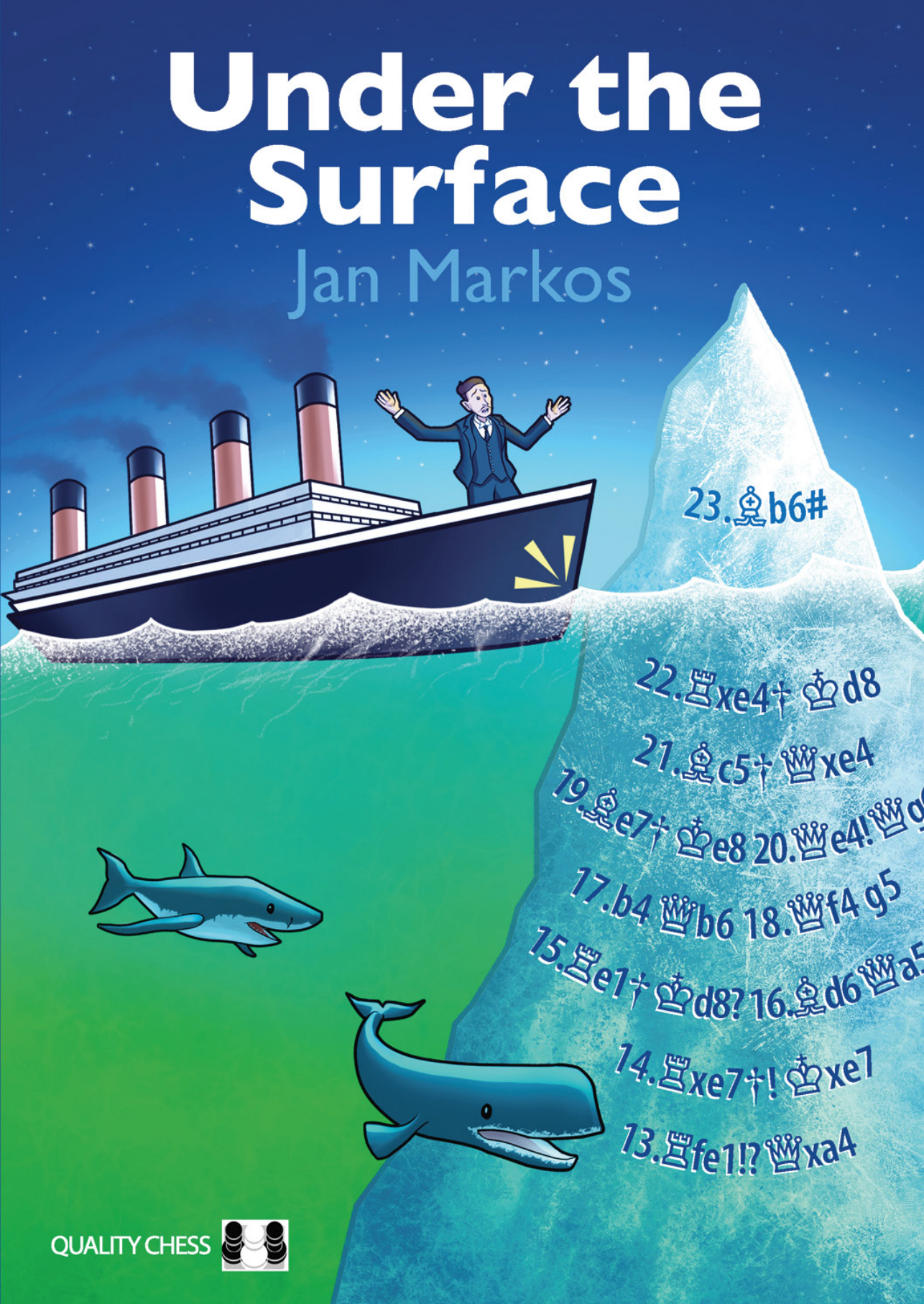
Under the Surface

Jan Markos

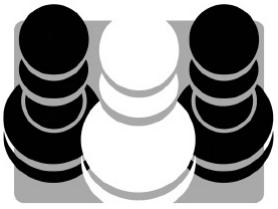


QUALITY CHESS

Under the Surface

By

Jan Markos



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Foreword
By GM Vlastimil Babula

Take a deep breath, we are about to begin...

It seems to me that we live in hasty times. We want to achieve everything quickly or, even better, immediately. In order to reach our target as soon as possible, we often take somebody else's idea or hypothesis as fact, without understanding its deeper context; we simply accept it. We may know a given thing and be aware that it is right, but if we haven't personally touched it or experienced it, then we haven't fully understood it. In other words, we have a tendency towards superficiality. However, there is a huge difference between knowing and understanding. Therefore, we build on bad foundations, and there cannot be a good structure built on bad foundations.

In addition, every person is different, everybody is unique. A road which one person has travelled might not be the right way for somebody else. It cannot simply be copied, though it might be used as an inspiration while searching for a direction. I consider personal knowledge to be the only way that leads to true awareness and understanding.

I think that the above is applicable also in the world of chess. What is the good of knowing a book line of an opening by heart, if I don't understand the idea of the given opening, and I don't understand the meaning of the individual moves? I can clearly remember one game from the beginning of my chess career in which I played an opening line I had learned, but because I didn't understand at all what was going on in the position, I quickly lost the game.

As a similar example, nowadays there is a bad habit among players of relying on computer analysis, again without understanding the meaning. However, you can achieve only short-lived success with that attitude, there are no benefits from a broader perspective, and that's why I reject it. Of course, a computer can be a good advisor, but it certainly should not be our master, it should not think instead of us. That leads only towards laziness and superficiality.

I have a great deal of empathy for the book that you are beginning to read, because it is not superficial at all, it goes to the heart of the matter, beneath the surface. I can see one dimension of its title in this. The second can be found in the fact that it gives you the opportunity to observe the real thoughts of a chess grandmaster during a game; this is so much more than just the moves that were made, which are visible on the surface.

I have known the author, Jan Markos, since his adolescence, and I appreciate him not only as a strong chess player, but also as a special person. I always like to hear his opinion on any subject, because I consider him to be a keen observer, and not only in chess. Moreover, he can put his observations into context, and this ability shines from every single page of this book.

If I am asked to classify this book thematically, I find it difficult, because you can find practically everything in it: opening, middlegame and endgame; strategy and tactics; computer and correspondence chess; statistics as well as an aesthetic view of chess.

This book cannot be called a textbook. I would say it is something like a travelogue, a description of a journey of discovery which the author himself has travelled. Or rather, an overview of the findings he discovered during this journey, which is mostly evident in the chapters dedicated to strategy, some of which completely thrilled me. Here, the author, with his original point of view of the things he has experienced, often reveals some completely new connections, which reminds me a little of the innovative approach of Nimzowitsch.

Overall, this book is very readable; you won't come across dull, scientific passages. It is written in the author's unique style, in a balanced combination of a philosophical view and humour, with a positive feel to it. The author demonstrates his knowledge with clear chess examples, and to facilitate the readers' understanding, he uses parallels from everyday life, which I consider to be very accurate.

In this book he writes about everything openly and sincerely, and doesn't hide or fake anything. You can sense from the book that he loves chess and, at the same time, also his humility to its laws.

My wish is for all readers to experience the pleasure of learning. Once again, I would like to remind you that if you really want to take full advantage of the knowledge in this book, you should actively experience it in the spirit of the well-known: "Trust, but verify." Because for each of us, the most convincing evidence is his own.

GM Vlastimil Babula

Preface

Invitation to the World under the Surface

When I was 15 years old, I played for the first time at the Chess Olympiad, representing Slovakia. It was held in Istanbul, and I can still remember the bustle of the markets, the morning calls from minarets, and the dishes full of dill.

However, what most stuck in my mind were encounters with the best players in the world. When I had a day off, or whenever I had finished my game, I spent long hours standing above chess boards, over which were leaning Ivanchuk, Gelfand, Adams, Korchnoi or Svidler.

And I was happiest when I could see them analysing. Around the table with the chess board, there always gathered a crowd of people, holding their breath while watching how the soul of the position was revealed under the hands of the super-grandmasters. Those players could see much deeper and more sharply than all of us. They could see a direction where we were lost. They could see a deep sea full of colourful fish and coral, where we saw only the glistening surface.

It was then I learned that the significant difference between a club player and a professional is not that the grandmaster can see much further, or that he calculates much more accurately or faster. This might all be true, but the significant difference can be found elsewhere. Grandmasters can see deeper. And this book invites you to study the depth of chess. It invites you beneath the surface. I would like to show you how a strong player perceives chess, what he focuses on, and how he thinks about a position. Understanding is pure happiness, and I would like to share this happiness with you.

I write mostly about phenomena I haven't seen discussed in chess literature before, but which I consider to be important. These phenomena also require new terminology, new words. That's why you are going to read about a *magnetic skin* made of pawns, bishops as *billiard balls*, and a *freezer* for storing tactical motifs. I was looking for metaphors that would be as precise as possible, and that would be easy to remember. At the end of the book, there is a glossary of these new expressions.

Even though this book is not about trivial topics, I did my best to explain them as simply as possible. It is intended for the general chess public – for players who work hard to improve their game, but also for those who play only for pleasure. Chess coaches might especially profit from this book, as they can use its chapters as teaching material for training sessions or lectures.

I wanted to make the text readable even without a chess board, while travelling to work, or on vacation at the seaside. Therefore, in this book there are many diagrams and lots of words, but only a few variations. If a specific line leading to victory is missing, it is not because of negligence, but because I would like to invite readers to find it themselves, to work on the position on their own. All of the moves and evaluations are, of course, computer-tested.

Many of the examples in the book are from my first-hand experience. Not that I think that my games are better than those of other chess players. The reason is practical: finding a good example is difficult and, moreover, I know my games the best. Other examples come from games played by world-class players, or from games in which I was personally involved, as a teammate or as a coach. A small portion of the examples come from computer chess.

The book is divided into seven parts. The first is about general laws that apply to the chess board. In the second part, we will gradually get to know pawns, knights, bishops, rooks and queens, and we will talk about their special characteristics. The third part is dedicated to peculiarities of time in chess. In the fourth part, we will examine together how to find the best move as often as possible. The fifth part is about openings, the sixth about computers. And, finally, the seventh part is about the beauty of chess.

This book would never have come into existence without the many hours that I spent training my students. They were the ones on whom I tested the thoughts contained in the book, checking whether they are comprehensible and beneficial. Thank you, Anna, Jakub, Vaclav, Marek, Jan, Stefan, Juraj, Van and everyone else, for your willingness to experiment and enter uncharted territories!

I would like to dedicate this book to my father, who has taught me that life has a depth which is worth searching for.

And that is pretty much it for the introduction. There is only one wish left: that you enjoy reading this book as much as I enjoyed writing it. And I also have one request: write to me about what you like about the book, what you would like to read more about in the future, or what you would improve or change about it. I'm really curious to know your opinion (jan.markos@gmail.com).

Now, take a deep breath! A mutual journey under the surface is awaiting us.

Jan Markos
Bratislava, Slovakia


38.f4 c4 39 Jd6 D6+
35.Dc4 Jxg2 34.Dc2 Sd5
37.Je4 Sd5
35.Jd7 Jh4 Sxh4
42.De2 Dxf4+ 43.Kg1 Dd3+
40.Kf1 g6 41.Vxd5 De3

Contents

Key to symbols used

⩲	White is slightly better
⩱	Black is slightly better
±	White is better
∓	Black is better
+–	White has a decisive advantage
–+	Black has a decisive advantage
=	equality
⯹	with compensation
⇄	with counterplay
∞	unclear
?	a weak move
??	a blunder
!	a good move
!!	an excellent move
!?	a move worth considering
?!	a move of doubtful value
#	mate
△	White to move
▼	Black to move

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Part I

About the Laws of the Chess World

In this introductory part, we will focus on the laws that all inhabitants of the board have to obey.

Three Faces of a Piece talks about how to correctly answer the question: "Is this piece standing well or not?" There are three crucial factors – whether the piece is active, whether it is vulnerable, and whether it is hindering its fellow fighters.

Hierarchy on the Board focuses on the vulnerability of pieces. You will learn why pieces of lesser value enter the fight first, which forms of protection are reliable, and why queens, though powerful, are easily bullied.

In ***Infection***, it is shown how one weakness leads to the creation of others, just as an infected person can become a carrier of disease.

Policemen of the Chess Board is devoted to prophylaxis. We will see that pieces can also perform tasks other than attacking and defending.

This part of the book is the most general and abstract. However, knowledge of the laws we are going to speak about will be of practical use to you in any position that arises on the board.

Chapter 1

Three Faces of a Piece

When are my pieces standing well?

During a game, I often ask myself the questions: "Are my pieces standing well or not? And if they aren't standing well enough, where is the best place for them to stand?" More advanced players answer this question almost subconsciously. They have seen so many positions in the past that their minds somehow recommend appropriate solutions automatically, out of habit.

In this chapter, we will try to put our hunches and intuition on slightly firmer ground. We will try to give them a theoretical basis. I think that this chapter is the most important one in the whole book – its correct understanding will be immediately reflected in your chess strength.

What criteria do we apply when deciding whether a piece is standing well or not? A beginner usually takes into account only one perspective. What matters to him is how actively the piece is standing, whether it is attacking anything, and whether it is controlling many squares. However, that's a very limited point of view.

There are two more perspectives that take into account other features of a piece. Firstly, it not only threatens but may also be threatened. Furthermore, it not only threatens and is threatened, but it can also hinder. It might be occupying a square that could have been better used by one of its fellow fighters.

Each piece on the chess board should be regarded from three perspectives. First, as an active tool that we can use to achieve our goals. Second, as a vulnerable and valuable creature which requires care all the time. Third, it is important to see it also as a 'piece of wood', which is standing in the way of its fellows.

Each pawn and every piece on the board has all three of these 'features', although they are not always divided in the same ratio. For example, looking at the king, we usually perceive mainly its vulnerability. However, that does not mean that it doesn't also play an active role in a game. As an example, in the castled position, it defends the pawns standing in front of it. Then, in endgames, it becomes an attacking tool.

The first World Champion, Wilhelm Steinitz, was a big supporter of the active role of the king even in middlegames. He wrote in his book, *Modern Chess Instructor* (1889):

> *But it is specially as regards the powers of the King that the modern school deviates from the teachings and practice of old theorists and Chess masters, and we consider it established that the King must be treated as a strong piece both for attack and defence. This means that so far from the King requiring great protection early in the game a few simple precautions which we shall further explain, will render him so safe that any attempt at attacking his wing will be more dangerous for the opponent than for himself.*

We usually consider pawns to be 'pieces of wood' forming the skeleton of a position. For your pieces to bypass a central mountain ridge formed in closed positions from the King's Indian Defence or Spanish Game can sometimes be a task worthy of Hannibal.

Pawns, due to their low mobility, often become victims of attacks, and therefore link themselves with defensive pieces.

And thirdly, when a passed pawn starts running, it becomes a weapon that can easily affect the whole fate of the game.

Let's have a closer look at each of the three faces of a piece.

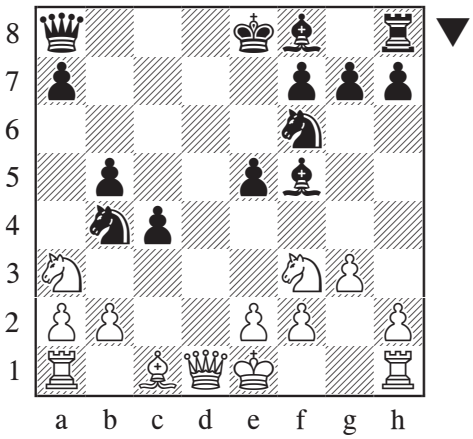
An Active Tool

All chess players intuitively understand that a piece can be used as a tool for achieving their goals. It's the most common criterion used to determine the value of a piece. Therefore, I will give you only two examples. There is not much to explain.

The first example is easy to understand.

Levan Pantsulaia – Judit Polgar

Aix-Les-Bains 2011



In the earlier course of the game, Judit Polgar sacrificed an exchange. It might seem that she will not receive sufficient compensation. With his next move, White intends to transport his king to safety, and Black will have a pawn and a bishop pair as a counterweight to her missing material. Will it be sufficient?

Black decided not to analyse this question and played the impressive:

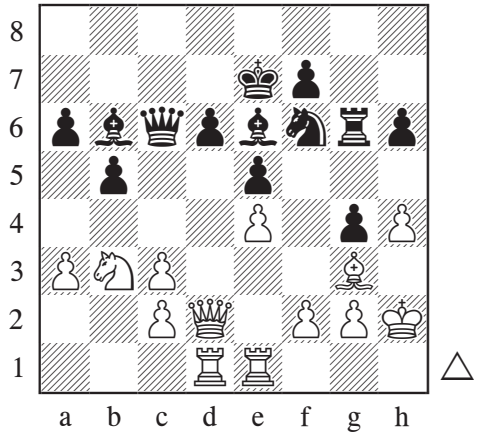
13...♘d3†! 14.exd3 ♗xd3

By sacrificing the knight, a new superpower is created on the board. The bishop on d3 cuts White's position into two pieces, and thanks to the bishop, the white monarch has to remain in the centre. In fact, White's position is already critical and Judit Polgar won the game beautifully.

The second example is much more complicated. White transfers the knight from the safe b3-square to the exposed b7-square, where it will be surrounded by the opponent's pieces. One might think that the vulnerability of the knight would be the defining feature of its character. However, the conductor of the white pieces assessed correctly that the active role it plays on this square is far more important.

Sergei Movsesian – Veselin Topalov

Khanty-Mansiysk (ol) 2010



In the earlier course of the game, Topalov sacrificed the exchange on c3 and gained sufficient compensation. The white pawns on the queenside are broken, the g3-bishop is out of the game, and Black is enjoying the bishop pair. If he could play ...♗c4, there would be almost no way to counter the threat of ...♘xe4, because the advance f2-f3 would seriously weaken the white king. Therefore, Movsesian has to act very quickly.

27.c4!

A nice move with an even nicer point. For the price of the (almost worthless) doubled pawn, White activates the b3-knight. With some help from his opponent, he will demonstrate in a few moves that the black king is not standing nearly as securely as it seems.

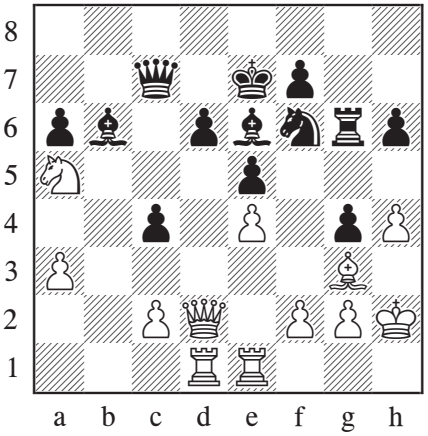
27...bxc4?!

Here Topalov shows slightly too much fighting spirit.

Objectively stronger is 27...♗xc4 28.♘a5 ♗xa5 29.♕xa5 ♘xe4, although this allows: 30.♖xe4! ♕xe4 31.♕c7† ♔f8 32.♖xd6 ♔g7 33.♖xg6† ♔xg6 34.♕xe5 ♕xe5 35.♗xe5= With an equal endgame.

28.♘a5 ♕c7

The capture on a5 was apparently the lesser evil.



29.♘b7!!

A beautiful and very strong move. The knight on b7 might seem to be totally lost, but it is, in fact, quite safe. Moreover, it is doing a great job of attacking the d6-pawn and effectively limiting Black's b6-bishop.

29...♘e8

This defensive move is necessary.

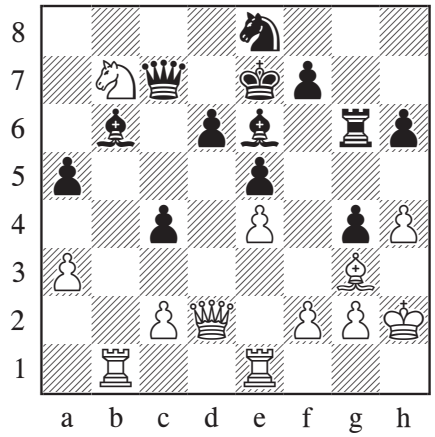
29...♕xb7 30.♕xd6† ♔e8 31.♖b1 ♘d7 stumbles into a hidden stab: 32.h5! ♖g8 33.♗h4 Black cannot prevent mate without material losses.

30.♖b1

It turns out that it is necessary to help the knight a little bit.

30...a5

According to Movsesian, his opponent had overlooked from afar that after 30...c3 31.♕d3 he cannot capture with 31...♕xb7 because of the impressive 32.♕e3!.



31.h5

The dead bishop is returning to a new life...

31...♖g5?

A clear sign that Topalov no longer had the moral strength to resist. Giving away the second exchange is equivalent to giving up.

Although 31...♖g8 32.♕xh6 f6! leaves White an exchange up, he also experiences problems with the somewhat comical placement of his pieces, and that would give Black some hopes for a successful defence.

32.♗h4

Movsesian didn't hesitate. After capturing the g5-rook, White's material advantage is too big; the game is coming to an end.

32...f6 33.♗xg5 fxg5 34.c3 ♗a7 35.♖ed1 ♗d7 36.♕d5 g3†

A spite check!

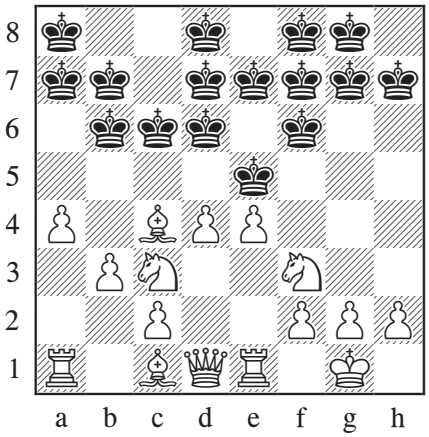
37.♔xg3
1–0

The b7-knight reminds us of a hero from an action movie, who avoids every bullet and cannot even be stopped by an explosion. However, it is extremely rare for pieces to have such luck – fate usually tests them much more.

So let's have a look at the second essential feature of pieces.

A Vulnerable Creature

Even a beginner understands that the king is a very vulnerable piece. The risk of being captured in the middlegame usually far overweighs the benefits it could bring its army if it actively participated in the fight. Its role in middlegames is usually to cower somewhere in the corner of the chess board. However, it is not only the king that is vulnerable, but all pieces – the loss of any of them can 'hurt'. They all need adequate protection. Many games have been lost because of a badly-placed knight, or a pawn that couldn't be protected.



It is necessary to take care of every piece; a 'little king' is hidden in each of them.

I would like to explain myself using a comparison. Young people are often mistaken in considering their bodies to be only a compliant tool, which helps them to achieve different goals and experience pleasant moments. The body of a young person doesn't usually ache, and so the person doesn't think about taking care of it. But everybody gets a lesson from life: he or she learns through pain that the body is a vulnerable, sensitive

structure, to whose fate is linked our destiny. We learn that to prevent our bodies imprisoning us in illness or pain, they require good care.

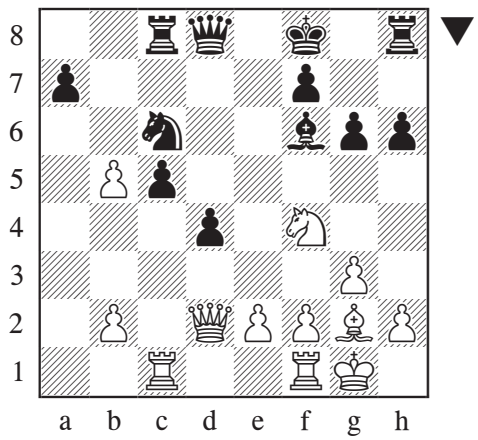
What applies to the human body also applies to pieces on the board. Let us, therefore, think of chess pieces as if they were living creatures and we cared about their fate. The well-known chess author Jonathan Rowson advises us, half joking, half serious, that we should *talk to our pieces*.

When you 'talk' to every piece on the board, when you pay attention to each one as a separate entity, it will help you avoid antipositional moves. You won't start attacking before completing development, because you will 'hear' your undeveloped rook fighting for its rights. You won't place your knight offside or on an exposed square, because you will not ignore its silent protests.

Even the strongest players can easily make mistakes if they don't care about their pieces.

Jan Markos – Vladimir Tukmakov

Czech Republic 2009



In this position, Tukmakov played the suspicious:

20...♘a5?

Thanks to the presence of the opposite-coloured bishops, White governs the light squares, and my opponent's move was intended to neutralize this advantage. From the a5-square, the knight controls the important c4-square and also threatens to fork my major pieces.

However, if Tukmakov had asked his knight if it wanted to go to a5, he would surely have quickly found out that 20...♘a5? is a bad move. On a5, the knight is almost imprisoned and also very vulnerable.

The game continued:

21.♕c2 c4

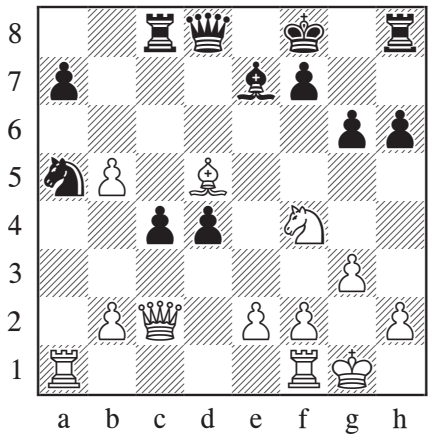
Black is fighting for the light squares.

22.♖a1

The weakness of the knight is becoming visible.

22...♗e7 23.♗d5!

Standing in a typical dominant position in relation to the knight.



23...♗g5 24.♗xf7!

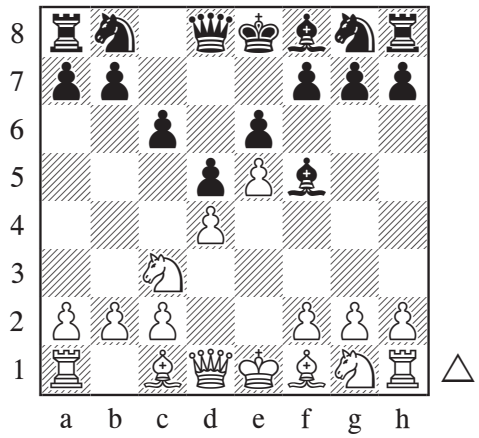
This sacrifice is successful mainly due to the fact that the opponent's queen cannot move

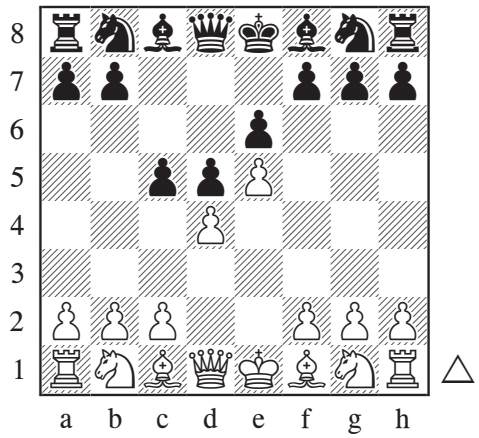
because it has to protect the unfortunate knight on a5.

24...♗xf4 25.♕xg6+–
White has a winning attack.

Let's go back to the position from the diagram. The knight itself would surely prefer the move 20...♘b4!. On this square it is closer to the centre and, in addition, it is safely protected by the c5-pawn. And, last but not least, it is protecting the central d5-square, which in the game became an important outpost for the white bishop.

Now, let's compare the following two positions:





In both cases Black's light-squared bishop is 'bad', which means it is not in a harmonious relationship with the pawn structure. However, it is not 'bad' in the same way. In the position from the French Defence it suffers from a lack of mobility, stuck behind a wall of pawns, while in the position from the Caro-Kann Defence it suffers from fear that it will soon be attacked by the opponent's pieces, and there is no way of returning home. In the first case, it is bad because it does not fulfil its function as an active tool; in the second case, it is bad because it suffers as a vulnerable being.

Of course, there is no real threat in the Caro-Kann that White will trap the f5-bishop. However, White can win tempos attacking it or forcing Black to take measures to safeguard it.

We can make use of an opponent's exposed piece in four different ways.

First, we can simply capture it and be a piece up.

Second, attacking it may gain us one or more tempos.

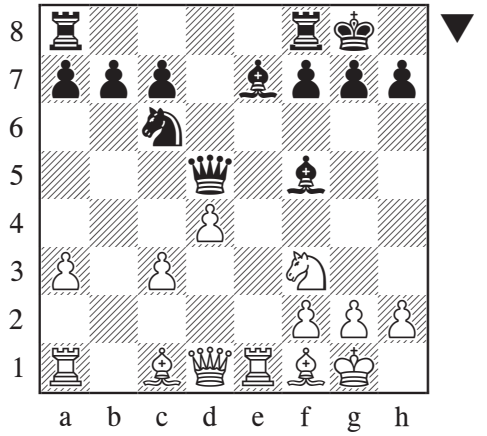
Third, by threatening such a piece, we might force the opponent to pay attention to it, while neglecting the rest of the battlefield.

The fourth way is perhaps the most interesting one. As we will see in the chapter on Infection (page 32), pieces defending a weakness are liable to become weaknesses themselves.

The following example illustrates excellently the extent to which the vulnerability of several pieces can affect the whole fate of a game. In the diagram, there is a well-known theoretical position from the Petroff Defence. We will follow the footsteps of the game:

Anatoly Karpov – Lajos Portisch

Lucerne (ol) 1982



Black's pieces are certainly not less active than White's. The queen on d5 is controlling many squares; the knight is developed in the centre, even the bishops have nothing to complain about. And yet, White can aspire to gain an advantage.

The problem with Black's army is that its soldiers can be easily attacked. The queen will be chased away by the pawn on c3; the c6-knight protects the e7-bishop and also the important e5-square, but the knight itself can be attacked by the d4-pawn. The bishop on e7 is lacking support, the f5-bishop and the b7- and c7-pawns are possible targets of attack.

Karpov made full use of the vulnerability of his opponent's army. He delivered to the Hungarian grandmaster one of the cruellest losses of his career.

14...♗g6

Nowadays, 14...♖fe8 is Black's main choice.

15.c4

With tempo!

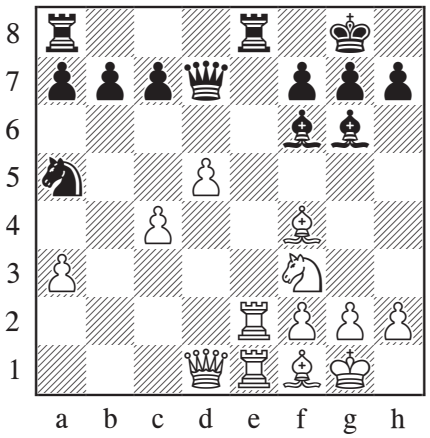
15...♕d7 16.d5

Another tempo!

