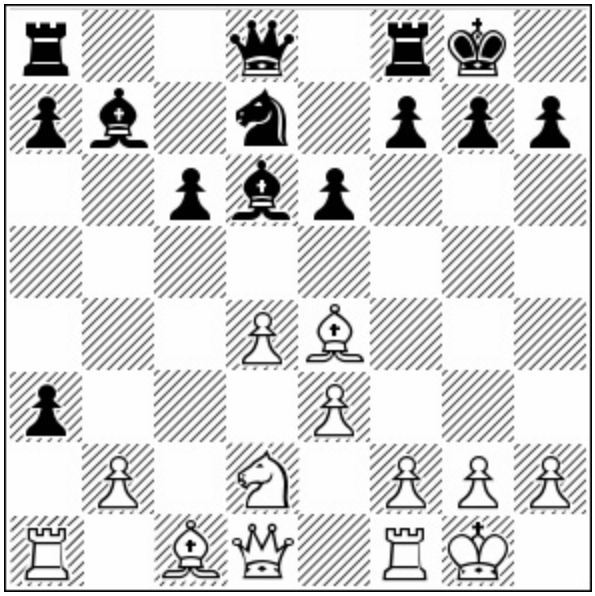
Once again, we can recognise a Carlsbad structure. The best move is the direct **16.b4!**. Speed matters in chess, and in this case the expansion on the queenside requires no preparation. 16...Bxb4? will be met by 17.Rfb1! and White wins the pawn back on b7 due to the skewer: 17...Qe7 18.Qb2! a5 19.a3, with a large positional advantage. Note that White needs the queen's rook on a1 to protect the a-pawn.

Exercise 4

Victor Mikhalevski 2592

Kamil Miton 2580

Lubbock 2008 (1)



White to move

How should White continue?

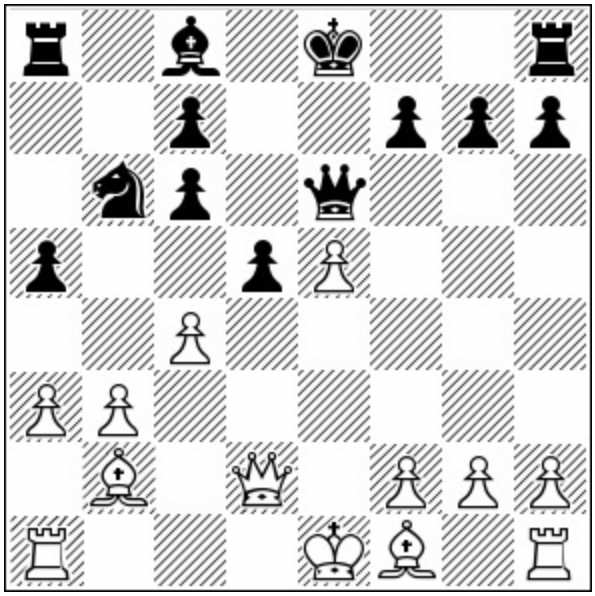
Show/Hide Solution

Exercise 4

14.b3! is correct. After capturing on a3 with the bishop, White obtains two targets since he can also attack the pawn on a7. Alternatively, 14.bxa3 is not good. Black plays 14...Qc7, which allows him to free himself with ...c6-c5.

After **14.b3**, the plan with 14...Qc7 isn't as effective. White plays 15.Bxa3, and now 15...c5 runs into Rc1. Instead, Black should capture with 15...Bxh2+, but White obtains more than enough compensation after 16.Kh1 Bd6 17.Bxd6 Qxd6 18.Nc4.

Exercise 5
Garry Kasparov 2800
Anatoly Karpov 2730
Lyon Wch 1990 (m/16)



White to move

Can you figure out Kasparov's next two moves?

Show/Hide Solution

Exercise 5

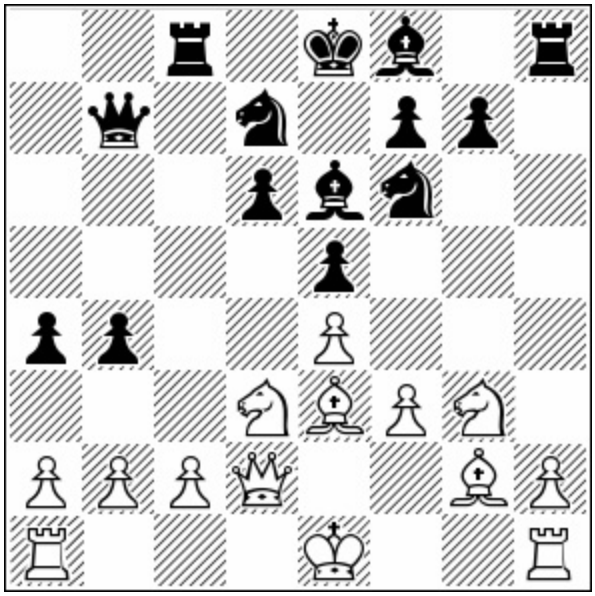
14.cxd5! is the best move. Sometimes, it is beneficial to resolve an opposing doubled pawn. Now, **14...Nxd5 is undesirable because it leaves Black's pawn structure in ruins. However, Karpov's move landed him into even more trouble: 14...cxd5?! 15.Rc1!**, and Black has enormous difficulties defending the backward pawn on c7.

Exercise 6

Alexander Morozevich 2774

Ruslan Ponomariov 2719

Russia tt 2008 (9)



Black to move

The early middlegame has been disastrous for White. How can Black take advantage of this?

Show/Hide Solution

Exercise 6

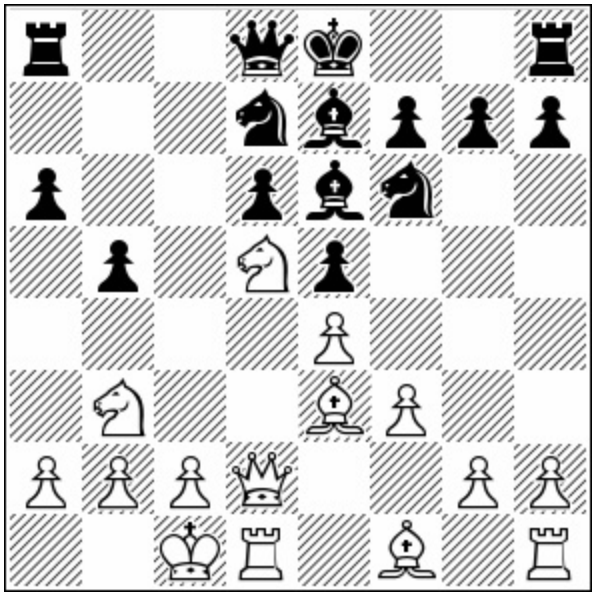
White hasn't succeeded in fixing the backward pawn. Thus, Black should play **18...d5!**. Subsequently, Black has better placed pieces and his pawn structure is superior. After **19.exd5 Nxd5 20.f4**, Ponomariov now played the splendid **20...Rxc2!**. The rook sacrifice destroys the white defences. **21.Bxd5 Rxd2 22.Bxb7 Rxd3**. Black has a completely winning endgame.

Exercise 7

Peter Leko 2753

Viswanathan Anand 2799

Morelia 2008 (5)



Black to move

Instead of playing the critical 11.g4, White has just occupied the foothold with **11.Nd5**. How should Black respond?

Show/Hide Solution

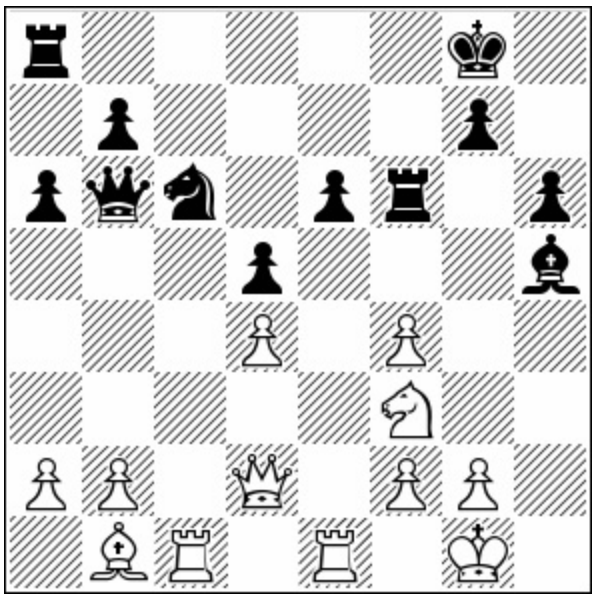
Exercise 7

Anand played **11...Bxd5!**, altering the structure in the centre and thereby reducing the pressure on Black's backward pawn. Black must capture the dominating knight, otherwise White follows up with Nxe7 and Qxd6. Instead, 11...Nxd5 is bad after 12.exd5 Bf5 13.Na5, and Black is not in time to respond to the strong threat of Nc6.

11...Bxd5!

The game continued **12.exd5 Nb6 13.Bxb6 Qxb6 14.Na5 Rc8 15.Nc6 Nxd5!**. The point. Black can tolerate White's knight on c6. **16.Nxe7 Nxe7 17.Qxd6 Qxd6 18.Rxd6 Nc6**. The endgame is about equal, although Anand eventually managed to outplay Leko.

Exercise 8
Jesus Garrido Dominguez 2406
Nick Maatman 2382
Netherlands tt 2019/20 (5)



White to move

In the Tarrasch Variation of the French, Black often plays with a backward pawn on e6. How should White continue?

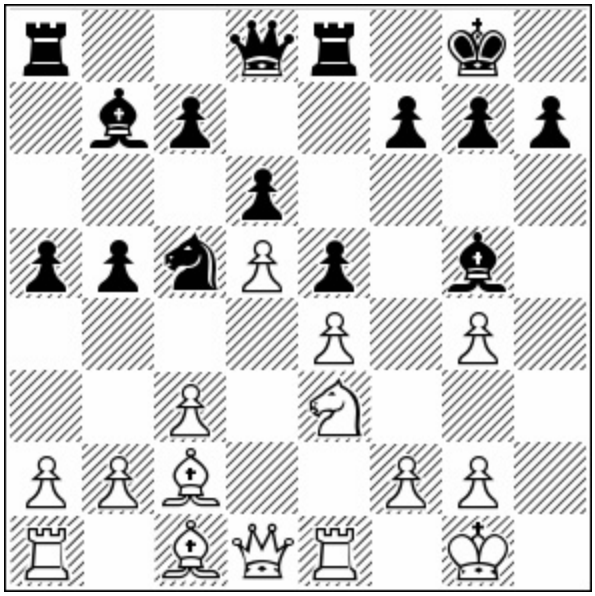
Show/Hide Solution

Exercise 8

23.Rxc6! The knight must be eliminated to get full control over the foothold. After **23...Qxc6 24.Ne5 Qc7 25.Qd3**, my opponent went on to win the game, which earned him a brilliancy prize in the Dutch League.

The immediate 23.Ne5 is not good, as it allows Black to equalise with 23...Qxd4.

Exercise 9
Michael Adams 2731
Etienne Bacrot 2653
Leon Ech-tt 2001 (4.1)



White to move

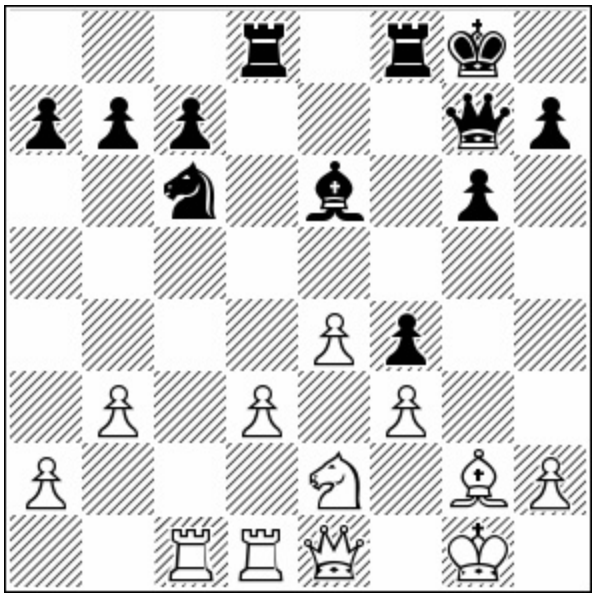
What should White play?

Show/Hide Solution

Exercise 9

This is a hard one. It requires quite some foresight. Correct is **19.b4!**. Since White has a space advantage on the queenside, it is favourable to initiate action on this side of the board. Adams will exploit the backward pawn on c7. **19...axb4 20.cxb4 Na4 21.Qd3 Qd7 22.Nf5 Bxc1 23.Raxc1 Nb6 24.Bb3!**. Finally, White's point becomes clear. Both sides have a backward pawn, but the white pawn on a2 can easily be defended, while Black's pawn on c7 will be a permanent source of concern. I will give the remaining moves here, as Adams' technique was excellent: **24...f6 25.Rc3 g6 26.Ne3 Kg7 27.Rec1 Rac8 28.Bd1!**. White goes after b5 as well. Remember the principle of two weaknesses. **28...c6 29.dxc6 Rxc6 30.Qxb5 1-0**

Exercise 10
Christian Bauer 2618
Joel Lautier 2658
Cannes Rapid 2001 (6)



Black to move

How should Black proceed?

Show/Hide Solution

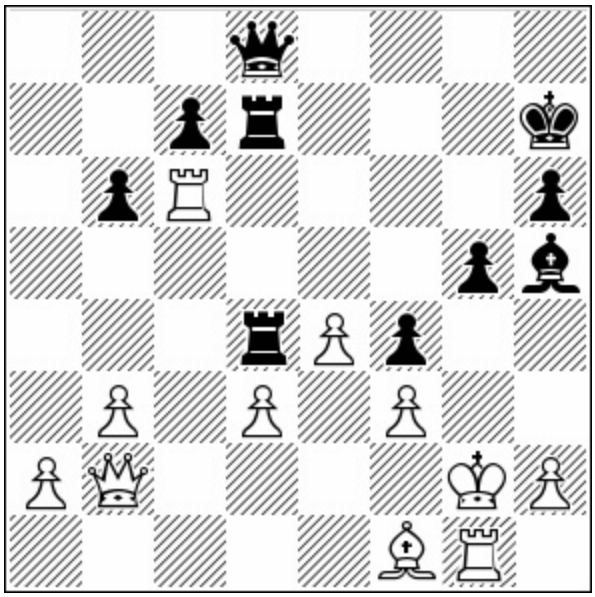
Exercise 10

The best move is the patient prophylactic 20...Rf7!. This move overprotects the c7-pawn and allows Black to double up on the d-file later. A possible variation is 21.Qf2 Nd4 22.Nxd4 Rxd4, and by keeping the queens on the board, Black maximises his winning chances.

A decent alternative is to occupy the foothold directly with 20...Nd4. After 21.Nxd4 Qxd4+, Black is better. Note that the capture 21...Rxd4?! 22.Qa5! allows too much counterplay.

In the game, Black played 20...g5?!. Now, White could have achieved the strategically desirable advance of the d-pawn with 21.Qc3!, leading to equality. Instead, after 21.Kh1?! Rf7 22.Qc3 Nd4, Black managed to occupy the foothold anyway.

Exercise 11
Christian Bauer 2618
Joel Lautier 2658
Cannes Rapid 2001 (6)



Black to move

Later on, Black managed to control the d-file. Can you figure out Black's best move? Take your time to calculate all the relevant variations accurately.

Show/Hide Solution

Exercise 11

Black missed the beautiful tactical strike 33...Bxf3+!!, which wins in all variations: 34.Kxf3 Rxd3+!. Let's first discuss what happens if White takes: 35.Bxd3 Rxd3+. Now, White has a tough choice to make. If he moves to f2 or g2, Black plays 36...Rd2+, forking the queen and king. In the ensuing endgame, the two rooks are no match for the black queen, as the black pawn structure is too sound. 36.Ke2 runs into 36...f3+!, once again forcing the king to an awkward square. Unfortunately, 36.Kg4 Qd7+ leads to a quick checkmate.

Instead of capturing, White can play 35.Kg4. The difference is that there is no ...Qd7+. The only winning move is the quiet 35...R7d4!!. Once again, the threat is ...Qd7+, and there is no defence. After 36.Bxd3 Qd7+ 37.Kf3, Black

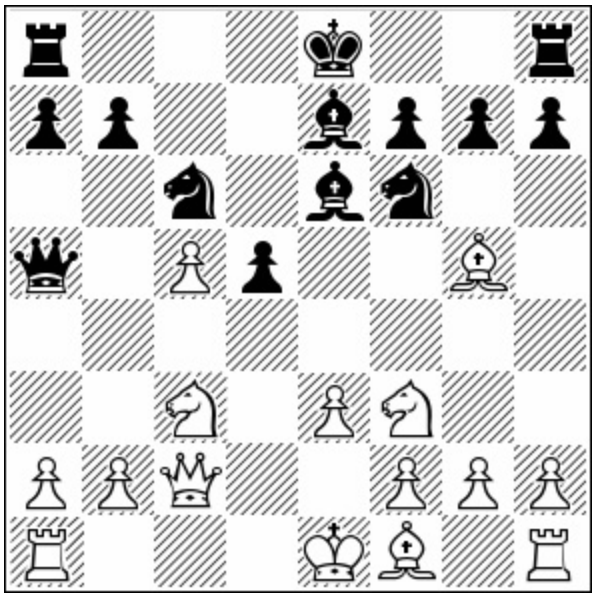
can win in a similar fashion to the aforementioned variations.

Note that the immediate 33...Rxd3 isn’t winning. After 34.Bxd3 Rxd3 35.Qe5!, White obtains sufficient counterplay.

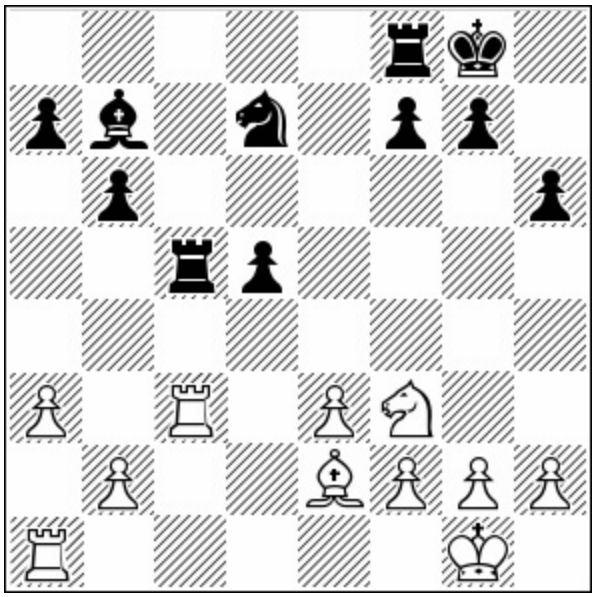
In the game, Black played 33...R7d6, which allowed White to stabilise, even though Lautier was ultimately victorious anyway.

Chapter 4
Preview exercises*

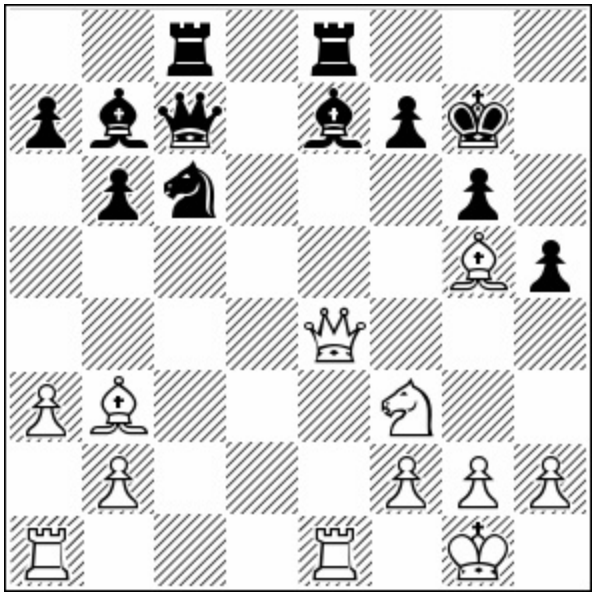
* Positions with isolated queen's pawns require a lot of (deep) calculation. The following exercises may be quite challenging. Really take your time if you want to extract the most value.



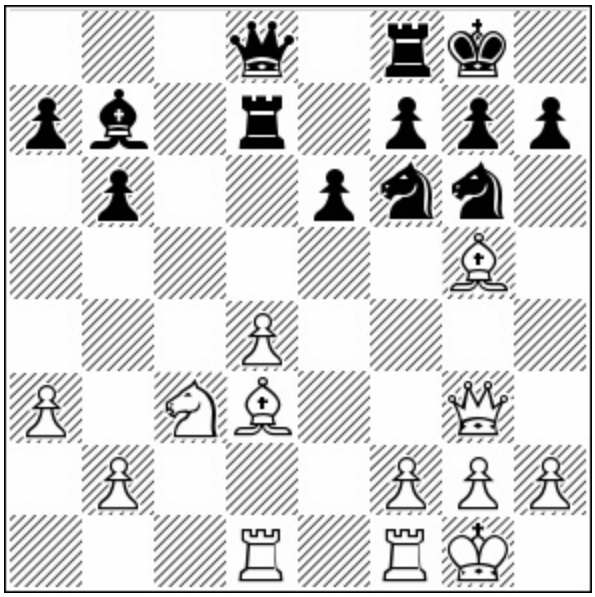
White to move
(go to the solution)



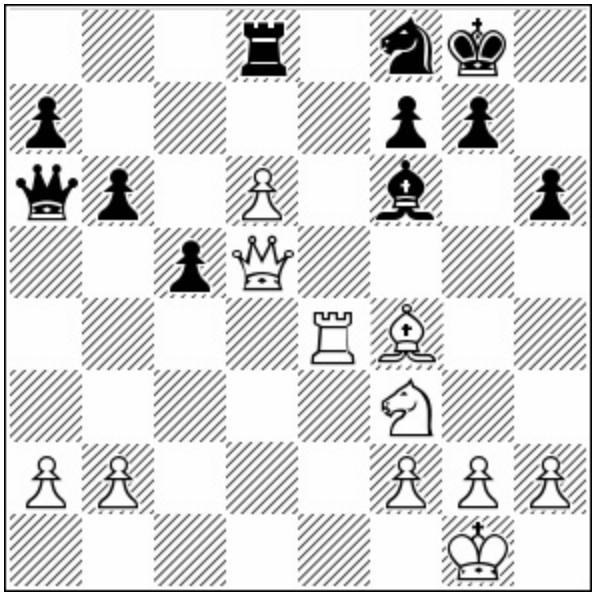
White to move
(go to the solution)



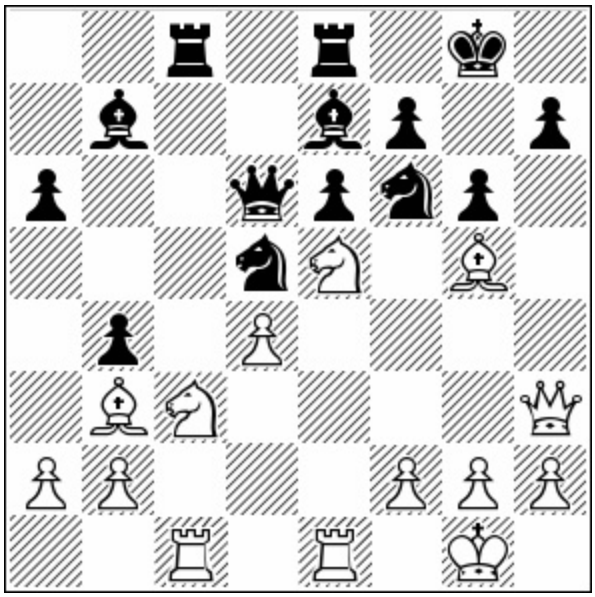
White to move
(go to the solution)



White to move
(go to the solution)



White to move
(go to the solution)

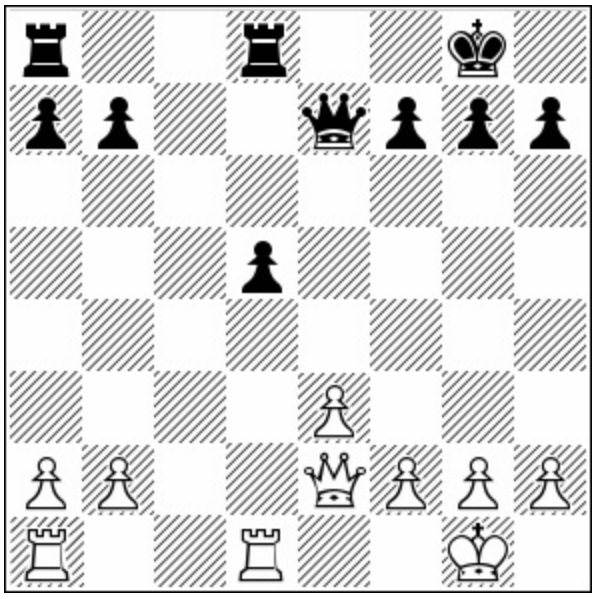


White to move
(go to the solution)

Chapter 4
Isolani

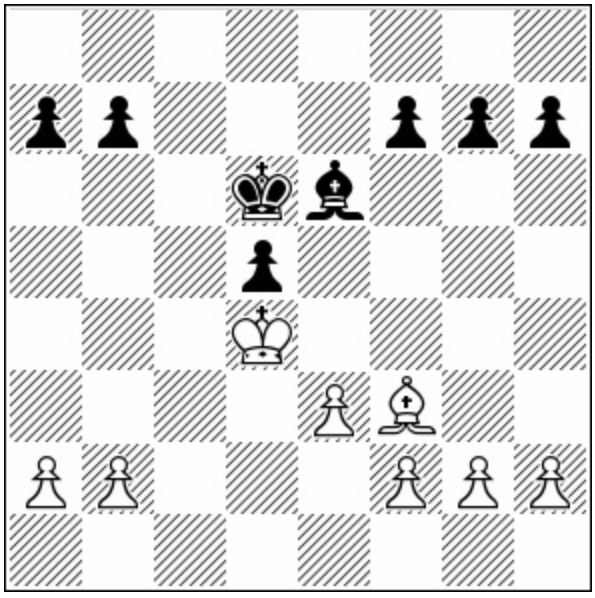
The isolated pawn casts gloom over the entire chessboard. – Aron Nimzowitsch

No pawn structure in chess is as divisive as the isolated queen's pawn (IQP). An isolated d-pawn can become a hero, but it regularly turns into a scapegoat. Some players love to play with an isolated pawn as it often offers great attacking possibilities. Others like to play against the isolated pawn as it offers a clear winning plan. Then there are also players who hate isolated pawns altogether... no matter what your position is in this spectrum, this chapter will equip you with tools that will help you navigate both sides.



White to move

A



White to move

B

We are going to mix it up a little in this chapter. It is quiz time! Above, I have set up two fictional positions. Both positions feature the theme of this

chapter: an isolated queen's pawn. It is clear that White has the upper hand in both cases. An isolated pawn is regarded as a weakness because it cannot be defended by other pawns.*

> * If you point out that this statement is tautologous, you got me!

In position A, only the major pieces remain; in position B, both sides have an army of king and bishop. Now the question is: in which position does White have the greatest winning chances?

To evaluate this, a couple of aspects come into consideration. In position A, both sides are similarly active. Since it is White's move and since he is the one who is attacking a pawn, he has an opportunity to develop an initiative. King safety is not really a concern for either side. In position B, we have entered deep into an endgame. So, the concern for king safety is off the table. Instead, we should assess the activity of both kings. Both are standing in opposition, with White's king being slightly more advanced and therefore generating a space advantage. Having the further advanced king is particularly important in king and pawn endgames where the result is regularly decided by a race. There is an even more striking detail apparent in the position: the bishops are on a favourable colour for White. Most of the time, it is favourable if the opposing pawns stand on the colour of your bishop, while your own pawns should be placed on the opposite colour. This description perfectly fits White's current situation.

On the surface, these analyses appear convincing. Now, the question is what conclusion do these analyses support? That is a tricky one. It appears that the analyses support that White enjoys a moderate advantage in position A and a massive advantage in position B. Did you come to this conclusion too, and is this conclusion correct?

The results are coming in! Shockingly, the conclusion totally misses the mark... so what is really going on? The specific conclusions have to take the entire context into account. A mere analysis of good vs bad bishop and activity is not going to be sufficient. We must analyse the pawn structure. I will now propose two Hidden Laws that suit the pawn structure and I will

make them visible with the support of concrete analysis.

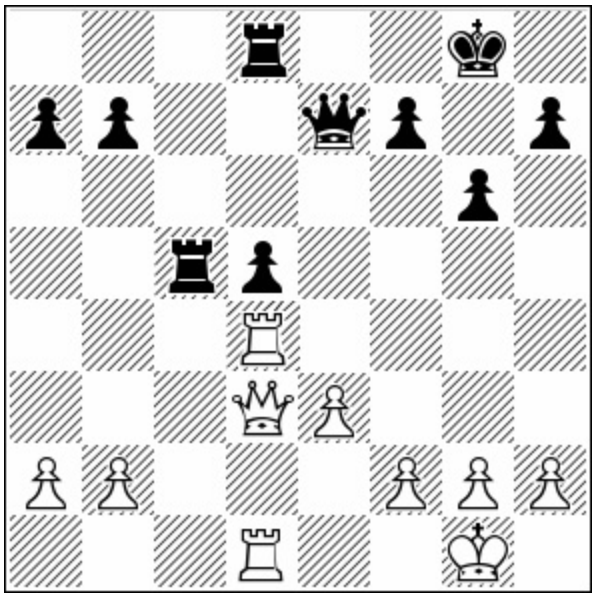
• The First Law of Isolated Queen Pawns: ‘When playing against an isolated queen’s pawn, the preservation of major pieces increases winning chances.’

• The Second Law of Isolated Queen Pawns: ‘When playing against an isolated queen’s pawn, the exchange of minor pieces increases winning chances.’

These laws are very specific and there is a good chance that you haven’t heard them before. So perhaps there is something new to learn in this book!? *

* Objection: speculation!

In position A, the best move is 1.Rd4!, fixing the black IQP and stopping Black from simplifying with 1...d4!. Now, White has a clear plan in mind: he wants to double the rooks on the d-file and increase the pressure on d5. A possible variation is 1...Rac8 (seizing the open file) 2.Rad1 Rc5 3.Qd3. Suddenly, the black position is looking precarious. The IQP is under attack three times and only defended twice. Furthermore, the rook on d8 is defended poorly and Black is struggling from back rank issues. Black can solve the second issue by playing 3...g6, reaching the position in the next diagram.



Obviously, White is not quite ready to take the pawn yet. Indeed, after taking three times on d5, White has admittedly won a pawn, but has to pay the price

of a queen... instead, White has a strong concrete move available that defines the nature of the position. 4.e4! is very powerful and it leads to a massive advantage for White. The pawn on d5 can no longer be defended adequately. Even though there is no guarantee that White will win, Black will have to struggle for the remainder of the game. It turns out that the idea of lining up all the major pieces on the d-file and then following it up with a well-timed e3-e4 is very effective and surprisingly difficult to stop. It is so powerful in fact that it puts Black on the brink of defeat.

Now we turn to position B. It is obvious that White is better, but is it sufficient to win? If White wants to win, he needs to come up with a plan. A similar plan of playing e3-e4 is not very suitable. It will exchange Black's one weakness, after which Black should hold comfortably. The main plan for White is to push pawns on the kingside. But even that plan is surprisingly hard to pull off. Black will put his pawns on dark squares by playing ...f7-f6, ...h7-h6 and ...g6-g5 and then continue by shuffling his bishop around. After the smart 1.Bd1, Black needs to play one accurate defensive move: 1...Bd7!. It is important that Black can meet 2.Bb3 with 2...Bc6. Then, the key variation 3.e4 dxe4 4.Bxf7 e3! liquidates into a drawn endgame. Note how the careless 1...f6 fails. After 2.Bb3, Black is in zugzwang!*

> * 'The Laws of Chess do not permit a free choice: you have to move whether you like it or not.' – Emanuel Lasker

White will continue with a2-a3 and shuffle his bishop between a2 and b3. Once the black bishop moves from e6 to f7, the break e3-e4 wins. So, the endgame is not entirely without venom, but if Black defends attentively he should have no problems holding. White's issue is that he cannot open a second front. Black can just defend passively and White cannot make progress. The advantage is an illusion.*

> * Coincidentally, soon after I wrote this section, an almost identical endgame appeared in So-Carlsen, Stavanger 2022. Carlsen held the draw without any difficulties.

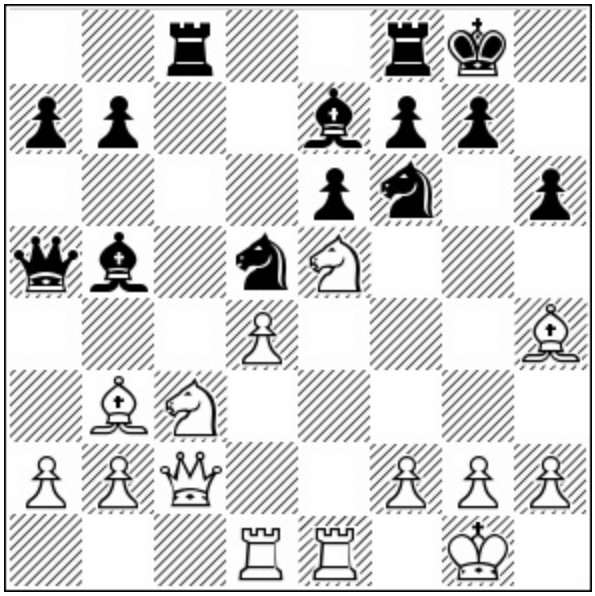
The knowledge of these laws provides useful guidance on what the inferior side needs to avoid and what the superior side needs to achieve. Both laws

are applicable specifically to situations where the player who is playing against the isolani is in control. Interestingly, an isolani can also have upsides. In many openings, White voluntarily takes on an isolani and then tries to attack. The advantages of isolated pawns will be discussed later in this chapter.

Eliminating minor pieces

We will move on to some model games. In the first model game of this chapter, we will watch a battle between two World Champions. Out of all the champions, the German Emanuel Lasker held the title the longest. It was in his possession from 1894 to 1921. That's more than a quarter of a century! If long-time World Champion Magnus Carlsen wanted to beat this record, he would have needed to keep winning matches until at least 2040. In 1921, Lasker faced the talented Cuban player José Raúl Capablanca. The game we are about to visit was part of their match for the World Championship. We enter the tenth game of the match on move 17.

Game 1
Emanuel Lasker
José Raúl Capablanca
Havana Wch 1921 (m/10)



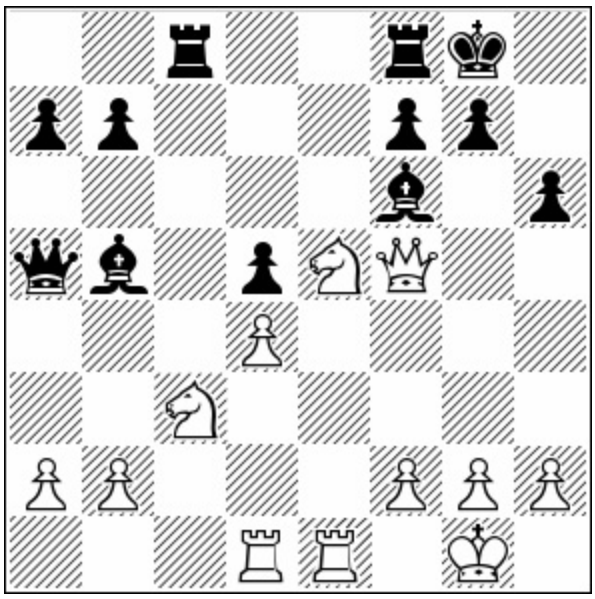
White to move

As White, Lasker is playing with an isolated pawn. The position is critical. Black continually has the option of exchanging one pair of minor pieces. Lasker is at risk of getting squeezed. He needs to act energetically.

17.Bxd5?

Lasker, who was known for his deep positional understanding, makes an uncharacteristically grave positional error. After Lasker's move, not one, but two pairs of minor pieces will be exchanged. By exchanging minor pieces, he violates the Hidden Laws of IQPs.

17.Bxf6! was correct. Similar to the game, this move also appears to break the Hidden Laws of IQPs, but laws can be broken if there is a strong tactical justification: 17...Bxf6 (17...Nxf6? meets with a phenomenal refutation: 18.Ng6!! fxg6 19.Bxe6+ Kh8 20.Bxc8 Rxc8 21.Rxe7 Nd5 22.Re5, and White is up a large amount of material) 18.Bxd5! exd5. After the exchange in the centre, the pawn structure is no longer asymmetrical. Suddenly, the pawn structure has assumed a rigid nature. Hence, the Hidden Laws of IQPs are no longer applicable. The bishop pair does not particularly thrive in this position. Instead, it is White who can seize the initiative. 19.Qf5.



analysis diagram

By unpinning the knight, White now attacks the d5-pawn. The white pieces are considerably more active than their counterparts. Black is on the defensive. 19...Rcd8 (this cautious move is the only one that doesn't let the situation get out of control; 19...Rfd8? 20.Nxd5; 19...Bxe5?! 20.dxe5 suddenly leaves Black struggling with an isolated pawn) 20.Ng4 Bg5 21.Nxd5 Qxa2 22.Ndf6+ (22.Ne7+ is also interesting. White doesn't ruin the black structure, but instead allows less counterplay, e.g. 22...Bxe7 23.Qxb5 Bg5 24.d5, with some advantage) 22...Bxf6 23.Nxf6+ gxf6 24.Qxb5 Qd5. White has the advantage, but it will be difficult to convert. Anyway, this continuation is far stronger than the one chosen in the game.

17.Bxd5? Nxd5 18.Bxe7 Nxe7

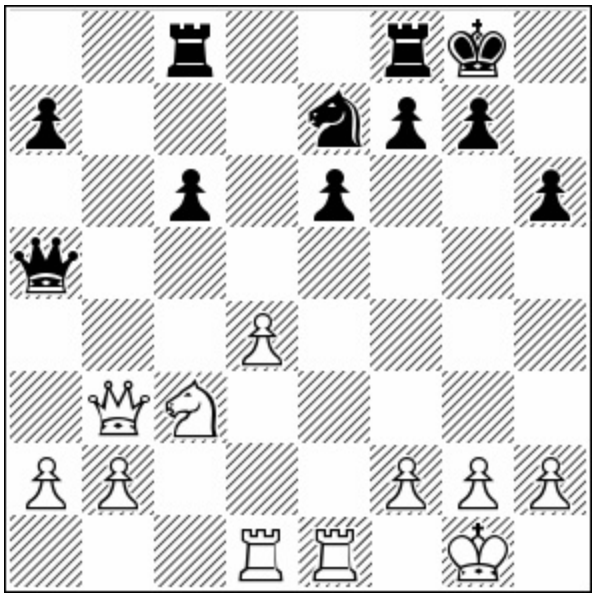
> The exchange of minor pieces significantly reduces the dynamic potential of an isolated queen's pawn.

Not one, but two pairs of minor pieces have been exchanged. With fewer pieces on the board, it is unlikely that White can develop an initiative. Now he is playing a positionally dangerous game because there is no easy solution available for the weak d-pawn.

19.Qb3 Bc6

19...Ba6 also came into consideration. Black could have avoided damage to his own structure by retreating the bishop. It is understandable why Capablanca discarded this idea, as the bishop is not looking particularly inspiring on a6.

20.Nxc6 bxc6

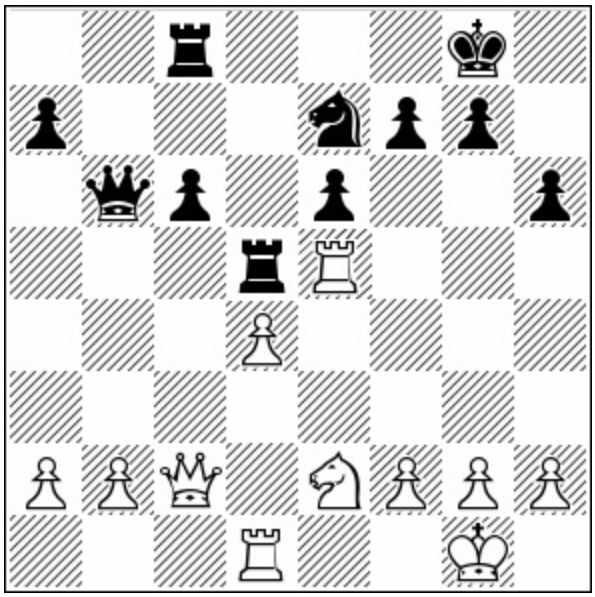


An eye for an eye. Black will have an isolated pawn too! Nevertheless, Capablanca has judged astutely that he maintains the upper hand. The c6-pawn is easier to defend than the one on d4. Furthermore, Black also obtains an avenue for an attack on the b-file.

21.Re5 Qb6! 22.Qc2

22.Qxb6 axb6 would repair the black pawn structure, which would obviously not be desirable for White.

22...Rfd8 23.Ne2 Rd5



Capablanca is improving his position consistently by offering exchanges that would benefit his structure, thus driving White's pieces back.

24.Rxd5?

A further positional error that leaves Black with a significant advantage. The white position was already becoming quite difficult to play though. Patience was required with 24.b3.

24...cxd5

Capablanca's pawn structure has been unified, leaving him with no weaknesses. Lasker's structure on the other hand is vulnerable with pawn weaknesses on both d4 and b2.

25.Qd2 Nf5 26.b3 h5 27.h3?!

This allows a further deterioration of the position. White needed to prevent ...h5-h4 at all costs with 27.g3.

27...h4

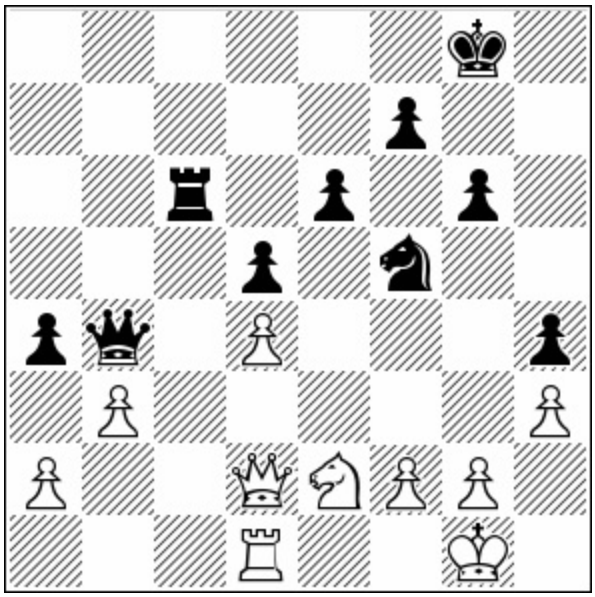
Now the knight on f5 has become totally secure. Notice how Capablanca is

making progress all over the board.

28.Qd3 Rc6 29.Kf1

A sign of desperation.

29...g6 30.Qb1 Qb4 31.Kg1 a5 32.Qb2 a4 33.Qd2



Another key moment arrives. Will Black's advantage persist in the endgame?

33...Qxd2! 34.Rxd2 axb3 35.axb3 Rb6 36.Rd3 Ra6

White has weaknesses on both d4 and b3, while the black rook has full rein.

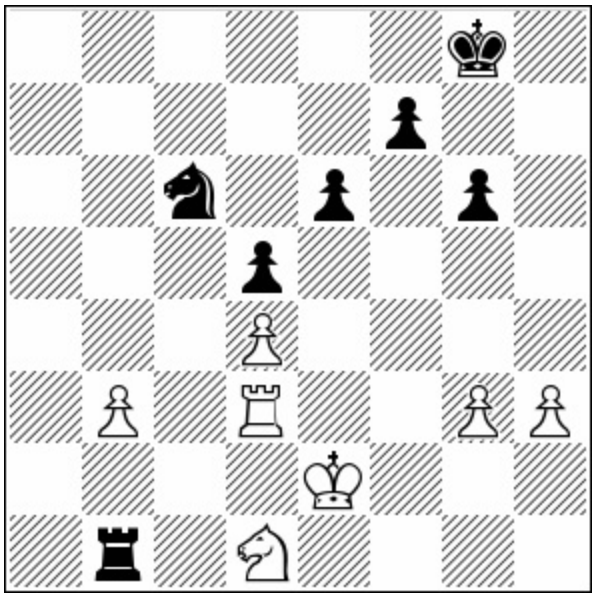
37.g4 hxg3 38.fxg3 Ra2 39.Nc3 Rc2 40.Nd1 Ne7

Squeezing White maximally with 40...g5! would have been best. White can only wait. The white b-pawn can run, but it will eventually be stopped in its tracks: 41.b4 Kg7 42.b5 Nd6 43.b6 Rc6 44.Rb3 Rc1 45.Rd3 Rb1.

Capablanca's technique proves to be sufficient, though.

41.Ne3 Rc1+ 42.Kf2 Nc6 43.Nd1 Rb1 44.Ke2?!

White allows a cute little tactic.



44...Rxb3!

From here onwards, it will be smooth sailing for Black. Now, 45.Rxb3 loses to 45...Nxd4+. Instead, Lasker played

45.Ke3

but threw in the towel on move 68.

0-1

A convincing victory by Capablanca, who eventually dethroned Lasker as World Champion by beating him 9-5. Lasker violated the Hidden Laws of IQPs, and he was punished severely. Capablanca on the other hand showed mastery over the pawn structures by making all the right transitions. White got squeezed slowly, but the result was never in doubt.

This game is a great example of how the side with an IQP runs a strategic risk. Often, compensation is acquired in the form of activity, but once minor pieces disappear from the board the activity diminishes, which further emphasises the weakness of the IQP.

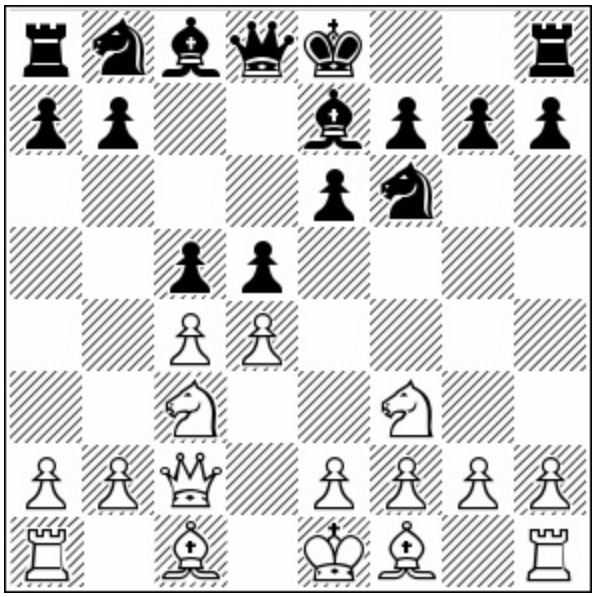
We will continue exploring this theme.

Game 2 Queen's Gambit Declined
Ruslan Ponomariov 2743
Pablo San Segundo 2523
Benidorm 2002 (10)

1.Nf3 d5 2.d4 Nf6 3.c4 e6 4.Nc3 Be7 5.Qc2

An interesting try. White attempts to stay maximally flexible and wants Black to commit to a plan. Nowadays, this move has become quite obsolete because Black players have figured out how to combat it.

5...c5



6.cxd5

After 6.dxc5, 6...d4 7.Nb5 e5! is known as the refutation of White's set-up. Black sacrifices a second pawn to develop a large initiative. The knight on b5 is completely misplaced. After 8.Nxe5?! a6 9.Na3 0-0 10.Nd3 Bf5 11.g3 Nbd7 12.Bg2 Nxc5, Black's activity more than compensates for the pawn deficit.

6...exd5

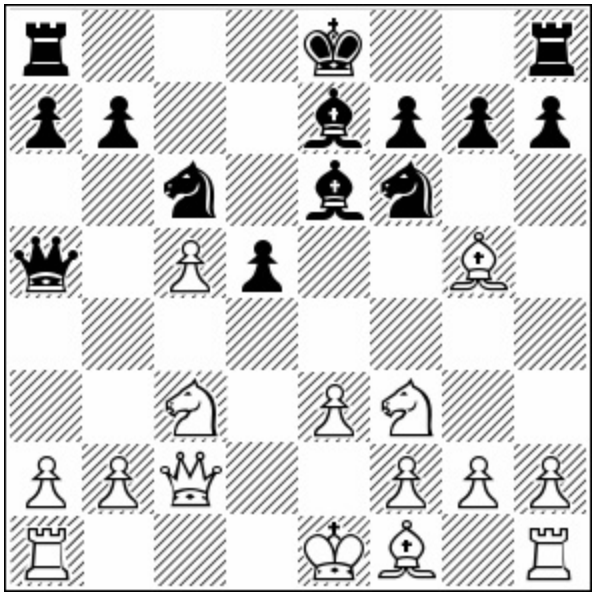
6...cxd4! is a smart reaction, equalizing on the spot: 7.Nxd4 0-0!, temporarily making use of the pin. Black will take back on d5 with his knight on the next move, avoiding any damage to his structure.

7.Bg5 Nc6 8.dxc5 Be6 9.e3

Now, White's strategy is starting to pay off. Black still has to take back on c5, which forces him to lose time. White has the tools to restrain Black's activity. Later on, the isolated queen's pawn will become a source of concern for Black.

9...Qa5?

This is already a significant error, allowing Ponomariov to demonstrate his knowledge of the Hidden Laws of IQPs. 9...0-0 was required.



White to move
(back to the exercises)

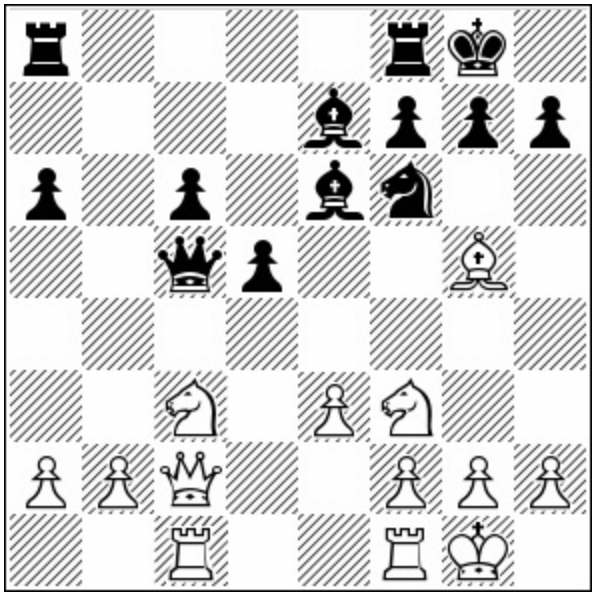
10.Bb5!

Very good. By pinning the black knight, Ponomariov creates the opportunity to exchange a set of minor pieces. Another benefit of the move is that it makes it more difficult for Black to take on c5.

10...a6

By forcing White to exchange immediately, Black at least wins the pawn back. 10...0-0 11.a3! (sometimes, a tiny move has devastating consequences. White intends to consolidate the extra pawn on c5 with b2-b4) 11...Bxc5 12.Bxf6 gxf6 leaves the black pawn structure in ruins. White has a winning advantage.

11.Bxc6+ bxc6 12.0-0 Qxc5 13.Rac1 0-0



The exchange on c6 has altered the pawn structure, as the IQP is now supported by a pawn on c6. In the new situation, Black has hanging pawns, a topic that will be discussed in more depth in the next chapter. I can already reveal that similar Hidden Laws apply in positions with hanging pawns. So, it turns out that Ponomariov currently has an extremely favourable version.

The capability to alter pawn structures at the right moment is an important weapon to have in your arsenal. The transition from isolated queen's pawns to hanging pawns is a common one. A regular theme of this transition is that

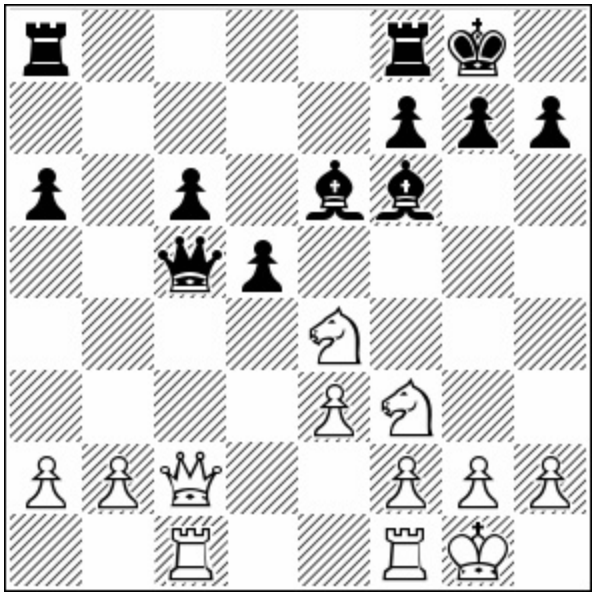
the supporting pawn on c6 is a backward pawn. Suddenly, it is the c-pawn that becomes the main target.

14.Bxf6!

With another exchange, White amplifies the structural problems in Black's position. The move is based on a sweet tactical detail.

14...gxf6

14...Bxf6 is more natural, but Ponomariov had a nasty reply ready: 15.Ne4!



analysis diagram

15...Qxc2 (15...Qe7 is the most tenacious reply, but after 16.Nxf6+ Qxf6, White has no weaknesses and plenty of targets on the queenside. Black faces a rough defensive task) 16.Nxf6+! (this zwischenzug is the key) 16...gxf6 17.Rxc2. White's positional advantage is overwhelming. In the introduction, I mentioned the importance of tactical training. In chess literature, it is regularly pointed out how good strategy is required to make tactics work. But it is also the other way around. Strong positional play needs to be supported by a solid tactical foundation. Weaving in these small combinations enables you to pursue a strong strategy. It is like a smart football coach who needs

technically gifted players to make his master plan come to fruition.

15.Nd4 Rfc8 16.Na4!

Black can no longer protect all his pawns. Besides attacking the weaknesses on the c-file, White is also threatening a fork on b6.

16...Qxc2 17.Rxc2 Rab8 18.Rxc6 Bf8 19.Rxa6 Rc4 20.b3 Bc8 21.Rxf6

Black's pawns are dropping like flies. With three extra pawns, White went on to win comfortably.

1-0

A very smooth victory for the Ukrainian grandmaster. 10.Bb5! was a key move enabling the right trades. Exchanging minor pieces proves to be an excellent strategy in the fight against the IQP. Another important strategic aspect of IQPs is the possible transition between various pawn structures. Be willing to transform an IQP into a position with hanging pawns – a structure that will receive special attention in the next chapter.

The exchange on c6 admittedly solves the problems of the d5-pawn, but new problems are created on the c-file. Since the c6-pawn is a backward pawn, it becomes particularly vulnerable.

Preserving major pieces

At the start of this chapter, I also introduced another Hidden Law: the preservation of major pieces increases winning chances when fighting against an isolated queen's pawn. We move on to another Ukrainian grandmaster, Vasyl Ivanchuk, who displays great mastery of the Hidden Laws of IQPs by making a peculiar decision on move 17. This game illustrates beautifully why it is so important to preserve heavy pieces when you are fighting for victory against an IQP.

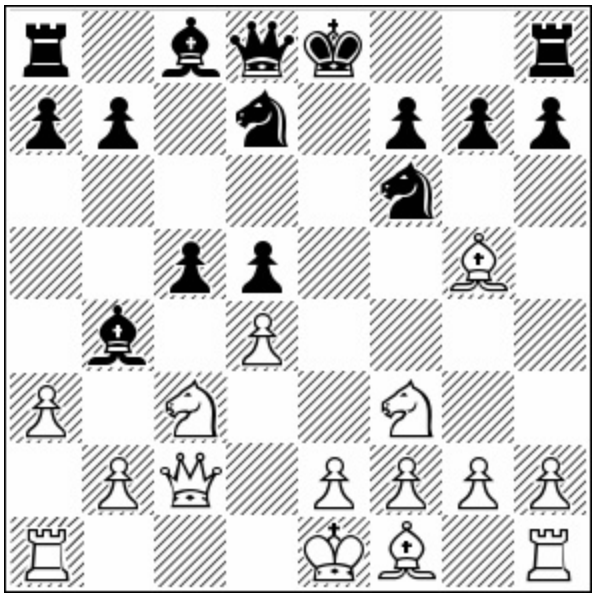
Game 3 Nimzo-Indian Defence
Vasyl Ivanchuk 2750

Levon Aronian 2744
Morelia 2007 (7)

1.d4 Nf6 2.c4 e6 3.Nf3 d5 4.Nc3 Bb4

The Ragozin is one of those openings in which Black regularly plays with an isolated d-pawn.

5.Bg5 Nbd7 6.cxd5 exd5 7.Qc2 c5 8.a3

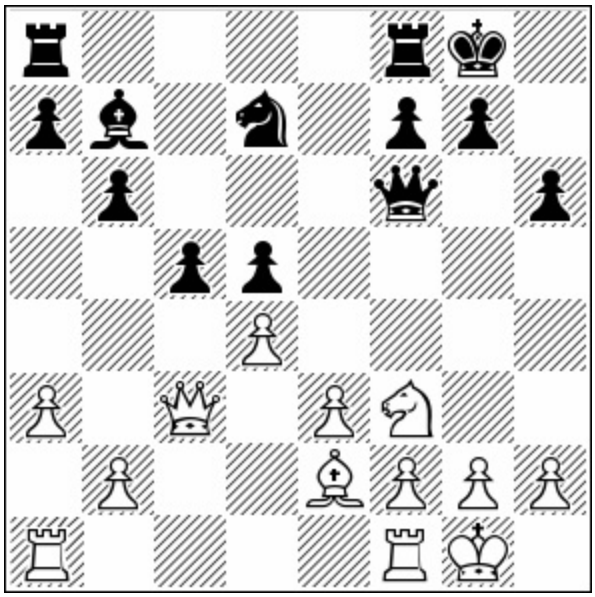


An interesting choice, forcing Black to clarify the situation on the queenside. White takes advantage of his early queen move, obtaining a structural advantage. The downside is obviously that this idea is very time-consuming.

8...Bxc3+ 9.Qxc3 h6

9...c4!? is the most popular move. Black grabs space on the queenside and avoids a structure with an isolated d-pawn.

10.Bxf6 Qxf6 11.e3 0-0 12.Be2 b6 13.0-0 Bb7



The first key moment arrives. Both sides are about to finish their development. The material is balanced. The tension in the position resides on the c5-square. A capture on d4 is clearly undesirable for Black, as White can then fight against the isolated pawn under very favourable circumstances. On the other hand, a capture by White on c5 allows Black to insert a queen trade on c3, damaging the white pawn structure and leaving Black without any problems. It is time for White to come up with a plan.

14.Rfc1!?

Wow! Why on earth would Ivanchuk bring this rook to c1, rather than the more natural Rac1? Let's first discuss the idea behind a rook move to c1. White now has a clear idea in mind. On the next move, he intends to take on c5 and with a rook on c1, he can take back on c3 without his structure being damaged. This gives White good prospects to play either against the IQP or against hanging pawns if Black opts for ...bxc5.

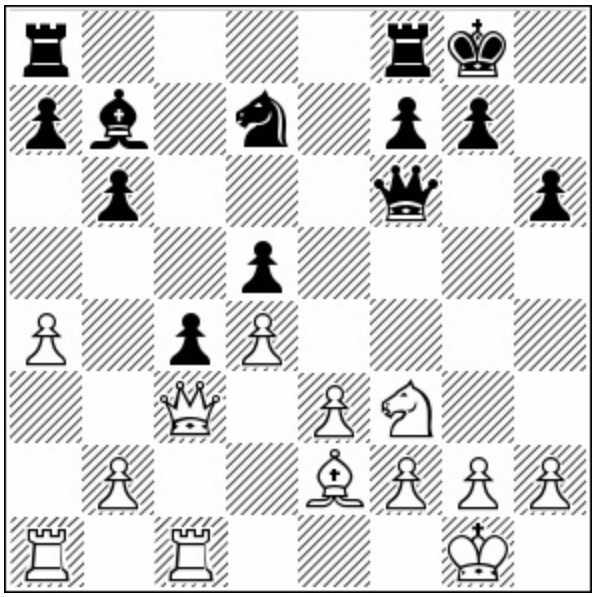
Note that in these variations where White takes on c3, it doesn't really matter if the other rook is on f1 or a1 – it has to move anyway. The difference comes to light if Black reacts with the more aggressive ...c5-c4, which will be discussed on the next move.

Note that preventing ...c5-c4 altogether by going full prophylaxis with

14.b3!? is potentially the right way to go. Still, it is hard to believe that such a timid move can lead to a real advantage for White.

14...Rac8?!

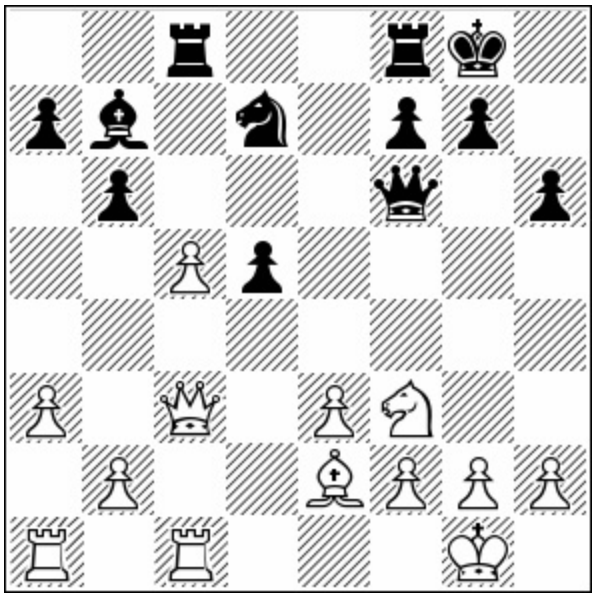
Now, Ivanchuk's strategic idea comes to full fruition. 14...c4! was still correct. Even though White is setting up his pieces in a way to counteract this move, Black should opt for it anyway! 15.a4.



analysis diagram

This is what White has in mind. The rook on a1 is clearly contributing to the battle on the queenside. White wants to prevent ...b6-b5 and he prepares b2-b3. 15...a6 16.b3 (16.Qb4 Bc6, and White cannot prevent ...b6-b5 in the long term) 16...b5 17.Nd2 Rfc8 18.Bf3 Bc6. Black had a fine position in Zakhartsov-Shimanov, Irkutsk 2010.

15.dxc5!



Suddenly, Black is facing an awkward decision. He has four different options, none of which are very appealing.

15...Qxc3

Let's consider the alternatives too:

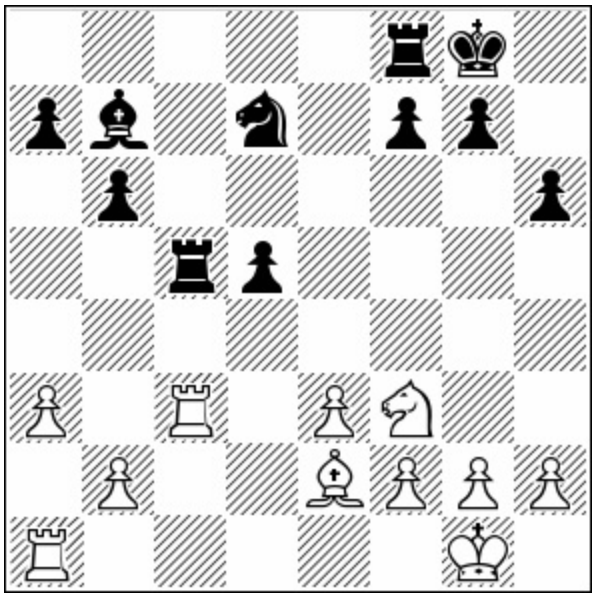
A) 15...Nxc5? 16.Qxf6 gxf6 is obviously terrible for Black;

B) 15...bxc5 16.Qxf6 Nxf6 17.b4!. A key idea that we will revisit in the next chapter. After 17...c4 18.Nd4, White can play against the hanging pawns under favourable circumstances;

C) 15...Rxc5 16.Qxf6 Nxf6 17.Nd4 Rfc8 (17...Rxc1+ 18.Rxc1 Rc8 19.Rxc8+ Bxc8 20.Nc6!. Black has succeeded in exchanging all of the rooks, but now he loses tactically: he cannot defend against the check on e7 and the capture on a7 simultaneously) 18.Rd1!, and White enjoys a massive advantage. He completely controls the isolated queen's pawn while at the same time keeping all the rooks on the board.

16.Rxc3 Rxc5

Once again, the alternative 16...bxc5 17.b4! c4 18.Nd4 is good for White.



White to move
(back to the exercises)

Question: In the game, we have finally entered a position where Black has an IQP. It is clear White has the advantage, as Black has no apparent compensation. Still, winning such a position is far from trivial. How can White maximise his winning chances? Take your time, since we are about to witness Ivanchuk's star move of the game.

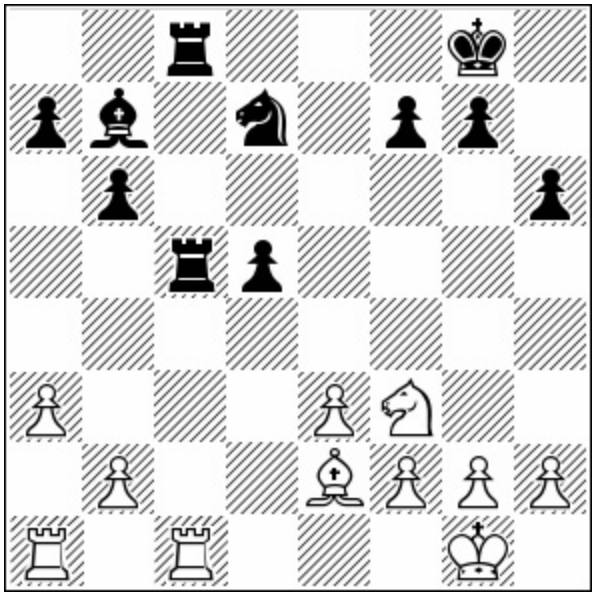
17.Rcc1!!

Ivanchuk shows true mastery over the Hidden Laws of IQPs. He tries to keep all the rooks on the board, creating a situation where Black doesn't have a clear-cut path to a draw. 17.Rac1? is natural but leaves White without real winning chances: 17...Rfc8 18.Rxc5 bxc5 19.b4 Kf8 20.bxc5 Rxc5 21.Rxc5 Nxc5. White is better, but his advantage shouldn't be sufficient to win. Without rooks on the board, Black should easily be able to defend his single weakness.

17...Rfc8?!

Aronian should have followed the Hidden Laws of IQPs by at least

exchanging one pair of rooks: 17...Rxc1+ 18.Rxc1 Rc8 19.Rb1, creating a similar situation to the game, but with only two rooks on the board.



18.Rd1

18.Rcb1!? was a fascinating alternative that featured in Salem-Hou Yifan, Sharjah 2017. While this move appears extraordinarily passive, it does offer Black even fewer options, as ...Rc2 is no longer a double attack. White takes control by centralizing the knight on his next move and the rooks will find other duties later.

18...Rc2

With such an active rook, Black shouldn't be in any trouble, right? Well, Ivanchuk has calculated nicely. By means of a subtle counterattack, he makes sure that the intruder gets kicked out.

19.Bb5!

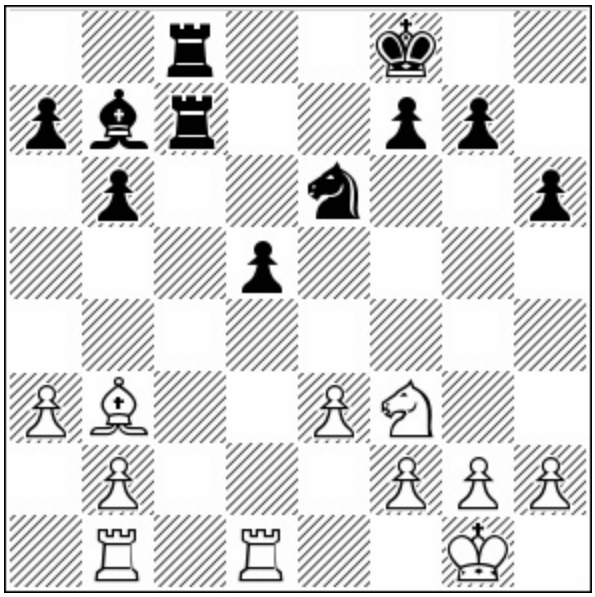
A sweet little tactic. The black knight is under attack, which grants Ivanchuk time to defend b2 as well.

19...Nf8 20.Rab1

With the pawn on b2 defended, White is ready to kick the black rook out. Black's activity is an illusion. He has no targets to attack.

20...R2c7 21.Ba4 Ne6 22.Bb3 Kf8

Another interesting moment arises.



23.h3

Wait, wasn't there a pawn hanging on d5? Don't be hasty! It is too early to cash in: 23.Bxd5 Bxd5 24.Rxd5 Rc1+ 25.Rd1 Rxd1+ 26.Rxd1 Rc2 27.Rb1. This is precisely the sort of transition that Aronian is looking for. By giving up a pawn, he can seize control. Here, the difference in activity between the rooks is so stark that White doesn't have any realistic winning chances. My countrymen, the Dutch, have a reputation of being greedy. Apparently the Ukrainians don't!

23...Rc5 24.Kh2!?

A cunning idea. Ivanchuk judges that Black has no active counterplay and so he takes his king out for a walk. 24.Rd2 came into consideration too. It allows Black to exchange one pair of rooks, but it avoids a key defensive idea.

24...Ke7

24...Rb5! would have put White in an awkward spot. After 25.Ba4, Black keeps chasing with 25...Ra5. 25.Ba2, on the other hand, fails to 25...Rc2. This leaves 25.Nd4!? Nxd4 26.Ba4 Nf3+! 27.gxf3 Ra5, and Black secures a level position. Fortunately for the Ukrainian, his creativity isn't punished!

25.Rd2

Ivanchuk evacuates his king from the back rank, so ...Rc1 is no longer coming with check.

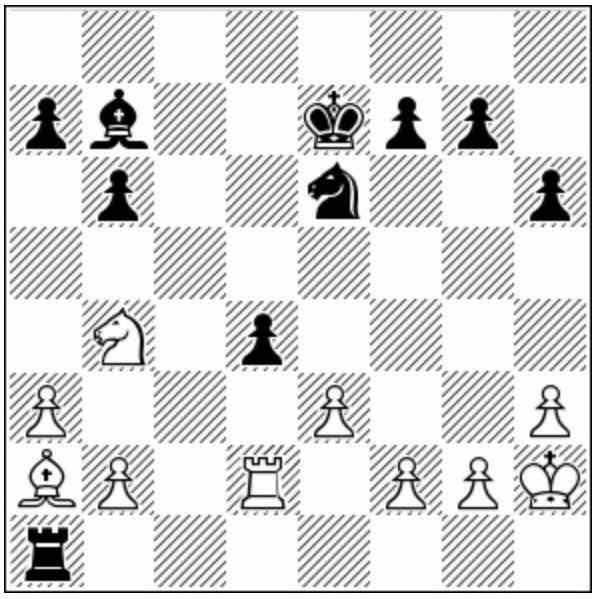
25...Rb5

25...Rc1 26.Rxc1 Rxc1 27.Bxd5, and White wins a healthy pawn. Notice how, contrary to the alternative on move 23, White is not suffering from a passive rook. Ivanchuk's prophylactic measures are clearly paying dividends.

26.Ba2 Rbc5 27.Ne1 a5

27...Rc1! is Black's best defence, even though he must walk a tightrope: 28.Rxc1 Rxc1 29.Nd3.

A) 29...Ra1?! is a natural move, but White has a beautiful refutation: 30.Nb4. All alternatives allow Black to solve his problems with ...d5-d4. Black can now try the active 30...d4!? anyway.



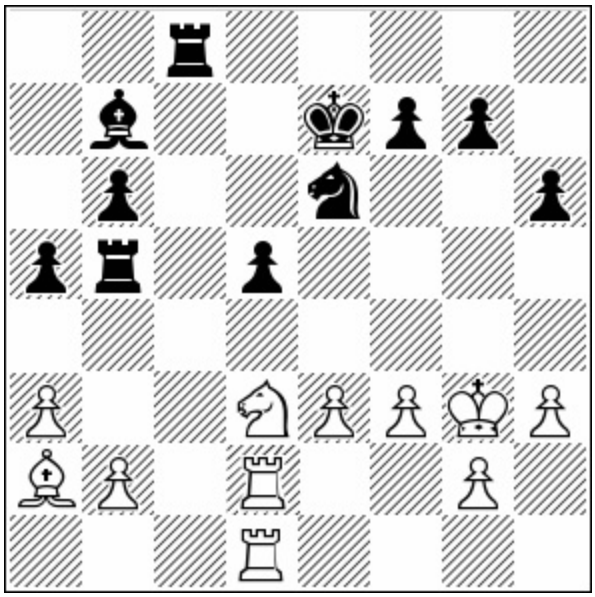
analysis diagram

Question: Can you figure out how White can maintain the upper hand? Try to include Black's best defence in your calculation.

31.exd4 Nf4. Suddenly, Black appears to be super-active. Yet, the white d-pawn will shut down all counterplay (31...a5 32.Nd5+ Bxd5 33.Bxd5, and White saves the piece): 32.d5! a5 33.Nc6+ Bxc6? (33...Kd6 34.Bb3, and White enjoys a healthy extra pawn) 34.dxc6! Rxa2 35.c7. White has lost a piece, but the black army can no longer stop the pawn from queening;

B) 29...Rc8! 30.Nb4 Nc7! is critical. Sometimes, passive defence is best. White is better but has no clear way to improve his position.

28.Rbd1 Rd8 29.Kg3 Rb5 30.f3 Rc8 31.Nd3



White's slow manoeuvring has paid off big time. Suddenly, the black pieces are misplaced while the white army is coordinating beautifully. Black is dead lost.

31...d4 32.Bxe6 Kxe6 33.Nf4+

An important intermediate check. The hasty 33.exd4 makes Ivanchuk's task more difficult.

33...Ke7 34.Rxd4 Rc7 35.R1d2

The isolated pawn has been eliminated and White is in full control. Ivanchuk converts comfortably.

35...Rbc5 36.e4 Rc4 37.Rd6 R4c6 38.e5 Rc2 39.Rxc2 Rxc2 40.Rxb6 Bc6 41.b4 g5 42.Nh5 axb4 43.axb4 Bd5 44.Ng7!

A third pawn is about to drop. The game is over.

44...Re2 45.Nf5+ Ke8 46.Nxh6 Be6 47.Rb5 Rb2 48.Rb8+ Kd7 49.Rg8 1-0

A fantastic technical victory by Ivanchuk. He made a lot of cunning moves that kept the game going by denying Aronian a straightforward path to a

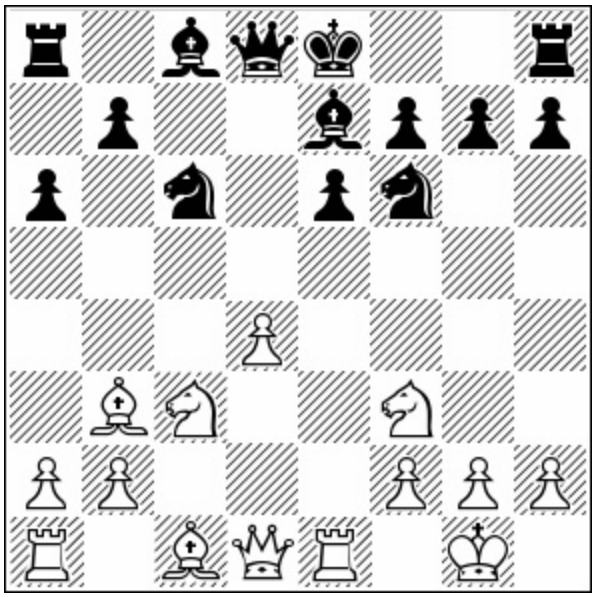
draw. After keeping up the pressure, Ivanchuk eventually managed to make substantial progress. Once the IQP dropped, other pawns quickly fell as well. You can only make a move like 17.Rcc1 if you have achieved a phenomenal understanding of this particular pawn structure.