16...♗f6 17.♖a2 ♘a5

Probably the best try, but the knight looks rather shaky on a5.

18.♗f4 ♖fe8 19.♖ae2



19...♖ec8?

This error, which results in a quick loss, is a decidedly unnatural move – a clear sign that Portisch wasn't satisfied with his position.

19...♖xe2 20.♕xe2 c5 is extremely uncomfortable, but perhaps still playable.

20.♘e5 ♕f5

Another piece lands in an exposed position.

21.♗d2!

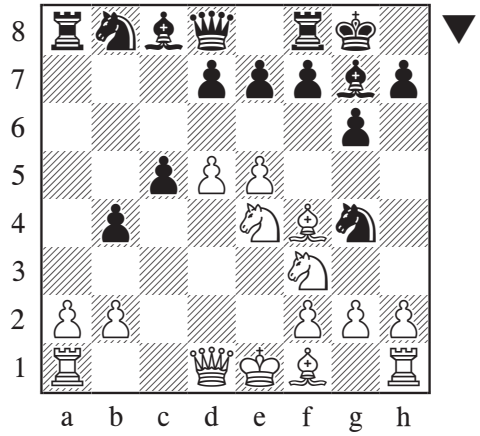
A double attack – White is also threatening to trap the queen.

21...♘xc4 22.g4! ♘xe5 23.gxf5 ♘f3† 24.♔g2 ♗h5 25.♕a4 ♘h4† 26.♔h3 ♗xe2 27.♗xe2
1–0

Another example of the vulnerability of pieces comes from my praxis:

Lubos Rosko – Jan Markos

Czech Republic 2010



It may seem that White's position is good – he has both pawns and pieces in the centre. However, a closer look reveals that his camp is full of tactical weaknesses: the e4-knight, the f4-bishop and the b2-pawn are not protected, the e5- and a2-pawns are barely protected, and the king is still in the centre.

Therefore I immediately opened the game with:

11...d6!

It soon became clear that Rosko's position was difficult. White had so many weaknesses that Black lived on them until the end of the game. I threatened or captured something on eleven of the following dozen moves. Events progressed rapidly:

12.♗c4 dxe5 13.♗g3 ♘d7 14.h3 ♘gf6 15.♕e2 ♘xe4 16.♕xe4 ♗b7 17.♕e2 e4 18.♘g5 ♘b6 19.♖d1 ♘xc4 20.♕xc4 e6 21.♘xe6 fxe6 22.dxe6 ♗a6 23.♕xe4 ♕a5 24.♖d7 b3†
0–1

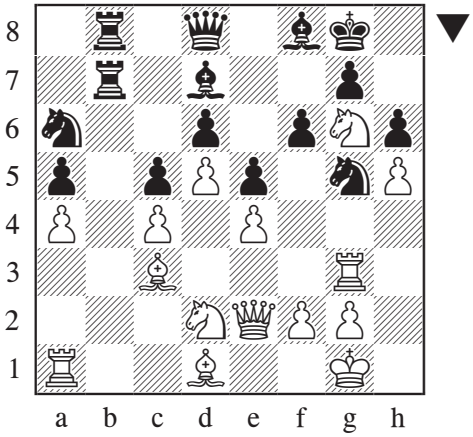
A Piece of Wood

The perception of the third and final face of a piece, which is the ability to hinder its brothers, is quite difficult because we cannot judge the position of a piece in isolation, regardless of the rest of the board. We have to see our whole army as one organic unit.

Our first instructive example comes from a game by the twelfth World Champion:

Anatoly Karpov – Ulf Andersson

Stockholm 1969



Andersson played:

31...♘b4?

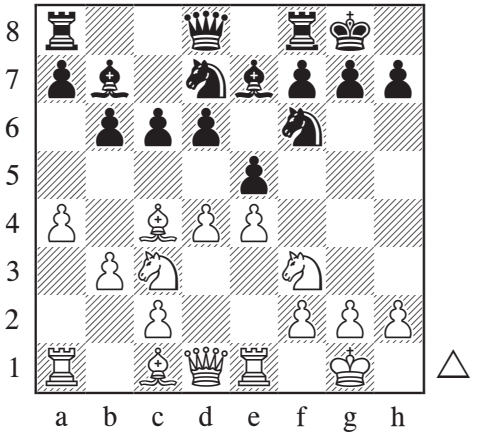
Karpov later showed little respect for this move: "Nonsense, Black should rather sacrifice the exchange on the b4-square."

The problem with the knight's jump is not that it stands badly on the b4; the contrary is true. The trouble is that it acts like a cork on that square. What will Black do with his doubled rooks on the b-file?

The next diagram portrays a position from the main line of the Philidor Defence:

Surya Ganguly – Roberto Cifuentes Parada

Calvia (ol) 2004



White plays a move that is mysterious at first sight:

10.♗d3

Why?

A chess player who doesn't perceive all three faces of a piece probably won't be able to decipher this move. After all, the bishop is more 'active' on c4 than on d3. Such a player plays ♗b2, ♕d2 and ♖ad1; then he ponders for a long time and is surprised that he cannot find any active way to an advantage, even though he placed his pieces 'perfectly'.

And yet the bishop's retreat has a strong inner logic: the bishop is vulnerable on c4 and it is liable to be attacked by the moves ...b5 or ...d5. The retreat makes these operations more difficult for Black. The c3-knight might also come under attack from the b-pawn. Moreover, both pieces are standing in the way of their own c-pawn; the knight also masks the dark-squared bishop that will soon be standing on b2. White, therefore, is planning to move the knight to g3. However, he needs to protect the e4-pawn for that, and so he retreats the bishop to d3 and not to the very safe f1-square.

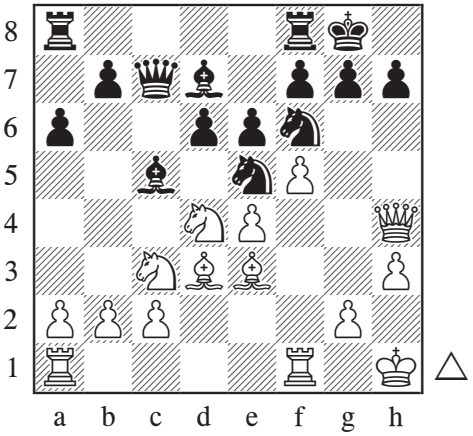
10...♖e8 11.♗b2 a6 12.♘e2 ♗f8 13.♘g3 ♕c7 14.c4±

White has easily harmonized his minor pieces, threatening to take space with the move d4-d5. He has a small advantage.

It is pawns that become 'pieces of wood' most often, because they have the most limited mobility of all the pieces on the board. It would be easy to find dozens of examples of various breaks and sacrifices of pawns, clearing the way for pieces behind them. However, the following example is different: White wants to clear his own pawn out of the way, but he sacrifices a completely different piece!

Nikola Mitkov – Sergey Rublevsky

Naum 2000



Compared to the Scheveningen Variation of the Sicilian Defence, Black's dark-squared bishop is standing in front of the d6-pawn on the active c5-square. On the other hand, this means that Rublevsky is missing an important defender near his king. Since the c5-bishop is dark-squared, its absence from the kingside weakens mainly the squares of this colour. That's why the attack should be aimed at the g7- and f6-squares. But how to attack them?

The best way would be to open the g-file. However, the march of the g-pawn alone is not sufficient – the pawn shield of the black king is not weakened, and so White would have to play g2-g4-g5-g6, and even then he would most likely open the f-file first.

Mitkov solved the problem of the hindering g-pawn very elegantly. He played:

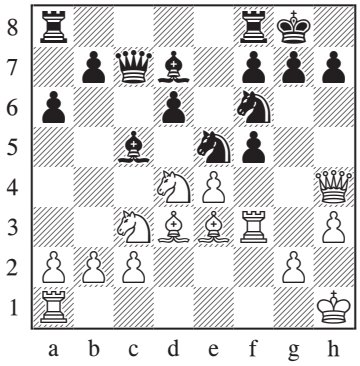
15.♖f3!?

White is threatening to move the rook to g3 in front of the 'piece of wood' on g2. However, if Black accepts the exchange sacrifice, White will recapture with the pawn and the g-file would be open for the second rook. The game continued:

15...♘xf3?

A natural move, but at the same time probably a crucial mistake.

The real test of White's concept would be: 15...exf5! **Opening the centre is often the accurate reaction to a flank attack!**



After 16.♖g1 ♘g6 17.♕f2 f4! there won't be any opening of the g-file.

After 16.♘xf5 ♘xf3, a few exchanges on c5 and f5 follow, which weakens White's attacking potential.

16.exf5 probably fits best into White's concept, but after 16...♘xf3 17.gxf3 ♗c6 his attack gets somehow stuck, because 18.♖g1 is met by 18...♗xf3†.

Of course, it is difficult to see all of these lines during the game. The move 15.♖f3 might be objectively doubtful, but does it really matter? Mitkov, thanks to it, posed his opponent a difficult problem, and he couldn't solve it. Thanks to 15.♖f3 White won the game.

16.gxf3 ♔h8 17.♖g1 ♕d8?!

This loses immediately!

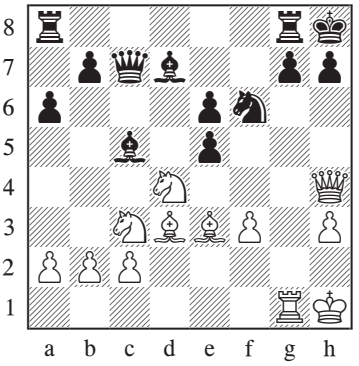
However, Black's position cannot be saved anymore. Ribli's recommendation was:

17...♖g8 18.fxe6 fxe6

18...♗xe6 19.♘d5 ♕d8 20.♘xe6 fxe6 21.e5!+–

19.e5! dxe5

This fails because of:



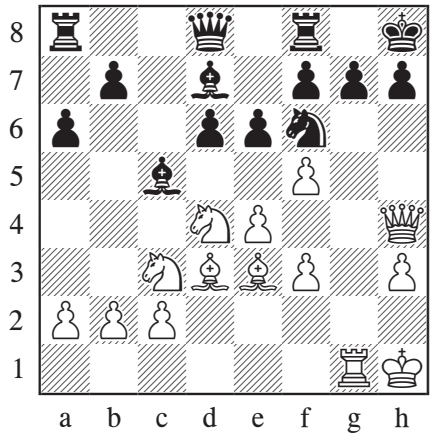
20.♗g5!

Ribli analysed only 20.♘e4.

There is now a forced line:

20...♗c6 21.♗xf6 ♗xf3† 22.♘xf3 gxf6 24.♕xf6† ♖g7 25.♖xg7 ♕xg7 26.♕xg7† ♔xg7 27.♘g5!

White has a great advantage in the endgame.



18.e5!!

For the second time, Mitkov removes from the board a pawn that was masking its fellow fighters. Now the d3-bishop enters the game. This spells the end for the black monarch.

18...dxe5 19.♖xg7!! ♖g8 20.♖xg8† ♔xg8 21.♗g5 ♗e7 22.♘e4 ♘d5 23.f6 ♕b6 24.♘c5! ♕xc5 25.♕xh7† 1–0

The aim of this chapter was to show you how to perceive your pieces in a much more complex way, in three dimensions. Each piece has three distinct features, and their interaction decides whether it is standing well or not.

Similar features to those of a chess piece also belong, for example, to my or your body:

The body is an active tool. It takes you up Mont Blanc, it tastes a steak for you, builds a house for you. A chess piece is, similarly, also an active tool. It delivers mate for you, captures a pawn for you, creates a threat.

However, the body is a very vulnerable creature. It can suddenly become ill and imprison you in pain. Just like a piece, which can advance and then loudly scream for help. Or you lose a piece and then lose also the game.

And thirdly, the body is a piece of matter. Prisoners who remain behind bars because of this feature of their bodies could talk about this. Also, a chess piece is a piece of wood. It can stand in the way of its own teammates, or, in contrast, protect with its own body the king or other valuables in its army.

Chapter 2

Hierarchy on the Board

About attacking and protecting

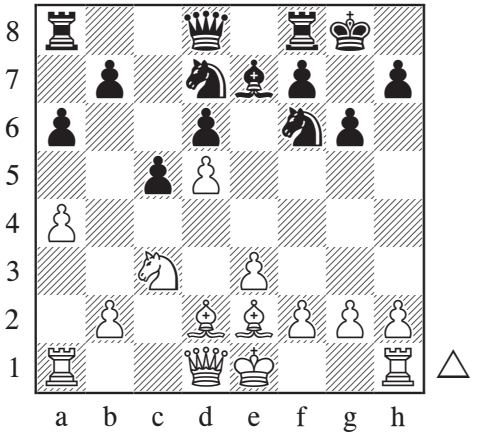
When there is one football or hockey player much better than the rest of the team, he fills up the whole pitch or field. He is a star; he is everywhere. On the board, the queen is a much stronger piece than the others, and yet, during a game, most of the time it is only sitting somewhere in the shade of other pieces. It is waiting for its moment. It is pretty similar with the rooks – they are stronger than minor pieces, and yet they give the impression of laziness, mainly at the beginning of a game. Why is it so?

The board is governed by a reversed hierarchy. The weaker a chessman is, the more it dares. It is so cheap that other chessmen prefer to avoid it because an exchange would be a bad bargain. And so pawns expel knights from good positions, knights and bishops tyrannize rooks, and other pieces act impudently towards the queen. That is one of the reasons why pieces usually join the game according to their value. At first, the pawns build the skeleton of a position, then the minor pieces join the game, and finally the major pieces become involved. Development often concludes only in the endgame when finally the last piece develops on the chess board, the piece with limitless value – the king.

Let's have a look at two simple examples to see how the reversed hierarchy works in practice. I have purposely chosen examples featuring minor pieces because these ones are rarer and intuitively slightly less obvious than the examples with a queen or rooks.

Fabiano Caruana – Ioannis Papaioannou

Istanbul (ol) 2012



White is slightly better. He has the bishop pair, and Black will need several moves to switch the position of his strangely-placed bishop to where it belongs, that is, the g7-square. But how should White proceed?

Black has already exchanged one minor piece, and so normally he should be able to fit into his small dwelling. Therefore, to create difficulties for him, White doesn't simply continue by castling, but tries to suffocate the black knights.

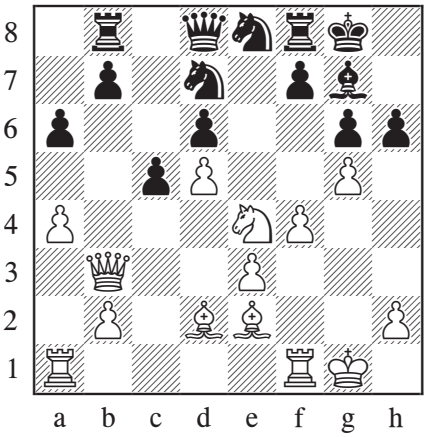
15.g4!

The knight is the second weakest piece on the board. And yet, there is still someone to tyrannize it – the pawn.

15...♘e8

The knight retreats.

16.0–0 ♗f6 17.f4 h6 18.♕b3 ♖b8 19.♘e4 ♗g7 20.g5



The mission is accomplished. White's courageous g-pawn cramped the black knights so much that it won for its knight the beautiful, central e4-square. White is better.

The knight is scared of pawns, but daring when it comes to bishops.

Even though we all learned in our first chess lesson that a bishop has the same value as a knight, in fact, in most openings and early middlegames, it is better not to exchange your bishops for the opponent's knights. There are two reasons for this.

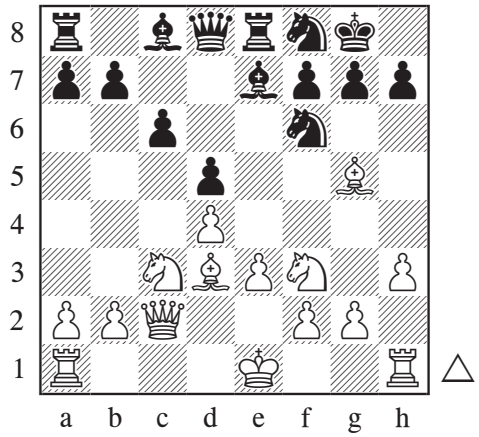
First, bishops like open positions, and the majority of positions have the tendency towards becoming open in the course of a game.

Second, a pair of bishops can be a considerable advantage, and so if the opponent has both bishops, we also tend to look after our pair.

Nakamura took good care of his bishop in the following example:

Hikaru Nakamura – Lexy Ortega

Skopje 2015



This position arose from the Carlsbad Variation of the Queen's Gambit. Black threatens to play ...♘g6, after which Nakamura would most likely have to exchange one of his bishops, because the g5-bishop wouldn't have any square to retreat to.

White, therefore, decided to prevent this scenario from happening, and started retreating with the bishop.

11.♗f4 ♘g6 12.♗h2

The target is achieved – the bishop won't be exchanged for a knight.

12...♗d6

This offer from Ortega to exchange pieces does not worry White – bishop for bishop is a fair deal.

13.♗xd6 ♕xd6

White has a slight edge.

Logical, right? In reality, everything is slightly different. When I gave this manuscript to David Navara for proofreading, he warned me that I had not understood what was really going on in the diagram position. He wrote to me:

Black, even after ...♘g6, doesn't threaten the move ...h6 because he would lose a pawn. In fact, he wants to play ...♘g6, ...♘e4 and recapture with the queen on e7. White invests two tempos (h3, ♗f4, ♗h2 against ...♗d6), because after the exchange of bishops on d6, Black often finds no better plan than ...♕e7 and ...♘e4, which gives White back what he has invested. In addition, with a knight on g6, White can opt for long castling and advance his pawns on the kingside. So this is rather a complex example of prophylaxis.

When do major pieces step into the game?

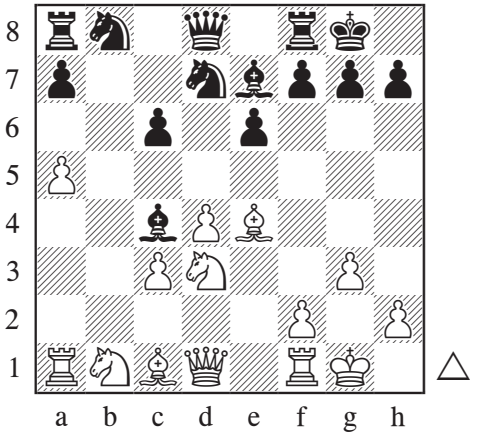
They usually have to wait for exchanges. These clean the board and create more space for more valuable chessmen.

This process reminds me a little of soil cultivation. When you buy a piece of land that had been set aside for a long time, you might find there an extremely resistant weed, such as goldenrod. You tear up all of the goldenrod, and a year later there will be couch grass, and you get rid of that as well, and another year later there is still some wild grass growing there. You rip up the wild grass, and the soil is ready, you can plant tomatoes, lettuce or any other crop.

It is just like this in chess – you exchange pawns, then the bishops will occupy the diagonal. You exchange the bishops, and the diagonal will be occupied by queens. And when you exchange queens, there will be the kings walking along the diagonal in the endgame.

Jan Markos – Jan Krzysztof Duda

Ruzomberok 2014

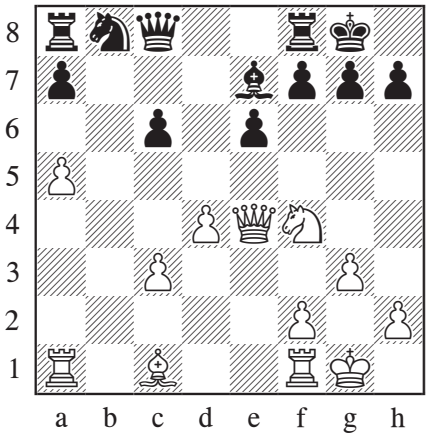


Black's c4-bishop is watching over the light squares in the centre and on the queenside. If White wants to gain access to these squares, he has to exchange the bishop.

14.♘d2 ♗d5 15.♘f4 ♗xe4

A twofold danger threatened the bishop: an exchange for the knight as well as motifs of trapping it with c3-c4. Even a bishop is a relatively valuable piece for such a shaky central position.

16.♘xe4 ♘f6 17.♕f3 ♘xe4 18.♕xe4 ♕c8



The light-squared bishops have disappeared from the board, and the role of controllers of the light squares has immediately been taken by the queens. However, another major piece also decides to take advantage of the sudden freedom of the light squares.

19.♖a4!?

The rook heads to the c4-square, from where it can press on the opponent's weak pawn.

Rooks hate bishop pairs. If a bishop pair is present, they usually don't feel comfortable on any square outside their own camp. However, if an opposing bishop is exchanged, the rooks gain greater safety on squares of one colour. (Rooks are not so afraid of knights and pawns, because they are able to run away from them thanks to their long steps.)

The game continued:

19...a6?

This is simply too slow.

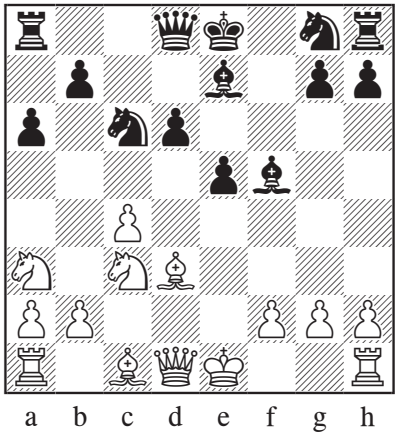
20.♘h5 ♘d7 21.♖c4±

And the c6-pawn was a huge problem for Black.

Pieces of lower value, therefore, take upon themselves the role of border guards. They control important squares, and if a fully-armed guest appears (a major piece), they ask him politely to leave the square.

If we exchange this border guard, we put ourselves at risk that more and more dangerous enemies will interfere with our position. In this sense, it is necessary to slightly redefine the terms 'good' and 'bad' bishop. As an example, we will take a look at a position from the Kalashnikov Variation of the Sicilian Defence.

1.e4 c5 2.♘f3 ♘c6 3.d4 cxd4 4.♘xd4 e5 5.♘b5 d6 6.c4 ♗e7 7.♘1c3 a6 8.♘a3 f5 9.exf5 ♗xf5 10.♗d3



Should Black exchange bishops or not?

If we understand the term 'good' bishop in terms of activity, Black might consider the exchange. The d3-bishop is standing well; it will be difficult for its black counterpart to find a similarly active position.

However, the black bishop is 'good' for another reason. It is a great, irreplaceable border guard. If Black exchanged the bishop, the light squares in the centre could be protected only by a knight on f6; that is, the squares will only be protected once, and only from one particular square. On the other hand, White has available border guards of great quality and yet cheap, in the form of the c-pawn and the f-pawn (after the possible move f2-f3).

Black, therefore, prefers to modestly retreat:

10...♗e6

This bishop will have lots of work in the future, casting major pieces out of the e4- and d5-squares.

Protection

So far, we have been discussing the hierarchy of pieces in the context of attacking. Let's now focus on the opposite phenomenon, protecting our pieces.

The protection is, of course, effective only when the piece being attacked is of lower value than the attacking piece. For example, if a pawn attacks our knight, not even the best protection can help us, the knight must retreat.

The lower the value a piece has, the more often it is saved by protection. The greater the value a piece has, the more often it is saved by running away or hiding behind another piece.

It is not possible to protect the king; the queen usually runs away or hides; a pawn has too short legs to run away, but is easy to protect because it is cheap.

Of course, the degree of success does not depend only on the piece that is protected, but also on the piece that is protecting. Because if the protected piece is attacked twice, the attacker will take both pieces. And to ensure that the entire operation will not be profitable for the attacker, the following must apply:

Value of the protected piece +
value of the protecting piece ≤
value of the cheaper of the attacking pieces

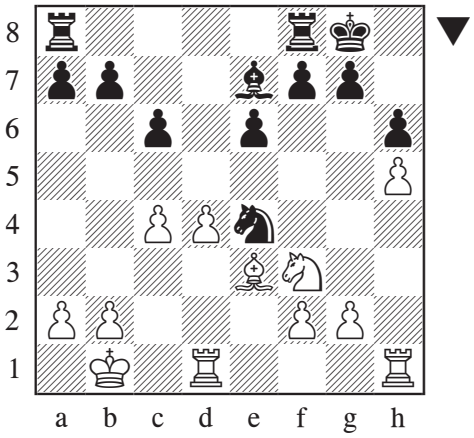
Therefore, there is no doubt that the best protecting piece is a pawn, because it has the lowest value on the board. The effectiveness of protection by a pawn emphasizes the fact that differences in value between different pieces (except the bishop and knight) are higher than the value of one pawn. Rook + pawn is less than a queen; bishop + pawn is less than a rook; pawn + pawn is less than a knight.

On the other hand, a queen or rook offer only poor, shaky protection. In addition, to use such mobile pieces for such a static task is an inefficient waste of resources.

Let's demonstrate the difference between high-quality and low-quality protection with a simple example:

Tomas Krnan – Peter Michalik

Banska Stiavnica 2013



This position arose from a Caro-Kann and is fairly balanced. However, there is one curiosity about it, the stray pawn on h5. This pawn is protected by the rook. However, as we have noted above, such protection is unstable and is also a waste of the rook's potential. White would, therefore, like to build a pawn-chain f3-g4-h5. This would create durable high-quality support for the h5-pawn.

That's why Michalik played:

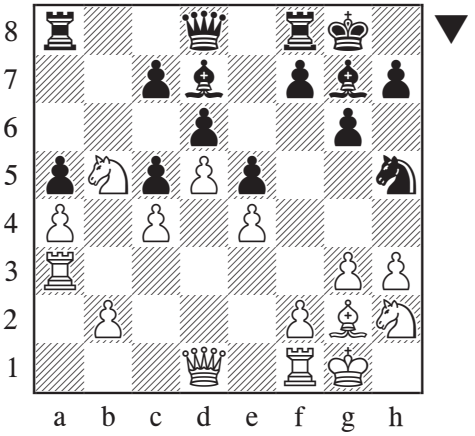
19...f5

Although this move appears antipositional because it weakens the e6-pawn and the e5-square, it allows Black to attack the h5-pawn in the future and thus to play for a win.

Another example comes from computer chess:

Komodo – Stockfish

Engine game 2015



In the previous course of the game, White exchanged bishop for knight and gave up chances of a break on the queenside, in return for a dominant b5-knight. The black queen is kept busy protecting the c7-pawn; however, such a strong piece deserves a better destiny. How to solve the situation?

The ...c6 break only weakens the d6-pawn; exchanging on b5 would make a dead man out of the a5-pawn. The a8-rook has to protect this pawn and, therefore, cannot replace the queen in protecting the c7-pawn.

And so the computer came up with an elaborate transfer of the h5-knight to a6, from where it protects the c7-pawn more cheaply than the queen does. The queen, subsequently, starts to peek at the kingside; it has basically changed roles with the knight. The game continued:

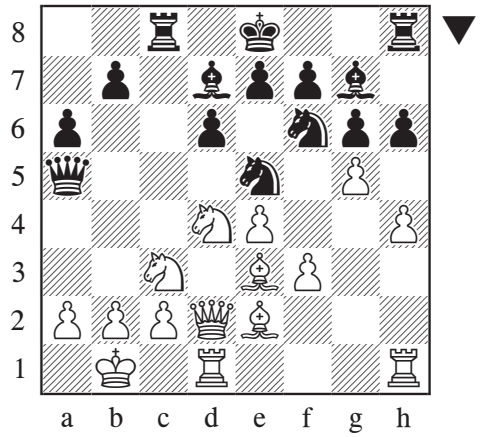
16...♗e8 17.♗f3 ♘f6 18.♘g4 ♘d7 19.♘e3 ♘b8 20.h4 f5 21.h5 ♘a6

Black has safely protected the c7-pawn and is planning ...♕g5. The a5-pawn is not as weak as it seems to be, because only the queen can attack it, and it is possible that the queen could even be trapped on the a5-square after ...♘a6-b4.

As the strongest piece, the queen has the greatest problem with the phenomenon of protection. It doesn't like to protect another piece. It doesn't help when the queen is protected. And when it attacks, the queen needs unprotected objectives, because it cannot capture a protected piece. The following example is a wonderful example of pieces of lower value plotting against the queen.

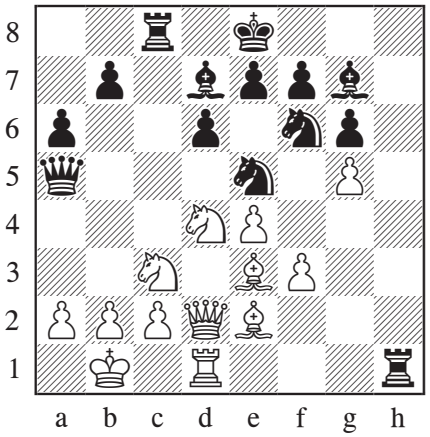
Mikhail Tal – NN

Stuttgart (simul) 1958



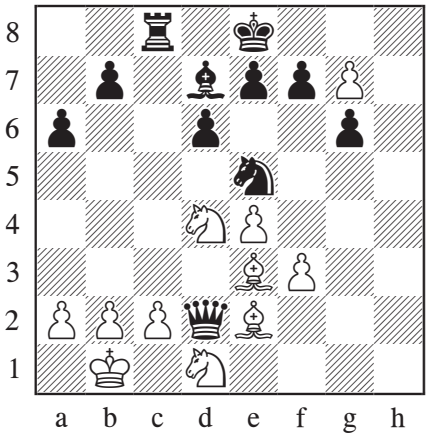
In this position, which arose from the Dragon Variation of the Sicilian Defence, Black is lagging quite significantly in development. He has not castled, nor has he any attack on the queenside. On the other hand, White has already begun a direct attack with the g4-g5 move. Retreating the f6-knight is not tempting at all, and so Black decided to relieve the pressure with a series of exchanges. However, it did not turn out the way he expected...

14...hxg5? 15.hxg5 ♖xh1?



White resisted the automatic reaction, which would be to recapture the exchanging piece, and instead played beautifully:

16.gxf6! ♖xd1† 17.♘xd1! ♕xd2 18.fxg7!

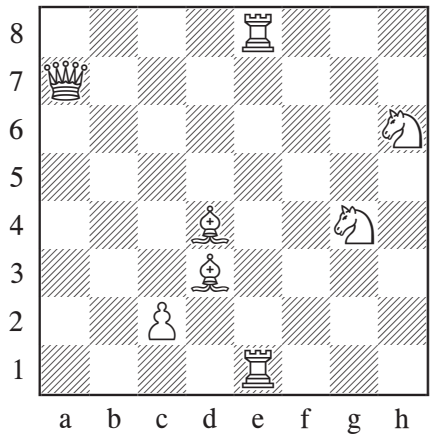


What a fantastic position! White's pawn-excelsior blazes a trail all the way to the promotion square. However, we are more interested in the exemplary cooperation of White's minor pieces, which protect each other and simultaneously defend the area around the king. This makes the black queen helpless, even though it is in the middle of the opponent's camp.