The d4-d5 push

We have thus far seen several examples of how an opposing isolated queen's pawn can be exploited. However, the IQP isn't always merely a weakness. It can regularly generate attacking possibilities, as it provides a lot of freedom for your pieces. We will now turn the board around and look for ways to turn an isolated queen's pawn into an asset.

Game 4
Vladimir Kramnik 2751
Anatoly Karpov 2710
Frankfurt 1999 (3)

1.d4 d5 2.c4 dxc4 3.Nf3 Nf6 4.e3 e6 5.Bxc4 c5 6.0-0 a6 7.Bb3 Nc6 8.Nc3 cxd4 9.exd4 Be7 10.Re1



In this popular position in the Queen's Gambit Accepted, most players follow common sense and opt for 10...0-0. Karpov thought that it was time for an adventure.

10...Na5?

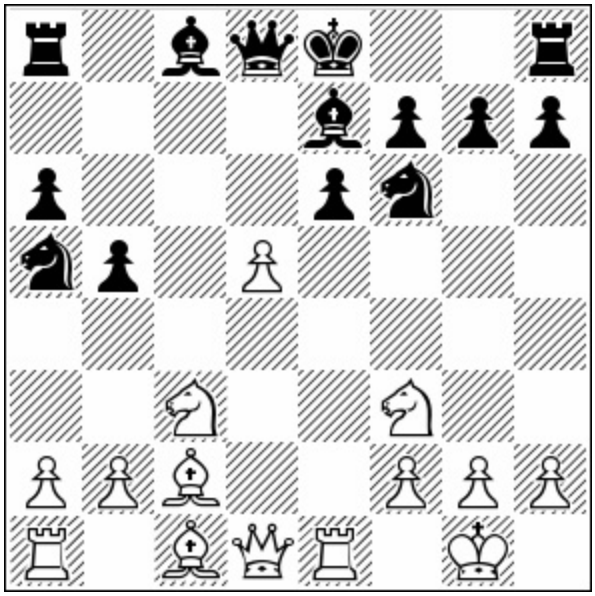
A mysterious move that has been played thirteen times nonetheless. This knight move is inflexible as the knight is often deployed to b4 to control the important d5-square. Furthermore, Black is giving up control over the centre and he chases the bishop to a square where it is not necessarily worse off.

11.Bc2 b5

Well, we can't blame Karpov for lacking ambition...

12.d5!

Of course! With Black's king still stuck in the centre, it is time to strike.



12...b4

A) 12...exd5?! unsurprisingly leads to quick disaster: 13.Bg5 Be6 14.Nd4 0-0 15.Qd3 g6 16.Nxe6 fxe6 17.Rxe6, and a young Jobava won a convincing game against Paresishvili, Tbilisi 2000;

B) If 12...Nxd5?! 13.Nxd5 Qxd5, 14.Bd2! is very powerful: 14...Nc6 15.Be4. The white bishop pair is coordinating beautifully. 15...Qd6 16.Qc2 Bb7 17.Bf4! Qc5 18.Qxc5 Bxc5 19.Rac1 Bb4 20.Bxc6+ Bxc6 21.Rxc6 Bxe1

22.Nxe1. The endgame is winning for White;

C) The natural 12...0-0 should be preferred. Still, the damage has already been done. White can continue forcefully with 13.Qd3!. A thematic idea. White sets up a strong battery and aims directly at the black king. The threat is 14.Bg5 followed by 15.Bxf6. (13.Bg5 was played in Peluso-D'Adamo, cr 1999. After Black played the accurate 13...h6!, he managed to hold the draw) 13...g6 14.Bh6 Re8 15.Qd4!. A tiny move with huge consequences. After all alternatives, Black takes on d5. Now, 15...Nxd5 allows a mate in one and 15...exd5 runs into 16.Rxe7!. Instead, after 15...Bb7 16.dxe6 Qxd4 17.Nxd4, White is up a healthy pawn.

13.Ba4+!

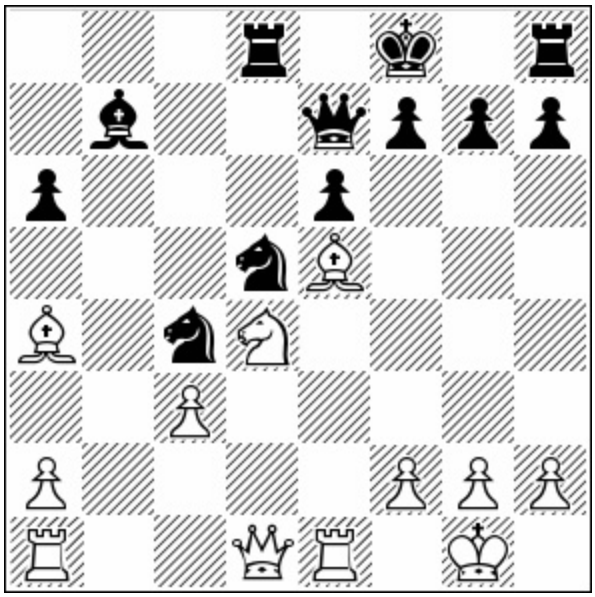
A nifty check, forcing Black to give up the right to castle.

13...Kf8

In chess, castling has two main purposes: it brings the king into safety, and it connects the rook with the rest of the army. Therefore, a compulsory king move in the opening often has devastating consequences. Kramnik shows no mercy.

14.Bf4 bxc3 15.d6 Nd5 16.dxe7+ Qxe7 17.Be5 Bb7 18.bxc3 Rd8 19.Nd4 Nc4?

It is easier to blunder in difficult positions.



Now it is time for gallery play.

20.Bxg7+!

The alternative move order that starts with 20.Nf5! is equally powerful.

20...Kxg7 21.Nf5+ exf5 22.Rxe7 Nxe7

Karpov lost his queen, but he did get a lot of material in return. How does Kramnik justify his investment?

23.Qe2!

Nice. Both knights are loose, so this double attack decides the game. That's why you must protect your pieces!

23...Ng6 24.Qxc4

Kramnik is up a lot of material, and he went on to win comfortably.

1-0

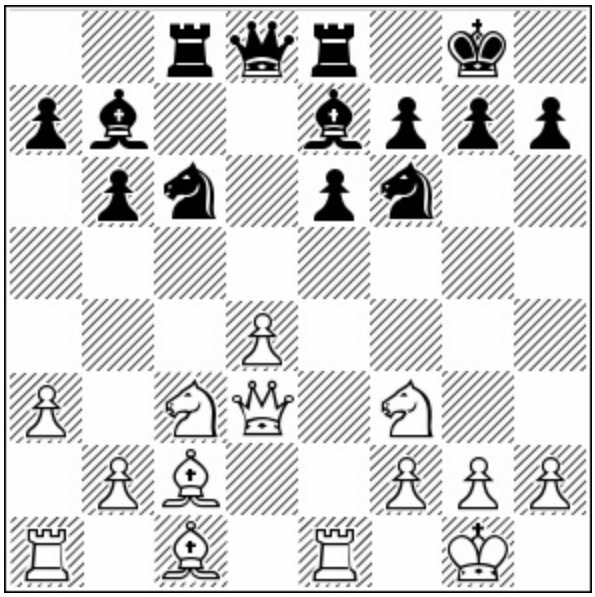
Karpov conducted the opening carelessly. With energetic play, Kramnik was able to capitalise to maximal effect. The d4-d5 push put a lot of pressure on

Karpov's position. Once the isolated queen's pawn is activated, it is no longer a liability, but instead it turns into an asset. However, when Black plays more carefully, this advance of the isolated queen's pawn is not so easy to realise. Generally, Black has enough control over the d5-square, which means that he can at least capture the pawn. Still, this should not discourage White from applying the d4-d5 pawn push idea.

> The d4-d5 push of the isolated queen's pawn can serve two purposes: firstly, an exchange can lead to simplification that can favour the side with better development, and secondly, the pawn can be sacrificed to cause disruption in the enemy camp.

In the next game, we will witness an application of the first purpose: simplification.

Game 5
Tigran Petrosian
Yuri Balashov
USSR 1974



White to move

Black had just played the inaccurate 14...Re8. Balashov's intention was

clearly to discourage an advance in the centre by overprotecting his bishop on e7. Petrosian isn't fazed and continues his agenda anyway.

15.d5!

Very good. At first sight it may look a bit surprising that White can force the issue in the centre since Black doesn't appear to be behind in development. Petrosian accurately judged that quality trumps quantity. In particular, the bishop and queen tandem is mighty strong – a recurring theme in IQP positions.

15...exd5 16.Bg5 Ne4

Black is pulling the emergency brake and gives back the pawn right away. 16...g6? 17.Rxe7! Qxe7 18.Nxd5, and it all falls apart.

17.Nxe4 dxe4 18.Qxe4

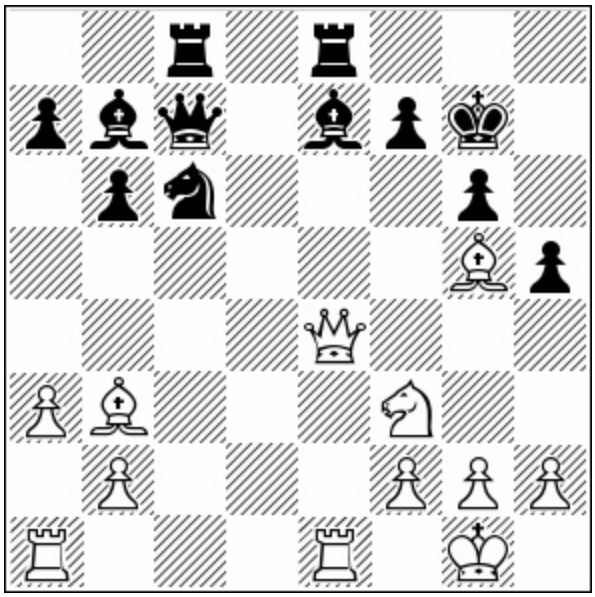
Suddenly, the structure is symmetrical. Now, it is primarily piece activity that matters. Black is lacking defenders on the kingside, which forces him to make major concessions.

18...g6 19.Qh4 Qc7 20.Bb3!

Remember this bishop manoeuvre, as it will be useful later on! Once ...g7-g6 has been provoked, the bishop can return to the a2-g8 diagonal.

20...h5 21.Qe4 Kg7

White was threatening 22.Qxg6 so Black didn't have much of a choice.



White to move
(back to the exercises)

22.Bxf7!!

Splendid. The black king was already very exposed and is now stripped of its remaining defenders.

22...Kxf7 23.Bh6!

Of course, this is what it is all about. The king has no way back.

23...Qd6

23...Kg8 24.Qxg6+, with mate.

24.Qc4+

The queen takes over the job from the bishop that has been sacrificed for a great cause. If your king is your most active piece in a middlegame position, this often means that the end is near...

24...Kf6 25.Rad1 Nd4 26.Qxd4+

The queens are coming off, but that won't bring Black any relief.

26...Qxd4 27.Rxd4 Rc5 28.h4

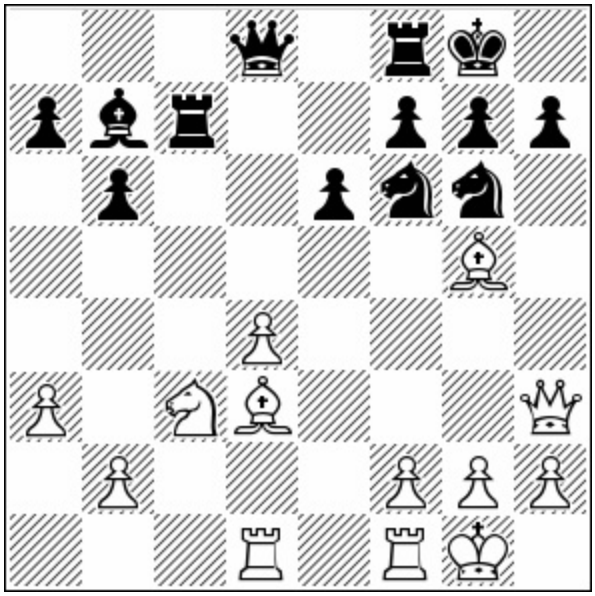
Black will now be losing at least a piece, so he decides to throw in the towel.

1-0

After the exchanges in the centre, the pawn structure was symmetrical. In the ensuing situation, Petrosian's pieces were considerably better positioned. He was able to force his opponent into making concessions, after which the black king came under heavy pressure. A fantastic sacrifice sealed the deal.

Sometimes, the d4-d5 push is not an attempt to simplify, but instead functions as a sacrifice. The aim is to cause disruption. We will return to Kasparov, who loved to play IQP positions from the white side. He executed multiple successful d4-d5 thrusts during his career.

Game 6
Garry Kasparov 2800
Lev Psakhis 2575
La Manga 1990 (m/6)

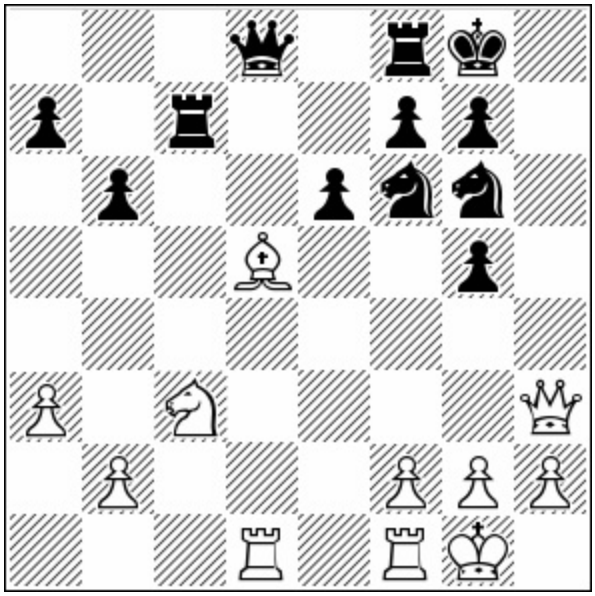


White to move

Kasparov has dynamically positioned his queen on h3, a noteworthy square in IQP positions. Can you figure out White's best continuation?

17.Qg3?!

A) If you guessed that the best continuation is 17.d5?, you were ambushed by the theme of this section. At this moment, attempts to exploit the pressure on the d-file only lead to simplification: 17...Bxd5 18.Be4 h6 19.Bxd5 hxg5



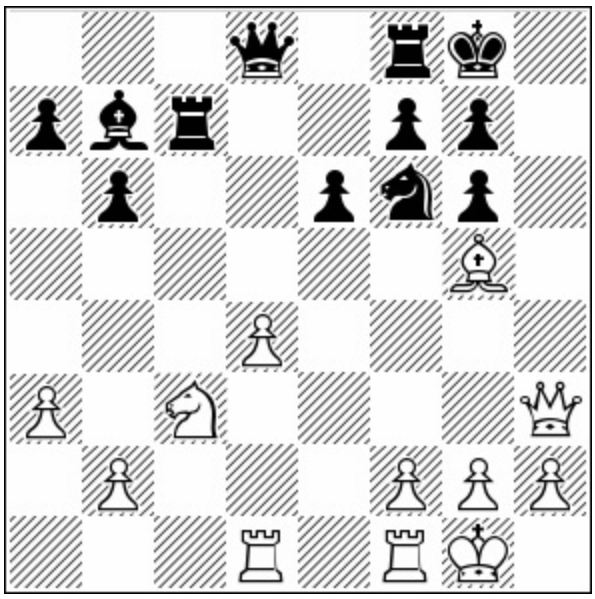
analysis diagram

20.Bxe6 Qb8, with equality. If the capture with the bishop is viable, Black is rarely facing real danger.

Indeed, after the alternative 17...exd5, White's strategy is working beautifully. Black's own pawn on d5 is curbing his activity and White has a strong continuation: 18.Nb5! Rc5 19.b4 Rc6 20.Nxa7 Rc3 21.Nb5 Rb3 22.Rfe1, with advantage. However, it is important to note that we may *never* resort to wishful thinking;

B) 17.Bxg6!!. A powerful, unorthodox trade that apparently wasn't on Kasparov's radar. Since Black is forced to recapture with his h-pawn, he will

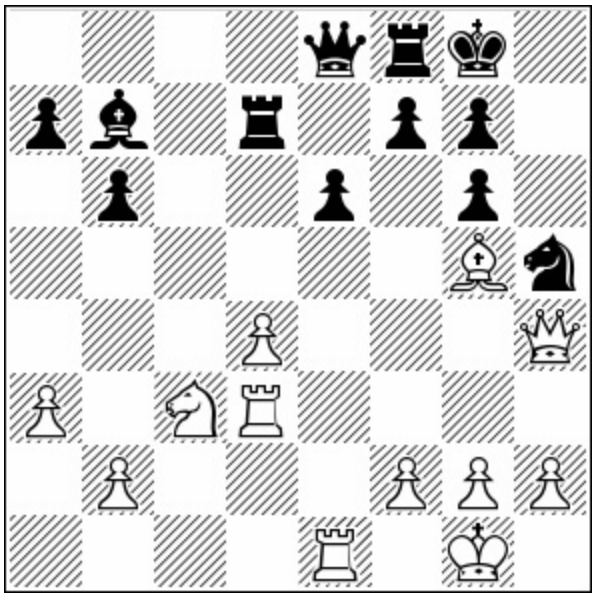
be under a constant threat of being checkmated down the h-file. Similar to Lasker-Capablanca (Game 19), this is yet another of those cases in which the Hidden Laws of Chess may be (temporarily) disregarded. 17...hxg6



analysis diagram

18.Rfe1!. This patient move puts Black in trouble. Now, there is no skewer along the a6-f1 diagonal to worry about. The threat is to play 19.Qh4 and swing over a rook to h3. Even though this plan is slow, Black doesn't have enough activity to develop sufficient counterplay in time. (Note how the immediate 18.Rd3 fails to 18...Ba6; and after 18.Qh4, intending Rd3 followed by Rh3, Black is just in time to create counterplay with 18...Qa8!. Black unpins the knight and prevents the rook from swinging over to h3 by threatening a capture on g2. 19.Bxf6 gxf6 20.d5!. This key advance shuts down Black's activity on the diagonal, but Black isn't out of it yet. 20...Kg7! (Black protects f6 and suddenly he is the one who is contemplating an attack on the h-file) 21.Ne4 Qd8 22.dxe6 Qe7 (the pin allows Black to recover the pawn) 23.Nd6 fxe6 24.Nxb7 Rxb7, and White is only marginally better) 18...Rd7 (18...Rxc3!? is an alternative that's worth mentioning: 19.bxc3 Qd5. At the price of an exchange, Black can thwart the attack. Black has decent compensation due to his control of the light squares, but with the extra material White should enjoy decent winning chances) 19.Qh4 Qe8 (strangely

enough this is the only move that avoids immediate defeat. For instance, 19...Qa8 20.Bxf6 gxf6 21.Qh6!. (another fine quiet move; White had to prevent 21...Kg7) 21...Bxg2 22.Rd3 (Black has smashed the white king's position, but he is lacking a good follow-up. White's threat of disconnecting the black queen and bishop with d4-d5 is decisive) 22...Rd5 23.Nxd5 Qxd5 24.Rg3 Bf3 25.Qf4 Bh5 26.Qxf6. White is winning) 20.Rd3 Nh5

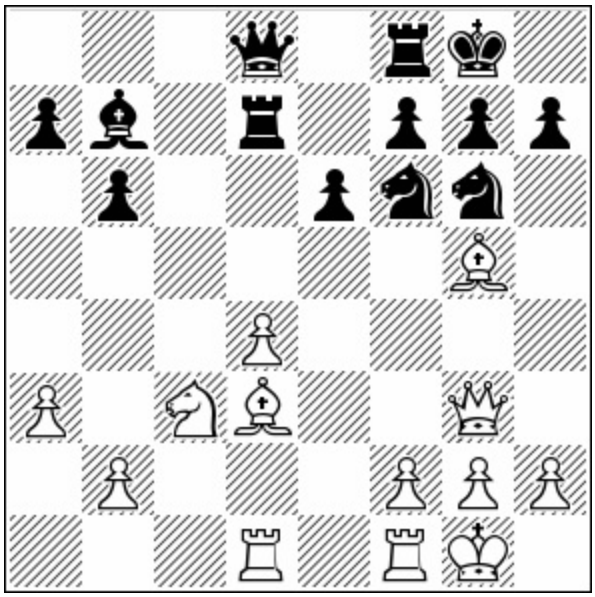


analysis diagram

21.d5!. A recurring theme! White has a big initiative and especially Black's f8-rook is struggling for breath. It's hard to imagine Black will be able to withstand this amount of pressure for long.

17.Qg3?! Rd7

Very natural. Psakhis' pieces appear to be coordinating beautifully. The bishop is operating on an excellent diagonal and the pressure against the isolated queen's pawn is mounting.



White to move
(back to the exercises)

Question: What did Kasparov have in mind?

18.d5!

Kasparov's favourite resource in IQP positions. He was clearly aiming at this. Precisely at the moment when the pressure on d4 is becoming critical, the pawn is launched forward.

18...exd5

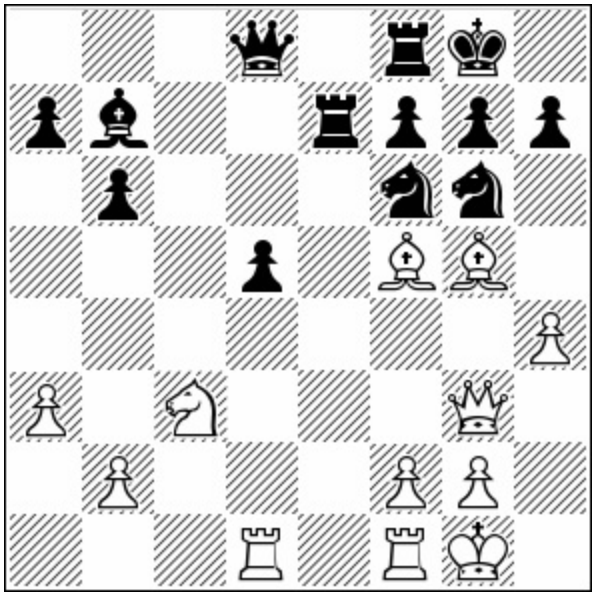
18...Bxd5 is possible but White has a venomous follow-up: 19.Bb5! Rc7 20.h4! Rc5!?. By investing an exchange, Black can alleviate the pressure. 21.b4 Rxb5 22.Nxb5 h6 23.h5 Nxh5 24.Bxd8 Nxg3 25.fxg3 Rxd8 26.Rf2. Black has two pawns for the exchange and a solid pawn structure. Still, a rook is a tremendous piece in the endgame, and White's activity should offer him decent winning chances.

19.Bf5 Re7

What did Kasparov achieve with his pawn sacrifice? After 17...Rd7, Black's coordination appeared excellent. Black had a great bishop operating on the long diagonal and he was putting severe pressure on the d-file. Now look how one move has transformed the position. All the pressure on the d-file is gone, and the black bishop is staring at a dark surface. Suddenly, it is White who is in charge of the d-file.

20.h4!?

Interestingly, Kasparov discarded 20.Bxf6 gxf6. The damaged black structure guarantees a white advantage, but it's true that White lacks firepower to set up a decisive attack.



20...Qc7

20...Ree8! is a cunning defence. It is almost as if Black's queen and rook have castled too. Black is protecting the f6-knight again and is now threatening to kick out the bishop with ...h7-h6. Surprisingly, White has no way to fight for an advantage here.

21.Qxc7 Rxc7 22.Rfe1

Normally, you would think that a simplification into an endgame favours the

side with the extra pawn. But Kasparov has judged finely that he maintains an initiative.

22...Re7 23.Nb5 Rfe8?!

23...Ba6 was a good way of guarding a7. Still, after 24.Rxe7 Nxe7 25.Nd4, White retains some advantage due to his far superior activity.

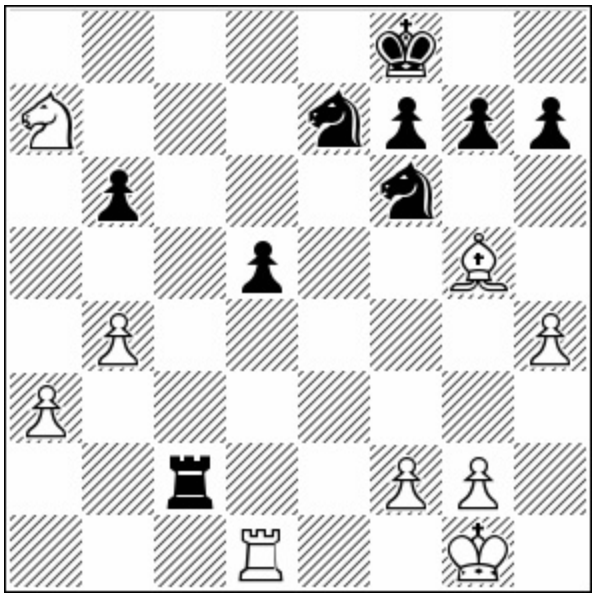
24.Rxe7 Nxe7

Perhaps Psakhis initially intended to recapture with his rook, but now figured out that this isn't very good either: 24...Rxe7 25.h5! Nf8 26.Bxf6 gxf6 27.Nxa7. With the far superior pawn structure and more active pieces, White should win.

25.Bh3 Bc8

Or 25...a6 26.Nd6 Rb8 27.Rc1, after which Black will be tied down completely.

26.Bxc8 Rxc8 27.Nxa7 Rc2 28.b4 Kf8



29.Be3!

In rook endgames with pawns on both flanks, bishops are generally better than knights.

The last move perfectly illustrates this, as a bishop can quickly swing from one flank to the other.

29...Nf5?

Black goes for a counterattack. But the strong bishop ensures that this attack is bound to fail. In the meantime, White is eating up Black's entire queenside. The connected passed pawns on the a- and b-files should now decide the game. 29...Nd7 was required.

30.Bxb6 Ng4 31.Bc5+ Ke8 32.Nb5 Ra2 33.Nc3 Rxa3 34.Nxd5 f6 35.b5 Rb3 36.b6 1-0

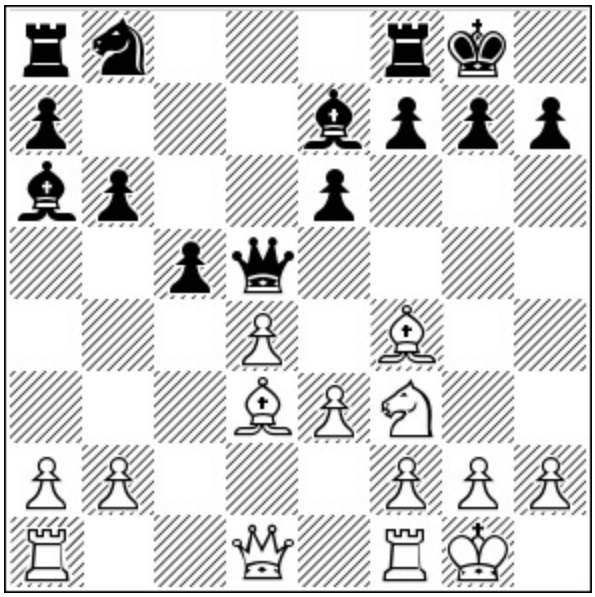
Notice how a single pawn move can transform a position! The d4-d5 push was timed excellently, and the sacrifice worked like a spell, deflecting the opposing charm right back. Even without queens, Kasparov maintained a sprakling initiative that more than compensated for the pawn deficit. Eventually, the pawn was recovered with interest and the extra material was calmly converted.

Passed pawn

Sometimes, an isolated d-pawn can move forward without facing any opposition.

An IQP can be a powerful asset if it becomes a mobile passed pawn.

Game 7
Joel Lautier 2678
Mershad Sharif 2463
Port Barcares 2005 (10)



White to move

We are entering a position in which Black is about to equalise. Facing a higher-rated opponent, Black opted to bring the bishop to a6 and offer an exchange of pieces with the intention of reaching calm territory. He has just played ...c7-c5, contesting the centre and threatening to make the position totally symmetrical.

Nevertheless, it is Lautier who strikes first...

11.e4! Qb7 12.d5!

The advance in the centre totally changes the nature of the position. White will play with an isolated pawn, but contrary to the previous games, Black will have trouble keeping it under control.

12...exd5 13.exd5 Nd7

13...Qxd5?? 14.Bxh7+!, but I guess you spotted that one!

14.Re1 Rfe8 15.Bxa6 Qxa6

With the black queen away from the action, Lautier judges correctly that it is

time to move forward.

16.d6! Bf6 17.Qd5

A fine move by White, putting the queen on a dominating central square and limiting Black's counterplay.

17...h6!

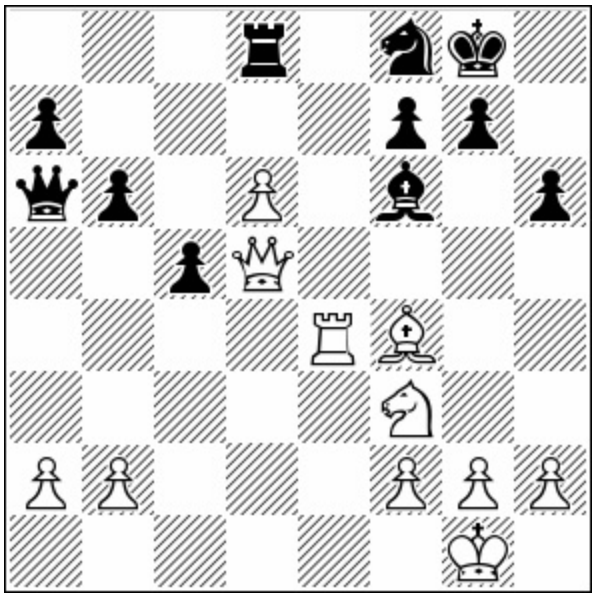
Solid defence, stopping White's threat of playing Ng5.

18.Re4?!

This rook move is a bit too creative. After 18.Ne5 Bxe5 19.Bxe5 Rad8 20.Bc3 White exchanges Black's strongest piece and keeps up the pressure.

18...Rad8 19.Rae1 Rxe4 20.Rxe4 Nf8?

20...Qc8! was the best defence. The queen needs to be brought back. After this retreat, it is surprisingly hard to suggest a way forward for White. In the game, Lautier can crash through with full force.



White to move

(back to the exercises)

21.Bxh6!

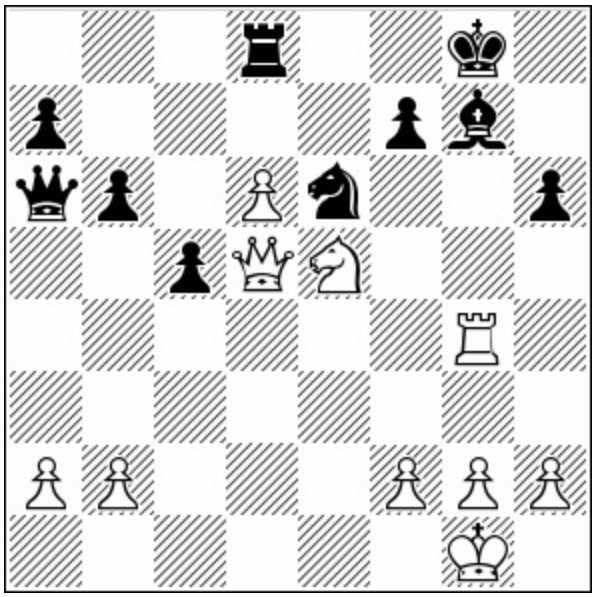
Marvelous. The black kingside is ripped open and its defenders are nowhere to be found.

21...gxh6 22.Rg4+ Bg7 23.Ne5

Since the black knight has moved away from d7, this square has become available for White.

23...Ne6

Alternatively, there was 23...Rd7 24.Nxd7 Nxd7 25.Re4. Even though Black has two pieces for the rook, he lacks activity and the white pawn on d6 is very strong. White should triumph easily.



Lautier needed to foresee this position when he went for the sacrifice on move 21. How does White crash through?

24.Nxf7!

A second piece is invested! Dazzling attacking play by the Frenchman.

24...Qe2

24...Kxf7 25.Qf5+ Kg8 26.Qxe6+ Kh8 27.Rxg7! Kxg7 28.Qe7+ Kg6 29.Qxd8, and the d-pawn will decide the game.

25.Nxh6+

25.Re4! was even stronger. Black has no mate, and he is now forced to give up the queen. The queen and passed pawn turn out to be far stronger than the rook, knight, and bishop: 25...Qxe4 26.Qxe4 Kxf7 27.Qf5+ Bf6 28.Qd5. Black does not have any good moves. For instance: 28...Bxb2 29.g4 Re8 30.f4 Kf6 31.Qf5+ Kg7 32.d7, winning material.

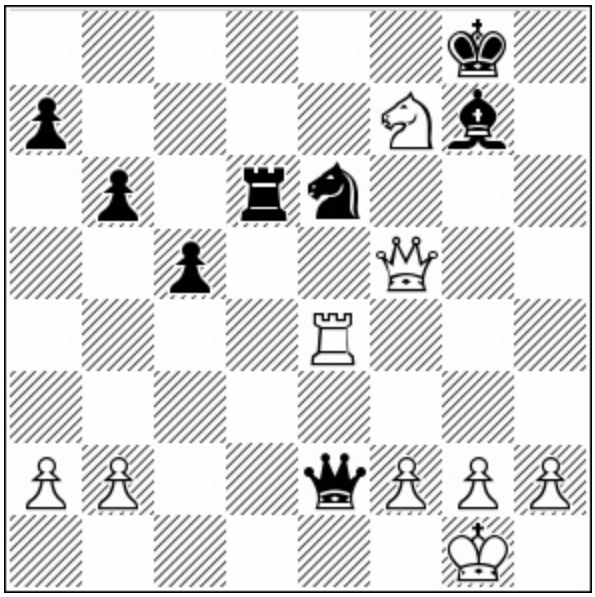
25...Kh7 26.Re4 Rxd6

Black doesn't go down without a fight, but Lautier has everything covered.

27.Qf5+ Kh8

27...Kxh6 28.Rh4+, and mate.

28.Nf7+ Kg8



29.h4!

The white king can now escape while the black king will never find a safe haven.

29...Qd1+ 30.Kh2 Rd7 31.Nh6+ Bxh6 32.Qxe6+ Kh7 33.Qf5+ 1-0

A spectacular attacking game by Lautier. The attack was enabled by two key factors. Firstly, an isolated d-pawn can become a force to be reckoned with once it passes the enemy pawns and enters deep into enemy territory.*

> * 'The passed pawn is a criminal, who should be kept under lock and key. Mild measures, such as police surveillance, are not sufficient.' – Aron Nimzowitsch

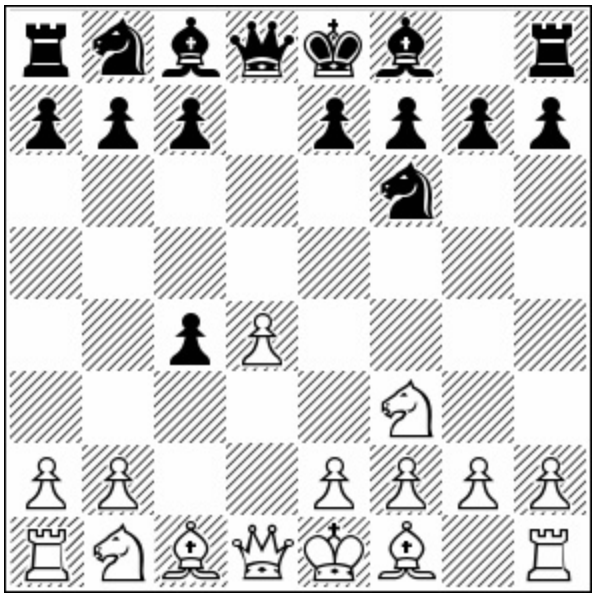
Secondly, the black queen was standing in the wrong neighborhood, which allowed Lautier to successfully unleash a series of sacrifices. Black was overloaded with defensive tasks as he couldn't simultaneously hold off the d-pawn and defend the king.

Dynamic piece play

Obviously, IQP positions aren't all about a possible advance of the d-pawn. Sometimes, Black can restrain this pawn. In such cases, White's play has to flow from his pieces. Dynamic IQP positions that aren't defined by a d4-d5 push are extremely rich in possibilities. Navigating these positions correctly requires great tactical prowess and calculation. The dazzling variations in the next game will be among the most complicated in the entire book. If you survive this one, it will only become easier!

Game 8 Caro-Kann Defence
Maxim Rodshtein 2614
Tigran Kotanjian 2545
Moscow 2008 (2)

1.d4 d5 2.Nf3 Nf6 3.c4 dxc4



Positions with an isolated d-pawn can appear everywhere, but they are particularly common in 1.d4 openings. In the Queen's Gambit Accepted, White often voluntarily takes on an isolated pawn and then tries to attack.

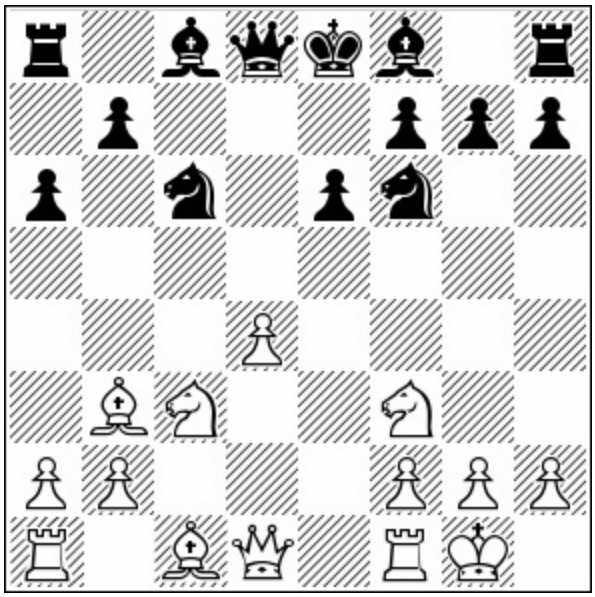
4.e3 e6 5.Bxc4 c5 6.0-0 a6 7.Bb3!?

An interesting prophylaxis that has been championed by both Kasparov and Kramnik. The main idea is to create an isolated queen's pawn without allowing Black to play ...b7-b5 with tempo. The alternative 7.dxc5 leads to an endgame and will be addressed in Chapter 8, when we will be discussing symmetry.

7...Nc6 8.Nc3 cxd4

8...Be7 is playable, but it allows White to take on c5 under more favourable circumstances. In the game, Black decides to isolate White's d-pawn.

9.exd4



One feature that makes this variation attractive for White is that it opens the diagonal for the dark-squared bishop. We can immediately recognise the mobility that the isolated pawn provides. White usually has two objectives: he wants to attack the black kingside, or he wants to transition with a well-timed d4-d5. Black on the other hand wants to blockade the d-pawn and exchange pieces, easing the pressure on his position.

9...Be7 10.Bg5 0-0 11.Re1 b5 12.Qd3

This odd-looking move has a clear aim. In an ideal world, White wants to set up a battery along the b1-h7 diagonal, threatening to win with Bxf6 and forcing a concession.

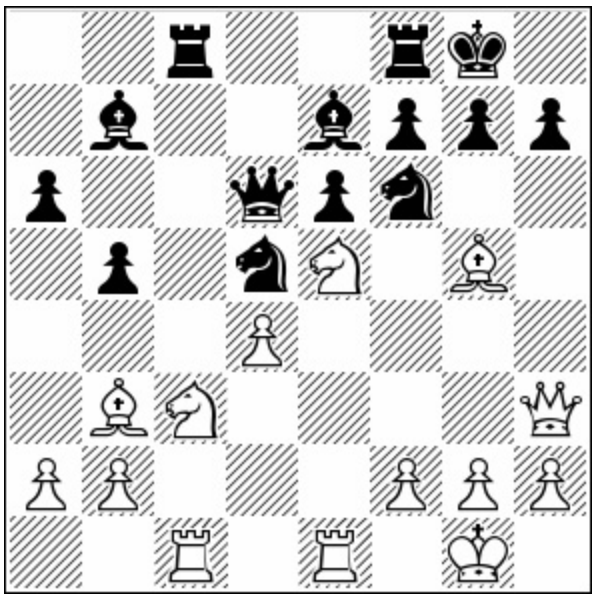
12...Nb4

Logical. Black deflects the white queen and takes further control over the important d5-square.

13.Qd2 Bb7 14.Ne5 Nbd5 15.Qd3 Rc8 16.Rac1 Qd6

16...Nd7! would be a sensible defensive move as it forces the exchange of minor pieces. For instance, 17.Bxd5 Nxe5! (a lovely zwischenzug) 18.Rxe5 Bxg5 19.Bxb7 Bxc1 20.Bxc8 Qxc8, and Black has no problems.

17.Qh3



17...Rfe8

A tad too timid. Black wants to overprotect e6, but in the meantime weakens f7. White now achieves his strategic goals.

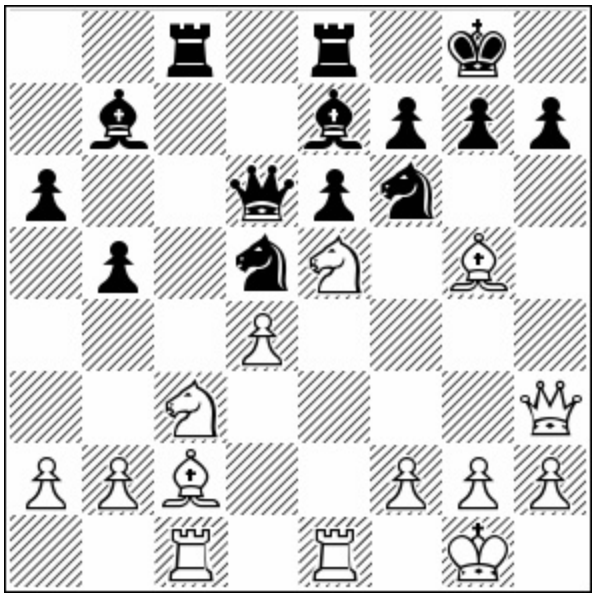
A) There is also 17...h6?. Trying to deflect the white bishop looks sensible, but it loses brutally: 18.Bxh6! gxh6 19.Qxh6 Nh7 20.Re4!. The rook joins the attack with decisive effect. 20...Bg5 (20...f5 defends the g4-square but opens a new avenue: 21.Re3!. Black's control over e3 is an illusion, as capturing the rook leads to a quick conclusion: 21...Nxe3 22.Bxe6+ Kh8 23.Ng6#) 21.Rg4 f6 22.h4 fxe5 23.hxg5 exd4 24.g6. White's attack is crushing;

B) Best is 17...b4!, a smart move that liquidates pieces:

B1) 18.Nxd5 Nxd5 19.Bd2 Rxc1 20.Rxc1 Bf6, and if anyone is better, it is Black;

B2) 18.Na4 Rxc1 19.Bxc1 (19.Rxc1 allows 19...Ne4) 19...Qc7 20.Bg5 Ne4 21.Bxe7 Nxe7 22.Qd3 Rd8. Black is totally fine.

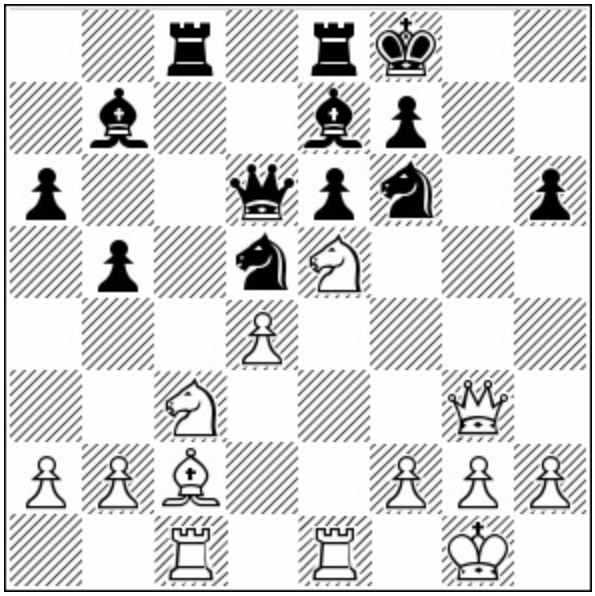
18.Bc2



Suddenly, the pressure against the black king's position is quickly mounting.

18...g6?

18...h6!. On the previous move, this defensive idea clearly failed, but one move later it could be Black's saving clause. 19.Bxh6 (what else!?) 19...gxh6 20.Qg3+ (20.Qxh6 doesn't work anymore since the black bishop can now join the defence with 20...Bf8) 20...Kf8



analysis diagram

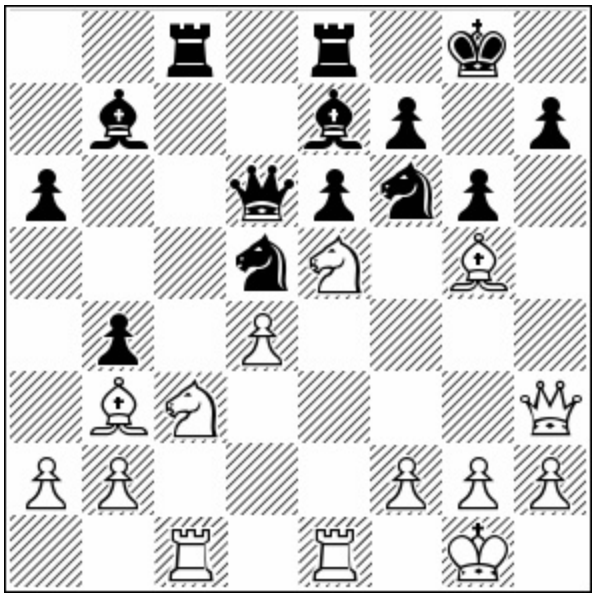
21.Bg6!? looks devastating (note that after 21.Qh4 Kg7 22.Qg3+, White is forced to repeat). The capture of the bishop leads to immediate disaster, and other moves appear to give up on the important f7-pawn. Still, Black manages to find a lifeline: 21...Nxc3! 22.bxc3 Qd5. Attacking is the best defence! Isn't that another piece of Cruyffian wisdom? The maxim is probably a bit older than that... 23.Bxf7 Ba3!!. Black miraculously survives. The e7-square is vacated, and his counterattacks are just in time. White can't win: 24.Qg6 Bxc1 25.Bxe8 Qxg2+! 26.Qxg2 Bxg2 27.Rxc1 Bd5 28.Bg6. The dust has cleared, and we have reached approximate equality.

19.Bb3!

The Russian-Israeli grandmaster Lev Psakhis wrote a brilliant book called *Advanced Chess Tactics*. In this book – from which I borrowed this game – Psakhis details the story of coaching Rodshtein. In their sessions, they studied the game Stein-Petersons, Kiev 1965. Stein executed a similar manoeuvre: he moved his bishop back and forth between a2 and b1 to provoke the move ...g7-g6. Rodshtein was clearly inspired by Stein's play and executes this idea with great effect. Perhaps this story can serve as proof that chess training can be effective!

The bishop has done its job on the b1-h7 diagonal and returns to the a2-g8 diagonal, where it creates all sorts of tactical ideas.

19...b4



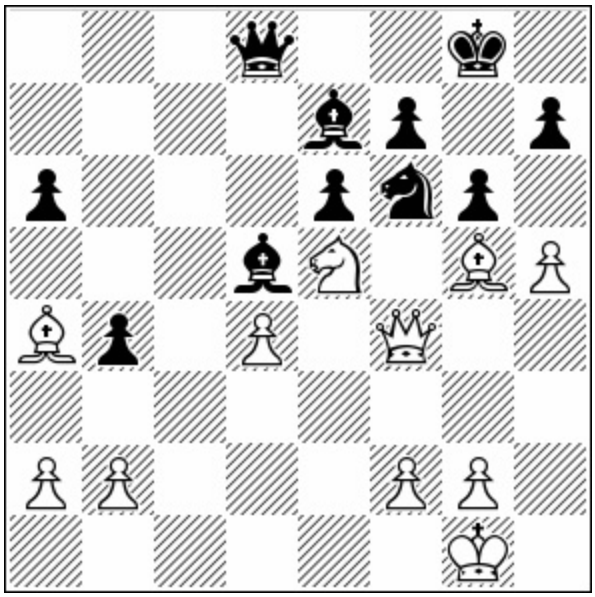
White to move
(back to the exercises)

Black finally pushes the b-pawn with the intention of exchanging pieces. Unfortunately, this creates holes in his position and these concessions change matters drastically.

20.Nxf7!!

20.Nxd5! is less flashy but equally convincing. 20...Bxd5 (20...Nxd5 allows the knight sacrifice to land with even greater magnitude: 21.Nxf7 Kxf7 22.Qxh7+ Kf8 23.Bh6#) 21.Ba4!. Kudos if you spotted this move! Now, all attempts for Black to preserve the exchange fail.

A) 21...Rxc1 22.Rxc1 Ra8 23.Qh4 Qd8 24.Qf4 Rc8 25.Rxc8 Qxc8 26.h4 Qd8 27.h5. This variation deserves a diagram.



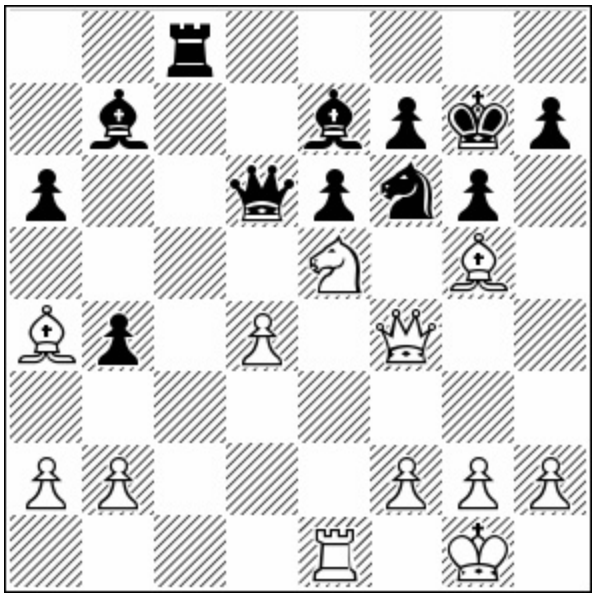
analysis diagram

Perhaps you wouldn't believe it, but in this position Black is in zugzwang! Psakhis, who published his book in 2011, gives all the right moves, but evaluates this position only as 'better' for White, and not outright winning. Stockfish 14 instantaneously judges this position as a whopping +7 in White's favour. The fact that the computer starts advocating moves like 27...b3 immediately made me realise that something special is going on. It truly shows how strong modern engines have become. Let's go over two options for Black:

A1) 27...Bxa2 28.hxg6 hxg6 29.Nc6 (this is what happens if Black gives up control over c6) 29...Nd5 30.Qh2 Qf8 31.Nxe7+ Nxe7 32.Bf6. Black has to give up the queen if he wants to delay mate;

A2) 27...a5 28.h6 Bb7 29.Bc6!, forcing Black to concede more ground: 29...Bc8 30.Bf3 Bd7 31.d5 Bb5 32.d6, winning a piece.

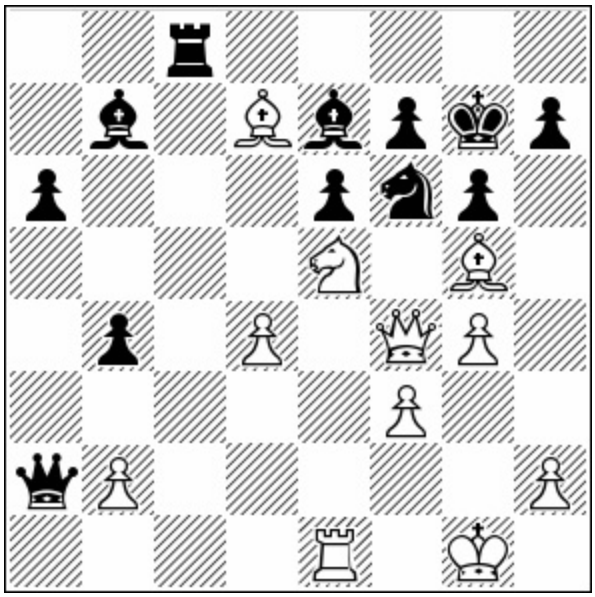
B) Let's return to another defensive idea: 21...Red8 22.Qh4 Kg7 23.Qf4 Bb7, setting up a battery. Black must do something proactive, right? 24.Rxc8 Rxc8.



analysis diagram

Question: Now, we arrive at another great exercise. There are multiple continuations that preserve a sizable advantage, but only one continuation wins convincingly. Can you find it? Take your time for this one.

25.g4!!. An insane move that is somehow by far the most convincing. I gave this position as an exercise to Jorden van Foreest. Even though the move g2-g4 crossed his mind, he eventually discarded the idea as he deemed it 'too suicidal'. Instead, he suggested solid alternatives such as Bb3 and h2-h4. He did get the gist of the position though, by pointing out that it is really hard to suggest a good move for Black. This observation is the key to understanding g2-g4. 25...Qd5 26.f3. Mate has been averted. Now, the threat is simply to play 27.Bh6 followed by g4-g5, after which pawn f7 will fall. Black is lacking serious ideas to counteract White's threat. The most aggressive move fails beautifully: 26...Qxa2 27.Bd7!.



analysis diagram

The only way is forward! By entering deep into enemy territory, the bishop destroys Black's coordination. 27...Rd8 (27...Rc7 28.Bxf6+ Bxf6 29.g5 Bxe5 30.Qxe5+, with a decisive fork) 28.Bh6+ Kg8 29.Bc6, and Black loses material.

Don't worry if these variations are a bit over your head. The fact that even a 2700 GM is struggling here may act as reassurance. I decided to include these lines anyway, because they nicely illustrate the power of zugzwang. Depriving an opponent of all activity can be a slow but effective path to victory. Rodshtein's continuation in the game is more forceful.

20...Kxf7 21.Ne4

The knight is joining the attack with tempo.

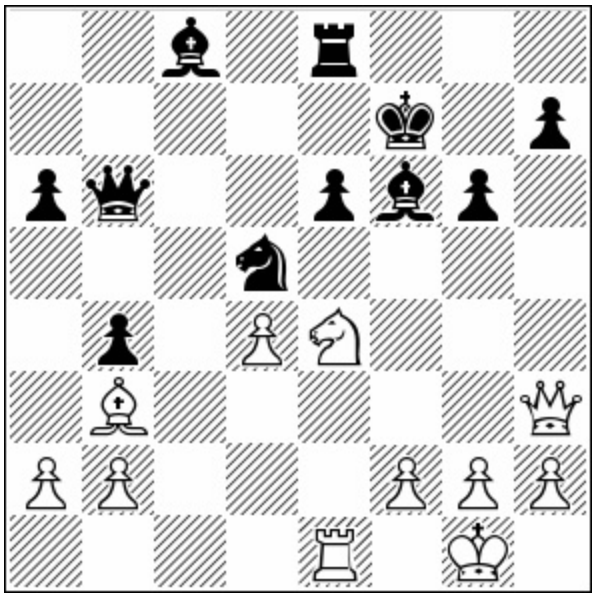
21...Qb6

21...Nxe4 22.Qxh7+ Kf8 23.Bh6 is checkmate.

22.Bxf6 Bxf6 23.Rxc8!

Forcing Black to make an awkward capture.

23...Bxc8



24.Bxd5!

24.Qxh7+? Kf8 leaves White without a convincing continuation.

24...exd5

24...h5! is critical: 25.Bc6!. Another splendid move. Black cannot take due to tactics. 25...Rf8 (25...Qxc6 26.Qf3 e5 27.Ng5+ and a discovered attack picks up the queen) 26.Nxf6 Kxf6, and with an extra pawn, better activity and the safer king, White should win comfortably.

25.Ng5+

By opening the e-file, White puts the final nail in the coffin.

25...Bxg5 26.Qxh7+ Kf6 27.Rxe8

The black king is not going to survive this.

1-0

A beautiful attacking game by the Israeli grandmaster, who navigated all the complications very well. His study of IQP positions with Psakhis clearly paid off. In the early stages, his opponent missed some opportunities to force pieces off the board. This set Rodshtein up for success. The presence of many pieces maximised Rodshtein's attacking potential. After the bishop returned to b3, Rodshtein managed to crash through with the spectacular 20.Nxf7!!.

I will be the first one to admit that the game of chess is so rich that its Hidden Laws cannot be captured in a single book. Apart from trying to remember (and recognise) certain particular Hidden Laws, it is even more important to recognise specific chess patterns. Unfortunately, capturing all the important chess patterns will create an extraordinarily long enumeration.*

> * The best-known method of mastering chess patterns is solving chess exercises. The downside is that most of these exercises are tactical in nature – they grant the attacking side a winning advantage. Many patterns are also positional or strategic in nature. Such patterns generally don't lead to huge swings in the evaluation of a position, but they are nevertheless important. Exercises that are focused on strategic patterns can mostly be found in chess literature. I have definitely tried to include a lot of positional exercises in this book. Of course, you can also learn these patterns by paying careful attention to high-level games.

Therefore, I have tried to highlight some patterns if they are of particular importance for a certain pawn structure. The pattern of moving a bishop back and forth between the a2-g8 and b1-h7 diagonal to force a weakening of the enemy king's position is a common one in IQP positions.

The Hidden Laws of Isolated Queen's Pawns

• When playing against an IQP, the exchange of minor pieces increases winning chances;

• When playing against an IQP, the preservation of major pieces increases winning chances;

• When playing against an IQP, don't hesitate to alter the structure. For instance, a transformation to hanging pawns can be beneficial, as the c-pawn often becomes a vulnerable backward pawn;

• If you are attacking with an IQP, it is beneficial to keep all the pieces on the board;

• The pawn push d4-d5 is a key resource that can serve two purposes: it can lead to simplification, or it can be played as a sacrifice to disrupt the opponent's coordination;

• An IQP can be a powerful asset if it becomes a mobile passed pawn.

Quiz

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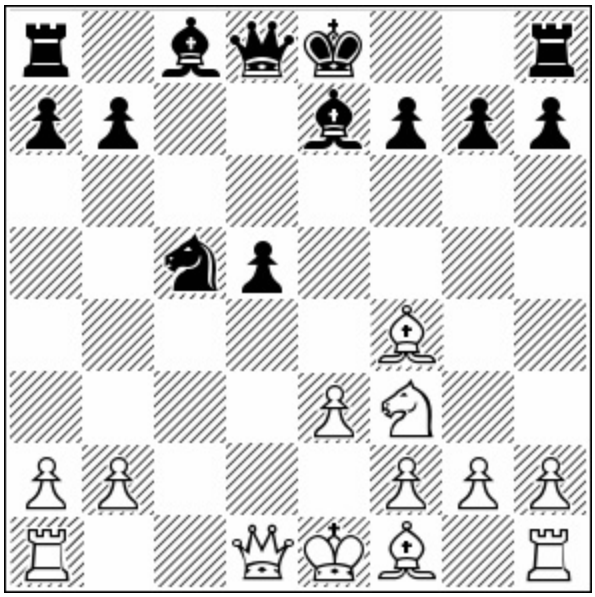
Exercise 1
Alexey Dreev 2673
Nigel Short 2684
Hyderabad FIDE World Cup 2002 (1.4)



White to move

Do you see a good continuation?

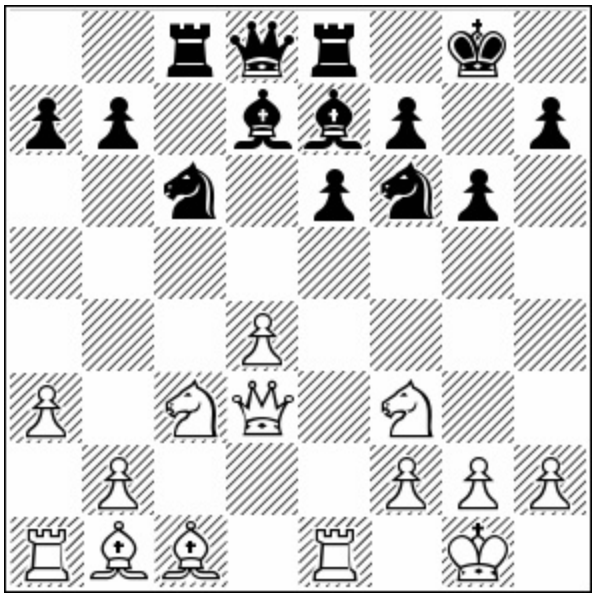
Show/Hide Solution

Exercise 1

Dreev shows understanding of the Hidden Laws of Chess with **10.Bb5+!**, initiating exchanges when playing against the IQP.

The machine also likes the prophylactic 10.Be5!?, taking further control over d4 and defending against possible queen sorties to a5 or b6. In both cases, White has the advantage.

Exercise 2
Svetozar Gligoric 2585
Arturo Pomar 2425
Nice Olympiad Final-A 1974 (3)



White to move

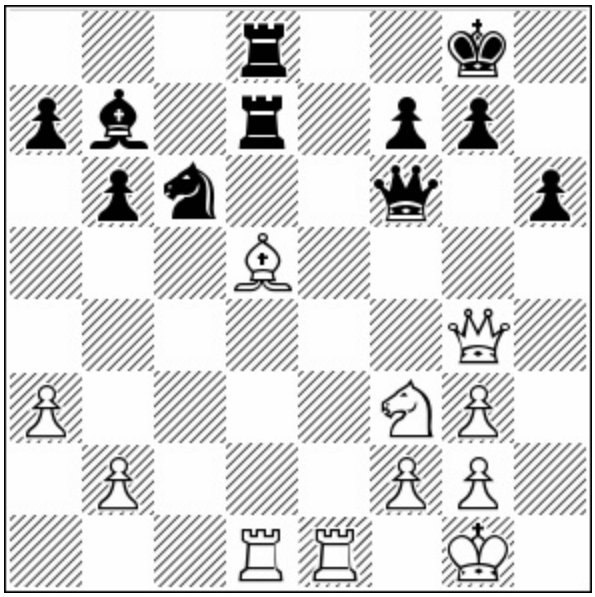
How should White continue?

Show/Hide Solution

Exercise 2

15.Ba2! is best. The bishop has done its job on the b1-h7 diagonal and now it will be more effective on the a2-g8 diagonal.

Exercise 3
Garry Kasparov 2700
Anatoly Karpov 2720
Moscow Wch 1985 (m/11)



White to move

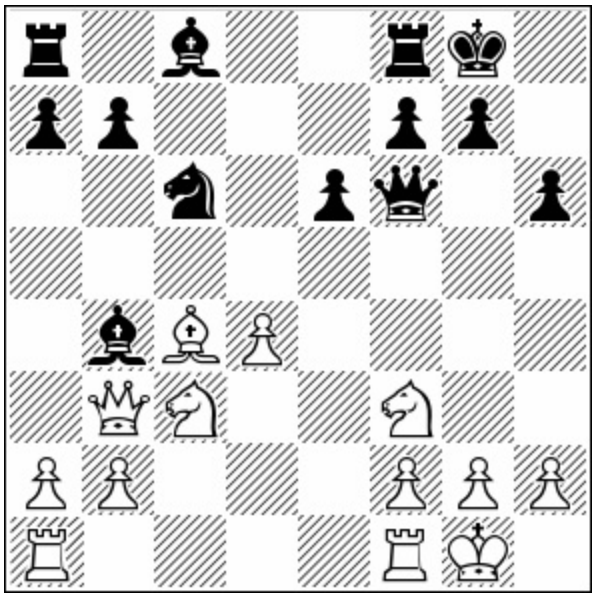
Kasparov simplified the position earlier on with d4-d5. What did he have in mind here?

Show/Hide Solution

Exercise 3

Kasparov has a forced win with **23.Qxd7! Rxd7 24.Re8+ Kh7 25.Be4+ 1-0**.

Exercise 4
Holl
Dijkstra
Groningen 2022



Black to move

What should Black play?

Show/Hide Solution

Exercise 4

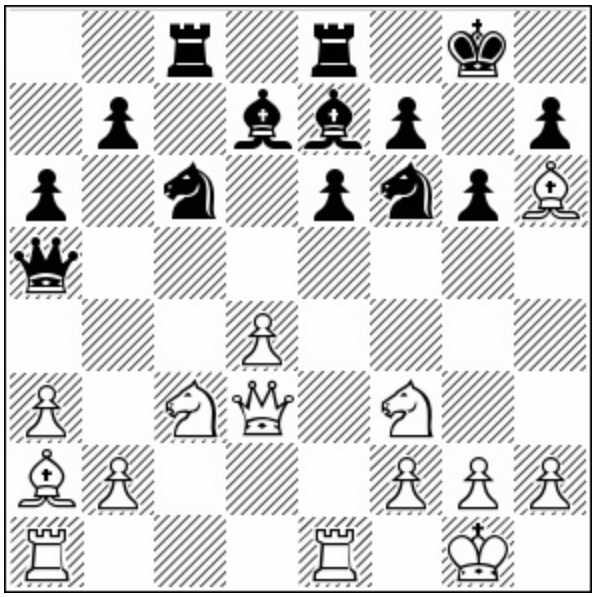
12...Bxc3! is correct. Remember the Hidden Law about the exchange of minor pieces? Now, 13.bxc3 would allow 13...Na5!, with a further reduction of the material. After 14.Qb4 Nxc4 15.Qxc4 b6, Black has a great position. Instead, White should play 13.Qxc3, after which Black can respond with either 13...Rd8 or 13...Bd7. In any case, Black enjoys a pleasant position, as the reduction of the material leaves White without any compensation for the isolated pawn.

In the game, Black played 12...Be7?!, ignoring the Hidden Laws of IQPs. Now, chances are about even and White went on to win the game.*

> * Since I am good friends with the black player, we analyzed the game at the venue. When going over this position, I immediately suggested 12...Bxc3! as a possible improvement,

since it aligns with the Hidden Laws in this book. And indeed, modern engines agree. Dijkstra is a very smart individual who is rated close to 2200. He had to admit that he hadn't even considered the move 12...Bxc3. This really strengthens my belief that almost anyone can learn from the Hidden Laws in this book. Apparently, they don't teach the Hidden Laws of Chess in university!

Exercise 5
Svetozar Gligoric 2585
Arturo Pomar 2425
Nice Olympiad Final-A 1974 (3)



White to move

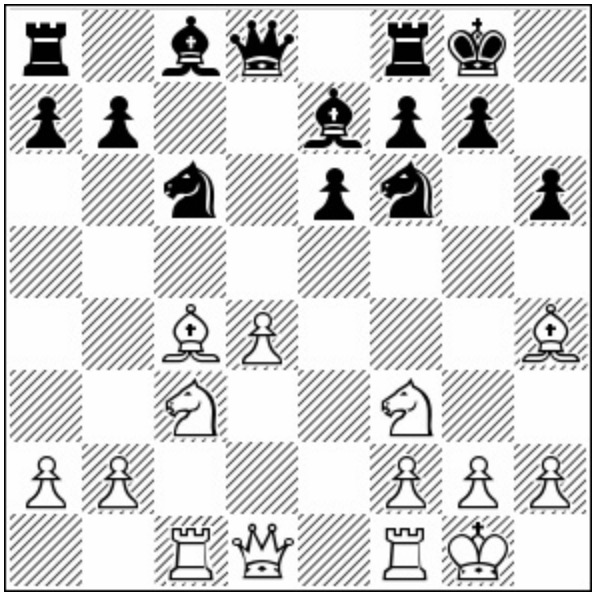
Two moves later we arrive here. How does Gligoric continue?

Show/Hide Solution

Exercise 5

17.d5!. White is well developed, so it's time to blast the position open. **17...exd5 18.Nxd5**. After 18...Nxd5 19.Bxd5, White wins as Black cannot defend against White's strong threat of 20.Bxf7!. Instead, Black played **18...Bf5**. If you didn't account for this move yet, try to find Gligoric's beautiful refutation! He continued with **19.Rxe7!**. Now, 19...Bxd3 20.Nxf6+ Kh8 21.Bg7+! leads to a forced mate. Instead, after **19...Rxe7 20.Nxf6+**, White had a winning material advantage on top of his initiative.

Exercise 6
Viktor Kortchnoi 2650
Anatoly Karpov 2690
Merano Wch 1981 (m/9)



Black to move

What did Karpov play here?

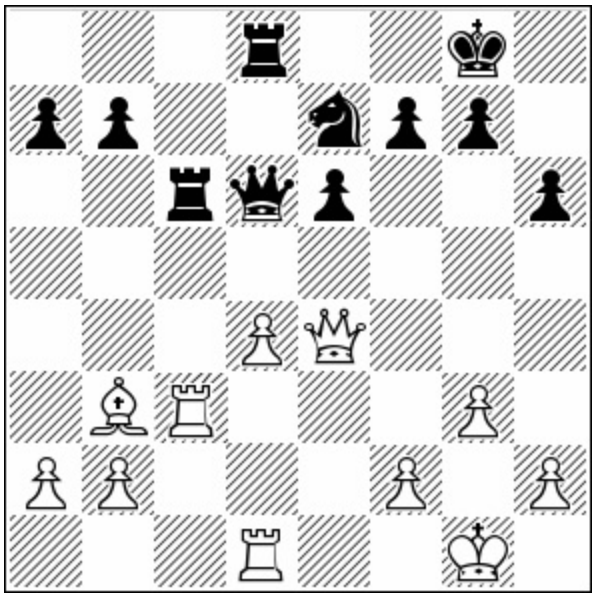
Show/Hide Solution

Exercise 6

Karpov played **11...Nh5!**, forcing a desirable exchange of minor pieces. After **12.Bxe7 Nxe7 13.Bb3 Nf6**, the knight returns, and Black has good counterplay.

The alternative 11...b6, intending to fianchetto the light-squared bishop, is also a good move.

Exercise 7
Viktor Kortchnoi 2650
Anatoly Karpov 2690
Merano Wch 1981 (m/9)



Black to move

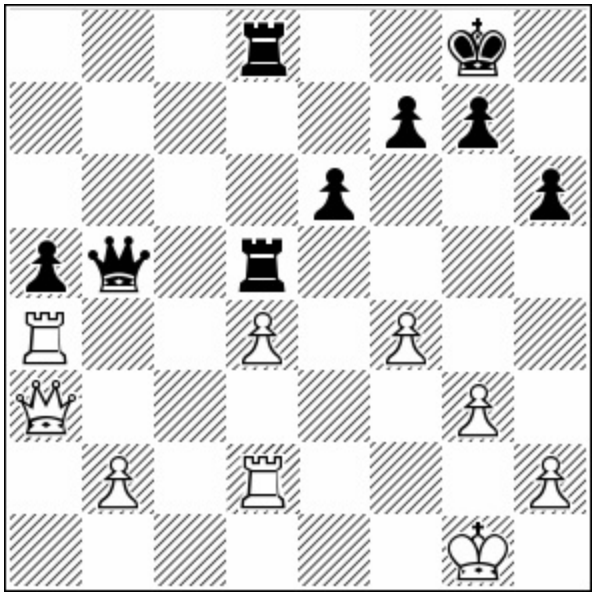
Ten moves later they arrived here. How did Karpov continue?

Show/Hide Solution

Exercise 7

Remember the Hidden Law about the preservation of heavy pieces? Karpov was aware! He played **21...Rb6!**, preserving all the heavy pieces on the board. After **22.Qe1 Qd7 23.Rcd3 Rd6**, the rook found an excellent square and Karpov obtained great winning chances.

Exercise 8
Viktor Kortchnoi 2650
Anatoly Karpov 2690
Merano Wch 1981 (9)



Black to move

We are at move 35 and Karpov has continued to improve his position. How would you try to convert the advantage?

Show/Hide Solution

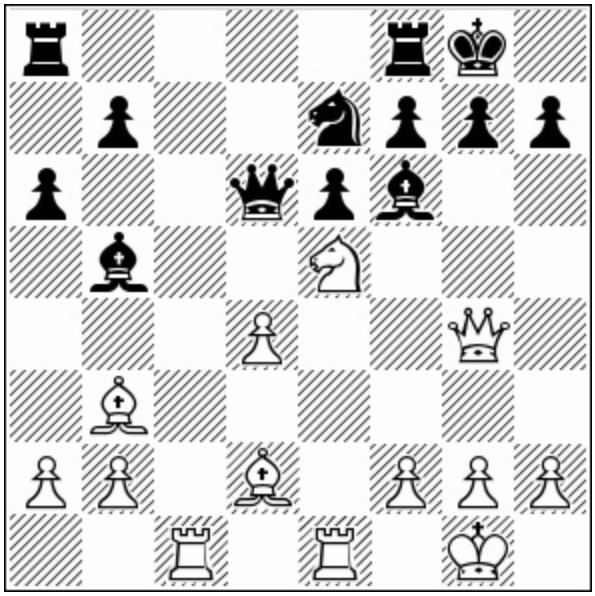
Exercise 8

Karpov has made all the right exchanges. Now, it is time to cash in. **35...e5! 36.fxe5 Rxe5 37.Qa1 Qe8!**. Fantastic technique. The threat of 38...**R**e1+ forces a capture. **38.dxe5 Rxd2 39.Rxa5 Qc6**. Now, White is even up a pawn, but his king will be hunted down soon. **40.Ra8+ Kh7 41.Qb1+ g6 42.Qf1 Qc5+ 43.Kh1 Qd5+ 0-1**.

You also get some points for the alternative plan 35...h5 intending ...h5-h4, but it isn't as convincing.

A strategic masterclass by Karpov that is definitely worth studying.

Exercise 9
Shakhriyar Mamedyarov 2699
Andrei Kharlov 2555
Sochi 2006 (6)



White to move

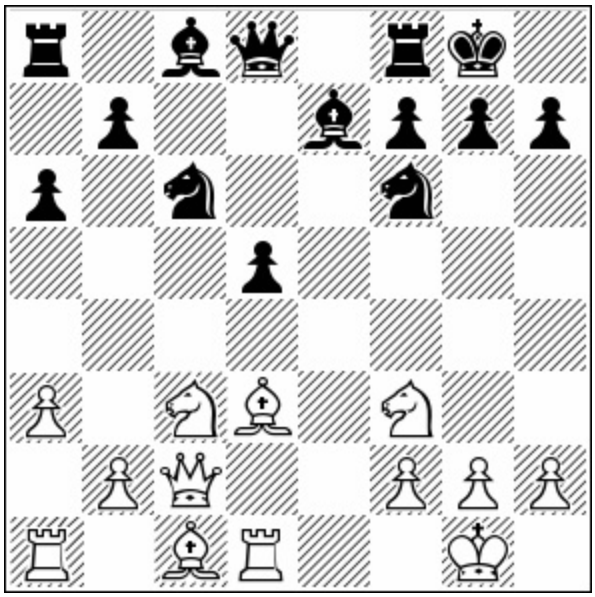
Can you figure out Mamedyarov's continuation?

Show/Hide Solution

Exercise 9

An IQP offers many dynamic possibilities if you achieve a serious lead in development. Here, Mamedyarov crashed through with **20.Nxf7!**. If Black declines the offer, he is obviously losing. Thus, **20...Rxf7 21.Rxe6 Qd7**. Mamedyarov needed to account for this defensive idea. The white rook is pinned to the white queen, right? Sure, but the queen is not holy: **22.Rxf6! Qxg4 23.Rxf7**. The threat of a discovered check allows White to regain more material. **23...Kh8 24.Rxe7 Rc8 25.Rxc8+ Qxc8 26.d5**. Black resigned. White already has a bishop, a rook and two pawns in return for the queen, and he will soon win more material.