As Tal's beautiful combination shows us, the most efficient protection is mutual protection.

If the protecting piece is at the same time being protected, a very stable structure is created, resistant to external attacks. I call these structures crystals, because their stable character, compared to the fluidity of the rest of the chess board, reminds us of ice crystals appearing on the surface of water when the temperature drops below freezing.

The following diagram shows four of the most common types of crystals:



While the crystals ♖e8+♖e1 and ♕a7+♗d4 are mobile (allowing moves along the file or diagonal, respectively), the crystals ♗d3+♙c2 and ♘g4+♘h6 are static – moving any piece destroys them. Note that ♗d4+♗d3 is not a crystal, but only two neighbouring pieces. The fact that two pieces stand side by side does not automatically mean that they are helping each other.

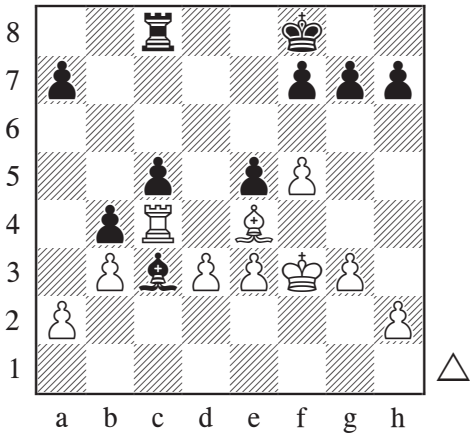
Of the depicted crystals, the most stable one is ♗d3+♙c2, because the value of pieces creating it is low. Only three pieces on the board can break the crystal without any sacrifice – a pawn, a knight or a bishop of the same colour.

If you want to, you can grab a chess board and pieces and try to create crystals that are as complex as possible. The rule is: every piece must be protected exactly once. If a piece is not protected, the opponent could capture it, and multiple protection is not efficient.

It is important to draw your attention to one more aspect of protection. This is a task that hinders the protecting piece and makes it impossible to engage in any other activity. That is also why it is best to protect using pawns. However, as the diagram below shows us, not even pawns are always thrilled by the role.

Richard Reti – Peter Romanovsky

Moscow 1925



This rook and opposite-coloured bishop endgame is very difficult for Black. His c3-bishop is placed in front of its pawn structure and, despite standing on a seemingly impressive post, it is not doing anything useful. In addition, the need to protect the bishop means that the b4-pawn cannot move. Reti, therefore, can play:

31.a4!

This great positional move makes Black's only possible counterplay, the manoeuvre ...♖b8-b6-a6, pointless. It also fixes the a7-pawn, which is vulnerable even though it is standing on a dark square, as it will be difficult for the c3-bishop to protect it.

Reti is not worried about the b3-pawn because he aims to move his bishop to c4, which will create a strong crystal on the queenside that the opponent won't be able to break.

This chapter has been rather abstract and perhaps, therefore, more difficult to understand. So let me conclude it with a small summary.

In a chess game, the pieces of lower value develop first, because they can effectively chase away pieces of higher value. The rooks, queen and king wait until room to operate is created by exchanges. Their activity on the board gradually increases with every exchange. The rooks and queen, for example, often wait until one of the opponent's bishops is exchanged, and then occupy the squares of its colour.

The pieces of lower value often take upon themselves the role of border guards: they control important squares so that more powerful pieces cannot occupy them. A 'good' bishop is often good not because of its activity, but because it is the irreplaceable protector of the key squares.

Queens have a problem with the phenomenon of protection. They don't like to attack protected pieces, they don't like being protected, and they don't like protecting others. They need chaos, freedom of action, and loose, unprotected targets.

Protecting is a static role, and in order to be effective, a piece of lower value has to perform it. Therefore, it is ideal to use pawns for protecting.

The most effective protection is mutual protection. Crystals created by mutually protecting pieces can withstand a lot. The strongest crystal on the board consists of a mutually protecting pawn and bishop.

Chapter 3

Infection

On the disastrous consequences of a weakness

In the Middle Ages, the plague was one of the most feared disasters. Because weapons were less effective at that time, a battle between two kings was restricted to a relatively small area. Twenty kilometres from the battlefield, settlers peacefully worked in their fields and took care of their cattle.

But the plague was something different. In the 6th century, it killed half of the inhabitants of Europe. Another wave of epidemics in 1347-51 killed one third of people living on the Old Continent.

How did it all start? Nobody knows, but probably the source of the infection was relatively small, no more than a few infected people or animals. Several infected rats in the lower deck of a ship, and the result? Millions of deaths.

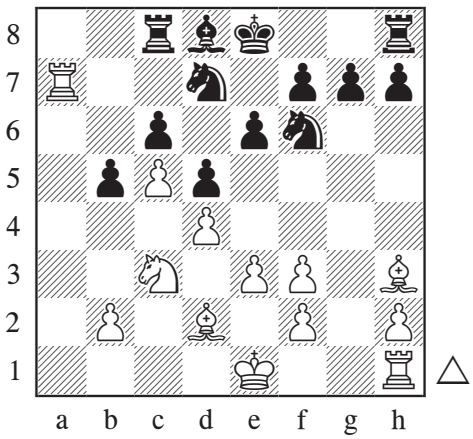
The plague is an excellent metaphor for a phenomenon that occurs often in chess.

A weakness creates other weaknesses around it, analogous to an infected man who spreads the disease to people around him.

Let's have a look at a simple example:

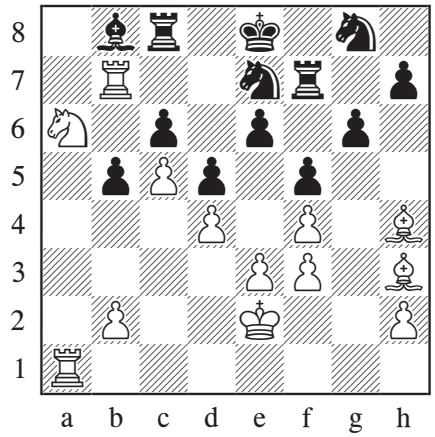
Jan Markos – Alfredo De La Cruz

Germany 2006



In this position, the original source of infection is the weak c6-pawn. It is quite difficult to protect this pawn, as the black pieces lack space. Therefore, they have to be satisfied with any squares from which they can fulfil their defensive tasks; some of these posts are pretty shaky. That is why some of the black pieces will become weaknesses as well. Please follow the moves and see how the problems for the black pieces gradually increase.

16.♔e2 ♗c7 17.♘a2 ♗b8 18.♖a6 ♘g8 19.♘b4 ♘e7 20.f4 f5 21.f3 ♘f6 22.♖g1 g6 23.♗e1 ♔d7 24.♗h4 ♖hf8 25.♖ga1 ♖f7 26.♖b6 ♘fg8 27.♖b7† ♔e8 28.♘a6
1–0

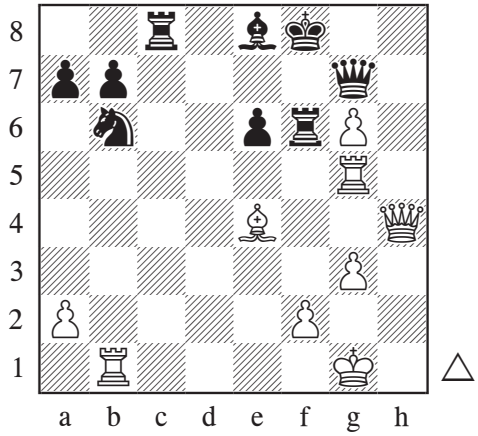


The final position deserves a diagram. Please note that Black did not lose because he had lost his c6-pawn. He lost one of the pieces around it, namely the b8-bishop. True, Black did not defend too well in this example. However, that does not mean that defensive pieces get 'infected' only when the defence is inexact. Defensive tasks always make them weaker and more vulnerable. All that players can do is to try to limit the casualties of the epidemic.

The most infectious source of a plague in your position is of course a weak king, as his defence is of the highest priority. Let's have a look at one example from the top level:

Garry Kasparov – Nigel Short

Sarajevo 1999



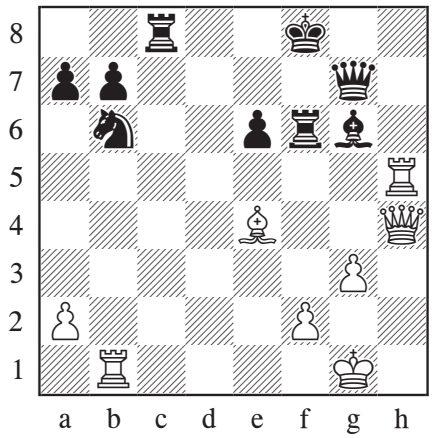
Black is a piece up, but his position is dead lost. The reason is simple: his king has lost the protection of cheap pawns, so now he has to be protected by costly pieces. White will attack the king but, rather than mating him, he will gain a material advantage by grabbing some of the defending pieces.

Kasparov played:

33.♖h5!

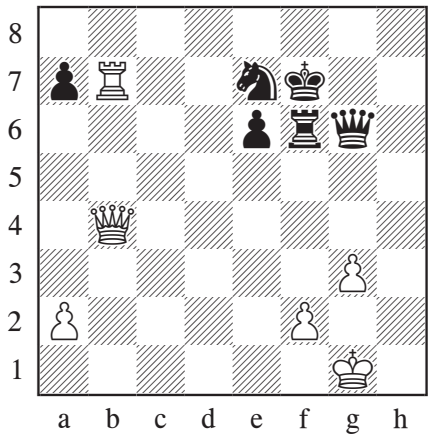
It transpires that the black queen is in grave danger. The threat of ♖h8† followed by ♖h7 can be prevented only by:

33...♗xg6



But now White will attack from the opposite side.

34.♖h8† ♔f7 35.♖xc8 ♘xc8 36.♖xb7† ♘e7 37.♗xg6† ♕xg6 38.♕b4



After a couple of forced moves, in which the black pieces protected their monarch with their very bodies, one of the pieces will pay for its loyalty. The e7-knight is attacked and pinned, and cannot be protected. Alas, it was infected by its king, standing on a nearby square.

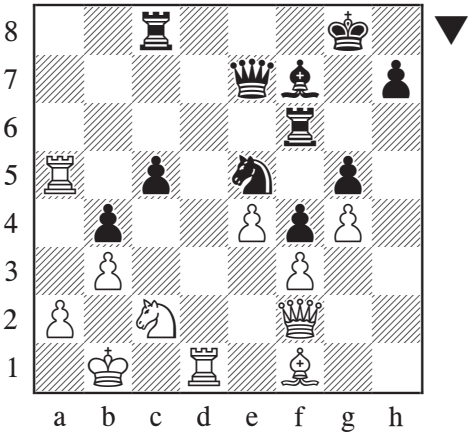
38...♕f5 39.♕xe7† ♔g6 40.♕h7†
1–0

It is not always the case that the infection has spread from an infected person or animal. Sometimes it is possible to become infected from germs in an unhealthy or unhygienic environment.

In chess, similarly, the infection does not always spread from a weak piece or pawn. Sometimes the source of weakness may be a weak square or a weak file.

Artur Kogan – Jan Markos

Torre delle Stelle 2011



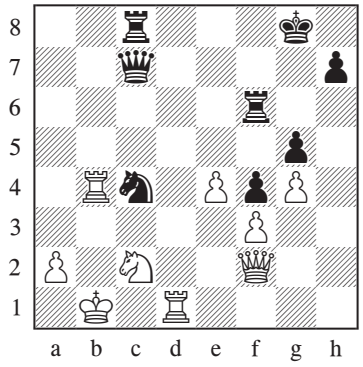
In White's camp there are several sources of infection. For example, the queen is tied to protecting the weak pawn on f3. However, the main germ-carrier is the weak a2-pawn, and the entire a-file. Because of the weakness of this file, the white rook had to go into exile on the a5-square. Over the next few moves, Black will focus on this rook.

31...♕c7 32.♖a4

Here the rook is completely offside, but it is still protecting the a-file. Therefore, I decided to force its exchange.

32...♗e8

32...c4! is more direct, but I had problems correctly evaluating the line: 33.♗xc4 ♗xc4 34.bxc4 ♘xc4 35.♖xb4



In fact, Black is completely winning after 35...♖d6!.

33.♖a6 ♖xa6 34.♗xa6 ♖a8 35.♕e2

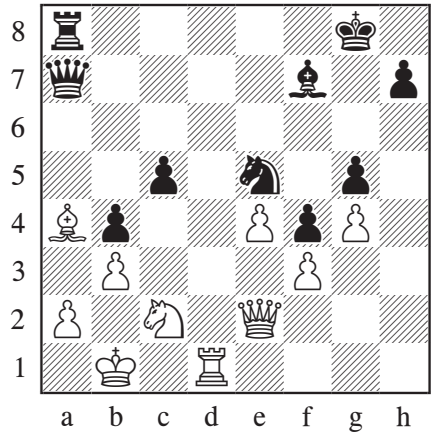
Now the queen is like a mum holding the hands of two irresponsible kids: the a6-bishop and the f3-pawn.

35...♗f7 36.♗b5 ♕a7

This is a suggestion from my computer.

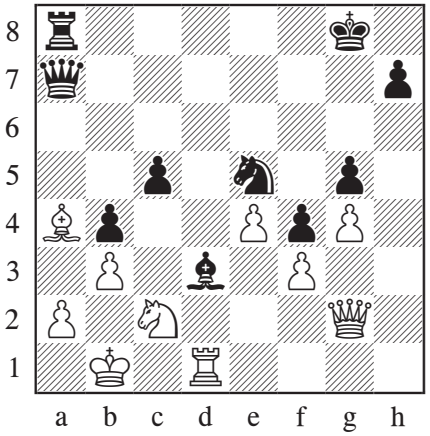
In the game, I played the weak 36...♖d8? and was unable to win the endgame after: 37.♖c1 ♕d6? (37...c4!) 38.♘e1 ♕b6 39.♗d3 ♕a5 40.♕c2 ♖d4 41.♖d1 ♕d8 42.♗e2 ♖xd1† 43.♕xd1 ♕xd1† 44.♗xd1 h5 Even here, though, Black definitely has the upper hand.

37.♗a4



The weakness of the a-file has forced yet another piece to a4, this time a bishop. And the shaky position of this bishop (Look, the plaque is spreading!) allows Black to enter his opponent's camp.

37...♗c4! 38.♕g2 ♗d3–+



The circulation of blood in the white camp has stopped. The queen still has to protect the f3-pawn, the a4-bishop is offside, and the c2-knight is pinned and could barely move even if it was not pinned. The epidemic has reached its full strength. By the way, the unfortunate position of the knight on c2 was at the root of White's problems. From c2 it had nowhere to go, and resembled a cork that closes a bottle. Because of this piece, the queen could not naturally protect the a2-pawn from the kingside.

To sum up: because of the bad position of the c2-knight, the a2-pawn was weak. Because of the weakness of the a2-pawn, both rook and bishop had to go to the a-file. And because of the shaky position of the bishop on the a-file, Black's bishop could enter via c4 and pin the c2-knight. The cycle is complete.

I hope that I have succeeded in showing how dangerous it is to have a weakness in your camp. It may become a germ-carrier that spreads the disease around. Therefore, try to avoid weaknesses as much as possible!

Chapter 4

Policemen of the Chess Board

On prophylaxis

What kinds of tasks can a chess piece fulfil? It can be used in defence, and also in attack. What else can it do? Have we omitted anything?

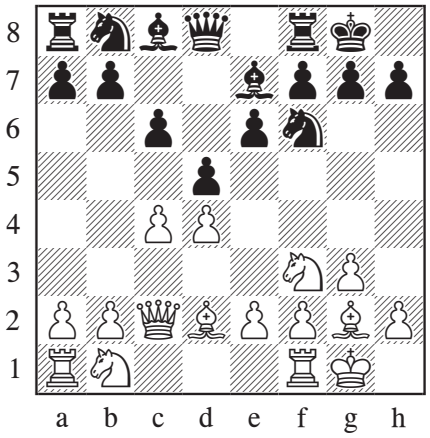
Maybe a little metaphor can help. Let's ask: "What kinds of attitudes can a man have to his health?" He can ignore health issues when healthy; he can seek to be healed when ill. But these are not the only two attitudes possible.

In fact, people usually don't ignore health issues when healthy. Instead, they try to avoid becoming ill. They try to exercise a little, eat healthy food, sleep well... In a word, they are trying to *prevent* any future health problems.

In the world of chess, it is the same. *Prevention* is the third typical task assigned to a piece. (Since Nimzowitsch, chess players have tended to call it prophylaxis.) Such a piece is neither attacking nor defending. It is patrolling.

Let's have a look at a common position from the Catalan Opening, arising after the moves:

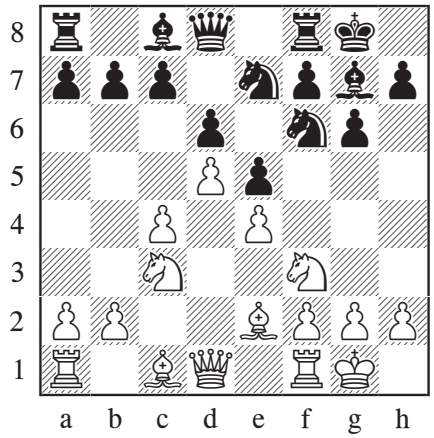
1.d4 ♘f6 2.c4 e6 3.♘f3 d5 4.g3 ♗b4† 5.♗d2 ♗e7 6.♗g2 0–0 7.0–0 c6 8.♕c2



What is the function of White's light-squared bishop on g2? Surely it does not defend: there is no sign of an attack against the white king. Also, it does not attack: the d5-pawn is too well defended by its compatriots. The light-squared bishop has a preventive function. It monitors the centre and makes it difficult for Black to play ...e6-e5 or ...c6-c5. Especially after ...c6-c5, the bishop's scope would extend significantly. Therefore, Black is facing an unpleasant dilemma – either he decides not to open the game, when he will suffer from lack of space, or he plays one of the pawn breaks and the g2-bishop will become significantly stronger. In principle, White is diversifying the risk. Either he will have the space advantage or a strong bishop.

Another, slightly more complicated, example arises from the Kings Indian Defence:

1.d4 ♘f6 2.c4 g6 3.♘c3 ♗g7 4.e4 0–0 5.♘f3 d6 6.♗e2 e5 7.0–0 ♘c6 8.d5 ♘e7



What is the task of Black's bishop on g7? It surely doesn't defend: there are so many pieces around the black king. It obviously doesn't attack. So, what is he actually doing?

You are no doubt familiar with this position. How does the game usually develop? White strikes on the queenside, whereas Black organizes an attack on the kingside, moving his f7-pawn to f4 and then playing along the g- and h-files.

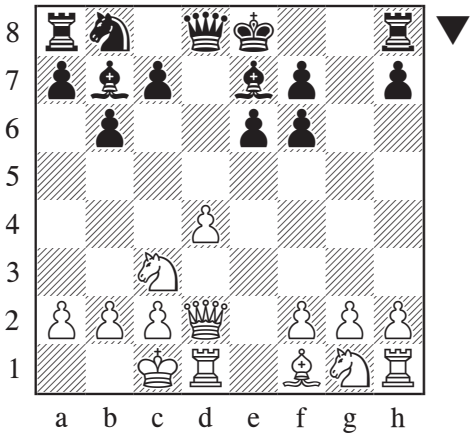
But how can it be possible that White usually does not fight the march of Black's f-pawn? He could play f2-f4 himself, or take on f5 after Black plays ...f5. Yes, he could do that, but both playing f2-f4 and taking on f5 would make the g7-bishop happy. Without the cork on e5, Black's dark-squared bishop would become a very active piece. White prefers to avoid this scenario. For him, it is a lesser nuisance to allow the pawn to f4.

So, what is the task of the g7-bishop? It supports Black's pawn march on the kingside, thus allowing Black to hope for counterplay in this region of the board.

Of course, prophylactic tasks can be fulfilled by any piece, not just bishops. In the next three examples we will see a pawn, a queen and even His Majesty himself, play the roles of 'policemen'.

Nils Grandelius – Penteala Harikrishna

Stavanger 2016



Even pawns can help to make the chess board a safer place. Black has obtained the bishop pair from the opening, a very valuable

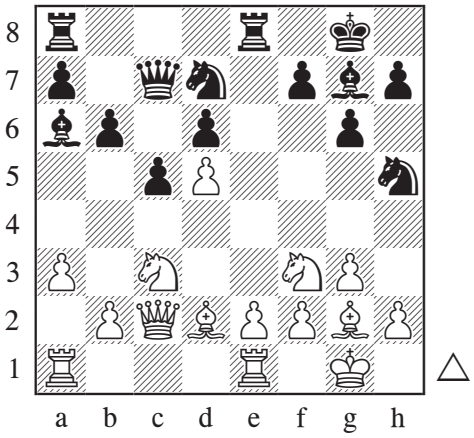
investment for the future. However, he has to make sure that there will actually be some future, as he is underdeveloped and has poor control of the centre. Harikrishna played an apparently ugly move:

9...c6!

Now the d4-d5 break is impossible and Black gets time to develop smoothly, intending to play ...♕c7, ...♘d7 and ...0–0–0.

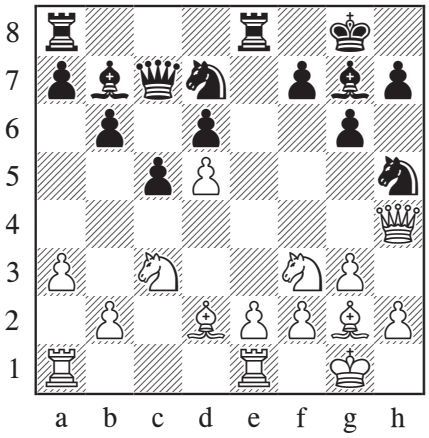
Garry Kasparov – John Fedorowicz

Graz 1981



The future World Champion played:

15.♕a4 ♗b7 16.♕h4



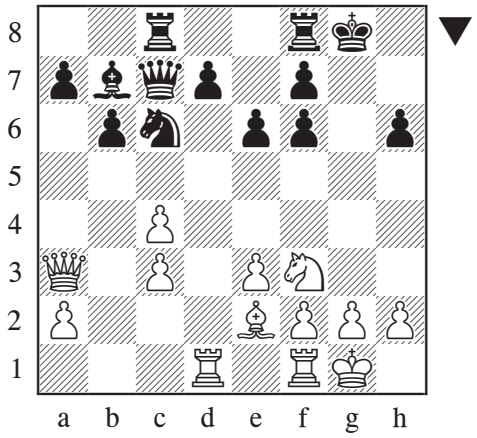
In his book *The Test of Time*, he later explained:

> *Such a transference of the queen is usually associated with an attack on the king. Here, for the moment, there is not even any expectation of an attack and with the board full of pieces it seems unjustified for the queen to take up a forward position. Nevertheless, there is some justification for the queen manoeuvre: to strengthen his queenside offensive, Black will have to transfer there a number of pieces, after which the preconditions may arise for an attack on the black king.*

Again, White tries to diversify the risk. Either Black will move his pieces to the queenside and then White will have chances to attack; or Black will keep his pieces where they are, but then his queenside initiative is not very dangerous. A win-win situation.

Shakhriyar Mamedyarov – Pavel Eljanov

Shamkir 2016



Black's kingside pawns are rather weak and most of his pieces are on the queenside. However, one piece is not! Eljanov played:

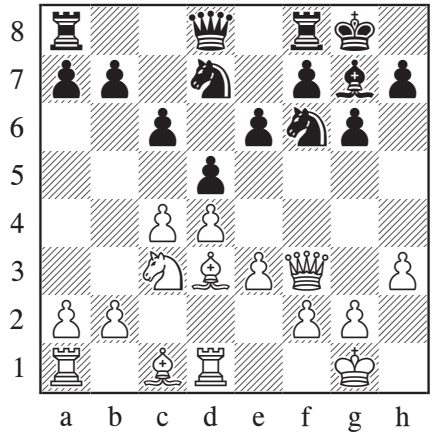
15...♔g7!?

Giving his f6- and h6-pawns extra protection.

This move is possible only because the f3-knight can't get to h5 quickly. Also, the d4-square is unavailable for the white rook. Black's king therefore feels reasonably safe on g7.

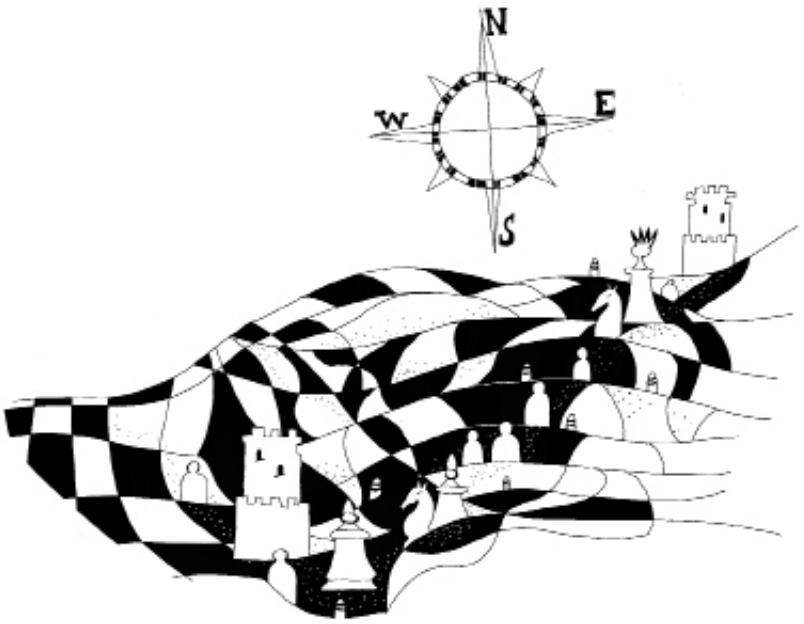
Sometimes the very existence of a piece on the board is enough to have prophylactic effects. With queens on the board, it is very difficult to move pawns in front of your king. A bishop pair also can help with restricting the opponent's play. The diagram position is from the Slav Defence.

1.d4 d5 2.c4 c6 3.♘c3 ♘f6 4.e3 g6 5.♘f3 ♗g7 6.♗d3 0–0 7.0–0 ♗g4 8.h3 ♗xf3 9.♕xf3 e6 10.♖d1 ♘bd7



White's pair of bishops is not very active; the position is too blocked. Their importance lies in their very existence. Playing against two bishops, Black should avoid any opening of the game. But unfortunately, any pawn push in the centre will lead to exchanges and an open game. Therefore, Black tends to play this position quite passively in the centre, giving White the freedom to choose from a variety of plans. The bishop pair has in fact secured White's position in the centre.

Nimzowitsch wrote in *My System* that prophylaxis is the very heart of positional play. I hope you will use your pieces to perform prophylactic tasks as naturally as you wash your hands before any meal, so that you don't expose yourself to a risk of infection.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Part II

About the Inhabitants of the Chess Board

We may look at the pieces on the chess board as tools in a workshop. Just as a hammer is suitable for certain tasks, and a saw for different ones, a bishop is suitable for certain tasks on the board, and a queen for others. It is good to know what role suits a specific piece.

In ***Magnetic Skin***, I will show you how pawns provide other pieces in their army with support and protection.

Inconspicuous Mate is about hazardous situations in which one player has an advanced passed pawn.

In ***Fractures***, you can read more about why doubled pawns make for a very immobile structure.

We will have a look at some peculiarities of knights in ***Understanding the Beast***.

Without Knights is an experiment – by studying the differences in positions without any knights, we will try to figure out what functions the knights usually have on the board.

Anatoly Karpov's Billiard Balls is about a strange handicap of bishops: their inability to move from one side of the board to the other.

In ***The Secret Life of Rooks***, you will find out why the rook is the perfect piece to attack on the flanks, and also how to make the most of its potential in the early stages of a game.

Princesses of the Chess Board is devoted to queens. It discusses what work they most like to do and, on the other hand, what work they would rather avoid.

Chapter 5

Magnetic Skin

About the relationship between the pawn structure and the pieces

The pawn structure is the most stable element on the board. It is a kind of skin that separates the safe, intimate world within our position, in which the king and usually the major pieces hide, from the wilder world outside.

And it is a strange skin. On one side it is magnetic, sticky as if covered with Velcro. Pieces which step over the pawns (in the opening it is usually bishops and knights) are given support and protection, without which they would be in a less stable position.

Pieces can stand in relation to the pawn structure in three different ways. They can stand in front of the structure, behind it, or they can stand in a part of the board where there is no pawn structure.

The best place for pieces is either to be 'stuck' on the external side of the pawn structure, or to hide behind it, (but only if the structure is still compact and unbroken). In other places, they feel insecure, often vulnerable and shaky. (This applies mainly to minor pieces, which are less mobile and so become weaknesses more easily.)

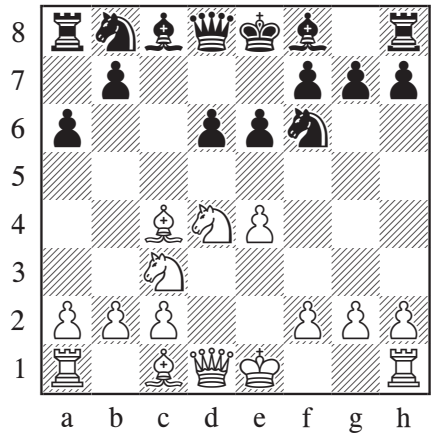
It is just like the case of an astronaut on a space station. He feels best when he is inside, but only when the surface of the space station is intact. He also feels safe on the surface of the space station, secured by a rope or magnets in his soles. However, when he moves away from the space station, he puts himself at great risk.

In this chapter, we will have a closer look at all three situations in turn: when the pieces are in front of the structure, behind it or beyond it. Finally, we will briefly look at how the opponent's pieces interact with your pawn structure.

Pieces in front of the pawn structure

Let's start with an easy example from the Sozin:

1.e4 c5 2.♘f3 d6 3.d4 cxd4 4.♘xd4 ♘f6 5.♘c3 a6 6.♗c4 e6

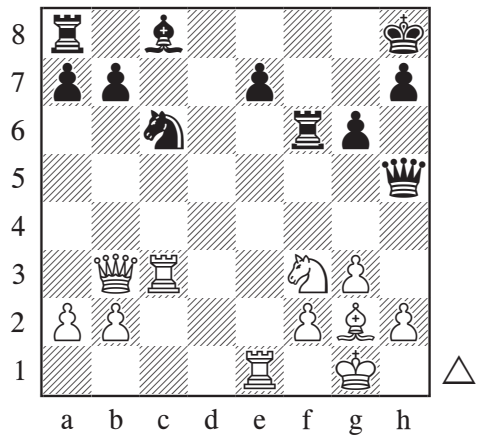


The light-squared bishop-astronaut ventured all the way to c4, but now it rather quickly retreats to be held by the magnetic surface of the space station. The most often played move in the position is **7.♗b3**.