Exercise 10
Veselin Topalov 2645
Einar Gausel 2505
Moscow Olympiad 1994 (5)



White to move

IQP positions often require a lot of calculation. What did Topalov have in mind here?

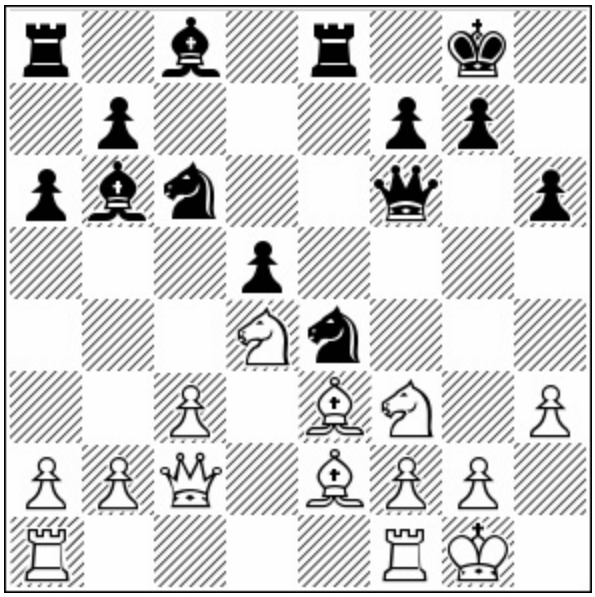
Show/Hide Solution

Exercise 10

14.Bg5 allows White to win back the pawn on d5 eventually, but afterwards the position will be completely balanced.

Instead, correct is **14.Nxd5!**. Topalov initiates a long and forcing combination. **14...Nxd5 15.Bxh7 Kh8 16.Be4 Be6 17.Bxd5! Bxd5 18.Qf5**. Topalov regains the piece and he has good winning chances with the extra pawn.

Exercise 11
Pavel Simacek 2498
Baadur Jobava 2702
Legnica Ech 2013 (3)



Black to move

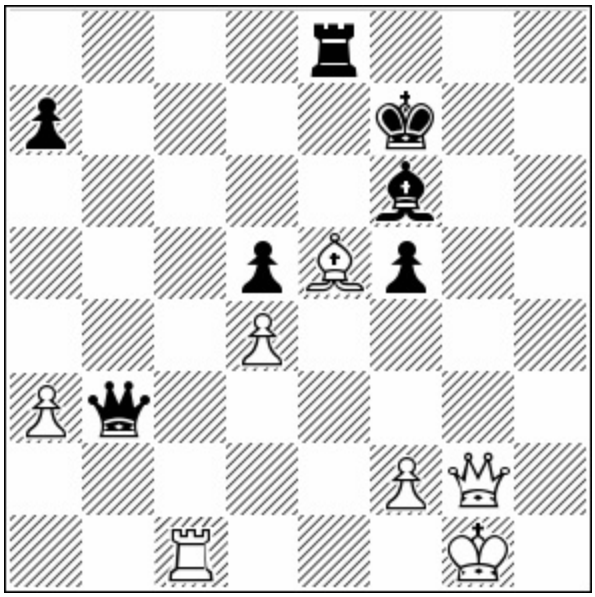
What did Jobava play? Set up the position on the board, take your time and try to be precise!

Show/Hide Solution

Exercise 11

All pieces are still on the board, which offers maximum dynamic potential. Jobava excels under these circumstances: **15...Bxh3!!**. One exclamation mark for quality, another one for Jobava's tremendous calculation. **16.gxh3 Qg6+**. The first point: besides targeting the white king, Black is also targeting the queen on c2. Now, 17.Kh1 loses to 17...Nxd4 18.Nxd4 Bxd4 19.Bxd4 Nxf2+!, winning the queen. Thus, **17.Kh2 Bc7+! 18.Kh1 Nxd4 19.Nxd4 Qd6!**. The second point: Black is threatening mate on h2. **20.Nf3 Qe6**. Now, after 21.Ng1 Black performs a zigzag manoeuvre with 21...Qe5! 22.Nf3 Qf5!. Black once again eyes both the king and the queen. A central queen can be a mighty piece. Here, 23.Kg2 Qg6+ transposes to the game. Instead, Simacek collapsed immediately after **21.Kg2 Qg6+ 0-1**. White resigned because 22.Kh1 once again allows a lethal discovered check.

Exercise 12
Daniil Dubov 2660
Arman Pashikian 2603
Minsk Ech 2017 (6)



Black to move

What should Black play?

Show/Hide Solution

Exercise 12

This position is a fun one at parties! Even though there are six isolated pawns, it doesn't necessarily fit the theme of the chapter. I decided to include it anyway for its similarities to the analysis in the Rodshtein game. The solution is 39...a6!!.*

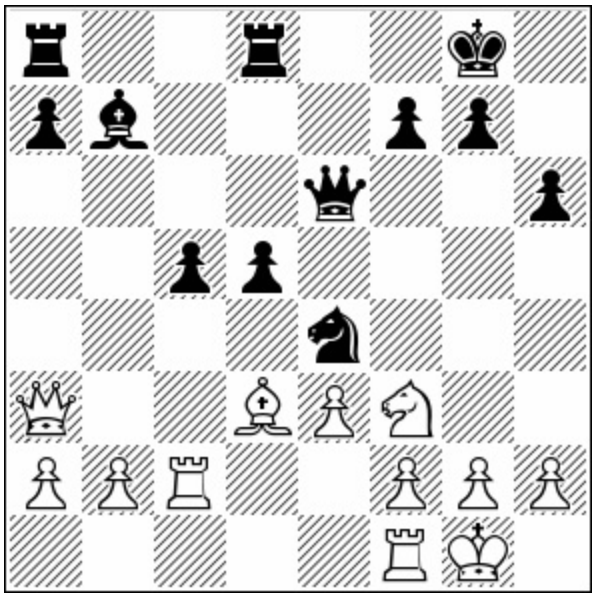
> * The alternative 39...a5 40.a4 Bxe5 41.dxe5 Qb7! probably draws as well, but it isn't nearly as clean and Black still has

practical problems to solve. World Champion Magnus Carlsen allegedly spent several minutes solving this puzzle.

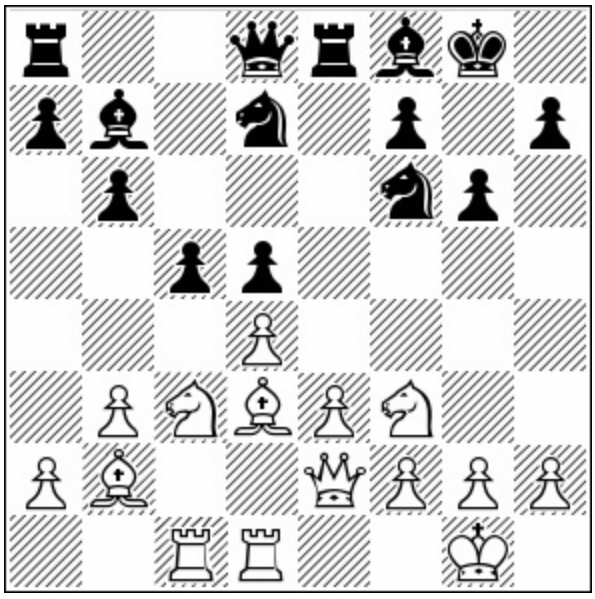
39...a6!!

‘Why on earth is that the solution?’, you may shout out loud. Give it some time to sink in. The position is an extraordinary case of mutual zugzwang. In such a situation, one would love to pass the move back to the opponent. All the pieces are already ideally placed. Both sides have tons of options, but none are satisfactory. All the pieces already perfectly fulfil their offensive and/or defensive duties. After 40.a4 a5, Black maintains the status quo. It turns out that there is no way for White to make progress. One sample line is 41.Rc7+ Re7 42.Rxe7+ Kxe7 43.Qg6 Qb1+ 44.Kh2 Bxe5+ 45.dxe5 Qe4, and the game should end in perpetual check.

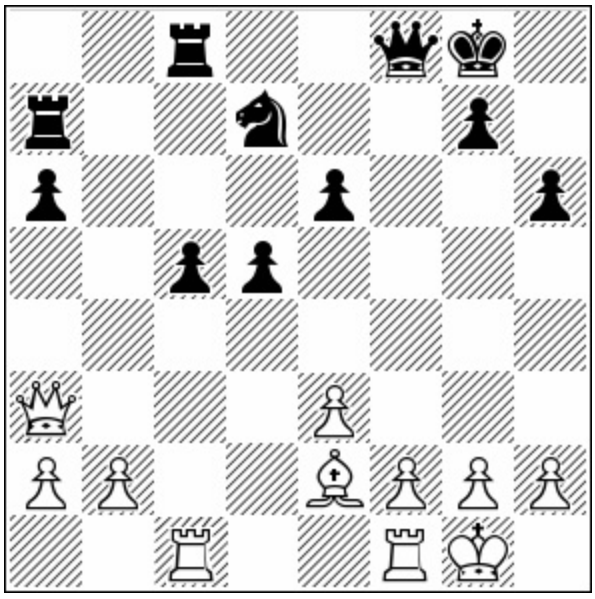
Chapter 5
Preview exercises



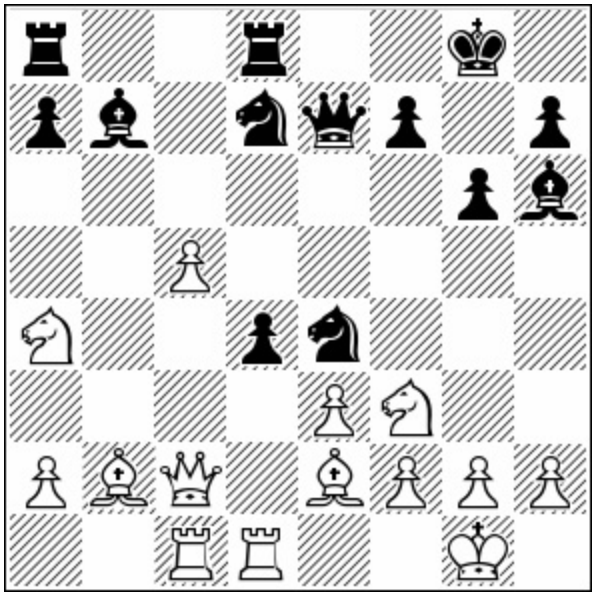
White to move
(go to the solution)



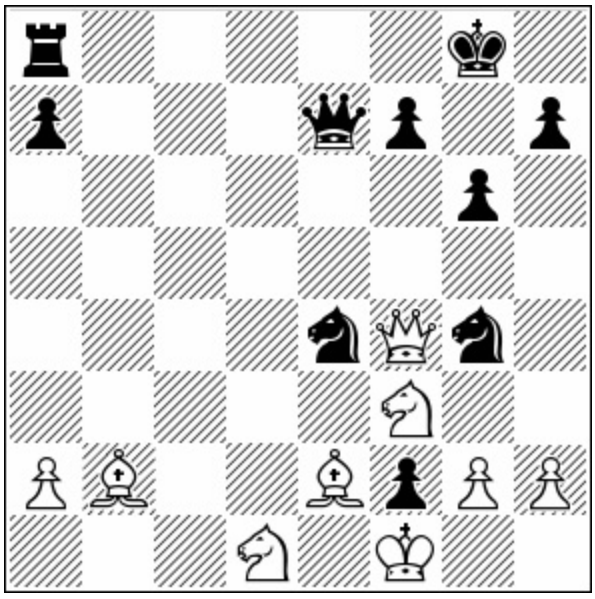
White to move
(go to the solution)



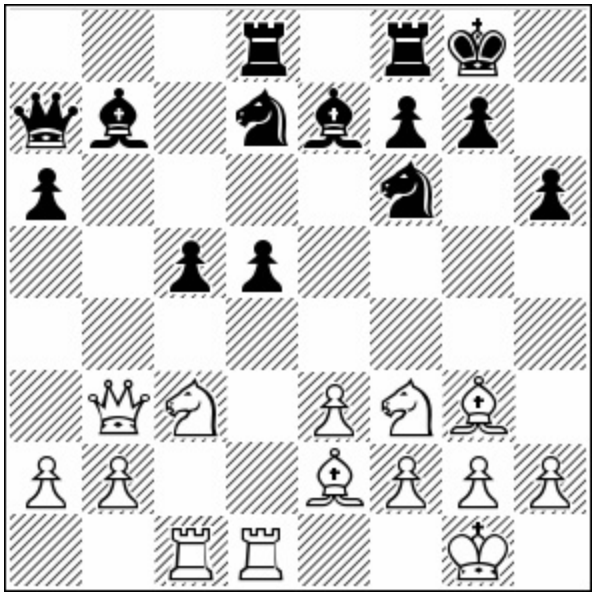
White to move
(go to the solution)



Black to move
(go to the solution)



Black to move
(go to the solution)



White to move
(go to the solution)

Chapter 5

Hanging pawns

I am convinced, the way one plays chess always reflects the player's personality. If something defines his character, then it will also define his way of playing. – Vladimir Kramnik

My favourite logical paradox is the *unexpected hanging paradox*:

Imagine a trial in which a judge informs a condemned prisoner that he will be hanged at noon next week during one of the weekdays. However, there is one special condition: the execution will be a surprise. He will not know on which day he will be hanged.

The prisoner then concludes that he can escape the hanging. He establishes that the hanging can't be on Friday. After all, once it is Thursday afternoon, the prisoner would know that he would be hanged on Friday, and in that case it would no longer be a *surprise*!

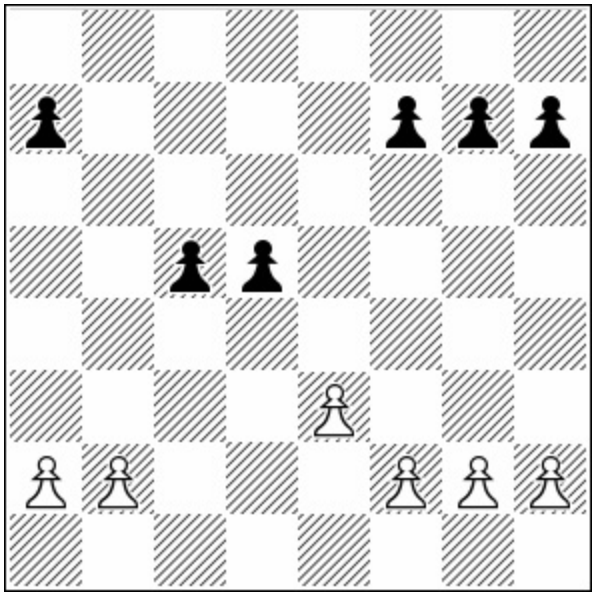
The prisoner subsequently invokes a backtracking argument. Since the prisoner established that he can't be hanged on Friday, he can infer on Wednesday afternoon that he will be hanged on Thursday. But that would once again remove the element of surprise. By continuing this logic, there will be no day left in the week. The prisoner should be safe.*

> * In my assessment, the prisoner's logic is flawed. One attempt to tackle the paradox is to recognise that propositions are timebound. For instance, the proposition: 'Fischer is leading against Spassky' was false at some point in time and true in others. As time goes on, the truth value of the claim by the judge changes. Therefore, it is a falsidical paradox.

Nevertheless, to the surprise of the prisoner, a guard knocked on his door on Wednesday at noon. The prisoner was executed. The judge was proved right after all.*

* Objection: relevance! You may wonder why I am telling you all of this. Well, I promised that you would learn something non-chess related.

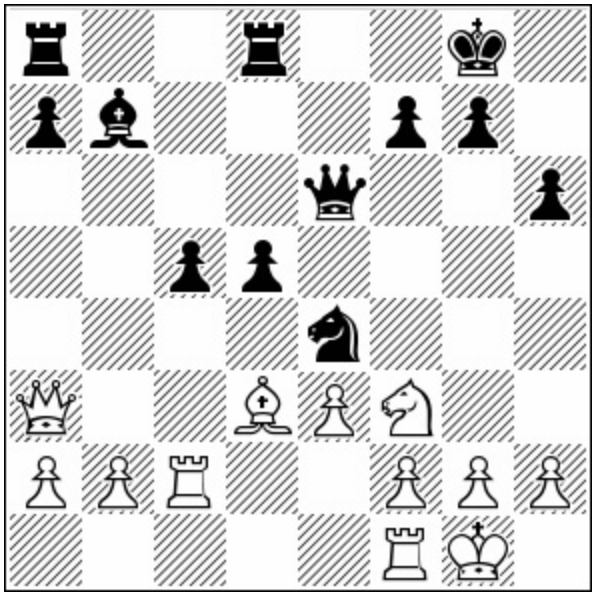
Contrary to the above story, hanging pawns in chess lack the element of surprise. With ‘hanging pawns’, we generally refer to a pawn island of two pawns on the c- and d-files. Hanging pawns are similar in nature to the isolated queen’s pawn. They offer dynamic opportunities when there are a lot of pieces on the board, but they can also become a liability once they are fixed or come under fire.



The diagram above features a typical hanging pawns structure. The main resource for Black is the ...d5-d4 push, as it opens the position and creates dynamic possibilities towards the white king. White, on the other hand, has multiple plans. First of all, a reduction of material is often favourable, as it limits Black’s attacking opportunities and weakens the defence of the centre. A concept that will be different than the previous chapter is that White often aims to lure one of the black pawns forward. By inserting b2-b4 or e3-e4, Black will be obliged to release the tension in the centre. Either ...d5-d4 or ...c5-c4 will greatly diminish the flexibility of the black centre and a capture will leave the other pawn isolated. Furthermore, the ...d5-d4 advance will reduce Black’s control over the light squares. Also, the ...c5-c4 advance will significantly weaken the dark squares, the most noteworthy being the central

square d4. We will start off with a fine execution of the b2-b4 plan.

Game 1
Paul van der Sterren 2535
Ljubomir Ljubojevic 2570
Amsterdam 1999 (3)



White to move
(back to the exercises)

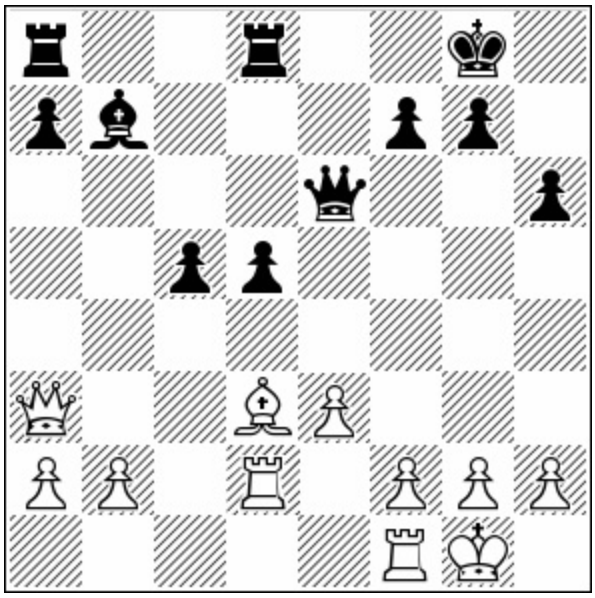
Although hanging pawns and IQPs bear many similarities, this position illustrates a key difference. Together, the hanging pawns control all squares in front of them. With an IQP, the situation would be totally different. Imagine for a moment that the black c-pawn stands on b6. In that case, White would enjoy a large advantage. This knight could occupy d4, and the black d5-pawn would be eternally weak. Attacking hanging pawns is considerably harder, as they have good synergy. Nevertheless, White finds a good method to pose some problems.

20.b4!

This typical move changes the nature of the pawn structure. Black is forced to concede the d4-square.

A) In Soppe-Garcia, Guarapuava 1991 (the only other game that reached this position) White played 20.Rfc1. This is a natural move, but after the active 20...Rd6!, Black is threatening ideas like ...Ba6, which allow him to equalise: 21.Nd2 Nxd2 22.Rxd2 d4, and Black has no issues;

B) 20.Nd2 is another typical idea. After an exchange of the strong knight on e4, the hanging pawns become more vulnerable. Unfortunately, it is not effective here as Black has a forcing sequence to solve his problems by means of a pawn sacrifice: 20...Nxd2 21.Rxd2



analysis diagram

21...d4! 22.Qxc5 Rac8 23.Qf5. The threat of 24.Qh7+ forces the queens off, but Black has everything covered: 23...Qxf5 24.Bxf5 dxe3! 25.Rxd8+ (25.Bxc8?? exd2, and Black queens) 25...Rxd8 26.fxe3 Rd2 27.Rf2 Rd1+. The active rook forces a repetition;

C) 20.h3!? is an extremely sophisticated move that tries to make Nd2 work under favourable circumstances:

C1) 20...Rd6?! isn't satisfactory here: 21.Nd2! Now, Black's active defence fails: 21...Ba6 (21...Nxd2 22.Rxd2 d4?! 23.Qxc5 Rc8 24.Qa3 and due to the unfortunate placement of the rook on d6, White is much better. A key idea is 24...dxe3?! 25.Bh7+!, with a discovered attack) 22.Nxe4 dxe4 23.Bxa6 Rxa6

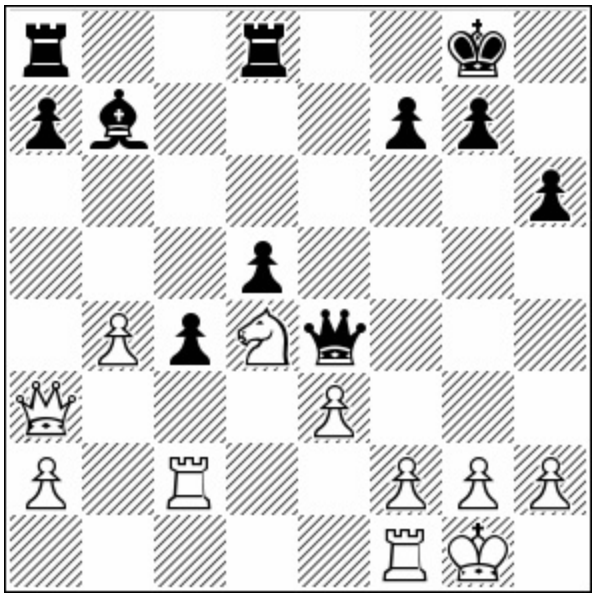
24.Qxc5 Rxa2 25.Rd1, and White's activity guarantees a slight advantage;

C2) 20...a5! seems best, for instance 21.Rfc1 a4 22.Bxe4 dxe4 23.Nd2 Ba6 24.Nf1 Bxf1 25.Rxf1 Rd5 26.Rxc5 Rxc5 27.Qxc5 Qxa2 28.Qb4. White is slightly better due to his well-placed queen and the target on e4, but Black should ultimately hold.

20.b4! c4

20...cxb4 is possible too: 21.Qxb4 Ba6 22.Nd4 Qb6! 23.Qxb6 axb6. After the exchange, White has a weakness on a2, which significantly reduces his advantage. 24.Bxa6 Rxa6 25.Nc6 Re8 26.Rd1. White has an edge, albeit a minor one.

21.Nd4 Qg6 22.Bxe4 Qxe4



The strong knight on e4 has been eliminated, and we are now entering a situation in which the white knight clearly dominates the black bishop. Still, it is difficult to make progress. Van der Sterren finds an excellent plan:

23.b5!

After this advance, the white queen threatens to penetrate the black position.

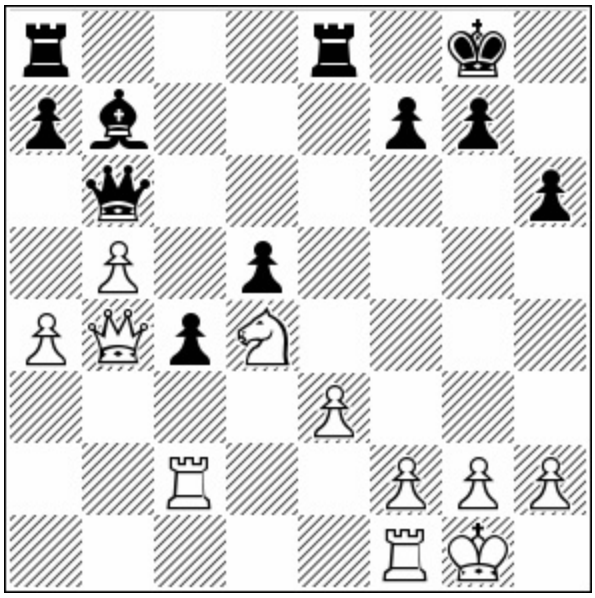
23...Qg6?!

Ljubojevic now lands into difficulty. 23...Bc8! was correct. The bishop needs to be rerouted quickly. 24.Qc5 Bd7 25.a4 a6!. The exchange of pawns gives Black more freedom and diminishes the power of White's pawn majority. 26.Rb2 Qg6 27.Rc1 Rac8 28.Qa7 c3. Black has created sufficient counterplay and he should be able to hold this position.

24.Qe7! Qb6

Black is forced on the defensive and he lacks counterplay.

25.a4 Re8 26.Qb4



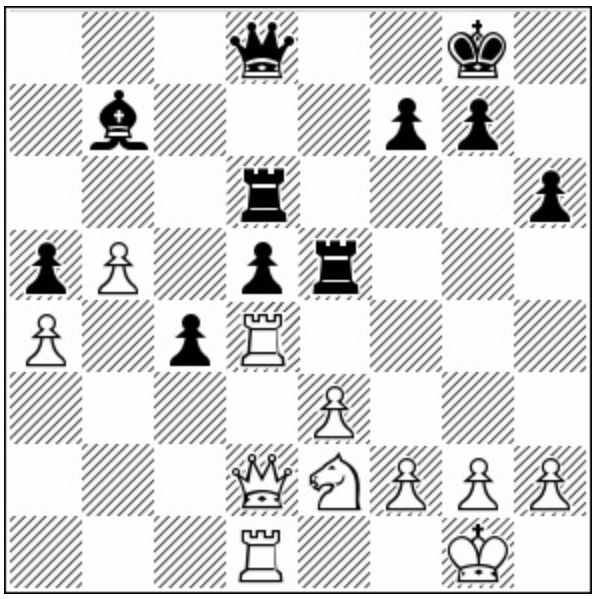
26...a5?

A further positional error, and Black's problems become insurmountable. The black queen had to return to the kingside to create counterplay.

27.Qc3 Rad8 28.Rd2

With the queenside locked down, White can patiently rearrange his pieces and target the weak pawn on d5.

28...Rd6 29.Ne2 Re4 30.Rfd1 Qd8 31.Rd4 Re5 32.Qd2



Remember the start of the previous chapter? This position plays almost exactly the same as an IQP position. The minor pieces have been exchanged, which limits Black's active opportunities. The heavy artillery is well-positioned to target the weakness. At an opportune moment, White breaks down the black defences with e3-e4.

32...Qc7 33.Nc3 Rg6?!

This forfeits an important tempo. After 33...Rde6, aimed against e3-e4, Black could still hang in there.

34.g3 Qc5

34...Rd6 35.e4, and White wins.

35.Nxd5

The central pawn is gone, and the game is over. Van der Sterren won on move 48.

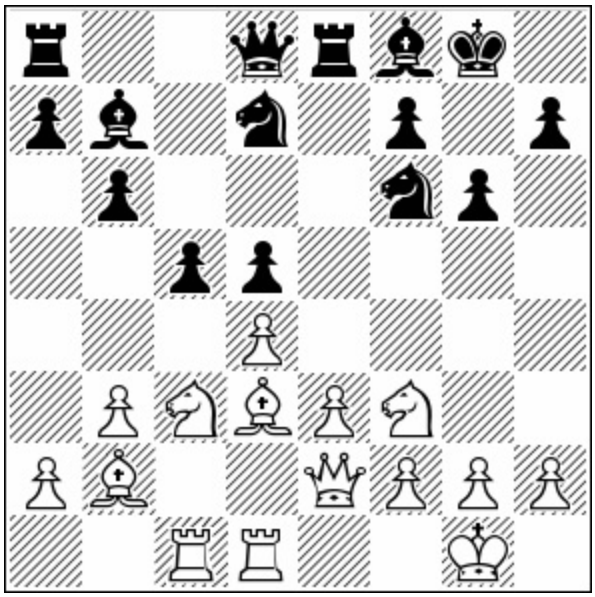
1-0

The b2-b4 advance is a key resource to undermine the synergy of the black hanging pawns.

The game was a great technical display by Van der Sterren. He found all the right moves that put maximal pressure on his opponent. Of course, with perfect defence Black should have held, but by creating practical difficulties, the opposition can be forced into making mistakes. Ljubojevic eventually crumbled under strong positional pressure.

Whether the process of writing this book made me a better chess player remains to be seen, but I did manage to apply a Hidden Law of Chess successfully after already having submitted most of the material to the editor. In the following position I played a counterintuitive move that starts to make sense with the Hidden Laws of Hanging Pawns in mind.

Game 2
Nick Maatman 2368
Bernhard Stillger 2245
Dieren 2022



White to move
(back to the exercises)

Question: A crucial position has arisen. It is clear that something went wrong for Black in the opening. All White's forces are perfectly mobilised while Black's development is still a little bit lacking. He would like to bring the a8-rook into play and transfer the dark-squared bishop to g7. Still, Black's central set-up seems solid.

Since the development stage has been completed, it is time to come up with a plan. White has to devise a way to make progress and capitalise on his small lead in development. How should White proceed?

14.Ba6!

A fascinating move that may look ridiculous to the untrained eye. Black's b7-bishop was merely staring at the d5-pawn while its counterpart was targeting both flanks. On the surface, a trade of light-squared bishops should clearly be in Black's favour. What is White envisioning? White wants to clarify the situation in the centre at some point by trading on c5, inducing a position with hanging pawns.

> In a position with hanging pawns, a reduction of the material favours the side that is playing against the hanging pawns.

The bishop on b7 is a key defender of the d5-pawn. After eliminating this piece, the pressure against d5 is already reaching critical mass. What else? The move ...b7-b6 weakened the complex of light squares on the black queenside. Once the black bishop disappears, these light squares suddenly become quite vulnerable.

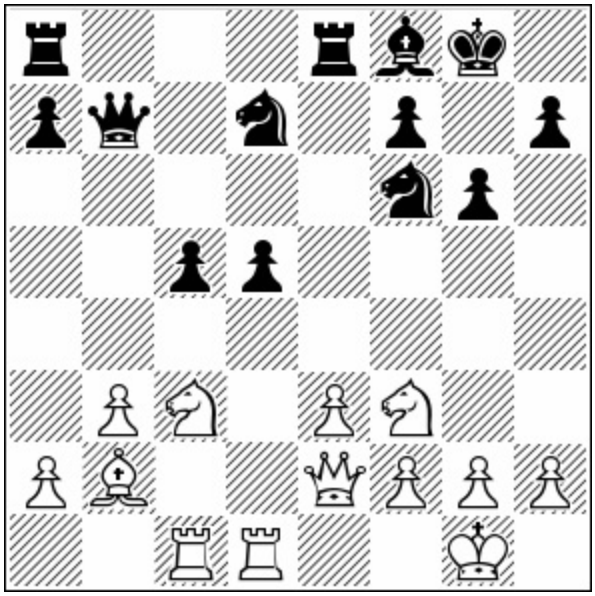
Did White have other options?

A) A respectable alternative is 14.Bb5!?, intending to enter an IQP position under favourable circumstances. For instance, 14...a6 15.Bxd7 Nxd7 16.dxc5 Nxc5. The bishop on b7 is very poor and Black doesn't have reasonable hopes of pushing the d-pawn anytime soon. Still, converting such a position is no trivial task, so the game continuation appears more convincing;

B) Note that 14.dxc5 is only good if it is followed up with 14...bxc5 15.Ba6!,

transposing to the game. Interestingly, all alternative options for White fail to put pressure on the black centre.

14.Ba6! Qc8 15.Bxb7 Qxb7 16.dxc5 bxc5



17.Qb5!

The situation in the centre has transformed. White is exerting considerable pressure on the hanging pawns. The exchange of queens aggravates the situation.

17...Qxb5 18.Nxb5 Rec8

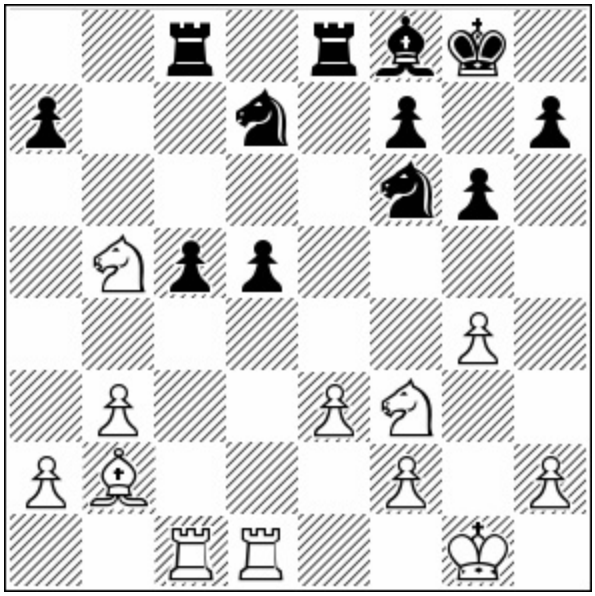
I was expecting 18...Rac8!?.

A) The point is that 19.Nxa7?! Ra8! 20.Nb5 Rxa2 alleviates Black's problems;

B) I was intending 19.Rc2 a6 20.Nc3 Nb6 21.Na4 Nxa4 22.Bxf6 Nb6 23.Bc3 with the strong threat of 24.Ba5!. Still, it seems that Black can save himself with 23...c4! 24.Bd4 Bc5. White has a strong grip on the d4-square and the black centre is now fully immobilised. Unfortunately White is lacking a clear method to make progress and Black should be able to defend the weaknesses

with careful play;

C) A notable alternative is 19.g4!?



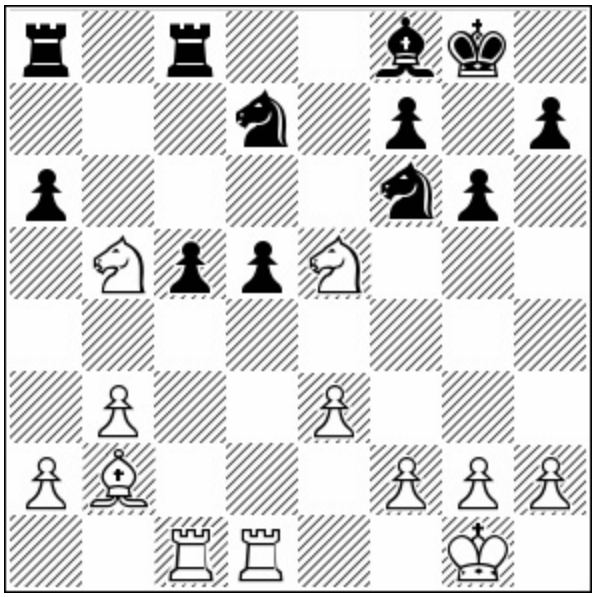
analysis diagram

19...Nxg4 20.Rxd5 Ndf6 21.Bxf6 Nxf6 22.Rdd1, further transforming the position. White has a sound pawn structure and clear targets on a7 and c5. Black is facing a tough defensive task.

19.Ne5 a6?!

This inaccuracy makes the situation untenable.

19...c4! was required. 20.bxc4 a6! is Black's key point. The attacked white knight doesn't have an attractive destination, so White has to enter a forcing variation: 21.Nxd7 Nxd7 22.Nc3 Rab8 (another very useful zwischenzug) 23.Ba1 Rxc4 24.Nxd5 Rxc1 25.Rxc1 Ba3. In the end, White managed to obtain a sound extra pawn anyway. Still, Black is very active, so converting the material advantage won't be a trivial task.



White to move

Question: After 19...a6?! I missed a stunning tactical shot. Do you see it?

20.Nxd7

Very natural as White now forcefully wins a pawn. Even so, an opportunity was missed here:

20.Nd6!!. Spotting tactical shots when you already have a very promising continuation available can be tremendously difficult. Perhaps the adagium 'if you see a good move, look for a better one' does contain some wisdom! 20...Bxd6 (20...Rcb8 21.Nxd7 Nxd7 22.Rxd5 allows White to cash in the pawn under very favourable circumstances) 21.Nxd7 Nxd7 22.Rxd5 Rc6 23.Rcd1. The beautiful point. White has temporarily sacrificed a full piece, but the awkward constellation of the black minor pieces on the d-file allows White to regain the piece, keep the extra pawn and maintain all his positional trumps.

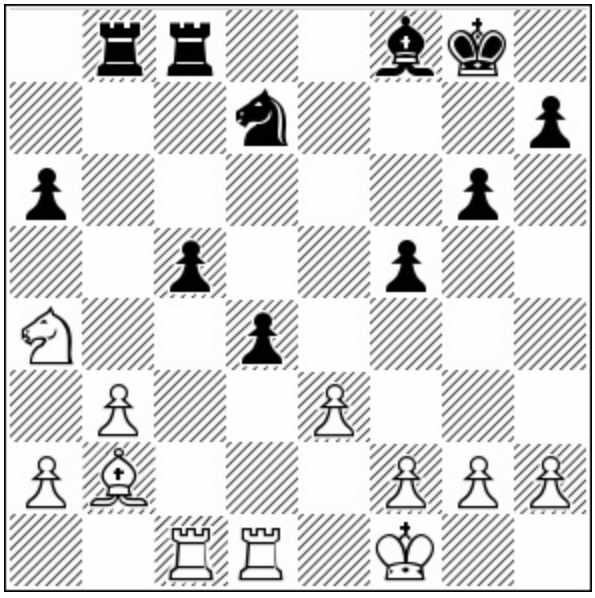
20...Nxd7 21.Nc3 d4

A little more tenacious was 21...c4 22.Nxd5 cxb3 23.axb3 Rxc1 24.Rxc1 Rb8. With the active rook Black maintains chances to save the game, despite

being down a healthy pawn.

22.exd4

Surprisingly, 22.Na4! was even more convincing. Apparently White has to postpone cashing in the material: 22...Rab8 23.Kf1. White can continue the game patiently. Note how the theme of the disrupted hanging pawns returns. By the push of the d-pawn, the black pawn formation has lost all flexibility and meanwhile Black has completely surrendered the light squares. 23...f5



analysis diagram

24.Ba1!. Another remarkable prophylactic move. By moving the bishop away from the b-file, White ensures that exd4 can no longer be effectively met by ...c5-c4!. Black is now lacking constructive ideas. For instance, 24...a5 25.exd4 cxd4 26.Bxd4. On top of being up a pawn, White maintains complete control over the position. Black is hopelessly lost.

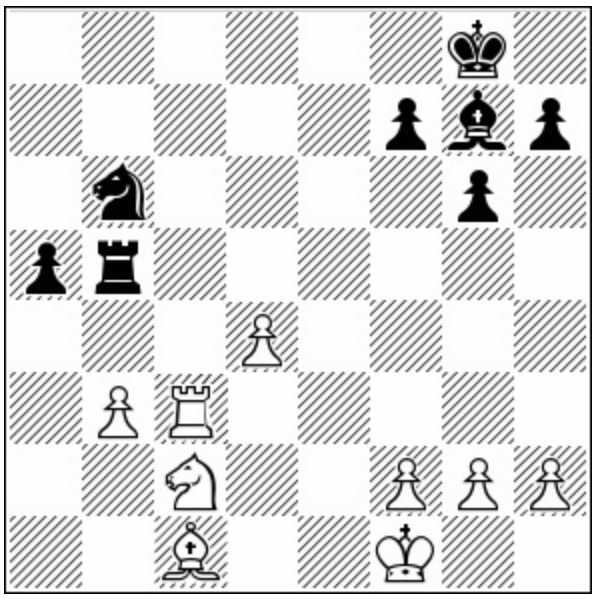
22...c4!

Smart defence by my opponent. By giving up the pawn in this fashion Black poses White some technical difficulties.

23.Nd5 cxb3 24.axb3 Rab8 25.Rxc8 Rxc8 26.Rc1 Rb8 27.Rc3 Rb5 28.Ne3 Nb6 29.Kf1 a5 30.Bc1!

If Black manages to exchange the a-pawn for the b-pawn, the game should theoretically be a draw. However, for the moment the idea of 30...a4 31.bxa4 Nxa4 can be strongly met by 32.Rc8!.

30...Bg7 31.Nc2



A critical moment arises.

31...Kf8?

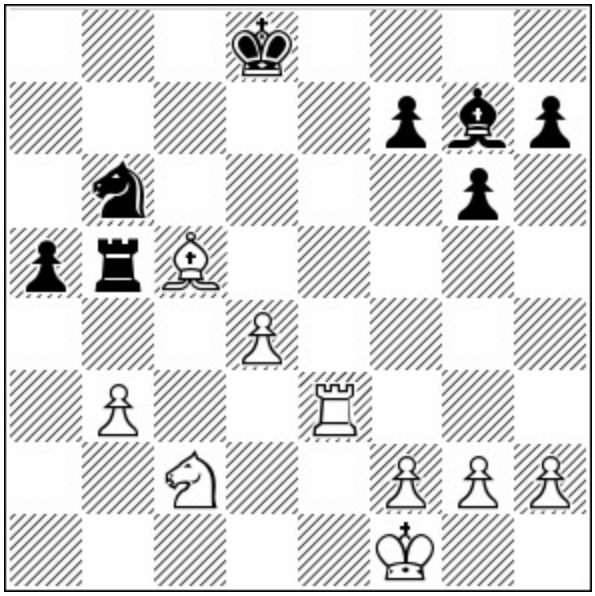
This allows me to finally coordinate my pieces.

A) During the game, I was a little worried about the continuation 31...a4 32.bxa4 Rb1!? 33.Na3 Ra1 34.a5 Bxd4. However, my worry transformed into reassurance when I spotted 35.Rc2!. Despite the peculiar constellation of White's pieces, Black has no way to take advantage. In the end, the a-pawn should decide the game;

B) Returning the bishop with 31...Bf8! is quite tenacious. After the white knight has left the e3-square, Black attained the option of improving his position with ...Nd5. The retreat to f8 serves to defend against Rc8+. After

32.Ba3 Kg7 33.Bxf8+ Kxf8 White is considerably better, but it is unclear whether he can win.

32.Ba3+ Ke8 33.Re3+ Kd8 34.Bc5



The bishop has undergone a metamorphosis. What a difference two moves can make! On c5, the bishop is fulfilling both an offensive and a defensive purpose. The extra pawn has been consolidated. From here onwards the technical assignment is fairly straightforward and I went on to win on move 57.

1-0

Many topics of the previous chapter are returning. Similar to an IQP, hanging pawns offer a lot of freedom to pieces. Furthermore, hanging pawns on c5 and d5 control many key squares. The pawns are heavily restricting the opposing pieces, which creates a cramping effect similar to a space advantage. However, once pieces start disappearing from the board, the dynamic potential reduces, the opposing side is feeling less cramped and the vulnerabilities of hanging pawns are amplified. This game was a prime example of how an exchange of pieces favours the side who is playing against the hanging pawns. The black centre became increasingly hard to

defend and ultimately crumbled.

The push e3-e4

Another key resource against hanging pawns is the pawn break e3-e4, undermining the synergy of the hanging pawns.

For an application of this idea, we will pay a visit to the Match of the Century in 1972. The match took place in Iceland, in the midst of the Cold War. The political interests provided the match with a lot of media attention, with Bobby Fischer representing the West and Boris Spassky representing the USSR. After a tumultuous start, Fischer was trailing in the match. In the first game, Fischer trapped his own bishop with a mysterious move, and in the second game he forfeited by not showing up. Fischer then struck back in Game 3 and 5, tying the match as we enter Game 6.*

> * Fischer forfeited Game 2 as he wasn't satisfied with the playing conditions. The officials at the venue weren't willing to grant his requests. The match could have ended right there if it wasn't for an extraordinary gesture by Spassky, who asked the officials to accommodate Fischer. Even though many of Fischer's requests are regarded as standard today, Spassky obviously wasn't required to cooperate. After the requests were accommodated, the match continued and chess history was changed.

Game 3 Queen's Gambit Declined
Bobby Fischer
Boris Spassky
Reykjavik Wch 1972 (m/6)

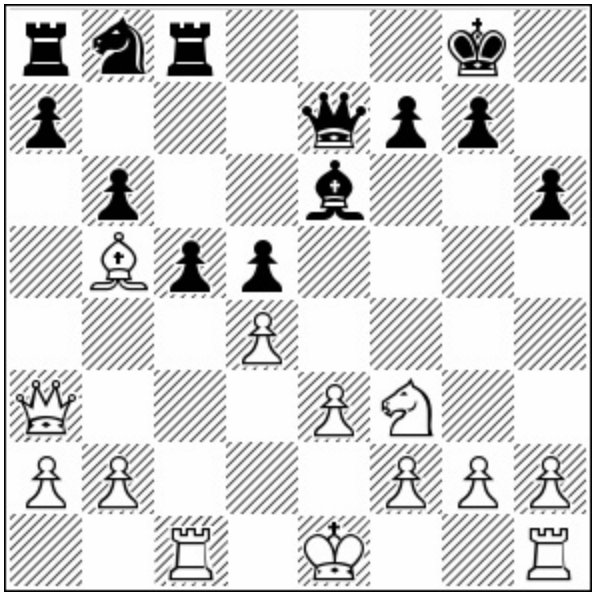
1.c4

Astounding! Fischer almost exclusively played 1.e4 and now he is playing the English in one of the most important games of his career.

1...e6 2.Nf3 d5 3.d4

So, after three moves we are back in a Queen's Gambit Declined. A real surprise, since Fischer had openly condemned the white side of this opening in the past.

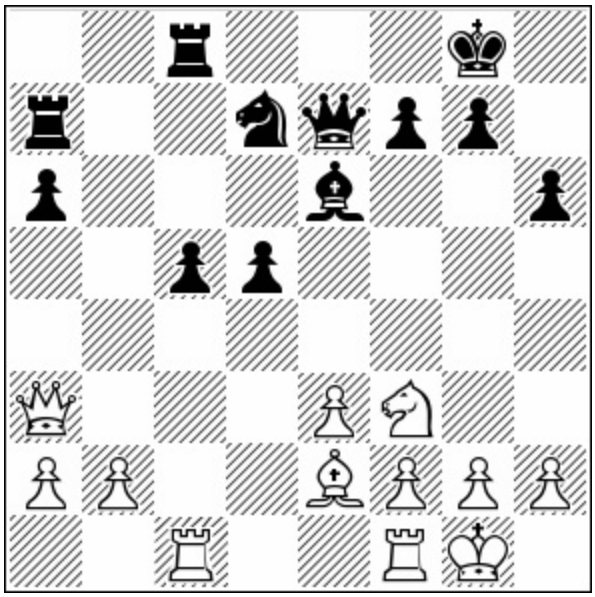
3...Nf6 4.Nc3 Be7 5.Bg5 0-0 6.e3 h6 7.Bh4 b6 8.cxd5 Nxd5 9.Bxe7 Qxe7 10.Nxd5 exd5 11.Rc1 Be6 12.Qa4 c5 13.Qa3 Rc8 14.Bb5



14...a6

Nowadays, people have figured out that 14...Qb7! offers good play for Black: 15.dxc5 (otherwise Black follows up with ...c5-c4!) 15...bxc5 16.Rxc5 Rxc5 17.Qxc5 Na6 18.Bxa6 (18.Qc6 Qxc6 19.Bxc6 Rb8 – White is now forced to give back the pawn immediately: 20.0-0 Rxb2 21.a4. Black's activity more than compensates for the IQP and Black has scored 3.5/4 from this position in practice) 18...Qxa6 19.Qa3 Qc4. Castling is illegal so White must force an endgame: 20.Qc3 Rb8! 21.Qxc4 dxc4 22.b3 cxb3. Black is better in this endgame and went on to win in Bogdanovich-Kovalenko, Alushta 2010.

15.dxc5 bxc5 16.0-0 Ra7 17.Be2 Nd7



We have entered a position with hanging pawns in which two sets of minor pieces have disappeared from the board. Fischer must have been satisfied.

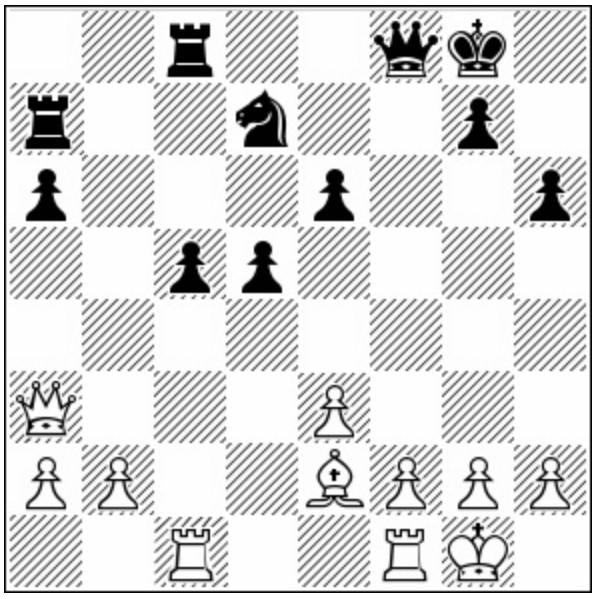
18.Nd4!

By making use of a small tactical detail, White is now challenging the important bishop on e6. Fischer is insisting on further exchanges that should magnify his structural advantage.

18...Qf8?!

A suboptimal decision. Spassky is forcing an exchange that Fischer wanted to make anyway. 18...Nf6 would have been more productive.

19.Nxe6 fxe6



White to move
(back to the exercises)

20.e4!

There we go, another key idea in White's arsenal. Its aim is to disrupt the synergy of the black centre. If the black pawn moves forward, the centre will lose flexibility and Black will concede full rein to White's light-squared bishop.

20...d4?

A) 20...dxe4 leaves the black pawn structure in ruins. Even though White can't pick up the pawns right away, he can slowly manoeuvre his pieces. With his pawn structure shattered, Black can never carry out any active plan. Still, considering what happened in the game, the capture was a far superior option;

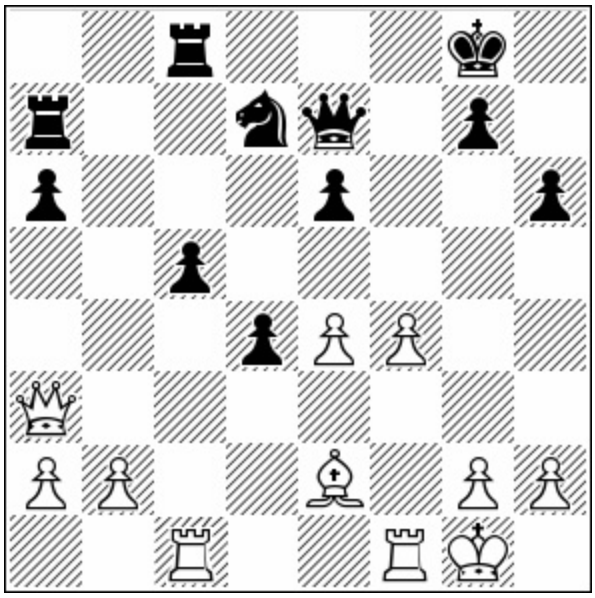
B) 20...c4 was another alternative, contesting the light squares. 21.Qh3!?. So, this was the additional idea behind White's advance in the centre. After his e-pawn thrust in the centre, the queen's mobility increased, and she could slide all the way over to the other side. 21...Nc5 22.b4!? cxb3. The en passant

capture is forced, as alternatives would allow White to crash through on e6. 23.axb3 Rd8 24.exd5 exd5 25.Qc3. White is better because Black has no compensation for his IQP, but Black still has reasonable chances to defend.

21.f4!

Very strong. The central transition has paid huge dividends for Fischer. He is now advancing his pawn majority on the kingside, while completely containing Black's majority on the queenside. Moreover, the white bishop has significantly more influence than the black knight.

21...Qe7



22.e5

The remarkable 22.Qh3! turns out to be even stronger. By staying flexible, White could prevent the knight from jumping to d5. White's main idea is to increase the pressure on e6 with Bc4 and tie the black pieces to the defence of the e6-pawn. 22...Nb6, stopping Bc4, runs into 23.f5! c4 24.f6 gxf6 25.Qxh6, and with his king stripped from its defenders, Black is in trouble.

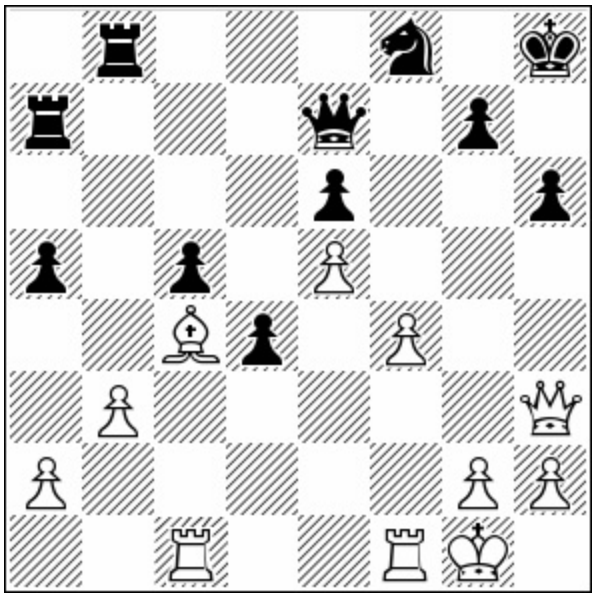
22...Rb8?!

22...Nb6 was required, preventing Bc4 and intending to centralise the knight on d5. White should nonetheless maintain a winning positional advantage, as Black simply has too many weak squares.

23.Bc4 Kh8 24.Qh3 Nf8 25.b3

Fischer makes chess look simple. He plays a calm move to strengthen his position further. Spassky has no counterplay.

25...a5



26.f5!

Fischer's patience runs out and he moves forward. The calm 26.a4!, fixing the queenside, would perhaps have been even more brutal.

26...exf5 27.Rxf5 Nh7 28.Rcf1 Qd8 29.Qg3 Re7 30.h4 Rbb7 31.e6

White completely dominates the board. Spassky keeps floundering, but his situation is hopeless.

31...Rbc7 32.Qe5 Qe8 33.a4 Qd8 34.R1f2 Qe8 35.R2f3 Qd8 36.Bd3 Qe8 37.Qe4 Nf6 38.Rxf6 gxf6 39.Rxf6 Kg8 40.Bc4 Kh8 41.Qf4

A totally dominant final position. Fischer is about to force mate. The hanging pawns went absolutely nowhere.

1-0

The American superstar delivered a strategic masterclass. He showed that he was capable of more than just razor-sharp calculation. After the conclusion of the game, Spassky joined all the spectators in their applause for Fischer's performance. Fischer was impressed by this amicable gesture, so he remarked that Spassky was a 'true sportsman'. With this famous victory, Fischer grabbed the lead in the match and never gave it away again.*

> * On YouTube, you can find a great documentary titled 'Bobby Fischer Against The World' (2011). The documentary features Fischer's quirks, his match against Spassky and his eventual descent into madness. International master Anthony Saidy's comment on Game 6, the highlight of the match, was: 'It was like a symphony of placid beauty.'

Dynamic piece play

After identifying the main resources to exploit hanging pawns, it is time to investigate what hanging pawns are capable of. We start off with a spectacular attacking game by Lev Psakhis. The variations that spring from Black's 25th move are truly mind-boggling and you can use that position as an excellent calculation exercise.

Game 4 Réti Opening
Mark Taimanov
Lev Psakhis
Moscow 1981 (2)

1.Nf3 c5 2.b3 b6

No theory in this game!

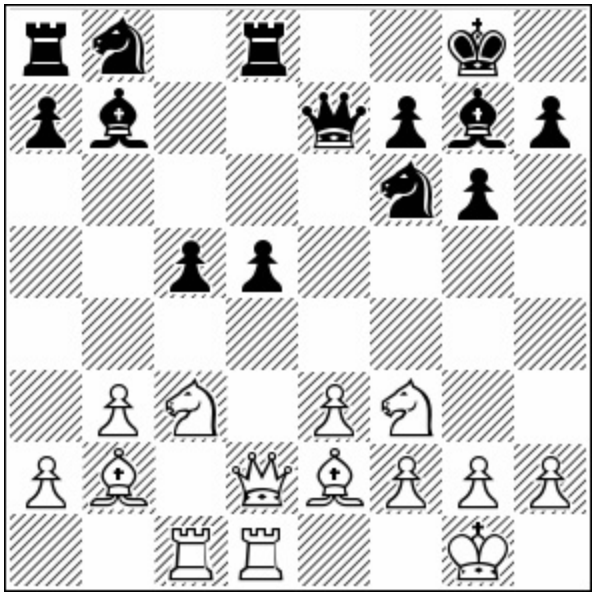
3.Bb2 Bb7 4.e3 Nf6 5.d4 g6 6.Be2 Bg7 7.0-0 0-0 8.c4 e6 9.dxc5 bxc5 10.Nc3 Qe7 11.Qd2

An odd move, though not necessarily a bad one. Black is intending ...Rd8, and this creates a potential face-off between the queen and rook. Therefore, 11.Qc2 is more natural. Black, on the other hand, has a perfectly positioned queen on e7, as it has good influence there and can hardly be harassed.

11...Rd8 12.Rfd1 d5 13.cxd5 exd5

From an unorthodox opening, we have now arrived at a normal-looking position with hanging pawns.

14.Rac1



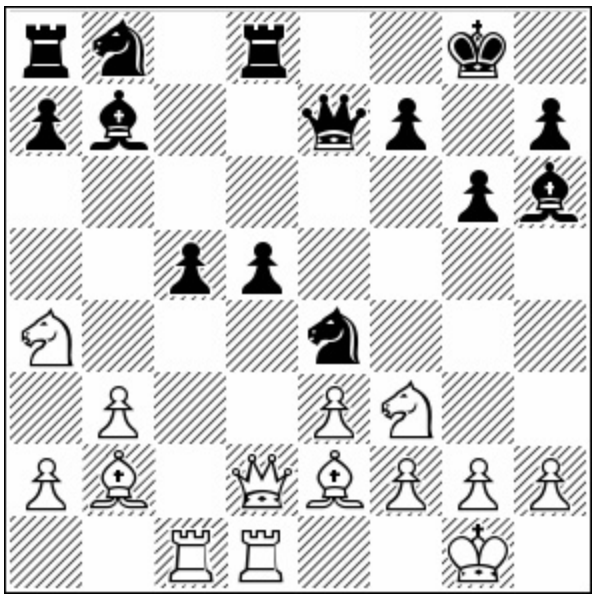
An interesting moment has arrived. White has finished his development and he is now looking to exploit the hanging pawns. Black, on the other hand, still needs to make a couple more moves to develop his queenside. He also needs to come up with a plan. Since all the pieces are still on the board, Black has maximal dynamic potential. This led Psakhis to a creative idea:

14...Bh6!?

The peculiar position of the white queen triggered Black to come up with this original move. The idea behind it is to increase the strength of ...d5-d4 and reinforce potential knight sacrifices on f2. Both 14...Nc6 and 14...Nbd7 are healthy alternatives, with chances for both sides.

15.Na4 Ne4

White was going after Black's vulnerable pawn on c5, but Psakhis now defends it with tempo. Note that 15...Nbd7?? 16.Nxc5! Nxc5 17.Bxf6 loses for Black, so Psakhis' only way is forward!



White has a crucial decision to make.

16.Qc2?!

This natural move turns out to be a mistake, as it does nothing to protect the vulnerable pawns on e3 and f2. Psakhis now grabs the initiative.

The odd 16.Qe1! was correct. White needs to keep an eye on pawn f2. In addition, White retains the possibility of going for an adventure by moving to the a5-square. In these hanging pawn positions, this square often proves to be a weak spot in Black's camp as the black queen's knight often develops to d7. 16...Nd7 17.Bd3 Rac8 18.Bxe4. Exchanging the strong knight on e4 relieves some pressure. 18...Qxe4 19.Qa5! Bf8. The bishop is forced back,

but the other black pieces are actively positioned. The position is dynamically even.

16...Nd7 17.b4?

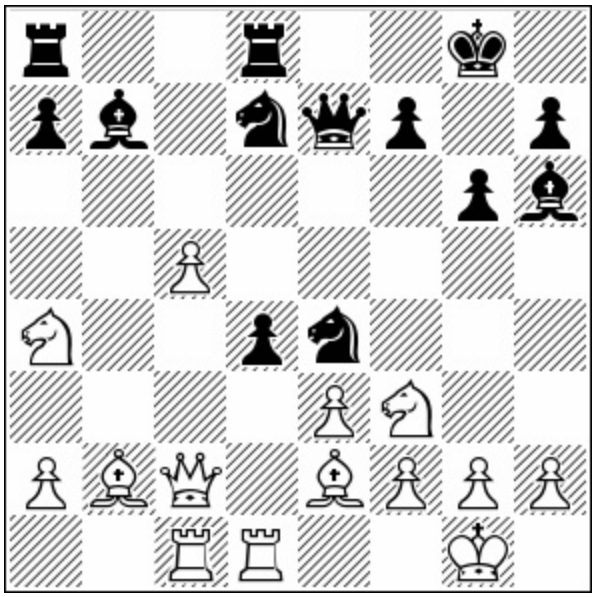
A thematic idea in positions with hanging pawns, but here it isn't good.

17...d4!

A) 17...cxb4?! 18.Qc7 would be exactly what White was hoping for. At the cost of a pawn, he limits Black's dynamic potential;

B) 17...Nxf2 18.Kxf2 Bxe3+ 19.Kf1 cxb4 was interesting too. Black has more than enough compensation for the piece, but he doesn't have a knock-out blow. The continuation in the game is far stronger.

18.bxc5

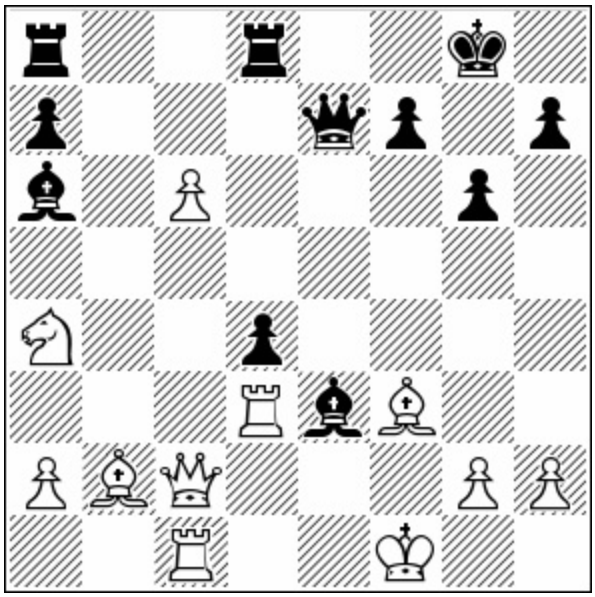


Black to move
(back to the exercises)

Question: Psakhis has a difficult choice to make. Both captures on f2 and e3 look attractive. Which one is best?

18...dxe3

18...Nxf2!! is complicated, but devastating. Black does need to find a series of accurate continuations: 19.Kxf2 Bxe3+ 20.Kf1 Ne5. All Black's pieces need to be brought into the attack. The main idea is to take on f3 and play ...Qh4. 21.c6 Nxf3 22.Bxf3 Ba6+ 23.Rd3 (23.Be2? Qf6+ leads to a quick checkmate).



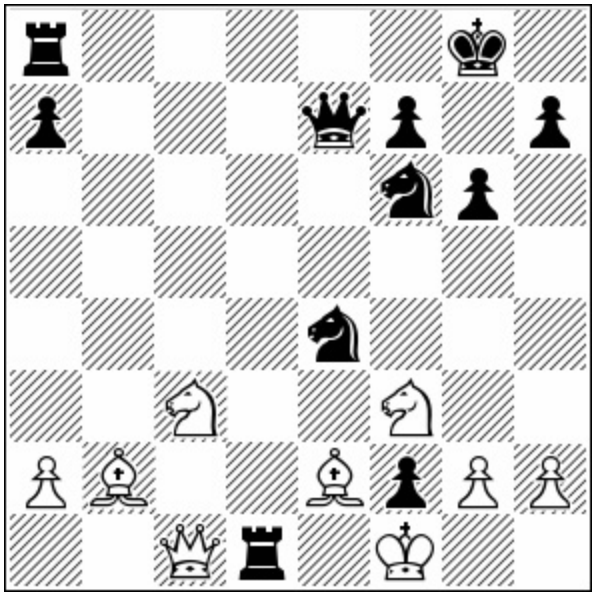
analysis diagram

Now follows an absolute star move that needed to be calculated at the start: 23...Re8!!. This phenomenal quiet move turns out to be the only decisive continuation. With a black rook on the e-file, the white king cannot flee to the centre and the black queen is now free to move. 24.Nc5. This move is White's main defensive idea. Why is the black rook so effective on e8? 24...Qxc5!. Fantastic. The queen is sacrificed, but Black can now start collecting. 25.Qxc5 Bxd3+ 26.Be2 Bxe2+ 27.Kxe2 Bxc1+ (check!) 28.Kd3 Bxb2. Black ends up with two rooks and a bishop for the queen. White can safely resign.

19.c6 exf2+ 20.Kf1 Bxc6 21.Qxc6 Bxc1 22.Qxc1

With two pawns and a rook for two pieces, Black is better, as White doesn't have immediate access to the vulnerable dark squares around Black's king. Yet, Black's attack has slowed down, so White has decent chances to put up a defence.

22...Ndf6 23.Nc3 Rxd1+



White to move

Question: Which of the three? This is a good defensive exercise. I can already reveal that only one capture holds for White.

24.Nxd1?

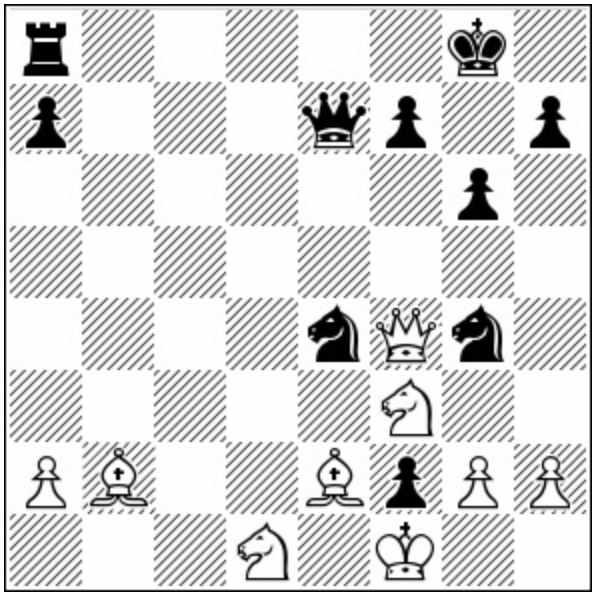
A) 24.Qxd1? Ng4! wins the queen: 25.Qd4 Ne3+ 26.Qxe3 Ng3+ 27.hxg3 (27.Kxf2 Nh1+!) 27...Qxe3, and Black should win eventually;

B) 24.Bxd1! is the correct recapture. The aggressive 24...Ng4 can now be met by 25.Nxe4 Qxe4 26.h3 Re8 27.Qd2, and Black lacks a decisive continuation. Note that 27.hxg4?? would be disastrous: 27...Qe1+! 28.Nxe1 fxe1=Q#.

24...Ng4!

Both knights enter the attack. Suddenly, all kinds of mating ideas appear and White has a difficult defensive task.

25.Qf4



Black to move
(back to the exercises)

We have arrived at my favourite position in the entire book! If you have some spare time, consider setting up this position on the board. It is a brilliant exercise. There's only a single move that wins for Black. Try not only to guess Psakhis' move, but also to calculate its main line correctly. In case you hit upon a fascinating idea, you know you are on the right track!

All right, I have used some lengthy prose to create some extra space here so as to not give away the answer too soon. Are you ready?

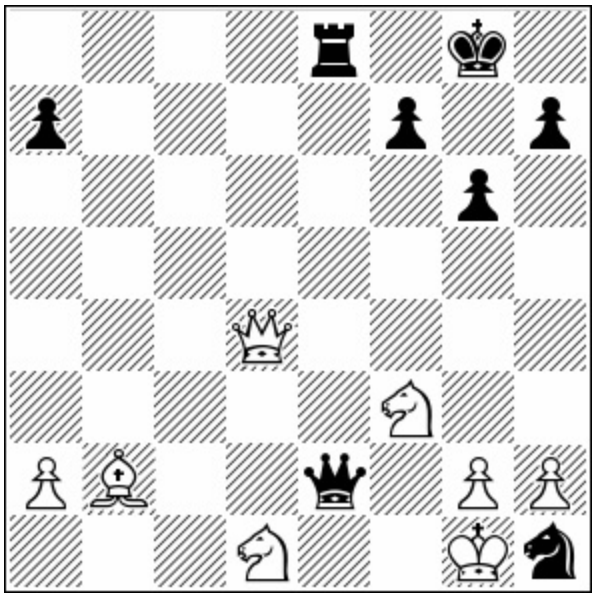
25...Re8!!

The key move. Obviously, it is natural to include the only inactive piece into the attack. But there is a knight hanging on g4. And why does the rook need to go precisely to e8? Okay, other rook moves allow 26.Qxg4, so they don't really come into consideration. So, you might have hit upon the correct move

by a process of elimination. Still, why doesn't 26.Qxg4 actually work against 25...Re8? Unfortunately, Taimanov didn't allow Psakhis to show his magnificent point.

26.Ne5

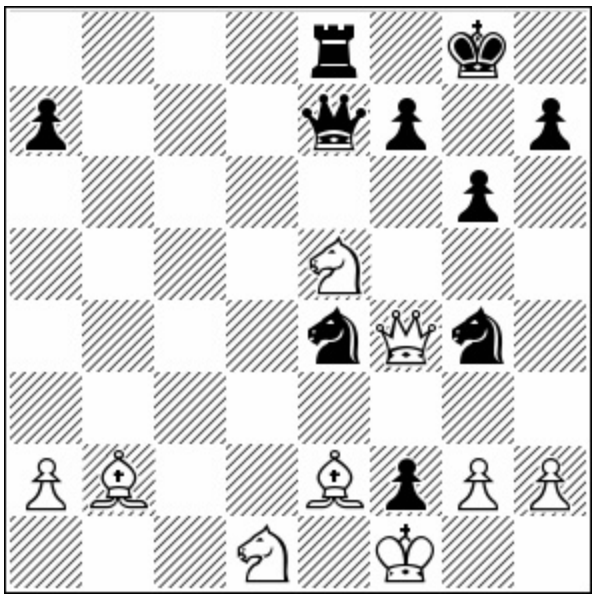
White's move deprives Psakhis of an exceptional finish, but fortunately for him, the conclusion of the game is still wonderful. As for the exceptional finish, what would have happened after 26.Qxg4 ? Down a knight, Black needs to act quickly: 26...Ng3+ 27.Kxf2 Nh1+ (note that 27...Nxe2?? 28.Ne5 leaves Black in trouble, and 27...Qxe2+?? 28.Kxg3 Qxd1 29.Qf4 also fails for Black. Suddenly, the white king is safe and Black will struggle on the dark squares). By process of elimination, the knight check in the corner was the only move, but can it really be effective on such a poor square? 28.Kg1 Qxe2. Obviously, 29.Kxh1 fails to 29...Qxd1+, but can White set up a counterattack? 29.Qd4.



analysis diagram

The white queen is about to deliver checkmate. Were Black's efforts all in vain? On the contrary! 29...Qe1+!! 30.Nxe1 Rxe1#. An extraordinary mating pattern. Have you ever seen something like this before? Black has sacrificed

most of his army to reach an extremely efficient mating pattern with a rook and knight. The remarkable knight in the corner prevents the king from escaping and the rook delivers the final blow.

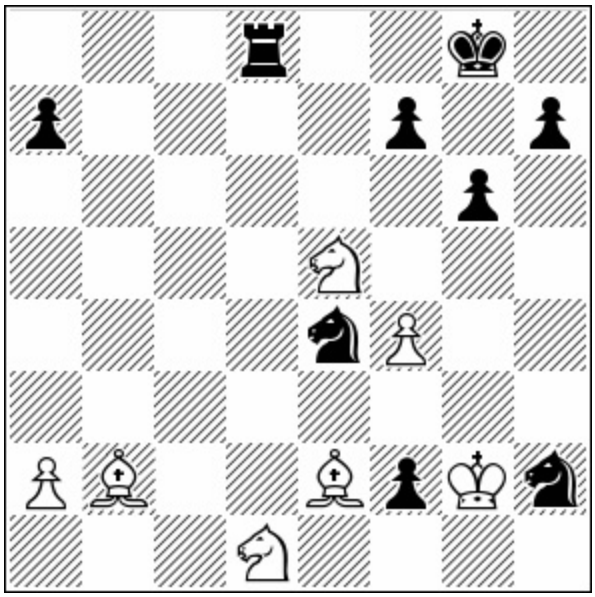


After the game continuation, Black's play is still stunning.

26...Qf6!!

Another small move with huge consequences. Psakhis is defending f2 by means of an X-ray. Both knights can be captured, but either capture allows a mate in one. Taimanov finds the only way to prolong the game, although it will be to no avail.

27.g3 Nxh2+ 28.Kg2 Qxf4 29.gxf4 Rd8!



The final important detail. The rook has done its job on the e-file and now threatens to infiltrate on square d2.

30.Nxf2 Rd2

Almost all of White's pieces are operating on the second rank. The rook can start collecting.

31.Nxe4 Rxe2+ 32.Nf2 Rxb2 33.Ned3 Rxa2 34.Kxh2 a5 35.Kg3 a4

The two knights are no match for the black rook and a-pawn. A phenomenal performance by Psakhis.

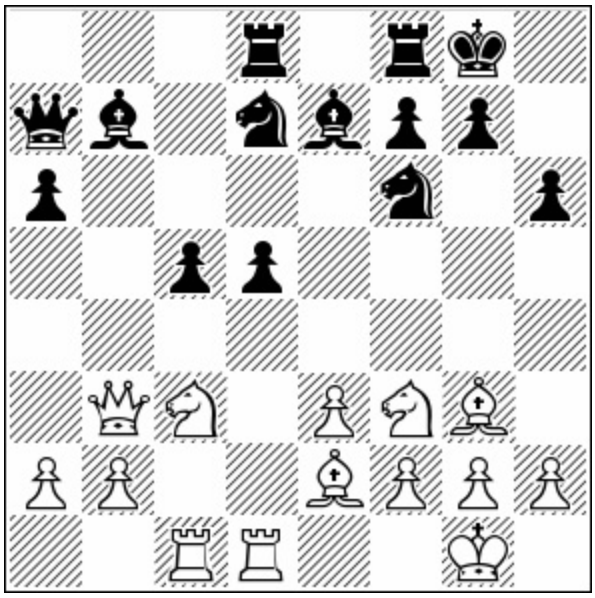
0-1

Sometimes, you wish that variations that remain under the surface would actually appear on the board. The one after 26.Qxg4 with 27...Nh1+ was particularly fascinating. The mating idea with a knight on h1 and a rook on e1 is a truly original pattern. This makes me wonder how pattern recognition really works. It wouldn't be surprising if both grandmasters had never seen this pattern before, but they were nevertheless able to find it over the board. The chess-playing mind remains a mystery and it is an equally mysterious question how we should evolve it.

The push ...d5-d4

Let's return to Garry Kasparov, who faced Veselin Topalov in the latter's home country. Early on, the Bulgarian grandmaster misses a chance to obtain an advantage with a typical manoeuvre and then he gradually gets outplayed. Kasparov achieves the ...d5-d4 push, this time with a different purpose: to start powerful play on the long diagonal.

Game 5
Veselin Topalov 2740
Garry Kasparov 2825
Sofia 1998 (1)



White to move
(back to the exercises)

Question: White has completed his development and now needs to come up with a plan. What is a good way to proceed?