The following is a slightly more complicated example from the Czech Team Championship:

Jan Markos – Radek Sluka

Czech Republic 2014



White has a great, probably winning, position. He is better developed, has the better pawn structure (the e7-pawn looks terrible), and in particular has the better king. But how to proceed?

I had been studying all sorts of different ways to infiltrate my rooks into the opponent's position, looking at sacrifices on e7 or doubling major pieces. However, I still wasn't satisfied. But at last I was enlightened. The main problem with White's position is that his knight hasn't got solid support. And so, after a relatively long think of about a quarter of an hour, I played:

19.h4!

The pawn skin is stretching, preparing the white knight a space on g5. Once it gets there, Black's position becomes untenable.

19...♕h6

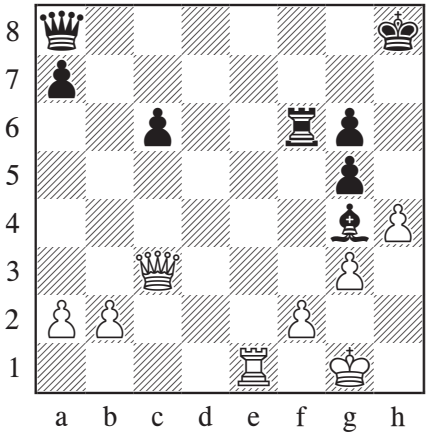
The queen returns to the defence.

Even though 19...h6?! prevents the knight's jump to g5, it further weakens the already weak king. White has several ways to win, such as the spectacular 20.♖xc6!? bxc6 21.♕c3 with a devastating attack.

Compared with the possibility of 19.♖xc6 on the previous move, having inserted h2-h4 and ...h6 greatly helps White.

The game didn't last much longer:

20.♘g5 ♕f8 21.♖ce3 h6 22.♗xc6 hxg5 23.♖xe7 bxc6 24.♖e8 ♗g4 25.♖xa8!? ♕xa8 26.♕c3
1–0

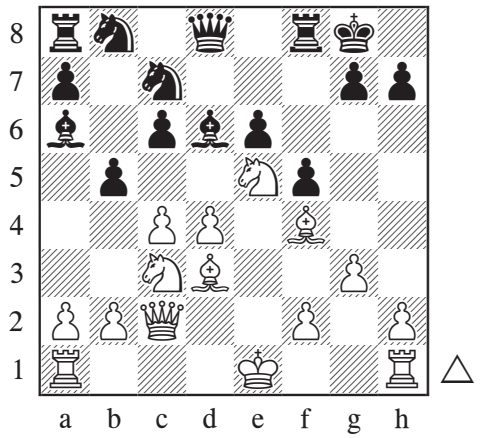


A lovely final position. Please note that none of Black's pieces is protected by a pawn.

In the following game, I seriously underestimated the importance of the pawn structure as support for my pieces, and it is a miracle that it didn't become fatal.

Jan Markos – Zsolt Rigo

Slovakian Team Championship 2015



White's position is quite good. He has a well-placed e5-knight and a better pawn structure. If he finishes his development without running into any problems, there won't be any doubt about his dominance. That's why it was best to play 14.c5 ♗e7 15.0–0–0, followed by attacking on the kingside.

However, I wanted too much from the position. I didn't want to give the d5-square to the opponent, and so I played in maximalist style:

14.b3? bxc4 15.bxc4 c5 16.dxc5 ♗xc5

The situation has changed. The e5-knight is no longer so self-confident; the d3-bishop is vulnerable, and so is the c3-knight. The a1-h8 diagonal might be the source of future problems. And White still hasn't castled. However, my sense of danger didn't warn me; maybe it was still overwhelmed by my recent optimistic mood. White has to play the accurate 17.♖d1 to achieve a position that is not dramatically worse.

However, I played the careless:

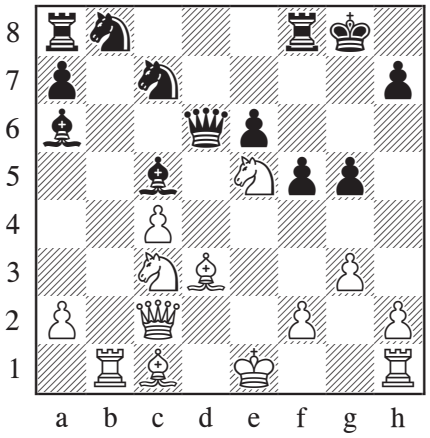
17.♖b1??

This prevents the bishop from going to b7, but that's the only thing it does.

17...g5!

A painful disillusionment. White loses all his influence in the centre.

18.♗c1 ♕d6



Only a few moves have been played, and yet White has become much worse. The knight is attacked, and it is not easy to protect it. The best solution was to humbly retreat: 19.♘f3 ♖d8 20.♗e2 g4 A nice point is that White has 21.♕d2! here, when Black's best would be to exchange queens with some advantage in the endgame, because after 21...gxf3 White delivers perpetual check.

However, I did not spot this resource, which is, by the way, based on getting 'under the skin' of Black on the kingside. I tried a more complicated and objectively losing continuation. My opponent already was under serious time pressure, and so I wanted to give him something to think about.

19.♘g4?! ♘c6!

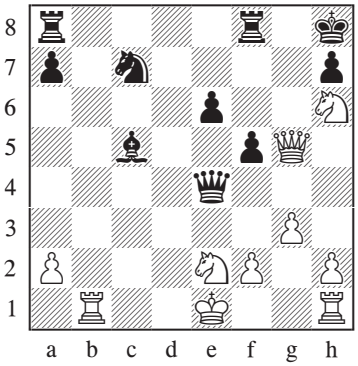
Correctly developing! There is no need to accept the sacrifice.

20.♘h6† ♔g7 21.♕d2!?

A smart attempt to escape the troubles unharmed.

21...♖f6

Probably the most beautiful win is: 21...♘e5 22.♕xg5† ♔h8 23.♗e2 ♗xc4 24.♗f4 (24.♗xc4 ♘f3†) 24...♗xe2 25.♗xe5† ♕xe5 26.♘xe2 ♕e4



The white rooks are forked, and saving them would cost White the e2-knight.

However, Rigo's 21...♖f6 is also fully sufficient. The game continued:

22.♕xg5† ♖g6 23.♕f4 ♖c8

Another elegant win is: 23...♕xd3 24.♕xc7† ♗e7 25.♕xc6 ♖d8 The white king in the centre dies before growing old.

24.♗xf5 ♕xf4 25.♗xf4 exf5 26.♘xf5† ♔f8 27.♘b5 ♖e6† 28.♘e3 ♗b4†?

A crucial mistake, with only seconds left on the clock.

The idea of checking from the b4-square is correct, but an exchange on b5 should have preceded it. The line 28...♘xb5 29.cxb5 ♗b4† 30.♔f1 ♗xb5† 31.♔g2 ♗d3 is hopeless for White.

29.♖xb4 ♘xb4 30.♘xc7 ♘d3† 31.♔d2 ♘xf4 32.♘xe6† ♘xe6

½–½

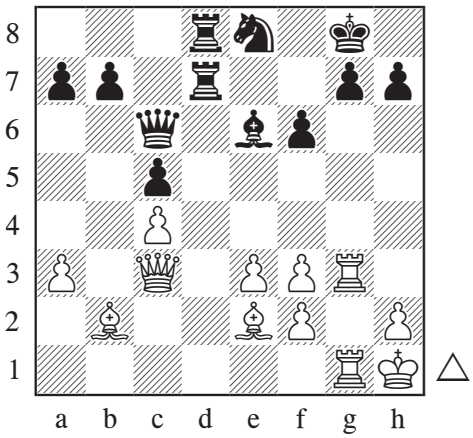
Pieces behind the pawn structure

For many amateur chess players, it is surprising what trouble their pieces can cause them behind their own pawns. After all, they are supposed to feel safe 'at home'. However, chess is not football; there is no such thing as a home advantage in chess.

While the pawn structure is intact, pieces really do feel healthy behind it. But if our opponent's pieces infiltrate behind the pawns, our own pieces will become very weak. The skin of our pawns is sticky and magnetic only from the outside.

Alexander Khalifman – Vladimir Kramnik

Linares 2000



White's attack on the kingside has come to a dead end. Although it may not seem so, the black knight, holding the king's position together, is the most precious piece on the board. The black rooks, thanks to the knight's work, can focus on a more active task; they would love to enter the opponent's camp via the d-file.

White has difficulties facing this threat. His pawn skin is torn, and his rooks have wandered to the kingside and thus cannot compete in the centre. Therefore, only the following unsightly move remains:

23.♗c1

The d2-square simply must be protected.

23...♗f5

Creating a threat of infiltration through the d3-square. Therefore, White must accept another weakness.

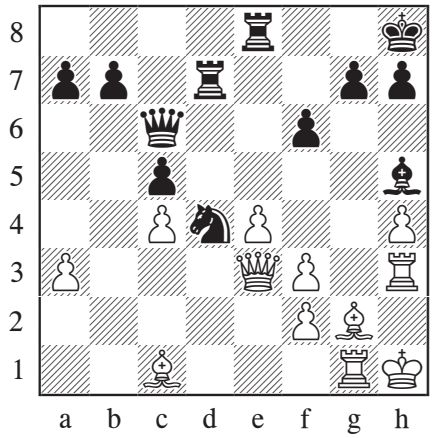
24.e4 ♗g6 25.h4 ♘c7

Infiltration was not possible through d2 nor d3, but it will be through d4!

26.♗f1 ♘e6 27.♖h3 ♗h5!

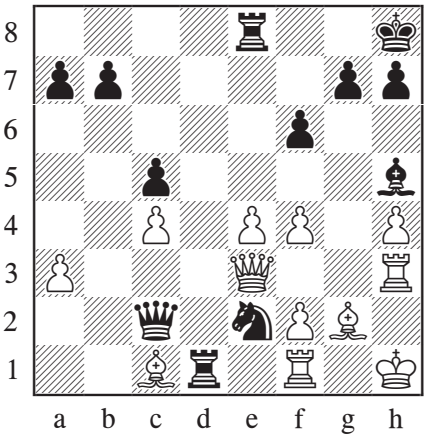
Stopping the advance h4-h5 for good.

28.♖hg3 ♔h8 29.♕e3 ♘d4 30.♗g2 ♖e8 31.♖h3



What is White's greatest weakness now? It is neither his king nor his pawns, even though the c4-pawn is really weak. In fact, the piece in the greatest danger is the c1-bishop, as it is completely immobile and can't be safely protected by a pawn.

31...♕a4 32.♗f1 ♕d1 33.♗g2 ♕c2 34.f4 ♘e2 35.♖f1 ♖d1



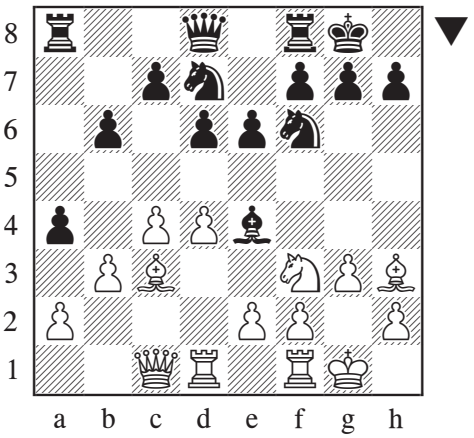
0–1

The final position deserves a diagram. The bishop on c1 is captured in its own camp.

Kramnik managed to penetrate his opponent's position through the centre. Now, let's have a look at another example, where Black infiltrates along the edge of the board.

Ivan Morovic Fernandez – Michael Adams

Istanbul (ol) 2000



A typical position from the Nimzo-Indian Defence. White's last move, 14.♗g2-h3,

signals an expansion in the centre: ♘d2, f2-f3 and e2-e4 will follow.

How can Black defend? Without the dark-squared bishop, he doesn't want to play ...d5, and if he does nothing, he risks being suffocated.

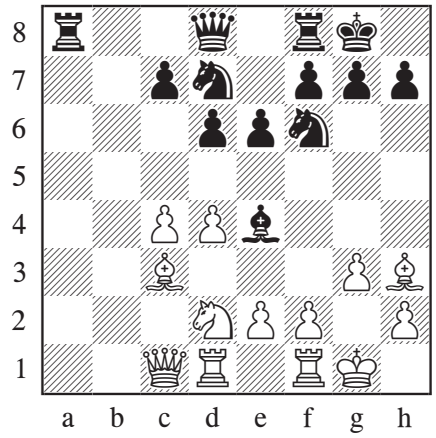
Adams responded originally. He noticed that White's plan described above – however strategically correct it is – puts the white pieces into temporary confusion. He therefore decided to open the position on the queenside.

14...b5! 15.♘d2

White continues with his plan.

The greedy 15.cxb5?! axb3 16.axb3 ♕b8 would only lead to a position full of weaknesses.

15...axb3 16.axb3 bxc4 17.bxc4



17...♖a2!

Many strong players would retreat the valuable bishop. Adams, however, perceives the situation differently. He is willing to exchange the bishop provided he gains play against the pieces behind the white pawn structure, especially against the c3-bishop.

18.f3??

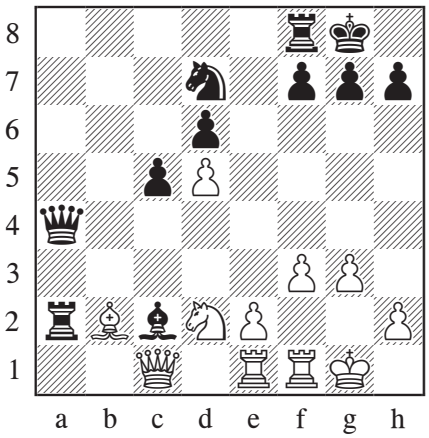
Incomprehensible carelessness. White acts as if his pawn structure is unbroken and simply continues his plan in the centre, but this has already lost its importance.

The balance would be maintained by the nontrivial: 18.♘xe4 ♘xe4 19.♗g2 ♘xc3 20.♕xc3 ♖xe2 21.♕a3 White is a pawn down, but Black's rook is surrounded, and it is impossible to extricate it without any losses. (Or is it possible? Try it!)

18...♗c2

Of course! Since the h3-bishop is out of the game, the light squares on the queenside are in Black's power.

19.♖de1 c5 20.d5 exd5 21.♗xd7 ♘xd7 22.cxd5 ♕a8 23.♗b2 ♕a4



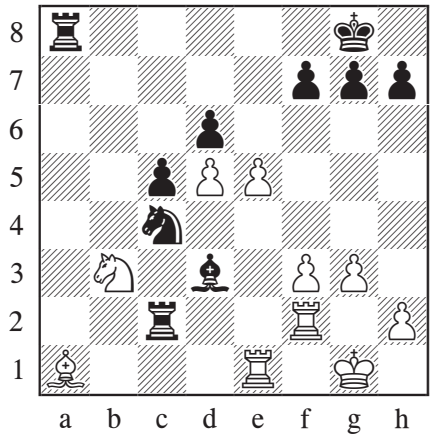
We have gone through several moves slightly faster, and now we can see the results of White's dubious strategy. He wasn't able to build the centre, but that is not the real problem. The greatest problem is that his minor pieces on the queenside are stuck in mortal danger. Notice how the presence of opposite-coloured bishops helps the acceleration of Black's attack. On the light squares, even the opponent's camp feels like home.

24.♗c3 ♘b6 25.e4 ♗d3 26.♖f2 ♖c2 27.♕a1 ♕xa1 28.♗xa1 ♖a8 29.♘b3?

29.♘f1 was more resilient.

29...♘c4 30.e5

A counterattack born out of despair.



Despite the exchange of the queens, the strategic problem for White remains the same, or has even increased. His minor pieces are huddling in the corner of the chess board, and they will become easy prey.

30...♖xf2 31.♔xf2 ♗c2!

This simply wins material, and the game ended:

32.♘d2 ♘xd2 33.exd6 ♘c4 34.d7 ♗a4 35.♖c1 ♗b5
0–1

I am not a fan of double question marks, and I try not to use them, especially in the games of other people. However, here White deserves them for the move 18.f3??. He didn't understand at all what was going on in the position. He thought that it was about the centre when, in reality, it was about the survival of his minor pieces behind the pawn structure.

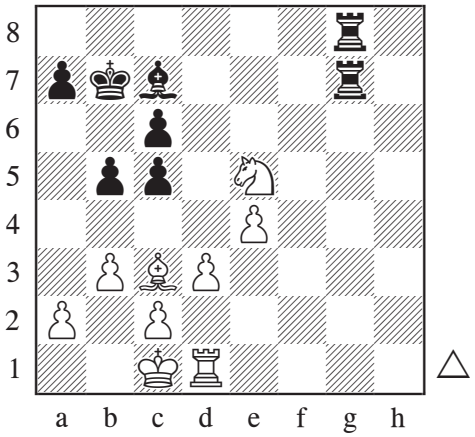
Pieces beyond the pawn structure

Sometimes a piece is neither in front of the structure nor behind – it is simply elsewhere. That is, of course, a very dangerous situation, just like a trip of an astronaut into outer space.

First, let's have a look at a simple example:

Juraj Lipka – Jan Markos

Czech Republic 2015



If the white knight stood on the f5-square (and the g7-rook, let's say, on h7), White would comfortably draw. His harmonious set-up, together with Black's doubled pawns, would compensate for the minimum material disadvantage.

But the knight is standing on e5 and although, technically speaking, it is close to the pawns, they cannot support the knight.

White is facing a difficult task – how to defend the first and second ranks and, simultaneously, to avoid losing the exposed knight? Lipka tried to solve the problem actively, aiming to move the knight to the dream f5-square.

33.♘f3 ♖g2 34.♗d2?!

This is an inaccuracy.

The strongest defence would be to support the knight with 34.♖f1 ♖f8 35.♔d1, but who would be happy putting the knight into a pin? White can wait and hope that Black won't make progress. If you fancy, you can try to analyse whether Black can find his way to victory. After the move in the game, it will obviously be easier.

34...♖f2 35.♘h4

The knight is only a move away from the dream square, but will it get there?

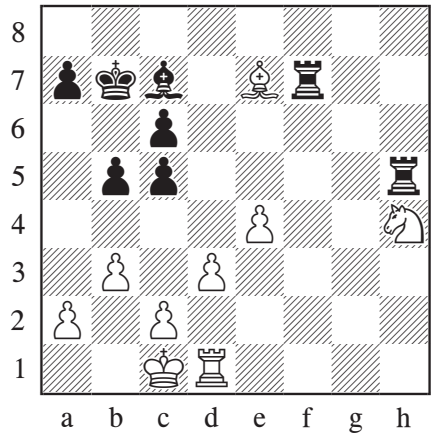
The passive 35.♘e1 ♖h8 36.♗e3 ♖e2 37.♗d2 ♖h3 looks as if White is putting himself into zugzwang.

35...♖h8 36.♗g5

It turns out that after 36.♘f5, the other pieces will suffer: 36...♖hh2 With the threat of ...♖xd2 followed by ...♗f4, winning a piece. 37.♘e3 ♗f4 White loses material.

36.♗e3 is best, but still does not save White: 36...♖e2 37.♘f5 ♖hh2 38.♖d2 ♖xd2 39.♗xd2 ♖h1† 40.♔b2 b4! This time it is the king who suffers. 41.c3 ♗e5 Black wins.

36...♖h5 37.♗e7 ♖f7



White is not able to protect both pieces and so loses material.

0–1

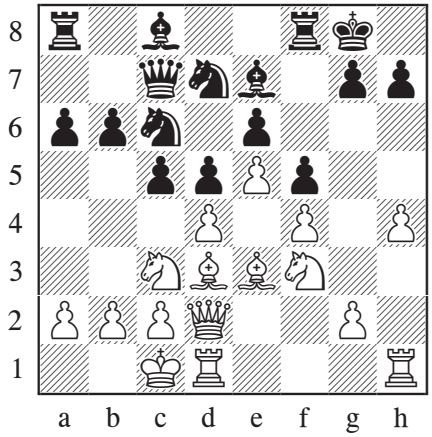
Sometimes it happens that the protective pawn structure disappears in front of the eyes of other pieces as a result of exchanging operations or tactical firefights. It is reminiscent of the situation when you roll away a stone, and you can see all the beetles and insects that lived their peaceful lives under the stone, suddenly running here and there, shocked by the sunlight and the air.

Kramnik, whose style has become much more combinational over recent years, has created a beautiful and complicated example on this theme. He doesn't hesitate to enter unclear, semi-correct complications, especially against weaker players than himself, and is often successful. Perhaps he found out that this way he can earn more points from the games where he is the favourite. However, I rather suspect that he has decided to have more fun from chess, and that as an older player he is more interested in creativity than in accuracy and impenetrability.

Vladimir Kramnik – Rainer Buhmann

Dortmund 2016

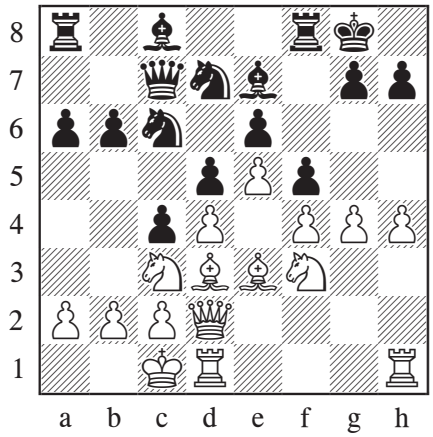
1.e4 e6 2.d4 d5 3.♘c3 ♘f6 4.e5 ♘fd7 5.f4 c5 6.♘f3 ♗e7 7.♗e3 b6 8.♕d2 0–0 9.h4 ♘c6 10.♗b5 ♕c7 11.0–0–0 a6 12.♗d3 f5



The position looks quite blocked, and the black pieces seem to be safe. However, this appearance is deceptive. The e6-pawn is overloaded because it protects two important pawns which find themselves under great pressure. Kramnik didn't hesitate and lit the first firecracker in a display of fireworks.

13.g4! c4

13...fxg4 14.♘g5 is already lost for Black. I don't want to get involved in theoretical discussions, but it seems to me that Black has not equalized from the opening if he is facing such a destructive avalanche as awaits him in the game.



14.gxf5!?

Also 14.♗xf5 exf5 15.♘xd5 ♕d8 16.gxf5 ♖xf5 17.♖hg1 g6 18.♘xe7† ♘xe7 19.d5 can be played, with an unclear game, or even the peaceful 14.♗f1, with chances for an advantage. Kramnik, however, chooses the romantic way.

14...cxd3 15.fxe6 ♘db8

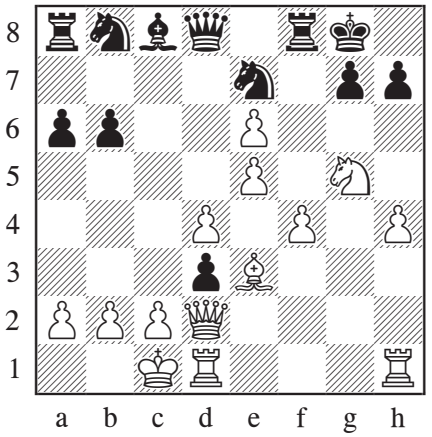
15...♘dxe5 16.♘xe5! is also not enough to equalize, for example 16...dxc2 17.♖dg1 gives White a dangerous attack.

16.♘xd5 ♕d8 17.♘xe7† ♘xe7

The position has radically changed. As if burned up by acid, Black's pawns have disappeared without trace. The black pieces on the back two ranks no longer feel so secure. And yet, Kramnik is only warming up.

18.♘g5!

Preparing the sacrifice of a second piece!

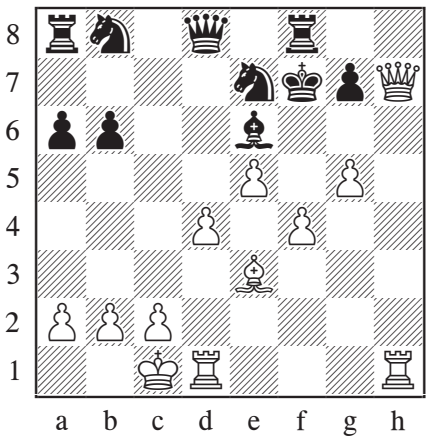


18...h6

Black must accept.

The naïve 18...dxc2? is easily refuted: 19.♕xc2 g6 20.h5 ♖a7 21.♔b1 White has a winning attack.

19.♕xd3 hxg5 20.hxg5 ♗xe6 21.♕h7† ♔f7



The king is naked. And, moreover, facing the spears of a horde of white pawns. Although it seems that the e6-bishop controls the light squares well, it is only an illusion.

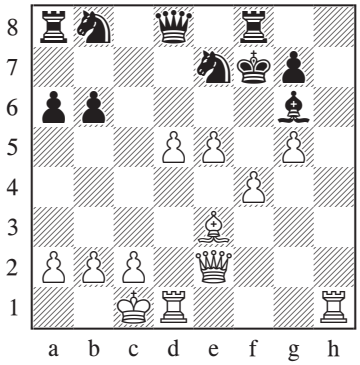
22.d5! ♗f5

Black simply cannot afford the opening of the d-file and the subsequent pin.

23.e6†?

This obvious check is quite surprisingly an error. Although White captures the last black pawn on the kingside, Black can skilfully consolidate his position.

Returning the queen to the centre would have brought Kramnik a great advantage: 23.♕h5†! ♗g6 24.♕e2



It may seem strange that such a mysterious return is better than continuing an attack along the seventh rank. This manoeuvre is, in fact, continuing the attack, but is also associated with prophylaxis. White protects the c2-square, the only weakness in his camp, while the queen is ready to catch the black monarch as it tries to sneak away to the queenside. Black is helpless despite having two pieces more.

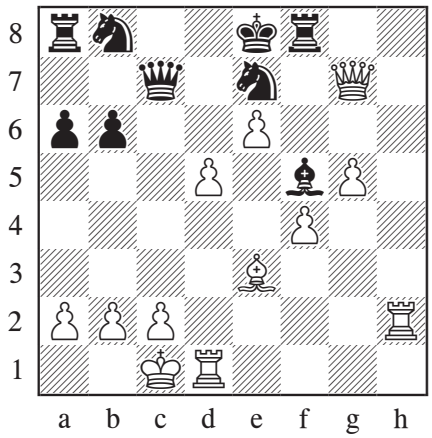
In fact, his pieces are in the most difficult situation that pieces can be in. They are away from their pawn structure, at the mercy of the opponent's rooks and queen. And to make it even worse, there is a phalanx of white pawns hurtling at them. The computer recommends 24...♘xd5 25.♕f3 ♔e7 26.♖xd5 ♕c8 27.♕d1 ♗e4 28.♖d6 ♗xh1 29.♕xh1 and, despite being a rook down, White is on the verge of winning.

However, let's go back to the game. After 23.e6†? this is what happened:

23...♔e8 24.♕xg7 ♕c7

This is the problem; Black now has counterplay.

25.♖h2



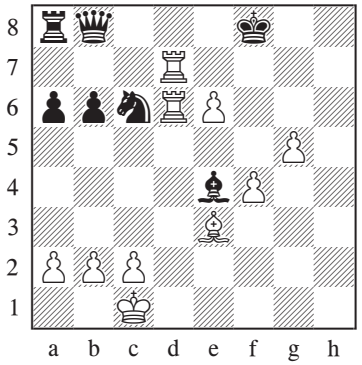
The last black pawn from the once great chain had disappeared. But now the white queen is exposed, which allows Black the following attack:

25...♘xd5! 26.♕xf8†?!!

Well, what is this? Where is the Kramnik who mastered the Berlin Defence, and whose craft was drawing games? This is objectively a bluff, though not easily refutable.

26...♔xf8 27.♖xd5 ♗h7?!

27...♗g6 28.♖hd2 ♘c6 29.♖d7 ♕b8 30.♖2d6 ♗e4 was winning for Black. Although the white pieces look dominant on the board, there are simply too few of them.



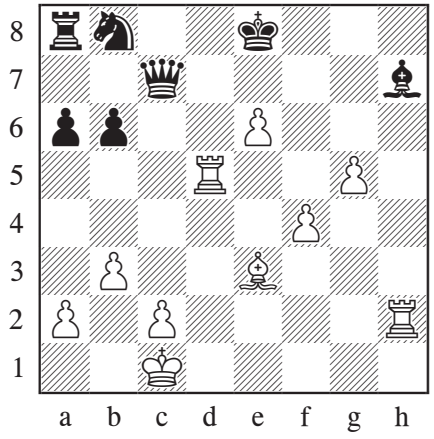
But let's go back to our game. After 27...♗h7?! there followed:

28.b3! ♔e8

It is interesting that Black has probably already missed his chance for a great advantage.

28...♖a7 leads to similar tactics as in the game: 29.g6 ♗xg6 30.♖h8† ♔e7 31.c4 Black cannot escape without any loss of material, for example 31...♔xe6 32.f5† ♗xf5 33.♖h6† with an equal game.

It is also not enough to 'correct yourself' with 28...♗g6. The move b2-b3 greatly helps White; after 29.♖h8† ♔e7 30.c4 he has a dangerous attack.

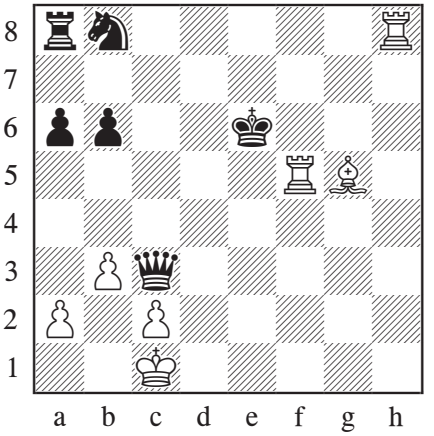


29.g6! ♗xg6 30.♖h8† ♔e7 31.f5 ♗xf5

Black returns some material.

32.♖xf5 ♕c3 33.♗g5† ♔xe6

There is the third act of the drama about the relationship of the pieces and the pawn structure. First, the black pieces, as well as the white ones, were hiding behind the skin of pawns. Then White exposed Black's pieces, but the white pawns remained. White gradually sacrificed or exchanged the pawns so that he could get to the opponent's king, and now all the pieces are flying in the open cosmos. Not a single piece is protected by a pawn; and not only the black king, but also the white one is exposed.



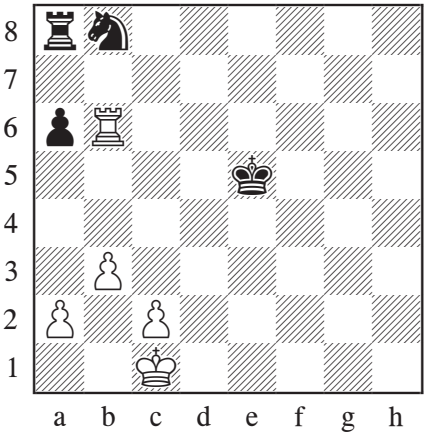
Such situations are so full of tension and electricity that a denouement usually comes quickly.

34.♖f6† ♕xf6

34...♔e5 35.♖e8† ♔d5 36.♖d8† is a beautiful perpetual check, as Black can't play 36...♔c5 because of 37.♖c8†.

After 34...♔d7? 35.♖d8†! ♔c7? 36.♖f7† ♔c6 37.♖c8†+– White grabs the queen under more favourable circumstances.

35.♗xf6 ♔xf6 36.♖h6† ♔e5 37.♖xb6=



The game soon ended in a draw. A single pawn on a6 is not enough for Black to win with his extra knight.

Although Kramnik didn't squeeze a full point out of the game, I believe that he left the playing room satisfied. His creativity enabled us to examine slowly and in great detail, just like in a museum or a laboratory, what happens to pieces when the protective pawns disappear in front of their eyes.

Now, let's have a brief look at how a pawn structure interacts not with its own pieces, but with the opponent's pieces.

Inflating the balloon

Pawns are the cheapest goods on the board, and so it is easy for them to be brave, to step up and force the opponent's pieces away from their positions. Like a balloon that is being inflated, the pawn structure can by its advance double the territory that is in the power of one side and, in contrast, squeeze the rival to an absolute minimum.

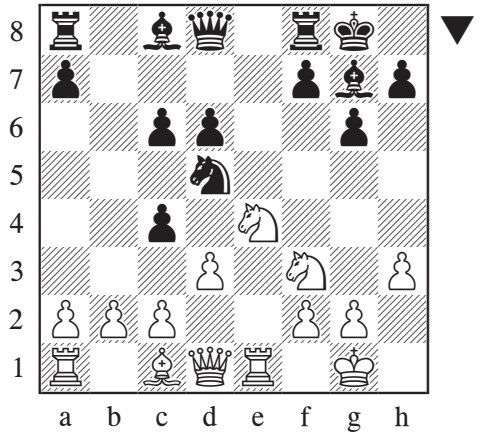
However, the advance of a pawn structure must be compact, without any defects. If weaknesses appear in it, or it is ruptured, this has the same devastating effect on the position as a pin has to an inflated balloon.

The side that is inflating the balloon of the pawn structure tries to keep the position closed and plays to suffocate the opponent. The opponent tries to open the position and plays for infiltration behind the inflated structure.

I will show two examples of the inflating of pawn structures. In the first example, it worked perfectly; in the second, it failed miserably.

Milan Pacher – Jan Markos

Slovakia 2015



White opened the game imprecisely and is already fighting to equalize. He has a little less space and his opponent has the advantage of the two bishops. Moreover, with his last move (12.d3) he offered an exchange of one of the opponent's doubled pawns.

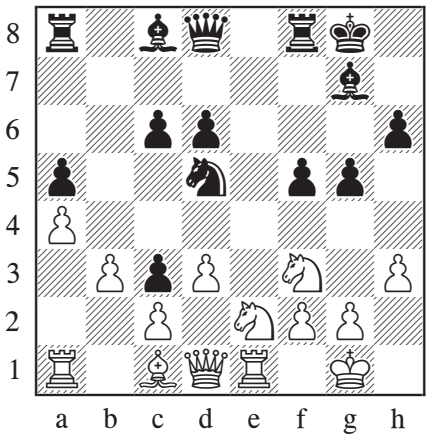
The continuation 12...cxd3 certainly has its logic. It gets rid of a structural defect and opens the position for the bishops. However, I couldn't stop thinking that my hanging pawns on c6 and d6 would be weak, and that advancing them could create a great outpost for the white knight. So I decided to play differently – to suffocate the opponent.

12...c3! 13.b3?

White underestimates the danger. It was necessary to remove the piercing sting on c3 in order to maintain something close to equality, even at the cost of the exchange.

Correct was 13.♘xc3! ♘xc3 14.bxc3 ♗xc3 15.♗h6 ♗xe1 16.♕xe1 ♖e8 17.♕c3 f6 18.♕xc6 with compensation.

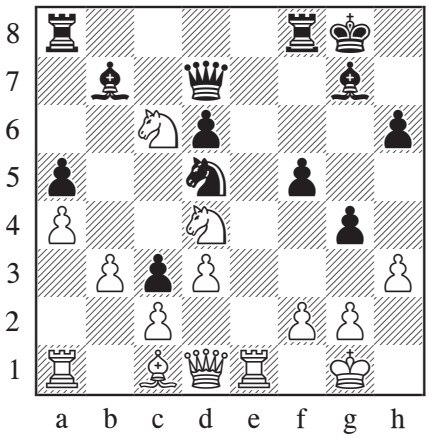
13...f5 14.♘g3 h6 15.a4 a5 16.♘e2 g5!



The triumph of Black's strategy. None of the white minor pieces has a square where it would feel useful. Black plans to slowly prepare a kingside attack, for example by transferring the queen's rook to the kingside via the a7-square. White, therefore, decided to take action immediately, but he miscalculated and lost material.

17.♘ed4? g4 18.♘xc6 ♕d7 19.♘fd4 ♗b7

The knights are embracing each other, while surrounded by enemies.



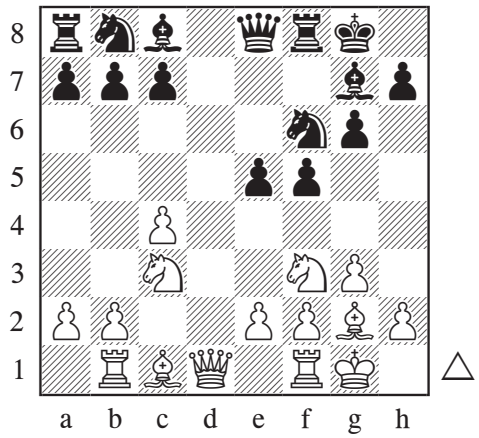
20.hxg4 fxg4 21.♘e6 ♗xc6 22.♘xf8 ♖xf8 23.♖e4 h5 24.♗g5 ♕f5 25.♗h4 ♘f4 26.♖c4 ♘xg2 27.♖xc6 ♘xh4 28.b4 ♘f3† 29.♔h1 ♕g5

0–1

The following example is a total contrast. I began to inflate a structure that was already broken, and did this even with poor control of the centre. The result was miserable.

Jan Markos – Jouni Yrjola

Riga 2012



This position arose from the Dutch Defence. Black has managed to build an impressive pawn duo in the centre, but White has the safer king (still with the protection of the f-pawn). The two strongest moves in the position are 10.e4, which prevents Black from advancing in the centre, and the very interesting 10.b3, when White tries to 'peek' over the opponent's structure with his dark-squared bishop, either from b2 or a3.

However, I decided to march forward, led by a superficial feeling that the Dutch should be met like this. True, it sometimes is, but not with an open centre.

10.b4?

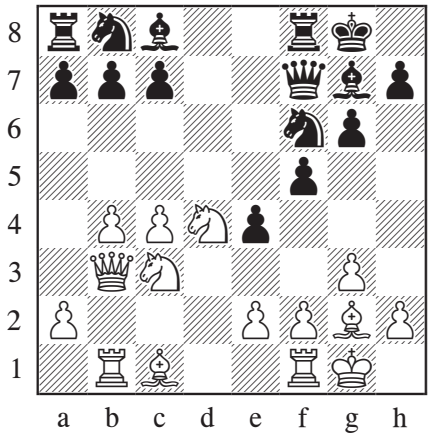
This move is against several strategic principles.

First and foremost, a flank action will never be successful without sufficient support in the centre.

Secondly, it is more effective to attack with pieces than with pawns in open positions – they are faster and can return if required.

And finally, we can successfully inflate the balloon of the structure only when it is relatively intact.

10...e4 11.♘d4 ♕f7 12.♕b3



Optically, everything seems to be all right, but it isn't. White's d4-knight is not protected and can easily become a target of tactics. However, it has an important role: it prevents the opponent's bishop from landing on the e6-square, from where it would attack the c4-pawn, the weakest spot in my position.

Black, therefore, played without prejudices:

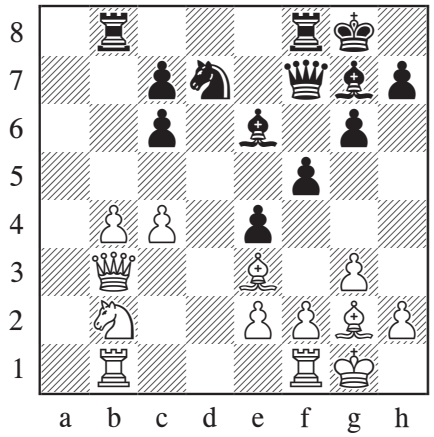
12...♘c6! 13.♘xc6 bxc6

Black has broken his own pawn structure, but it doesn't matter because White cannot attack it. Conversely, White's 'compact' structure proves to be very weak, because all Black's fire can be focused there, now also along the b-file.

14.♘a4 ♗e6 15.♘b2

An awful manoeuvre, but I haven't figured out anything better.

15...♖ab8 16.♗e3 a5 17.a3 axb4 18.axb4 ♘d7



White's position is on the edge of losing. His pawns are weak, and his pieces are divided into two disparate groups by the wedge on e4. The b2-knight is a typical piece behind the pawn skin, and has the potential to become the crucial weakness of the game.

It may seem that I must have been in particularly bad shape to manage to get into such a position with no prospects in less than twenty moves. But it is not true – mistakes are sometimes simply made, whether you are in good shape or not. What is important is how we deal with them. I swore inwardly, but I didn't give up the game. I complicated the ensuing events on the board to such an extent that I put my opponent under time pressure and, finally, I won the game as well as the entire tournament.

Pawns usually appear rather inconspicuous on the board. However, we have just demonstrated that they carry out several important functions.

They support the pieces standing in front of them.

They are a shield for the pieces standing behind them.

They can effectively oppress the opponent's pieces if they advance in a compact mass.

And sometimes they also promote into a queen.

Chapter 6

Inconspicuous Mate

A passed pawn close to the promotion square

Which situations on the board are the most thrilling? You would certainly place among them the moments when at least one king is threatened by an abrupt attack. Will it survive or not? The nerves of both opponents are as tight as violin strings and they both calculate with all their might and main.

However, kings sometimes stand safely behind a wall of pawns, surrounded by their subjects, and yet they are in mortal danger! Elsewhere on the board, there is something going on which can have an impact on the future fate of the monarchs. Will that knight escape from being surrounded by the opponent's fighters? Will that black pawn be promoted into a queen, or will it be captured on its way? When you lose a piece without any compensation, it's like being mated. If you lose control of a passed pawn, your king will almost certainly make its farewell.

These tense situations in the life of a game, such as a 'trapped piece' or a 'passed pawn close to the promotion square', I therefore call **inconspicuous mates**. Playing in these situations requires as much attention and effort as those in which the opponent's pieces are attacking the king like hungry vultures. Here too, it is about the mate, about the whole point being at stake. In chess, unlike in hockey or football, the goal is everywhere on the field.

In particular, positions with a passed pawn one or two ranks from promotion are often misunderstood by chess players. Less experienced players underestimate the pawn's importance; they don't pay it sufficient attention. The evaluation of such positions often turns like a weather vane on a church tower, and even players with international titles are often unable to figure out how good their position actually is. A passed pawn is in many cases more dangerous than you think. Its energy is sometimes truly marvellous.

You can make use of a passed pawn in three different ways.

First, you can promote it and gain material.

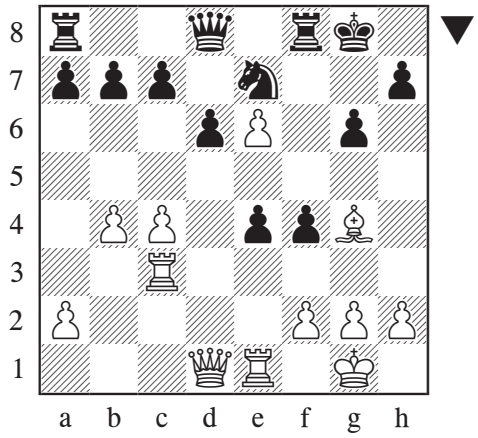
Second, the passed pawn draws to itself the opponent's power, which is then missing elsewhere on the board.

Third, the passed pawn sacrifices itself to clear the way for its own pieces, or to cause chaos in the opponent's camp at a crucial moment.

Let's have a look at examples of all three uses of a passed pawn.

Vladimir Kramnik – Alexei Shirov

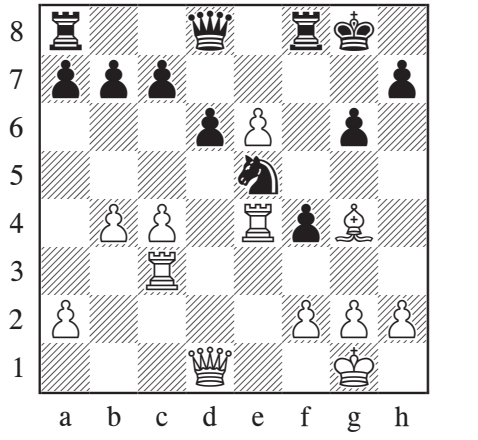
Monte Carlo (blindfold) 1998



White has a well-protected passed pawn on e6, but this pawn is at the moment reliably blockaded. However, in this blindfold game, Shirov decides to play actively. Contradicting the principles of Nimzowitsch, he moves the blockading e7-knight to a different, seemingly more active, square.

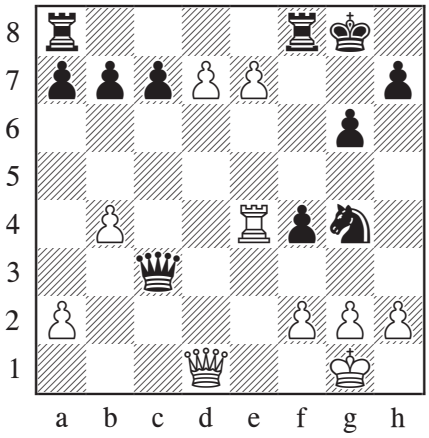
By the way, Black's material advantage is only temporary. His e4-pawn will fall.

17...♘c6 18.♖xe4 ♘e5



At this point, Kramnik played the dubious 19.g3?! and the game ended pretty quickly in a draw. I believe that if White had more time for making the decision (and if he could see the board), he would surely find the strong and precise:

19.c5! ♕f6 20.cxd6! ♘xg4 21.d7! ♕xc3 22.e7!

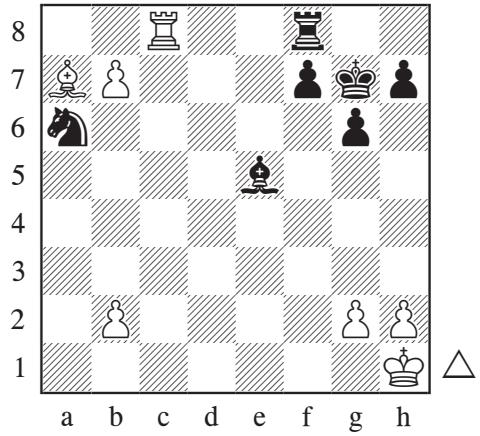


The great energy hidden in the e6-pawn has been released. Although White has a rook and a knight less, he has a decisive advantage, because the connected pawns will cost Black both rooks – a severe punishment for leaving the blockading square.

I'm going to illustrate the second use of the passed pawn with a game from the semi-final of the women's world championship. As with the above example, it is also a rapid game, though this one was played in much tenser circumstances, because the winner would go to the final, where another Chinese woman, 16-year-old Hou Yifan, was already awaiting her.

Zhao Xue – Ruan Lufei

Antakya (5.4) 2010



In this position, White's b7-pawn cannot even think about promotion – the b8-square is protected three times, and White has only two pieces available. And yet, this pawn does White a great service – it ties all the black pieces to b8, and, in addition, creates a great c8-outpost for the rook.

White should have played:

39.♗e3!

The threat of ♗h6† means that Black would have to respond with the abysmal:

39...♖h8

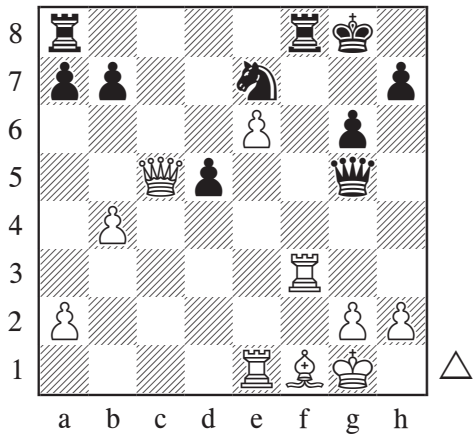
One little soldier on b7 would force two black pieces (the rook on h8 and knight on a6) into funny positions. Despite the material deficit, White would be okay.

However, Zhao Xue couldn't handle the mutual time pressure, and failed to find 39.♗e3!. She eventually lost the two pawns on the b-file, and together with them also the chance to fight for the chess crown.

In order to illustrate the third way of using the passed pawn, that is, its sacrifice in return for other benefits, we don't have to go far. We just need to go back to the players from the first example, even to the same opening line; but, of course, in another game.

Vladimir Kramnik – Alexei Shirov

Tilburg 1997



In this game (this time played with a classical time-control), Shirov was more cautious and preferred not to move the blockading e7-knight. However, the future World Champion found another way to use his e6-pawn. This pawn is hampering not only Black, but also White. If the pawn was not there, the e1-rook, and also the f1-bishop, would have a much larger field of activity. Therefore, Kramnik played the paradoxical:

25.♖f7!! ♖xf7 26.exf7† ♔xf7 27.♕c7!

As the later course of the game showed, Black's situation is joyless, and his pieces lack coordination. The e7-knight, once standing safely, is suddenly under fire, and the white bishop is looking forward to the e6-square. Kramnik won the game convincingly.

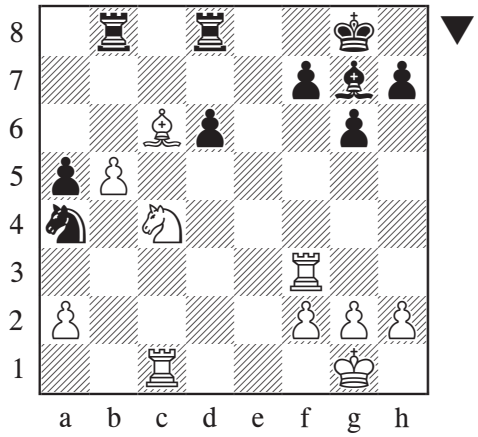
Up till now, we have been dealing with positions in which only one player has a passed pawn. However, the real fun begins in positions where both players have their own 'sprinter',

and if such a situation is accompanied by time pressure, the players' heads will not lack grey hair.

Thanks to the strange influence of the goddess Caissa, I had the opportunity to participate in two such exciting 'journeys' in the space of just a couple of months, both with the same opponent, the Hungarian grandmaster Csaba Balogh. In addition, I was Black in both games, and they both featured strong time pressure.

Csaba Balogh – Jan Markos

Hungary 2009



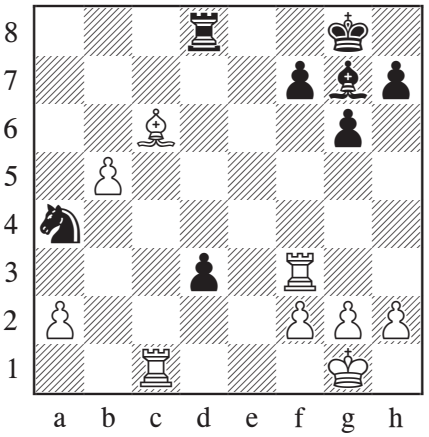
Black's situation is unpleasant, as he is losing his a5-pawn. His only chance is linked to a rapid advance of his passed pawn.

Usually, it is worth playing actively in positions with passed pawns on both sides. It's better to advance your own pawns than to passively cower in front of your opponent's pawns.

And so I played:

35...d5 36.♘xa5 d4 37.♘b7 d3! 38.♘xd8 ♖xd8

38...d2?! is inaccurate, because it would give White's king access to the e2-square.

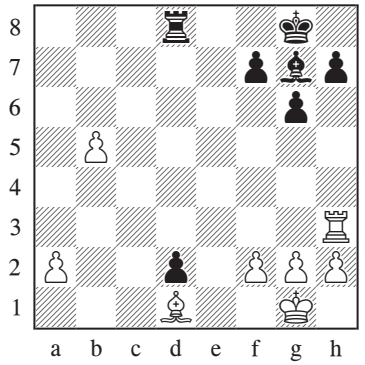


Even with an extra exchange, White suddenly has a problem – how to efficiently stop the opponent's annoying pawn.

39.♖d1? ♘b2 40.♖d2 ♗c3 leads to the capture of the rook.

39.b6 gives away a pawn to try to deflect the knight, but without success – Black can instead take a whole rook: 39...d2 40.♖d1 ♘b2 41.♖xd2 ♖xd2 42.g3 ♗e5 Black has good chances.

Perhaps the best move is the paradoxical 39.♖h3! which frees the f3-square for the bishop, when play may comtinue: 39...d2 40.♖d1 ♘b2 41.♗f3 ♘xd1 42.♗xd1



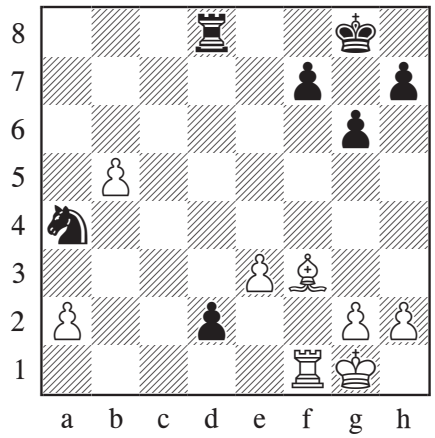
White will defend the d1-square with his king, and is a pawn up, even though Black's powerful d2-pawn gives him good chances for a draw.

However, White didn't have time for a thorough analysis. To tell the truth, he hardly had time for anything, and so he tried to choose a safe option:

39.♖e3

This allows Black to take back the exchange.

39...♗h6 40.♗f3 d2 41.♖f1 ♗xe3 42.fxe3



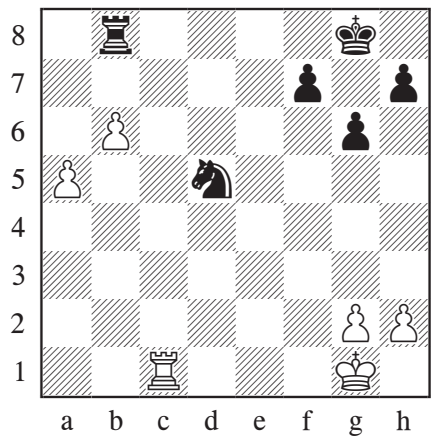
42...♘c3 43.b6 d1=♕ 44.♗xd1 ♘xd1

Suddenly it is Black who is a piece up!

45.a4 ♘xe3 46.♖c1!

Not allowing the opponent to bring the knight closer to the pawns.

46...♖b8 47.a5 ♘d5



The audacious d-pawn ended up costing White a whole rook. However, the white pawns have meanwhile advanced quite far. Balogh now played:

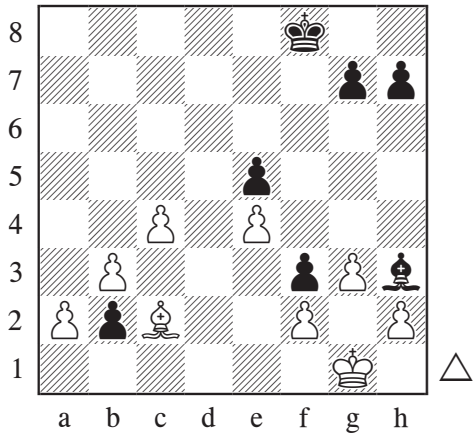
48.a6! ♘xb6 49.♖b1!

Tying the black pieces down for the price of one of the white 'sprinters'. After the inevitable a6-a7, the game resulted in a rook endgame with three pawns against two, which is a theoretical draw.

Two months later, we sat down at the board again, this time in the Austrian Team Championship. Several moves before the time control, there appeared what is perhaps the most amazing position with passed pawns that I have ever had on the board.

Csaba Balogh – Jan Markos

Austria 2010



This incredible position resembles an artificially created study. White is two pawns up, and on the queenside he has a phalanx of passed pawns. However, his king is enclosed in a kind of a cage, and the bishop must not stop keeping an eye out for the b2-pawn. After long analysis, I have finally come to the conclusion that the position on the board is a draw, but

from the practical point of view, it is White who must be more precise to achieve this result. It would be exhausting to give all of the lines of analysis; therefore, I will mention only several laws in accordance with which the game will most likely develop in the near future.

A great deal depends on if and when Black's bishop leaves the h3-square. The black king on its own will not be able to capture all the white pawns on the queenside. However, Black will try to keep the white king in the cage for as long as possible.

It would be very unpleasant for White if the black bishop managed to get to the a6-f1 diagonal with tempo, because then it would be standing on an active square and at the same time limiting White's king. Therefore, White will in some lines play ♗b1, so that after ...♗e6 Black is no longer threatening ...♗a2.

White's phalanx on the queenside is currently standing very firmly, but its advance will weaken it. Therefore, it is essential for White to time its advance in such a way that it will not end in the stomach of the black king.

Both players had about three minutes on the clock (plus a 30-second increment per move). Therefore, it is clear that they made the following moves largely by intuition.

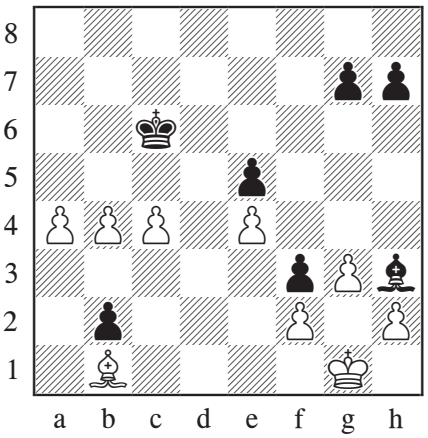
35.♗b1

White follows the motto, "Better safe than sorry." In time trouble, he anticipates the threat of ...♗a2.

However, other moves, such as 35.g4, also lead to a draw.

35.c5 is another move that draws, for example: 35...♔e7 36.a3! ♔d7 (36...♗e6? 37.♔f1 ♗xb3 38.♗b1 leads to an endgame in which White will have an extra passed a-pawn.) 37.b4 ♔c6 38.♗a4† ♔c7 39.♗c2 With a repetition of moves.

35...♔e7 36.b4 ♔d6 37.a4 ♔c6



The fight has been entirely logical so far – White advanced his pawns, while Black brought his king in front of them. However, in the following phase, the pieces clash directly. And only a few minutes remain on the clock. What to play?

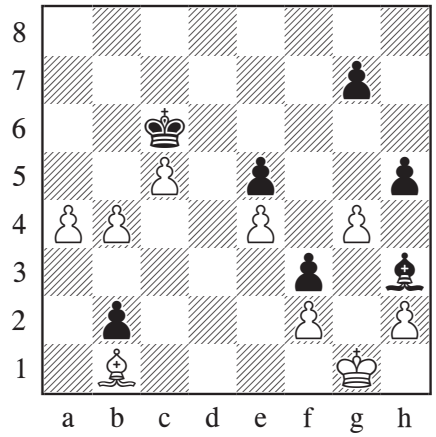
38.c5?

Balogh commits a mistake. White has to advance his pawns, because otherwise ...♗e6xc4 will follow. However, it seems much more logical to advance the a-pawn, which is further from the black king.

38.a5 leads to a draw after the safe 38...♗e6 39.♔f1 ♗xc4† 40.♔e1 ♔b5 41.a6! ♔xa6 42.♔d2. Even after the more challenging 38...g5 39.a6 ♔b6 40.b5 h5 41.c5† ♔a7 42.♗d3 ♗d7 43.b6† ♔a8 44.a7 ♗b5 45.♗b1, Black can hold the draw as the white king won't come out of the cage.

38...h5 39.g4

White is basically in zugzwang: if a4-a5 then the white pawns will fall; if ♔h1 then ...♗f1 will follow; and if the b1-bishop moves then Black will play ...♗e6 with the threat of ...♗a2.



39...h4!

Gaining an extra tempo for the future advance of the kingside pawns!

40.a5

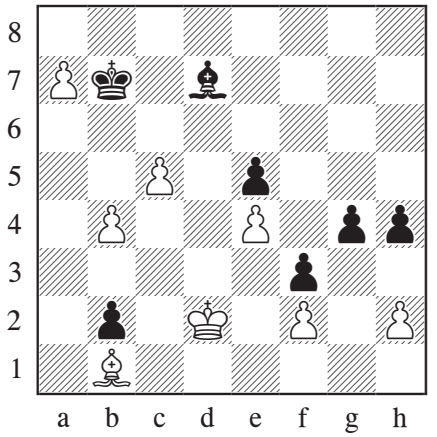
40.g5 g6 doesn't change anything about the zugzwang.

40...♗xg4

Time trouble is over, and White is about to lose. The rest is less interesting.

41.a6 ♗c8 42.a7 ♔b7 43.♔f1 ♗d7 44.♔e1 g5 45.♔d2 g4

White falls short of being able to capture the b2-pawn by a single tempo.



46.♔e3 ♔xa7 47.♗d3 ♗b5 48.♗c2 ♗c4 49.♗b1 ♔a6
0–1

I am convinced that when training it is necessary to devote a similar amount of time and effort to positions in which one or more pawns is close to the square of promotion, as to positions with a direct attack against the king. Such positions occur frequently, and a lot depends on them. And yet they are relatively neglected in chess literature.

Even an inconspicuous mate is still a mate.

Chapter 7

Fractures

On doubled pawns

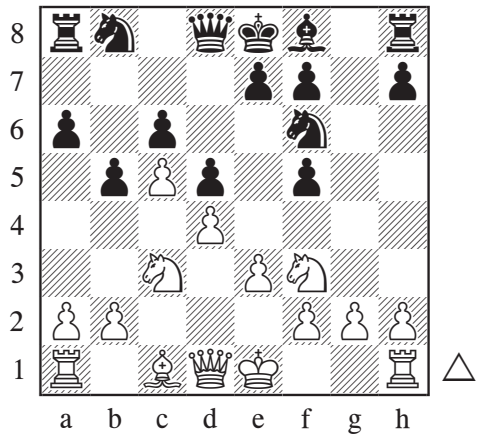
Pawns are the bones of any position. They are not very mobile, and they are so cheap that it is difficult to dismantle them. In blocked positions, pieces often have to humbly bypass a pawn structure that rises like the Himalayas in the centre of the board.