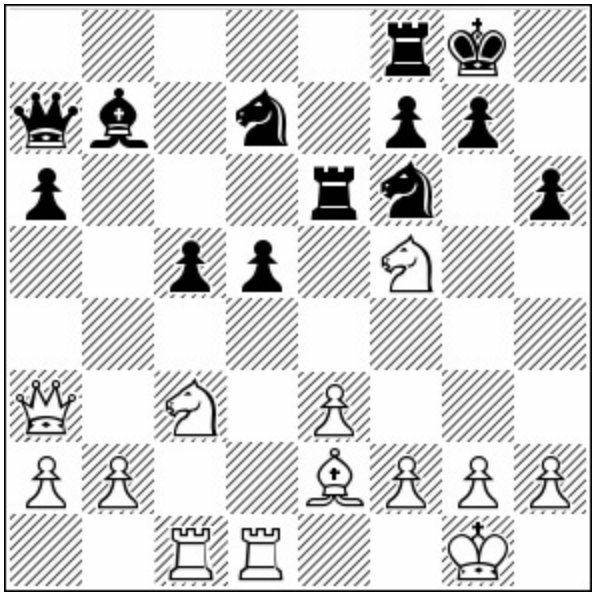
17.Rd2?!

Topalov tries to put additional pressure on the d5-pawn, but this only plays into Kasparov's hands. Instead, 17.Nh4! is the start of a strong manoeuvre.

Since Black has fianchettoed his light-squared bishop, the f5-square has become vulnerable. 17...Rfe8. Black needs to vacate the f8-square for the bishop. 18.Nf5 Bf8 19.Bc7. Before executing his plan, White first displaces the black rook. 19...Rc8 20.Bd6!. A surprising idea. The white bishop looked considerably more active than its counterpart on f8, but the black bishop was fulfilling an important defensive job, while the white bishop was merely hitting thin air. After the exchange of the dark-squared bishop, Black becomes vulnerable on the d6-square, which gives White opportunities to threaten a fork.

> Furthermore, an exchange of pieces lowers the dynamic potential of the hanging pawns and makes the task of defending them more difficult.

20...Re6 21.Bxf8 Rxf8 22.Qa3!?.



analysis diagram

White can follow up with Na4, targeting the c5-pawn. He enjoys a very pleasant position.

> Characteristic of hanging pawns are two uniquely weak squares on a5 and f5. Try to take advantage of these squares.

17.Rd2?! Rfe8 18.Qd1 Bf8 19.Bh4 Qa8!

Now, Black's pieces are nicely positioned and his hanging pawns are well protected. White lacks a concrete plan, while he must be constantly on his guard for potential pawn breaks by Black. Even though Black isn't better yet, his position is easier to play.

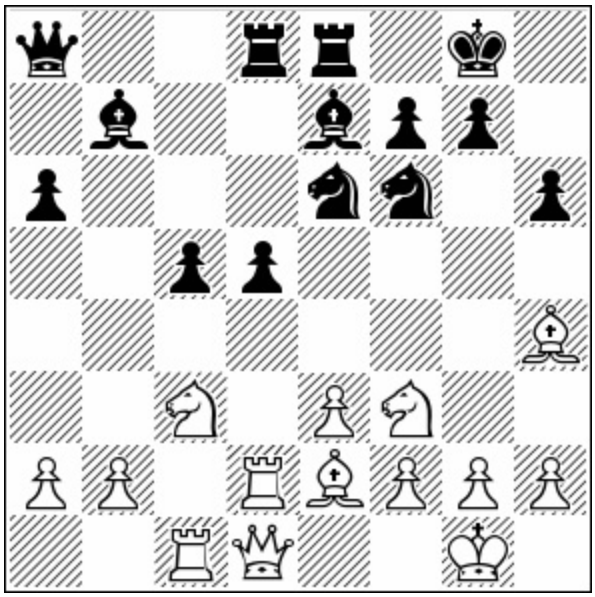
20.Ne1 Be7 21.Bg3 Nf8!

Kasparov excellently senses how he has to improve his position. The knight belongs on e6.

22.Nf3

Topalov's last moves show his despair. In the meantime, Kasparov keeps improving his position.

22...Ne6 23.Bh4



23...d4!?

23...g5!, followed by ...d5-d4, may well have been stronger as it creates an additional resource. 24.Bg3 d4 25.exd4 g4! (the point) 26.Ne1 cxd4. The

pawn on d4 is protected and Black has a massive advantage.

24.exd4 cxd4 25.Na4?

This is way too passive, leaving White with a hopeless position. 25.Nxd4 was required: 25...Nxd4 26.Rxd4 Bxg2. White's kingside has been shattered, but Black is lacking a decisive follow-up. Still, his winning chances remain excellent.

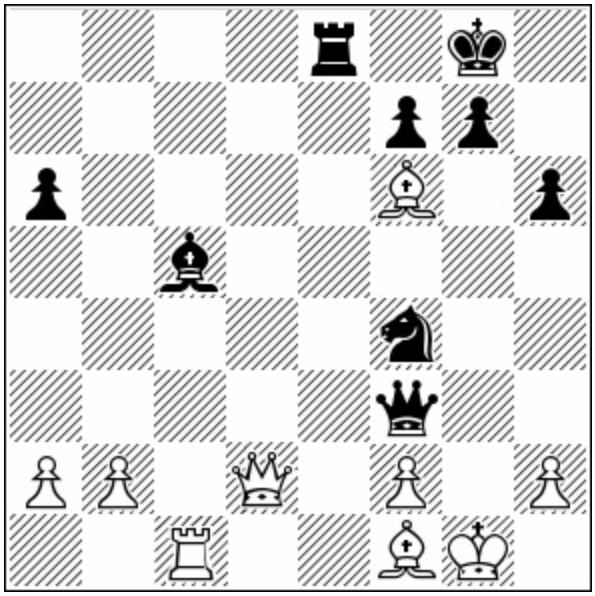
25...Nf4 26.Nc5 Bxc5 27.Bxf6 d3 28.Bxd3 Bxf3 29.gxf3 Rd5?

Too creative, giving White chances to defend. 29...gxf6, followed by ...Kh8 and ...Rg8, was far simpler.

30.Bh4?

Now it's over. White loses a lot of material. There was a way back into the game with 30.Bf1!. Black can still maintain the upper hand, but he has to rely on crazy tactics already:

A) 30...Rxd2 31.Qxd2 Qxf3



analysis diagram

32.Rc3!. I guess this is the move that both players missed. Somehow, Black lacks a decisive continuation. With the rook coming over to g3, White is starting to develop threats of his own.

B) 30...Bxf2+! 31.Kxf2 Qa7+ 32.Bd4 Rxd4! 33.Rxd4 Ne6 34.Qa4 Rd8 35.Rcd1 Nxd4 36.Kg2!. With a much safer king, Black is considerably better, but White can still fight.

30...Bb4! 31.Rc3 Bxc3 32.bxc3 Red8

The pin on the d-file leads to a decisive material advantage.

0-1

Not a perfect game by Kasparov by any means, but he showed the dynamic potential of hanging pawns, exemplifying another Hidden Law.

> A well-timed ...d5-d4 advance unleashes all the dynamic energy of hanging pawns.

Early on, Topalov missed a typical manoeuvre that would have produced favourable exchanges. By eliminating pieces, Topalov could have reduced Black's dynamic potential and weakened the defence of the hanging pawns. Once the ...d5-d4 advance was carried out successfully, Black suddenly obtained great attacking chances.

Is there such a thing as a playing style in chess? At the start of the chapter, I quoted Kramnik, who famously said that he is convinced that one's playing style reflects one's personality. Perhaps there is some truth to this claim. Take Mikhail Tal, for example. He was known for his fierce attacking chess, full of sacrifices, and he led a dynamic, bohemian lifestyle away from the board. When choosing our openings, we have some agency over steering the game into a particular direction.

> Tip: When deciding upon your opening repertoire, assess your strengths and weaknesses, and adjust your opening choices accordingly.

As we have seen in the first three chapters, different pawn structures facilitate different types of play, and a lot of decisions were strategic in nature. In Chapters 4 and 5, on the other hand, the decision-making often came down to deep and accurate calculation.

The similarities between IQPs and hanging pawns are glaring. In both cases, the key attacking resource is the advance of the d-pawn. Another striking similarity is the use of piece exchanges for the defending side. Since hanging pawns are more flexible than isolated pawns, the defending side should look for ways to disrupt the hanging pawns. We have seen that b2-b4 and e3-e4 are two particularly effective resources against them.

The Hidden Laws of Hanging Pawns

• The side who is playing against the hanging pawns has two key resources available: the e3-e4 advance and the b2-b4 advance. The aim of both moves is to reduce the mobility of the hanging pawns and to seize control over key squares;

• A trade of pieces generally favours the side playing against the hanging pawns;

• The ...d5-d4 advance is the main resource to unleash all the dynamic energy of the hanging pawns;

• Hanging pawns generally come with uniquely weak squares; hanging pawns on c5 and d5 can be exploited by accessing the a5- or the f5-square. In other structures, these squares are usually not under White's control.

Quiz

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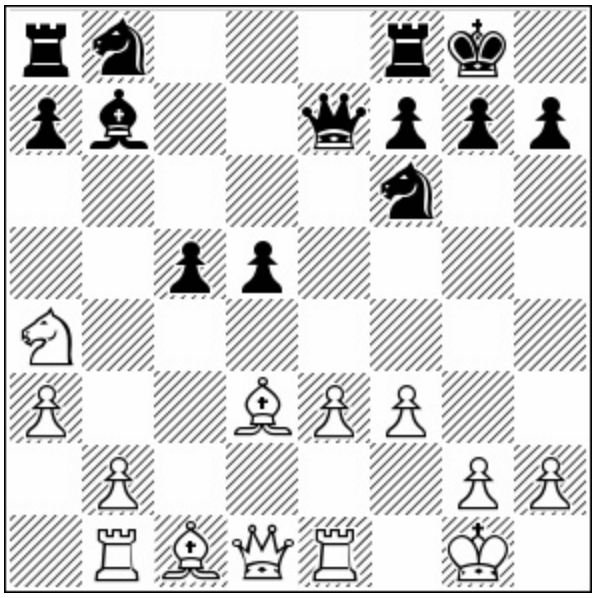
Exercise 1

Viktor Kortchnoi

Vladimir Antoshin

Sochi 1966 (15)



White to move

How does Kortchnoi continue?

Show/Hide Solution

Exercise 1

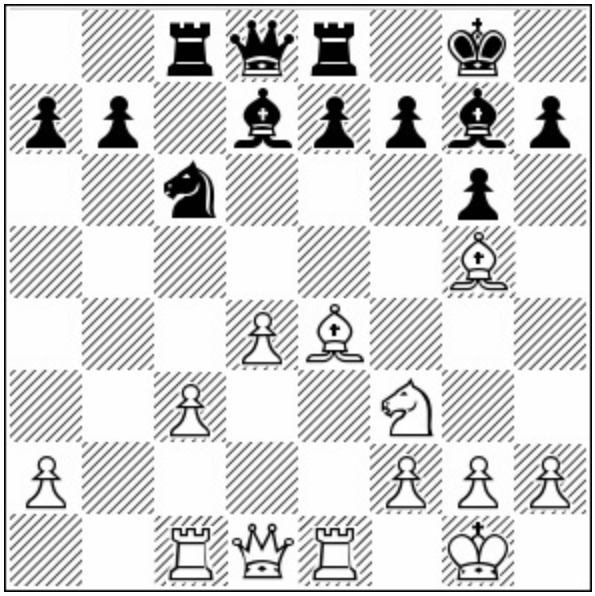
Black's position is already very bad. Kortchnoi now disrupts the hanging pawns with **16.b4!**. Black lacks a good reply. **16...c4 17.Bc2 Nc6 18.Bb2 Rad8 19.b5 Nb8 20.Qd4**. White is dominating the board.

Exercise 2

Yuri Balashov 2555

Alexey Dreev 2630

Samara 1998 (4)



Black to move

How does Dreev continue?

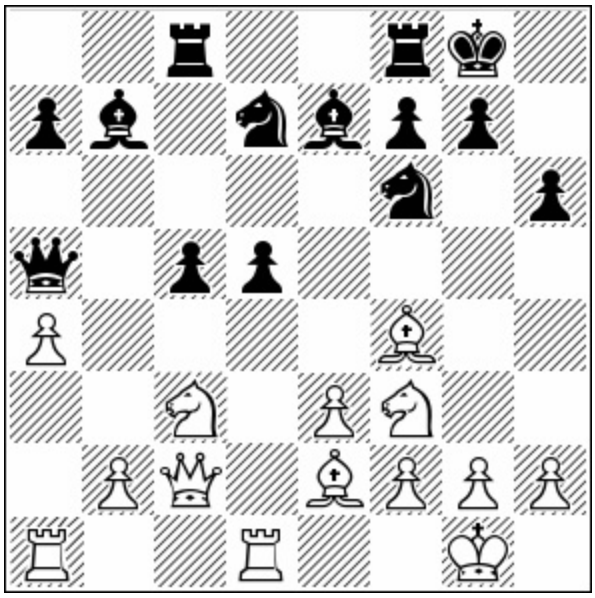
Show/Hide Solution

Exercise 2

Dreev played **14...Na5!**, intending to fix the hanging pawns. Alternatives allow 15.c4, with an advantage for White. In the game, Dreev quickly seized the initiative: **15.Bd3 Nc4 16.Qb3?! b5! 17.Bxc4?! Rxc4**. Dreev managed to immobilise the hanging pawns and went on to win comfortably.

Exercise 3

Garry Kasparov 2740
Lajos Portisch 2605
Brussels 1986 (5)



White to move

Can you figure out Kasparov's continuation?

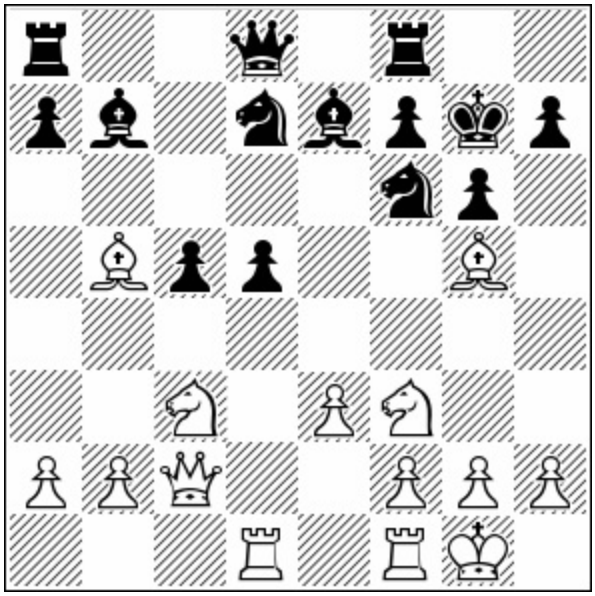
Show/Hide Solution

Exercise 3

15.Nh4!. The knight belongs on f5. **15...Rfd8 16.Nf5 Bf8 17.Nb5!**. Another excellent move. Kasparov is targeting the vulnerable d6-square. **17...Ne8 18.Bd6! Nxd6 19.Nfxd6 Rb8 20.Nxb7 Rxb7 21.Rxd5**. The hanging pawns have collapsed.

Exercise 4
Carl Schlechter

Amos Burn
Ostend 1906 (16)



White to move

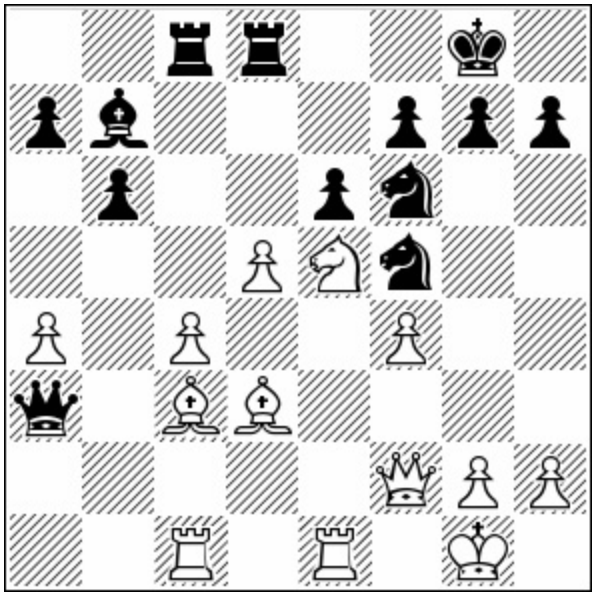
White is well developed. How should he continue?

Show/Hide Solution

Exercise 4

14.e4!. This advance in the centre is based on a sweet tactical idea. **14...d4 15.Nxd4!**. The point. White has so much pressure that he will regain the material. **15...cxd4 16.Rxd4 Bc8 17.Qd2 a6 18.Bc6 Ra7 19.Bh6+ Kg8 20.e5**, and White wins material. Burn could have defended as follows: **16...Qb6 17.Rxd7 Nxd7 18.Bxe7 Rfe8 19.Bg5, but with two pawns and a bishop for the exchange, White is winning. White has great coordination, and the black king is very vulnerable on the dark squares.**

Exercise 5
Anton Rosmuller 2091
Nick Maatman 2207
Vlissingen 2013 (7)



White to move

How should White continue?

Show/Hide Solution

Exercise 5

I had been completely outplayed from a Nimzo-Indian. White wins after almost any sensible move. Three moves are equally strong. The first one is 23.a5!, making headway on the queenside and targeting b6.

The second one is 23.h3!, prophylactically controlling the g4-square.

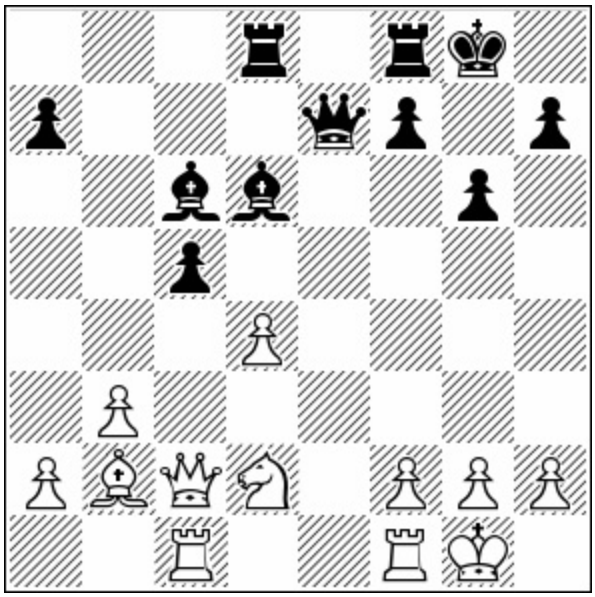
The third one is 23.Bb2!, forcing the queen to an awkward square. After 23...Qc5 24.Qxc5 bxc5, White wins with 25.Nxf7!.*

* Hopefully you spotted 23.Nxf7 and found its refutation. The

knight sacrifice is a very tempting option, and the exercise illustrates that you shouldn't always go for a tactical solution on autopilot..

Instead, my opponent didn't spot the devious trap that I set with my last move 22...**Q**a3. He played **23.Nxf7??**. This looks completely winning, because after **23...Kxf7? 24.dxe6+ Kg8 25.Bxf5, White wins back the material with interest. A cold shower came with 23...Ng4!**, a strong zwischenzug that turns the tables completely. **24.Qf3?! Qc5+**. The point. The queen swoops back in for a lethal check. **25.Kh1 Nf2+**, and White had to give up the queen anyway.

Exercise 6
Aron Nimzowitsch
Siegbert Tarrasch
St. Petersburg 1914 (5)



Black to move

Tarrasch has successfully executed the pawn thrust ...d5-d4!. How can he

continue his attack?

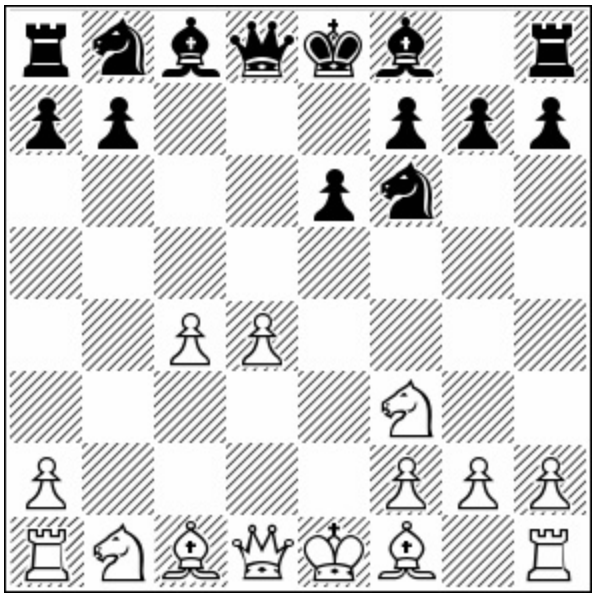
Show/Hide Solution

Exercise 6

19...Bxh2+! 20.Kxh2 Qh4+ 21.Kg1 Bxg2!. The famous double bishop sacrifice. Accepting the second bishop leads to a quick demise after **22.Kxg2 Qg4+ 23.Kh2 Rd5 24.Qxc5 Rh5+ 25.Qxh5 Qxh5+ 26.Kg2 Qg5+, winning. The game concluded in style: 22.f3 Rfe8! 23.Ne4 Qh1+ 24.Kf2 Bxf1 25.d5 f5! 26.Qc3 Qg2+ 27.Ke3 Rxe4+ 28.fxe4 f4+ 29.Kxf4 Rf8+ 30.Ke5 Qh2+ 31.Ke6 Re8+ 32.Kd7 Bb5#**.

For the sake of completeness, full points are also awarded for the alternative 19...Bxg2! 20.Kxg2 Qg5+ 21.Kh1 Qf4.

Exercise 7
Rudolf Flatschacher
Dietmar Göhring
Freechess.de 2020



Black to move

This position springs from an obscure variation against the Tarrasch Defence. How should Black proceed?

Show/Hide Solution

Exercise 7

In this obscure variation of the Tarrasch Defence, Goehring was the only one out of four players in the database who played the stunning central blow

7...e5!!

Remarkably, Black is supposed to forego development by disrupting White's central pawn formation first. It turns out that White has no satisfactory reply. The logical 8.Nxe5 runs into the devastating 8...Bb4+!, and if White defends with 9.Bd2, then 9...Qxd4 is decisive. Alternatively, 8.dxe5 Qxd1 9.Kxd1 Ng4! is very favourable for Black. Therefore, White continued

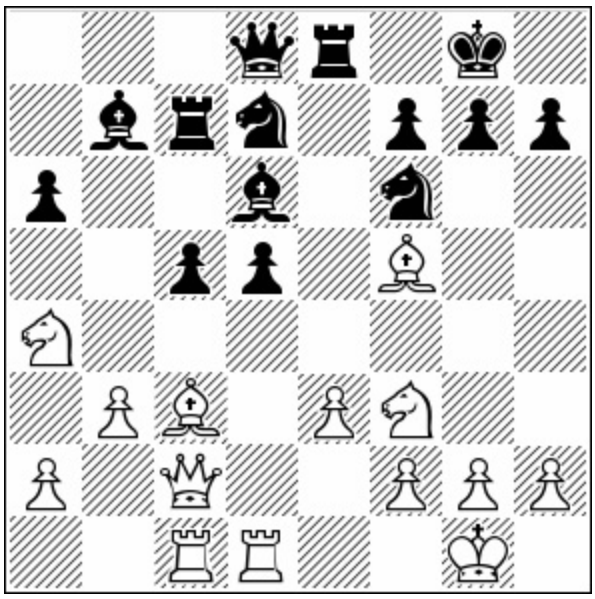
8.d5

but after

8...Bb4+!

Black had the upper hand.

Exercise 8
Andrey Esipenko 2714
Magnus Carlsen 2865
Wijk aan Zee 2022 (1)



Black to move

What should Black play here?

Show/Hide Solution

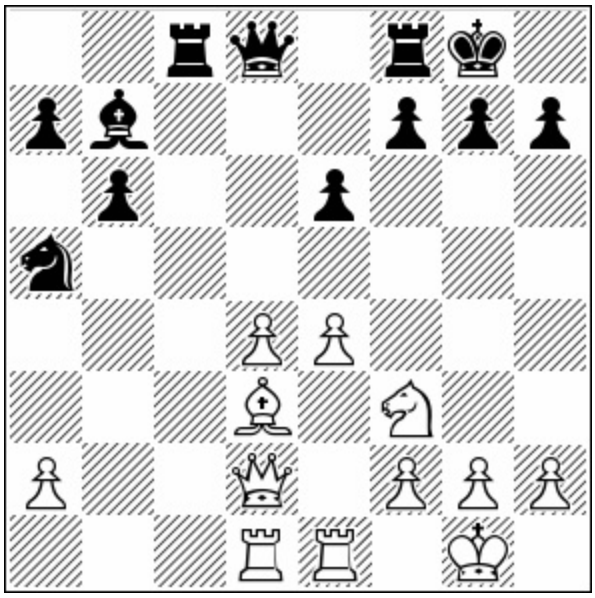
Exercise 8

The game ended in a draw after **17...Qe7 18.Ba5 Rc6 19.Bc3 Rc7 20.Ba5**

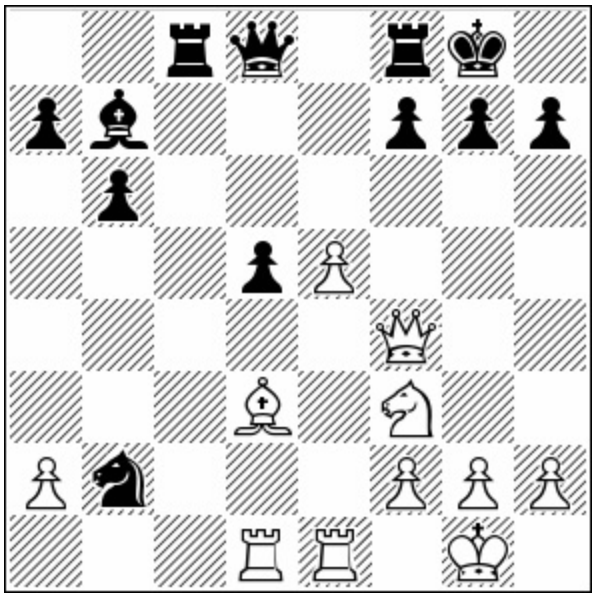
Rc6 21.Bc3 Rc7. What did Carlsen miss?

He could have played 17...d4!!. Figuring out this move is perhaps not that difficult, because it is Black's main resource in positions with hanging pawns. But the complicated part is actually calculating the variations correctly whilst making the right assessments. Carlsen must have been worried about 18.Ba5, seemingly winning an exchange. Interestingly, Black's attack is so strong that White can hardly take the material: 18...Bxf3! 19.gxf3 Ne5! gives White a headache. Now, White can try to defend with 20.Qe2 Qa8! 21.Kg2. The problem is that White isn't up any material. Black can play 21...Rc6!. This move appears very awkward, but it is the only one that keeps everything together. Other rook moves drop the c5-pawn. On closer inspection, it turns out that the white pieces are even more awkward, which gives Black a massive advantage. Taking the exchange with 20.Bxc7 is worse. After 20...Nxf3+ 21.Kg2 Nh4+ 22.Kh3, Black wins with the splendid 22...Qa8!!. Alternatively, 18.exd4 Bxf3! 19.gxf3 Nd5! allows the black queen to join the attack. White is lost. A fascinating position.

Chapter 6
Preview exercises



White to move
(go to the solution)



White to move
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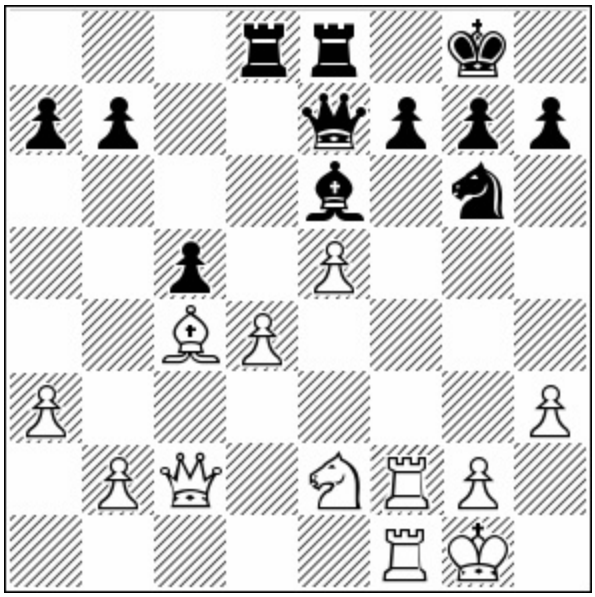
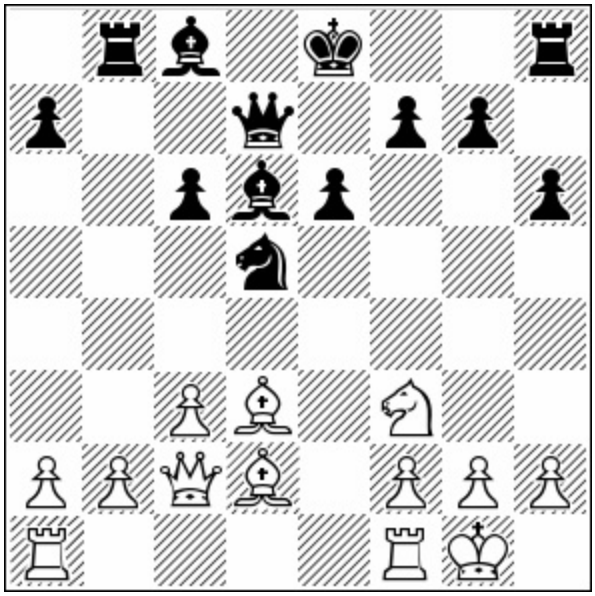
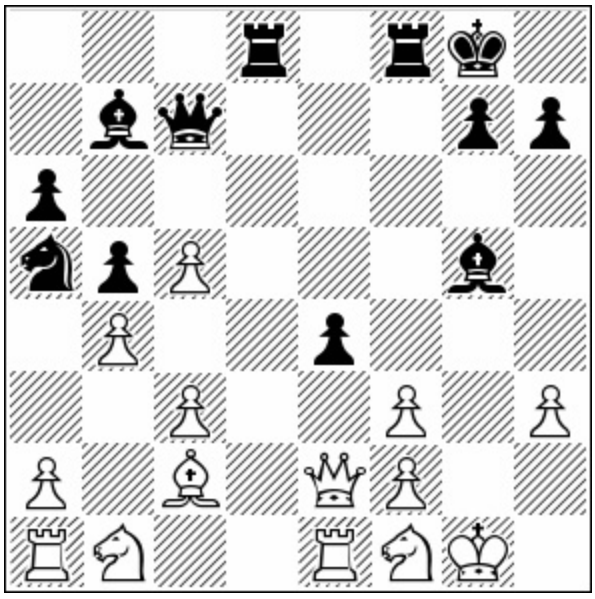


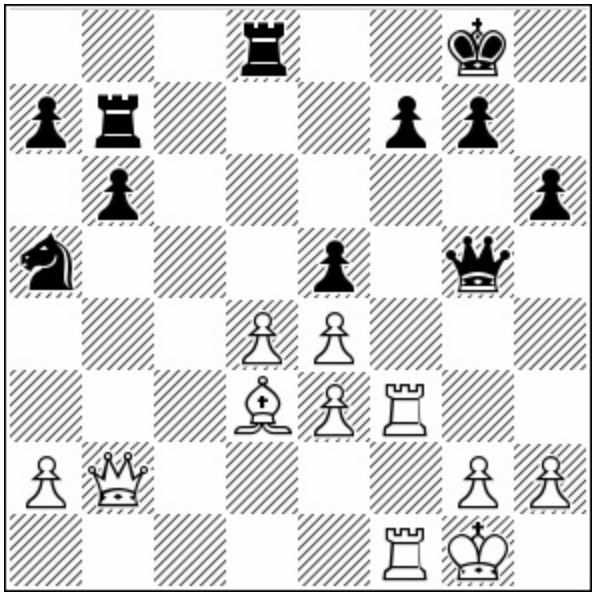
White to move
(go to the solution)



Black to move
(go to the solution)



Black to move
(go to the solution)



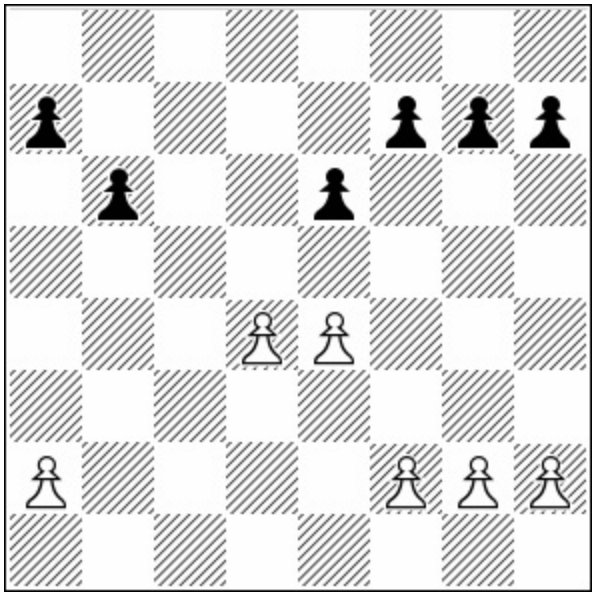
White to move
(go to the solution)

Chapter 6

Mobile pawn centre

Chess is a terrible game. If you have no centre, your opponent has a freer position. If you do have a centre, then you really have something to worry about! – Siegbert Tarrasch

When we are learning the game of chess, we are quickly taught that it is beneficial to fight for the centre. In the beginning, we usually start out with the move 1.e4 and Black often responds with 1...e5. This is a healthy approach. Contesting the centre is important. Control over the centre usually results in a space advantage and enhanced mobility of your pieces. Having a mobile centre is a universally good thing. Therefore, in almost all respectable openings, the centre is contested from the start, either directly or indirectly. Since both sides are contesting the centre, making progress in this area is often difficult, as the centre can be locked up or an advance may be deterred.



Central pawn majority

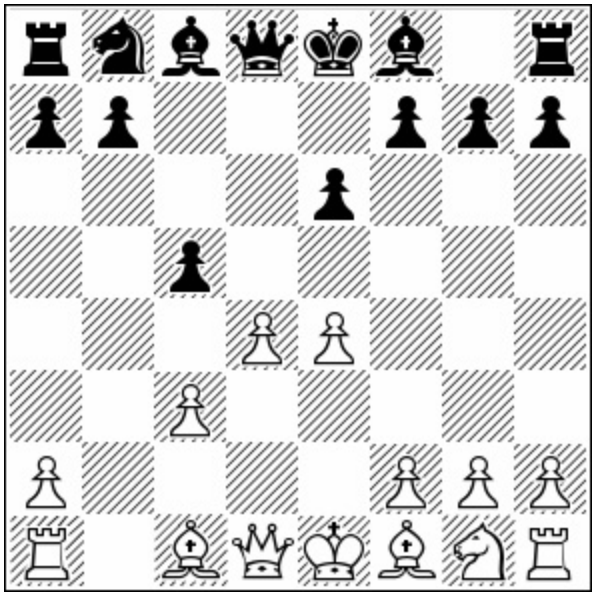
There are some exceptions. Consider for a moment the above pawn structure. The structure is notorious for White's pawn majority in the centre. White's pawn majority allows him to be in charge and he can always decide at will if

he wants to advance. Black can make this advance unattractive, but he won't be able to stop it altogether. Some players are willing to defend the black side as the structure is solid, and the queenside pawn majority still offers decent prospects in the endgame. Nevertheless, White is the one who will have most of the fun. The mobile pawn centre offers White dynamic possibilities, as he can advance with both d4-d5 and e4-e5 (and sometimes even combine those ideas!). Moreover, White's central control gives him attacking chances on the kingside. The central pawn majority is clearly not the only pawn structure that generates a mobile pawn centre, but it is the one that we will start with.

Game 1 Tarrasch Defence
Bahadir Ozen 2328
Velislav Kukov 2351
Manisa Yunusemre 2019 (10)

1.d4 d5 2.c4 e6 3.Nc3 Nf6 4.cxd5 Nxd5 5.e4 Nxc3 6.bxc3 c5*

* I have slightly adjusted the move-order for educational purposes.



7.Nf3

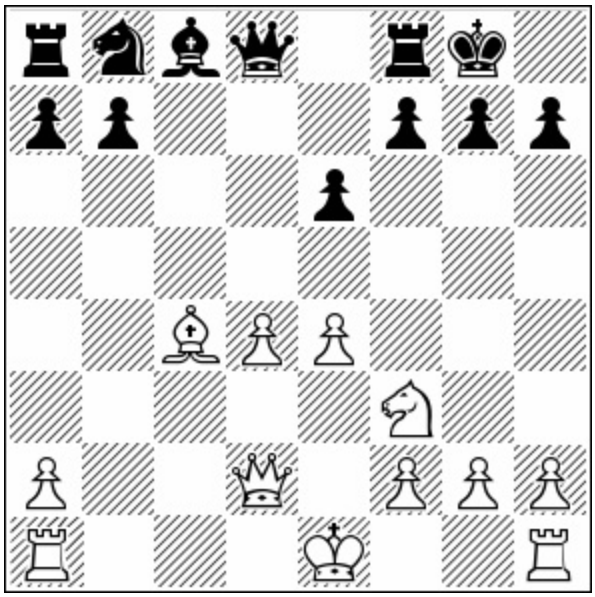
We now enter the main line of this variation of the Semi-Tarrasch Defence.

Since this move allows an exchange of bishops, players have started experimenting with two sophisticated moves with a similar purpose: 7.a3!? and 7.Rb1!?. The aim of both moves is to prevent Black from playing ...Bb4+ after an exchange in the centre. Let's briefly discuss the latter: 7.Rb1 Be7. The downside for White is that Black no longer has to insert ...cxd4. Still, White has been quite successful in this variation. 8.Nf3 0-0 9.Bc4 Qc7 (this useful move keeps White guessing about how Black will develop the knight) 10.Qe2 a6 11.0-0 b5 12.Bd3 Nd7 13.a4! (exchanging the isolated pawn on the edge is favourable for White as it decreases his number of pawn islands, leaving him with the more compact pawn structure) 13...bxa4 (13...c4?! 14.Bc2 Rb8 15.e5 f5 16.exf6 Nxf6 17.Bd2 and White is considerably better due to his far superior pawn structure) 14.d5 exd5 15.exd5 Nf6 16.c4. White has a strong protected passed pawn on d5, while Black's extra pawn on the a-file is meaningless. Still, Black has a decent blockade on the dark squares, but White definitely has the advantage.

7...cxd4 8.cxd4 Bb4+!

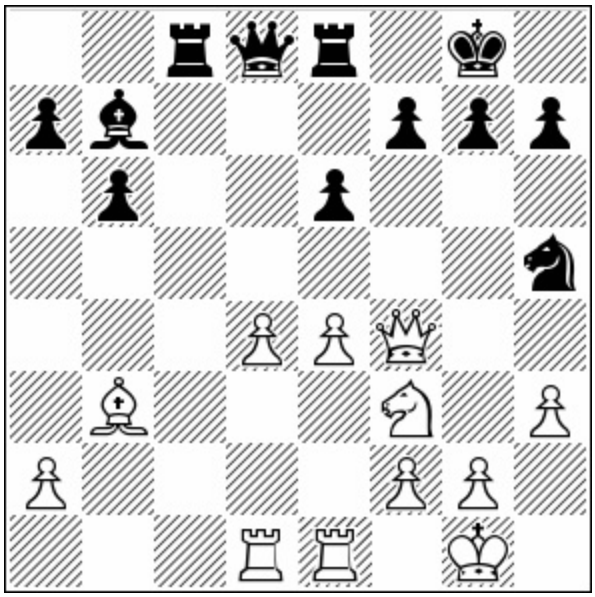
Black follows the Hidden Law of Chapter 1, i.e. that the side who has a space disadvantage should seek to exchange pieces.

9.Bd2 Bxd2+ 10.Qxd2 0-0 11.Bc4



11...Nc6?!

This natural move has been played in about a thousand games, but it should lead to difficulties. The game at hand showcases a nice scheme for White that poses clear problems to Black. The alternative 11...Nd7 is more flexible, and it is preferred by the large majority of top players nowadays. The difference in win rate between both moves is also quite staggering. White scores a whopping 63% after 11...Nc6, while White scores about 55.5% after 11...Nd7: 12.0-0 b6 13.Rfe1 Bb7 14.Rad1 Rc8 15.Bb3 Re8 16.h3 Nf6. This is the logical destination for the black knight. On f6, it can contribute to the defence of Black's king. 17.Qf4 Nh5!.



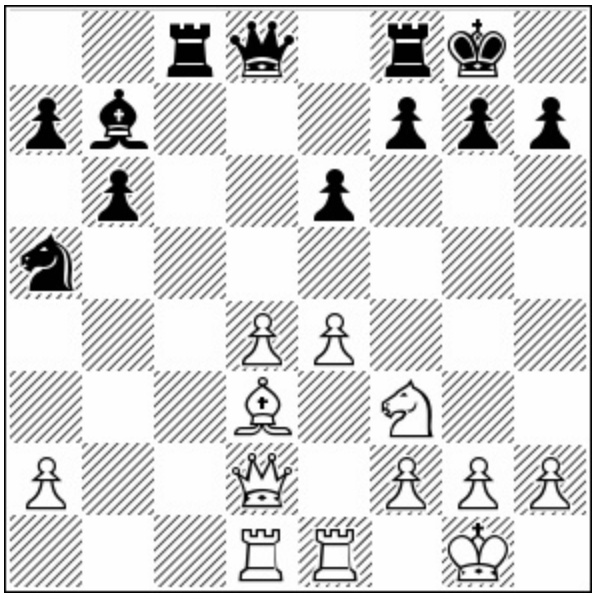
analysis diagram

The white queen should be pushed away from its dominant position. This tabiya is championed by the Chinese top player Ding Liren. The Azeri star Shakhriyar Mamedyarov has challenged him four times in this variation, but only managed to score two draws in those encounters.*

> * Admittedly, Mamedyarov had the upper hand at least temporarily in all these encounters. Hence, the result of a game doesn't always reflect the quality of an opening, even at the top level. Maybe we should take the lessons about statistics and sample size seriously...

18.Qh2 h6!. When the time is right, the knight will return to f6 and Black should be alright.

12.0-0 b6 13.Rad1 Na5 14.Bd3 Bb7 15.Rfe1 Rc8



White to move
(back to the exercises)

White has nicely centralised all his pieces. When you have finished your development, it is time for action! Ozen now successfully applies a thematic pattern:

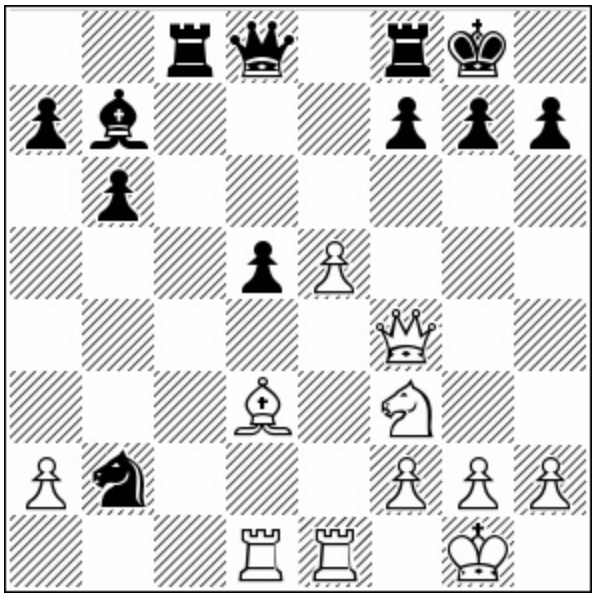
16.d5! exd5 17.e5!

This is an extremely important pattern to remember, as it is White's main resource in positions with a central pawn majority. The idea is reminiscent of the d4-d5 push that we observed in Kasparov-Psakhis in Chapter 4. The black pawn on d5 limits the scope of his own pieces. On the other hand, White has vacated a square on d4 and opened the line of sight of his bishop. Suddenly, White has obtained strong attacking chances, especially since Black's army is mainly operating on the queenside.

17...Nc4 18.Qf4 Nb2?

Black's position was difficult to play anyway, but he could have put up more resistance with 18...Qe7 19.Re2 h6 20.h4 Rc5 21.Nd4 Bc8 22.Bf5 Kh8 23.Bxc8 Rcxc8 24.Qg4 Rg8 25.Rde1 Rc7. White maintains an enormous

initiative, but for the moment Black is staying afloat.



White to move
(back to the exercises)

At least 35 players have fallen victim to White's next strike:

19.Bxh7+!!

A bolt from the blue. A full bishop is invested to lure the king out of his refuge.

19...Kxh7 20.Ng5+ Kg6

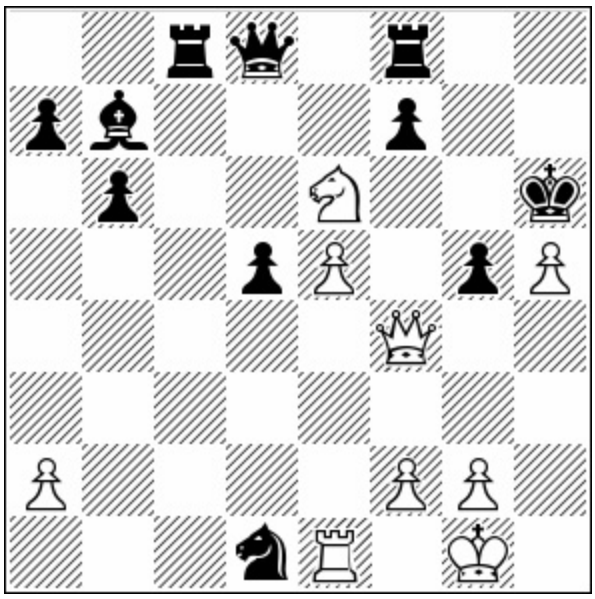
The king is entering uncharted territory, but what is White's follow-up? Note that 20...Kg8 21.Qh4 Re8 22.Qh7+ Kf8 23.e6! is crushing, since 23...Qxg5 24.e7+! leads to checkmate.

21.h4!

Calm and collected. This quiet move justifies the sacrifice.

21...Qe7

A) The main point of White's play becomes clear after the continuation 21...Nxd1 22.h5+! Kh6 (22...Kxh5 23.g4+ Kg6 24.Qf5+ Kh6 25.Nxf7+ Rxf7 26.Qh5# and everything works out neatly) 23.Ne6+ g5.

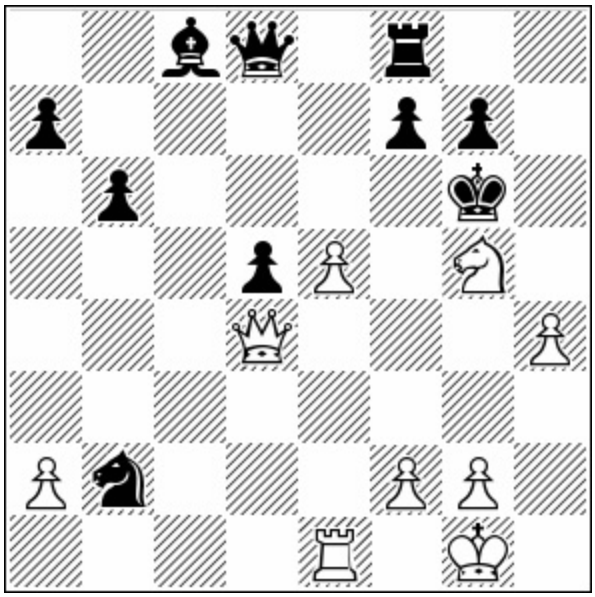


analysis diagram

White to play and win.

24.hxg6+!. Don't forget about that one! The en passant rule saves the day. Black is getting mated;

B) 21...Rc4 was played 14 times, and now the most convincing is 22.Rd4! (22.h5+!? Kh6 23.Nxf7+ Kh7 24.Qf5+ Kg8 25.e6 Qf6 26.Qxf6 gxf6 27.Rd2! and White was victorious in the famous game Polugaevsky-Tal, Moscow 1969, but he still had to work for it) 22...Rxd4 23.Qxd4 Bc8



analysis diagram

24.Re3!. White isn't even interested in the black knight. 24...f6 25.e6! fxg5 26.e7. A decisive fork.

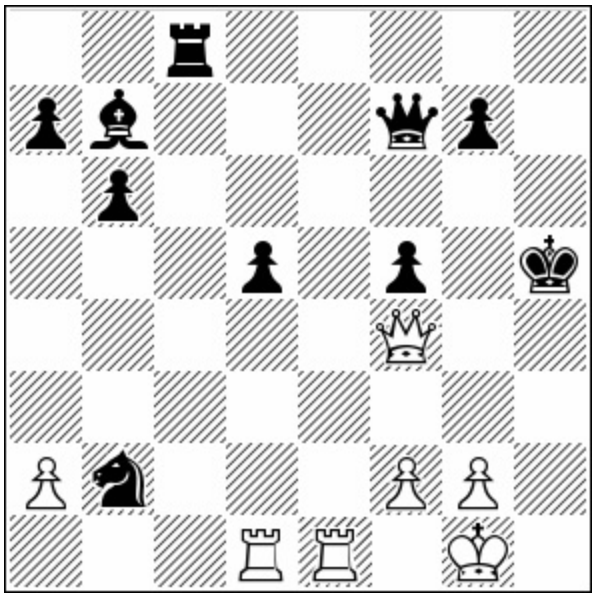
22.e6

22.Rd2 featured in Dreev-Jussupow, Mainz rapid 2003, but the move chosen by Ozen is much cleaner.

22...f5 23.h5+! Kxh5 24.Nf7

White's main threat of 25.Qxf5 forces Black to give up the rook.

24...Rxf7 25.exf7 Qxf7



26.g4+!

There are alternative solutions here, but Ozen finds the cleanest method.

26...Kg6 27.Qh2! fxg4 28.Re5

The game can only be prolonged at the price of a queen.

1-0

A brilliant execution by the Turkish talent. The pawn sacrifice d4-d5 followed by e4-e5 is a thematic one that is reminiscent of Kasparov's pawn sacrifice against Psakhis in Chapter 4. At the cost of a pawn, the lines towards Black's king are opened and the black army loses effectivity. The subsequent piece sacrifice 19.Bxh7+!! creates mayhem in Black's camp. The black king is forced out of its cage and the onslaught can begin. Ozen's play was so strong in fact that he even improved upon the play of several legendary predecessors.

Carlsbad structure

We already saw an appearance of the Carlsbad structure in Chapter 3 on backward pawns, when White successfully carried out a minority attack.

There is another common plan for White in this structure, and it involves a mobile pawn centre.

Game 2 Queen's Gambit Declined
Jan Bernasek 2459
Vladimir Talla 2426
Czechia tt 2007 (9)

1.d4 d5 2.c4 e6 3.Nc3 Nf6 4.cxd5 exd5 5.Bg5 Be7 6.e3 0-0

As the main lines turn out to be quite challenging for Black, players started experimenting with different schemes. A popular one is 6...c6 7.Bd3 Nbd7 8.Qc2, and now

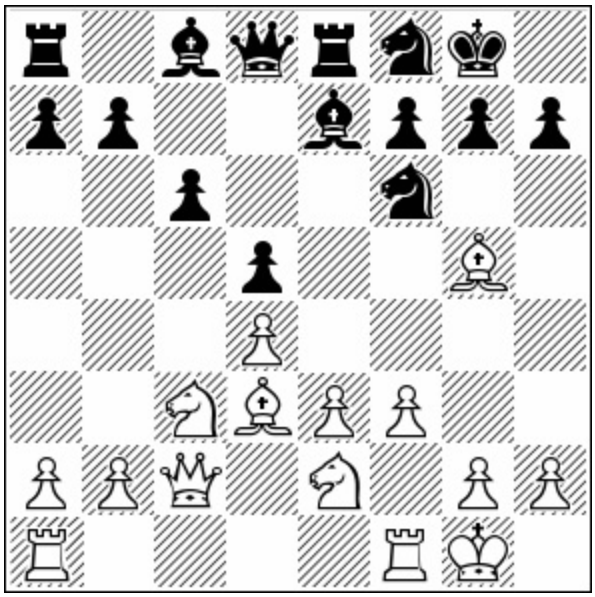
A) 8...Nh5!. With this set-up, Black keeps his king's position flexible. After the game continuation, both sides generally castle on the kingside, but in this particular variation it is common for both players to store their kings on the queenside. For instance, 9.Bxe7 Qxe7 10.Nge2 g6 11.0-0-0 Nb6 12.Kb1 Ng7 13.Ng3 Be6 14.Rc1 h5 15.h4 0-0-0. Black has a satisfactory position;

B) Inserting 8...h6!? is interesting too. 9.Bh4 Nh5! 10.Bxe7 Qxe7 11.0-0-0 Nb6 12.Nf3 Bg4 13.Kb1 Nf6 14.Rc1 Nfd7 15.Ka1 0-0-0, and Black held the draw in Aronian-Carlsen, Baden-Baden 2015.

7.Bd3 Nbd7 8.Nge2

We have made our return to the Exchange Variation of the Queen's Gambit Declined. In Chapter 3, we investigated the application of the minority attack with b2-b4-b5. This time around, White opts to connect the knights, which is the start of a different scheme. White keeps the f3-square empty, as he wants to create a mobile pawn centre with f2-f3 followed by e3-e4.

8...Re8 9.0-0 Nf8 10.Qc2 c6 11.f3



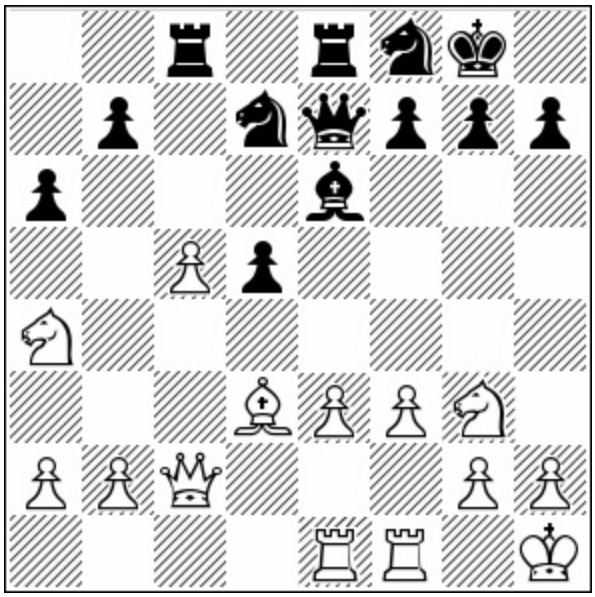
This is White's first step in his mission to conquer the centre. He prepares e3-e4 and since White has a pawn majority on the kingside, Black cannot prevent it.

11...Nh5?!

This can't possibly be a good defensive set-up, as it gives White the opportunity to execute his plan freely. 11...Be6 is the most popular move. Here, several ideas have been tried:

A) 12.e4?! is too hasty: 12...dxe4 13.fxe4 Ng4! (a typical resource for Black; the potential fork on e3 is annoying) 14.Bxe7 Qxe7 15.Qd2 c5! 16.d5 Bd7. Black completely controls the dark squares, which reduces the mobility of White's centre. Black should have no worries;

B) 12.Rae1 is a common alternative: 12...Rc8 13.Kh1 a6!. Black is preparing an advance on the queenside. White's advance in the centre is harmless for the time being, so Black should obtain reasonable counterplay. 14.Na4 N6d7 15.Bxe7 Qxe7 16.Ng3 c5 17.dxc5



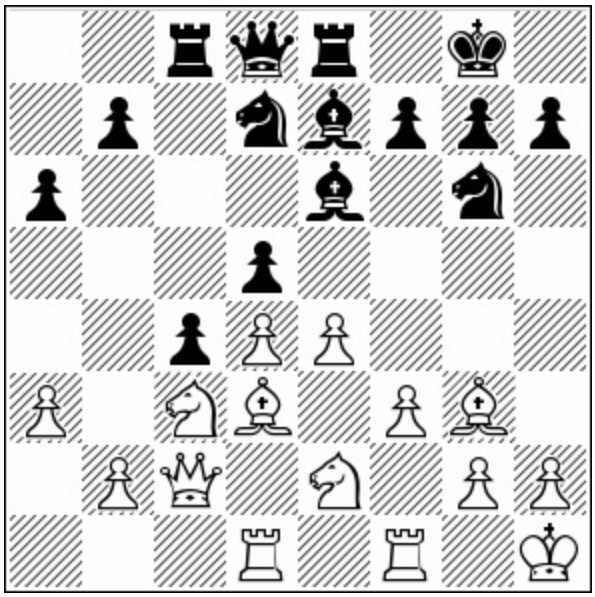
analysis diagram

17...b5!. A nice little sequence. White can't take en passant due to the pin. On the next move, c5 will be recaptured, which results in a fine position. Note how Black has a quite good version of an IQP, since White has played the weakening f2-f3 and his rooks are misplaced. Black went on to win in Dao Thien Hai-Campora, Moscow 1994;

C) 12.Rad1 is most popular and probably best. For instance: 12...Rc8 13.Kh1 Ng6 14.a3 Nd7 15.Bf4 a6 16.Bg3 c5 17.e4, and now:

C1) 17...Nf6? 18.e5 Nd7 19.f4, and White was winning in Ivanchuk-Bruzon, Merida 2006. The mobile pawns are too powerful;

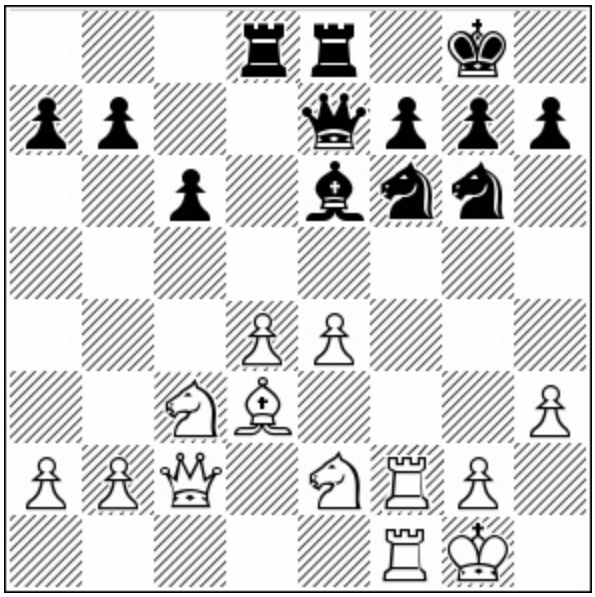
C2) 17...c4! is correct.



analysis diagram

We are now entering a variation with some incredible zwischenzugs: 18.exd5! cxd3 19.Qxd3 Bh3!. The bishop is trapped, so Black might as well give it up on a more favourable square. 20.d6!. White isn't even interested in the light-squared bishop, but rather goes after the dark-squared one. 20...Bxd6 21.Bxd6 Nb6!. As if we haven't seen enough zwischenzugs already! 22.Bc5 Be6 23.Bxb6 Qxb6 24.d5 Bd7 25.Rd2. White is up a pawn, but the conversion won't be trivial.

12.Bxe7 Qxe7 13.e4 dxe4 14.fxe4 Be6 15.Rf2 Nf6 16.h3 Ng6 17.Raf1 Rad8



The white pawn formation in the centre grants Bernasek complete control over the position.

18.a3!?

I also don't see what is wrong with the direct 18.e5! Nd5 19.Nxd5 Bxd5 20.Nf4 Qb4 (avoiding this move is the idea behind White's prophylaxis in the game) 21.Nxd5 cxd5 22.Qd1!? Nf8 (22...Qxd4?? 23.Bxg6 Qxd1 24.Bxf7+) 23.Bf5 Re7 24.Kh2. White has a dominant position, and Black is essentially without counterplay.

18...c5

18...Rf8 was played in another game between the same players, but Bernasek was also victorious after 19.b4!. White's space advantage grants him a very comfortable position, and Black needs to be constantly on his guard for e4-e5.

19.e5!

White finally decides to set the centre in motion after Black gave up some control over the d5-square.

19...Nd5

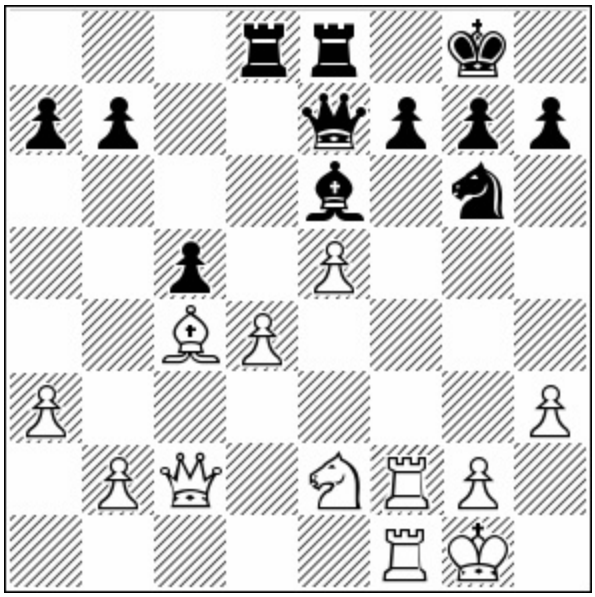
19...cxd4 initiates a forcing line that leads to a very favourable endgame for White: 20.exf6 Qc5 21.Nb5 Qxc2 22.Bxc2 d3 23.Nc7! Rf8 24.Nxe6 fxe6 25.f7+ Rxf7 26.Rxf7 dxe2 27.Rxb7 exf1=Q+ 28.Kxf1. Despite the equal material, the difference in activity should bring White victory, although he still has to show some technique. This is one of those cases in which a bishop completely outclasses a knight.

20.Nxd5 Rxd5

20...Bxd5 21.Nc3! (21.Nf4? spoilt the advantage in Vaisser-Bricard, France tt 1998. 21...Nxf4 22.Bxh7+ Kh8 23.Rxf4 cxd4, and White is lacking a strong continuation) 21...Be6 22.d5!. The mobile pawn centre in optimal form! 22...Rxd5 (22...Bxd5 23.Nxd5 Rxd5 24.Bc4 wins for White. Black collapses on the light squares) 23.Nxd5 Bxd5 24.Bb5 Rf8 25.Rd1 Be6 26.Bc4 Bxc4 27.Qxc4 Nxe5 28.Re2 Nxc4 29.Rxe7 Nxb2 30.Rc1 b6 31.Rxa7. The endgame is lost for Black.

21.Bc4 Rdd8

Talla doesn’t want to give up the exchange, but now Bernasek can break through.



White to move
(back to the exercises)

22.Rxf7! Bxf7 23.Rxf7 Qxf7 24.Bxf7+ Kxf7 25.Qxc5

Normally, two rooks are ample compensation for a queen. Here, the addition of two healthy mobile centre pawns leaves the black rooks totally powerless. The game is over.

25...b6 26.Qc4+ Kf8 27.e6 1-0

A strong performance by Bernasek. White's mobile pawn centre granted him complete control, and once he crashed through on f7, it was total destruction. Nowadays, the consensus is that the plan with f2-f3 is so effective that players consider deviating very early on in the game. Black players started to be more creative with the move order. For instance, after 1.d4 Nf6 2.c4 e6, White has a choice to play the Catalan with g2-g3, allow a Nimzo-Indian with Nc3 or allow a Queen's-Indian with Nf3. On 3.Nc3, Black replies with 3...Bb4, entering a Nimzo-Indian, while many players opt for 3...d5 against 3.Nf3. Thereby, Black is playing a Queen's Gambit Declined, while dodging the most aggressive scheme that includes Nge2 and f2-f3. Fortunately for Black, the alternative that was offered on move 6 also appears to offer

satisfactory counterplay for those who want to stick to the Queen's Gambit Declined.

Kingside vs queenside majority

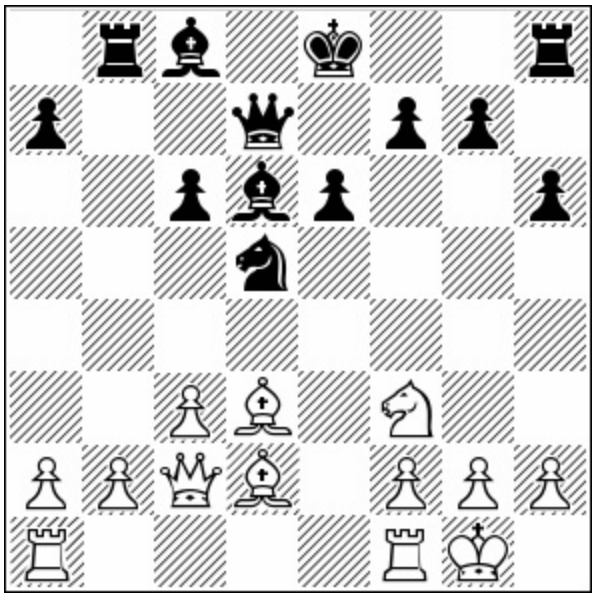
We will now move on to another structure, one in which White has a pawn majority on the queenside, while Black enjoys a pawn majority on the kingside.

Game 3 Sicilian Defence
Jorden van Foreest 2644
Jan-Krzysztof Duda 2758
Wijk aan Zee 2020 (10)

1.e4 c5 2.c3 d5 3.exd5 Qxd5 4.d4 Nf6 5.Nf3 e6 6.Na3 Nc6 7.Be3 cxd4 8.Nb5 Qd7 9.Nbxd4 Nd5 10.Bd2 Bd6 11.Nxc6 bxc6 12.Bd3

If White wants to achieve anything in this line, he must play 12.c4!?, as it forces Black to clarify his knight's position early on. A possible variation is 12...Nf6 13.Bd3 (13.Bc3?! occurred in Rezzuti-Raivio, cr 2015, but after 13...0-0 14.Qc2 e5!, Black equalised comfortably) 13...0-0 14.Qc2 c5 15.Bc3. Two moves later this set-up is favourable for White. 15...Bf4 (15...e5?! doesn't work: 16.Nxe5 Bxe5 17.Bxe5 Re8 18.f4, and White is completely winning) 16.0-0 Qc7 17.Rfe1 (there is no need to rush with 17.Bxf6 gxf6 18.Bxh7+ Kg7 19.Be4 Rb8 20.Qc3 Rh8. Black has reasonable compensation for the pawn) 17...h6 18.Ne5 Bb7 19.Qe2 Rfd8 20.Bc2 Rac8 21.g3 Bxe5 22.Qxe5 Qc6 23.Be4 Qb6 24.Bxb7 Qxb7. White's bishop is clearly superior to the knight, so he has the advantage.

12...Rb8 13.Qc2 h6 14.0-0



Black to move
(back to the exercises)

14...c5!

Very accurate play by the Polish grandmaster. He takes his chance to improve his control over the centre before he finishes his development. 14...0-0?! 15.c4! Nb4 16.Bxb4 Rxb4 17.a3 Rb8 18.c5 Be7 19.b4 grants White a good position. Duda's move prevents White's expansion on the queenside.

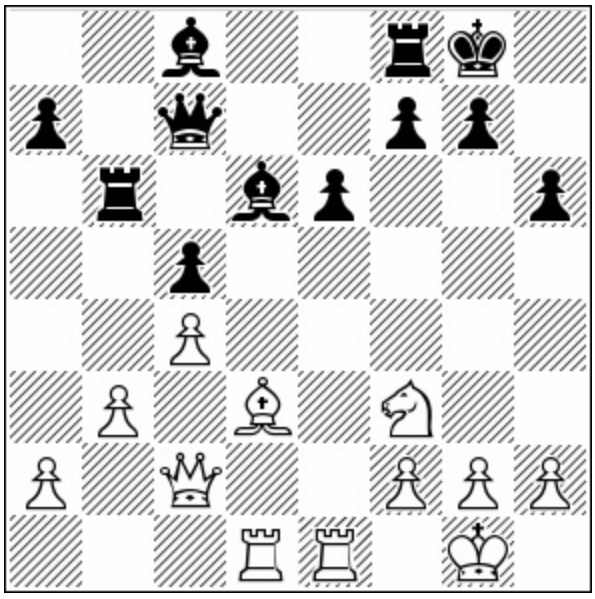
15.Rad1

15.c4 is now harmless: 15...Nb4 16.Bxb4 Rxb4, and since White can't expand with c4-c5, Black's bishop pair should give him the upper hand.

15...Qc7 16.c4

White insists on this advance anyway, but it's too late.

16...Nb4 17.Bxb4 Rxb4 18.Rfe1 0-0 19.b3 Rb6



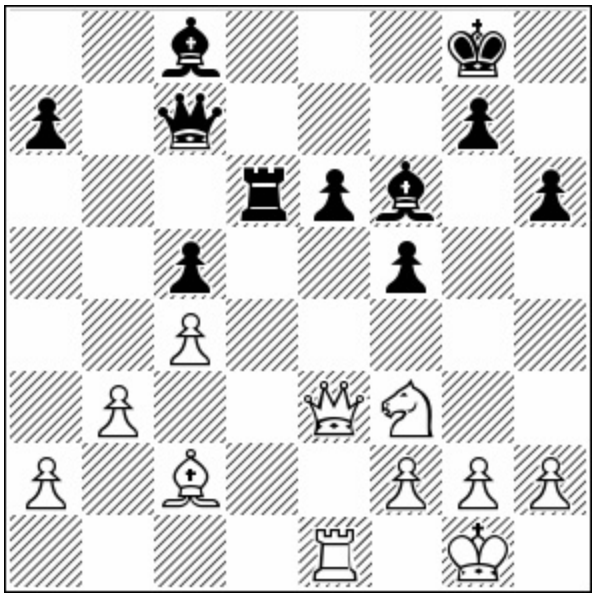
It is time to take stock. How should we evaluate the current position? One thing that we can do is count the number of pawn islands. We count three for Black and two for White, so we give White the check mark. This assessment is hard to argue with, since White doesn't have any apparent weaknesses in his structure. Another check mark is handed out for development. White's rooks are nicely centralised, his minor pieces are in fine positions and his queen is flexible. On the other hand, Black still must develop a rook and his light-squared bishop. Another check mark for White. In return, Black gets a check mark for his possession of the bishop pair. All in all, things should still look quite promising for White, right?

Well, I have news for you: White is worse! Now, you might think, 'Come on Nick, you were telling me about the importance of development and the significance of the number of pawn islands, and now you're telling me that White is worse. Is there any logic in chess?!' Well, handing out check marks for every characteristic may not be the best way to evaluate a position – especially since advantages and disadvantages are weighed up. For instance, possessing the bishop pair is considerably more valuable in open positions than in closed positions. So, what is the characteristic in this position that makes strong players immediately realise that the white situation is strategically risky? It is Black's *mobile pawn centre*.

In chess, the pawn structure often determines the course of the game. In

positions like these, White has a pawn majority on the queenside, while Black has a pawn majority on the kingside. In positions with pawn majorities, the evaluation of the position is usually based on the potency of each pawn majority. We can immediately see the application of this rule in this position. The white majority is stalled by Black's strong pawn on c5. Even an advance with a2-a3 followed by b2-b4 is unrealistic. Black has pressure on the semi-open b-file and if it is really required, he will just play ...a7-a5. Black's majority similarly doesn't appear to be going anywhere, but as we shall see, the black pawn majority has more potential. Moreover, Black's isolated pawns on a7 and c5 aren't a source of concern as they can be easily defended. Therefore, the white position is strategically risky. Even though White's position might not be lost yet, a single mistake can push him over the edge into losing territory.

20.Qe2 Rd8 21.Bc2 Be7 22.Qe4 f5 23.Qe5 Rbd6 24.Rxd6 Rxd6 25.Qe3 Bf6



Black has already progressed on the kingside with the pawn push ...f7-f5. White is now putting his bets on the backward pawn on e6. Indeed, achieving the pawn push ...e6-e5 won't be a trivial task either. But we can already feel why the bishop pair is such a cherished treasure. If White occupies the foothold with Ne5, Black will always be in control of the tension, as he will

continually have the choice whether he wants to capture. Therefore, the bishop is clearly more powerful than the knight.

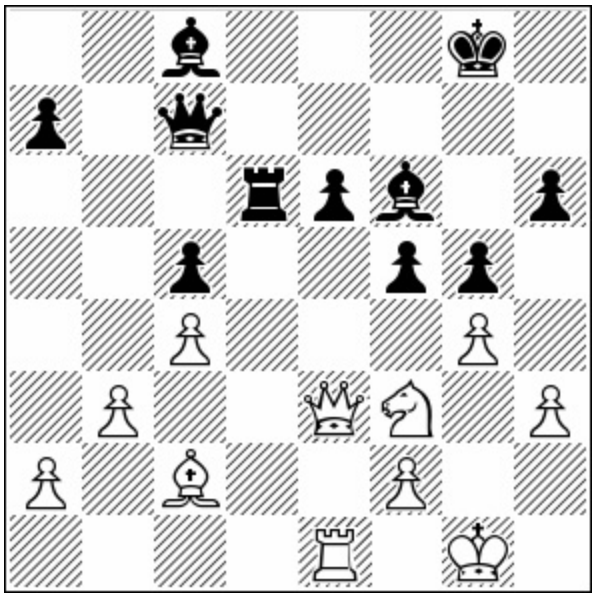
26.h3?!

Defending with 26.h4! was White's best approach. Apart from playing ...e6-e5, Black can also improve his position with ...g7-g5. With h2-h4, White stops both expansions, which makes it difficult for Black to make real progress.

26...Bb7

Obviously, this natural move can't be a bad one, but Black had two different ideas that create bigger problems.

A) 26...g5!? grabs quite a lot of space on the kingside. Due to Black's dark-square control, he doesn't really have to fear for the safety of his king. Maybe Duda was worried about 27.g4!?.



analysis diagram

Now, Black has two attempts:

A1) 27...Rd8 (by protecting the back rank, Black defends against 28.gxf5)

28.Rd1 Rxd1+ 29.Bxd1 Qc6 30.Ne1 Bd4 31.Qd2 e5 32.gxf5 Bxf5 33.Bg4!. White should hold after the exchange of bishops;

A2) 27...Kg7 28.Kf1! (this prophylactic king move is required to defend against a possible queen-bishop tandem on the long diagonal) 28...Rd8 29.Rd1 Rxd1+ 30.Bxd1 Qc6 31.Bc2 Bb7 32.Ke2, and White should be able to defend. Nevertheless, 26...g5!? poses White some difficult questions.

B) 26...Kh7!. This prophylactic move is probably best. Black's main intention is to follow up with ...g7-g6 and ...Kg7. 27.Ne5 Rd8 28.Re2. Here, Black has two appealing options:

B1) 28...Qxe5 29.Qxe5 Bxe5 30.Rxe5 Rd2 31.Rxc5 Bd7 32.Rc7 Be8 33.Bxf5+ exf5 34.Rxa7, with decent winning chances for Black;

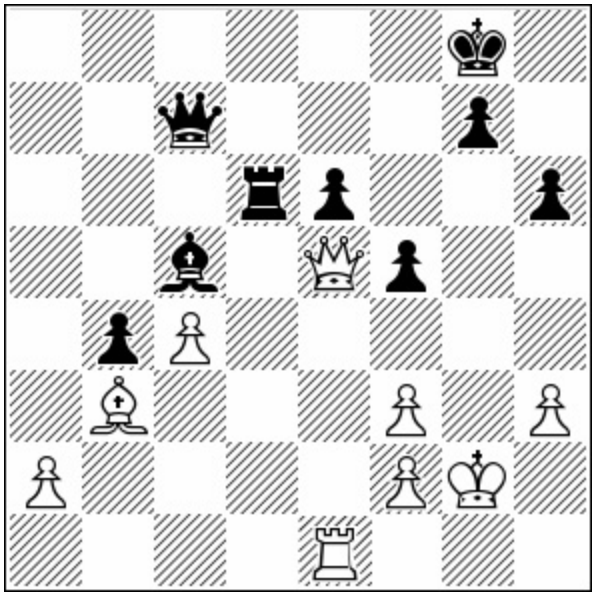
B2) 28...g6 29.g4 a5, and Black has a significant advantage.