Still, sometimes even a bone breaks. In real life, a man ends up with his arm or leg in a splint. In chess, such an accident often means a long and wearisome defence of chronic pawn weaknesses. It is not at all pleasant. However, with good care the recovery can be less painful and shorter. In this chapter, I will try to show you how to treat one specific type of pawn fracture – doubled pawns.

In the first example, we will show why doubled pawns are usually unwelcome guests in a position.

Jan Markos – Mihail Saltaev

Germany 2008



Doubled pawns tend to become weak. The pawn in front can't be protected by a rook from behind. Moreover, it can be protected only by one pawn from an adjacent file. However, in the diagram position, the f5-pawn is not weak; after ...e6 it will be safely protected.

But in order to protect the f5-pawn safely, the e-pawn has to stand on e6 forever. The ...e5 break, so natural if the f5-pawn had remained on the g-file, is now almost impossible; it would weaken the f5-pawn too much.

Also, the f7-pawn is restricted in its movement. It will remain in the shadow of the f5-pawn for a long time.

Furthermore, if White arranges to play e3-e4 in the future, Black will be almost obliged to take with ...fxe4, as the exchange on f5 would create isolated doubled pawns on the f-file.

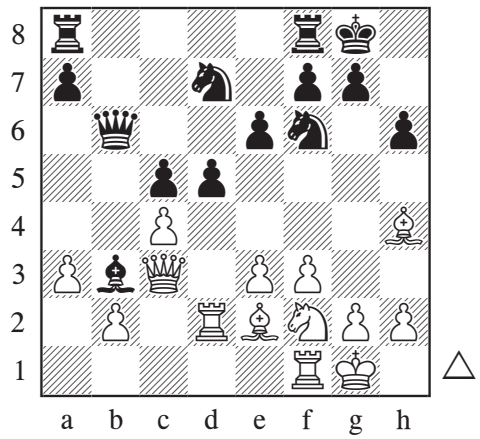
As Nimzowitsch mentioned, a structure including doubled pawns is much restricted in its movement. It is a defensive structure. Any movement forward would create chronic pawn weaknesses.

Doubled pawns are truly similar to a bone fracture. When you move them, they start to hurt a lot. Doubled pawns therefore restrict their owner's movement, as does an arm in a splint.

All this is true only about doubled pawns that cannot easily be exchanged. Doubled pawns that arise, but then cease to exist a few moves later, can't be considered as a chronic weakness.

Garry Kasparov – Anatoly Karpov

Las Palmas 1996



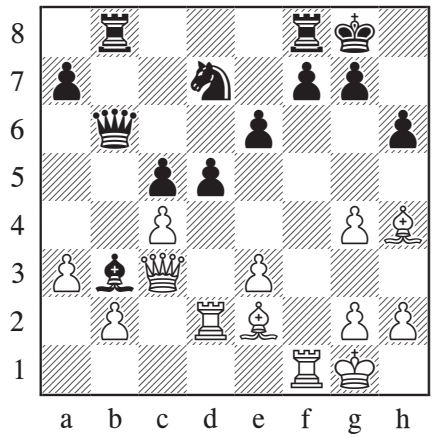
White cannot be completely satisfied with the result of the opening. The position is more or less equal. White has no chances for active play on the queenside or in the centre. Therefore, he starts operations on the kingside, creating doubled pawns as a by-product.

18.♘g4! ♘xg4 19.fxg4

However, these doubled pawns will have only a very short life.

19...♖ab8

Black can't afford to hinder g4-g5 by playing 19...f6?!, as after 20.cxd5 exd5 21.♗f3 White would get control over the weakened light squares.



20.g5 hxg5 21.♗xg5

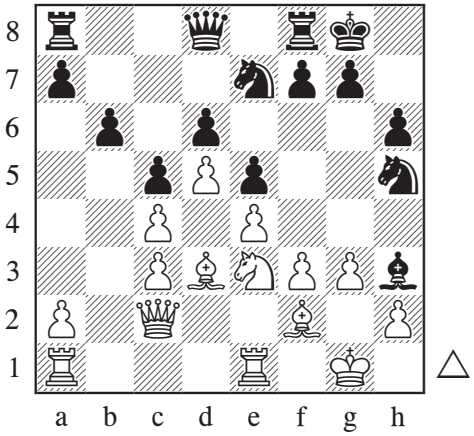
That is the end of the short appearance of the doubled pawns. White has opened the f-file for his rooks. His pair of bishops also gained a little more space.

It is good to remember that the side with doubled pawns gets a (semi-)open file as a pleasant bonus.

Sometimes, the semi-open file more than compensates for the doubled pawns:

Gabriel Sargissian – Alberto David

Mainz 2008



In this typical pawn structure, which arises mostly from the Sämisch Variation of the Nimzo-Indian Defence, it is not easy to decide if the doubled pawns are weak or not. Much depends on the placement of pieces. If Black manages to get his knight to a5 and his bishop to a6, White will feel unpleasant pressure on his c4-pawn. But here David's minor pieces are on the kingside, and the doubled pawns are well protected. Please note the excellent placement of the white knight. It is simultaneously defending the c4-pawn and helping with the upcoming kingside initiative.

Sargissian played the typical:

21.a4!

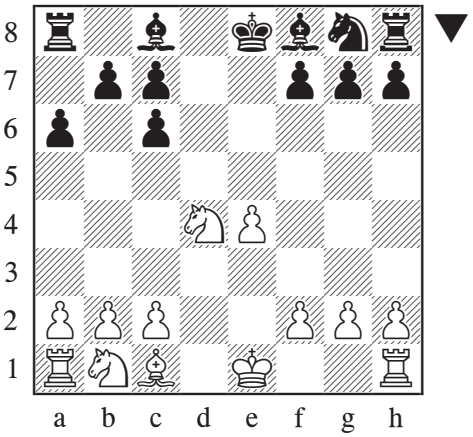
Threatening to open some files on the queenside with a4-a5, and intending to leave Black with a weakness on b6. David answered also in a typical manner. He played:

21...a5

Hoping to exploit the potentially weak a4-pawn in the future. Still, White is the one benefitting from the inclusion of a2-a4 and ...a5. Now he can press along the b-file, and he has also obtained the b5-square for his knight.

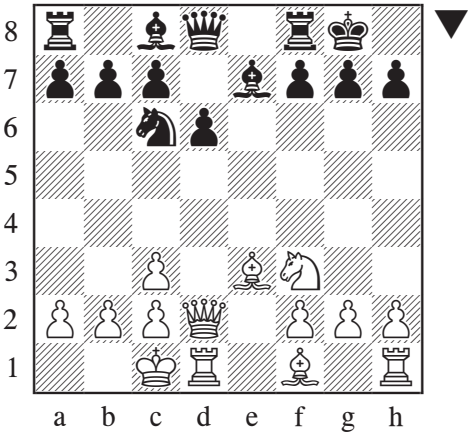
Doubled pawns have so little mobility that a pawn majority containing them usually cannot be transformed into a passed pawn. Players with experience in the Exchange Variation of the Spanish Opening know that very well.

Exchange Spanish



But in some positions, the immobility of the doubled pawns is not a disadvantage. Let's take a look at a position from the Petroff Defence:

Petroff Defence



In the diagram position from the Petroff Defence, compared to the Exchange Spanish, no pawn majorities are present. White is therefore in no danger of entering an inferior endgame. Moreover, the kings have castled on opposite sides of the board. The combination of these facts completely changes the evaluation of the doubled pawns. Here the c2- and c3-pawns create an extra-strong shelter for the white monarch. There is no need for them to march forward. The rook on d1 will use the semi-open file to put pressure on the centre. In this position, White can live pretty well with the 'fracture'. If Caissa offered to miraculously move his c3-pawn to the d3-square, he would probably refuse the offer.

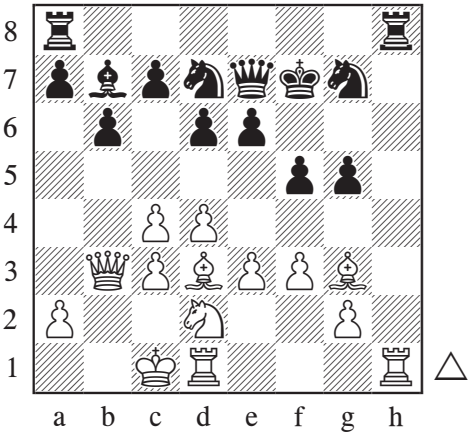
In the opening phase of the game, doubled pawns usually arise by an exchange of a bishop for a knight on the c3- or c6-squares, or, less often, on the f3- or f6-squares. This is the case in the Sämisch Variation of the Nimzo-Indian Defence, in the Exchange Spanish, in the Rossolimo line of the Sicilian Defence, in the Trompowsky Attack, and in several other openings.

Such an exchange leads to an interesting strategic fight on the topic of "playing against doubled pawns vs. playing with a pair of bishops". To find the correct plan in such a situation is sometimes as difficult as unravelling the Gordian knot, or standing the Egg of Columbus on the table.

Eventually though, the Gordian knot was sliced in two halves with a stroke of a sword, and the Egg of Columbus was broken in order to stand on the table. Similarly, it is often good to use violence when solving the problem of doubled pawns.

Garry Kasparov – Anatoly Karpov

Moscow (7) 1985



White's bishops need some fresh air. The black king is stuck in the centre and will not be happy if the game opens up. And doubled pawns tend to be a pain in the neck...

19.c5!

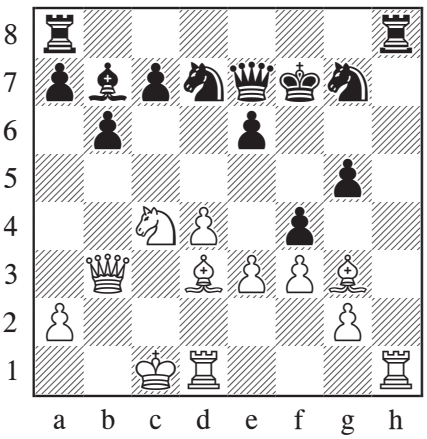
Interestingly, computers prefer to continue quietly, preparing the e3-e4 break. For example: 19.♗f2 ♘f6 20.♖de1 c5 21.♔b2 ♖ac8 22.♗c2 ♕c7 23.e4 White has a slight advantage.

19...dxc5 20.♘c4

Now the game will become very sharp.

20.♗xc7? cxd4 21.exd4 ♘c5 is not a good idea.

20...cxd4 21.cxd4 f4



22.♔f2

Both monarchs are so exposed that the number of pawns doesn't have a big influence on the outcome of the game. In the next part of the game, White had more chances. However, in the end a draw was agreed.

In this chapter, I have tried to depict doubled pawns in rather bright colours, drawing your attention to their potentially positive functions. However, usually the reality is much more depressing. Weak doubled pawns are similar to a stone in your shoe. You feel it all the time and the end of the game is still many miles away.

Chapter 8

Understanding the Beast

About Knights

Playing with a knight is much more difficult than playing with a bishop.

There is something rational in the movement of a bishop. It is reminiscent of a line drawn by a ruler, or a motorway, which like an open wound or a huge conveyor belt, crosses the landscape from one horizon to the other.

In contrast, the jumps of a knight display a trace of animality and unpredictability on the chess board.

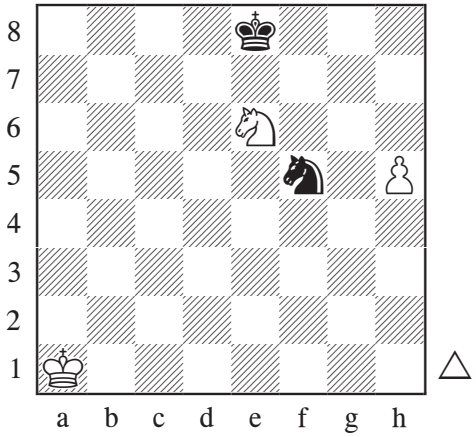
Also, beginners can tell at first glance whether opposite-coloured bishops stand on the board, and can relatively easily understand the concept of 'good' or 'bad' bishops.

However, it is not so easy to tame the knights.

Here is the end of a simple study that demonstrates, in a minimalist way, the peculiarities of knights:

Andre Cheron

Nouveau Traite Complet d'Echecs 1952



Even though the white king is far away, and for Black it would be sufficient to give up the knight for the h-pawn, White nevertheless wins nicely:

1.♘g7† ♘xg7 2.h6 ♔f8 3.h7+–

The black knight not only couldn't stop the h-pawn, but also stood in the way of its own king.

What can be learned from this study?

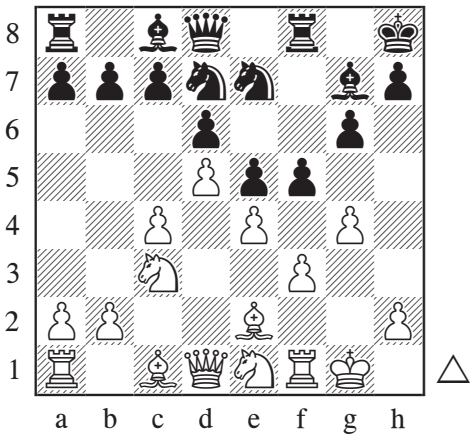
First, when a knight gets stuck somewhere on the board, it is not only less active, it may also become vulnerable and a hindrance to its colleagues.

Second, the knight has difficulties not only moving quickly over long distances, but also overcoming very short distances, such as getting to an adjacent square in time. It is therefore very important to the knight (as opposed to the bishop) which square it is currently occupying; it is not enough to be in the right 'region' of the board.

We will now look at a position from the opening of the game:

Maxim Rodshtein – Boris Avrukh

Ma'alot-Tarshiha 2008



The black knights are standing on adjacent squares, but while the d7-knight is relatively well off (it can, for example, hope for a career on the c5-square), the e7-knight is definitely a bad piece – it has nowhere to go and it is standing in the way of the queen. Last but not least, it is also vulnerable, because it is behind its own pawns and so it is not protected by them. Just imagine what would happen if White got a rook on the seventh rank.

In the King's Indian Defence, the e7-knight has basically only three possible ways to make a decent career. First, Black exchanges on e4 when White has to capture with a piece, and the knight then jumps through f5 to d4. Second, Black plays ...g6-g5 and ...♘g6. Third, the knight slips around the king with ...♘g8-f6.

With f2-f3 played, Rodshtein has already made clear that he intends to recapture with the pawn on e4. In the position from the diagram he played:

12.g5!

This prevented both ...g6-g5, and ...♘g8-f6, and therefore sentenced the e7-knight to life in prison.

We can often read in textbooks dealing with strategy that knights like closed positions. Please, take this statement with a grain of salt; if a knight remains locked behind a compact pawn structure, it experiences no more joy than a hen feels in a tiny battery cage.

Playing with a knight is in some ways like driving. Let's have one more look at the study by Cheron from the beginning of this chapter; the strange sensation of the powerless black pieces close to the white h-pawn is pretty similar to the situation when you stop too far from the window of the customs office, and

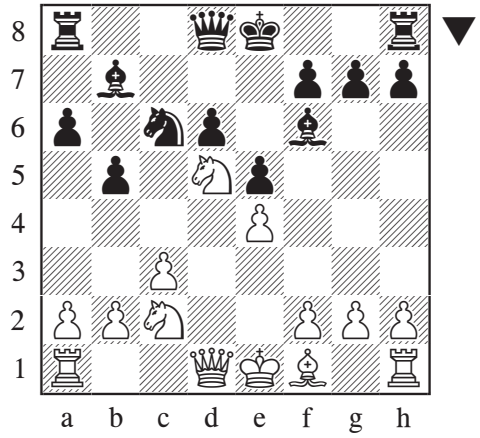
you have to lean almost to your waist so that you can hand the documents to the customs officer. Although the car drove you hundreds of kilometres, you cannot move it half a metre to the side.

The lengthy transfer of a knight to a nearby square reminds me of attempts by drivers to turn in a narrow road, or to park in the city: two metres forward, change gear, turn the steering wheel, two meters back, change gear, turn the steering wheel... Even the curved movements which the car makes in such manoeuvres are somehow similar to the knight's L-shaped manoeuvres.

In the following position, Shirov 'drove' like this, but Kasparov didn't allow him to finish his manoeuvre, and so the black knight didn't get to paradise, but was left completely offside.

Garry Kasparov – Alexei Shirov

Horgen 1994



The position of Black's c6-knight is not ideal. It is standing in the bishop's way and has nowhere to jump. The best it could manage would be an exchange for the d5-knight.

However, Black must be careful here – White has two knights, but only one ideal square in the centre. Therefore, one of the knights will inevitably get a little bit 'bored', and so White doesn't mind the possible exchange of a pair of knights; on the contrary, it rather helps him. That's why Shirov decided to put the knight on a better square, namely c5. He shifted into reverse gear and backed up:

13...♘b8!? 14.a4 bxa4 15.♖xa4 ♘d7

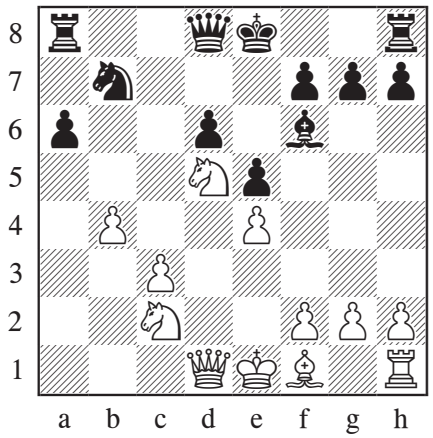
However, Kasparov disappointed him.

16.♖b4 ♘c5?

Correct is 16...♖b8.

17.♖xb7! ♘xb7 18.b4!

The knight has found itself on an even worse square than before.



White's compensation for the exchange lies not only in the stronghold on d5, the opposite-coloured bishops of contrasting value, and the possibility of creating a passed pawn on the queenside. It is also based on the 'opposite-coloured' knights; while the d5-knight is in the centre and remains safe, the b7-knight is on the edge of the board, has no future and is not sufficiently protected. Please also notice that in practice there is no possibility of these two knights being exchanged; the journey from b7 to d5 takes as many as four moves, just like the journey from a1 to g7.

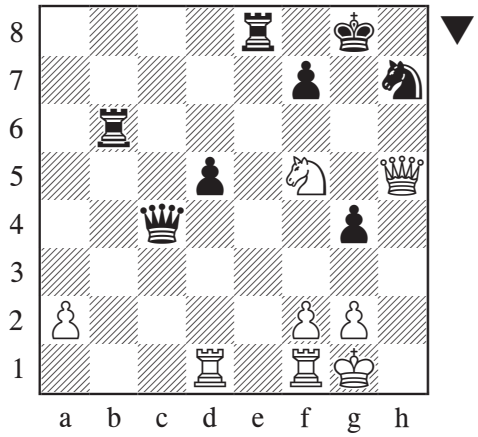
For the knights, 'two diagonally' is the longest short distance of all. The difference between the value of two knights standing close to each other can be even greater if there is a king somewhere close by.

An attacking knight around a king is a very dangerous piece, not least because of its love for forks. In contrast, it is a miserable defender: it can get under the king's feet, it is easily taken into custody, but especially it doesn't cover squares in its immediate vicinity.

The difference in the value of such knights is also illustrated in the following position:

Alexander Grischuk – Levon Aronian

Linares 2009



Despite the equal material, a difficult defence awaits Black; the crucial part of White's advantage lies in the 'opposite-coloured' knights. The f5-knight is an assassin, whereas the h7-knight looks like a scared child.

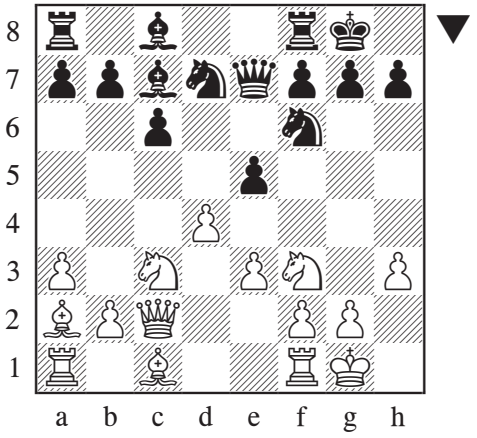
The knight has such a unique way of life, with so little nutritional value that in the ecosystem of the chess board it has almost no natural competition and doesn't have to be too worried about predators (unlike the queen). However, one strategic aspect of the position which has a decisive influence on its life on the board is the pawn structure.

If the opponent's pawns are compact, they can make the knights' lives difficult, taking many good squares away from them. That's the reason knights love weakened, stretched or broken pawn structures. They can attack the opponent's weakened structure perfectly, and they can 'repair' their own broken structure in a very effective way.

Even world champions are sometimes unable to avoid committing sins against their pawn structure:

Anatoly Karpov – Viswanathan Anand

Brussels 1991



Anand carelessly played:

12...h6?

White didn't hesitate to put the knight on the great f5-square with the move:

13.♘h4!

If the black pawn stood on h7, Black could have defended himself against the successful

transfer of the knight with ...g6. Now this is impossible because the f7-pawn is pinned.

The next game is so instructive that I couldn't resist putting it here without many comments, for you to enjoy like an evening movie.

First, you will see how White tears his compact pawn structure by his careless pseudo-activity. He gains a pawn but greatly falls behind in development.

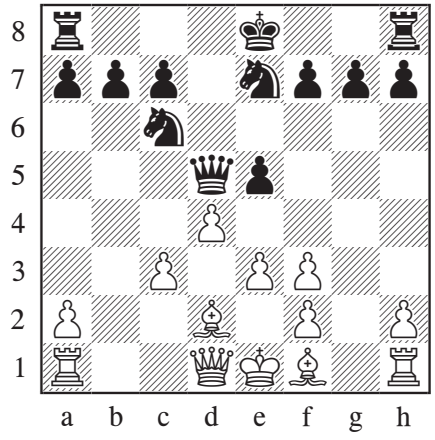
Black temporarily withdraws, but only to come back strongly: the white structure is so compromised that Black can easily find work for both knights.

The game ends with a direct mating attack, which illustrates the survival chances of a king when it gets under the hooves of a pair of horses.

Pecot Laurent – Olivier Renet

France 2000

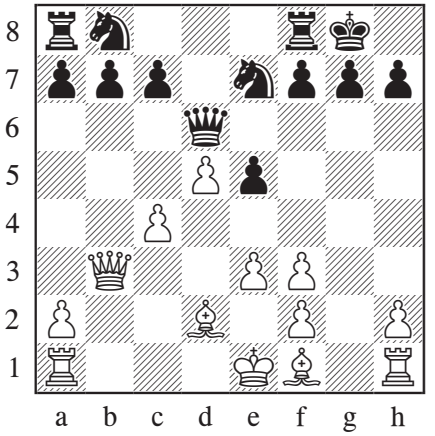
1.d4 d5 2.♘f3 ♘c6 3.c4 ♗g4 4.cxd5 ♗xf3 5.gxf3 ♕xd5 6.e3 e5 7.♘c3 ♗b4 8.♗d2 ♗xc3 9.bxc3 ♘ge7



10.c4?

White is lagging behind in development and has doubled pawns. Therefore, he should be thinking about consolidating his position rather than advancing in the centre.

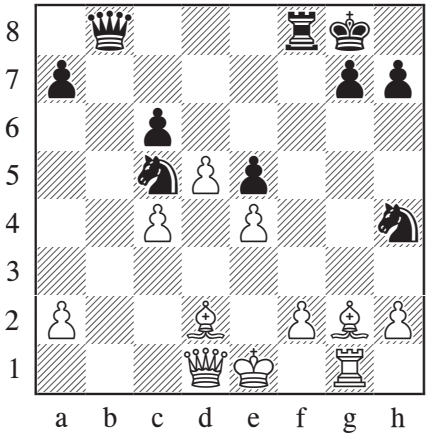
10...♕d6 11.d5? ♘b8 12.♕b3 0–0



13.♕xb7?

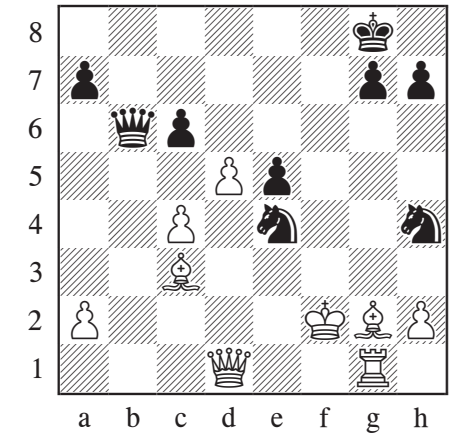
Over-optimism. Now the b-file is opened for both sides.

13...♘a6 14.♕b3 ♖ab8 15.♕d1 c6 16.e4 f5 17.♗g2 ♘g6 18.♖b1 ♘h4 19.♖g1 fxe4 20.♖xb8 ♕xb8 21.fxe4 ♘c5



The knights have woken up and are advancing through the holes in the white pawn sieve.

22.♗c3 ♕b6 23.♔e2 ♖xf2† 24.♔xf2 ♘xe4†



0–1

Chapter 9

Without Knights

Some things we understand best after they are gone

This chapter will be special. It is about knights, but you won't find a single one of them in any of the diagrams. We will examine positions without these pieces, so that we can discover how the game changes without them. This will help us to understand what functions they normally have on the board.

This method might seem slightly far-fetched, but ordinary human experience says we often truly understand the value of an object or a person only when they are gone.

Hardly any young person thinks about health, but when you lose it, then you realize its real value.

When an employee leaves and the team suddenly stops functioning and starts handing in things late and poorly done, only then do you realize how important the employee had been.

And many of us don't know, for example, what exactly a crankshaft does, until it breaks down.

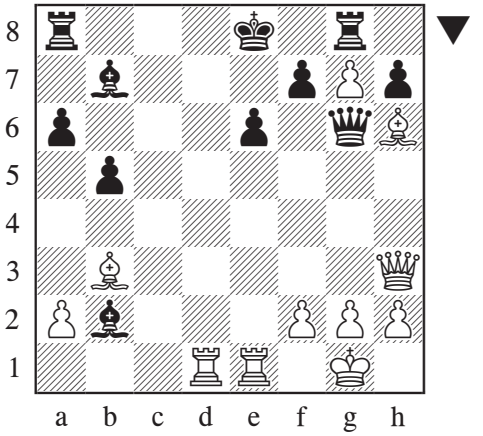
And this method suits knights perfectly. They have a unique mobility that no other piece on the board has. The kings, queens, bishops and even pawns can move diagonally. The rooks, kings, queens and pawns can move straight forward. No other piece moves the same way as a knight.

So what happens to the position when the knights disappear?

In particular, the play tends to speed up. Knights are relatively slow pieces and, once they disappear, the average speed on the board increases. In the following game, I underestimated this fact, and my reward was a painful loss.

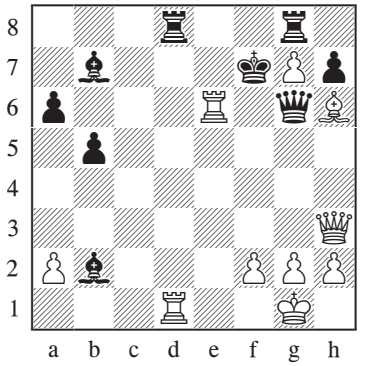
Tomas Petrik – Jan Markos

Slovakia 2012



This is a wild position but, surprisingly, a rather balanced one. Black's king is stuck in the centre, but this factor is compensated by his well-placed bishops and the weak g7-pawn. However, Black has to reduce the pressure of the white pieces on his position immediately.

After the correct 26...♖d8, the most likely outcome would be an equal endgame after: 27.♗xe6 fxe6 28.♖xe6† ♔f7



29.♖de1 ♕xg2† 30.♕xg2 ♗xg2 31.♔xg2 ♗xg7 32.♖e7† ♔f8=

However, instead of reducing the pressure, I placed another poorly-protected piece in the centre.

26...♗e4?

The attempt to protect the e6-pawn is commendable, but the bishop will not be able to stay in the central position for long.

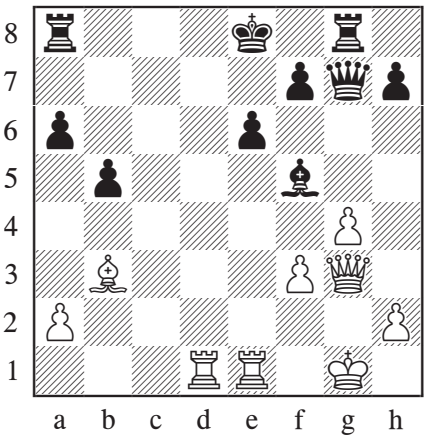
27.f3

Maybe even stronger is the laconic 27.g3!.

27...♗f5 28.g4! ♗xg7 29.♗xg7 ♕xg7 30.♕g3?

This loses all the advantage.

After the simple 30.♔h1, White is winning. However, both opponents were already in time trouble.



30...♕c3?

Black again underestimates the power of his opponent's pieces and continues playing speculatively.

It wasn't too late to reduce the pressure with 30...♗xg4! 31.fxg4 ♕xg4 32.♕xg4 ♖xg4† 33.♔f2 ♔e7, retaining chances for a draw.

31.♔h1?!

31.♕f4! is the most convincing win.

31...h5?

It still wasn't too late to play 31...♗xg4.

32.♕f4 ♗xg4

But now this move does not have the desired effect – Black gains too little material and, in addition, will not manage to exchange queens.

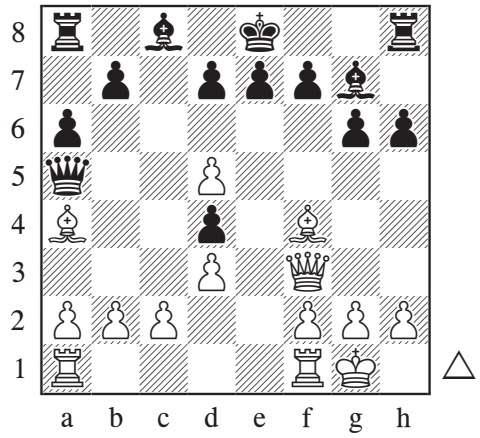
Sadly, after the planned 32...hxg4, Black would immediately be forced to give up by 33.♗d5!.

33.fxg4 ♖xg4 34.♕f5 ♖a7 35.♗xe6 ♔f8 36.♖f1 ♕h3 37.♖d8† ♔g7 38.♕f6† 1–0

However, the wild ride in a position without knights has been fatal even for stronger players than myself. The current World Champion has seen his king suffer in a similar plot. To be fair, I should admit that Carlsen was only 15 years old at the time.

Peter Svidler – Magnus Carlsen

Longyerbryen (2) 2006



Black has attacked the white bishop with 12...♕a5, and hopes that after its expulsion he will manage to complete his development, for example with the moves ...d6, ...♔f8, ...♗f6 and then ...♔g7. However, White is more interested in the opponent's king that is still in the centre, than in his own bishop. There are no knights on the board, so the moves should contain the qualities of speed and aggression!