27.b4!?

Van Foreest seizes his chance to complicate matters.

27...cxb4 28.c5

28.Qxa7 was another decent option: 28...Ra6 29.Qe3 Bxf3 30.gxf3 Be7 31.Bb3 Bc5 32.Qe5 Rd6 33.Kg2.



analysis diagram

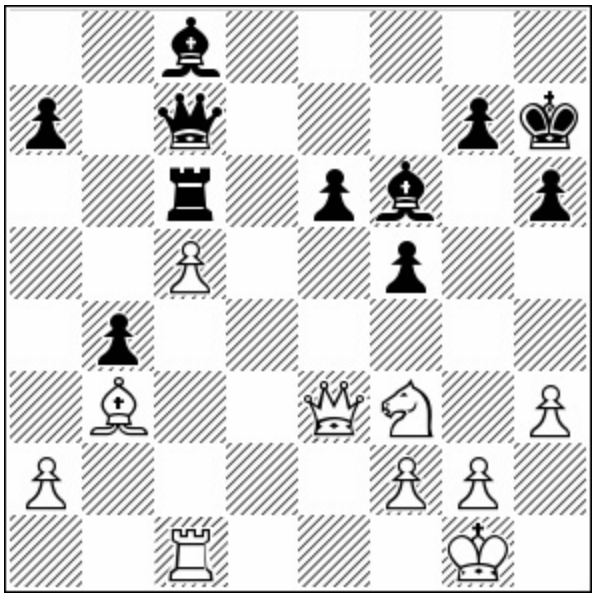
White's bishop and pawn structure look awful, but it is nonetheless difficult for Black to make progress. Especially the backward pawn on e6 is a concern. 33...Kf7 34.h4 Qc6 35.Rd1 Rxd1 36.Bxd1 Bd6 37.Qb5 Qxb5 38.cxb5. Once the heavy pieces disappear, White will draw comfortably.

28...Rc6 29.Bb3 Bc8?!

This is too passive. 29...Kh7! would once again have created the most problems, e.g. 30.Ne5 Bxe5 31.Qxe5 Qxe5 32.Rxe5 Kg6 33.f4 Kf6 34.Kf2 Bc8 35.Ke3 g5 36.g3 Rc7 37.Bc4 Rg7 38.c6! Rc7 39.Bb5 Ke7 40.Kd4 Kd6. Black is up a healthy pawn. With perfect defence, White can probably hold, but defending this position will definitely be a struggle. Black can become active with a well-timed ....Rg7 and ...g5xf4.

30.Rc1 Kh7

After 30...f4, Black can maintain an extra pawn with 31.Qe4 Rxc5 32.Bxe6+ Bxe6 33.Qxe6+ Kf8 34.Re1 Qc6 35.Nd4 Bxd4 36.Qe7+ Kg8 37.Qd8+ Kh7 38.Qxd4 Rg5 39.Qd3+ Qg6 40.Qf3 a5 41.Kh2 Qc2 42.Re8. Unfortunately, the black king is too vulnerable, so White will hold.

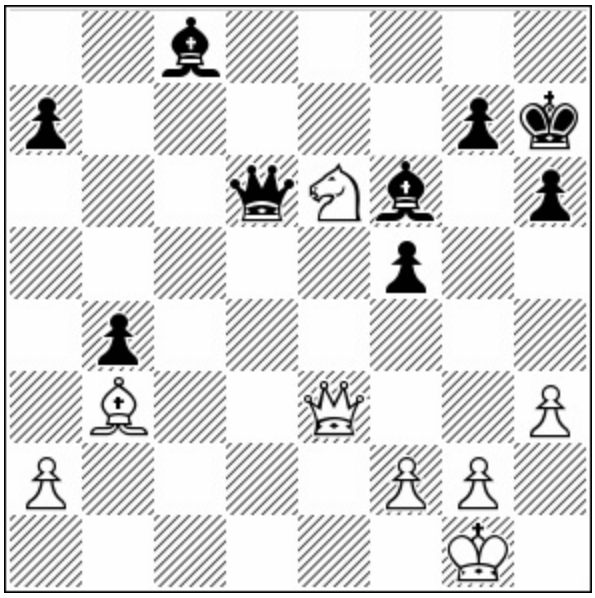


In the game, Duda finally steps away with his king. He is now threatening ...e6-e5. If he succeeds in achieving the central advance, White will be lost. Can Van Foreest stop him? The Dutchman now performs a Houdini act to save himself.*

* I was referring to the magician, not the chess computer!

31.Nd4! Rxc5 32.Rxc5 Qxc5 33.Nxe6 Qd6

On 33...Qe7, White plays the even more stunning 34.Qxa7!! Qxa7 35.Nf8+ Kh8 36.Ng6+.



34.Qd3!! Qxd3 35.Nf8+ Kh8

The particular configuration of the black king's position allows a ravishing perpetual check.

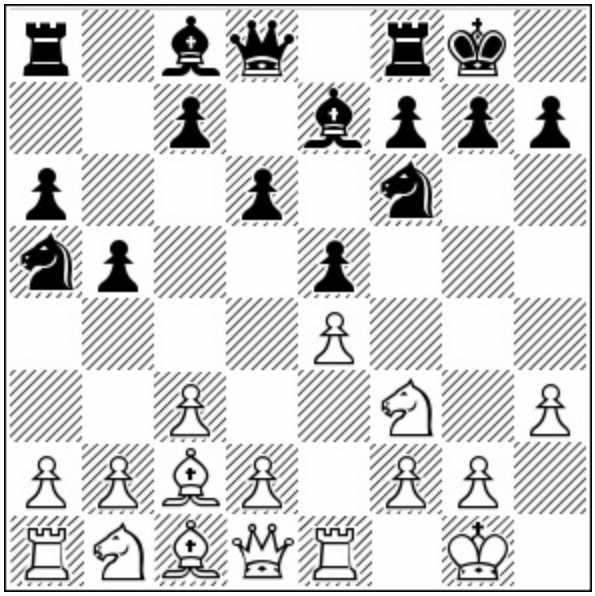
½-½

A very interesting game that reveals the complexities of chess strategy. Once again, we saw a situation in which multiple Hidden Laws of Chess were colliding. The ability to evaluate certain advantages and disadvantages is one that needs to be cultivated over time.

In the last game, we saw how a mobile pawn centre can outweigh other factors. We will now see how a mobile pawn centre can (more than) compensate for a pawn deficit.

Game 4 Ruy Lopez
Andrei Volokitin 2678
Radoslaw Wojtaszek 2635
Heraklio 2007 (8.3)

1.e4 e5 2.Nf3 Nc6 3.Bb5 a6 4.Ba4 Nf6 5.0-0 Be7 6.Re1 b5 7.Bb3 d6 8.c3 0-0 9.h3 Na5 10.Bc2



10...d5!?

This extraordinary gambit was introduced by Wojtaszek's compatriot Grzegorz Gajewski in 2007! Gajewski won a game full of sacrifices against Kuznetsov that is worth checking out. In the past, players used to play 10...c5 almost exclusively. Gajewski's novelty beautifully showcases that chess really has endless possibilities and that we are still far from solving all its mysteries. Even in modern times, there are many ideas left to be discovered.

11.d4!?

Opting for central play is critical. 11.exd5 e4 12.Bxe4 Nxe4 13.Rxe4 Bb7 is Black's approach if White decides to accept the gambit. Play is very reminiscent of the notorious Marshall Attack.

11...dxe4 12.Nxe5 c5 13.Bg5

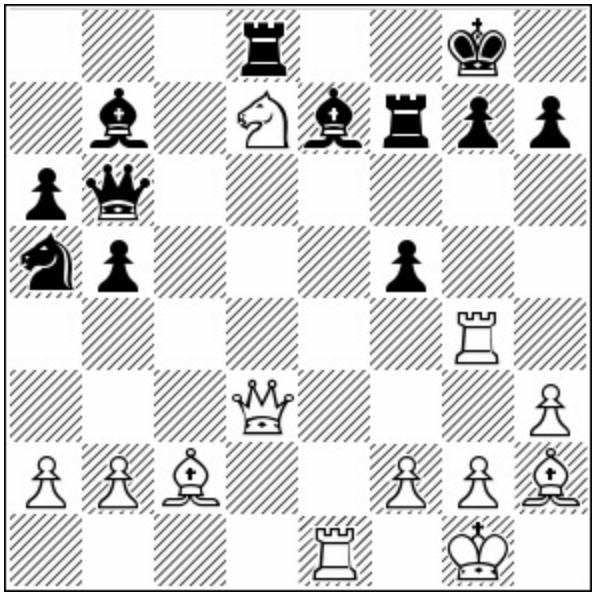
The main move 13.Be3 seems to be the biggest test: 13...Bb7 14.Nd2 Qc7, and now:

A) Going after pawn e4 with 15.Qb1 is most popular, but I believe that Black can obtain sufficient counterplay: 15...cxd4 16.Bxd4 Bd6 17.Ng4 Nxg4 18.hxg4 Bh2+ 19.Kh1 Bf4 20.Nxe4 f5! 21.gxf5 Rxf5. Black is very active, and he drew comfortably in Le Page-Colucci, cr 2009;

B) 15.Bf4! looks the most challenging: 15...cxd4 16.Nxe4 Nd5 17.Bh2 dxc3 18.Nxc3 Nxc3, and now:

B1) 19.Qh5 only led to a draw in Solodovnichenko-Kriebel, Malatya 2016. 19...Ne4 20.Bxe4 Bxe4 21.Rxe4. Material is even and the careful 21...Bd6 should yield equality;

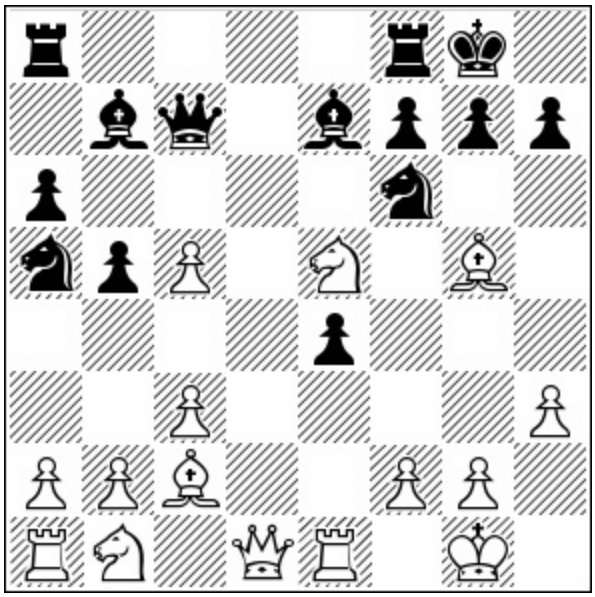
B2) 19.Qd3! is a strong novelty. 19...Ne4 20.Rxe4 Qb6 21.Rg4 f5 22.Re1 Rad8 23.Nd7 Rf7



analysis diagram

24.Bf4!. Apparently, Black is so paralyzed that White can even afford to make a calm move in a very chaotic position. I wonder if any human would play such a move... 24...Bc5 (24...Qc6 25.Rxe7! Rxe7 26.Qxf5 shows why 24.Bf4 is so useful, as there is no back-rank mate) 25.Nxb6 Rxd3 26.Bxd3 fxg4 27.Re8+ Rf8 28.Rxf8+ Bxf8 29.hxg4. White is up a healthy pawn and he has fantastic winning chances.

13...Bb7 14.dxc5 Qc7!



For the moment, Black cannot take back on c5 as b2-b4 would be a fork, but there is no need to rush. Black has active pieces and a strong pawn on e4.

15.Bxf6?

If a move looks ugly, this often implies that it is bad. We are simply not supposed to give up bishops for knights like this.

Since White's opening play was already somewhat lacklustre, other moves also don't appear to achieve anything tangible. Sometimes, it is better to bail out: 15.Ng4 Rad8 16.Nd2 Nxg4 17.Qxg4 f5 18.Qf4 Qxc5 19.Bxe7 Qxe7. Black has recovered the pawn, and with identical material, chances should be fairly even.

15...Rad8!

It is hard to believe that a player of Volokitin's calibre missed such a zwischenzug. In any case, Black now gets the upper hand.

16.Qe2?

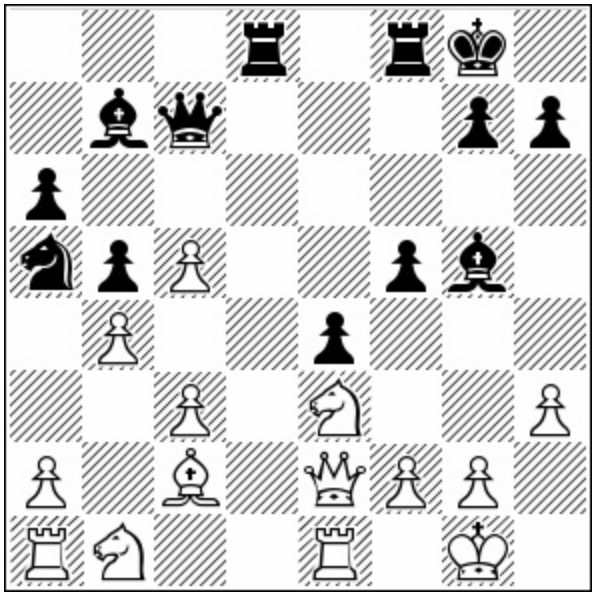
A further error turns the white position into a losing one. After 16.Nd7!? Rxd7 17.Bd4 Bxc5 18.Bxe4 Bxe4 19.Rxe4 Nc6 20.Na3 Bxd4 21.cxd4 f5! 22.Qb3+ Kh8 23.Ree1 Nxd4 24.Qc3 Rfd8 Black has a slight initiative due to his active knight, but White should have good chances to hold.

16...Bxf6 17.Ng4 Bg5

Pinning the f2-pawn with 17...Bh4! is even more powerful. 18.Nd2 f5 19.Ne3 f4 20.Ng4 e3. Black's mobile centre has crippled White completely.

18.Ne3 f5 19.b4?

White had to continue developing with 19.Nd2, but Black will still maintain a large initiative. In the game, Black's initiative quickly becomes decisive.



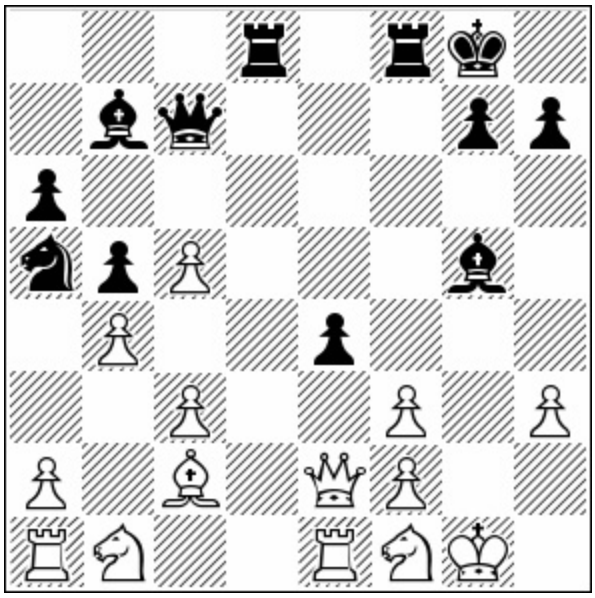
19...f4!

Since all Black's moves come with tempo, White doesn't get a chance to catch up in development. Note how Wojtaszek completely ignores the attack on his knight on the edge.

20.Nf1

20.bxa5 fxe3 21.fxe3 Rf3!!. Isn't this splendid? 22.gxf3. There are no good ways to defend e3, but capturing the intruder leads to forced mate. 22...Qg3+ 23.Kf1 (23.Qg2 Qxe1+) 23...Bc8! 24.Bb3+ Kh8 25.Qf2 Bxh3+ 26.Ke2 exf3+ 27.Qxf3 Qh2+ 28.Qf2 Bg4+ 29.Kf1 Qh1+ 30.Qg1 Rf8+, and mate.

20...f3! 21.gxf3



Black to move
(back to the exercises)

21...e3!!

Black's play is tremendously pleasing aesthetically. The mobile pawns keep moving forward. After this move, both pawns will eventually be eliminated, but they have inflicted huge damage.

22.fxe3 Rxf3

Usually, to cause this much damage to the enemy king's position, you have to invest at least a piece. Here, the stakes are 'only' two pawns. Moreover, Black's bishops and heavy artillery occupy active positions, while the white pieces are stranded on the back rank. White fights a hopeless battle. Wojtaszek concludes the game convincingly.

23.e4 Rdf8 24.Qg2 Bh4 25.Nbd2 Rxc3 26.Rec1 Bc8 27.bxa5 Qxc5+ 28.Kh1 Rf2 29.Bb3+ Kh8 30.Rxc3 Qxc3 31.Qxf2 Bxf2 32.Rd1 Bxh3 33.Nh2 Qg3

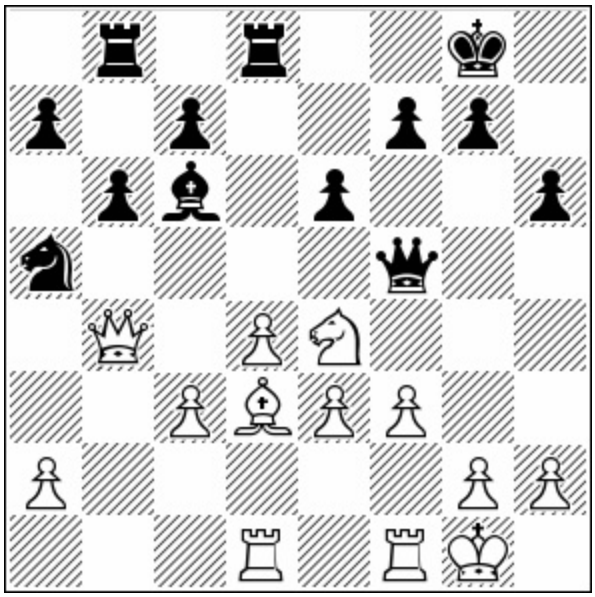
0-1

Wojtaszek's central advance was unstoppable. It was almost poetic how the e- and f-pawns kept marching forward step by step, even when they entered deep into enemy territory. What was particularly noteworthy is the way in which these pawns were used to destroy the enemy king's position.

> A mobile pawn centre can create a tremendous amount of damage that can usually only be inflicted by heavy material investments.

We will examine one more game that demonstrates the potency of mobile centre pawns.

Game 5
Levon Aronian 2809
Wesley So 2810
Saint Louis 2017 (6)



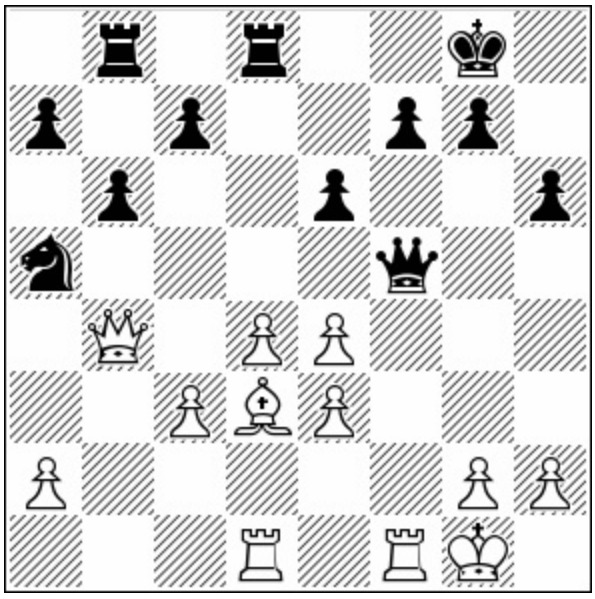
Black to move

19...Bxe4?!

This inaccurate capture is the start of Black problems. 19...Nb7!, intending ...Qa5, probably achieves equality: 20.Qb2 Qa5 21.g4 (21.Nd2 Nd6 22.e4 Bb5. The black knight found an excellent post and White's centre isn't that flexible really; Black has a comfortable position) 21...Nd6 22.h4 Bxe4 23.fxe4 e5!. The white centre has been stalled, so Black should be alright.

19...Bxe4?! 20.fxe4!

Instead, 20.Bxe4 Qf6 is nothing special. Black will obtain typical counterplay over the c-file after playing ...c7-c5.



So, Aronian splits up his structure and voluntarily accepts a doubled pawn. Doubled pawns often make a structure rigid, but here Aronian assessed correctly that his pawn formation in the centre remains flexible. Moreover, he can now use the semi-open f-file to target f7.

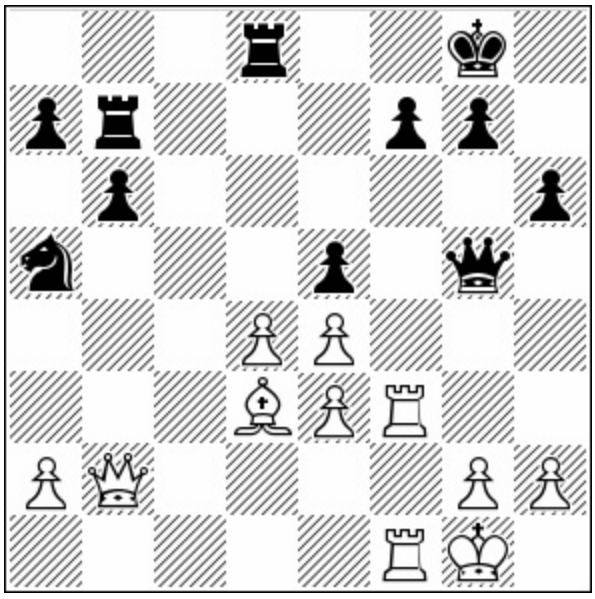
20...Qg5 21.Rf3 c5 22.Qb2

The white queen appears passive on b2, but it protects the important pawn on d4 and later the queen can slide over to f2 to join the attack.

22...e5

So is trying his best to generate counterplay, but the white centre is very well protected. Aronian now starts his assault on the kingside. Notice in particular how Black's knight is very far away from the action.

23.Rdf1 cxd4 24.cxd4 Rb7



White to move
(back to the exercises)

Question: Black has succeeded in defending f7 and the pawn on e5 provides a reasonable blockade. How does Aronian continue?

25.d5!

This anti-positional move puts Black under a lot of pressure.

The central pawn majority generates a space advantage.

The black knight is completely sidelined. Aronian's centre suddenly appears inflexible, but he has assessed accurately that his central pawns will ultimately become mobile again.

25.Qf2 is a good move too, but it allows Black to be more tenacious: 25...Qe7 26.Rf5 f6 27.Ba6! (the d-pawn needs to be unpinned) 27...Rbd7 28.dxe5 fxe5 29.Qg3 Qc5 30.Rxe5 Qc3 31.Rd5! (31.Re6!? Rd1! 32.Re8+ Rxe8 33.Rxd1 Nc6, and since the knight gets to e5, Black should have decent chances to hold) 31...Rxd5 32.exd5 Qd2! (32...Rxd5? 33.Qb8+ Kh7 34.Qe8! is the astute point behind White's play. The deadly check on e4 is extremely hard to parry. Material may be equal, but Black's knight on a5 is just a bystander.

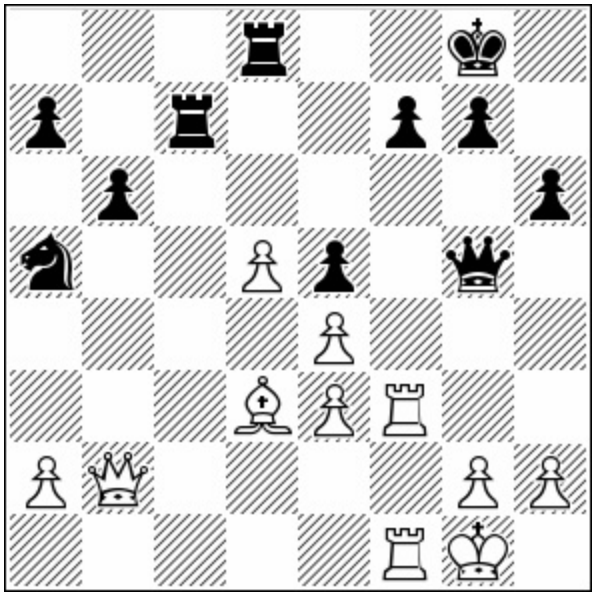
34...Re5 35.Bd3+!. The bishop swoops in for a decisive check: 35...Qxd3 36.Qxe5) 33.Qc7 Qxd5 34.Qxa7. White has a healthy extra pawn so he should have great chances to win.

25...Rc7

Black is lacking better altenatives:

A) Overprotecting the e5-pawn with 25...Re7? runs into 26.Rg3! Qh4 27.Rf4! (the white queen pins the e5-pawn all the way to the pawn on g7, while the black queen is running out of squares) 27...Qh5 28.Be2, trapping the queen;

B) Similarly, playing 25...f6 to protect the pawn on e5 is not effective. White once again plays 26.Rg3, and the black queen has to give up on her role of sole protector of the f6-pawn. Notably, 26...Qh4 runs into 27.Qf2!, threatening to win the queen with 28.Rxg7+: 27...Kh8 28.Qf5! and Black has no defence against 29.Rg4, trapping his queen.



White to move

Question: In the game, another critical moment arises. For the moment, Black's dark-squared blockade seems to hold. How does Aronian make progress?

26.h4!

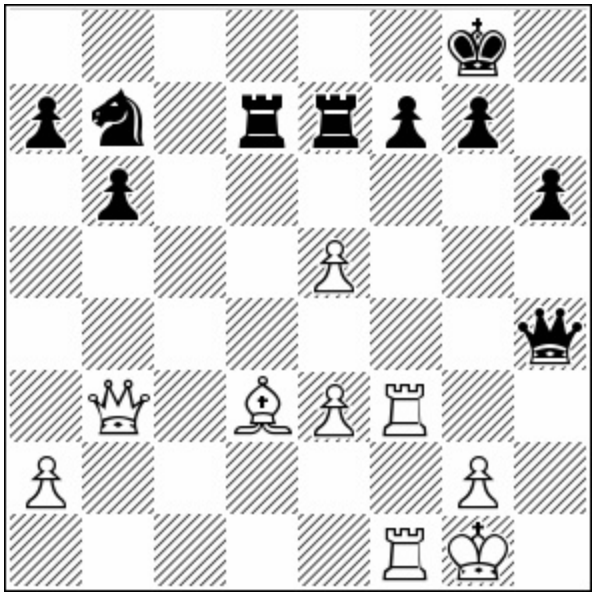
The h-pawn acts as a decoy and the pawn on e5 can no longer be defended. After the e5-pawn is gone, the white centre becomes mobile again.

26...Qxh4

26...Qe7 loses to 27.Rxf7 and 26...Qh5 runs into 27.Rf5. Since the queen no longer attacks e3, this move is decisive.

27.Qxe5 Qe7?

The Filipino-American succumbs under the pressure. 27...Re7 was more tenacious. 28.Qc3 (28.Qf4 Qxf4 29.exf4 is also very promising for White) 28...Nb7 29.e5 Rxd5 30.Qb3 Rdd7.

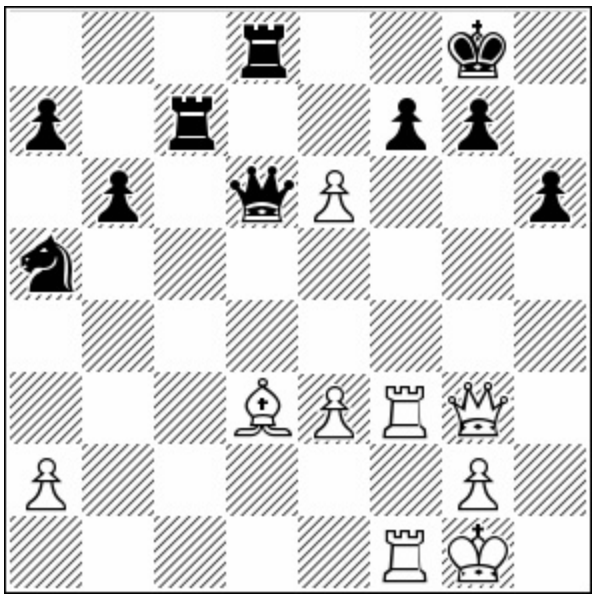


analysis diagram

White now relies on extraordinary tactics to stay ahead: 31.Bg6! Nc5 32.Rxf7! Rxf7 (32...Nxb3 33.Rf8#) 33.Bxf7+ Kh8 34.Qb1 Qe7 (34...Qg3 35.Be8! Qxe3+ 36.Kh1 Rd3 37.Rf8+ Kh7 38.Bb5. Great geometry. The bishop decides the game) 35.Qf5. Although it is unclear if White can win immediately, his advantage is still overwhelming.

28.Qg3 Qc5

28...Qd6 requires White to be very precise: 29.e5! Qxd5 30.e6! Qd6. White's play once again showcases the power of the mobile pawn centre.

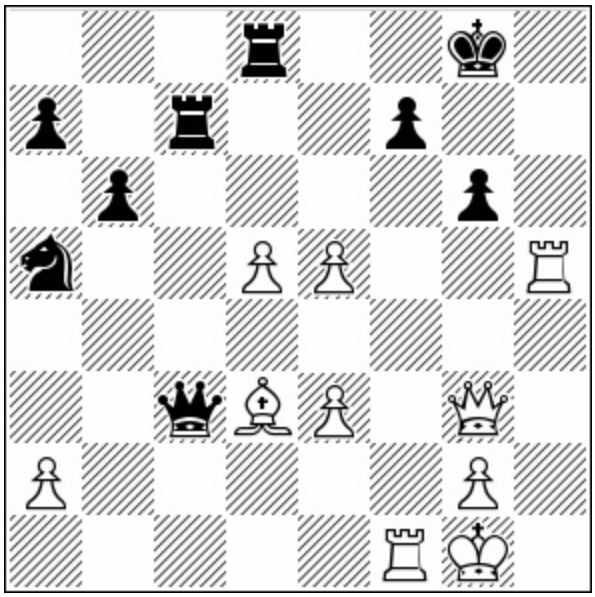


analysis diagram

Question: Now only one move wins for White. Can you find it?

31.Bh7+!! Kxh7 32.Qxd6 Rxd6 33.exf7. The pawn can only be stopped at the price of a rook, and the ensuing endgame should be a technical win.

29.Rf6 h5 30.Rh6 Qc3 31.Rxh5 g6 32.e5!



Note how White's central pawn mass completely prevents the black pieces from joining the defence. The black king is helpless.

32...Qxd3 33.Rh3!

The pawn on e3 is protected, and White now prepares to install a deadly battery on the h-file. There is no defence.

33...Rc4 34.Qg5 1-0

A perfect game by the Armenian superstar. Black missed his chance to regroup his knight and allowed White to build an enormous centre. After the anti-positional 25.d5!, the black knight was transformed into a passive onlooker. The e5-pawn was eliminated thanks to a small deflection tactic, and thus White's centre regained its mobility. His central pawn mass generated a space advantage, denying the black pieces access to the kingside. The black king became a sitting duck and was soon hunted down.

Defeating a mobile pawn centre

In this chapter, the mobile pawn centre received a lot of praise. Justifiably so, as it comes with a wide range of advantages. Is there anything that can beat a mobile pawn centre? Well, as always, it can crumble if it is outweighed by other factors.

A crazy example in which White allows Black to get a mobile pawn centre whilst simultaneously sacrificing a piece is the notorious Perenyi Attack. We are about to witness the best female player of all time, Judit Polgar, executing the Perenyi Attack with verve.

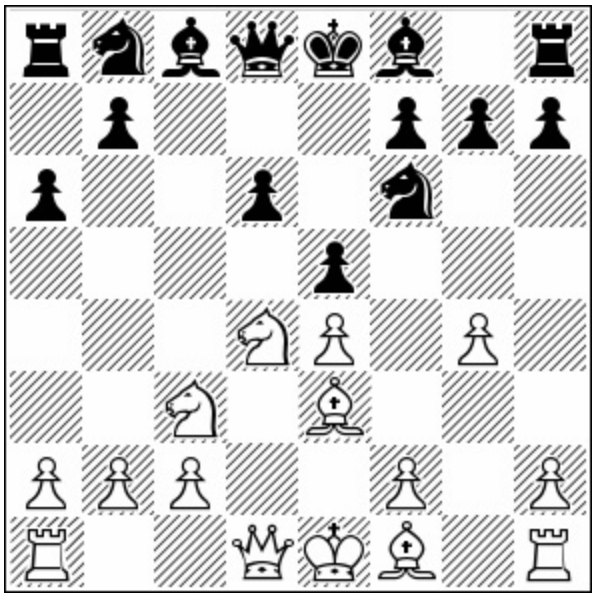
Game 6 Sicilian Defence
Judit Polgar 2677
Viswanathan Anand 2781
Dos Hermanas 1999 (1)

1.e4 c5 2.Nf3 d6 3.d4 cxd4 4.Nxd4 Nf6 5.Nc3 a6 6.Be3 e6 7.g4!?

Polgar was known for her aggressive attacking style. Here, she validates this description by employing the most aggressive scheme against the Scheveningen: the Perenyi Attack.*

> * Scheveningen is a small place at the west coast of the Netherlands. The name of the place is now attached to one the most famous variations in the Sicilian Defence, which was championed by Garry Kasparov. Being Dutch, I have the privilege of being one of the few people who actually knows how to pronounce ‘Scheveningen’! Unfortunately, I can’t show how to do it on paper...

7...e5!



Anand accepts the challenge, and he moves his e-pawn for the second time in a row. Usually, White responds to ...e7-e5 with either Nb3 or Nf3, but here this is impossible as the g4-pawn would be hanging. Therefore, a forcing sequence is initiated.

Black can try to steer the game into calmer waters with 7...h6. However, this is a concession as White has now achieved the advance g2-g4 without any preparation. Critical seems 8.h4! Nc6 (if Black insists on playing Perenyi style anyway with 8...e5, White is no longer forced to invest a piece: 9.Nf5 g6 10.Nxh6! Bxh6 11.g5 Ng4 12.gxh6 Nxe3 13.fxe3 Rxh6 14.Bc4, and White has a nice initiative) 9.Rg1 h5 10.gxh5 Nxh5 11.Qd2 Bd7 12.0-0-0. White has very smooth development and a safe king. 12...b5 13.Nxc6 Bxc6 14.Bg5 Nf6 15.Qe3 Qe7 16.Bg2 Qb7 17.Nd5!. A typical pattern: the knight is immune. White won convincingly in Riccio-Rada, cr 2009.

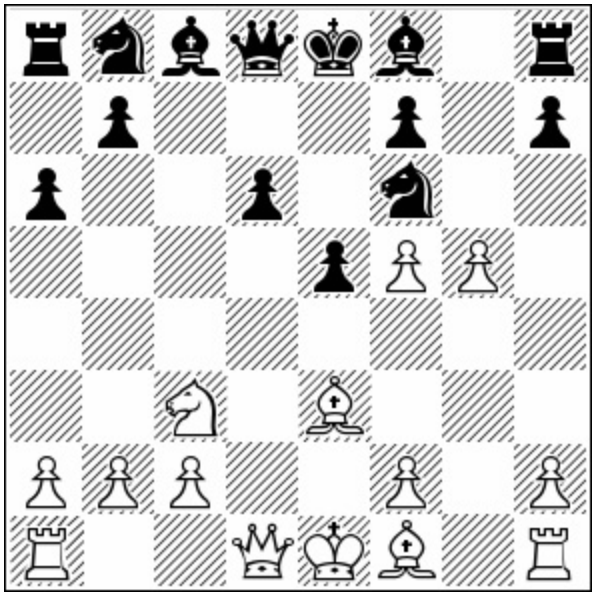
8.Nf5 g6

The knight is once again targeted. It can't move, as the g4-pawn would come under fire. Therefore, White is obliged to invest a piece.

9.g5 gxf5 10.exf5!?

10.gxf6? wins back the piece, but Black would obtain excellent play after

10...f4! 11.Bd2 Be6 12.Rg1 Nd7. The pawn on f6 is falling, and White doesn't have any compensation for the pawn.



A truly fascinating position arises, which defines the Perenyi Attack. White has granted Black a mobile pawn centre and in the meantime she has invested a piece! Furthermore, Polgar doesn't intend to take back on f6 anytime soon, as that would create an ugly tripled pawn. And we were so convinced of the strength of the mobile pawn centre...

10...d5 11.Qf3 d4 12.0-0-0

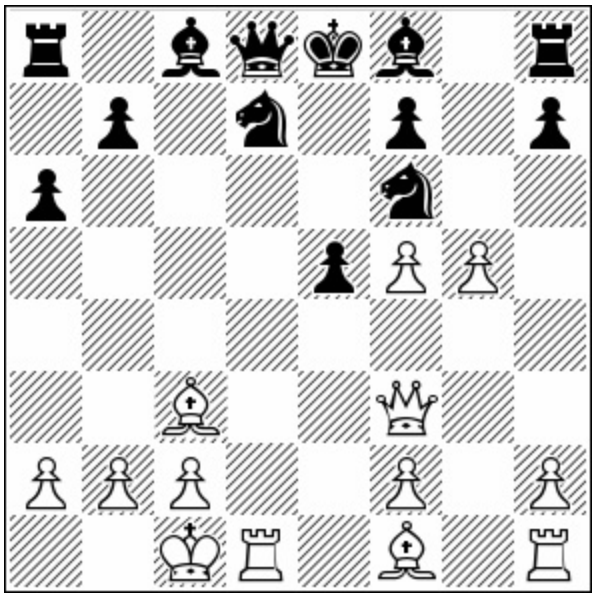
Anand has used his turns to move his centre forward, thereby forking the white pieces. Polgar focuses on quick development. For the moment the d4-pawn is pinned, but the pin is only temporary. This stunning position deserves a book in itself.

12...Nbd7 13.Bd2!?

The exclamation mark represents the creativity of Polgar's novelty at the time. The question mark reflects its actual quality. Once a novelty of this magnitude appears, other players will want to tread in a popular inventor's footsteps. Therefore, Black players started to figure out good ways to combat the new idea. Black's alternative that will be discussed on move 14 has made

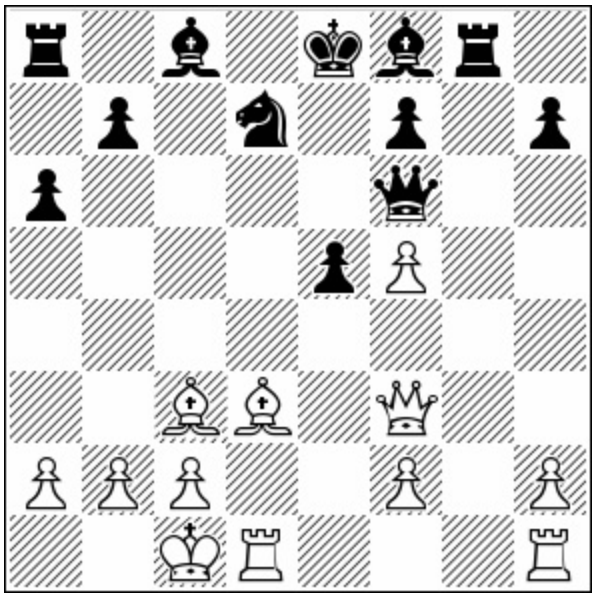
Polgar's approach less fashionable. Still, this doesn't spell the end of the notorious Perenyi Attack. Both 13.Bc4 and 13.Bxd4 remain respectable options that lead to incredibly complex positions.

13...dxc3 14.Bxc3



14...Bg7?

Nowadays, it has been figured out that 14...Rg8! offers Black good prospects. By attacking g5, Black forces White to release the tension. From this position, Black has scored a whopping 24 out of 30. A tremendous record! 15.gxf6 Qxf6 16.Bd3

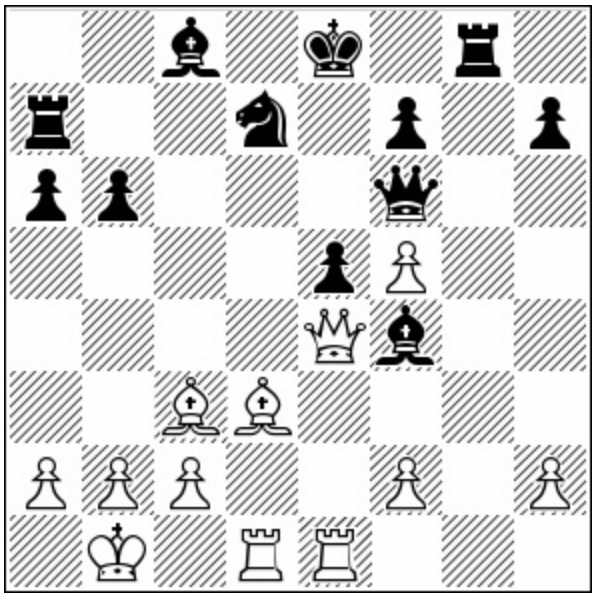


analysis diagram

16...Ra7 (the safe 16...Be7!? is perhaps a good novel attempt for Black to fight for an advantage), and now:

A) The main reason for White's misery is the popular 17.Rhe1?! b6!. Black aims to finish development with ...Rc7 and ...Bb7. He slowly starts to untangle;

B) Better is 17.Qe2! Bh6+ (17...b6, intending ...Rc7 followed by ...Bb7, is possible too, but by playing 17.Qe2, White has generated another resource: 18.f4! Bh6 19.Rhf1 Rc7 20.Kb1 Rxc3!. The pressure on e5 is mounting, but Black is in time to eliminate an important attacker. After the return of part of the material, another dynamic position arises, in which chances should be fairly balanced) 18.Kb1 Bf4 19.Rhe1 b6 20.Qe4



analysis diagram

20...Kd8 21.Bc4 Kc7. The black king is running for the hills, but this offers White an opportunity to bail out: 22.Rxd7+!? (22.Qxf4 first also works) 22...Bxd7 23.Qxf4 exf4 24.Bxf6. White should have sufficient compensation for the exchange, and he drew in Siefring-Sadowski, cr 2015.

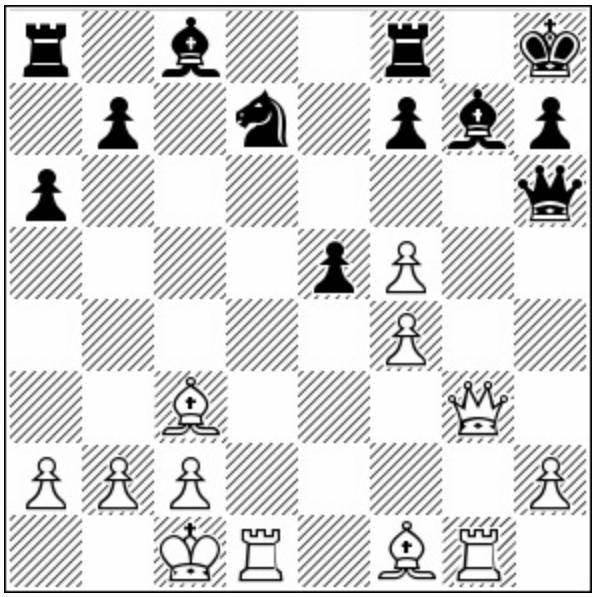
15.Rg1!?

This is Polgar at her finest. She has invested two pieces and instead of trying to regain the material, she just makes another calm move that improves her position.

15...0-0 16.gxf6 Qxf6 17.Qe3

Very flexible play by the Hungarian. She now intends to open the position with f2-f4. Anand has an incredibly difficult time finishing his development.

17...Kh8 18.f4 Qb6 19.Qg3 Qh6



White to move

Question: Now White can create huge problems in the black camp with a little deflection tactic. Do you see it?

20.Rd6! f6

20...Nf6 21.Bxe5 Bxf5 22.Qxg7+! Qxg7 23.Bxf6 Qxf6 24.Rxf6. White has regained the material with interest, and Black shouldn't be able to hold this endgame.

21.Bd2!

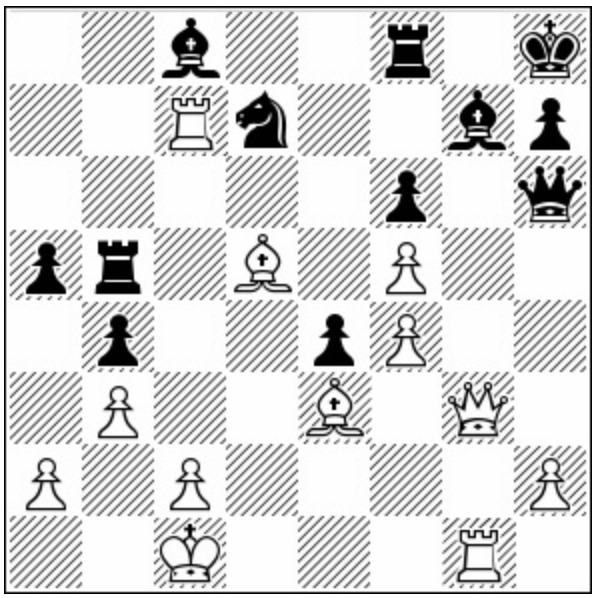
The bishop effectively switches diagonals. Polgar defends f4 and threatens a decisive capture on e5.

21...e4 22.Bc4

Black is completely without counterplay. Quality trumps quantity. The extra piece isn't felt at all, as the white pieces are all considerably more active. Polgar concludes the game convincingly:

22...b5 23.Be6 Ra7 24.Rc6 a5 25.Be3 Rb7 26.Bd5 Rb8 27.Rc7 b4 28.b3

Rb5



29.Bc6

Finally, Black collapses. By weaving in another tactic, Polgar regains the material, leaving her with a completely winning position.

29...Rxf5 30.Rxc8 Rxc8 31.Bxd7 Rcc5 32.Bxf5 Rxf5 33.Rd1 Kg8 34.Qg2

The difference in piece mobility is enormous. Polgar now threatens to take on e4, after which the black king will be hunted down from the other side. Anand had seen enough.

1-0

Vintage Polgar. Her style very much resembles that of Kasparov. She has a hyper-aggressive approach, and she thrives when she has the initiative. In this variation, White's sacrificial play is justified by the large lead in development. In essence, Black is overextending himself by pushing his central pawns forward. Nevertheless, play is highly unclear in the Perenyi Attack and there is a lot of uncharted territory left to be discovered.

The Hidden Laws of a Mobile Pawn Centre

• Having a mobile pawn centre is very beneficial and it should be valued highly;

• A mobile pawn structure generally appears when the structures are imbalanced. Common examples are cases with a pawn majority in the centre, the Carlsbad structure, and the queenside majority vs kingside majority;

• A mobile pawn centre may allow you to damage the enemy king's position with relatively low investments;

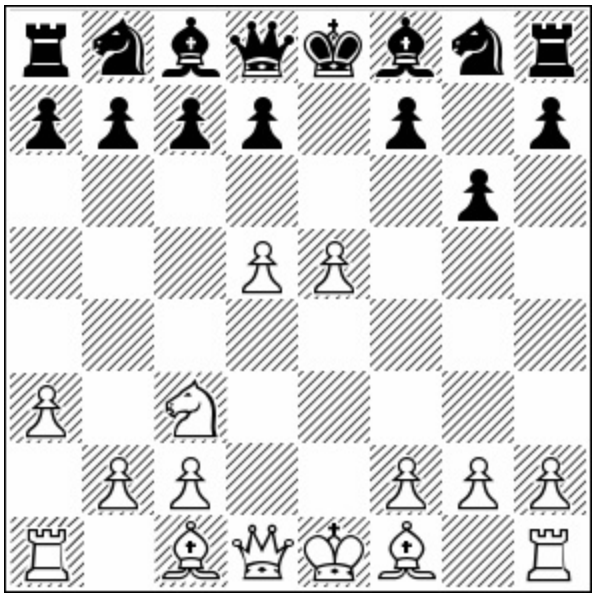
• A mobile pawn centre can generate a space advantage: it grants superior mobility to your own pieces, while the mobility of the opponent's pieces is significantly reduced;

• If you are pushing your mobile centre pawns, be wary of overextension.

Quiz

Show in Text Mode

Exercise 1
Magnus Carlsen 2163
Sampsa Nyysti 2242
Helsinki 2002 (2)



White to move

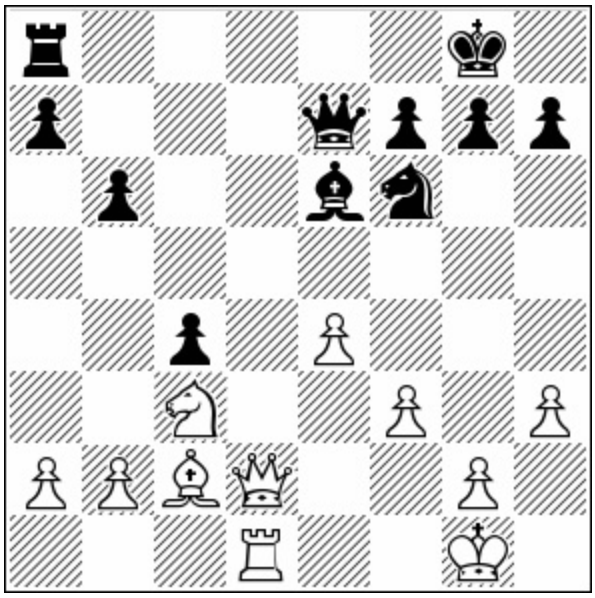
What did the (very) young Carlsen play here?

Show/Hide Solution

Exercise 1

9.d6! cxd6 10.exd6. The advanced pawn has a suffocating effect. **10...Qf6 11.Nb5 Na6 12.Bc4 Bh6**. Now White could have continued to restrain the black pieces with **13.f4!. Instead, Carlsen's 13.Qe2+** also proved to be sufficient. The connoisseur recognises a variation of the Halloween Gambit. Carlsen was 11 years old at the time. At least now we know what he was studying at this age!

Exercise 2
Alexander Alekhine
Efim Bogoljubow
Budapest 1921 (1)



White to move

How does Alekhine proceed and how do you assess the position?

Show/Hide Solution

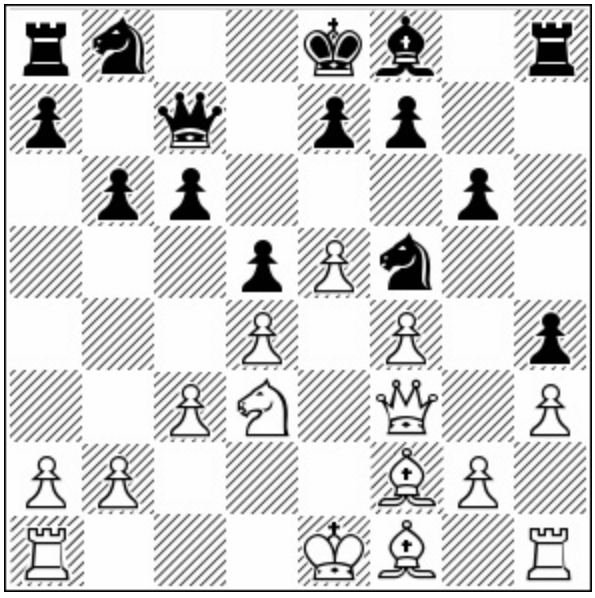
Exercise 2

23.f4!. White is completely winning. On top of his control over the only open file, White's pawn majority on the kingside is unstoppable. Meanwhile, Black isn't going anywhere on the queenside. **23...g6 24.Qd4 Rc8 25.g4! Bxg4 26.hxg4 Nxg4 27.Kg2 h5 28.Nd5 Qh4 29.Rh1 Qd8 30.Bd1 1-0**.

Starting with 23.e5 is also good, but 23.f4 is way more flexible because it keeps options open.

Exercise 3
Sergey Karjakin 2523
Pavel Kotsur 2573

Halkidiki 2002 (2)



White to move

What is White's best move?

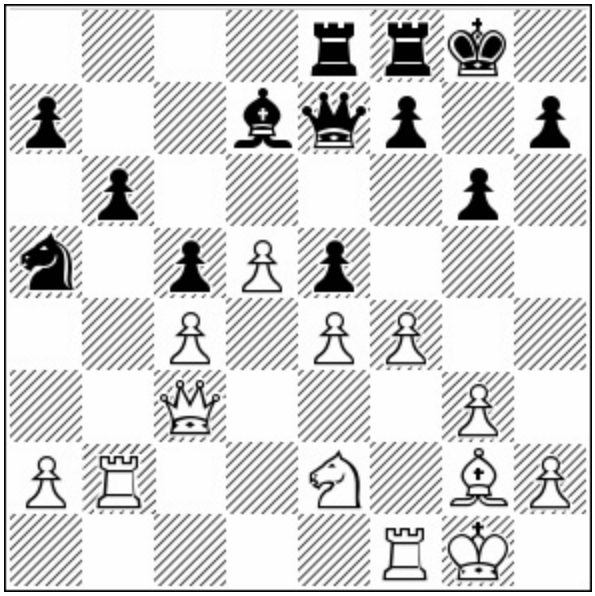
Show/Hide Solution

Exercise 3

The centre appears fairly closed, but White's forward pawn hasn't been fully immobilised yet. White should transform its potential energy into kinetic energy with the thrust **15.e6!**. The pawn sacrifice completely transforms the position. **15...fxe6 16.Qg4 Rh6 17.Ne5 Nd7 18.Bd3 Bg7 19.0-0 Bxe5 20.fxe5**. White has an enormous space advantage and far superior coordination.

Exercise 4
Lev Polugaevsky

Efim Geller
Riga ch-URS 1958 (16)



White to move

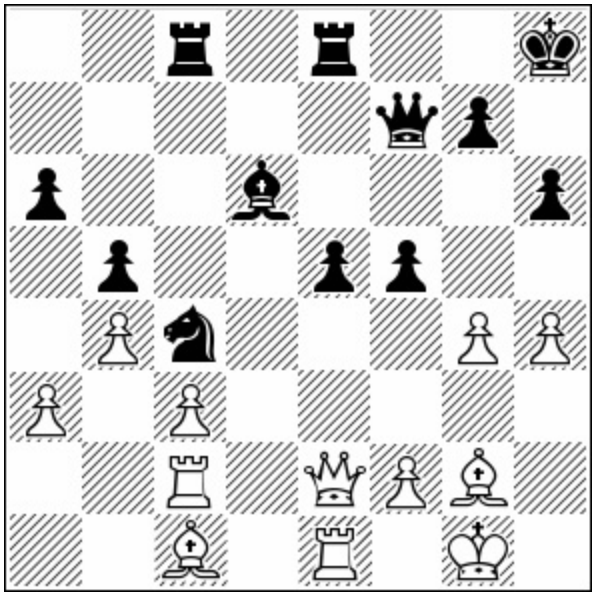
For the moment it appears that Black has a decent blockade. How should White proceed?

Show/Hide Solution

Exercise 4

The correct move is **22.Nc1!**. The knight is heading for d3 from where it will support White's central advance. **22...f5**. A defensive set-up with **22...f6 would leave Black passive forever. 23.Nd3 exf4 24.e5!**. The point! White sacrifices a pawn to get two connected passed pawns in the centre. **24...fxg3 25.hxg3 Qg5 26.Nf4 Nxc4 27.e6 Nxb2 28.exd7 Rd8 29.Ne6**. White is completely winning.

Exercise 5
Alexey Kislinsky 2425
Nick Maatman 2363
Groningen 2018 (7)



Black to move

White has just tried to confuse matters with 28.g4. How should Black respond?

Show/Hide Solution

Exercise 5

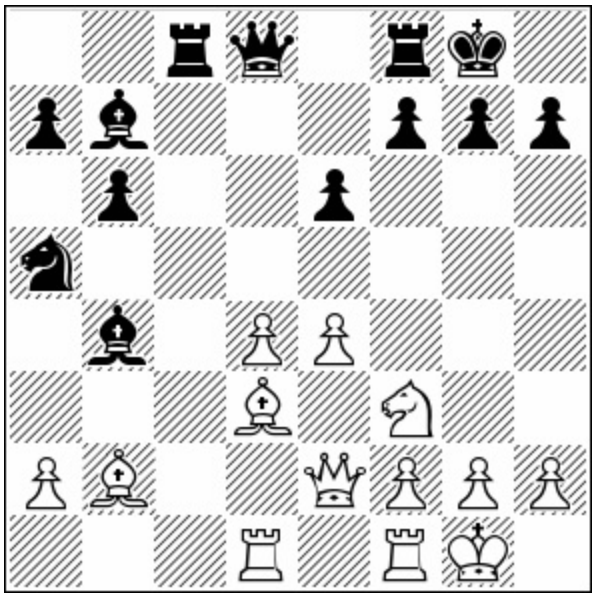
White's advance with g3-g4 is an interesting attempt to take control over the light squares. However, if Black responds well, it just turns out to be self-destruction: **28...e4!**. By pushing the central pawn forward, Black opens lines towards the white king. **29.gxf5 Qxf5 30.Bxe4 Qh3**. The similarities with the Wojtaszek game are great. At a low price, Black has obtained a strong attack. **31.f3 Qxh4 32.Rf1 Bc7!**. The bishop effectively switches diagonals. **33.Qg2 Bb6+**. Black wins material.

Exercise 6

Paul Keres

Efim Geller

Moscow m 1962 (8)



White to move

A classic position with a central majority. Can you figure out Keres' next moves?

Show/Hide Solution

Exercise 6

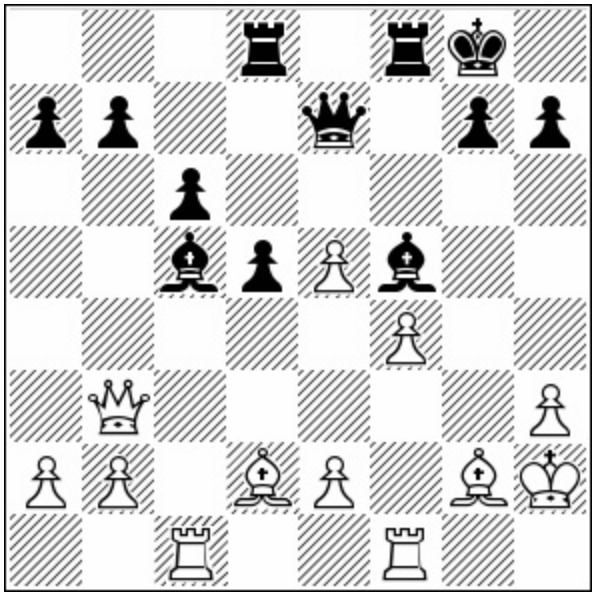
16.d5! exd5 17.exd5! is correct.*

> * If you went for the typical pattern with 16.d5 and 17.e5, you got tricked! Always try to think critically and don't try to apply patterns without calculation. In this case, Black

responds 17...Nc4, with a balanced position. White has enough compensation, but nothing more.

All the white pieces are excellently lined up for an attack on the black king, while the black pieces are idle on the queenside. **17...Qe7 18.Ne5!**. The critical move that makes the attack so powerful. **17...Re8 would have been met by the same move. The knight is placed on a strong central square and the threat of 19.Q**h5 is devastating. **18...f6 19.Qh5 g6 20.Nxg6! hxg6 21.Bxg6 Qg7 22.Rd3 Bd6 23.f4! Qh8 24.Qg4 Bc5+ 25.Kh1 Rc7 26.Bh7+ Kf7 27.Qe6+ Kg7 28.Rg3+ 1-0**. A brilliant attacking game by Keres.

Exercise 7
Peter Svidler 2768
Sergey Karjakin 2753
Wijk aan Zee 2018 (12)



White to move

Karjakin has set up a decent blockade on the light squares. Can you figure out a way for White to make use of the central pawn mass?

Show/Hide Solution

Exercise 7

19.e4 is very tempting, but it brings White no advantage: 19...Be6 20.f5??. The logical continuation fails tactically. 20...dxe4!. Suddenly, the unprotected bishop on d2 is hanging. 21.Qxe6+ Qxe6 22.fxe6 Rxd2, and the endgame is lost for White.

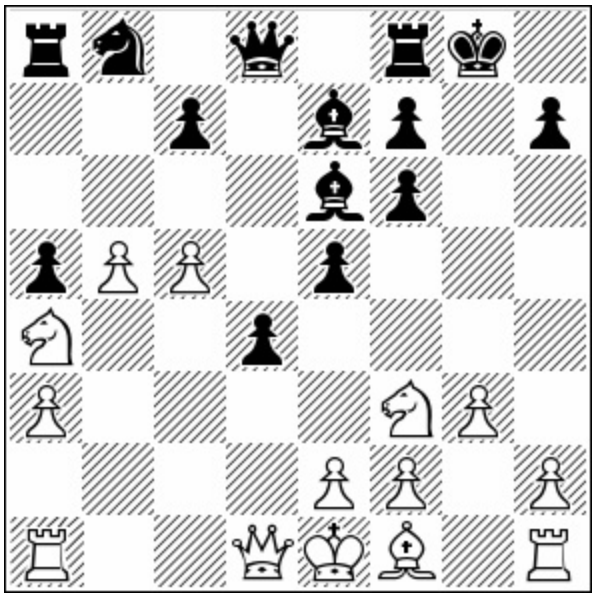
Svidler started with the correct **19.Rxc5! Qxc5 20.e4**. Here, Karjakin erred with **20...Bg6?**. In response, Svidler immediately recovered the material with **21.Bb4?, but this gave up a substantial part of his advantage. It is a bit mysterious why he didn't activate his mobile pawn centre with 21.f5! Bf7 22.e6 dxe4 23.Bc3, and White is completely winning. Note that 20...Be6 21.f5! dxe4?? 22.Qxe6+ no longer works, since the black queen has been distracted from the defence of e6. After the correct defence 20...Bc8, White should recover the material with 21.Bb4, with a sizeable advantage.**

Exercise 8

Johannes Zukertort

Wilhelm Steinitz

New Orleans Wch m 1886 (19)



Black to move

A great positional exercise! What should Black play? Take your time.

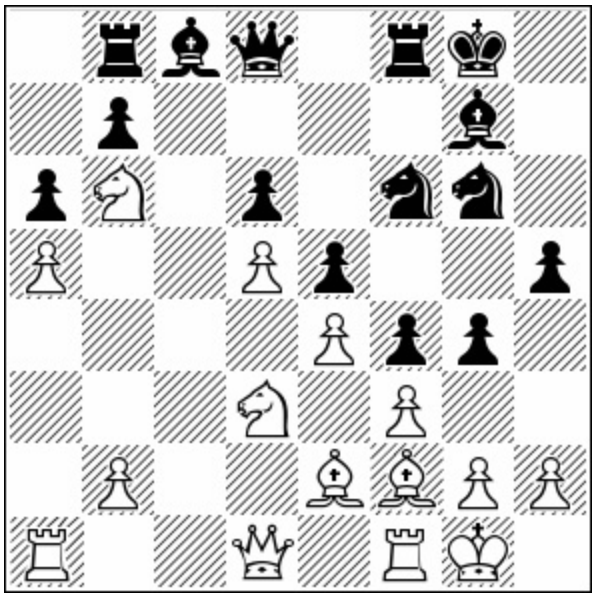
Show/Hide Solution

Exercise 8

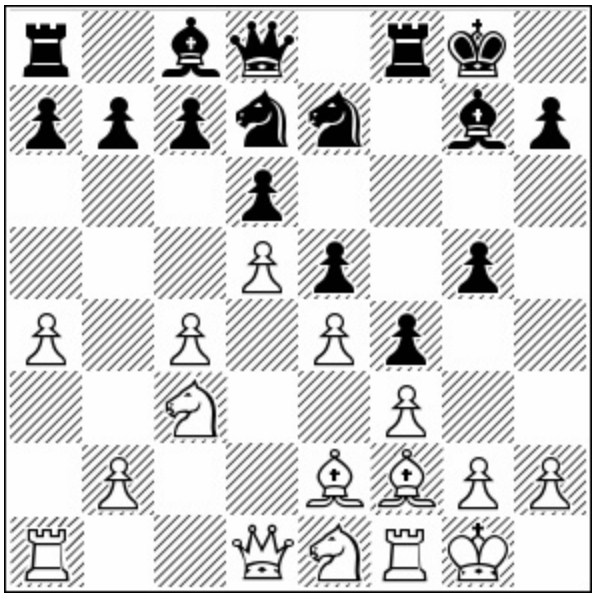
Black's pawn centre has great potential. Unfortunately, further expansion isn't possible yet. A mobile pawn centre needs to be supported by the rest of the army, otherwise you are risking overextension. How does Black achieve this? There is only a single move that brings Steinitz an advantage: 13...c6!. Fantastic understanding of the pawn structure. By loosening up the white queenside, Steinitz tries to incorporate the knight into the action. After 14.bxc6? Nxc6 15.Bg2 Rb8 16.Qc1, the black centre is ready to advance at once. Instead, Zukertort should have defended with 14.b6, but even this insertion is favourable for Black. The following line is completely forced: 14...Na6 15.Rc1 Qd5. White's queenside majority has been immobilised, and Black can now pick up the c5-pawn. 16.Bg2 Nxc5 17.Nxc5 Bxc5 18.0-0 e4! 19.Rxc5! (after 19.Nd2 f5, the black centre is too strong) 19...Qxc5 20.Nxd4. White has some compensation for the exchange, but Black should be

winning.

Chapter 7
Preview exercises



White to move
(go to the solution)



Black to move
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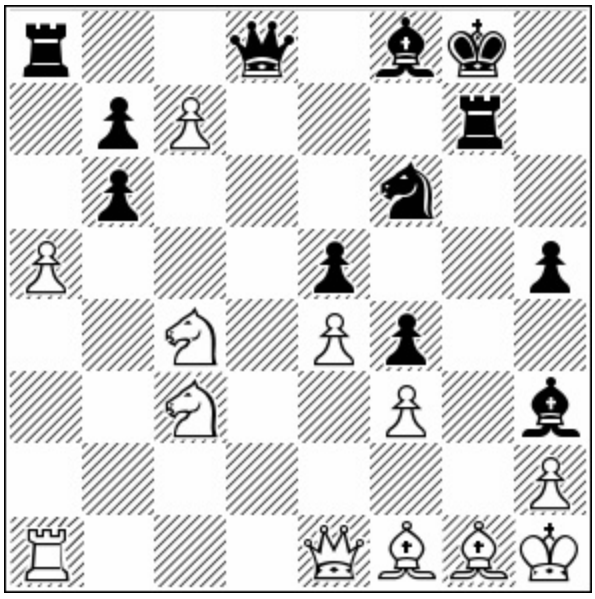
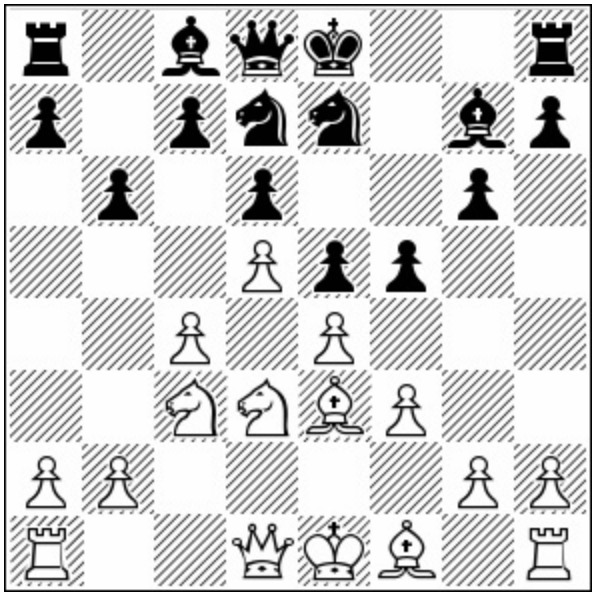
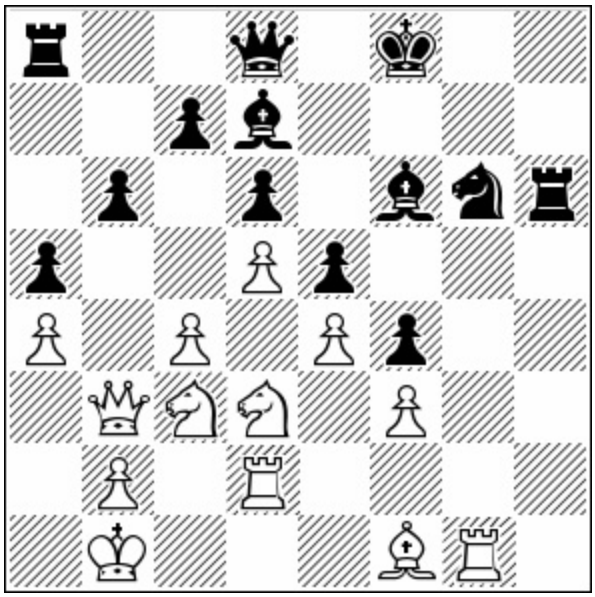


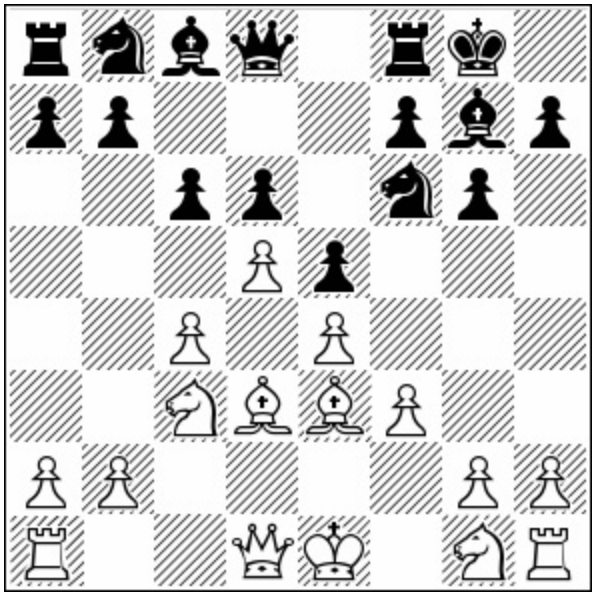
Black to move
(go to the solution)



White to move
(go to the solution)



White to move
(go to the solution)



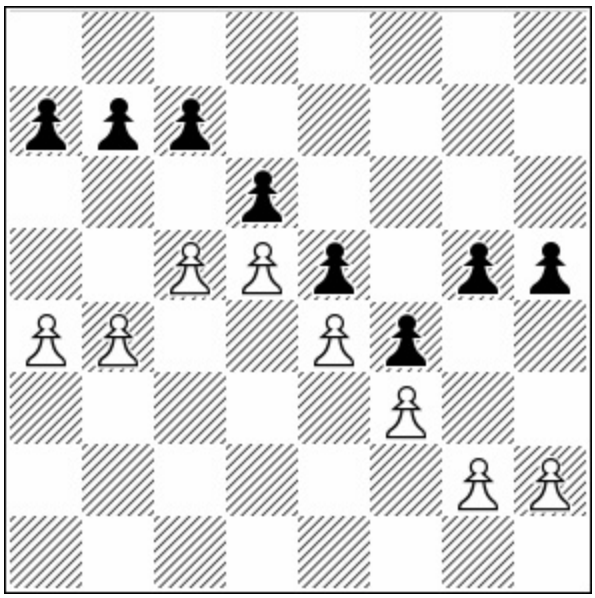
Black to move
(go to the solution)

Chapter 7

Locked pawn centre

Pawns are the soul of the game. – François-André Danican Philidor

Sometimes, a game of chess turns into a game of Risk. By fixing the pawn structure early on, borders are created and both sides are claiming their own territory. One opening that is particularly known for this is the King's Indian Defence. A typical structure that arises from this opening is featured in the diagram below.



This structure arises after White grabs space in the centre with d4-d5. Black in his turn gets the opportunity to lash out with ...f7-f5, and he can follow it up with ...f5-f4, usually only after White plays f2-f3. A situation is created in which both sides have long pawn chains. Despite the closed nature of the position, a highly complex situation arises. As you can see, it is White who enjoys a space advantage. Therefore, Black is playing a strategically risky game, as he usually cannot protect his queenside in the long term. But since White's king is often located on the kingside, the black attack is more threatening. A mistake in the defence on the kingside can lead to checkmate. The King's Indian is a hypermodern opening that produces intense battles.

Black regularly burns his bridges on the queenside to go all out for the white king.

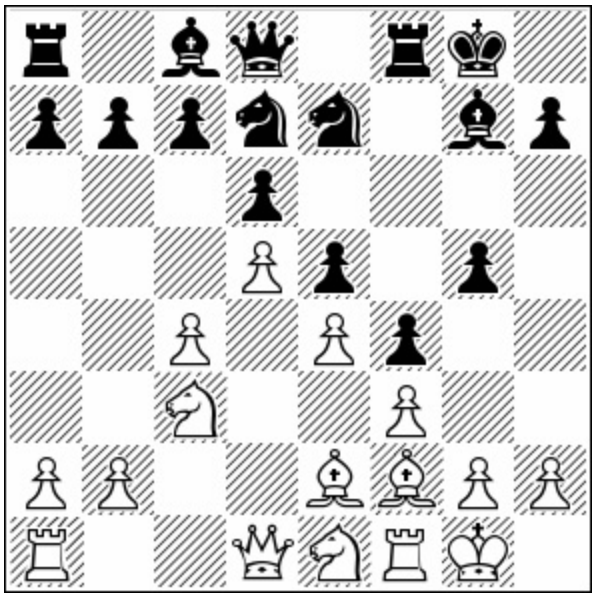
Positional bankruptcy

With a ‘locked’ pawn centre, I refer to positions in which all the central pawns are still present. We will discuss games in which the entire pawn centre is locked. Thus, an opening with a fixed pawn centre, such as the Exchange Variation of the French, will be excluded. An opening that fits this criterion is the King’s Indian Defence, which will play a prominent role in this chapter. What is a good strategy in positions with a locked centre? I can throw out a maxim here: ‘if the centre is closed, attack on the wing.’ You may sensibly reply that this is the only strategy available! Therefore, I must avoid offering such maxims as Willy Hendriks labeled as ‘free advice’. Thus, I will try to be a bit more specific in this chapter.

In the first game, we can detect why Black’s approach in the King’s Indian is considered risky. A single inaccuracy can leave you positionally bankrupt.

Game 1 King’s Indian Defence
Viktor Kortchnoi 2575
Boris Gelfand 2685
Tilburg 1992 (5)

1.d4 Nf6 2.c4 g6 3.Nc3 Bg7 4.e4 d6 5.Be2 0-0 6.Nf3 e5 7.0-0 Nc6 8.d5 Ne7 9.Ne1 Nd7 10.Be3 f5 11.f3 f4 12.Bf2 g5



13.a4!?

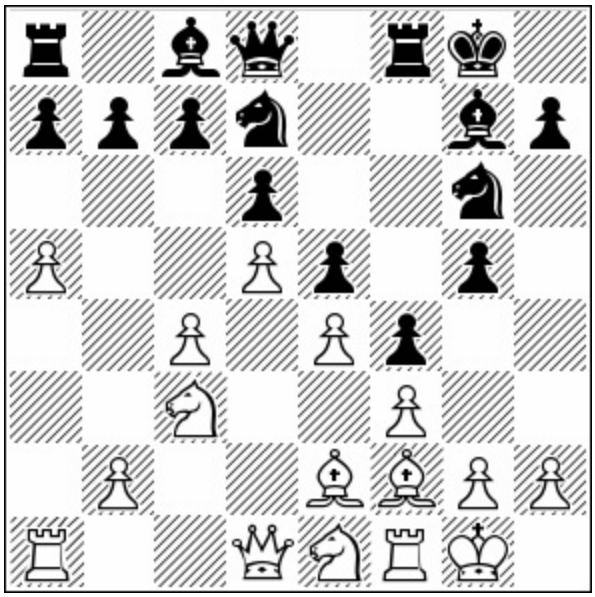
A thematic move in the King's Indian Defence. White intends to move the pawn to a5 in order to control the b6-square. This prevents Black from answering a possible c4-c5-c6 with ...b7-b6 (as White would then be able to respond with axb6) and it enables piece manoeuvres to b6 after Black answers with ...a7-a6. This is exactly what happens in the game. White's plan is to play a4-a5 and c4-c5, then Nb5 and sometimes even Na7 to eliminate Black's strong light-squared bishop.