13.♖fe1!? ♕xa4

Since Black has to suffer, let it at least be in exchange for some material.

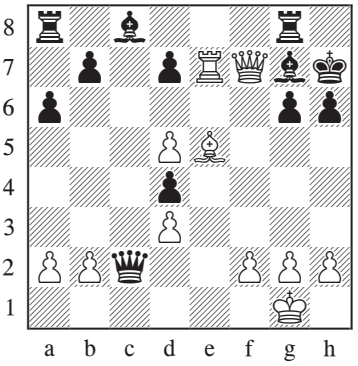
14.♖xe7†!

Otherwise, the whole combination wouldn't make much sense.

14...♔xe7 15.♖e1† ♔d8?

A strange mistake. Instead of hiding on the kingside, the king heads to the centre, where nothing good awaits it. Black clearly must have miscalculated something.

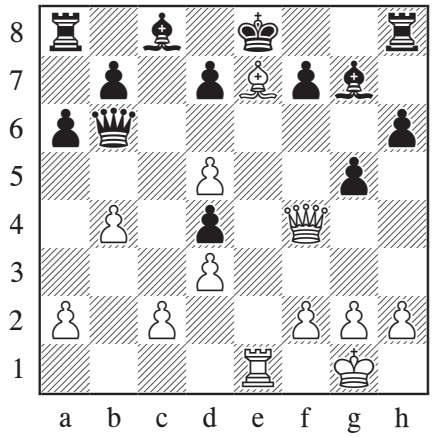
After 15...♔f8 White – it seems – has nothing better than a nice draw: 16.♗d6† ♔g8 17.♖e7 ♔h7 18.♕xf7 ♖g8 19.♗e5 ♕xc2



20.♕xg7† (20.h3 ♕e2!=) ♖xg7 21.♖xg7† ♔h8 22.♖xg6† ♔h7 23.♖g7†= Grinding the black king in a mill.

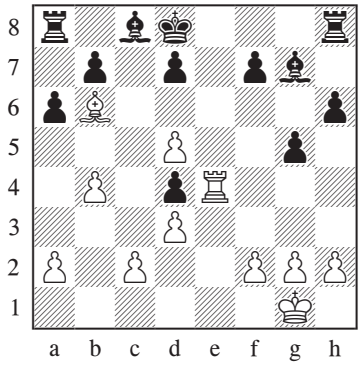
However, let's go back to the game. After 15...♔d8? there came:

16.♗d6 ♕a5 17.b4 ♕b6 18.♕f4 g5 19.♗e7† ♔e8



20.♗c5†?!

Although this wins, it would be much better to play the position not on material, but on domination. Black is helpless after 20.♕e4! because after the natural 20...♕g6 he is nicely mated: 21.♗c5† ♕xe4 22.♖xe4† ♔d8 23.♗b6#



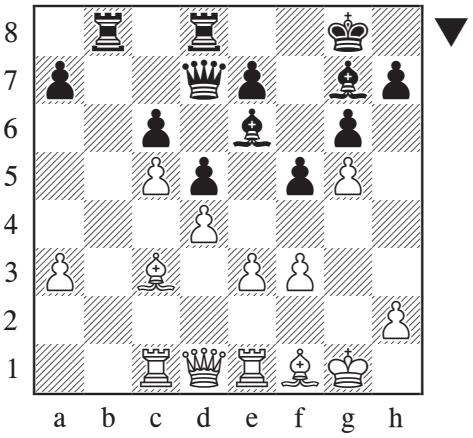
The game finished:

20...♕e6 21.♕d2 d6 22.♗xd6 ♔d7 23.dxe6† ♔xd6 24.exf7 ♖f8 25.♕e2 ♗f6 26.♔f1 ♔c7 27.♕h5 ♗f5 28.♕f3 ♖xf7 29.♕xf5 ♖af8 30.f3 ♗g7 31.♕c5†
1–0

Besides the high-speed play, there is another feature of positions without knights: the importance of weak squares declines, because the most appropriate pieces to occupy such squares are missing. Here is one interesting example from a game played with a rapid time control:

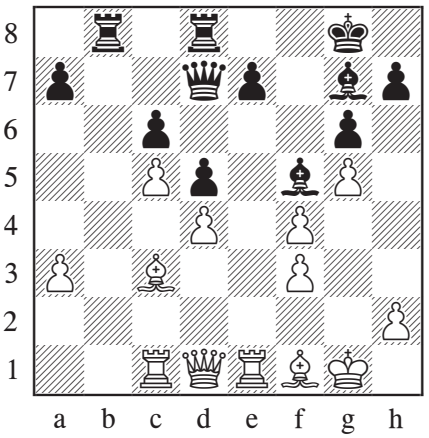
Maxime Vachier-Lagrave – Eric Hansen

Berlin (rapid) 2015



The position is more or less equal. If Black plays passively and carelessly, he could get into trouble on the queenside, where he has weaknesses on c6 and a7 which are difficult to protect. Therefore, he decided not to wait for the f3-f4 move, which would block the centre. Instead, he preferred to sacrifice a pawn.

23...f4! 24.exf4 ♗f5



With knights on the board, this pawn structure would cause White much more trouble. A black knight on f5 or, God forbid, on f4, would mean great danger for the white king. However, there are no knights on the board, and so the monarch can fearlessly walk out to help with the defence of its pawn cover. The game continued:

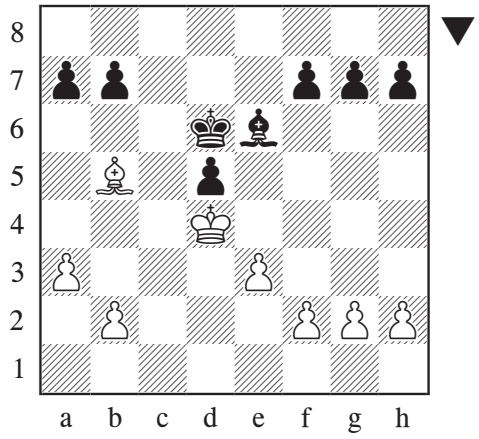
25.♔f2!? ♕c7 26.♔g3 ♖f8 27.♕d2 ♖f7 28.♗a5 ♕d7 29.♖c3

With a roughly equal game.

Thirdly, in positions without knights, the importance of levers and breaks increases. Let's first have a look at a simple example from an endgame to see what a lever is, and how powerful it can be.

Jan Markos – Igors Rausis

Kallithea 2008



Black has an isolated pawn and a bad bishop. This has allowed the white king to occupy d4, the ideal blockading square. However, the d5-pawn is the only weakness in Black's camp – the other pawns are not yet fixed and so cannot be targets of an attack.

How should Black defend such a position?

It is clear that White would like to get his king to e5 or c5. These squares are both controlled by the black king from d6, but not from any other square. For Black it is safest to protect theses squares with pawns in order to avoid landing in zugzwang, and therefore he should play ...b6 and ...f6.

Black can protect d5-pawn twice. Can White attack it three times? Theoretically, it can be attacked by the move e3-e4. However, Black would then quickly play ...dxe4, and the position would be equal. Or is it that simple?

Well, there is one case when Black couldn't capture on e4, which is when the d5-pawn is pinned, that is, there is an unprotected bishop standing behind it. Then the move e3-e4 would become a lever – the pawn pressure on a pawn or a piece that has to be endured because it cannot move.

And so the threat of White in the diagram position is:

To place the bishop on the a2-g8 diagonal.

To wait. Black cannot move with his pieces, only with his pawns. Therefore, sooner or later he will play ...f6.

To keep waiting. After ...f6 Black still cannot retreat with the bishop to f7 or g8 because White would play e3-e4.

Black will be forced either to play ...f5 or move another of his pawns to a light square. This will create a second weakness in Black's camp, and White's chances of winning will increase rapidly.

However, Black is to move. Can he prevent events developing in this way?

He certainly can. There are two diagonals from which it is possible for the bishop to protect the d5-pawn. If Black's bishop stood on the a8-d5 diagonal, the break e3-e4 would no longer be effective, as it would no longer be a lever, and there is not a c3-c4 lever available for White.

Therefore, the correct move is 27...b6! with the idea of ...♗c8-b7. (Playing 27...♗c8 is inaccurate because White gains an important tempo by attacking the f7-pawn: 28.♗e8! ♔e7 29.♗a4 ♔d6 30.♗b3 and the bishop is forced back to the e6-square.) With the bishop on b7, Black would then play ...f6 and thus create an impenetrable fortress. The important thing is that Black has three squares available on the a8-d5 diagonal. Even when one is controlled by a white bishop, there will still be two other left; so the threat of zugzwang is no more.

However, Rausis landed in serious trouble after:

27...h6? 28.♗a4!

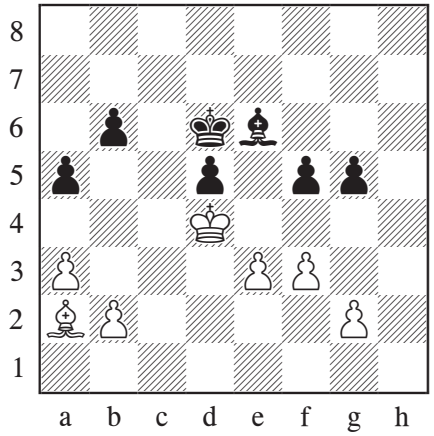
With the idea of ♗b3. Even though the endgame is still drawn, Black did not manage to save it. The game continued:

28...b6 29.♗b3 a5 30.h4 g5 31.hxg5 hxg5 32.♗a2 f5

After 32...f6, White can wait with 33.♗b3.

33.f3

33.g3? g4! lets Black builds a fortress.



33...a4?

The last chance of salvation was 33...f4! 34.e4!? dxe4, exchanging into an equal pawn endgame: 35.♗xe6 ♔xe6 36.♔xe4 a4!=

34.g3 b5 35.b4 axb3 36.♗xb3 ♗f7 37.e4 g4 38.e5† ♔c6 39.fxg4 fxg4

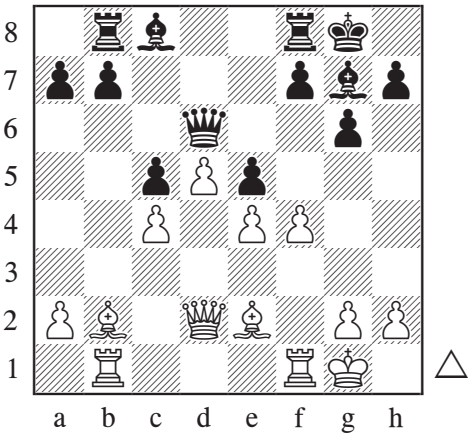
There are too many diagonals for the black bishop to control.

40.♗c2 ♗e6 41.♗g6
1–0

Here is a simple example of a lever in the middlegame:

Evgeny Agrest – Mladen Muse

Berlin 1993



Black has the inferior pawn structure, because the d5-pawn is protected and passed, and the queen, the most valuable piece on the board, has the humbling task of blockading it. However, after ...exf4 and the subsequent exchange of dark-squared bishops, Black would have a chance to construct a decent blockade on the dark squares.

That is why White needs to create a lever on the e5-pawn. The strongest move in the position is:

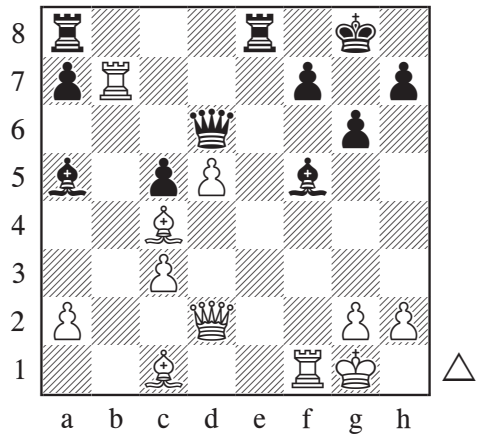
17.♕c3!

We are going to say goodbye to positions without knights with a final extremely sharp

example, which is full of tactical possibilities. If you fancy, think about what could happen from the diagram position before looking at the course of the game. In any case, hang on to your hat!

Suat Atalik – Petr Sinkevic

Kazan 2013



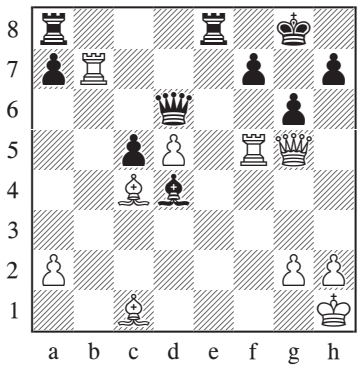
White is winning. All his pieces are aiming at the opponent's king. On the other hand, Black has an inactive a8-rook and a strangely placed a5-bishop, so he shouldn't have enough defenders to guard his monarch. The most logical continuation of the attack is to bring the white queen to the kingside. But to which square?

19.♕g5?

A mistake. After the correct 19.♕h6!, which creates the threat of ♖xf5, Black's position would soon collapse. It would not be possible to play 19...♖e5 like in the game, because both the prosaic 20.g4 and the romantic 20.♖xf7 would win for White.

19...♖e5?

Black could maintain an equal game only with the accurate 19...♗xc3! because after 20.♖xf5? (20.♗f4=) 20...♗d4† 21.♔h1 (21.♔f1 ♕xh2–+) he has a beautiful move. Can you see it?



After 21...♕xd5!! Black is smoothly winning; his queen has bravely stepped onto the most protected square on the entire board.

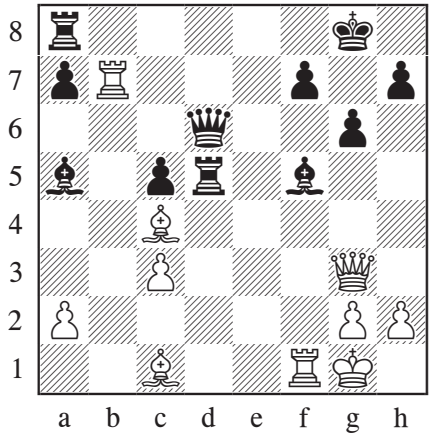
However, let's get back to the game. After 19...♖e5, play continued:

20.♕g3!

This precise retreat of the queen puts everything back in order. The e5-rook is overloaded because it has to protect the f5-bishop and provide shelter for the black queen. White is again winning.

20...♖xd5

An insufficient defence.



21.♖xf7!

An elegant move, which immediately made Black resign; both his king and his pieces in the centre are too weak. The prosaic 21.♕xd6 ♖xd6 22.♗xf7† also wins, but who could resist delivering such a splendid blow?

1–0

So, the play without knights is faster, full of levers and breaks, and weak squares lose their importance.

Then what do the knights do on the board?

They slow down the game. They make it more subtle. (Without them, the board can look like a firing range.) They increase the importance of local phenomena, such as weak squares.

It is not possible to determine precisely whether the presence of knights on the board increases the importance of passed pawns or not. On the one hand, the knight is the best friend of a passed pawn, and can effectively support its process. On the other hand, it is also the best blockading piece. And so everything depends on the specific position.

Chapter 10

Anatoly Karpov's Billiard Balls

On the inability of bishops to move from one flank to the other

Although the internet era has brought plenty of chess training material to the web, it is still difficult to find out how the best players in the world think about the game.

Partly it is because top grandmasters make many decisions intuitively and find them natural and self-evident. How do you explain to another person something that you feel is obvious?

Partly it is because nowadays most annotations are made in a hurry, and consist more of computer lines than explanations in words.

Still, there are some excellent sources on the internet. For example, press conferences from super-tournaments are always instructive. It is a pleasure to watch Carlsen, Kramnik, Nakamura and other great players, explaining their victories literally minutes after the game has ended. And, of course, it is good to have at home as many books from the top grandmasters as you can get. For example, Gelfand's *Positional Decision Making in Chess* is a gem. Even grandmasters are buying this book to learn something new about strategy.

This chapter was inspired by a small sentence uttered by Karpov in one of his commentaries. I don't think he had any intention of educating his audience, but for me, his commentary had the value of gold.

Karpov said: **"Bishops are rebounding from the edges of the board, similarly to billiard balls rebounding from the edges of the table."**

A witty comparison, is it not? I think this is what Karpov is saying:

For bishops, there is no direct road from one flank to the other. Bishop needs to 'rebound' somewhere. However, such a rebound is often difficult to achieve – it needs to take place either in the depth of my own camp (where my own pieces often obstruct the way), or else in the depth of my opponent's camp (where the squares are carefully guarded).

For example, from h4, you can transfer a bishop to c3 by two routes – via e1 (but this could be prevented by a pawn on f2 or a rook on e1), or via f6 (but, for example, an opponent's pawn on g7 would thwart this).

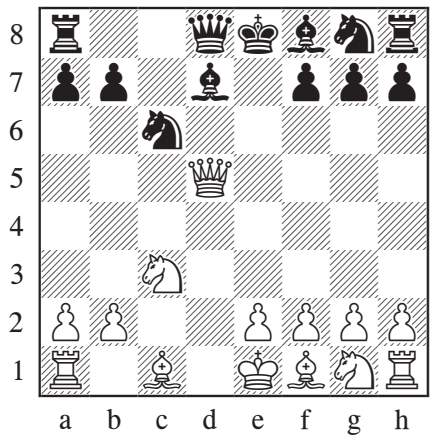
To sum up, often it is surprisingly difficult to transfer a bishop from one flank to the other. It is therefore better to decide beforehand where the bishop should be developed. It is quite possible that it will stay there for the rest of the game.

The first example belongs in the UNESCO World Chess Heritage:

Vasja Pirc – Alexander Alekhine

Bled 1931

1.d4 d5 2.c4 e6 3.♘c3 c5 4.cxd5 cxd4 5.♕a4† ♗d7 6.♕xd4 exd5 7.♕xd5 ♘c6



Black's compensation for the sacrificed pawn is based on his lead in development. His pieces can develop freely, and White will surely lose another tempo, as his queen is too exposed. Therefore, White must handle the position very carefully. Pirc decided to develop his bishop to g5, attacking the opponent's queen. What could be more natural?

8.♗g5?

In fact, this move is a serious mistake. The dark-squared bishop should have stayed on the queenside, protecting the weak b2-pawn. But now it will never get back, as White will need to play e2-e3 in order to develop his kingside.

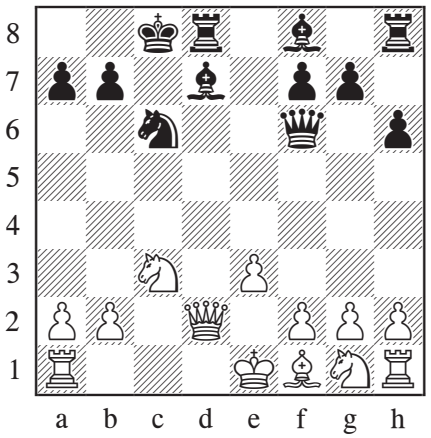
Nowadays, 8.e3 or 8.♘f3 are more common.

8...♘f6 9.♕d2 h6 10.♗xf6

A sad necessity.

10.♗h4 g5! 11.♗g3 ♕a5 gives Black an advantage, for example: 12.e3 ♖d8 13.♕c1 ♘e4 Black has a dangerous initiative.

10...♕xf6 11.e3 0–0–0



Without the dark-squared bishop, White's queenside is very weak. It is definitely not suitable to house the white king. However, Pirc is optimistic:

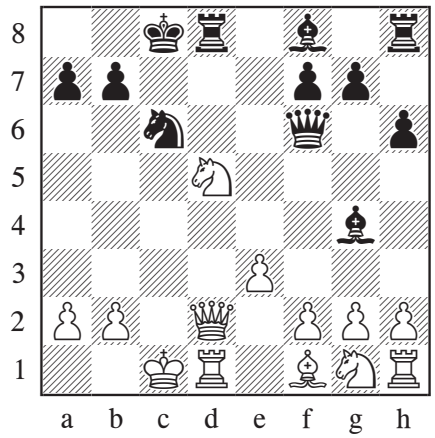
12.0–0–0?

12.♘f3 or 12.♘ge2 would give better chances for a successful defence.

12...♗g4

Of course, White had anticipated this move and prepared his reply:

13.♘d5



However, he did not anticipate Black's response:

13...♖xd5! 14.♕xd5 ♗a3!!

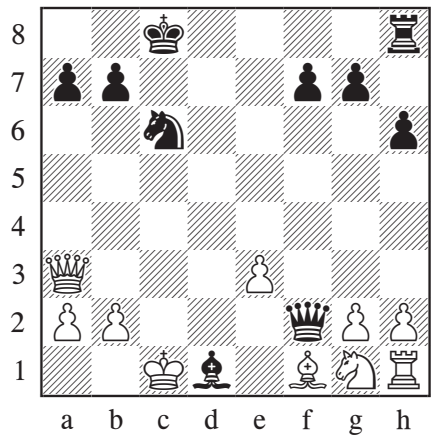
Where is White's dark-squared bishop when it is needed most? White now loses.

15.♕b3

15.bxa3 leads to a massacre: 15...♕a1† 16.♔c2 ♗xd1† 17.♕xd1 ♕xa2† 18.♔c3 (or 18.♔c1 ♕xa3† 19.♔b1 ♖d8 20.♕c2 ♕b4† 21.♔c1 ♕e1† 22.♔b2 ♖d2–+) 18...♕xa3† 19.♕b3 ♕a1† 20.♕b2 ♕xf1–+

15...♗xd1 16.♕xa3 ♕xf2

The rest is agony. White's pieces are undeveloped and his king is weak.



17.♕d3

17.♔xd1 ♕xf1† 18.♔c2 ♕xg2†–+

17...♗g4

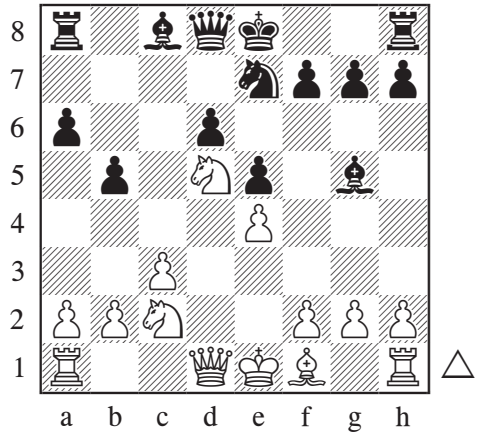
17...♗a4, with the threat of ...♕e1† followed by mate, is even stronger.

18.♘f3 ♗xf3 19.♕f5† ♔b8 20.♕xf3 ♕e1† 21.♔c2 ♖c8 22.♕g3† ♘e5† 23.♔b3 ♕d1† 24.♔a3 ♖c5
0–1

The following four examples are from my own praxis. I will start with the ones that were less pleasant for me:

Zbynek Hracek – Jan Markos

Germany 2007



White played:

13.h4!.

This move quite seriously weakens White's kingside. It will not be easy for him to castle there, as the black queen could contemplate taking the h4-pawn. So, why does Hracek play such a move? Does he want to attack on the kingside?

Not at all! With the h2-h4 move, White prepares an initiative on the queenside.

Standing on the g5-square, Black's dark-squared bishop could in some circumstances be transferred to the queenside via d8. White has already exchanged his dark-squared bishop, and therefore a bishop on b6 could seriously hinder his active plans on the queenside. However, after the bishop is forced to the h6-square, its possibilities will be much slimmer. The only transfer route to the queenside will be through White's camp. And White will be careful enough not to allow the bishop to swing via d2 or e3.

The game continued:

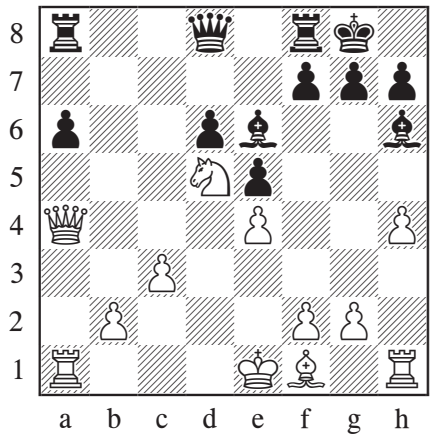
13...♗h6 14.a4 bxa4 15.♘cb4 0–0 16.♕xa4 ♘xd5 17.♘xd5

Unsurprisingly, all this is theory. All White's forces are concentrated on the queenside. Black would love to open the game and cause problems to the white monarch, but this is unfortunately not possible, as the d5-knight dominates the board.

17...♗e6?

A serious mistake.

With the bishop on h6, Black needs to obtain at least some control over the dark squares with 17...a5!, with good chances for equality.



18.♕a5! ♕b8 19.b4

Now White is simply better. For Black it will be difficult to protect his a6-pawn in the long run.

Also in the following game, my billiard balls somehow slipped off the table and got lost on the floor:

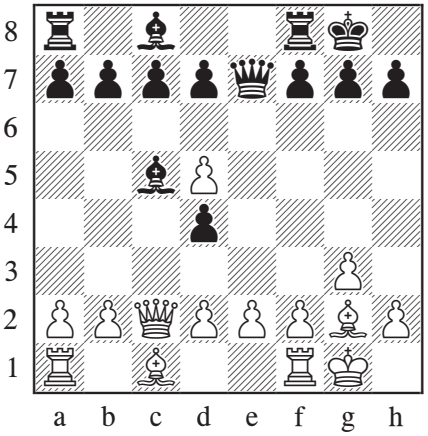
Evgeny Tomashevsky – Jan Markos

Ohrid 2009

1.c4 e5 2.♘c3 ♘f6 3.♘f3 ♘c6 4.g3 ♗b4 5.♘d5 ♘xd5

It is perhaps safer to play 5...e4 or 5...♗c5.

6.cxd5 ♘d4 7.♘xd4 exd4 8.♕c2 ♕e7 9.♗g2 ♗c5 10.0–0 0–0



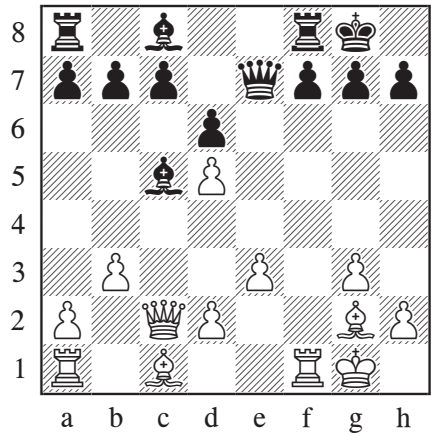
In my preparation, I thought that Black should easily equalize here. Oh, how I was mistaken!

11.b3!

White's dark-squared bishop heads for the long diagonal, where it has no opposition.

11...d6 12.e3 dxe3 13.fxe3!

I had underestimated this move. After 13.dxe3 Black is fine.

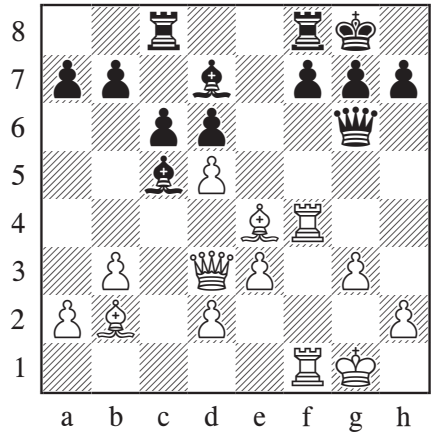


A seemingly innocent line of the English Opening has turned into a nightmare for me. After a couple of careless moves, I have landed in a position where my pieces (especially the c5-bishop) don't have much to do, whereas White can transfer all his pieces to attack my kingside. It is possible that Black's position can no longer be defended. In any case, I did not manage to get any counter-chances and was simply steamrollered.

13...♗d7 14.♗b2 ♕g5 15.♖f4 ♖ac8 16.♖af1 c6

The problem with this move is that it doesn't threaten anything, as taking on d5 would only create weaknesses in Black's camp.

17.♖d3 ♕g6 18.♗e4!



All White's pieces are attacking my kingside. White is winning.

An apparently unambitious opening also caused Black huge problems in the next game, from the Slovakian Team Championship.

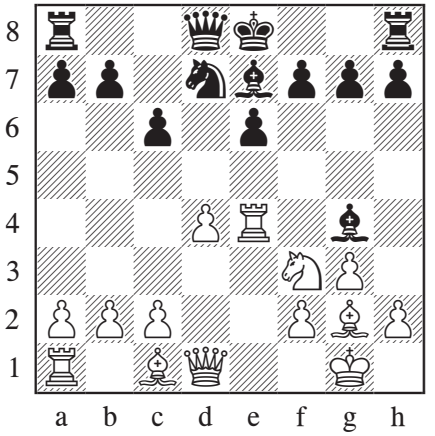
Jan Markos – Tomas Petrik

Slovakia 2010

1.♘f3 ♘f6 2.g3 d5 3.♗g2 c6 4.0–0 ♗g4 5.d4

In Chapter 19 on *The Scheme*, we will focus more on the 5.d3 set-up.

5...♘bd7 6.♘bd2 e6 7.♖e1 ♗e7 8.e4 dxe4 9.♘xe4 ♘xe4 10.♖xe4



It may seem that Black has equalized without difficulties. All his pieces are developed. He has succeeded in exchanging a pair of knights, so he has no problems with lack of space. Also, his light-square bishop has avoided being stuck behind the pawn structure.

However, in reality, Black's position is strategically rather dangerous. He lacks counterplay. It is almost impossible to successfully prepare the ...e5 break. The ...c5 break would make White's g2-bishop really happy. And the g4-bishop has left the queenside and will probably never return.

White's plan is simple. He will transfer his queen and knight to the queenside. The ideal place for the knight would be the a5-square. After that, Black will be outnumbered on the queenside with all the unpleasant consequences. (Please note that White avoided playing h2-h3 in the previous moves, so that the g4-bishop would now be attacked by his rook.)

Petrik played:

10...♘f6?!

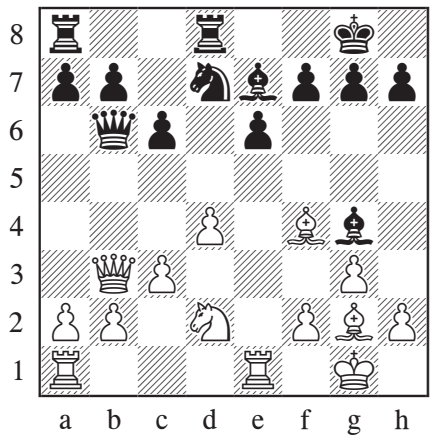
It is hard to criticize such a move, developing the knight with gain of tempo. However, Black's knight had been protecting the important e5-square, and the bishop does not stand well on g4. It is therefore better to play 10...♗f5 or 10...♗h5.

11.♖e1 0–0 12.c3 ♕b6 13.♕b3 ♘d7!?