13...Ng6?!

Slowing down White's attack with 13...a5! is correct, as we will see in the next game. The idea is to delay White's advance on the dark squares.

14.a5!

Kortchnoi immediately seizes his chance to grab more space on the queenside.



14...a6?

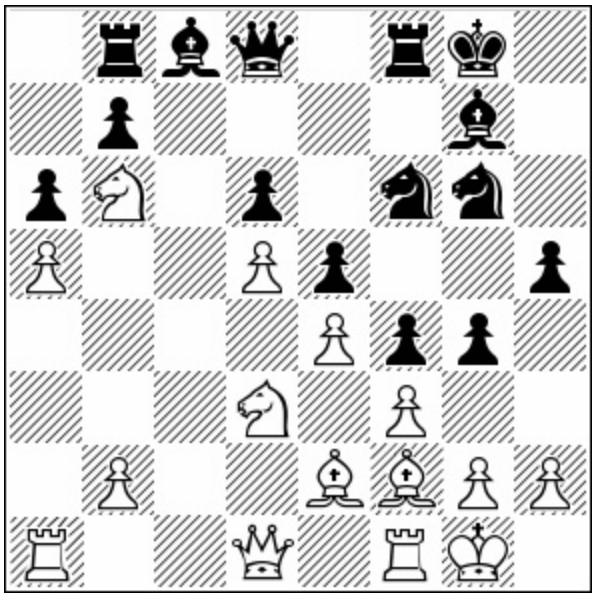
This strategy is clearly premature. Yes, Nb5 is prevented but Black will now get a gaping hole on b6. Continuing in typical King's Indian fashion with either ...h7-h5 or ...Rf7 is better. Examples of how Black should conduct his attack will be shown in the next two games.

> A good rule of thumb is that you only want to make moves on your weak side if it really slows down your opponent.

15.Nd3 Nf6 16.c5 h5 17.cxd6 cxd6 18.Na4!

Kortchnoi is taking optimal advantage of Black's inaccurate play. Since the black knights must join the attack on the kingside, the hole on b6 will be left undefended.

18...g4 19.Nb6 Rb8



White to move
(back to the exercises)

20.Nxc8!

If you aren't very familiar with King's Indian structures, this move may look shocking. Why would White give up such a strong knight after investing so many moves in it, just to take a bishop that is still on its starting square? Well, the key point is that Black's attack is harmless without the bishop on c8. Usually after Black achieves ...g5-g4-g3, White can never react with h2-h3, as the sacrifice ...Bc8xh3 is often devastating. But without the bishop Black is completely disarmed. In the meantime, White can continue to build his advantage on the queenside. Black is positionally bankrupt.

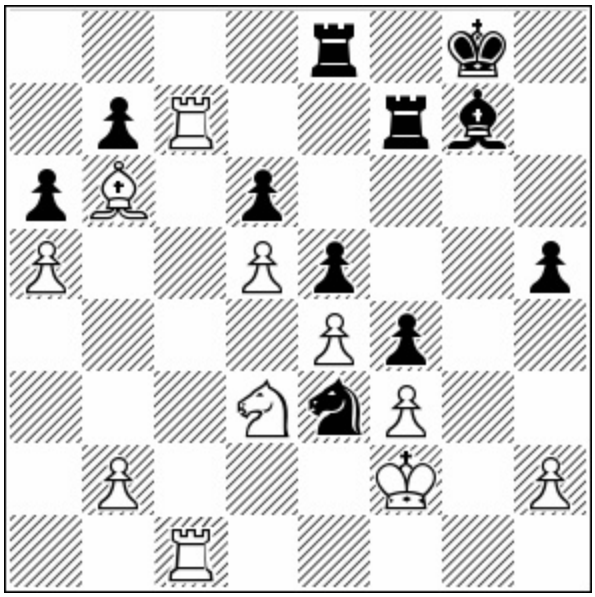
20...Qxc8 21.Qa4 gxf3

A clear sign that things are going south. Usually, Black wants to follow up with ...g4-g3. In this case, 21...g3 can be answered powerfully by 22.Ba7! Ra8 23.Rfc1!. The black queen has no good square, and the attack is harmless. White's large space advantage on the queenside will decide the game.

22.Bxf3 Ng4 23.Bb6 Nh4 24.Rac1 Qe8 25.Qxe8!

A queen exchange is desirable for White, as it makes the black attack even less threatening.

25...Rbxe8 26.Rc7 Nxf3+ 27.gxf3 Ne3 28.Rfc1 Rf7 29.Kf2



Even though material is equal, White's positional advantage is overwhelming. Black is struggling with a terrible bishop, and White can dominate both open files. Black's chances to hold are extremely slim.

29...Bh6 30.Rg1+ Bg7 31.Rgc1 Bh6 32.Ke2 Kf8 33.Rg1 Bg7 34.Rg6 Bf6 35.Rc1 Ke7 36.Rh6 Rg8 37.Rc7+ Kf8 38.Rc8+ Kg7 39.Rxg8+ Kxh6 40.Bxe3!

Kortchnoi's technique hasn't been perfect, but he has finally found a desirable transition. The rest of the game is fairly straightforward and White won on move 56.

1-0

Gelfand's ...a7-a6 idea was dubious as it created a gaping hole on b6. Kortchnoi infiltrated this square with a knight and eliminated Black's

attacking c8-bishop. As a result, Gelfand's attack never came off the ground. Hence, White was in complete control due to his large space advantage on the queenside.

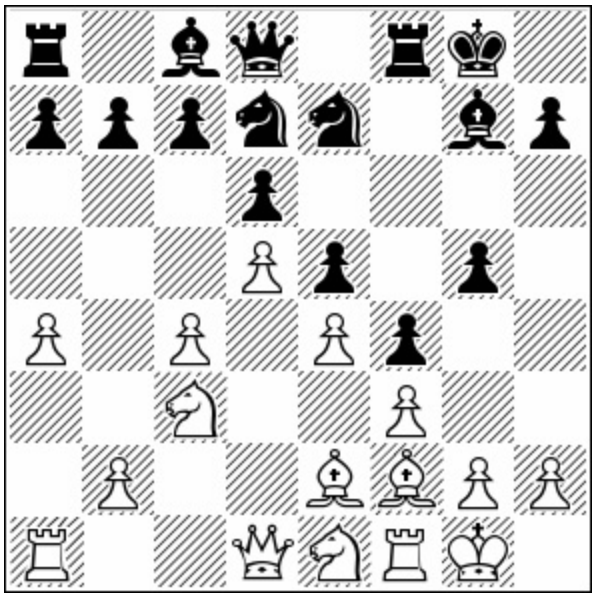
> In positions with long pawn chains where either side is ruling on one flank, you must be very cautious making moves on your weak side.

Playing on your weak side

Can it sometimes be viable to make moves on your weak side?

> Making moves on your weak side can be justified if it significantly slows down or disrupts the opponent's plans.

Game 2
Nick Maatman 1980
Etienne Goudriaan 2250
Hoogeveen 2011 (1)

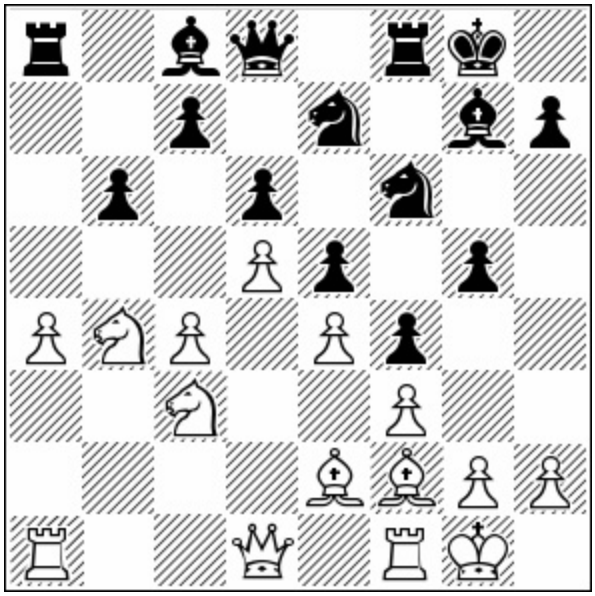


Black to move
(back to the exercises)

13...a5!

A typical resource for Black in the King's Indian, going against the protocol that you shouldn't waste moves on your weak side. It serves two purposes: discouraging b2-b4 and preventing White from gaining more space with a4-a5.

14.Nd3 b6 15.b4 axb4 16.Nxb4 Nf6



17.Nd3

At the time, this was immature opening preparation on my part. Obviously, I was hoping that my opponent wouldn't go for 13...a5, but wishful thinking is rarely good guidance. My move perfectly exemplifies the success of Black's strategy: White has invested multiple moves with his knight, which means that effectively Black's countermeasures didn't cost any time. This doesn't necessarily mean that White is worse in this particular position yet, but there are other variations that lead to more promising positions.

17.Nc6!? is an interesting attempt to vacate the d5-square: 17...Nxc6 18.dxc6 Be6 19.Nd5 Rf7. White has a dominant knight in the centre, but Black can play around it and continue his play on the kingside. Black's counterplay should be sufficient for equality.

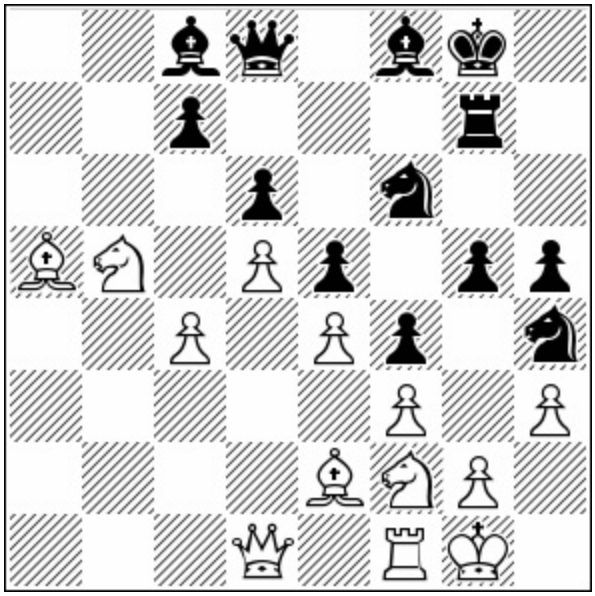
17...Ng6 18.Be1 Rf7 19.Nf2

The knight is well-placed on f2, as it protects e4 and defends against ...g5-g4. The downside is that my manoeuvres have been extremely time-consuming. White simply has a bad version compared to similar variations.

19...h5 20.h3

The move h2-h3 is rarely a good resource for White in this type of a King's Indian. It is true that it temporarily prevents ...g5-g4, but ultimately this advance will happen anyway, and the ensuing exchanges will leave the white king even more exposed.

20...Bf8 21.Nb5 Rg7 22.a5 bxa5 23.Rxa5 Rxa5 24.Bxa5 Nh4



25.Na7?!

Another typical resource: White is going after the black light-squared bishop. However, here this idea is premature, as the black bishop can easily move away. 25.Nxc7 was superior, and it should have led to a draw: 25...Rxc7 26.Qb3 Qe7 27.Bxc7 Qxc7 28.Rb1 g4 29.hxg4 hxg4 30.fxg4 Qa7 31.Qb6 Qa2 32.Qb2. White can keep chasing the black queen forever. Black can't

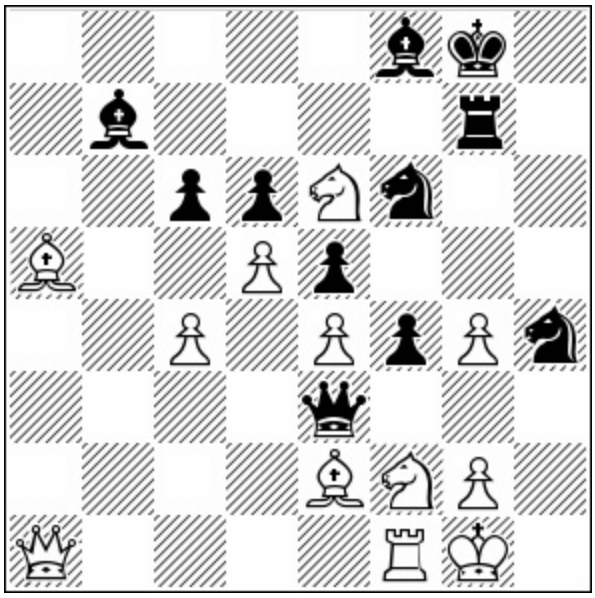
allow the exchange of queens, as the white rook would be too strong in the endgame.

25...Bb7?!

I remember being extremely surprised by this move since I expected the logical 25...Bd7. As is so often the case in chess, the natural move is preferable, but my opponent had a brilliant concept in mind. After 25...Bd7 26.Nc6 Qe8 27.Be1 Kh8 28.c5 Bxc6 29.dxc6 Qxc6, White has insufficient compensation for the pawn deficit and Black enjoys a risk-free advantage.

26.Nc6?

This allows Black to execute his plan. 26.Qa1! is a very smart prophylaxis. The main idea is that it takes the sting out of Black's planned ...Qa8, as the dark-squared bishop will be defended. Since the black bishop is now misplaced, ...g5-g4 is relatively harmless: 26...Qa8 27.Nb5 g4 28.hxg4 hxg4 29.fxg4 c6 30.Nc7 Qa7 31.Ne6 Qe3



analysis diagram

32.Qc3! (this is forced, as Black has the deadly threat of 23...Qg3) 32...Qxe2 33.Nxg7 Bxg7. After a crazy sequence, White has some advantage.

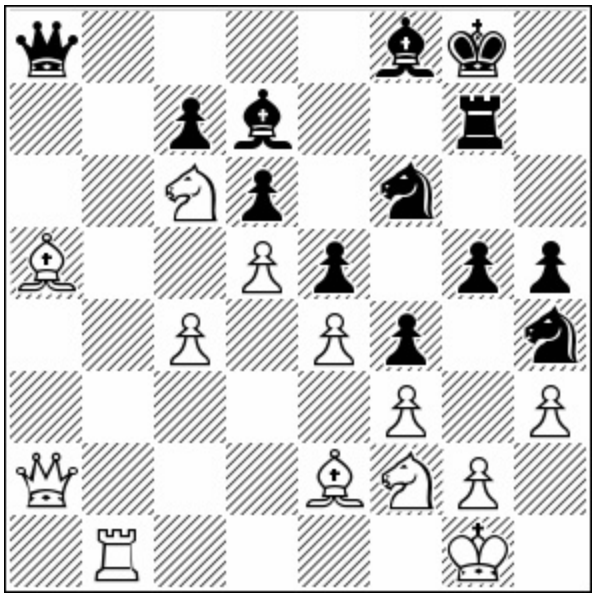
26...Qa8!

So that was Black's plan! White's minor pieces on the queenside are suddenly quite awkward.

27.Qa4 Bc8

27...Bxc6! 28.dxc6 Qa7 is advantageous for Black, as he obtains good play all over the board.

28.Rb1 Bd7 29.Qa2



29...g4!!

Even though this move is not quite winning yet, Goudriaan deserves the double exclamations for his exquisite calculation.

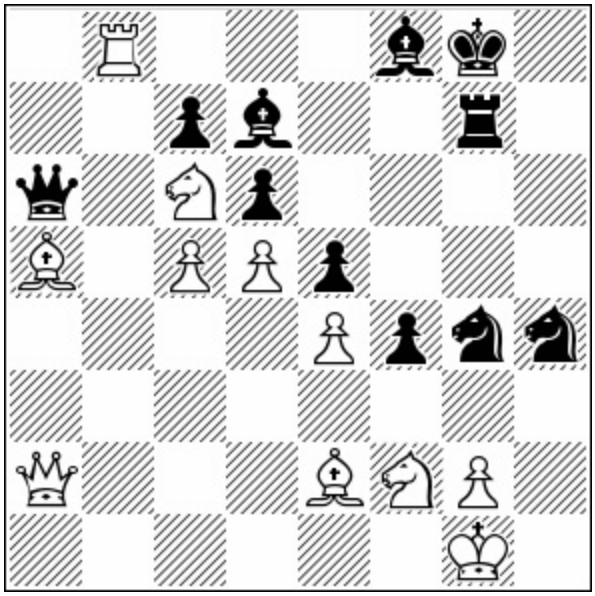
30.Rb8

The rook brings the queen into jeopardy, but little did I know that Black had everything under control...

30...Qa6 31.fxg4

31.hxg4 was the safest continuation: 31...hxg4 32.c5 Nxf3+! (32...Qxe2!? is possible too, but after 33.Qxe2 gxf3, the game should end in a draw after the white queen moves away. Black has multiple drawing patterns, such as ...Nh4xg2-e3+ and then ...Rg7-h7-g7, etc.) 33.Kf1 Nh2+ 34.Kg1 (34.Ke1? is too optimistic: 34...f3! 35.gxf3 Nxf3+ 36.Kf1 g3!, and Black is winning) 34...Nf3+. Sometimes, when the entire board is on fire, the game can suddenly end in a crazy, anti-climactic perpetual check.

31...hxg4 32.hxg4 Nxg4 33.c5?



All of a sudden, Black appears to be in major trouble, as the black queen has nowhere to go and appears to be lost. Unfortunately, this logical move turns out to be the decisive mistake and it allows Goudriaan to execute his brilliancy:

33...Ne3!

Black may be losing his queen, but White is losing his king! I am lost in all variations.

34.g4

This leads to a quick demise. 34.Bxa6 Nf3+ 35.Kh1 Rxg2! is the main

variation. Mate is unavoidable. The black pieces are coordinating beautifully.

34...Nf3+ 35.Bxf3 Qf1+ 36.Kh2 Rh7+

0-1

An outstanding attacking game by my opponent, who was on his path to the IM-title.*

> * Despite our ratings, the game featured as 'game of the day' on the website Chessgames.com and therefore received quite a lot of attention.

Despite the convincing defeat, I was still quite satisfied with my play. I guess that Magnus Carlsen would disapprove of this sentiment. He notoriously said: 'Some people think that if their opponent plays a beautiful game, it's OK to lose. I don't. You have to be merciless.' Not everyone is born with Carlsen's killer instinct, so I guess that I'm just lacking the right attitude...

Burning bridges

Goudriaan took some countermeasures on the queenside to slow down White's play. This is not strictly required. A different strategy is to go all out for the attack.

You can burn all your bridges if the prize of your attack is the king.

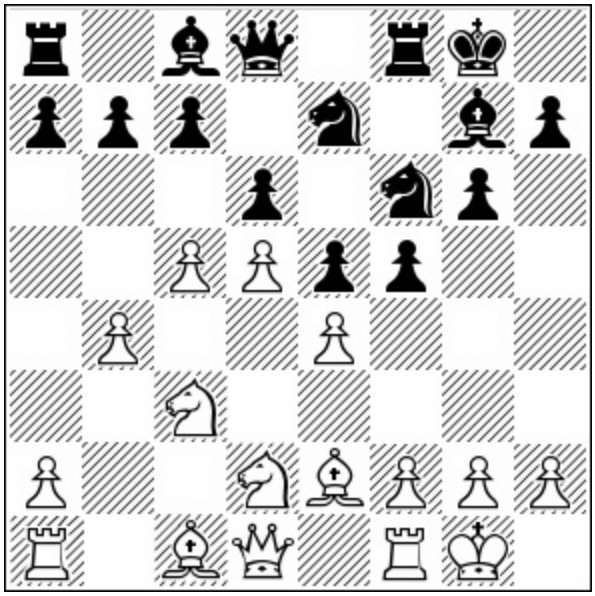
We will observe such an approach in the next game, which is the most brilliant King's Indian game that I have ever seen.

Game 3 King's Indian Defence
Boris Gelfand 2761
Hikaru Nakamura 2708
Bursa 2010 (5)

1.d4 Nf6 2.c4 g6 3.Nc3 Bg7 4.e4 d6 5.Nf3 0-0 6.Be2 e5 7.0-0 Nc6 8.d5 Ne7 9.Nd2 Ne8

It’s interesting how such a backward move can be the most aggressive continuation! The prophylactic 9...a5!? is the most popular move here. It is understandable why, because it significantly slows down White’s initiative on the queenside. White now must invest three moves in order to realise the b2-b4 advance: 10.a3 Nd7 11.Rb1 f5 12.b4. This position has fans on both sides. Garry Kasparov piloted the black pieces 9 times and Mikhail Gurevich played the white side no less than 15 times.

10.b4 f5 11.c5 Nf6



12.f3

I have analysed this position extensively in an attempt to find a weapon against the King’s Indian. Even though this move is clearly the most popular, in my estimation it is a mistake. Analyzing the King’s Indian is incredibly deceptive. Computers regularly give White a 1.5-point advantage, which is usually enough for a win. But in the King’s Indian matters are different. White has a large space advantage on the queenside that is feeding the computer’s evaluation.

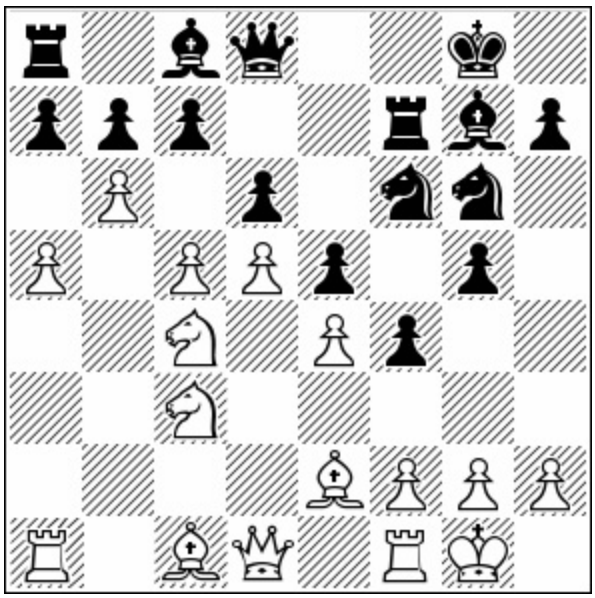
Interestingly, computers often overestimate White’s potential on the queenside and underestimate Black’s attack on the kingside. When you start

to suggest moves for Black, the evaluation usually becomes less pessimistic. So maybe humans still have a role to play in chess in the future!

I think that the sophisticated 12.a4! creates practical difficulties for Black. If you have developed some distaste for opening analysis or if you are just too curious about Nakamura's fireworks, I recommend that you skip ahead.

A) 12...fxe4 is strategically undesirable for Black, so White has no urgent need to strengthen his centre with f2-f3: 13.Ndxe4 Nf5 14.Bc4 a5 15.bxa5 Rxa5 16.Ba3 Nxe4 17.Nxe4. White has a massive advantage. The central knight on e4 dominates the board;

B) 12...Rf7 is a decent attempt to transpose to the game, but White doesn't have to cooperate: 13.a5! f4 14.Nc4 g5 15.b5 Ng6 16.b6.



analysis diagram

It is time for another good rule of thumb.

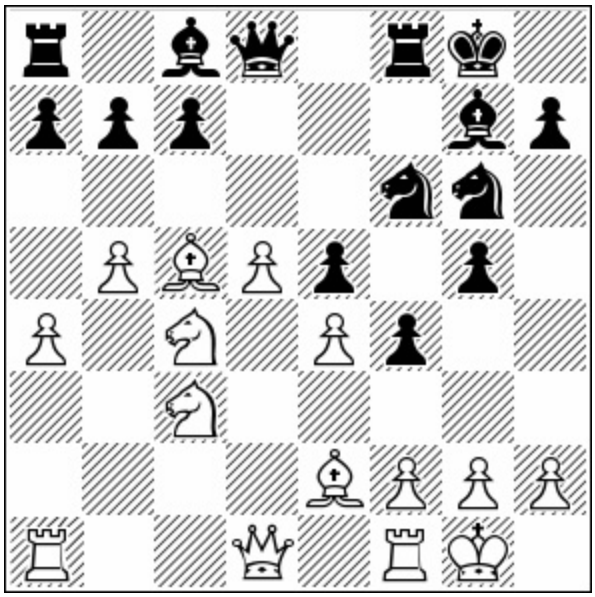
> Whenever White achieves b5-b6, he is usually winning, as he is forcing a breakthrough on the queenside.

(Interestingly, the present game is an exception!) 16...axb6 17.cxd6 cxd6 18.Nxb6. Black's position is positionally bankrupt and his attack isn't getting off the ground;

C) 12...f4 13.Nc4 g5 14.Ba3

C1) 14...g4 15.b5 f3!? (15...dxc5 16.Bxc5 Ng6 17.Bxf8 transposes to Variation C21) 16.gxf3 gxf3 17.Bxf3 Ng6 18.Kh1!. White should be able to defend and later capitalise on his material and positional advantages;

C2) 14...Ng6 15.b5 dxc5 16.Bxc5

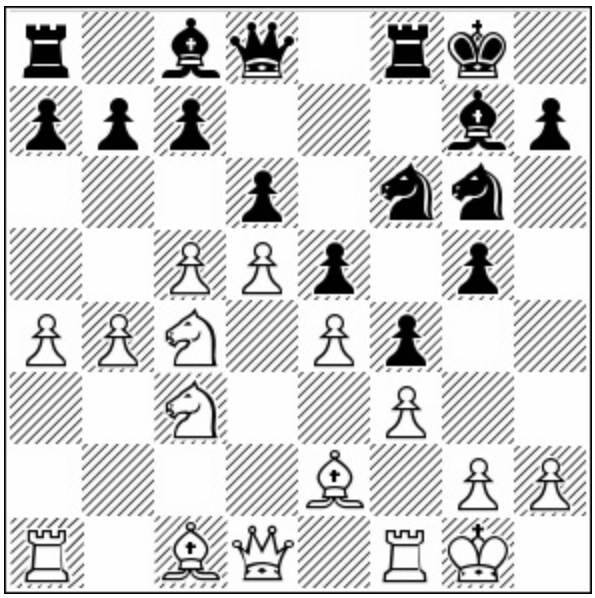


analysis diagram

C21) 16...g4 17.Bxf8 Bxf8 18.d6 cxd6 19.Nd5 Be6 20.b6 Bxd5 21.exd5. Once exchanges start happening on the queenside, the black attack stalls. Black has some compensation for the exchange, but White should be far ahead;

C22) 16...Rf7. This is the critical variation. I think that the evaluation of this move determines the viability of the entire variation! Still, fans of the King's Indian Defence shouldn't despair yet, as Black has a healthy alternative in the form of 9...a5. Now, 17.f3 transposes to the game, but Nakamura will show why that may be undesirable. White has other options though. The idea of delaying f2-f3 allows White to be creative with 17.Bh5!? Nxh5 18.Qxh5 Bd7 19.Rac1. White should be better due to his space advantage, but it isn't entirely clear yet.

12...f4 13.Nc4 g5 14.a4 Ng6



15.Ba3?!

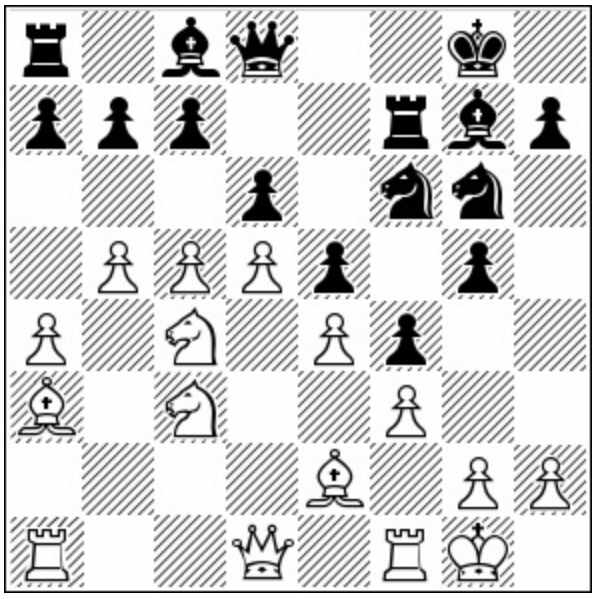
This popular move appears to spoil White's advantage.

More promising is 15.cxd6 cxd6 16.Nb5 Ne8 17.Kh1 Rf7 18.Bd2. This is the start of a slow plan that turns out to be quite effective. 18...Bf8 19.Be1 Bd7 20.Bf2 (a strong and logical novelty. In all fourteen games that reached this position, White opted for Na5, but the bishop move is very pragmatic) 20...Bxb5 21.axb5 b6 22.Ra6, with a very comfortable position for White.

15...Rf7

Black lacks space in the King's Indian Defence, but this isn't necessarily problematic, as it turns out that Black often has exactly enough space to manoeuvre. The typical moves are: ...Nd7(e8)-Ng6-Nf6-Rf7-Bf8-Rg7, and Black is ready to attack. The bishop and rook perform a little switcheroo. On f8, the bishop protects the vulnerable point on d6, and on g7, the rook can participate in the attack.

16.b5



16...dxc5!

A deeply counterintuitive move. Usually, Black tries to maintain the tension by defending d6. In this case though, White has made so much progress already that the defence of d6 is troublesome. After the capture on c5, White doesn't have a straight path forward.

16...Bf8 is natural, but with 17.b6! White forces a breakthrough on the queenside: 17...axb6 18.cxb6 cxb6 19.Qb3 Ra6. White should have the upper hand in this position, as the queenside has been opened.

17.Bxc5 h5

Black just continues with his own agenda as if nothing is happening on the other side.

18.a5 g4 19.b6

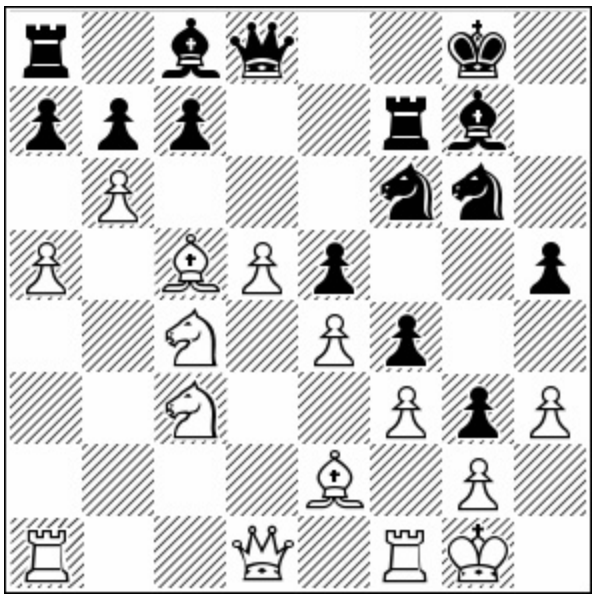
I mentioned earlier how White is usually doing well if he achieves b5-b6, but here Black's attack is extremely far advanced.

19...g3!

Obviously, Black isn't interested in an exchange on f3. The King's Indian attacking scheme is extremely venomous. Ideally, Black now brings the queen to h4 and delivers a checkmate.

20.Kh1

The king is moving to the corner to vacate g1 for the bishop and thereby strengthen h2. Note how Black isn't necessarily intending to take on h2 with the pawn, as it can then function as a shelter for the white king. 20.h3? appears to shut down the kingside.



analysis diagram

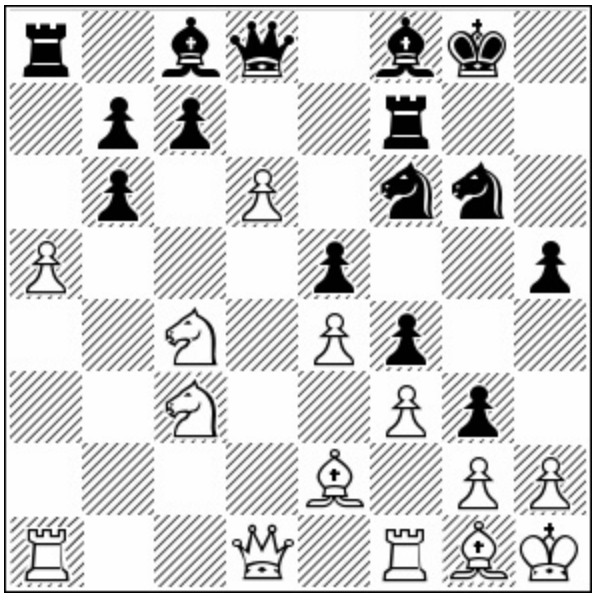
However, Black has a winning attack after 20...Bxh3!. The bishop leaves its starting position to detonate the white kingside. This sacrifice is exactly the reason why White can almost never get away with h2-h3. 21.gxh3 Qc8. The threat of 22...Qxh3 followed by 23...Qh2# forces White to give up at least a rook, and interestingly Black isn't even obliged to take straight away! 22.Rf2 cxb6! 23.Bd6 Qxh3 24.Bf1 gxf2+. Black is winning.

20...Bf8 21.d6

Forcing play on the queenside must be White's best chance. An extremely

tense situation arises.

21...axb6 22.Bg1



22...Nh4!?

Of nineteen players who reached this position, Nakamura was the only one to play this aggressive knight move.

A) 22...gxh2?! was played seven times, but Black has had no success after 23.Bf2. This is precisely what Black wants to avoid. After the pawn capture, Black lacks a plan to increase the pressure;

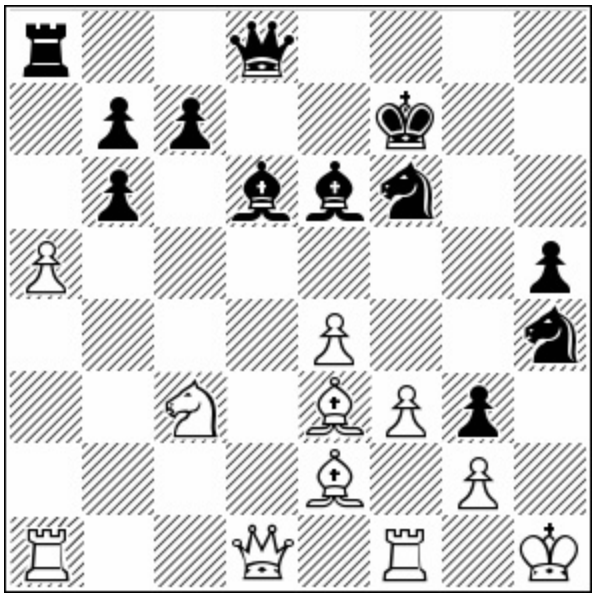
B) 22...Bxd6 is a solid alternative: 23.Nxd6 cxd6 24.Bc4 bxa5. Black will have enough compensation for the exchange, and he drew in Lebedev-Nekhaev, cr 2015.

23.Re1

23.hxg3!? is interesting: 23...fxg3 24.Be3 Bh3! 25.Rg1 Be6 26.Nxe5 Bxd6 27.Nxf7 Kxf7, and now:

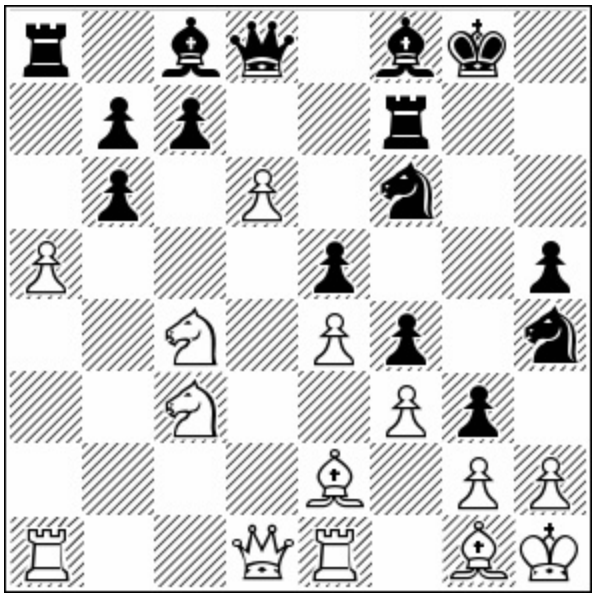
A) 28.Bg5? Ng4! 29.fxg4 Qxg5 30.Qc1 Qe5, and Black's control is overwhelming;

B) 28.Rf1 is better, as White must defend against the threat of ...Ng4.



analysis diagram

Fasten your seatbelts! We are about to enter an outrageous variation with some stunning only moves for both sides: 28...Bh3!? 29.Bc4+ Kg7 30.Rg1 Bxg2+! 31.Rxg2 Qc8! (note that 31...Qd7 loses to 32.Rxg3+) 32.Raa2 Qh3+ 33.Kg1 Rf8! 34.axb6 Ng4! 35.fxg4 Nf3+ 36.Qxf3! Rxf3 37.Bd4+ Kh6 38.g5+ Kxg5 39.Ra5+ c5! 40.Bxc5 Bxc5+ 41.Rxc5+ Kh6 42.Be2 Re3 43.Nd5 Rxe4 44.Nf6 Rh4 45.Rxh5+ Kg6 46.Rxh4 Qxh4 47.Nh5 Qd4+ 48.Kh1 Qh4+, and finally we reach a perpetual. I have no clue whether Stockfish is brilliant, or if it is just messing with us. Let's just assume the former to preserve our sanity.



Back to the game. Now, it is showtime!

23...Nxg2!

Nakamura thrives in the chaos.

24.dxc7?

The decisive mistake. Nakamura's brilliant sacrifice put White on the defensive, but Gelfand could still make a draw. 24.Kxg2 was required: 24...Rg7 25.dxc7 Qe7 26.Nxe5! gxh2+ 27.Kxh2 Qxe5 28.Bf2!. Somehow, White is still in time to prevent the black queen from coming over, but it is understandable that Gelfand didn't fancy these positions: 28...Bc5 29.Qd8+ Kh7 30.Nd5! Bxf2 31.Nxf6+ Kh6 32.Ng8+ Kh7 33.Nf6+, with a perpetual.

24...Nxe1 25.Qxe1

The rampant knight has been eliminated, but the damage is done. Note that White couldn't take the queen, as 25...g2 would be mate!

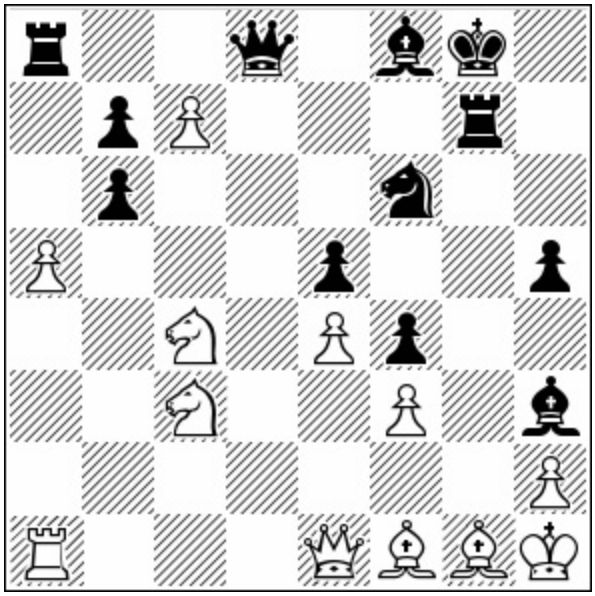
25...g2+!

The pawn is given up to win a crucial tempo.

26.Kxg2 Rg7+ 27.Kh1 Bh3

We rarily witness a bishop threatening a smothered mate.

28.Bf1



Black to move
(back to the exercises)

Question: So far, Nakamura has carried out his attack flawlessly. Can you spot the marvelous finishing touch?

28...Qd3!!

Simply stunning. The queen is sweeping deep into enemy territory on a square where she can be taken. The numerous threats created by the queen will decide the game.

29.Nxe5

Gelfand still tries to struggle on. It's a bit of a pity that the game didn't end with the picturesque 29.Bxd3 Bg2#.

29...Bxf1 30.Qxf1

The black queen is still alive, and she can now start collecting.

30...Qxc3 31.Rc1 Qxe5 32.c8=Q Rxc8 33.Rxc8 Qe6

After multiple sacrifices, Nakamura ends up with an extra knight.

0-1*

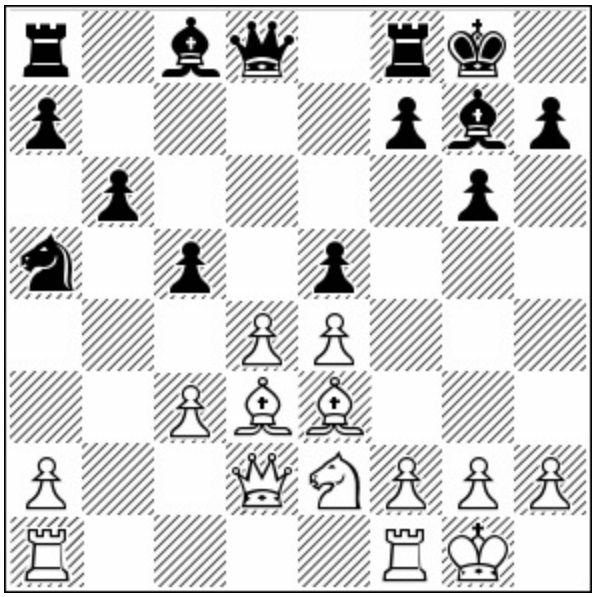
> * Gelfand happened to be on the receiving end of two convincing King's Indian games, but this by no means discredits his strategic capabilities! Gelfand in fact wrote a great book on chess strategy called *Positional Decision Making in Chess*.

Nakamura's victory is excellent marketing for the King's Indian Defence, and fans of the opening should put this game on billboards! These attacking games display precisely what makes this opening so attractive. Both strategically and tactically, Black is playing on the edge. The space between brilliance and madness can be paper-thin here.

Total domination

Obviously, a strategy that involves burning all your bridges is risky. A flank attack can be even more deadly if one is able to control the other side of the board. We will examine such a strategy now. We will go on an excursion to the Grünfeld Indian Defence and observe two veterans at work who have fought each other in many competitive battles.

Game 4
Loek van Wely 2676
Gata Kamsky 2726
Dagomys 2008 (3)



White to move

We are entering a tabiya in the Grünfeld Defence. Black has just contested the centre further with 12...e5. What are the typical plans for both sides in this position? It depends on how the situation in the centre is clarified. White has three options: he can take on c5, close the centre with d4-d5, or maintain the tension by playing a different move. In cases where White takes on c5, Black often gambits a pawn and plays for activity on the queenside. If White pushes in the centre, Black usually manoeuvres the knight to d6 via b7 and will create counterplay with ...f7-f5. The critical situation arises if White maintains the tension. Usually, this implies a temporary sacrifice of the pawn on d4, which leads to highly complex positions.

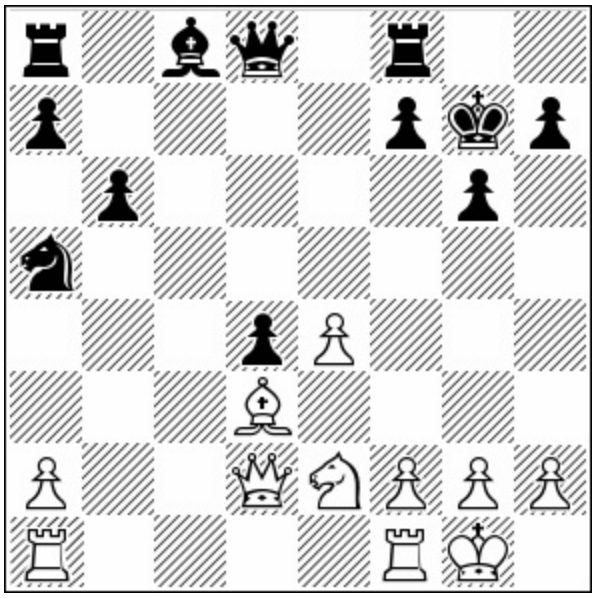
13.d5?

Closing the centre is premature. It gives Black a straightforward game plan, while it is unclear how White should proceed.

A) 13.dxc5 isn't that challenging either. After 13...Be6 14.Rfd1 Qc7 15.cxb6 axb6, Black obtains good compensation for the pawn. He will have strong play down the a- and c-files, and the knight has access to an excellent square on c4. Black went on to win a smooth game in Ni Hua-Navara, Dagomys

2008;

B) 13.Bh6 is the main line. White gambits the pawn on d4 to create an attack on the kingside: 13...cxd4 14.Bxg7 Kxg7 15.cxd4 exd4.



analysis diagram

Here, we arrive at a crossroads.

B1) 16.Rac1 occurred in Game 1 of the World Championship Match between Topalov and Anand, Sofia 2010, in which the Bulgarian managed to score a brilliant victory;

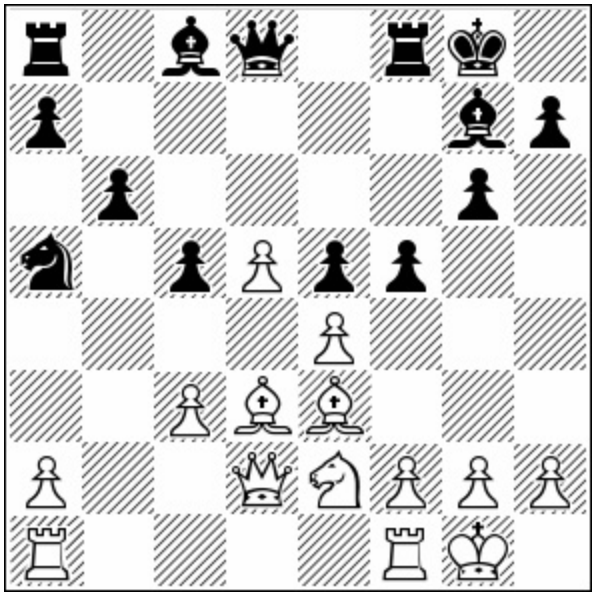
B2) 16.f4 led to a complicated draw in Nakamura-Caruana, Wijk aan Zee 2012.

C) 13.Bg5 is a sophisticated alternative. After 13...Qd7 14.Bh6, White intends to follow the aforementioned variation under favourable circumstances. In the alternative avenues B1, B2 and C, White should have reasonable hopes to play for an advantage.

13.d5? f5!

13...Nb7?!, aiming for a blockade with ...Nd6, is natural, but it hands over the initiative to White: 14.f4!. Now, it is White who strikes first. 14...Nd6

15.Ng3 exf4 16.Bxf4 Re8. Here, White has multiple ideas, such as a2-a4, Rae1 or Rf3. White has a significant advantage.

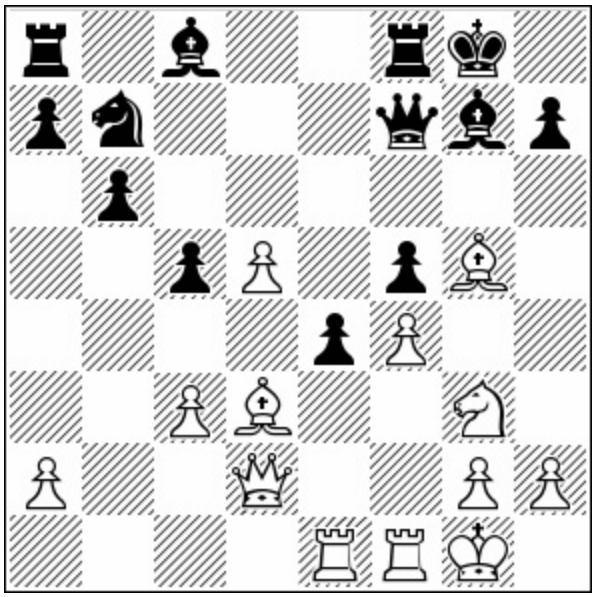


After the centre is closed, all play usually takes place on the flanks. So Kamsky immediately starts to take command of the kingside.

14.Bg5 Qe8 15.f3

A bad sign already. Van Wely accepts that he must concede the initiative on the queenside to Black. Anyhow, there were no good alternatives. We can briefly investigate 15.exf5?!:

A) 15...gxf5? was played in all three games that reached this position, but after 16.Ng3 it is suddenly White who is dominating the board. He has clear plans with Rae1 followed by f2-f4, or he can advance in the centre with d5-d6. For instance, 16...Nb7 17.Rae1 Qf7 18.f4 e4



analysis diagram

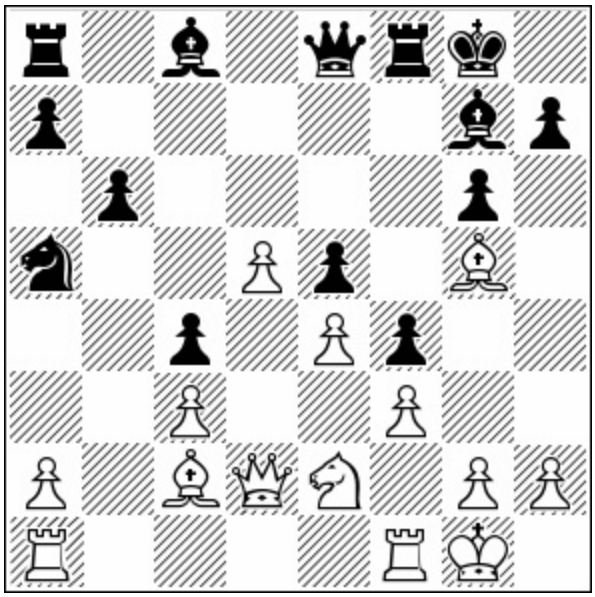
19.Bxe4!! fxe4 20.f5!. Fascinating stuff. Apparently, White's initiative is so strong that he can afford to sacrifice a piece. 20...Be5 21.Rxe4 Bxg3 22.hxg3 Nd6 23.Re6!. The stakes are increased to a whole rook. 23...Bxe6 24.dxe6 Qg7 25.f6. The pawns are rolling, and in the previous chapter we could already see how that can have major consequences. 25...Qg6 26.e7. Black is now forced to give up the rook on f8, leaving White with a totally winning position;

B) Instead, Black should play the strong novelty 15...e4!. This intermediate move allows Black to develop an initiative: 16.Bc2 Nc4 17.Qc1 Bxf5, and Black has the upper hand.

15...c4!?

An interesting choice by the American grandmaster. He tries to fix the queenside so all attention can be focused on the kingside. What Black wants to avoid is that White can develop play of his own with c3-c4 and an eventual a4-a5.

16.Bc2 f4



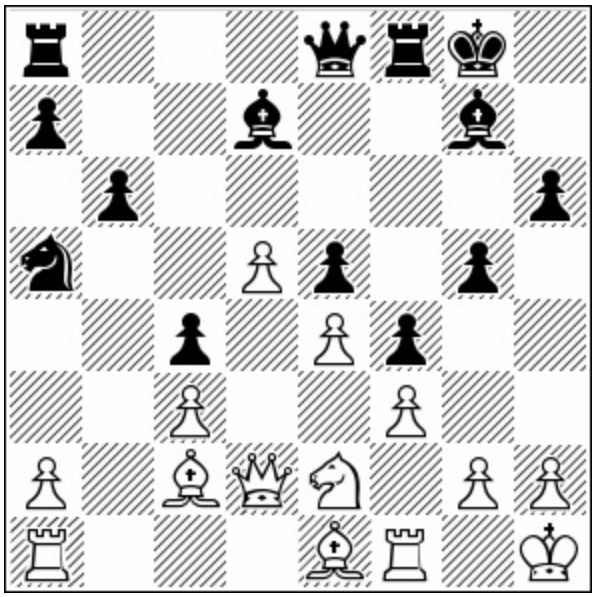
17.Kh1?

Van Wely misses his chance to do something active and now he will be forced into passivity for the remainder of the game. There were two interesting alternatives:

A) 17.d6 allows White to create some play of his own: 17...Rf7 18.g3 fxg3 19.hxg3 Nb7 20.f4 Bh3 21.Qd5 Qe6 22.Qxe6 Bxe6 23.Rad1. Chances should be equal in this endgame;

B) 17.g3!?. The start of a remarkable concept. 17...h6 18.Bxf4 exf4 19.gxf4. A profoundly complicated position arises. In return for the piece, White has a large mobile pawn centre. These positions are extremely hard to evaluate. In any case, White's chances in this variation should be considerably higher than those he gets in the game.

17...h6! 18.Bh4 g5 19.Be1 Bd7



Black has now solidified his position on both the queenside and the kingside. Furthermore, White's advance d5-d6 will no longer create any problems. Therefore, White is entirely without counterplay. On the other hand, Black still has many ways to improve his position.

20.g3 Qh5 21.Ng1 Rf7 22.Qg2 Kh8?!

Bringing the knight back in the game with 22...Nb7 was better.

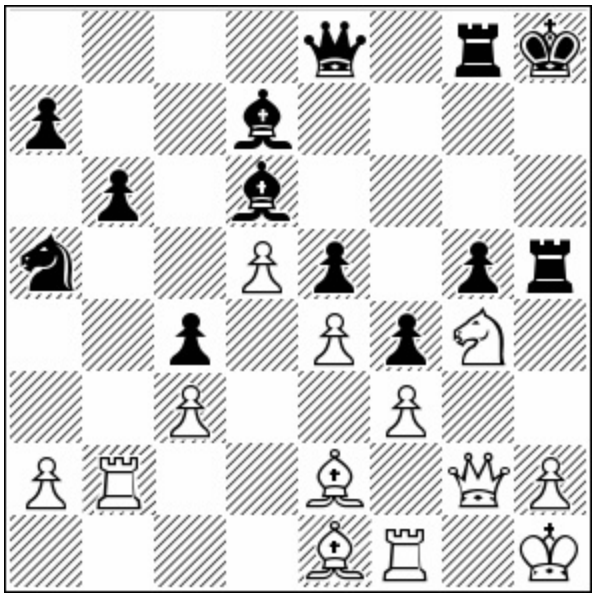
23.Bd1?

Black's previous move was a bit inaccurate, which gave White a final opportunity to do something active. 23.h4! fxg3 24.Bxg3 Raf8 25.Qh2 Nb7 26.hxg5 Qxh2+ 27.Kxh2 hxg5. Black still enjoys a good position due to White's backward pawn on f3, but at least White is fighting here.

23...Rg8 24.Rb1 Bf8 25.Be2 Bc5 26.Bf2 Bd6 27.Rb2

Van Wely keeps playing the waiting game, but Kamsky continues to find ways to improve his position.

27...Rf6 28.Be1 Qe8 29.Nh3 Rfg6 30.Nf2 h5 31.g4 Rh6 32.gxh5 Rxh5 33.Ng4



33...Kg7!

Of course! Black is ready for an assault on the h-file.

34.Bd1

The flamboyant Dutchman must not have enjoyed this situation. His American contemporary is holding all the trumps.

34...Rgh8 35.Rff2 Rh3 36.Qf1 Bxg4 37.fxg4 Qg6 38.Bf3 Bc5 39.Rfe2 Nb7 40.Qg2 Nd6

Finally, Black has set up the renowned blockade.

41.a4 Qh7 42.Qf1 Kf6

Kamsky is playing with his prey. 42...Nxe4! was winning on the spot: 43.Bxe4 Rxh2+ 44.Rxh2 Qxe4+ 45.Rbg2 Rxh2+! (a neat mating idea) 46.Kxh2 Qh7+ 47.Bh4 Qxh4#.

43.Qg2 Qd7 44.Ra2 R8h6 45.Qf1 Qh7 46.Qg2 Rxf3 47.Qxf3 Rh3 48.Qg2 Ke7

Van Wely had seen enough, as the threat of ...f4-f3 is unstoppable.

0-1

When we think of brutal chess games, the games that first come to mind involve heavy tactics. But games where one side is totally devoid of counterplay are even more brutal, in my opinion. These situations occur regularly in positions with a closed pawn centre. The previous game showcased Kamsky slowly seizing control. By locking down all play on the queenside, Kamsky was able to fully shift the attention to the kingside, and this was precisely where he had the upper hand. Van Wely could only play a waiting game while Kamsky kept improving his position. When the time was right, he opened the kingside and launched a decisive attack. In this game, with the other part of the board all locked, all play revolved around the kingside.

A similar strategy occurs when a player tries to compete for both flanks. I was a bit hesitant to include the following game, because the players are two machines. Still, Jorden van Foreest convinced me to incorporate it anyway because the game is a strategic masterpiece. It really showcases how much headway computers have made in closed positions. A couple of years ago computers regularly made really foolish mistakes in closed positions such as the King's Indian. For instance, machines would regularly lock the pawn structure on their strong side. Nowadays, the play of computers is close to perfection in almost any position. And who's to say that we cannot learn anything from near-perfect chess?

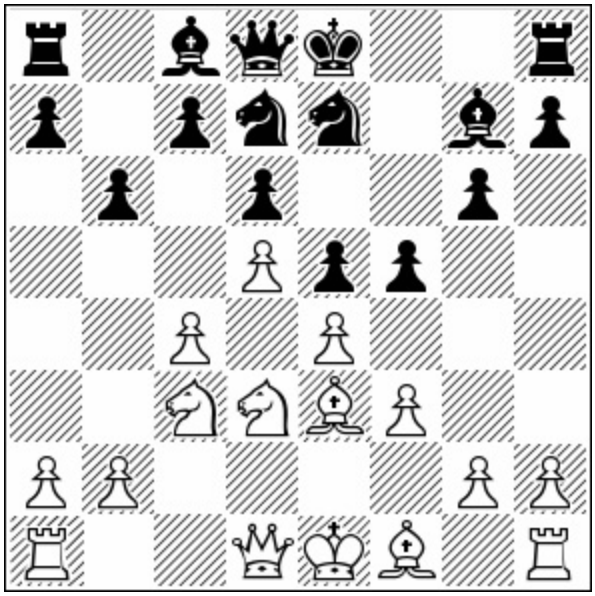
Game 5 King's Fianchetto
Stockfish dev15_20220302 3612
ScorpioNN 3.0.15.5 3514
TCEC Season 2022 (55)

1.d4 g6 2.c4 Bg7 3.Nc3 d6 4.e4 Nc6

In computer tournaments, the game usually starts with a predetermined

opening and not from the starting position. This increases the variety of the games and raises the chances that a game ends in a decisive result. From an objective point of view, openings that concede the centre early on have a questionable reputation. Nevertheless, forcing the engines to play such openings leads to very interesting games.

5.Be3 e5 6.Nge2 Nf6 7.d5 Ne7 8.f3 Nd7 9.Nc1 f5 10.Nd3 b6



White to move
(back to the exercises)

The opening has clearly turned out advantageous for White. White has more space and well-positioned minor pieces. Stockfish now shows excellent understanding of the position.

11.g4!

Nowadays, new strategies of play against King's Indian style set-ups been have identified. Since Black's counterplay usually revolves around ...f7-f5, the white king is better off in the centre or on the queenside. White likes to delay castling to avoid a potential kingside attack. Instead of focusing fully on a queenside attack, White wants to compete on all fronts – the eleventh

move is a clear sign that he isn't forfeiting the kingside for free.

11...Nf6 12.Rg1 f4 13.Bf2 g5 14.h4 gxh4

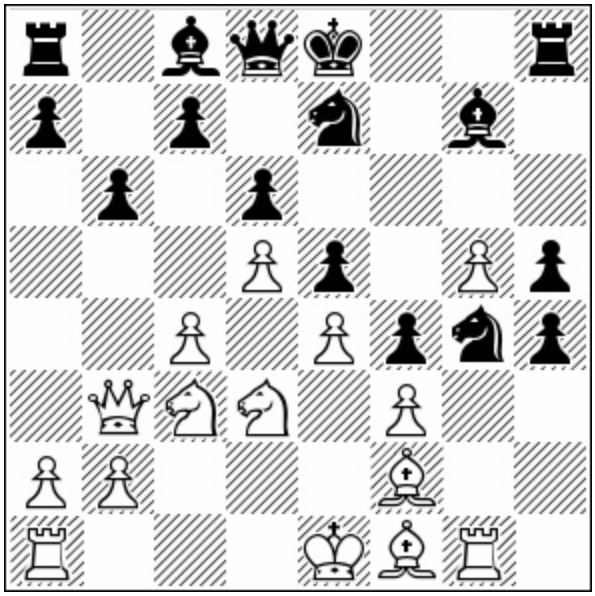
Black is strategically obliged to make this capture, as otherwise White would completely control the tension on the kingside.

15.Qb3 h5!

This well-timed advance allows Black to regain the initiative on the kingside.

16.gxh5

16.g5?! looks like a clever way to control the queenside, but Black has a nasty reply in store: 16...Ng4!



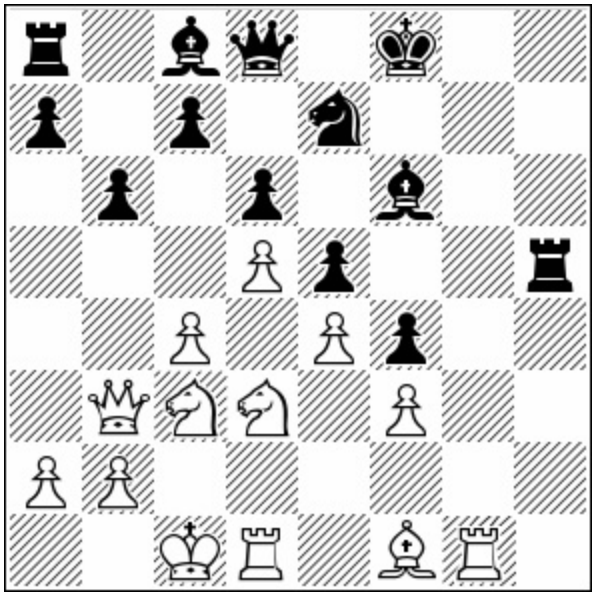
analysis diagram

17.Bxh4 (17.fxg4? hxg4, and at the price of a piece, Black starts a deadly avalanche. The three connected past pawns are unstoppable) 17...Ne3. Black cannot be worse with such a strong knight.

16...Kf8

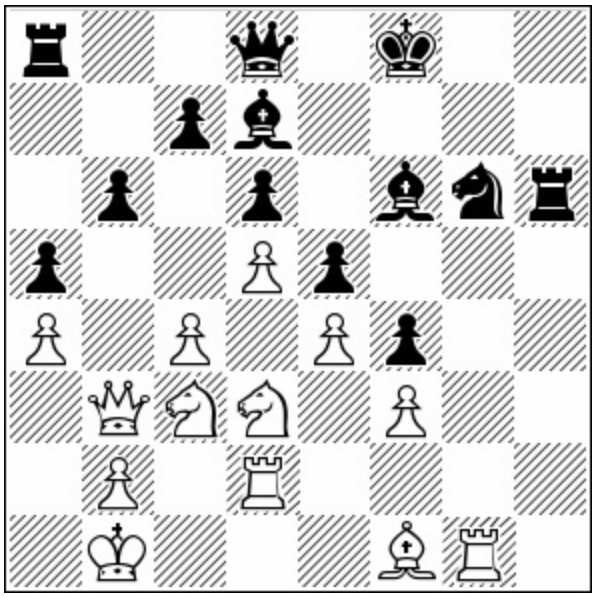
Very interesting. In closed positions, guidelines about castling go out the window.

17.Bxh4 Rxh5 18.Bxf6 Bxf6 19.0-0-0!



Both sides position their king on their strong side. How should we evaluate the current situation? White has a space advantage on the queenside, while Black's forward pawn on f4 offers him a space advantage on the kingside. In the white camp, it is mainly the pawn on f3 that is vulnerable, but it turns out that this pawn is difficult to attack. So, Black's problem is that his advantage on the kingside is unlikely to lead to anything promising. This also seems to apply to White's advantage on the queenside. For the moment, the black queenside is well-defended and a pawn storm on the queenside would expose the white king. Nevertheless, Stockfish still correctly assessed that its initiative on the queenside has more potential.

19...Rh6 20.Kb1 Bd7 21.a4 a5 22.Rd2 Ng6



White to move
(back to the exercises)

Question: We are about to reach the crucial moment in this game. In the introduction, I discussed how computers used to misplay closed positions in the past. Here, a similar thing seems to happen. Black appears to have a perfect blockade on the dark squares. Any further advance of the pawns merely seems to invite exchanges and these exchanges would expose the white king. What does Stockfish have in mind?*

> * What is a 'mind'? Do computers even have a 'mind'? Can Stockfish 'think'? The world is so mysterious. Contemplating such questions is the result of studying too much philosophy.

23.c5!!

I hope you haven't fallen off your seat. What on earth could be the point of this move? Let's see.

23...bxc5

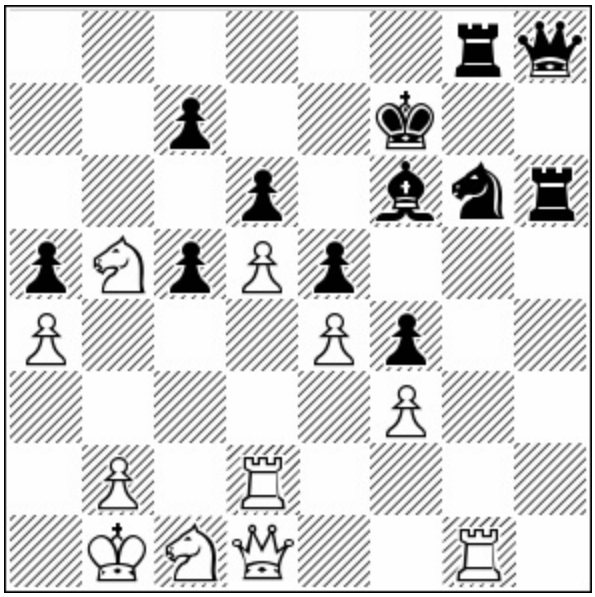
After the natural capture, the black pawn on c5 is well-defended, so White can't expect to recover his investment anytime soon. Furthermore, Black's

control over the dark squares has been amplified. However, as it turns out, it is not the dark squares that White is after, but the light squares. The pawn on c4 needed to go so the light-squared bishop can start participating.

24.Nc1!

The point is indeed starting to become clearer. Now the knight is moving out of the way in preparation of Bb5.

24...Kf7 25.Qd1 Qh8 26.Bb5 Bxb5 27.Nxb5 Rg8



The light-squared bishops have been exchanged, which significantly reduces Black's control over the light squares. Note how this exchange was extremely desirable for White from a strategic point of view. Almost all the white pawns are on light squares, while all the black pawns are fixed on dark squares. This heavily devalues the remaining black bishop. White's light-square dominance and superior minor pieces massively outweigh the pawn deficit.

28.Rdg2!

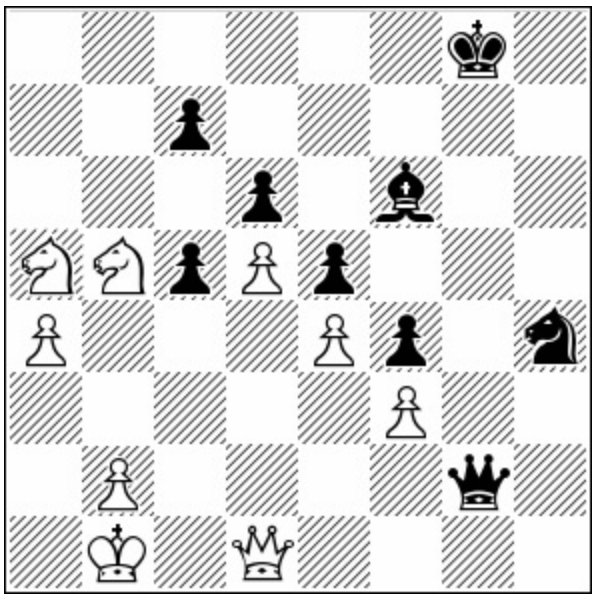
White is temporarily shifting his forces to the kingside, but this is mainly a distraction. The sacrifice on c5 left the black a-pawn vulnerable. Once it is

gone, White will get a powerful passed pawn on the a-file.

28...Rh2 29.Rxh2 Qxh2 30.Nb3 Nh4

If Black wants to preserve a pair of rooks with a move like 30...Rc8, the white rook can assist with the defence of f3, which leaves Black without any counterplay.

31.Rxg8 Kxg8 32.Nxa5 Qg2



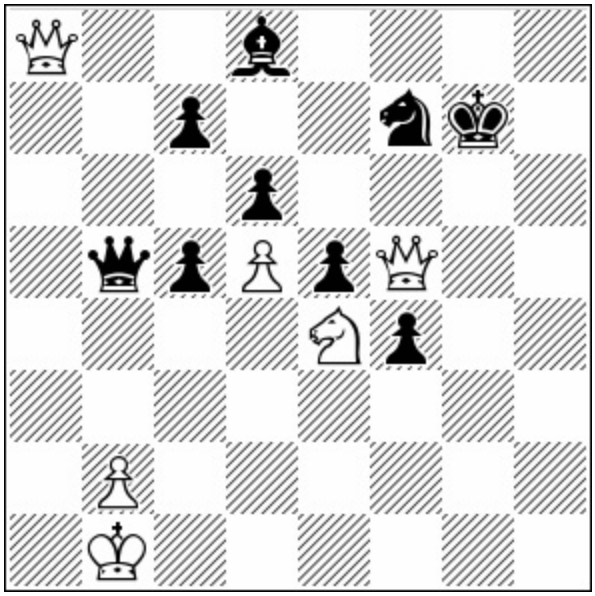
After all the exchanges, Black is still dominating on the kingside. Now, the pawn on f3 is also dropping, which leaves Black with a strong passed pawn on the f-file. However, with the disappearance of the rooks, Black will have a hard time stopping White's a-pawn. We are entering a race, and Stockfish has accurately calculated that its passed pawn will arrive first.

33.Nb3! Nxf3 34.a5 Ng5

34...Nd4 35.N5xd4 cxd4 36.Nd2.The white knight and queen are a fantastic tandem. Together they restrain the black pawns and protect the white king. 36...d3 37.a6 Qf2 38.Nf3 d2 (38...Qe3 39.Qg1+) 39.Nxd2 Qd4 40.Qb3! Kg7 41.Qc3 Qg1+ 42.Qc1 Qa7 43.Qc6. White's winning process is slow, but eventually the a-pawn cannot be stopped. Black's problem is that it's

essentially playing down a minor piece.

35.a6 Qxe4+ 36.Qc2 Qe1+ 37.Ka2 Qb4 38.Qg6+ Kf8 39.a7 Qa4+ 40.Kb1 Bd8 41.Qc2 Qa6 42.Qf5+ Nf7 43.Nd2 Kg7 44.Ne4 Qxb5 45.a8=Q

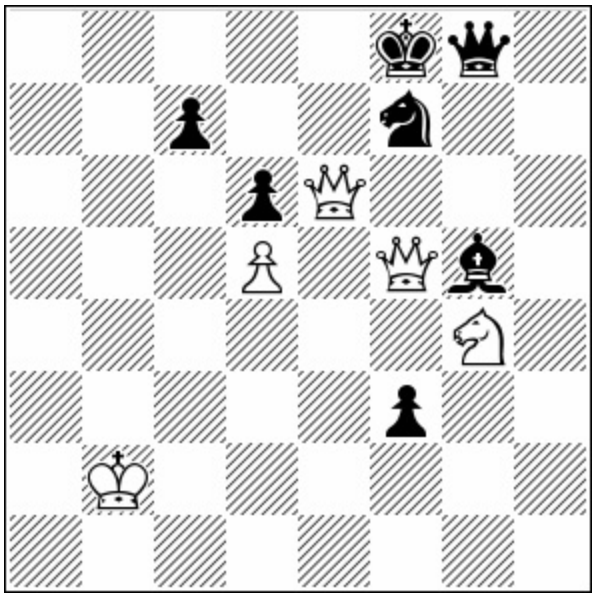


A fascinating position arises with no less than three queens on the board. Black still has quite a lot of material for White's second queen, but there is no perpetual check. Therefore, the white queens will ultimately start coordinating and launch a decisive attack.

45...Qd3+ 46.Kc1 Qc4+ 47.Nc3 Qf1+ 48.Kc2 f3 49.Qa4 c4 50.Qad7 Be7 51.Qg4+ Kf8 52.Qc8+ Bd8 53.Qcf5

The white queens finally achieve perfect coordination, which means that the black pawns start dropping. The game is over.

53...e4 54.Qgf4 Qg2+ 55.Kc1 Qg1+ 56.Nd1 Qg7 57.Q4xe4 Qg5+ 58.Kb1 Qg2 59.Qee6 Qg8 60.Nf2 c3 61.Ng4 cxb2 62.Kxb2 Bg5



63.Nh6 Bxh6 64.Qff6 Qg2+ 65.Kb3 Qb2+!?

The perfect example of a spite check! Maybe machines are human after all...*

> * The British scientist Alan Turing devised the Turing test as a method of establishing whether computers can exhibit humanlike intelligence. Nowadays, moderators of chess websites are working on 'reverse Turing tests'. They must develop software that can establish whether a human is playing like a machine to combat cheating!

66.Kxb2 Bc1+ 67.Kxc1 Kg8 68.Qexf7# 1-0

An enthralling concept by Stockfish. The move 23.c5!! is just so captivating. Extraordinary imagination is needed to even consider such an idea. White's only path forward appears to be on the dark squares, but the machine completely forfeits the dark squares. Instead, it contests the light squares at the cost of a pawn. Eventually, the black a-pawn was lost, and its White counterpart promoted. Outstanding foresight by the machine.

The famous evolutionary biologist Richard Dawkins once remarked: 'Personally, I rather look forward to a computer program winning the World Chess Championship. Humanity needs a lesson in humility.' The times that

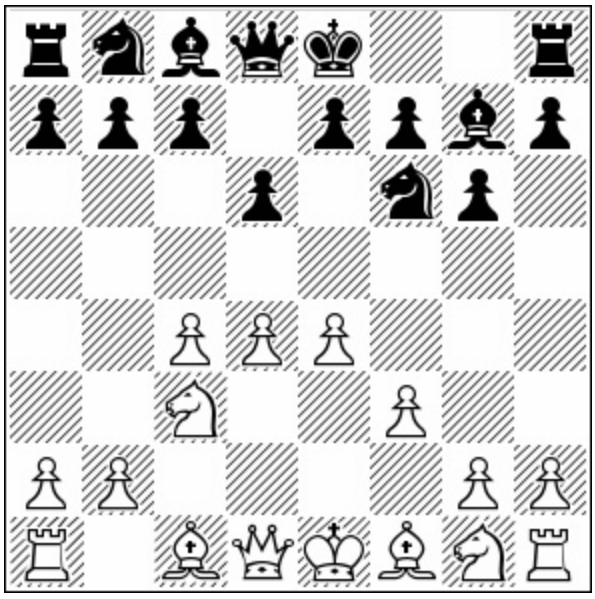
humans were able to compete with computers have long gone, but the above game showcases that computers now have our number in any position.

Exploding the centre

There is one strategy we have yet to discuss: exploding the centre. A closed centre often comes with a space advantage for one side. Naturally, one side's pawns will be further advanced. Therefore, it can be favourable for the defending side to destroy the centre. Often, this strategy is unrealistic, as a locked pawn centre is generally well supported. For instance, a potential break for Black in the King's Indian is ...c7-c6, targeting White's advanced pawn on d5. Black's problem is that ...cxd5 is often simply answered by cxd5, which leaves White's centre intact. The exchange only helps White, as Black will be left with a weakness on d6. Remarkably, White generally tries to enforce the exchange by playing c4-c5xd6, which is in fact the same transaction, so he doesn't mind some assistance. We will nonetheless turn to an example in which Black succeeds in destroying the centre.

Game 6
Jan Timman 2660
Garry Kasparov 2760
Reykjavik 1988 (14)

1.d4 Nf6 2.c4 g6 3.Nc3 Bg7 4.e4 d6 5.f3



The Sämisch is one of those variations in which White stays flexible. Ideally, White wants to lock the centre after ...e7-e5 with d4-d5, castle queenside, and attack on the kingside.

5...0-0 6.Be3 e5

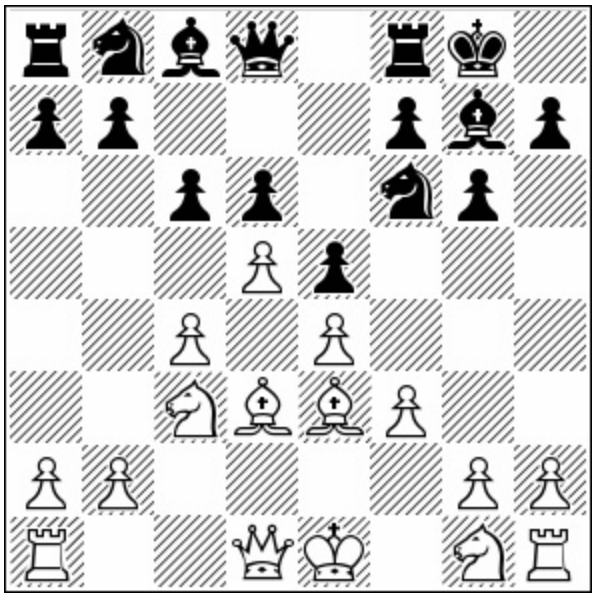
Kasparov stays in King's Indian territory. Continuing in Benoni style with 6...c5! has the best reputation. Since White has already committed to f2-f3, he no longer has access to the scarier systems we saw in Chapter 1. Furthermore, 7.dxc5 dxc5 8.Qxd8 Rxd8 9.Bxc5 Nc6 10.Nd5 Nd7! offers Black sufficient compensation.

7.d5 c6

There we have it, the pawn break that we were discussing in the introduction to this game.

8.Bd3

The popular 8.Qd2! is more flexible because it denies Black's active option from the game: 8...b5? 9.cxb5 cxd5 10.Nxd5, with a winning position. In this case, the light-squared bishop is not blocking the line of sight of the white queen.



Black to move
(back to the exercises)

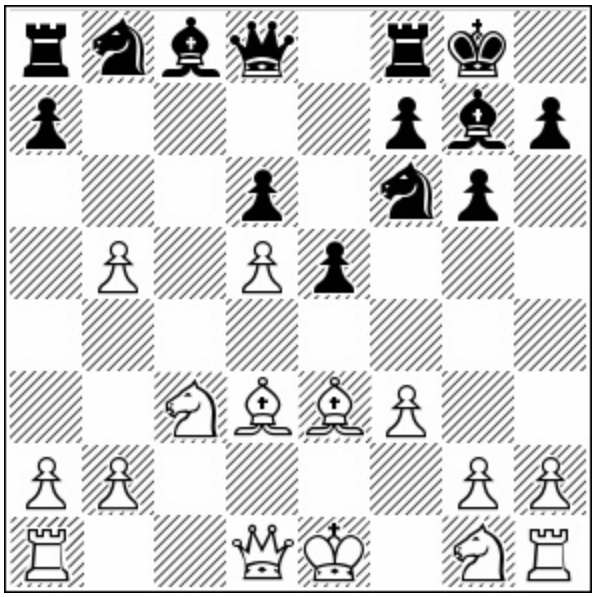
8...b5!

The white bishop is a little clumsy on d3, and Kasparov immediately takes advantage.

9.cxb5 cxd5!

The point is becoming clear. The b-pawn acted as a decoy, so White can no longer answer with the strategically desirable cxd5.

10.exd5



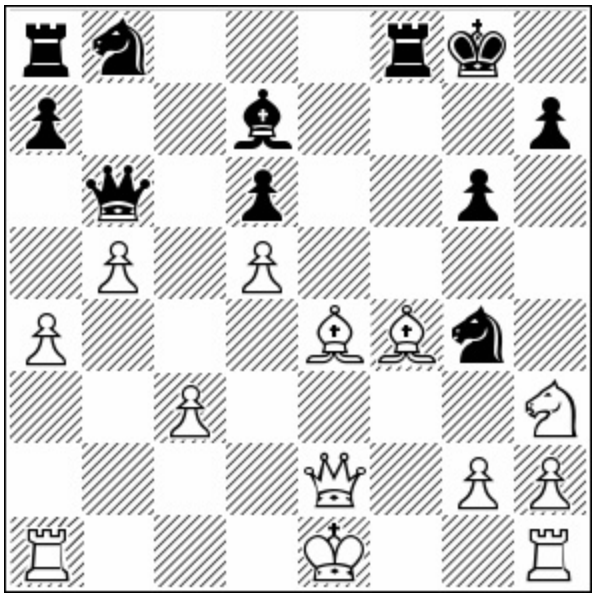
10...e4!?

A creative concept. Black sacrifices a second pawn, aiming for total dark-square domination. 10...Nbd7 was a less adventurous, but solid alternative: 11.Nge2 Nb6 12.Bg5 Bb7 13.Qb3 Rc8. The d5-pawn will be hard to defend, so Black should have sufficient counterplay.

11.Nxe4

This capture is suboptimal, because it allows Black to finish the destruction of the centre.

A) Another possibility was 11.fxe4 Ng4 12.Bf4 Qb6. Black continues his fight for the dark squares. Still, White is currently up two pawns, so Black needs some acrobatics if he wants to achieve equality. Let's look at one fascinating variation: 13.Qe2 Bd7 14.a4 f5 15.Nh3 Bxc3+! (such a capture might hurt your eyes, but here it is justified. The knight was fulfilling excellent defensive duties) 16.bxc3 fxe4 17.Bxe4



analysis diagram

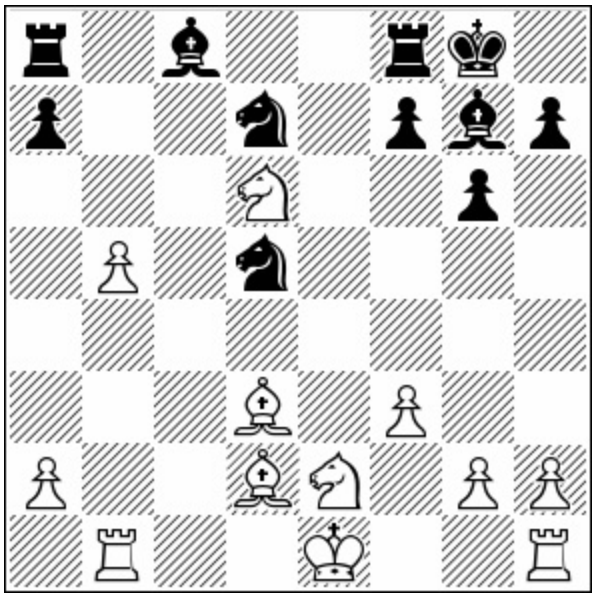
17...Na6!. Black invests a whole piece to speed up his development. 18.bxa6 Rae8. The pin on the e-file guarantees that Black will eventually recover the piece. 19.Rb1 Qc5 20.Bd2 Nf6 21.Nf2 Nxe4 22.Nxe4 Qxd5 23.Rb4 Bc6 24.Bh6 Rf5 25.Rf1 Rxe4 26.Rxe4 Rxf1+ 27.Kxf1 Qxe4 28.Qxe4 Bxe4. The presence of opposite-coloured bishops is an assurance for Black that White's advantage is insufficient for victory;

B) The best move is 11.Bxe4! Nxe4 12.fxe4 Qh4+ 13.Kd2!? (a brave king) 13...a6 14.Nf3 Qg4 15.Nd4 Qxg2+ 16.Qe2 Qxe2+ 17.Kxe2 axb5 18.Ndxb5 Ba6 19.a4 Nd7 20.Kd2 f5 21.exf5 Rxf5. White retains some advantage in this complicated endgame.

11...Nxd5

The mighty centre has disappeared.

12.Bg5 Qa5+ 13.Qd2 Qxd2+ 14.Bxd2 Bxb2 15.Rb1 Bg7 16.Ne2 Nd7 17.Nxd6



A new phase arises. Timman maintains an extra pawn, but Kasparov's lead in development and active pieces should be sufficient compensation. It's anyone's game!

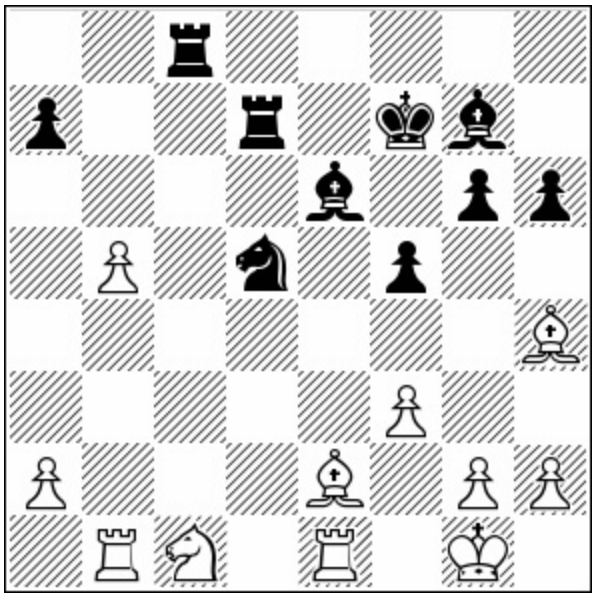
17...Nc5 18.Bc2 Be6 19.Ne4 Rac8 20.0-0 Nxe4 21.Bxe4 f5!

Vintage Kasparov; he knows when it's time to grab the initiative.

22.Bd3 Nb6 23.Nc1?!

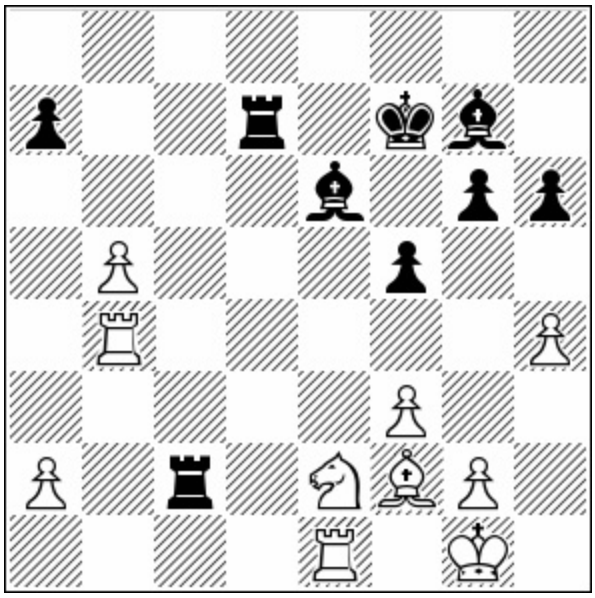
Black was threatening to win a piece on the d-file, but this is too passive. Maybe Timman was still ambitious? Returning a pawn with 23.Be3 is correct. 23...Bxa2 24.Rbc1 Rxc1 25.Nxc1 Bf7 26.Rd1. As White has caught up in development, the game should end in a draw.

23...Rfd8 24.Bg5 Rd7 25.Re1 Kf7 26.Be2 h6 27.Bh4 Nd5



28.Bd1?

This error loses the game on the spot. Admittedly, White's position wasn't easy to play, but he could have put up a lot of resistance with a careful move like 28.Bf2, for example 28...Nc3 29.Rb4 Nxe2+ 30.Nxe2 Rc2 31.h4!.



analysis diagram

Activating the h-pawn limits Black's options for an expansion on the kingside. 31...Rxa2 (the importance of h2-h4 becomes clear after 31...Bc4

32.Nf4 g5 33.hxg5 hxg5 34.Nh3. The knight has access to h3 and the pawn on g5 is hanging. Therefore, White wins valuable time that enables him to save the game: 34...g4 35.fxg4 fxg4 36.Nf4, and White should hold) 32.b6! axb6 33.Bxb6. Black is slightly better since he possesses the bishop pair, but with all pawns standing on one flank White should be alright.

28...Bd4+! 29.Bf2

Timman has no choice.

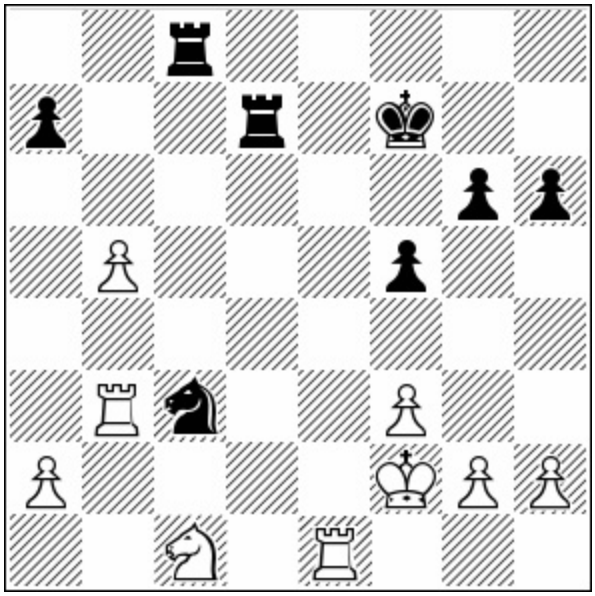
A) 29.Kf1 Ne3+ is immediately decisive;

B) 29.Kh1 Nc3 30.Bb3 Bxb3 31.Rxb3 g5! 32.Bg3 f4 traps the bishop.

29...Bxf2+ 30.Kxf2 Nc3 31.Bb3

I guess that Timman had calculated until this point and concluded that White is fine, since 31...Nxb1 runs into 32.Bxe6+. Kasparov has calculated slightly more deeply...

31...Bxb3 32.Rxb3



32...Nd1+!

Knight moves to the first or last rank of the board can be tough to spot, especially several moves in advance. The white rook and knight are now disconnected. Black wins material and Kasparov had no problems converting.

33.Rxd1 Rxd1 34.Nd3 Rd2+ 35.Ke3 Rxg2 36.Ra3 Re8+ 37.Kd4 Re7 38.Ne5+ Kf6 39.Nc6 Rd7+ 40.Kc4 Rc2+ 41.Kb4 Rxh2 42.Ra6 Kg5 43.a4 h5 44.Rxa7 Rxa7 45.Nxa7 h4 0-1

Kasparov distracted the c4-pawn with ...b7-b5, which loosened White's grip in the centre. Kasparov subsequently exploded the centre with dynamic play. The queens went off and Kasparov played the ensuing endgame with great precision.

What are the main takeaways from this chapter? A locked pawn centre can significantly alter the nature of the game. Regularly, the centre defines the dominant territory of either player, with each player generally having a superior flank. Making moves on your weak side is usually only desirable if it significantly slows down your opponent. In ideal circumstances you can lock up your weak side, after which all the focus can be transferred to the superior flank.

In openings like the King's Indian Defence, Black's strategy is fundamentally risky, as White's farther advanced centre grants him a space advantage. Black is ultimately willing to sacrifice his entire queenside to launch an all-out attack against the white king. Despite the closed nature of the position, Black's strategy leads to highly intense and razor-sharp battles.

The Hidden Laws of a Locked Pawn Centre

• Generally, it is a bad idea to push pawns on your weak side, unless it really slows down your opponent;

• You can burn all your bridges if the prize is the king;

• After neutralizing one side of the board, an advantage on the other flank becomes deadly;

• By putting your king on your strong side, the opposing attack is less

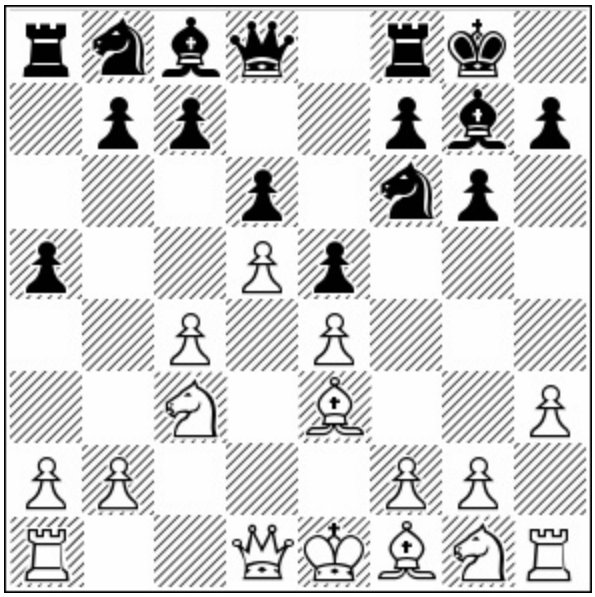
threatening;

• A space advantage can be neutralised by exploding the centre.

Quiz

Show in Text Mode

Exercise 1
Fabiano Caruana 2832
Hikaru Nakamura 2746
London 2018 (1)



White to move

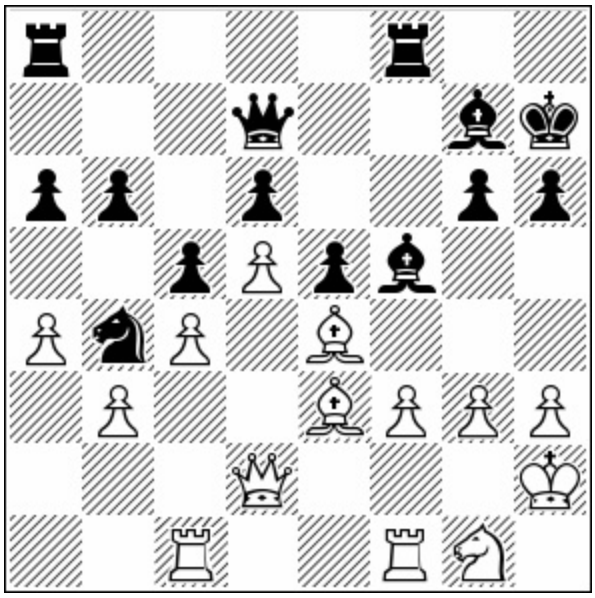
How should White proceed?

Show/Hide Solution

Exercise 1

8.g4! is nowadays considered to be quite promising for White. White keeps his king either in the centre or on the queenside, and he tries to compete for both flanks.

Exercise 2
Dimitri Tyomkin 2516
Boris Chatalbashev 2522
Verona 2000 (6)



Black to move

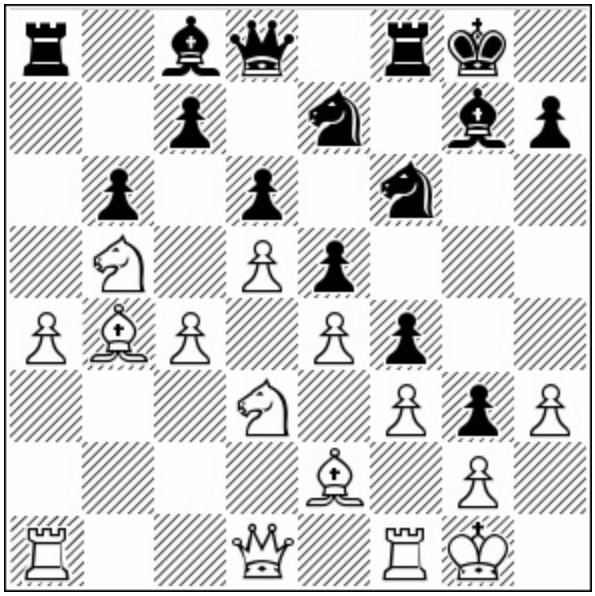
What would you play and how would you assess the position?

Show/Hide Solution

Exercise 2

Black is slightly better after **23...b5!**, seizing the initiative on the queenside and already being in control on the kingside. Now, White should limit the damage with **24.a5!, keeping the position closed with good chances to defend. Instead, White played 24.axb5?**, opening the queenside to Black's advantage: **24...axb5 25.Ra1 bxc4 26.bxc4 Ra4 27.Rfb1 Rfa8 28.Qd1 Bxe4 29.fxe4 Nc2 30.Rxa4 Qxa4**. White falls apart as he cannot defend c4.

Exercise 3
Ruslan Pogorelov 2462
Carlos Matamoros Franco 2514
Dos Hermanas 2003 (3)



Black to move

White tried to close the kingside with **19.h3**. Can Black still make progress?

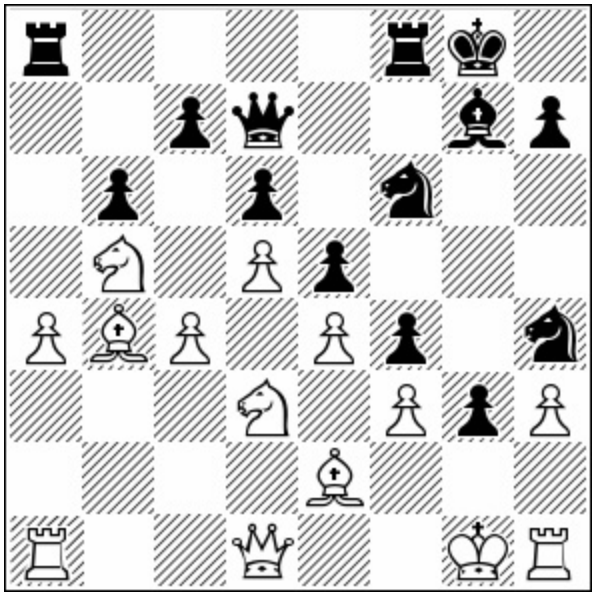
Show/Hide Solution

Exercise 3

Of course he can! Black breaks through with the classic **19...Bxh3! 20.gxh3 Qd7 21.Kg2 Ng6 22.Rh1 Nh4+ 23.Kg1**, leading straight to the next exercise.

Black has an extraordinary alternative winning line: 19...Ng6 20.Re1 Nh4 21.Bf1 Ng4!! 22.hxg4 Nf5!!. The threat of 23...Qh4 forces White to return a piece with 23.Nf2, and Black is winning. Sometimes we should just be thankful to computers for showing us these gems.

Exercise 4
Ruslan Pogorelov 2462
Carlos Matamoros Franco 2514
Dos Hermanas 2003 (3)



Black to move

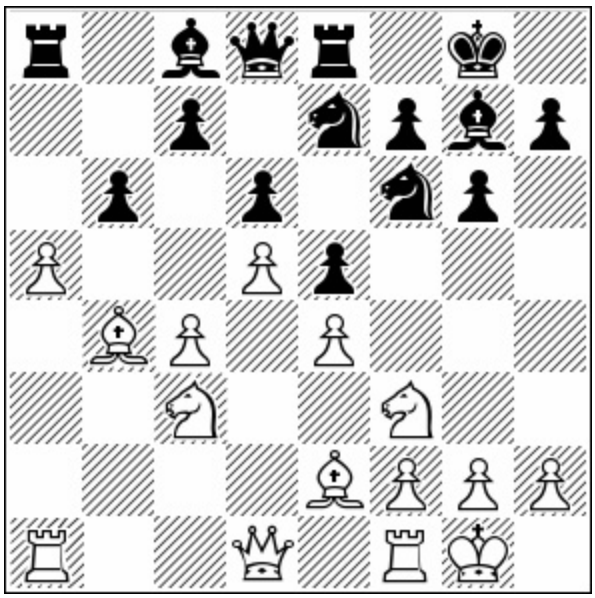
How does Black finish White off?

Show/Hide Solution

Exercise 4

23...Nxe4!. Black increases the stakes to two pieces. There is little coherence in White's camp, and the black pawns will soon start feasting. **24.fxe4 f3 25.Bd2 f2+ 26.Nxf2 Rxf2 27.Rh2 gxh2+ 28.Kxf2 Qxh3 29.Qh1 Rf8+ 30.Ke1 Qg2 31.Bf3 Nxf3+ 0-1**. A great game by Matamoros, winning in typical King's Indian style.

Exercise 5
Alina Kashlinskaya 2426
Kateryna Lagno 2543
Riga Ech-W 2017 (8)



Black to move

White has just continued her conquest on the queenside with **13.a5**. How

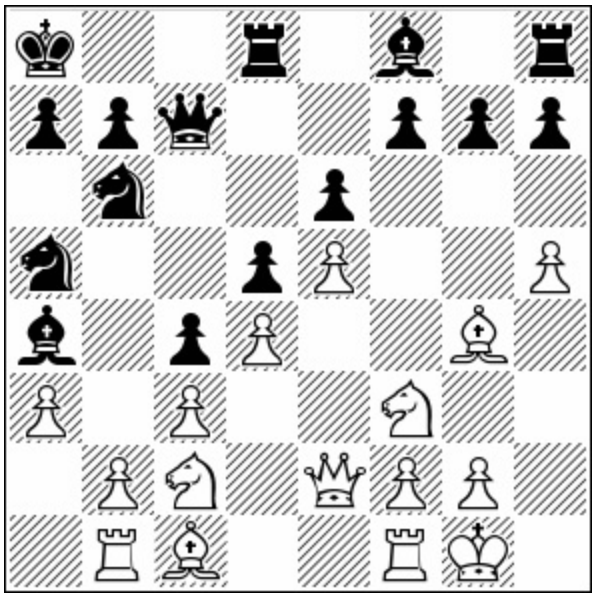
does Black respond?

Show/Hide Solution

Exercise 5

The pawn thrust a4-a5 is thematic. White wants to open the board on the flank where she has the advantage. Unfortunately, 13.a5 is a well-known inaccuracy after Black's tricky move-order. Black responds powerfully with **13...c5!**, which allows her to successfully fight back on the queenside. After **14.dxc6 Nxc6 15.Bxd6 Rxa5 16.Rxa5 Nxa5 17.Bxe5 Qxd1 18.Rxd1**, Black can play **18...Nxe4!, with a completely level endgame. Instead, she went down after 18...Bb7?! 19.Bc7! Nxe4 20.Nxe4 Rxe4 21.Kf1 Nxc4? 22.Rd8+ Bf8 23.Bd3 f6 24.Bxe4**, with a winning material advantage for White.

Exercise 6
Sergei Zhigalko 2656
Julian Radulski 2574
Warsaw 2010 (4)



Black to move

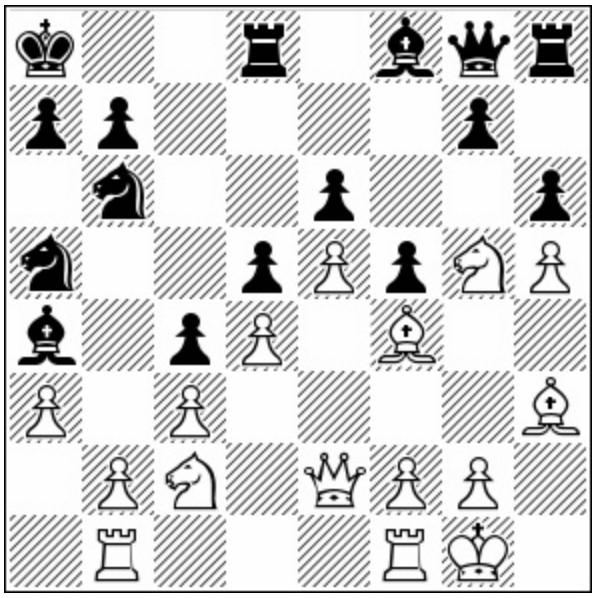
This is my favourite line in the Advance Variation of the French. How should Black proceed?

Show/Hide Solution

Exercise 6

Even though Black is in control on the queenside, he can't make any concrete progress there. Therefore, he must compete for the kingside as well with **17...f5!**. Other moves would allow White to progress on the kingside with a potential f2-f4-f5, putting Black at risk of a squeeze. With ...f7-f5, Radulski takes matters into his own hands.

Exercise 7
Sergei Zhigalko 2656
Julian Radulski 2574
Warsaw 2010 (4)



White to move

A couple moves later they reached this position. Black has just played **20...h6**. How should White respond?

Show/Hide Solution

Exercise 7

Radulski was too optimistic with 20...h6, but his optimism was rewarded! Zhigalko responded way too cautiously with **21.Nf3?**, giving Black the opportunity to seize the initiative on the kingside.

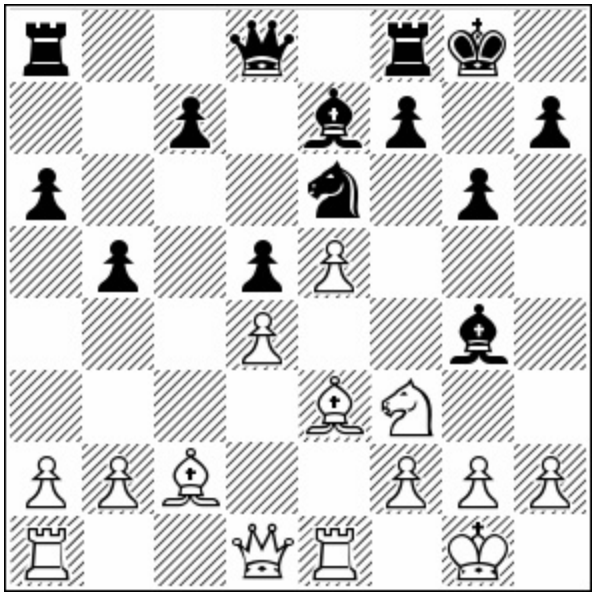
Instead, he should have exploded the centre with 21.Nxe6! Qxe6 22.Ne3 Bd7 23.Bxf5 Qf7 24.Bxd7 Qxd7 25.Bh2, and the pawns can start rolling soon. Black's position will be incredibly hard to defend, and it wouldn't surprise me if White is winning already. We already saw the power of a mobile pawn centre in the previous chapter!

Exercise 8

Arkadij Naiditsch 2581

Viktor Kortchnoi 2626

Zurich 2002 (2)



Black to move

How did Kortchnoi proceed?

Show/Hide Solution

Exercise 8

16...f5! is correct. Kortchnoi already has more potential on the queenside with his pawn majority, and now he also grabs the initiative on the kingside. On top of this, Black has a phenomenal knight that neutralises White's advanced pawn on e5. Note how the en passant capture with **17.exf6 is inadvisable because it would grant Black too much pressure on f3.**

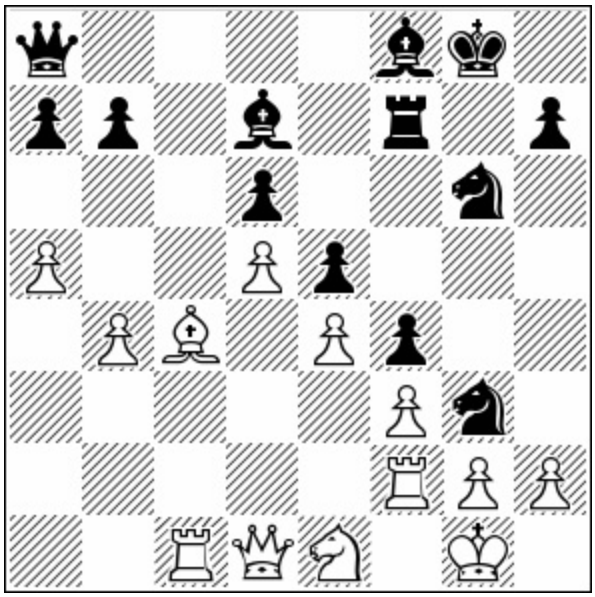
Inserting 16...Bb4, intending to play ...f7-f5 on the next move, also earns you full points.

Exercise 9

Jeroen Piket 2540

Garry Kasparov 2775

Tilburg 1989 (8)



Black to move

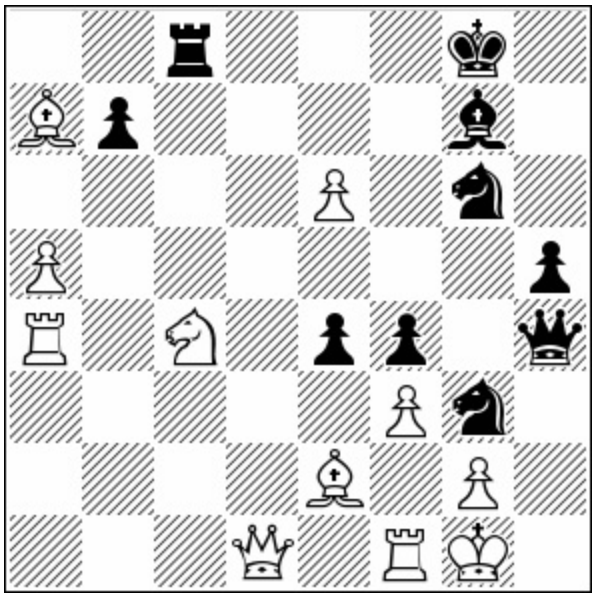
With two pieces for a rook, Black is naturally doing well, but White's space advantage on the queenside still offers potential. How does Kasparov improve his position?

Show/Hide Solution

Exercise 9

A classic. **25...a6!**. The Hidden Laws of Chess dictate against defensive moves like ...a7-a6, but here this move is offensive rather than defensive! **26.Qd3 Qa7**. The point. The queen finds an amazing diagonal. **27.b5 axb5 28.Bxb5 Nh1!! 0-1**. What a beautiful way to finish the game!

Exercise 10
Alexander Beliavsky 2662
Hikaru Nakamura 2710
Amsterdam 2009 (3)



Black to move

The connoisseur may still detect the contours of a King's Indian. This is another Nakamura brilliancy. Black plays and wins.

Show/Hide Solution

Exercise 10

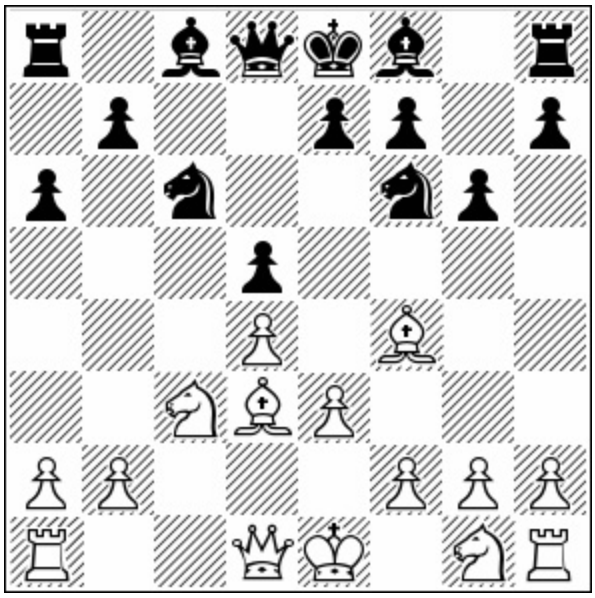
Nakamura found the stunning **28...b5!!**.*

> * 28...Rd8 works as well, but after 29.e7! Qxe7 30.Qc2, you still have to find 30...b5!!.

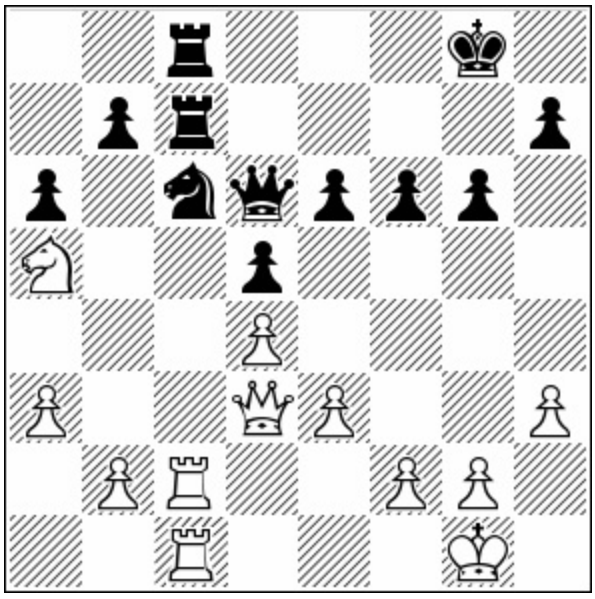
28...b5!!

The point is that the en passant capture 29.axb6 loses immediately to 29...Bd4+!. Beliavsky played 29.Rb4, which obviously costs a piece. He resigned a couple of moves later.

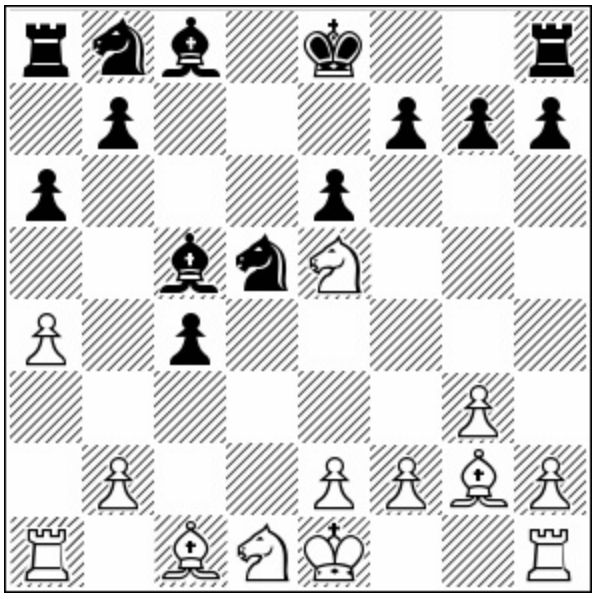
Chapter 8
Preview exercises



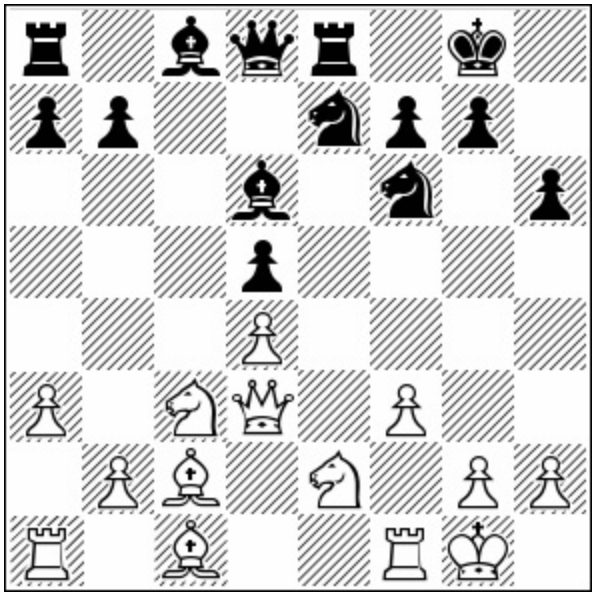
White to move
(go to the solution)



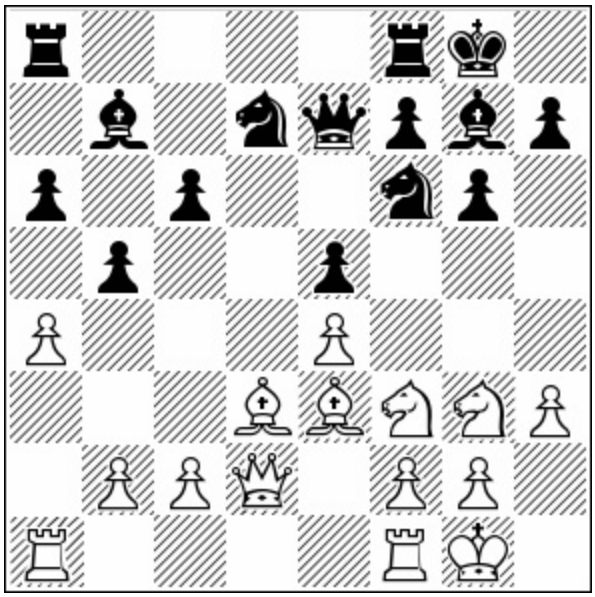
White to move
(go to the solution)



White to move
(go to the solution)



White to move
(go to the solution)



White to move
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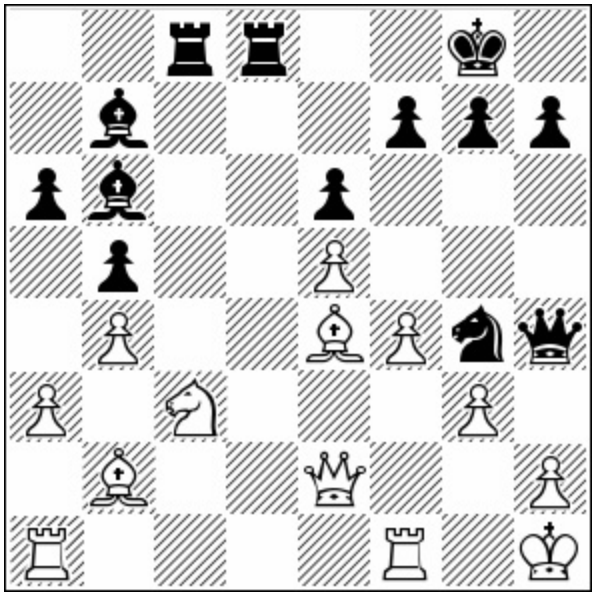


Black to move
(go to the solution)

Chapter 8

Symmetry

Don't confuse symmetry with balance. – Tom Robbins

Symmetry. We can find it anywhere. In mathematics it plays an important role in geometry. We can find it in biology, as many organisms are bilaterally symmetrical. And of course, artists incorporate symmetry in artwork. On the other hand, some features are surprisingly asymmetric. For instance, why is the heart located on the left side of our body?

In chess, symmetry is a delicate issue. Many players must have encountered an opponent at some point who was just copying their moves. Fortunately, this strategy is not so effective. The copycat will run into trouble when the symmetry can no longer be successfully maintained. Therefore, if in this book I talk about 'symmetry', I am referring to a symmetrical pawn structure. Some opening schemes have been developed to generate symmetry. The Petroff Defence is a prime example of a cunning scheme that aims at a quick symmetry by removing both e-pawns.

Symmetry is a delicate issue in chess because positions with a symmetrical pawn structure generally aren't very dynamic. As a lifelong enthusiast of the French Defence, I face opponents from time to time who decide that we should both suffer by capturing on d5.*

> * The French Defence is somehow subject to a lot of hatred, and therefore I have tactically put this confession lose to the end of the book – although the attentive reader could have already garnered this information from Van Foreest's foreword.

The ensuing symmetrical positions are low in dynamics and tend to end in a draw. Personally, I have developed a bit of a distaste for symmetrical positions. But perhaps this is just because I am not very skillful at navigating them...

Imbalance & lead in development

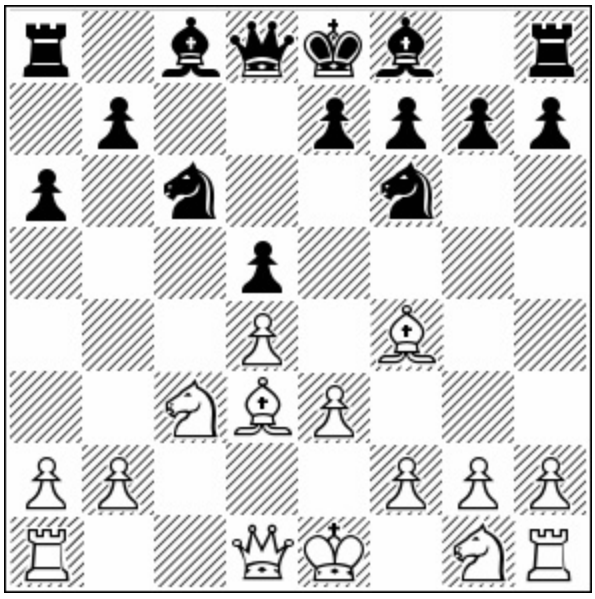
Symmetrical positions often require extreme patience and test your ability to squeeze water out of a stone. In symmetrical positions, technically gifted players tend to thrive more than dynamically gifted players. Are symmetrical positions always dull? This is not necessarily the case. There are two ways to fight for an advantage in symmetrical positions. The first is to create an imbalance. Such imbalances include altering the pawn structure, grabbing the bishop pair, or castling on opposite sides. The second strategy is to capitalise on a lead in development.

Game 1 Slav Defence
Vladimir Kramnik 2797
Levon Aronian 2816
Istanbul Olympiad 2012 (6)

1.d4 d5 2.c4 c6 3.Nc3 Nf6 4.cxd5 cxd5 5.Bf4 Nc6 6.e3 a6

This move appears to be very slow, because it gives White time to get further ahead in development. Yet, it is a very useful move. By controlling square b5, Black stops direct aggression by White with Nb5. Furthermore, ...a7-a6 will be useful later, as it prepares an expansion on the queenside with ...b7-b5. The natural 6...Bf5 would allow White to strike first with 7.Qb3, and the alternative 6...e6 would reduce the scope of the light-squared bishop.

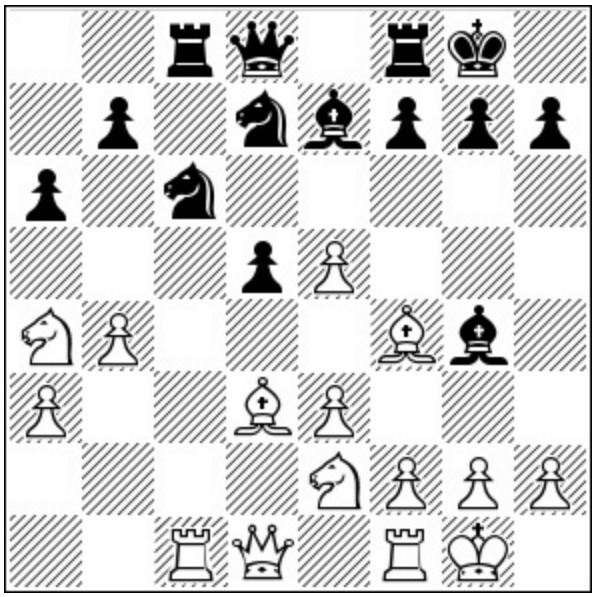
7.Bd3



7...g6?!

Aronian seems to be taken off-guard by Kramnik's timid approach and he improvises with a move of limited popularity. Often, the aim of such deviations is to take the opponent out of his preparation, but this regularly comes at the cost of objective quality. I don't think that the black bishop is well-placed on the long diagonal, as it is merely staring at a well-defended pawn on d4. Contrary to other openings, Black is lacking the dynamic strike ...c7-c5 to loosen the defence of the centre pawn.

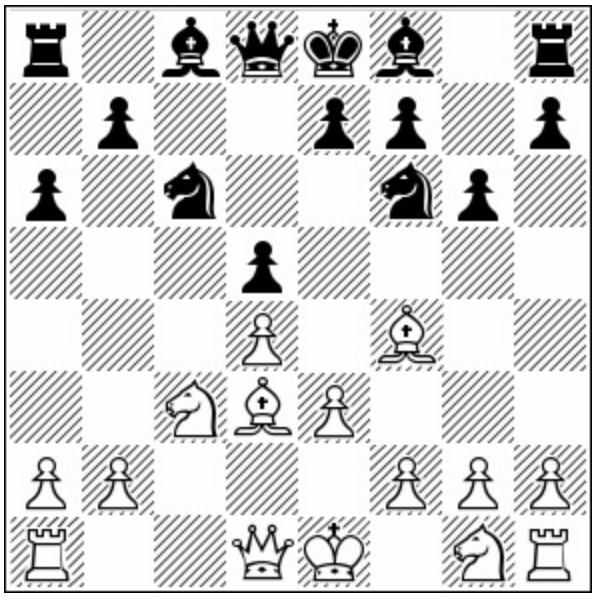
The main move 7...Bg4! seems best. Now, 8.Nge2!? is an attempt to create some imbalance (8.Nf3 e6 9.0-0 Bd6 gives Black easy development and good prospects to reach equality): 8...e6 9.0-0 Be7 10.Rc1 0-0 11.Na4 Nd7!? (a typical manoeuvre in this symmetrical position. The knight moves to the queenside, where most of the action is. The knight move also prepares the liberating ...e6-e5) 12.a3 Rc8 13.b4 e5 14.dxe5



analysis diagram

A) 14...Ndxe5 15.h3!. Black's attempt to liberate himself has left him with an IQP. With h2-h3, White tries to initiate the exchange of multiple minor pieces, which is in accordance with the Hidden Laws that we studied in Chapter 3. Black will have to fight for equality;

B) The odd-looking 14...Ncxe5! seems most critical: 15.Rxc8 Qxc8 16.Bxe5!?. White initiates a forcing sequence, but Black should eventually hold his own. Lots of tactics suddenly emerge. 16...Nxe5 17.Nb6 Qe6 18.Nxd5! Rd8 19.Be4. White has won a pawn through tactical means, but his pieces are now arranged in an awkward constellation. Black starts a forcing sequence of his own that liquidates into a drawn endgame: 19...Nc4 20.Qd3 Rxd5! 21.Qxc4 Bxe2 22.Qxd5 Qxd5 23.Bxd5 Bxf1 24.Kxf1 b6!. In the end, White keeps the extra pawn, but the winning chances are slim with opposite-coloured bishops.



White to move
(back to the exercises)

8.h3!

Very smart! Before developing the knight, White prevents 8...Bg4. In symmetrical positions, both sides often have a ‘good bishop’ and a ‘bad bishop’. To determine which bishop is the good one, you need to look at how the structure is fixed. The better bishop is the one that occupies the colour opposite to your own central pawn. In this case, the structure is fixed on d4/d5. Therefore, White’s good bishop is the one on d3 and the bad bishop is the one on f4. The logic behind this reasoning is that the light-squared bishop is significantly more flexible. The light-squared bishop targets both the queenside and the kingside while it can hardly be harassed. The situation of the dark-squared bishop is more intricate. White has opted to develop the bishop actively outside of the pawn chain. This has two negative aspects. Firstly, the path home has been blockaded, which reduces its flexibility, and secondly it can easily be harassed by the black knight. Kramnik’s move therefore serves two purposes: it defends against ...Nh5 by giving the bishop a retreating square on h2 and it stops ...Bg4. Preventing ...Bg4 is very useful since Black wants to apply the same logic. By bringing the bishop to g4,

Black should develop the bishop actively outside the pawn chain. Black wouldn't mind trading off the bad bishop for a knight.

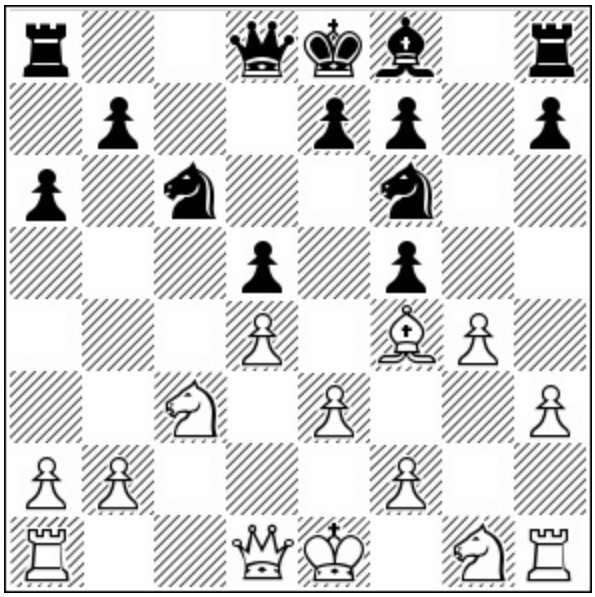
> In general, exchanging your bad bishop for a knight is not a very unfavourable trade, especially if this exchange gains some time.

8...Bf5

Since Black no longer has access to g4, he instead tries to arrange a favourable exchange of bishops. The drawback is that Kramnik can now alter the black pawn structure.

9.Nf3?!

Interestingly, he fails to take advantage: 9.Bxf5! gxf5. Normally, this structure isn't so bad for Black. The pawn chain gives great control over the light squares, while the black pieces can fight for the dark squares. In this case though, White has an immediate method available to challenge Black's set-up: 10.g4!



analysis diagram

A) 10...fxg4?! 11.hxg4 gives White an enormous advantage, as White has

strong pressure along the semi-open h-file and opportunities to gain space with g4-g5;

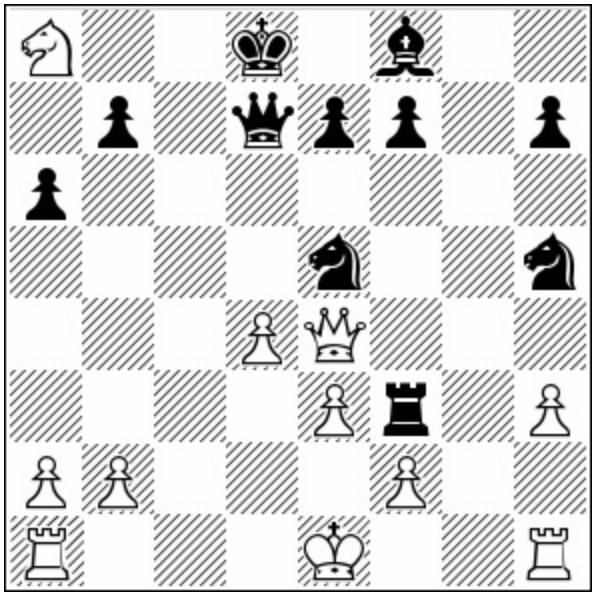
B) 10...e6 11.gxf5 exf5 leaves the black structure in ruins;

C) 10...Qd7 11.Na4!, and Black is simply too vulnerable on the dark squares;

D) 10...Rg8! is the critical move. 11.gxf5 Qd7 12.Qd3 Nh5, and now:

D1) 13.Bh2 Rg5 14.Na4 Qxf5 15.Qxf5 Rxf5 16.Nb6 Ra7 17.Ne2, and Black has regained the pawn, but his pieces are clumsy. White enjoys a nice advantage;

D2) 13.Be5!? is another sophisticated attempt. Its main point is 13...Rg5 14.Nf3 Rxf5 15.Nxd5!. The black queen is overloaded. Still, this isn't the end as Black can also introduce some crazy tactics of his own: 15...Rxf3 16.Nc7+ Kd8 17.Nxa8 Nxe5 18.Qe4.

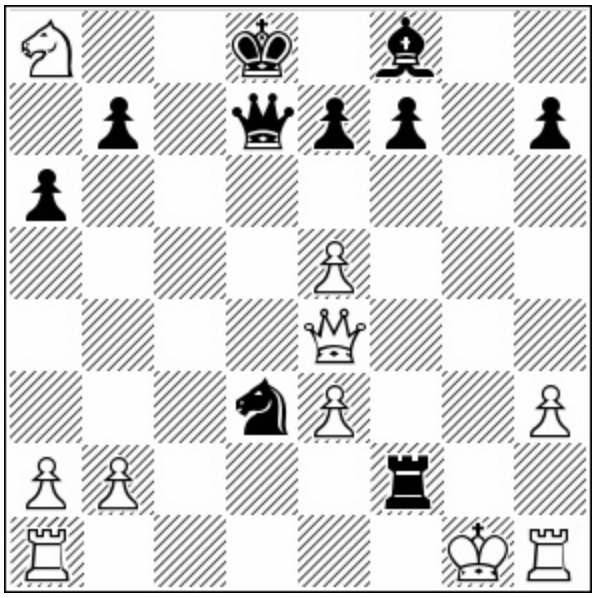


analysis diagram

Question: With multiple attacked pieces, Black appears to be in a world of trouble. How can he still complicate matters?

18...Nf4!!. The first dazzling move, and the only move that creates threats. Suddenly, many of Black's pieces are hanging, but as the late Mikhail Tal used to say so wisely: 'you can only take one piece at a time!' 19.dxe5 Nd3+

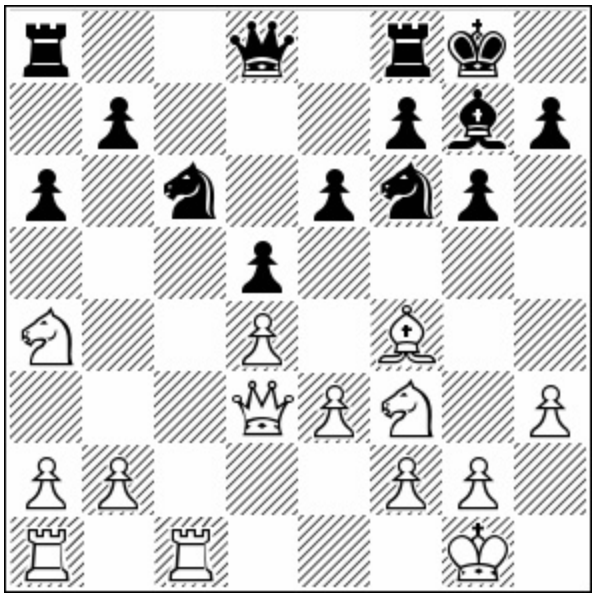
20.Kf1 Rxf2+ 21.Kg1



analysis diagram

21...f5!!. Another stunner. Black has invested a lot of material, and this move is the only one that keeps his attack alive. 22.exf6 Qd6. Black is threatening a lethal check on square g3, so White must escape into the endgame: 23.Qd4 Qxd4 24.exd4 Rxf6 25.Rf1 Nf4 26.Kh2 Bh6 27.Rhg1. A sensational variation that looks almost completely forcing. White is significantly better in this endgame, but it is unclear whether he can win, as Black is coordinating well and the white knight remains caged in on a8.

9...Bxd3 10.Qxd3 Bg7 11.0-0 0-0 12.Rfc1 e6 13.Na4

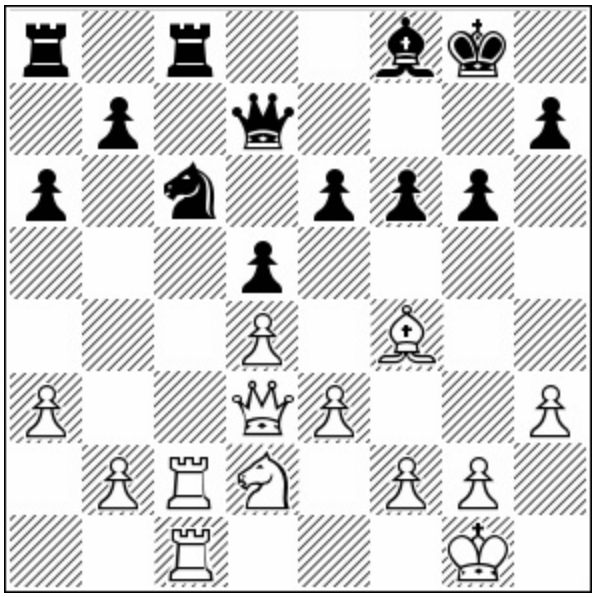


Kramnik missed an opportunity on the ninth move, but he still maintains an initiative. The battle will shift completely to the queenside, where Kramnik is better developed. Following traditional chess logic, we would conclude that Black has the superior bishop, since his pawns are fixed on light squares. Here, this assessment makes little sense, as the black bishop is idle on g7, while the white bishop is contributing to the fight for the queenside.

13...Ne4 14.Nc5 Nxc5 15.Rxc5

Black couldn't tolerate a white knight on c5, but now White is the first to occupy the only open file on the board.

15...Qd7 16.Rac1 Rfc8 17.a3 Bf8 18.R5c2 f6 19.Nd2



19...Bd6?

Aronian tries to relieve the pressure on his position by exchanging pieces, but this leaves his dark squares even more vulnerable. Kramnik remains a couple of steps ahead and he finds a great way to improve his position.

19...Na7! was best. It is understandable that Aronian didn't fancy this option, as it requires Black to tolerate a rook on the seventh rank. But it turns out that it is not so easy for White to make use of it. 20.Rc7 Qe8 21.Nb3 (capturing on b7 isn't possible due to the pin on the c-file) 21...Nb5 (the active rook gets kicked out) 22.R7c2 (22.Rxb7?? Rxc1+ 23.Nxc1 Qc6 loses horribly for White) 22...Rxc2 23.Qxc2 Na7!. The knight performs the same trick for a second time. White has no choice but to fall for it: 24.Qd1 Rc8 25.Nc5 Bxc5 26.dxc5. Black has very methodically arranged a lot of exchanges. White's initiative has been neutralised, and this position should be defensible.

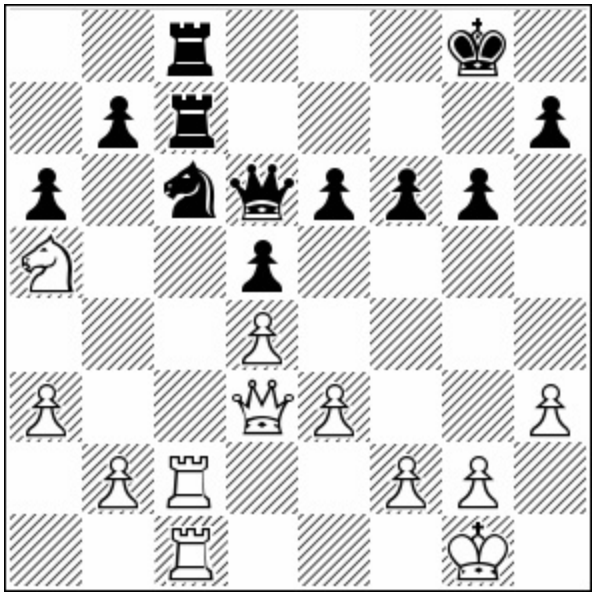
20.Bxd6 Qxd6

Matters now appear highly symmetrical, but Aronian is actually in quite a lot of trouble already.

21.Nb3! Rc7?

Aronian collapses. He needed to play 21...b6. Even so, White maintains a huge initiative on the queenside, but there is no immediate way to break through. In this case, in particular White's plan of 22.Nd2! followed by e3-e4 looks promising.

22.Na5 Rac8



White to move
(back to the exercises)

It is time for the culmination of Kramnik's play:

23.Nxb7!!

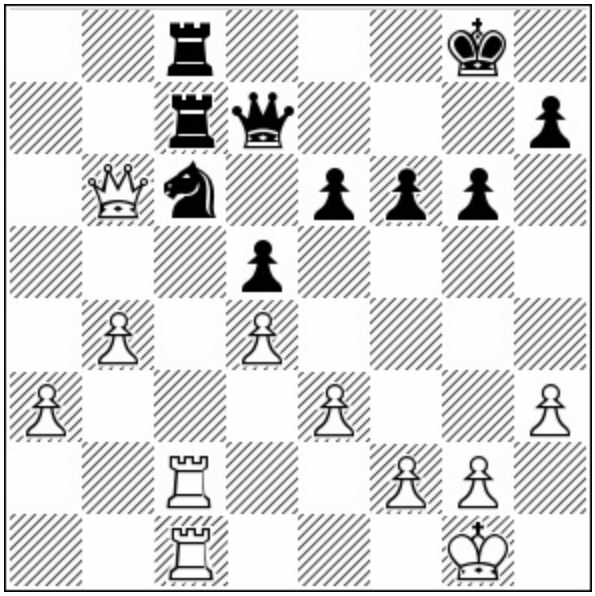
A lovely sacrifice. Precisely at the moment that Aronian appeared to have achieved full symmetry, Kramnik detonates a bombshell on the queenside.

23...Rxb7 24.Qxa6 Rbc7

Black is up a piece, but he is pinned everywhere. There is no way to hold on to the knight.

25.b4 Qd7 26.Qb6!

26.b5 Ne7 27.Rxc7 Rxc7 28.Rxc7 Qxc7 29.Qxe6+ is winning too, but Kramnik's approach is even stronger.



26...Qe8

Aronian sets up a final trick. Instead, 26...Rb8 27.Qxb8+! is crushing. The rooks will completely dominate the queen and knight: 27...Nxb8 28.Rxc7 Qd6 29.b5 Qxa3 30.R1c5 Qa8 31.b6. The knight will be lost, and the game is over.

27.b5 Nxd4!?

This is Aronian's idea. However, Kramnik had calculated deeply enough, and he had correctly assessed that he could allow it.

28.Rxc7 Ne2+ 29.Kh1 Nxc1 30.Rxc8 Qxc8 31.Qc6!

Black has managed to maintain the extra knight, but now he can no longer stop the passed pawn.

31...Qd8 32.b6 Kf7 33.Qc7+ Ke8 34.Qa7 d4 35.b7 1-0

Kramnik surprised Aronian in the opening by employing the Exchange

Variation against the Slav Defence. The set-up that Aronian opted for appears to be a bit imprecise, and Kramnik managed to generate a small lead in development as a result. At some point, Aronian seemed to catch up in development, but Kramnik had calculated a fine tactical sequence. With the knight sacrifice, the black defences were shattered and White essentially won two pawns.

A lead in development can become deadly once it facilitates tactics.

Even though Aronian managed to trade off his bad bishop for Kramnik's good bishop, he couldn't reap the fruits of his play, as his remaining bishop was positioned far away from the action.

In the next game, we will see a cunning idea in the opening. The game superbly shows the value of smooth development, as White is willing to completely spoil his own pawn structure to put pressure on the enemy position.

Game 2 Slav Defence
Peter Prohaszka 2536
Sipke Ernst 2590
Groningen 2010 (5)

1.d4 d5 2.Nf3 Nf6 3.c4 c6 4.Nc3 e6 5.g3 dxc4 6.Bg2 a6

Via a transposition, we have arrived at a topical line of the Chebanenko Slav.

7.a4

In a way, this is an ugly move as it severely weakens the b4-square, but it is often required in the Slav. Alternatives would allow Black to hold on to the extra pawn with ...b7-b5.

7...c5

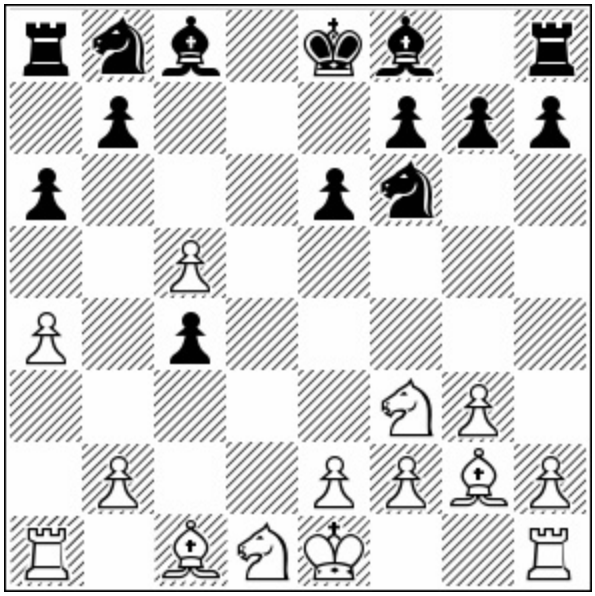
A typical resource for Black. After White 'wasted' a move with a2-a4, Black

can afford to lose a tempo by pushing the c-pawn in two moves. The white centre is put under pressure, and Black prepares smooth development by moving the knight to c6 and the bishop to e7.

8.dxc5

White isn't obliged to enter the endgame. 8.0-0 was played by Kramnik in his incredible victory over Luke McShane, London 2012 – a game that will definitely be discussed in my next book on the Hidden Laws of Chess.

8...Qxd1+ 9.Nxd1



We have reached a tabiya in the Chebanenko Slav. The queens have gone off early and the pawn structure is fairly symmetrical. Both players have captured the opposing c-pawns and now the newly emerged pawns on the c-file are about to drop.

Can White fight for an advantage? Let's take a look.

9...Bxc5

This capture looks completely natural, but it allows White to develop some pressure.

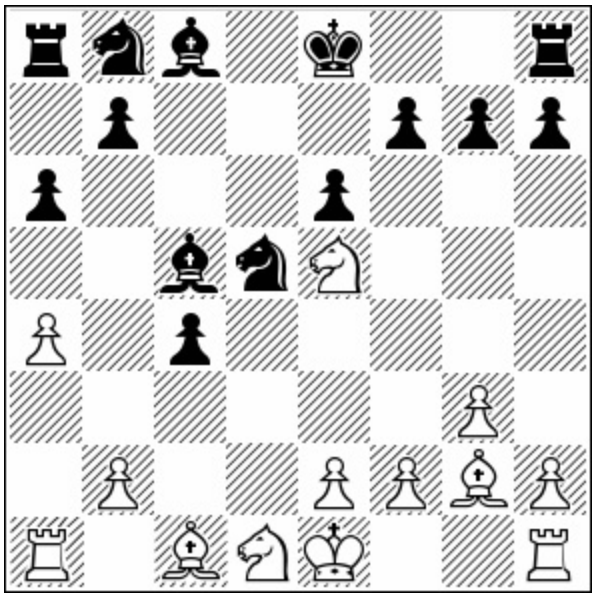
A) The equally natural 9...Nc6 also allows White to fight for an advantage: 10.Ne3 Bxc5 11.Nxc4 Ke7 12.0-0, and White is better as Black has problems developing the light-squared bishop;

B) In 2009, Karjakin was the first strong player to figure out that 9...Bd7! is a very precise defensive idea. Since then, most games have ended in a draw and people have lost interest in this endgame: 10.Ne5 Nc6! 11.Nxc6 Bxc6 12.Bxc6+ bxc6 13.Ne3 c3!. Here we have another typical resource in these structures. Black invests a tempo to weaken the white structure. Both players will have an isolated pawn on the c-file and symmetry will be restored. The position is level.

10.Ne5!

Suddenly, Black is under some positional pressure. Both the natural ...Nc6 and ...Bd7 have been prevented.

10...Nd5



White to move
(back to the exercises)

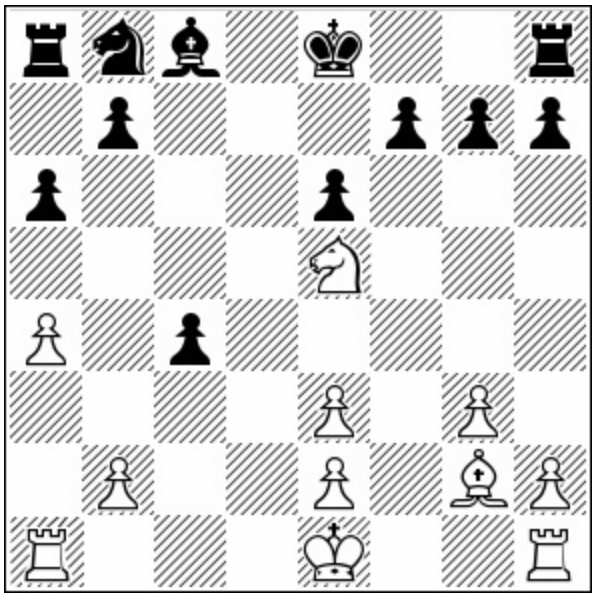
Question: Black's last move blocked the long diagonal, and he now intends

to develop the knight to c6 anyway. How can White thwart this plan?

11.Ne3!!

A remarkable positional concept. White is willing to completely spoil his kingside pawn structure to maintain an initiative. This idea was also introduced by the Polish grandmaster Gajewski, who has shown that he has real creative prowess in the opening.

11...Nxe3 12.Bxe3 Bxe3 13.fxe3



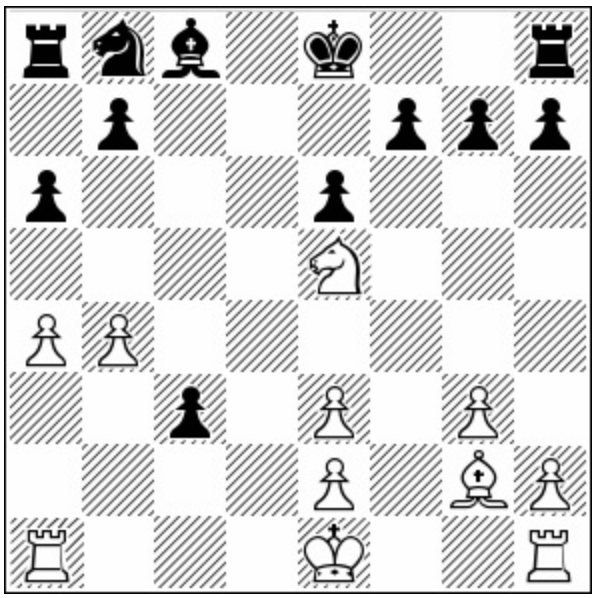
Black is temporarily up a pawn and the white pawn structure is in ruins. Why can White still claim an advantage? The difference lies in the quality of the pieces. In particular, White's light-squared bishop on g2 dominates the battlefield. Black has real difficulty developing his queenside. The knight doesn't have access to c6, and the bishop needs to protect pawn b7.

13...c3!

This is absolutely Black's best bet. He is deliberately giving up his extra c-pawn to damage the white structure further. It isn't even really a waste of a tempo either, as the white knight was aiming for the c4-square anyway.

14.b4!

Prohaszka is in no way obliged to cooperate. He postpones the capture of Black's c-pawn. By advancing the b-pawn, he gains more space. 14.bxc3?! deprives the white rooks of access to the c-file: 14...Nd7 15.Nc4 (after 15.Nxd7 Bxd7! 16.Bxb7 Ra7 17.Be4 a5, White has won a pawn, but since his structure is terrible, he doesn't have any real winning chances. Black has too much counterplay) 15...Ke7 16.Rb1 Rb8 17.0-0 b5 18.Na5 Ne5. Black is fine thanks to White's poor structure. Just imagine if White could play f2-f4...



14...a5?

This error is fatal already. The superior 14...Nd7 occurred in Anand-Wang Yue, Linares 2009. Still, the black position is not easy to defend: 15.Nd3 Rb8?! 16.0-0 b5 17.axb5 Rxb5 18.Rfc1. Anand, the reigning World Champion at the time, had the upper hand and he managed to win convincingly.

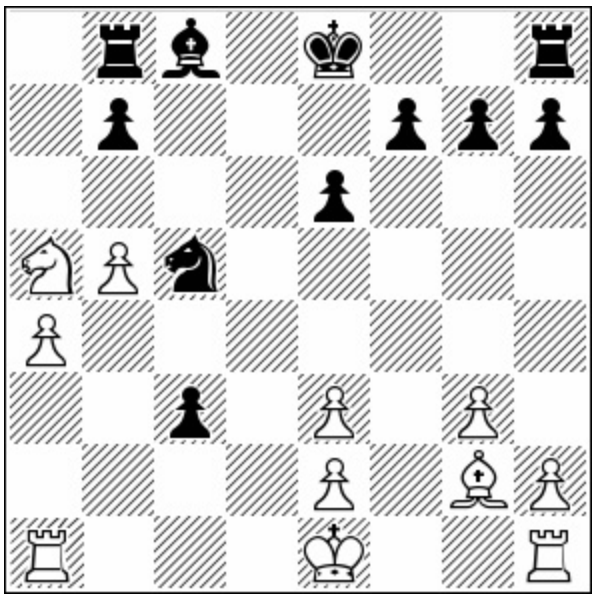
15.b5 Nd7 16.Nc4

Black has too little space. He no longer has the possibility of generating some counterplay by playing ...Rb8 followed by ...b7-b5.

16...Rb8

In an attempt to finish his development, Ernst decides to give up a pawn. His Hungarian opponent willingly accepts the offer. Notice how White's doubled pawns on the kingside don't matter at all. White will soon obtain a pawn majority on the queenside, and this will grant him great winning chances.

17.Nxa5 Nc5



18.Ra3

Going after the pawn on c3 with the rook makes a lot of sense. Although?! Somehow, Stockfish has a significant preference for picking up the pawn with the artificial manoeuvre 18.Kd1! e5 19.Kc2 Be6 20.Kxc3 Ke7 21.Kb4. As it turns out, the king belongs on b4! White has made four king moves in a row and he is now completely winning. Isn't it amazing how machines think?

18...c2 19.0-0 Ra8 20.Rc3 Rxa5 21.Rxc5 0-0 22.Rf4!

Prohaszka is nicely coordinating his pieces. The pawn on c2 is about to fall and Black is completely deprived of activity.

22...e5 23.Rb4 Bf5

After developing the bishop, the pawn on b7 falls and White will be left with two connected pawns on the queenside. The Hungarian had no trouble converting his advantage:

24.Bxb7 Rd8 25.Kf2 Rd1 26.Rbc4 g6 27.e4 Be6 28.Bd5 Bxd5 29.exd5 Rb1 30.d6 Kg7 31.d7 Rd1 32.b6

1-0

At the time, I was playing in the same tournament hall. This game made a profound impression on me, so it stuck in my memory. My friends sometimes jokingly called me a 'structure man', as I tended to overvalue a healthy pawn structure a little bit. I have been trying to get rid of this reputation ever since... Prohaszka's game against Ernst really shows why a healthy pawn structure shouldn't be overvalued.

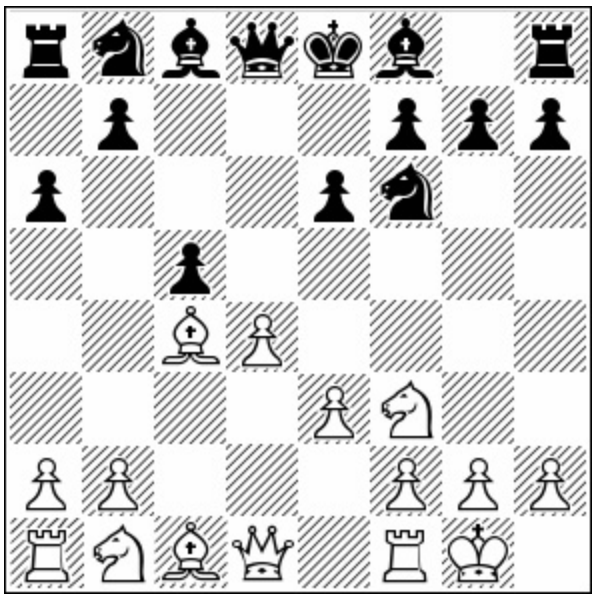
A bad pawn structure is only problematic if it can be exploited.

In this case, White rightly identified that it was the queenside structure that mattered, not the structure on the kingside. Therefore, he tried to avoid weakening his structure with bxc3, and instead played 14.b4!. Ernst's subsequent attempt to break free cost material, and Prohaszka smoothly converted the advantage.

We will now turn to a classic battle. In the year 2000, Vladimir Kramnik became the challenger of Garry Kasparov. Kramnik had a tremendous task ahead of him, as Kasparov had showed great form before the match. As a part of his match strategy, Kramnik didn't shy away from symmetry.

Game 3 Queen's Gambit Accepted
Vladimir Kramnik 2770
Garry Kasparov 2849
London Wch 2000 (m/4)

1.d4 d5 2.c4 dxc4 3.Nf3 e6 4.e3 c5 5.Bxc4 a6 6.0-0 Nf6

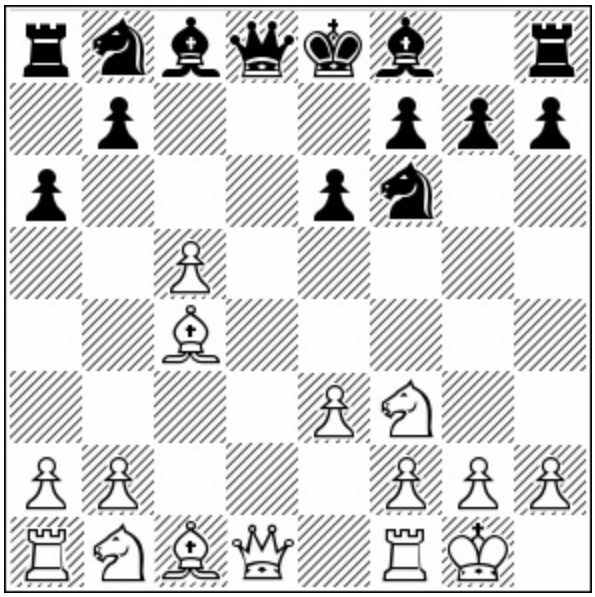


We return to the Queen's Gambit Accepted. Kramnik's victory over Kasparov was one of the biggest upsets in World Championship history. Not because Kramnik wasn't a force to be reckoned with of his own, but because at the time Kasparov felt nearly invincible. One of the driving forces behind Kramnik's success in this match was a well-crafted match strategy. He figured out that Kasparov thrives most in dynamic positions in which he is the one who is attacking.*

> * Kasparov commented on his own style: 'I used to attack because it was the only thing I knew. Now I attack because I know it works best.'

Thus, Kramnik decided that he wanted to take Kasparov to the endgame. With the black pieces, he opted for the notorious Berlin Wall and with the white pieces, he went for variations that led to quick queen swaps. Kramnik's strategy worked beautifully. After 15 games, the match was decided in his favour, while he didn't lose a single game.

7.dxc5!?

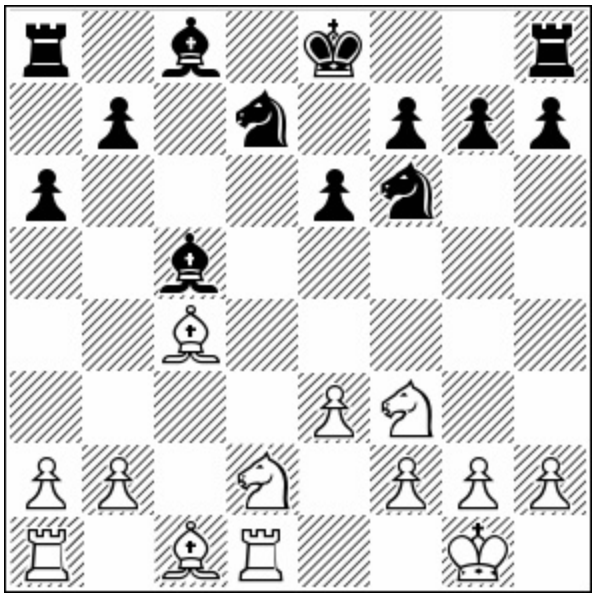


No IQP position this time around. Kramnik initiates an endgame straight away.

7...Qxd1 8.Rxd1 Bxc5

A topical position in the Queen's Gambit Accepted arises. The structure is very symmetrical and so is the arrangement of the pieces. White's only advantage is his small lead in development. White's king has already castled and his rook is actively positioned on d1. In return, Black has played ...a7-a6, a useful move, but also one that can be exploited. Moreover, it is currently White's turn, so his net lead in development is about two moves. In a queenless middlegame, such a lead in development may not have immediate consequences, as it is difficult to transform the advantage into something concrete. Nevertheless, Kramnik continuously manages to maintain an initiative.

9.Nbd2 Nbd7



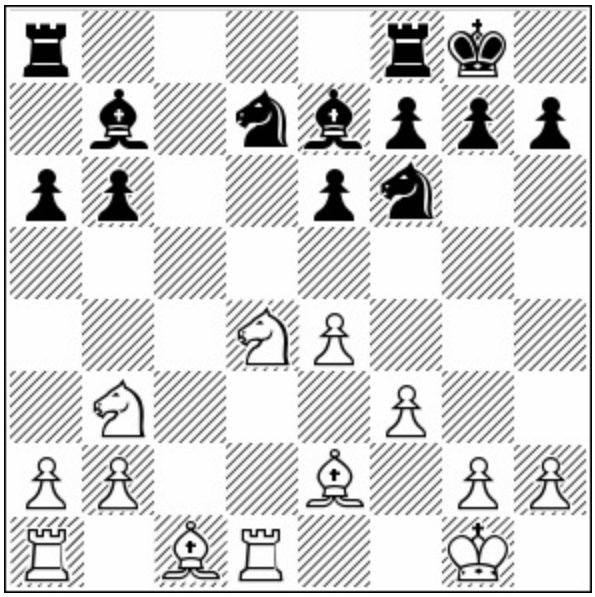
10.Be2!

This move may come as a surprise. Why would Kramnik spend a move on retreating such an actively positioned bishop? The move 10.Be2 serves several purposes. First of all, it is a useful prophylaxis against ...b7-b5 or a potential harassment by a black knight. Secondly, it prepares one of the key ideas in this structure, which is to hunt down the dark-squared bishop.

10...b6

White's main idea becomes clear after 10...Ke7 11.Ne1!? b6 12.Nd3. Black already must hand over the bishop pair. If he doesn't, he will be punished severely: 12...Bd6? 13.Nc4 Bc7 14.b3. The check on a3 is going to be brutal. White enjoys an enormous advantage.

11.Nb3 Be7 12.Nfd4 Bb7 13.f3 0-0 14.e4

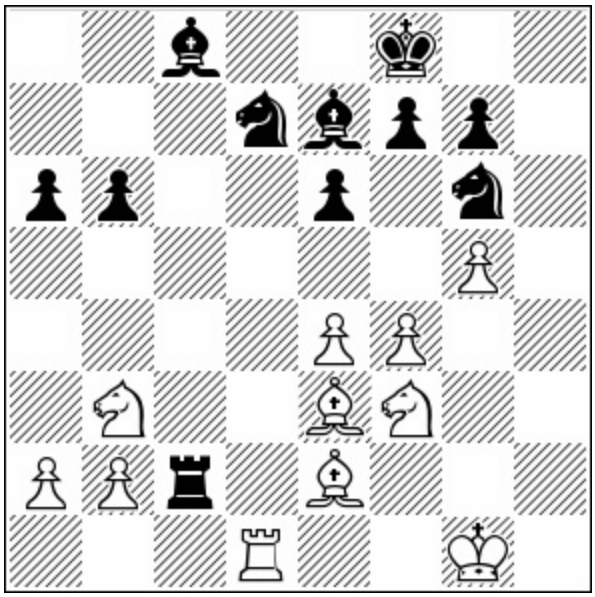


Kramnik has used his additional tempi to increase his influence in the centre. This particularly decreases the effectiveness of the black bishop on b7 and the knight on f6.

14...Rfc8 15.Be3 Kf8 16.Nd2 Ne5 17.N4b3 Rc6 18.Rac1 Rac8 19.Rxc6 Rxc6 20.g4!?

As we will soon see that he does not have to fear a rook infiltration, White's position on the queenside is stable, so Kramnik now starts to gain space on the kingside.

20...h6 21.h4 Bc8 22.g5 hxg5 23.hxg5 Nfd7 24.f4 Ng6 25.Nf3 Rc2



White to move

Question: Kramnik must have accounted for Kasparov's infiltration with the rook on the last turn. How can he maintain the upper hand?

26.Bxa6!

A small deflection tactic temporarily wins a pawn.

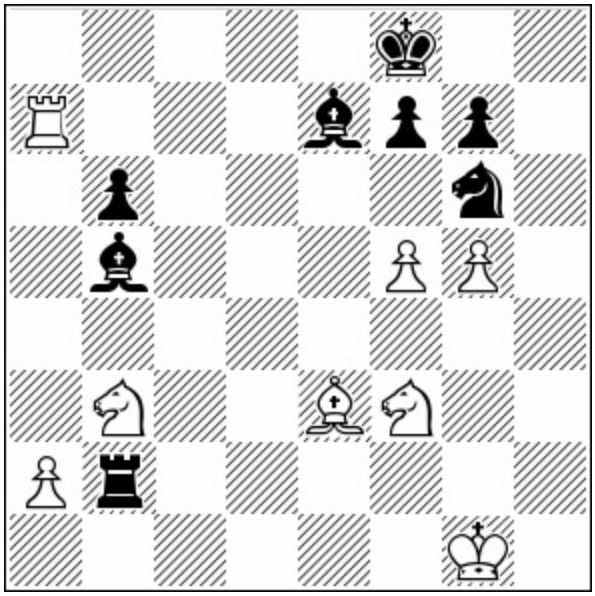
26...Bxa6 27.Rxd7 Rxb2?

Kasparov instantly wants to regain the pawn, but this is way too hasty. Suddenly, Black's king will struggle with back-rank problems. 27...Re2! 28.Bxb6 Ke8 29.Ra7 Bc4 was more responsible. Black is temporarily down two pawns, but his activity generates compensation. For instance: 30.Nc5 Bxc5+ 31.Bxc5 Rxe4 32.Bd6 Bd5 (32...Nxf4?? 33.Ne5, and Black abruptly finds himself in a mating net) 33.Ne5 Nxe5 34.Bxe5 f6! 35.gxf6 gxf6 36.Bxf6 Rxf4. White can obviously try to win this endgame, but with opposite-coloured bishops, Black should be able to hold.

28.Ra7! Bb5

Since Black can still meet 29.Ra8 with 29...Be8, he can avoid immediate disaster, but he will have to withstand a lot of pressure.

29.f5! exf5 30.exf5



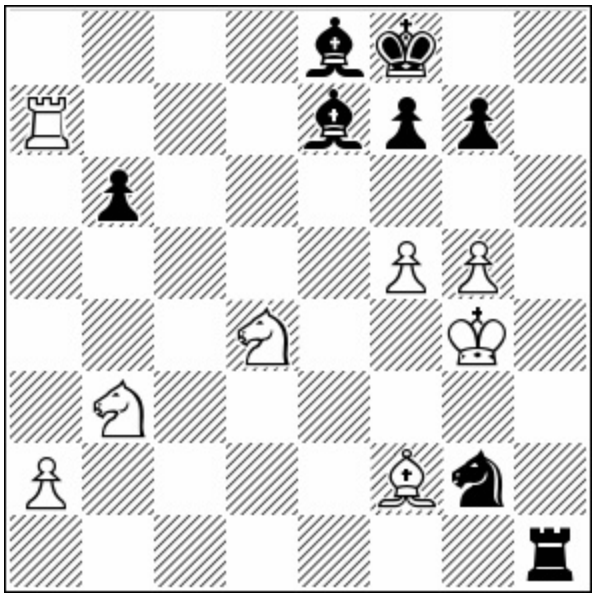
30...Re2!

The knight on g6 is almost trapped, but Kasparov finds the only way to prolong the game.

31.Nfd4 Re1+ 32.Kf2 Rf1+ 33.Kg2 Nh4+ 34.Kh3

Kramnik has calculated excellently that his king can escape the checks.

34...Rh1+ 35.Kg4 Be8 36.Bf2 Ng2



Question: The knight is forced to wander deep into enemy territory and Black is severely struggling with a lack of coordination. Can Kramnik take advantage?

37.Ra8

Kramnik missed a forced win with 37.f6! gxf6 38.Nf5!. There is no good square for the bishop, so Black loses a piece in all variations:

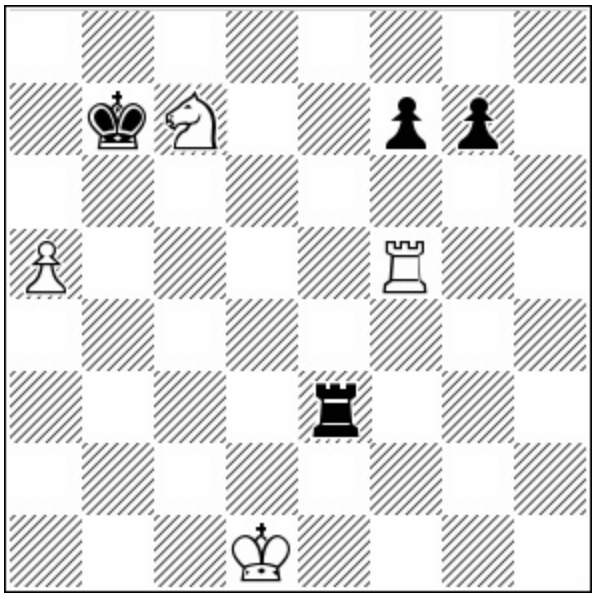
A) 38...Bb4 39.gxf6 Bc3 40.Bxb6 Bxf6 41.Bc5+ Kg8 42.Ra8 Re1 43.Nd6, winning a piece;

B) 38...Bd8 39.Ra8 Be7 40.Bd4! fxg5 41.Bg7+ is decisive.

37...Rf1 38.Kf3 Nh4+ 39.Ke2 Rh1 40.Nb5!

After a lot of manoeuvring, Kramnik's position is winning: the threat of 41.Nc7 is unstoppable. Kasparov doesn't throw in the towel yet and puts up a lot of resistance.

40...Bxg5 41.Nc7 Ke7 42.Nxe8 Nxf5 43.Bxb6 Kd7 44.a4 Rh3 45.Nc5+ Kc6 46.a5 Re3+ 47.Kd1 Re7 48.Rc8+ Kb5 49.Ne4 Rxe4 50.Rc5+ Ka6 51.Nc7+ Kb7 52.Rxf5 Be3 53.Bxe3 Rxe3



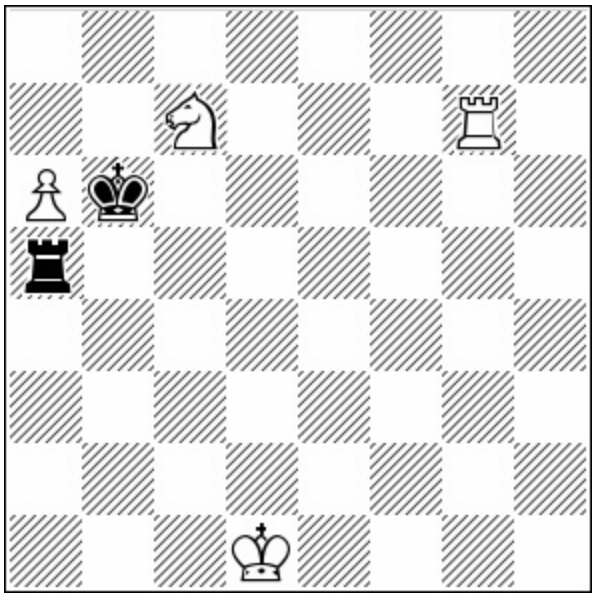
Kasparov has managed to reduce the material significantly. If he also manages to trade off the a-pawn for the f- and g-pawns, the game will be a draw, as the defence of rook against rook and knight should not cause too many issues. At the same time he also sets up a neat trap and Kramnik falls for it.

54.Rxf7?

This natural capture completely spoils the advantage. Now, White's main issue is that his configuration is very inflexible. It will be difficult for White to keep the knight and pawn protected while also finding a method to make progress. Kasparov is about to set up a fortress.

Instead, 54.Nd5! is the most straightforward way to win this position. The pawn must be protected from behind. For instance, 54...Ra3 55.Nb4 f6 56.Kc2 Kc7 57.Kb2 Rh3 58.a6 Kb6 59.Rd5 g5 60.Rf5 Rh6 61.Kb3 g4 62.Ka4. Once the knight and king are coordinating, the a-pawn will be unstoppable. 62...g3 63.Rb5+ Kc7 64.a7 Rh8 65.Rb8!. A cunning move to decide the game. 65...Rxb8 runs into 66.Na6+!.

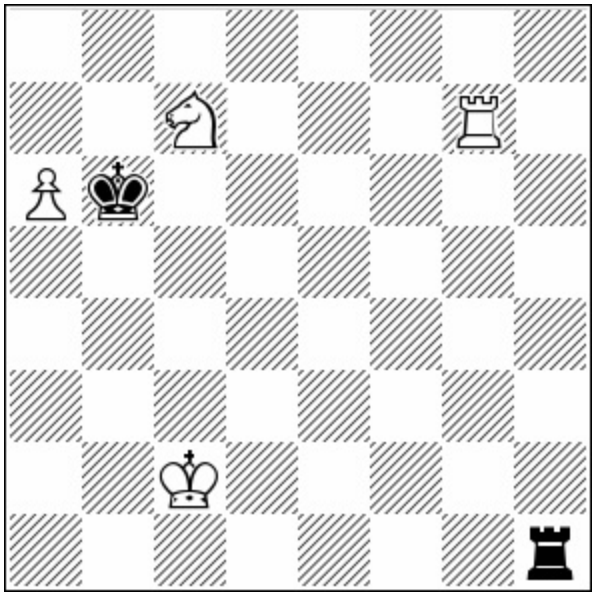
54...Re5 55.a6+ Kb6 56.Rxg7 Ra5



With an extra knight and pawn, you would imagine that this endgame is a trivial victory, but it turns out that Kasparov has created a fortress! Kramnik's peculiar configuration leaves him without any concrete method to make progress. Of course, this doesn't stop him from trying.

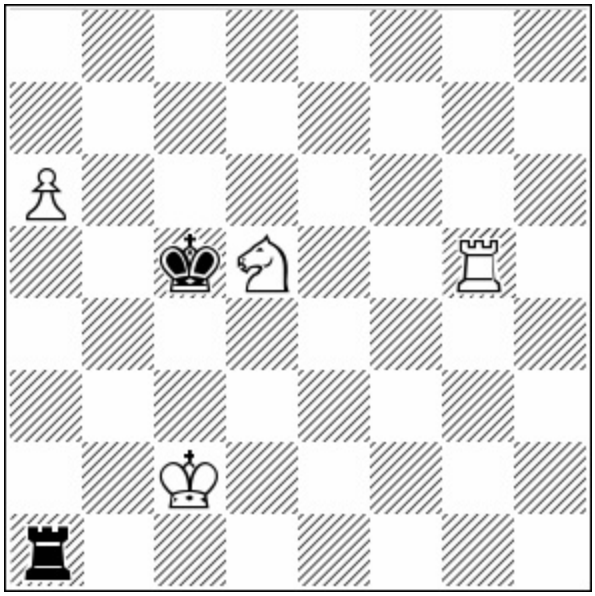
57.Kd2 Ra1 58.Kc2 Rh1?

Another crucial mistake. Kasparov gives up the fortress. Instead, he should just have stayed with his rook on the a-file: 58...Ra5 59.Kb3 Ra1 60.Kb4 Rb1+, and White cannot make any meaningful progress.



59.Kb2?

Kramnik wants to prevent the black rook from accessing the a-file, but in turn misses his opportunity. 59.Rg8! offers White a way back to the winning set-up: 59...Ra1 60.Nd5+! Kc5 (60...Kxa6 61.Ra8+ skewers the king and rook) 61.Rg5!.



analysis diagram

A peculiar set-up. The rook is awkwardly protecting the knight, while the a-pawn is no longer covered at all. Still, the a-pawn cannot be captured, as that would lose to a discovered attack. Even in a position with very limited material, tactics can be ubiquitous. The white king is about to kick the rook out of its defensive position on a1, so Black can no longer prevent White from achieving the winning set-up: 61...Kd6 (61...Kb5 62.Kb2 Rh1 63.a7 Rh8 64.a8=Q Rxa8 65.Nc7+, and the rook drops) 62.Nb4. The pawn is protected from behind and White reaches the winning set-up.

59...Rh8 60.Kb3 Rc8 61.a7 Kxa7

Kramnik finally gives up his a-pawn. A draw was agreed on move 74.

½-½

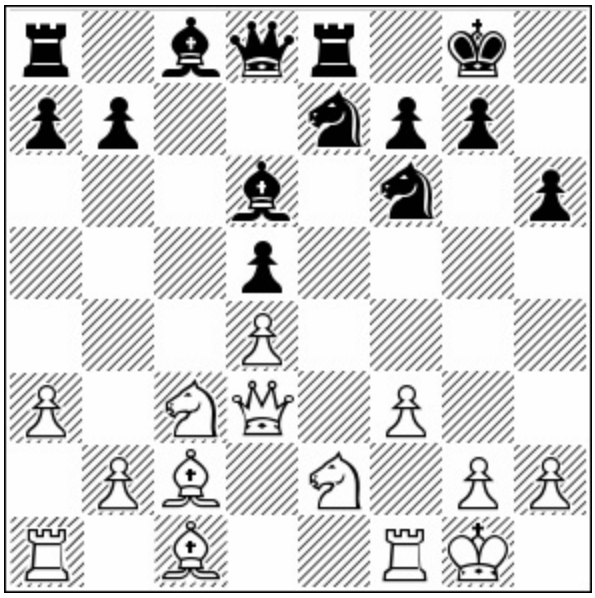
A very hard-fought game. Kramnik's match strategy to force endgames worked wonderfully. In this game, he transformed his lead in development into a space advantage on the queenside. After a tactical skirmish, it appeared that Kramnik was going to win. In the end, Kasparov defended tenaciously, and he managed to set up a fortress, allowing him to escape by the skin of his teeth.

This game shows that Kramnik's victory in his match over Kasparov could have been even more convincing.

Flank attack

We will now return to a position with queens on the board, by examining a situation in which both sides have an isolated queen's pawn. With the fixed centre, attention naturally shifts to the flanks. The Dutch grandmaster Ivan Sokolov shows a promising plan in this structure.

Game 4
Ivan Sokolov 2545
Lucas Brunner 2415
Oakham 1988 (4)



White to move
(back to the exercises)

Question: We have reached a fairly symmetrical position that arose from a Nimzo-Indian. The pawn structure is fixed in the centre, with both sides having an IQP. Black is about to achieve the strategically desirable exchange of bishops with ...Bf5. How should White react?

14.g4!?

A highly instructive idea.*

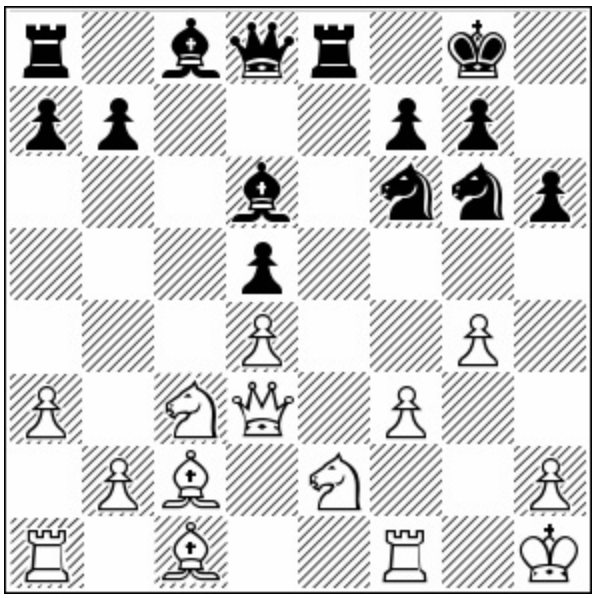
> * I have noticed the tendency of authors in chess literature to regularly advocate what is instructive over what is objectively correct. Sometimes, inferior moves are advocated to make a point about some strategic manoeuvre or idea. In his game against Brunner, Sokolov's 14.g4 is the best move, but the strategy that he started one move earlier with 13.f3 is somewhat questionable from an objective point of view. Throughout the book, I have selected material based on objective quality on top of instructive value. Since we are studying the Hidden Laws of Chess, it is critical that the derived laws are in fact aligned with the 'best' way to play. This game is an exception. I decided to include this game anyway, because Sokolov executes his plan impeccably and because the plan is illuminating.

In essence, ideas in this position are similar to those in the previous chapter. Since the centre is fixed, all the play revolves around piece activity and action on the flank. Thus, players can get away with pushing pawns in front of their king. The main difference with the positions in the previous chapter is that this position is more open. Therefore, Black has more counterplay.

14...Ng6!

A good reply. Since Black has been deprived of the light squares, he instead starts to fight for the dark squares.

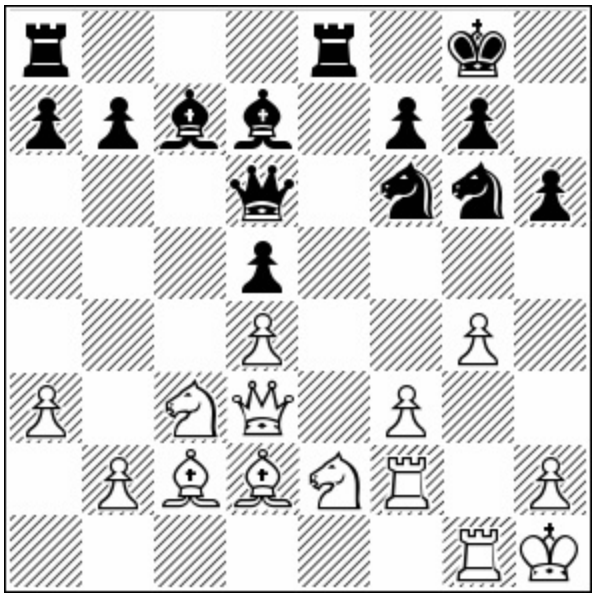
15.Kh1



15...Bc7?!

One slow move allows Sokolov to execute his strategy with success. Instead, Black should have focused on finishing his development first. Black had to be precise with 15...Bd7! 16.Bd2 Rc8 17.Rg1 Qb6! 18.Rab1 (18.g5?! isn't effective yet: 18...hxg5 19.Bxg5 Nh7. Black is too active, and his king is well-defended. In the meantime, White has only created weaknesses in his own camp) 18...Bb8 19.Rg2 a6. Black has a flexible position. He can pressure pawn d4 with ...Ba7 or set up a battery with ...Qd6. Most importantly, White's attack isn't really getting off the ground, as one rook is tied down to the defence of pawn b2. If anyone is better, it is Black.

16.Bd2 Qd6 17.Rf2 Bd7 18.Rg1



Sokolov has achieved a fantastic set-up. All his pieces are coordinating wonderfully. The rook on f2 is covering the vulnerable point on h2, while the other rook is preparing the advance g4-g5. All of White's pieces are directly supporting an onslaught on the kingside.

18...Qe6 19.g5! hxg5 20.Bxg5 Bc6?!

Another questionable move. Apart from overprotecting the pawn on d5, the bishop is doing nothing on the a8-h1 diagonal. Admittedly, Black's position is already incredibly hard to play.

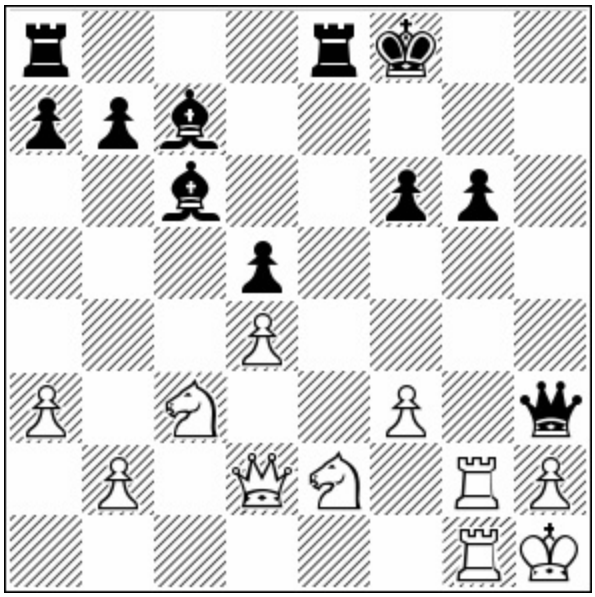
21.Rfg2 Kf8 22.Qd2!

Sokolov is conducting the attack with extraordinary precision. His idea is now to capture on g6 and crash through on the g-file.

22...Qh3

Black goes for counterplay against h2 and f3, but Sokolov has calculated a forcing sequence that brings him a winning position.

23.Bxg6! fxg6 24.Bxf6 gxf6



White to move

Question: Both White's bishops have been given up to remove the defending knights. How should Sokolov continue his attack?

25.Nf4!

The knight joins the attack with decisive effect. After the elimination of the black knights, the black king proves to be too vulnerable.

25...Qxf3

25...Bxf4 doesn't help either: 26.Qxf4 Qf5 27.Qxf5! gxf5 28.Rg7. Interestingly, White's best play involves an exchange of queens, as the resulting endgame is totally crushing. The black bishop is a mere bystander, and the rooks can hardly become active. White has a very effective winning procedure, as he can simply push the h-pawn. 28...b5 29.h4 Re3 30.Rg8+ Ke7 31.R1g7+ Kd6 32.Rxa8 Bxa8 33.Kg2 f4 34.h5, winning comfortably. White has too much control.

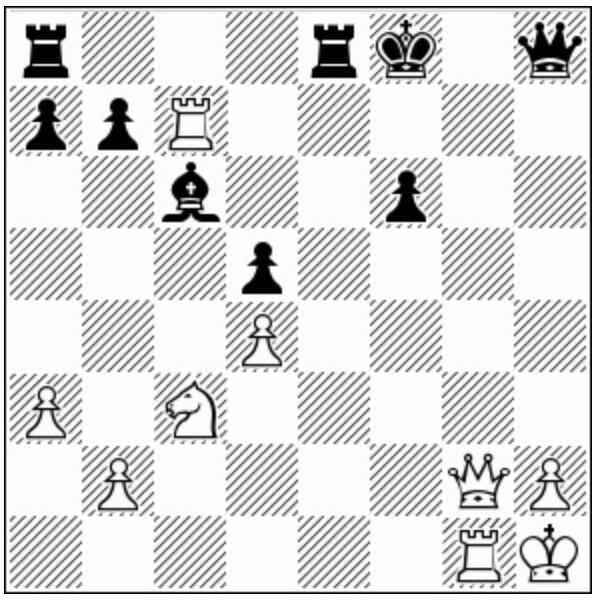
26.Nxg6+ Kf7 27.Nh4!

Now the black queen will be pushed off the dominant square on f3 and she will have to give up the pin.

27...Qh5 28.Rg7+ Kf8 29.Rxc7

The funny 29.Ne4 leads to the quickest mate, as the threat of 30.Qb4+ is deadly. Sokolov's approach is more than sufficient though.

29...Qxh4 30.Qg2 Qh8



31.Rg7

Precision till the end. A logical move such as 31.Qg6 would have squandered a large part of the advantage after 31...Re7.

31...Qh5 32.Qg3 Rad8 33.Qf4

The black king can no longer be adequately defended. 33...Re6 runs into 34.Rg8+ followed by 35.R1g7+, winning the queen.

1-0

A highly thematic approach by Sokolov, who showed great understanding of

the pawn structure.*

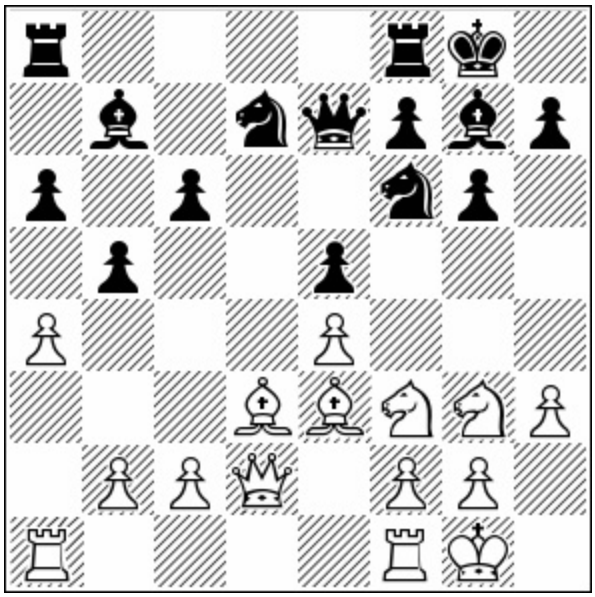
> * Ivan Sokolov wrote a brilliant book titled *Winning Chess Middlegames*, which was a great inspiration for this book. His book focuses on 1.d4 positions and deals with many topics that feature in this book. He brought to my attention the games Botvinnik-Chekhover and Ivanchuk-Aronian that were covered in Chapters 2 and 4. Admittedly, the material in Sokolov's book may be aimed at players of a quite advanced level. To serious chess players who want to improve further, this book is highly recommended.

He managed to coordinate his pieces very effectively. After eliminating the defending knights, his flank attack became unstoppable.

Controlling the tension

We will now turn to the English grandmaster Michael Adams, a contemporary of Sokolov. Adams is known for his incredible technical skills and his ability to exploit small imbalances.

Game 5
Michael Adams 2742
Mikhail Gurevich 2641
Wijk aan Zee 2002 (11)



White to move
(back to the exercises)

We arrive at a position that stems from the Modern Defence. This opening isn't particularly known for its symmetrical positions. On the contrary, Black tries to create imbalances early on and wants to start a dynamic fight. However, an exchange in the centre has led to a fairly symmetrical position. A striking difference between both sides is the placement of the bishops. White has opted to develop the bishops in the centre, while Black has fianchettoed both bishops. Interestingly, this is not the most important aspect of the position. Indeed, the bishops may be operating on different diagonals, but their effectiveness is fairly similar.

The key aspect that sets both sides apart is the configuration of the pawns on the queenside. Two of White's pawns are still at home, while Black has advanced all of his. You may be inclined to think that this is to Black's advantage, as the advanced pawns are controlling space. The pawn on c6 is controlling d5, while the b5-pawn controls the important square on c4. Furthermore, the black pawn formation greatly reduces the scope of White's light-squared bishop.

Be that as it may, this assessment appears flawed on closer inspection. The pawn configuration on the queenside is in fact very much in White's favour,

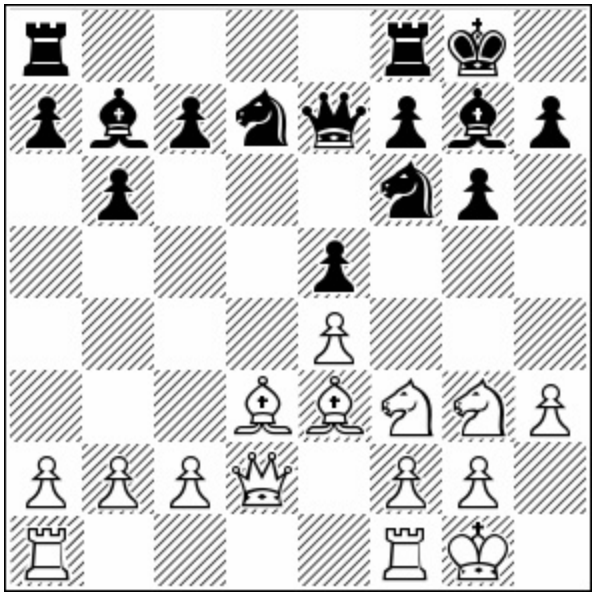
as the black pawn mass lacks one thing: *flexibility*. Every possible advance for Black has a deficiency. Pushing the a- or c-pawns weakens b5, while a push of the b-pawn chronically weakens the c4-square. This reveals a limitation of the black structure.

> A peculiar drawback of pawn moves is that they can't move back.*

* This reminds me of a brilliant quote by Artur Jussupow, who made a famous remark about the Dutch Defence: 'The problem with the Dutch is that Black very often in the middlegame finds that his best available move is ...f5-f7.'

> Once a pawn travels forward, space may be left behind that can no longer be appropriately defended.

Particularly in this case, the dark-square complex has been significantly weakened. Imagine for a moment that the black pawns are back on a7, b6 and c7, respectively, while the white a-pawn is still on a2.



analysis diagram

The position would be totally balanced, as Black wouldn't have any exploitable weaknesses. A notable complication of Black's current formation is that the pawn on b5 becomes a 'hook'.*

* The term ‘hook’ was extensively used by Sam Shankland in his book *Small Steps to Giant Improvement: Master Pawn Play in Chess*.

White can target b5 with his own pawns, allowing him to control the tension. White can now open the position at his will. This is exactly what Adams is going to exploit.

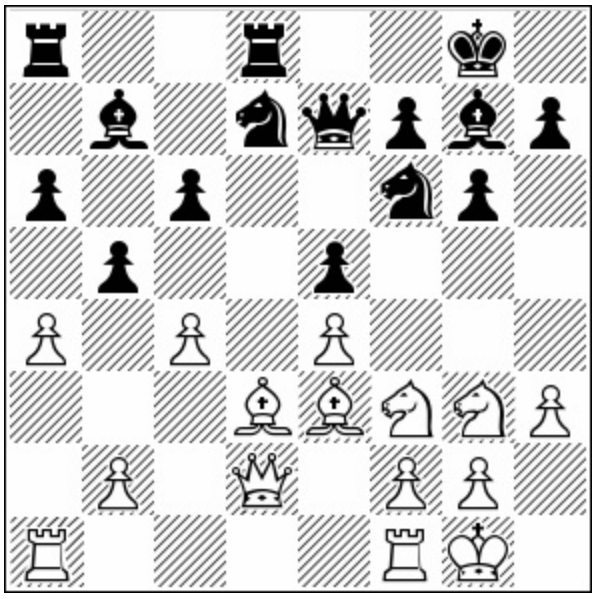
14.c4!

White increases the tension on the queenside by aiming more forces at b5. The pressure is already becoming critical, as the pawn is attacked three times and defended only twice. For the moment, White cannot really take yet, as a triple capture would drop the e4-pawn. But the situation will be concerning in the long term, as Black doesn’t have a single move available to strengthen b5.

14...Rfd8

A) 14...bxc4 15.Bxc4 is positionally disastrous, as Black would be left with two terrible weaknesses on the a- and c-files;

B) 14...b4 15.c5! is the tactical justification of Adams’ previous play: 15...a5 (15...Nxc5?? 16.Qxb4 Nfd7 17.Rfc1 would end the game immediately, as the pin will be lethal) 16.Qc2. White’s positional advantage is overwhelming. He has great control over the important squares c4 and d6, while Black’s pawns on c6 and a5 are both vulnerable. On the flipside, Black’s advanced pawn on b4 is merely controlling air.



15.axb5

Adams has spotted a sequence that resolves the tension in his favour, so he doesn't hesitate. He could have maintained the tension with a move like 15.Rfc1!?.

15...cxb5 16.cxb5 axb5

16...Nc5!? was possible too, e.g. 17.Qb4 Rxd3 18.Bxc5 Qe6 19.bxa6 Bxa6. With a healthy extra pawn, White maintains excellent winning chances.

17.Rxa8! Bxa8

17...Rxa8 would have abandoned the pressure on the d-file, which allows White to cash in the pawn: 18.Bxb5 Nc5 (18...Nxe4?? 19.Nxe4 Bxe4 20.Qxd7) 19.Qb4 Bf8 20.Rc1 Rc8. White should win in the long term, as Black has no compensation whatsoever for the pawn.

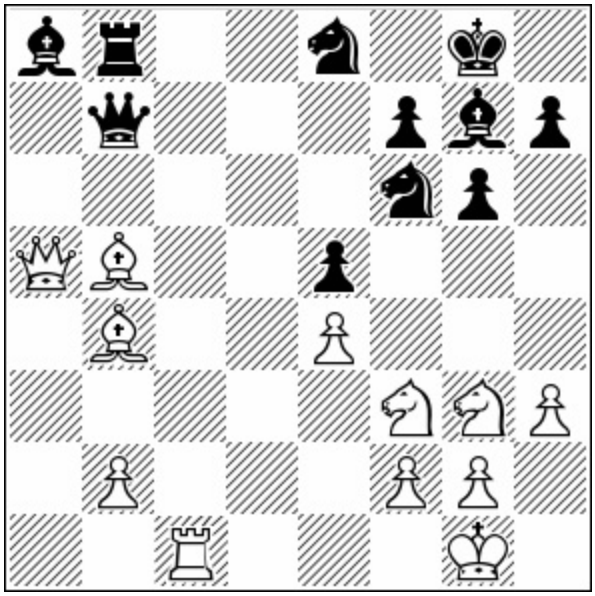
18.Qa5!

This is Adams' crucial point. The white queen enters a tremendous square, as it targets the black rook, bishop and pawn on b5.

18...b4

If 18...Rb8, 19.Rc1! would have forced Black into further passivity.

19.Rc1 Ne8 20.Bd2 Rb8 21.Bb5 Ndf6 22.Bxb4 Qb7



Gurevich has set up a powerful battery on the b-file which threatens the white bishops. In response, Adams doesn't hesitate to give up his bishop pair to consolidate the extra material:

23.Bxe8!

23.Rc5? Nd6 24.Bc6 Qxb4 25.Qxb4 Rxb4 26.Bxa8 Rxb2 gives away the advantage.

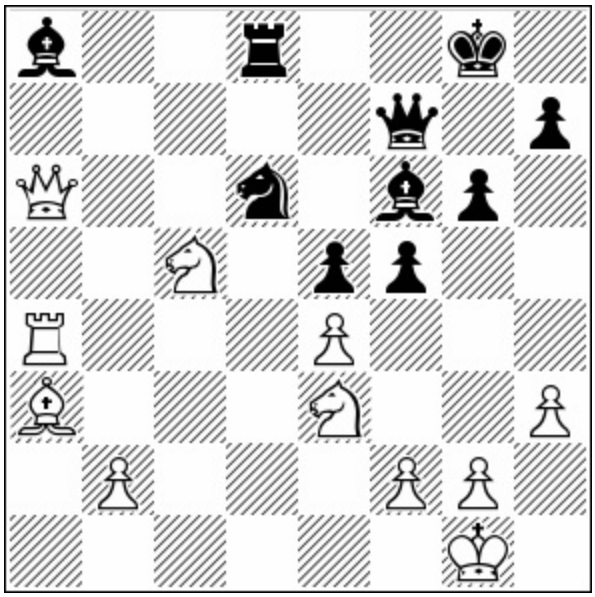
23...Nxe8 24.Rc4 f6 25.Nd2 Qd7 26.Ngf1

We have entered the technical phase, and Adams arranges his pieces masterfully. In the next phase he will make a lot of progress.

26...Bb7 27.Ba3 Ra8 28.Qc3 Rd8 29.Nb3 Qf7 30.Nc5

The white pieces are coordinating well, and the knight has found an excellent square on c5. Black completely lacks counterplay.

30...Ba8 31.Ne3 Nd6 32.Qa5 Rc8 33.Rb4 f5 34.Qa6 Rd8 35.Qb6 Bf6 36.Ra4 Nc8 37.Qa6 Nd6 38.Qb6 Nc8 39.Qa6 Nd6



Sometimes, repeating moves is useful to make the time control. Interestingly, Adams still has to make a critical decision on move 40. He shows that he is up to the task!

40.exf5!

40.Qb6?? would have allowed Gurevich to repeat the position for a third time and claim the draw.

40...gxf5

40...Nxf5 41.Ne6 Re8 42.Qxa8! is the cute point: 42...Qxe6 43.Nxf5 gxf5 (43...Rxa8 44.Rxa8+ Kf7 45.Rf8# is a very efficient mating pattern) 44.Qb7. The black king is very exposed and shouldn't survive.

41.Nd3 Bb7 42.Qb6 Ne4 43.Nxe5!

The centre collapses and so does Gurevich' hope of saving the game.

43...Rd1+ 44.Nxd1 Bxe5 1-0

Adams cashed in a pawn and he subsequently converted his material advantage comfortably. The game serves as a great reminder of a peculiar drawback of pawn moves: they can't move backwards!

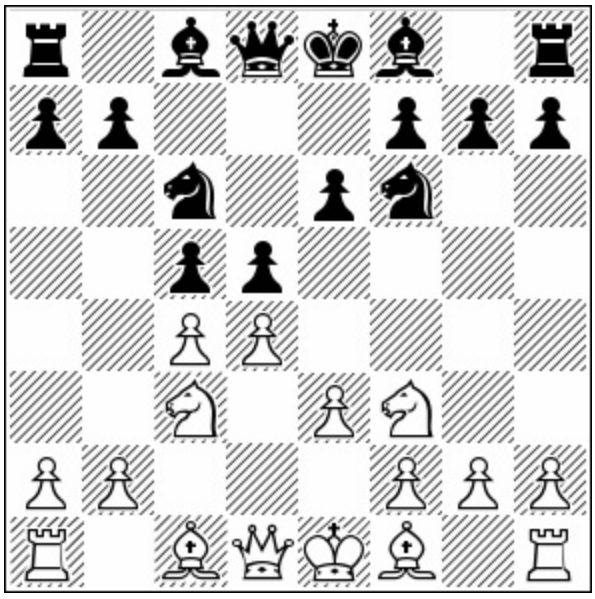
Having further advanced pawns on a flank is not necessarily identical to having a space advantage. Instead, these pawns can leave behind holes and serve as a 'hook'. Once the hook is attacked, the attacker is controlling the tension.

A masterpiece

We will finish the book with a timeless classic. Many people will probably recognise the final combination, as it is one of the most famous tactical sequences of all time. What fewer people know is that the combination arose from a very symmetrical position. This shows that even the most magnificent attacking ideas can spring from a position of symmetry.

Game 6 Tarrasch Defence
Georg Rotlewi
Akiba Rubinstein
Lodz 1907 (6)

1.d4 d5 2.Nf3 e6 3.e3 c5 4.c4 Nc6 5.Nc3 Nf6



6.dxc5

White opts for one of the tamest approaches against the Queen's Gambit Declined. Usually, it is premature to release the tension this early. The black bishop can now take on c5 in one fell swoop and White is lacking a good follow-up.

The ridiculous-looking 6.a3!? is the main move here. Its purpose is to maintain the tension and make a useful waiting move, passing the move back to Black. If Black now plays 6...Be7, White will answer with dxc5 and b2-b4, granting him a far more favourable version of the game. Therefore, Black has to either release the tension himself or join the waiting game with 6...a6.

6...Bxc5 7.a3 a6

Rubinstein decides to copy the strategy of his opponent. This suddenly justifies White's decision on move 6. Generally, quick development should be preferred over subtle pawn moves, and in this case there was absolutely nothing wrong with 7...0-0.

8.b4 Bd6 9.Bb2 0-0 10.Qd2?!

A very mysterious move that is reminiscent of Taimanov's choice against

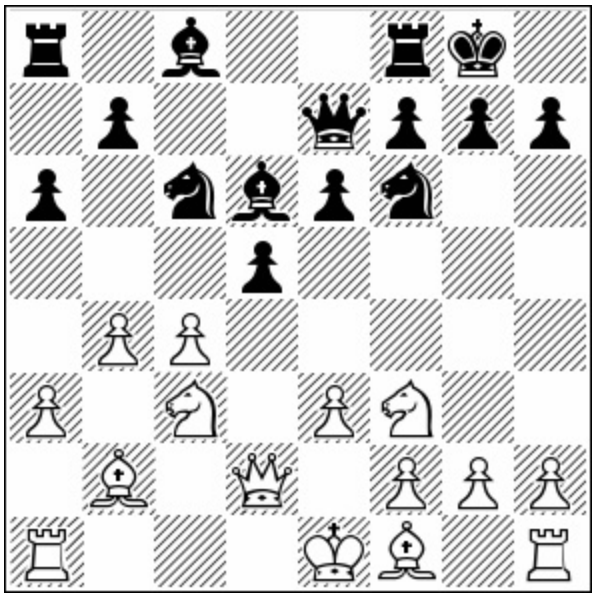
Psakhis in Chapter 5. In Queen's Pawn Openings, the queen often belongs on e2 or c2. Instead, White should aim to play against an isolated queen's pawn with 10.cxd5 exd5 11.Be2.

10...Qe7!?

Very interesting. Rubinstein gambits a pawn in 'Schara-Von Hennig style'.*

> * The Schara-Von Hennig Gambit arises after the moves 1.d4 d5 2.c4 e6 3.Nc3 c5 4.cxd5 cxd4. This gambit has received quite a resurgence in recent years.

In return, he wants to obtain smooth development. 10...dxc4 was a calmer move that aims to exploit the peculiar position of White's queen: 11.Rd1 Be7 12.Bxc4 (12.Qc2?? Qc7 13.Bxc4 Nxb4!. Always be wary of tactics!) 12...Qxd2+, with a level endgame.

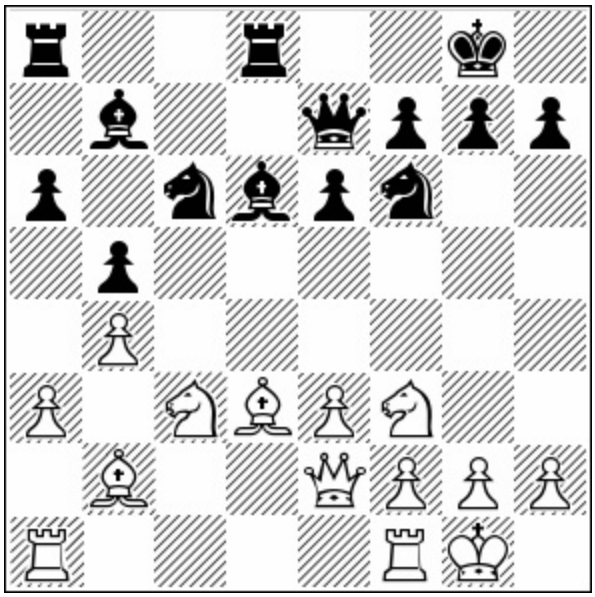


11.Bd3?

This inaccuracy puts White in trouble. He has simply given up too many tempi. Rotlewi had to accept the invitation: 11.cxd5 exd5 12.Nxd5 Nxd5 13.Qxd5 Rd8 14.Qb3 Ne5 15.Bxe5!? Bxe5 16.Rc1 Bf6 17.Bc4. Black definitely has compensation for the pawn due to his bishop pair, but White is about to catch up in development. White is the one who is pushing for an

advantage.

11...dxc4 12.Bxc4 b5 13.Bd3 Rd8 14.Qe2 Bb7 15.0-0



We have reached a highly remarkable position. The set-up on both sides is an almost complete mirror image. Strikingly, it is Black who is slightly ahead. He has already developed a rook on an open file, and it is his turn! It is fair to say that Rotlewi didn't make the most out of his first move advantage... Rubinstein now takes action.

15...Ne5! 16.Nxe5 Bxe5 17.f4??

This is so irresponsible that it deserves a double question mark. Recall from Chapter 1 that grabbing space is only justified if you can protect the entire area. Otherwise, you are risking overextension.

> When you are behind in development, your first job is to catch up and only afterwards may you dream about more optimistic projects.

17.Rfd1 was preferable. Black is better, but without any tangible weaknesses in the enemy camp, he will have a tough task converting his advantage.

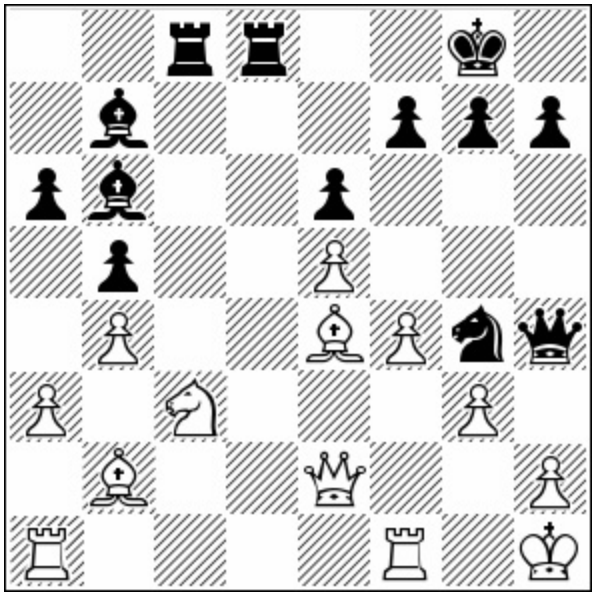
17...Bc7 18.e4 Rac8 19.e5

White is ‘completing’ his overextension, and Rubinstein now initiates one of the most famous combinations in chess history.

19...Bb6+ 20.Kh1 Ng4! 21.Be4

21.Qxg4 Rxd3 is no better. The black army dominates the board.

21...Qh4 22.g3



Black to move
(back to the exercises)

We are about to reach the pinnacle of Rubinstein’s career.

22...Rxc3!!

A bishop is hanging, a queen is hanging, and Black now decides to invest a rook.*

> * In his brilliant book *The Joys of Chess*, Christian Hesse criticised Frank Marshall’s extraordinary 23...Qg3!! against Levitsky. He called it the most overrated move of all time, as many alternative moves were equally winning for Black. In

Rubinstein's case, this criticism may apply as well since 22...Qe7 would have been crushing too. Nevertheless, Rubinstein's combination is the most convincing way to end the game and his stunning deflection on the 23rd move is in fact the only winning move!

What did Tal say again about multiple hanging pieces?

23.gxh4

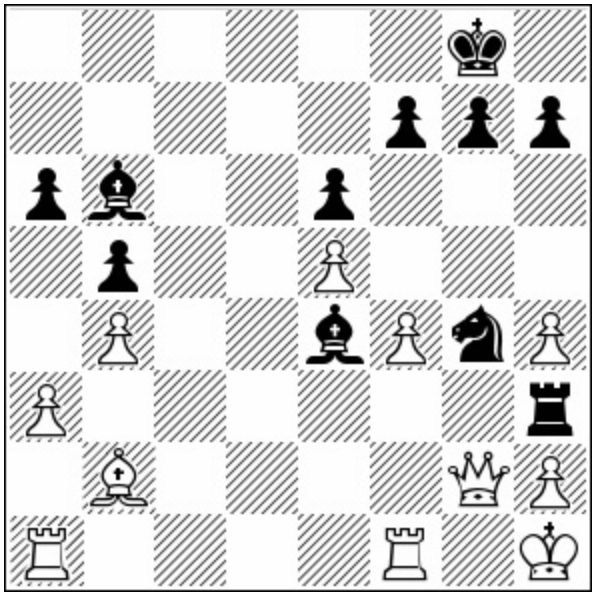
A) 23.Bxb7 Rxg3! leaves the white position in ruins, and ...Rh3 on the next move will be decisive;

B) 23.Bxc3 Bxe4+ leads to a quick mate, as the white queen is overloaded. We can thank Rotlewi for taking the queen, as that allows Rubinstein to showcase the point behind his combination.

23...Rd2!!

Another stunner. The white queen is deflected from the defence of the central bishop and the remaining black pieces will together seal the deal.

24.Qxd2 Bxe4+ 25.Qg2 Rh3!



A beautiful picture that finishes the theoretical part of the book. The white queen is helpless against the threats of the black forces. Checkmate on h2 is unavoidable.*

> * After his outstanding victory over Aronian in Wijk aan Zee (2013), Anand identified the great similarities between his moves and those by Rubinstein against Rotlewi.

0-1

While symmetry is often frowned upon in chess, chess is such a rich game that even the smallest of imbalances can generate insurmountable problems. Next time, when your opponent is insisting on exchanges and symmetry, and you notice that thoughts of boredom are entering your head, you can remind yourself of Rubinstein's masterpiece.

Thanks for joining me on the first quest to discover the Hidden Laws of Chess.

The Hidden Laws of Symmetry

• When fighting for an advantage, you need to break the symmetry by creating an imbalance;

• In symmetrical positions, a lead in development can become deadly if it can be transformed into something concrete;

• Piece activity outweighs the quality of pawns. Don't worry about weakening your structure if this implies that you can grab the initiative;

• If the centre is fixed in a symmetrical position, both sides usually have a 'good' and a 'bad' bishop, with the good bishop occupying the colour of the opposing pawn structure. Try to exchange your bad bishop for your opponent's good one;

• Look for a hook. Exploiting a hook can be very favourable, as it allows you to control the tension;

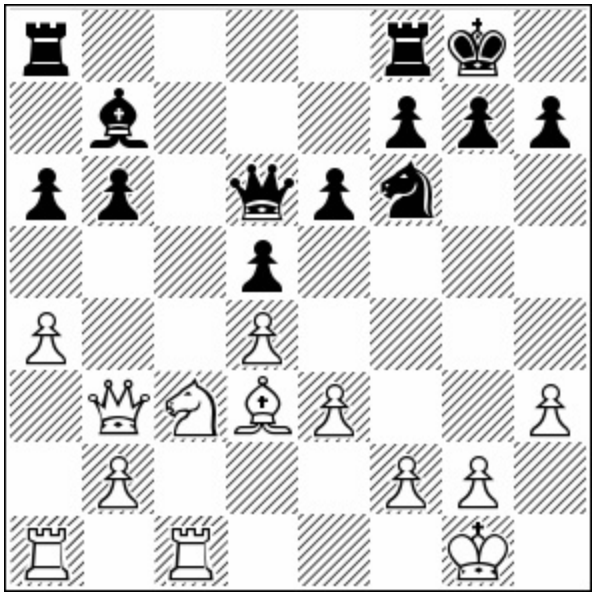
• When the centre is fixed, play revolves around the flanks. Don't hesitate to

move pawns in front of your king.

Quiz

Show in Text Mode

Exercise 1
Alexander Khalifman 2628
Dibyendu Barua 2550
Las Vegas rapid 1999 (1.6)



White to move

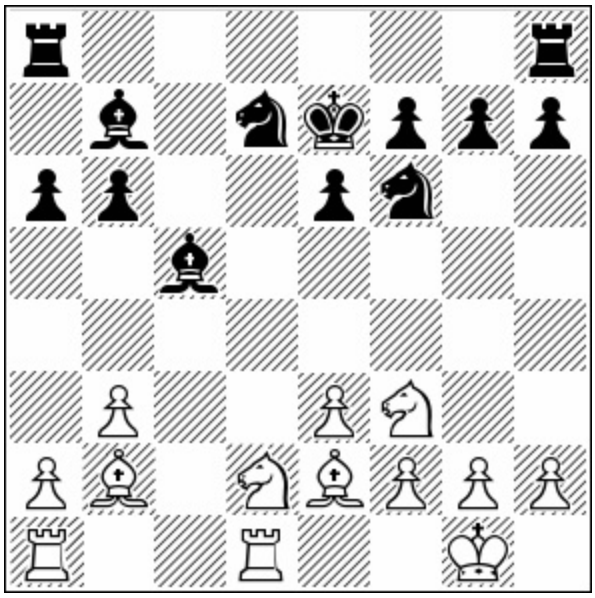
White has achieved the strategically desirable exchange of the dark-squared bishops. How can Khalifman increase his advantage?

Show/Hide Solution

Exercise 1

18.a5! is correct, inviting Black to respond with **18...b5**, fixing all the black pawns on light squares. Alternatively, **18...bxa5 gives White a clear target on a6. In either case, White has a large positional advantage.**

Exercise 2
Dmitry Jakovenko 2737
Varuzhan Akobian 2606
Dresden Olympiad 2008 (8)



White to move

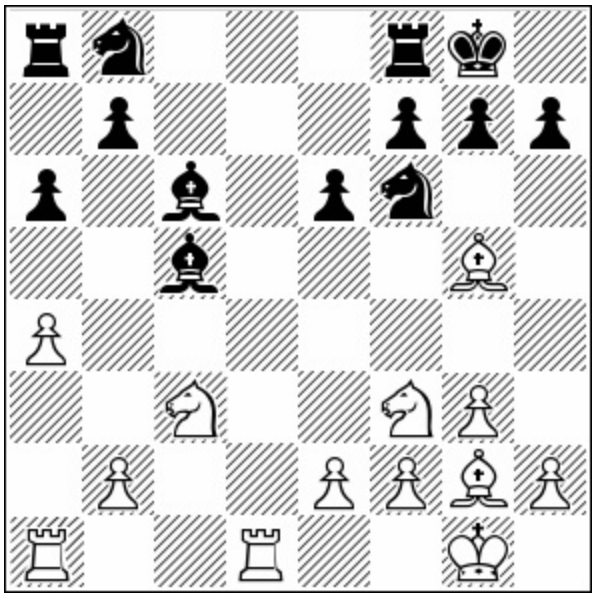
A similar endgame to the one in the Kramnik-Kasparov game. How should White proceed?

Show/Hide Solution

Exercise 2

14.Ne1! is correct. White must hunt the dark-squared bishop. **14...b5 15.a4! bxa4? 16.Nd3 Rhc8 17.Nxc5**. White is winning. This is one of those positions in which the bishop pair is just too dominant. Black cannot compete on the dark squares. Instead, Akobian should have defended with **15...b4!. After 16.a5! – another typical idea in this structure – White has a significant advantage because the black pawns on the queenside are more vulnerable. Note that going after the bishop immediately with16.Nd3 a5 17.Nxc5?! Nxc5 is too hasty. Black has reasonable counterplay due to White's vulnerable pawn on b3, and White can hardly make use of his bishop pair. The bishop pair thrives in open positions!**

Exercise 3
Benjamin Bok 2607
Lucas van Foreest 2481
Wijk aan Zee B 2018 (8)



White to move

How can White exploit his lead in development?

Show/Hide Solution

Exercise 3

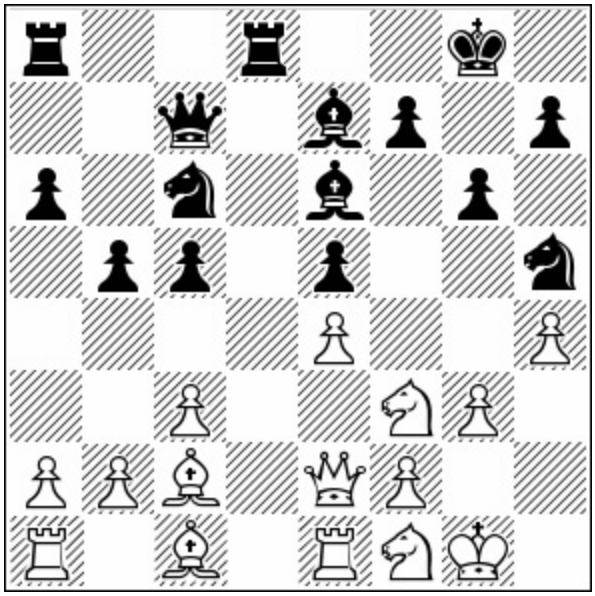
16.N**e5!**. After the knight arrives on e5, Black can hardly finish his development. A natural move like 16.Rac1 is not good, as it allows Black to catch up with 16...Nbd7. White must act quickly.

16.Ne5! Bxg2 17.Kxg2. It is extremely hard to suggest a good move for Black. 17...**N**bd7 isn't possible and **17...Nc6 runs into 18.Bxf6, followed by 19.N**d7. In the game, Black collapsed quickly: **17...h6 18.Bxf6 gxf6 19.Ne4 fxe5 20.Nxc5 b6 21.Ne4 Nc6 22.Rac1 1-0**

Exercise 4

Bobby Fischer

Arthur Bisguier
New York ch-USA 1963/64 (4)



White to move

How should White proceed and how do you evaluate the situation?

Show/Hide Solution

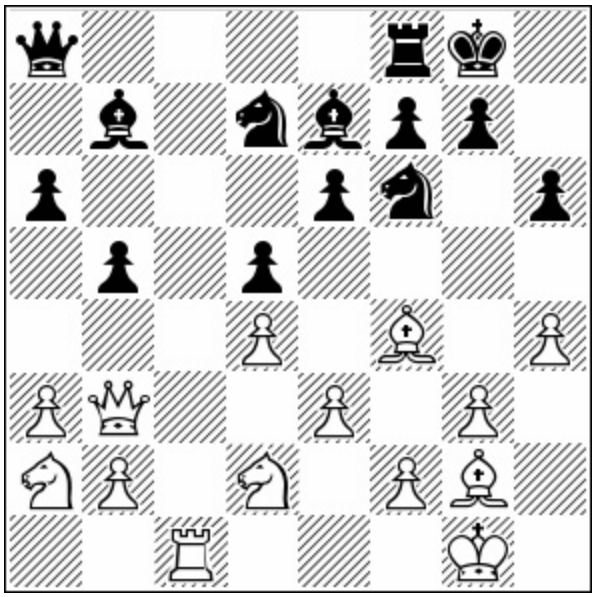
Exercise 4

18.Ne3!. Fischer wants to stop 18...**B**c4, and the knight is now targeting the important square d5. White is better, as Black has a vulnerable square on d5. while Black cannot take advantage of the square d4. In this case, the fact that Black's c-pawn is further advanced is a drawback. **18...f6?!**. A careless move that allows White to take immediate action. Defending with a patient move like **18...Rac8 was preferable. Fischer continued 19.Nd5!**. Since the diagonal towards the black king has been opened, this immediate jump is justified. Bisguier responded with the correct **19...Qb7**, but his position is already very bad. Fischer won comfortably.*

* This game was part of Fischer's run in the American Championship in which he scored 11/11. Those were the days!

Grabbing the pawn with 19...Bxd5 20.exd5 Rxd5 doesn't really work. White makes use of a hook with 21.a4!. Suddenly, the b5-pawn is under a lot of pressure. 21...Rb8 22.c4! Rdd8 23.axb5 axb5 24.cxb5 Nd4 25.Nxd4 cxd4. Black's centre looks mighty, but White has total control over the light squares. White is winning.

Exercise 5
Magnus Carlsen 2864
Ding Liren 2799
Charity Cup KO 2022 (2.23)



White to move

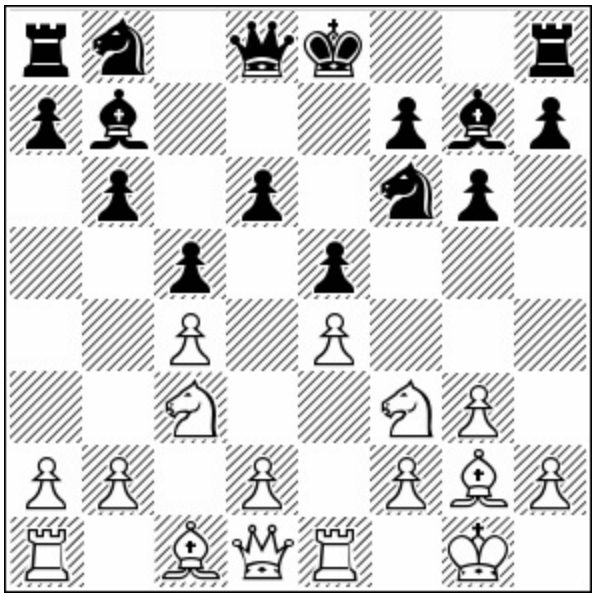
Carlsen is known for his extraordinary ability to squeeze water from a stone. Can you guess his move here?

Show/Hide Solution

Exercise 5

20.Bc7!. The only move to fight for some advantage in this completely symmetrical position. Carlsen has a beautiful manoeuvre in mind. **20...Rc8 21.Ba5 Ne8 22.Qd1 Nd6 23.Rxc8+ Qxc8 24.Bb4**. The bishop has found a nice square on b4, where it is no worse than its counterpart. Furthermore, White's light-squared bishop has more potential, and he still retains the option to play b2-b3, contesting the key square on c4. White is slightly better.

Exercise 6
Le Quang Liem
Eric Hansen
Oslo rapid 2022 (4.2)



White to move

How did White continue in this symmetrical position?

Show/Hide Solution

Exercise 6

Some points are awarded if you suggested 9.a3, intending an expansion on the queenside with b2-b4.

However, full points are awarded for the stunning **9.d4!!**. A fascinating idea that is known from opening theory. The pawn move looks completely ridiculous at first glance, butt turns out that Black can't really take the pawn: 9...cxd4 runs into 10.Nxd4!. If Black doesn't accept the piece sacrifice, he will be left with a terrible backward pawn. Yet 10...exd4 allows 11.e5!, opening the position with decisive effect. If Black captures the bishop on g2, White takes on f6 with check, winning a large amount of material. Hence, 11...dxe5 12.Bxb7, and White wins at least the exchange. The alternative 9...exd4 10.e5! is even more crushing. After 10...dxe5 11.Nxe5, White's threats are lethal. Therefore, Hansen responded with the correct **9...Nc6**. This allowed Le Quang Liem to open the position. After **10.dxe5 dxe5 11.Nd5 h6 12.Bd2 0-0 13.a3 Qd6 14.Rb1 Rfd8 15.b4**, White had a long-lasting initiative and he went on to win. Note that Black cannot respond with 11...Nd4, as that would drop the e-pawn. As a result, White is capable of successfully breaking the symmetry.

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Chess terminology

Backward pawn. A pawn that has fallen behind allied pawns on neighbouring files. The backward pawn cannot safely be advanced.

Battery. A tandem of two pieces that operate together on the same rank, file, or diagonal. They fulfill the same function. For instance, a bishop on c2 and a queen on d3 targeting a pawn on h7.

Calculation. The process of considering several alternatives whilst accounting for the opponent's replies. During calculation, one proceeds to go deeper and deeper into a variation. Calculation is usually supplemented by intuition, because we need to assess positions at the end of variations. Training calculation skills is an essential part of chess improvement.

Deflection. A move that forces an enemy piece away from the defence of a particular square or piece.

Discovered attack. A piece moves out of the way, uncovering an attack from the piece behind.

Dynamics (as opposed to statics)**.** Dynamics refers to non-durable advantages. The simplest and most common dynamic advantage is a lead in development. Usually, a dynamic disadvantage is relatively easy to dissolve.

En passant. A French expression meaning 'in passing' that refers to a special rule in chess. If a pawn uses its one-time right to move two squares from its starting square, it can be captured by an enemy pawn that is on a square horizontally adjacent to its destination square. The enemy pawn still captures diagonally, entering the empty square behind while eliminating the sprinting pawn as if it only moved one square. The en passant rule is only active during the turn that follows immediately after the two-square pawn jump has been made. The rule counteracts the power of a two-square pawn jump, as it prevents a pawn from bypassing an opposing pawn.

Exchange sacrifice. With an 'exchange sacrifice', we refer to the sacrifice of a rook for a minor piece.

Fianchetto. A bishop that occupies the long diagonal, usually from squares b2, b7, g2 or g7.

File. The vertical lines on the board, for instance a1 to a8.

Foothold. A new term that describes a strong square in front of an enemy backward pawn. This square can no longer be guarded by opposing pawns. Contrary to an outpost, a foothold doesn't need to be protected by an allied pawn.

Fork. A pawn or piece of lower value attacks two pieces of higher value.

Fortress. A situation in an endgame in which the defending side organises a set-up which cannot be penetrated. It is impossible for the attacking side to make significant progress.

Gambit. A chess opening in which one side sacrifices material.

Hanging pawns. A pawn island of two adjacent pawns (usually on the c- and d-files) standing on semi-open files with no allied pawns on neighbouring files on either side.

Hook. A hook is an advanced enemy pawn that the opponent can use to open files. Often, a move by the 'hooked' pawn is undesirable, allowing the opponent to control the tension.

Isolated pawn. A pawn without friendly pawns occupying neighbouring files.

Isolated queen's pawn (IQP). A pawn on the d-file without allied pawns on neighbouring files.

Kingside. All the space on the e-, f-, g- and h-files.

Major piece (also known as heavy piece). A rook or queen.

Minor piece. A bishop or knight.

Natural move. A move that is in line with conventional chess wisdom. Examples are moving a rook to an open file or capturing with a pawn towards the centre.

Novelty. A move that takes the game into uncharted territory. A novelty is a

new move that is the first deviation from a known position.

Open file. A file that isn't occupied by any pawns.

Outpost. A strong square protected by a pawn that can never be attacked by an opposing pawn.

Overload. A piece that can no longer fulfill all of its defensive duties.

Passed pawn. A pawn that can no longer be stopped by opposing pawns.

Pawn island. A group of pawns (or a single pawn) that is at least one file away from another group of pawns.

Perpetual check. A player forces a draw by threefold repetition, as the opposing side cannot escape the checks.

Piece. All units apart from the pawns are referred to as pieces.

Pin. A piece (bishop, rook, or queen) ties down an enemy piece, as any movement by the 'pinned' piece implies that a piece of higher value will otherwise be captured.

Plan. A set of interconnected actions that serve to fulfill a certain objective. We often rely on the execution of plans to make progress in a position. Contrary to a 'tactic', a plan is often more strategic in nature.

Prophylaxis. A move that deals with an opposing threat before it appears on the board.

Queenside. All the space on the a-,b-, c- and d-files.

Rank. The horizontal lines on the board, for instance a7 to h7.

Second. A chess player who helps another player during their preparation.

Semi-open file. A file with pawns of only one colour.

Skewer. A piece (bishop, rook, or queen) that targets an enemy piece. If the enemy piece moves, another piece behind it will be lost.

Spite check. A check in a completely losing position that delays the inevitable mate.

Squeeze. A strategy that involves slowly building up pressure in such a way that the opponent ultimately cannot cope with all the threats.

Statics (as opposed to dynamics)**.** Statics refers to durable advantages such as a damaged pawn structure. Usually, a static disadvantage is hard to dissolve.

Strategy. With strategy, we refer to a goal-oriented method to gain an advantage. Contrary to tactics, strategy usually concerns long-term goals.

Tabiya. An opening position that is heavily standardised and is the start of discussion. From the tabiya, several alternatives have been tried.

Tactic. A small combination that typically leads to material gain. Plenty of tactics have received their own name, many of which are featured in this book. For instance, the 'pin' and 'skewer' are common tactical motives.

Tension. A description that is usually applied to situations in which pawns can capture each other.

Transposition. Reaching the same position via a different move order.

X-ray. An enemy piece is attacked indirectly through another piece, or a friendly piece is defended through an enemy or friendly piece.

Zugzwang. A special situation in which every single move worsens a player's position. The player would rather pass his turn.

Zwischenzug. A chess tactic in which a player doesn't react to an opposing threat or capture immediately, but first interposes a move that creates a threat of its own. Only after the zwischenzug has been answered does the player react to the initial threat or capture.

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