Black admits his mistake and protects the vulnerable e5-square.

In Panchanathan – Harikrishna, Philadelphia 2010, Black parted with the bishop pair with 13...♗xf3. However, after 14.♗xf3 ♖fd8 15.h4 ♖d7 16.♔g2 ♖ad8 17.♕xb6 axb6 18.a4, White was slightly better.

14.♗f4 ♖fd8 15.♘d2



All White's pieces are aiming at his opponent's queenside. Petrik needs to play actively to stay in the game.

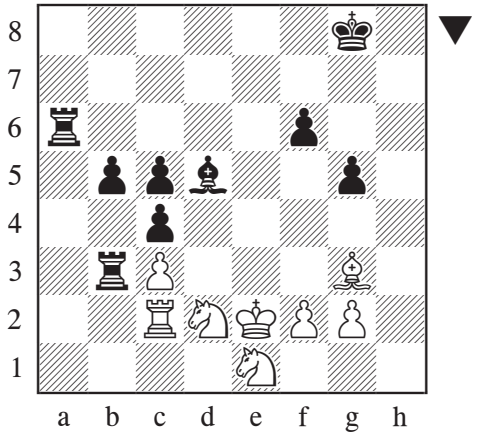
15...g5! 16.♗e3 ♕xb3 17.axb3 ♘b6 18.♘e4 h6 19.c4

Now White's knight has better prospects than its counterpart. White is better, as all his pieces are able to put pressure on Black's queenside.

The following combination is possible only because the g3-bishop is completely out of play, unable to help with the defence of the queenside.

Dominik Csiba – Jan Markos

Banska Stiavnica 2011



32...♖aa3!

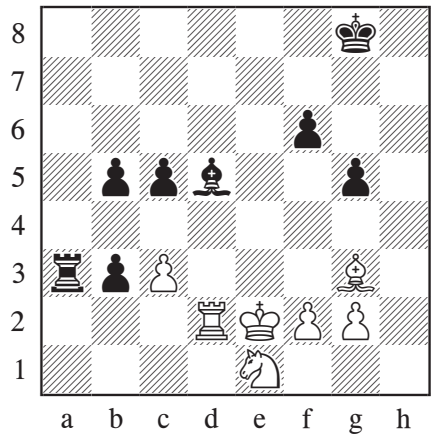
Black sacrifices an exchange in order to create a strong passed pawn. Interestingly enough, he will be able to promote this pawn with the help of only two pieces. White has three pieces close to the queenside, but they are awkwardly placed and will not be able to resist.

33.♘xb3

Otherwise the c3-pawn falls.

33...cxb3 34.♖d2

34.♖c1 is also bad, for example: 34...b4 35.cxb4 ♗e4! 36.♘d3 ♗xd3† 37.♔xd3 b2†–+ This discovered check is why Black removed the c3-pawn with 34...b4.



34...♖a2 35.♘d3 ♗c4

Unfortunately for White, this pin decides.

36.♔d1 ♗xd3 37.♖xd3 ♖a1†
0–1

When I saw the following game for the first time, I felt a lot of admiration for Magnus Carlsen. The Norwegian has created a strategical gem. The main topic of the game is the inability of Black's dark-squared bishop to move from one wing to the other.

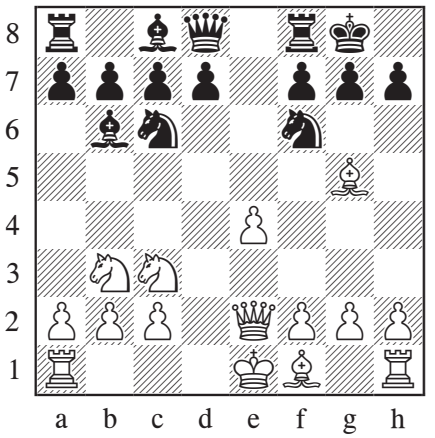
Magnus Carlsen – Etienne Bacrot

Nanjing 2010

1.e4 e5 2.♘f3 ♘c6 3.d4 exd4 4.♘xd4 ♗c5 5.♘b3

Not the first choice of White players; more usual is 5.♗e3. However, with the move played, White forces the opponent's dark-squared bishop to b6. Will the bishop be missed on the kingside?

5...♗b6 6.♘c3 ♘f6 7.♕e2 0–0 8.♗g5!

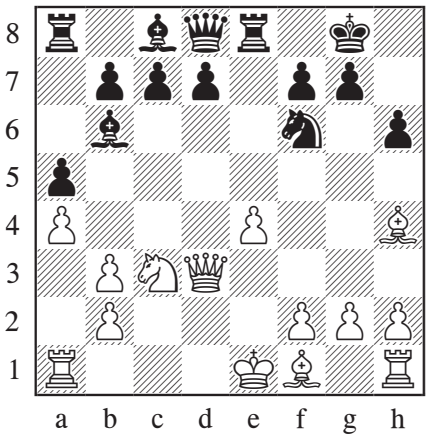


Yes, the bishop is missed already! White has created a very unpleasant pin. It is surprisingly difficult for Black to neutralize it. He can't move away with the queen, as White would create doubled pawns on the f-file; and the plan of ...h6 followed by ...g5 would terribly weaken Black's king.

8...h6 9.♗h4 a5 10.a4 ♘d4 11.♕d3!

Carlsen is consistent. He prefers to let his opponent spoil his pawn structure, rather than allow the b6-bishop back into the game via the d4-square.

11...♘xb3 12.cxb3 ♖e8

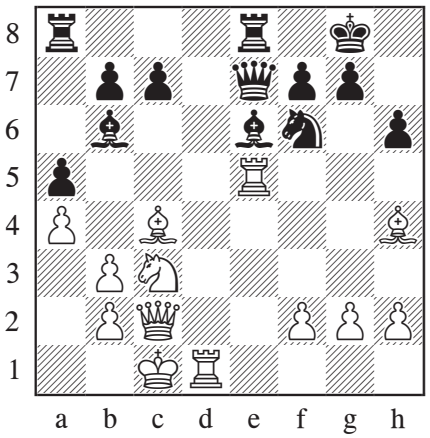


13.0–0–0

This strengthens the impact of the pin. With the kings on opposite flanks, every pawn move on Black's kingside will be felt much more. The white king looks quite vulnerable on the c1-square, but in fact it is pretty safe. At the moment, the king is hiding behind the wall of black pawns which prevent Black from utilizing the queenside files, and in case of need the king can retreat to a safe haven on a2.

13.♘d5? would be too optimistic. After 13...g5 Black wins material.

13...d6 14.♕c2 ♗d7 15.♗c4 ♗e6 16.♖he1 ♕e7 17.e5! dxe5 18.♖xe5

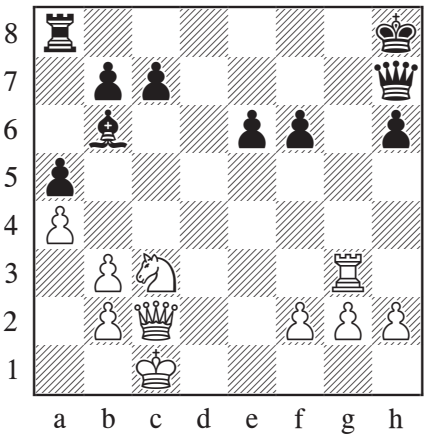


White has succeeded in breaking in the centre, and pins yet another piece to the black queen. Bacrot refuses to stand passively in chains, and retreats with the queen. However, White is then able to blow up the kingside.

18...♕f8 19.♗xf6 gxf6 20.♖e2 ♕g7 21.♗xe6 ♖xe6 22.♖xe6 fxe6 23.♖d3

The rook lift is a clear sign that a direct attack on the opponent's king has begun.

23...♔h8 24.♖g3 ♕h7



25.♕d2!

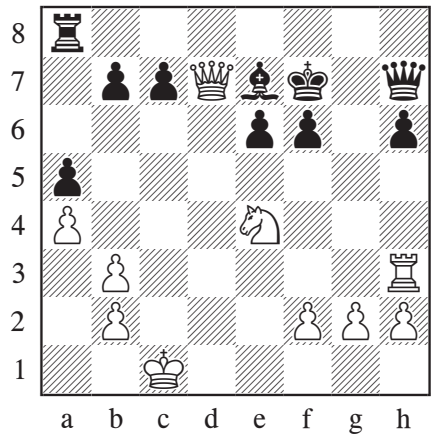
A beautiful, multifunctional move. White's queen attacks and defends at the same time.

It attacks the h6-pawn, while preventing the black rook from going to the open d-file. As a by-product, the queen also controls the d4-square, so that the black bishop cannot return to the kingside.

25...♗c5

Bacrot decides to try to get his bishop to the kingside anyway, albeit by a more complicated route. However, it is too late.

26.♘e4 ♗e7 27.♖h3 ♔g7 28.♕d7 ♔f7



29.♘g5†!

With a simple yet lovely blow, White transforms the game into a won endgame. The rest is simple:

29...fxg5 30.♖f3† ♔g8 31.♕xe6† ♔h8 32.♖f7 ♗d6 33.♖xh7† ♔xh7 34.♕f7† ♔h8 35.g3 ♖a6 36.♔b1 ♗b4 37.f4 gxf4 38.gxf4 1–0

I had absolutely no problem finding examples for this chapter. There are so many games in which the main story is a sad bishop standing in an offside position on one of the flanks! Nimzowitsch himself writes about these bishops as being "on a desert". However, in no book on strategy have I seen it explicitly stated that bishops have problems moving from one flank to the other.

It was Karpov's inconspicuous sentence that focused my attention on this phenomenon. And now I have brought it to your attention.

Chapter 11

The Secret Life of Rooks

What you do not yet know about these unobtrusive figures

Club players are reasonably familiar with rooks. It is well known that a rook should be placed behind a passed pawn and on an open file. The damage it can cause among the opponent's pawns, when suitably placed on the 7th rank, is almost legendary. And yet, the correct use of this piece is quite difficult, definitely more complex than the use of a bishop or a knight. Rooks stay out of the light at the beginning of the game, hiding their inner power.

In this chapter we will add some new facts to the well-known biography of the rook. We will focus on its relation to the centre and to the pawn structure. We will also show several inspirational examples, where a player succeeded in fully unleashing the potential of this piece.

Along the edge of the chess board

The rook seems to be created exactly to fit the square shape of the board. It is the only piece on the board which doesn't require any centralization. It doesn't care whether it is standing on a1 or d4 on an empty board, it always controls the same number of squares.

The sensitivity of the individual pieces to centralization is captured in the following table:

	How many squares does it control from d4?	How many squares does it control from a1?	Multiple of squares controlled – central over corner
♘	8	2	4
♔	8	3	2.67
♗	13	7	1.86
♕	27	21	1.29
♖	14	14	1

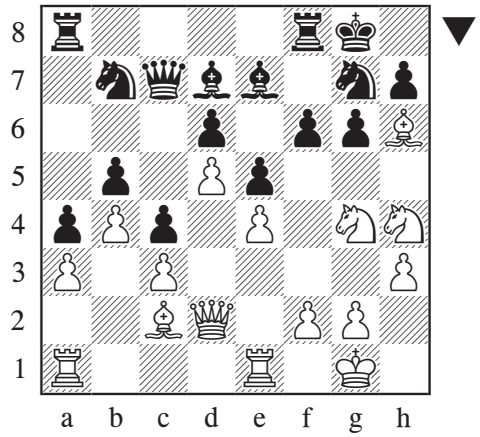
This means that the rook is an ideal piece for the roads along the edge of the board. Since it is not influenced by centralization as the other pieces are, the rook's strength relative to them increases on the edge of the board.

The rook is also an ideal attacking piece. It is able to cause immense damage to the opponent's pawn structure, because it is ideally adjusted for manoeuvres deep in the opponent's camp: along the highway of the back rank, and on the 'smorgasbord' of the seventh rank, where many exposed pawns stand.

Let's have a look at one simple example:

Alexander Motylev – Jan Markos

Plovdiv 2008



In this position, typical for the Spanish Opening (although in this case it was reached from a Sicilian Defence), Black is slightly worse. The queenside is closed, and White has all his minor pieces on the kingside. That crowd in front of my king made me so nervous that I decided to exchange one of them.

21...♗xg4?

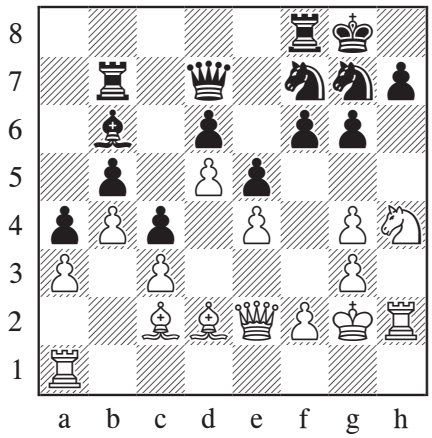
The problem with this exchange is not really the fact that Black loses the bishop pair. (After all, what good is the bishop pair in a closed position?) The problem is rather that the exchange opens the h-file, a peripheral highway for White's heavy pieces. I can remember that I was aware of this danger, but I thought that the exchange would make other breaks on the kingside harder, and that I could defend the only open file.

Let's run through the following moves:

22.hxg4 ♘d8

Black would like to play 22...f5, but the sacrifices 23.♘xf5 and 23.♘xg6 are both too dangerous.

23.g3 ♘f7 24.♗e3 ♕d7 25.♕e2 ♖ab8 26.♔g2 ♗d8 27.♖h1 ♗b6 28.♗d2 ♖b7 29.♖h2

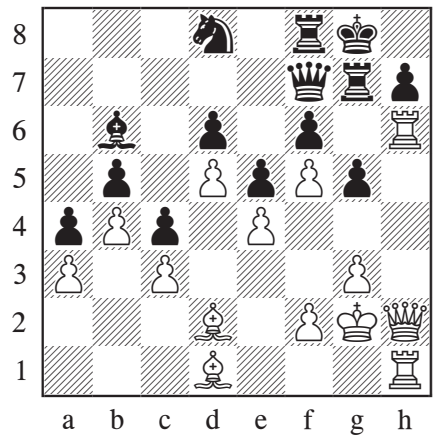


29...g5?

Black continues with a similar strategy. Weakening the light squares in front of the king hardly looks like a good idea, but I thought that the position is being simplified, and that protecting the h7-pawn three times would be sufficient for me to make a draw. Please note my b6-bishop – it seems to be standing beautifully when you look at it, but in fact it does not participate in anything at all.

Again we will go fast-forward on the chess board:

30.♘f5 ♘xf5 31.gxf5 ♘d8 32.♖ah1 ♕e8 33.♗d1 ♖g7 34.♖h6 ♕e7 35.♕h5 ♕f7 36.♕h2

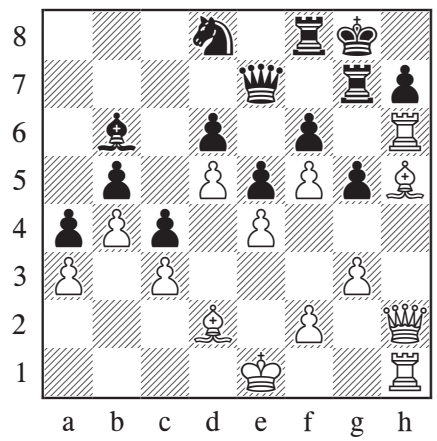


The concentration of forces on the h-file has reached its maximum. Even though it might seem that Black is in no danger, this is not the case. Although Black is able to protect the h7-square, the real weakness is the h8-square, which White will uncover with a suitable bishop sacrifice.

36...♕e7 37.♗g4 ♗a7 38.♔f1 ♗b6 39.♔e1

Making the opponent feel totally passive.

39...♕a7 40.♗h5 ♕e7



41.♗g6!

And that's it. White has attacked the h7-pawn for the fourth time, and Black cannot protect it because he cannot get the f8-rook to the seventh rank. After 41...hxg6 42.fxg6, the weakness of the h8-square is fatal. White has effectively slipped through a keyhole in this game – he has managed to get to the opponent's king with his entire army through just a few squares on the h-file.

I learned two lessons from this (rather depressing) game.

First, most positions are less blocked than they seem to be at first glance. And so, even in a relatively closed position, it is usually not a good idea to defend passively.

Second, the files on the edge of the board suit rooks; they are able to operate extremely efficiently there.

The game concluded:

41...♖ff7 42.♗xf7† ♕xf7 43.♕h5 ♕e7 44.♖g6
1–0

The next example about the effect of rooks on the edge of the board is more complicated and much prettier. Let's have a look at the whole game.

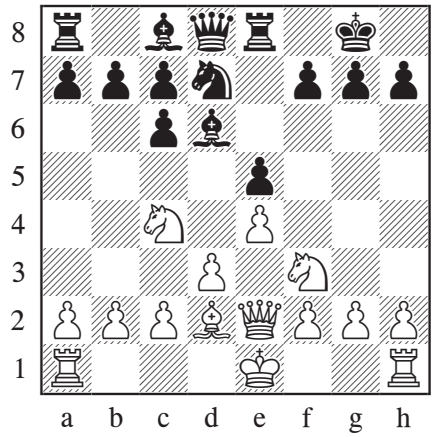
Wei Yi – David Navara

Wijk aan Zee 2016

1.e4 e5 2.♘f3 ♘c6 3.♗b5 ♘f6 4.d3 ♗c5 5.♗xc6 dxc6 6.♘bd2 0–0 7.♘c4 ♘d7 8.♕e2 ♖e8 9.♗d2

White's last two moves have been 'small' and inconspicuous. However, they were also very flexible, allowing him to choose where to hide his king.

9...♗d6



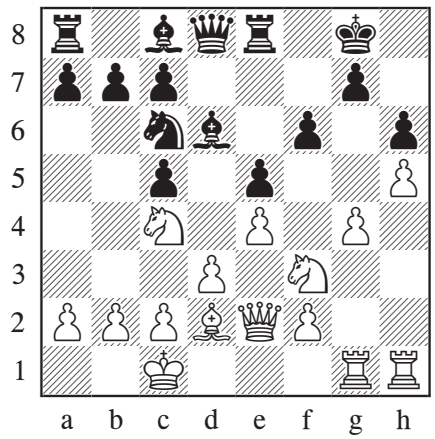
10.h4!

The signal for an attack! It is clear after this move that White is going to hide his monarch on the queenside, where the doubled pawns make it difficult for Black to organize a pawn storm.

10...c5 11.h5 h6?

Black's only mistake in the game, but a very serious one. The pawn on h6 allows White to open the game more easily than if it was standing on h7. Navara, of course, knows that it is wrong to move pawns in front of his own king, especially in positions with castling on opposite sides. However, he thought (just like I did in the previous game), that he would manage to block the position on the kingside.

12.0–0–0 ♘b8 13.♖dg1 ♘c6 14.g4 f6

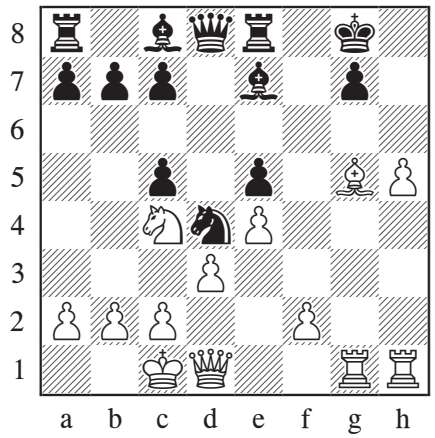


The position on the kingside appears to be quite safely blocked but, unfortunately for the Czech player, it is a false appearance. White is happy to sacrifice a piece to make his rooks part of the game. He knows that they will be very strong at the edge of the board.

15.g5!

It is not difficult to see this move. The real mastery is to calculate everything accurately, including the clever point several moves later.

15...fxg5 16.♘xg5 ♘d4 17.♕d1 hxg5 18.♗xg5 ♗e7

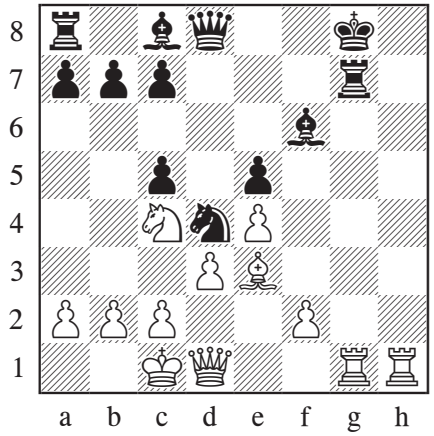


19.♗e3!!

A real gem – after this move White is clearly winning. Instead, after 19.♗xe7 or 19.♗h6, Black could still fight on. This diagram would also be suitable for the chapter on *Smart Retreats* (page 169).

White fully relies on the strength of his rooks and doesn't hurry with the attack. The e7-bishop is standing rather awkwardly; it is only hindering Black's major pieces. Try showing this position to your teammates. If any of them is able to correctly assess that 19.♗e3!! (or 19.♗d2!!) is the cleanest way to win, then that person has excellent calculating skills and a great sense for the royal game.

19...♗f6 20.h6 ♖e7 21.hxg7 ♖xg7



22.♕h5

The triumph of White's strategy – the attack along the h- and g-files is crushing. The game continued:

22...♗e6 23.♗h6 ♗f7 24.♗xg7 ♗xh5 25.♗xf6† ♔f8 26.♗xd8 ♘e2† 27.♔b1 ♘xg1 28.♗xc7
1–0

In the above game, Black suffered a quick defeat caused by a tiny move of a pawn from h7 to h6, only one square forward. This allowed files to be opened for the rooks, resulting in a rapid attack. Rooks are indeed very sensitive to where the pawns are standing – let's look at this phenomenon more closely.

Let us work!

The rook is the piece which is most often hindered by the pawn structure. As the only piece on the board that is not able to 'slip' around pawns, it usually has to wait until a pawn captures (or is captured), and thus a file is opened.

Furthermore, the rook is a natural defender of the base of your position. The back two ranks of the board are a kind of Achilles' heel of every position, because the pawns cannot protect them. And so the rooks usually take care of this weakness.

The combination of these two reasons causes an interesting phenomenon. In the opening and the early middlegame, exchanges of rooks are relatively rare. This means that **rook endgames are by far the most common endgames.** As is shown in *The Biggest Lie* (pages 244-245), rook endgames occur three times as often as the second-most common endgames, those with knight versus bishop.

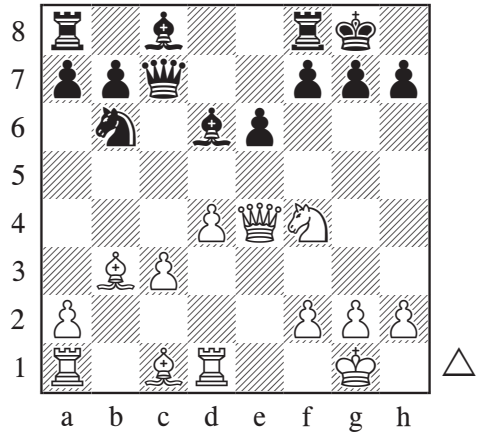
The combination of the rook's defensive function and its trouble bypassing pawns means that this piece can find full employment in openings and middlegames only with great difficulty. If you manage to combine the offensive and defensive power of your rooks at an early stage, you often gain a major advantage.

An attractive (and therefore often mentioned in chess literature) way of activating the rook is to lift it in front of the pawn structure, from where it can attack the opponent's king.

I'm going to show an example from my own experience, which made me very happy – not only because I beat a great chess player, but also because I managed to find a very unusual continuation of the attack.

Jan Markos – Jan Timman

Torre della Stelle 2011

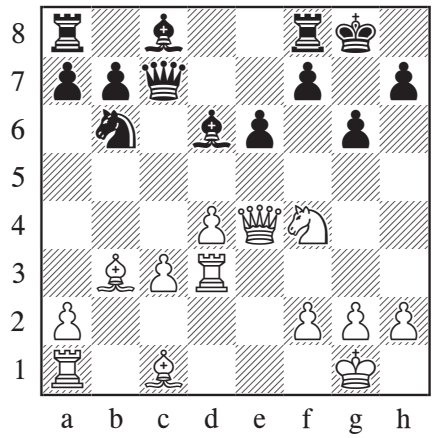


16.♖d3

White, of course, is not going to protect the c3-pawn with the meek 16.♗d2?. Instead, he lifts the rook to the third rank, which becomes the highway to the kingside. It is there that all White's pieces, except the a1-rook, are aiming; Black can, therefore, expect trouble.

16...g6!?

A move which Black isn't entirely happy to make, because it weakens his king. On the other hand, ♖h3 is no longer associated with a mate threat, the f4-knight has limited options to move, and Black has created the threat of ...e5 followed by ...♗f5.



How should White continue?

He would love to play 17.c4, but Black can capture the pawn: 17...♘xc4 18.♖c3 b5! 19.♕xa8 ♗b7 20.♕xa7 ♖a8 21.♕xa8† ♗xa8 The black queen is much stronger than the uncoordinated white rooks.

White's attack on the kingside has somehow got stuck. The white knight may soon be attacked, and has no good squares. It stands in the way of the queen, which would like to go to h4, and it also hinders the c1-bishop. Is the knight itself the problem?

After long consideration, I found the paradoxical:

17.♘h3!?

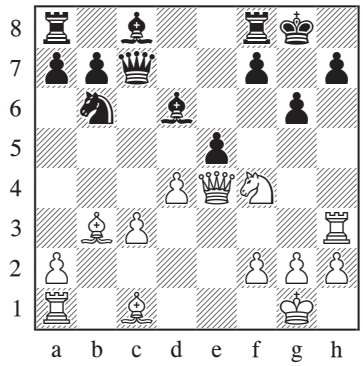
This not only puts the knight on the edge of the board, but also puts the h2-pawn en prise.

However, even better is the straightforward: 17.♖h3!

The rook shows its attacking abilities.

17...e5?

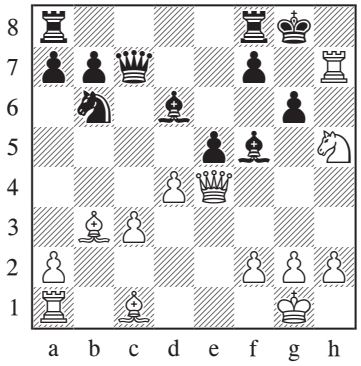
Also after other moves, Black's position is in grave danger.



18.♖xh7! ♗f5

18...♔xh7 19.♘xg6 fxg6 20.♕h4† leads quickly to mate.

19.♘h5!!



The queen cannot be captured because of the mate in one.

19...♔xh7 20.♕e3!!

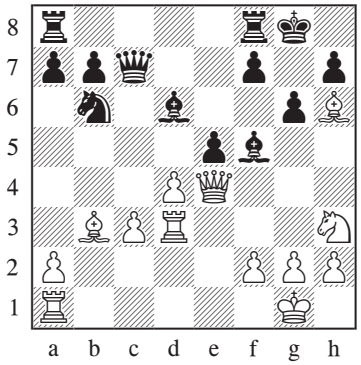
White mates in a further 11 moves, as my computer demonstrates. Naturally, it was beyond my abilities to find such a line at the board. Please note that moves other than 20.♕e3!! do not lead to success.

17...f5?!

This move greatly weakens Black's position. But other possibilities are not appealing either:

17...♗xh2† 18.♔h1 ♗d6 19.♗h6 ♖e8 20.♘g5 is highly dangerous for Black.

The break 17...e5 simply does not work: 18.♗h6 ♗f5? (18...♖e8 19.♕h4 wouldn't solve anything)



19.♕xf5! gxf5 20.♖g3† ♔h8 21.♗g7† ♔g8 22.♗f6#

Finally, 17...♗d7 18.♗h6 ♖fe8 19.♘g5 looks horrific for Black.

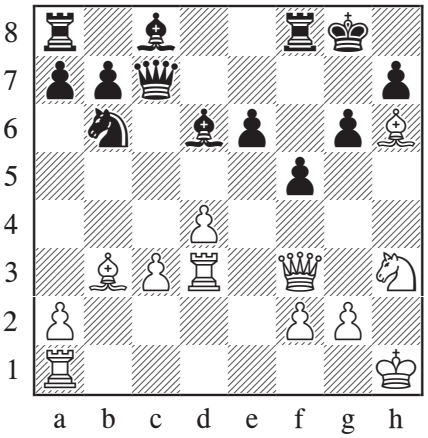
18.♕f3?!

18.♕h4 is more direct and stronger.

18...♗xh2†

Black at least captures a pawn.

19.♔h1 ♗d6 20.♗h6



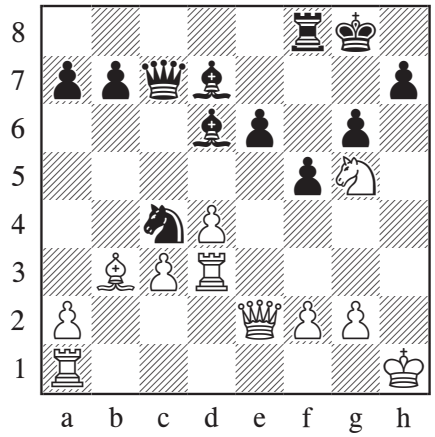
20...♗d7?

This sacrifice of the exchange does not work, because White will soon also capture a pawn.

Correct was the humble 20...♖e8, even though White has more than enough compensation for the pawn after 21.c4. Note that 21...♘xc4? 22.♖c3 b5 is not possible here, because Black can no longer trap the queen after 23.♕xa8, as the e8-rook is not protected.

21.♗xf8 ♖xf8 22.♘g5 ♘c4 23.♕e2!

There is a threat of a triple attack! After ♖h3 Black will have to extinguish fires on c4, e6 and also h7. And he won't have enough time to extinguish all of them.



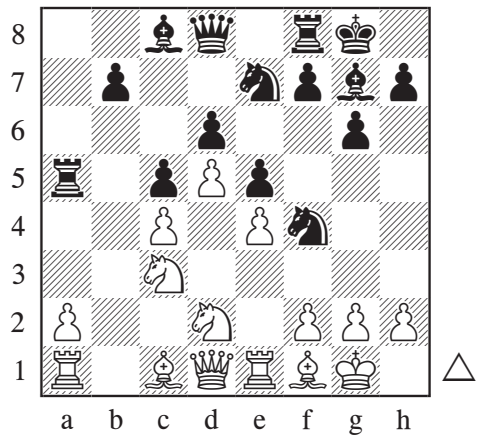
23...b5 24.♖h3 ♕d8 25.♘xe6+–

White has gained some more material, and safely brought the game to victory.

Rooks in advance of the first rank can often serve both as offensive and defensive pieces. Here is a short sample from the highest echelons:

Vladimir Kramnik – Garry Kasparov

Novgorod 1997



This position arose from the King's Indian Defence. Black has a weakness on d6 but, thanks to the f4-knight and the possible ...f5 advance, he also has some chances for an attack on the kingside.

14.a4

White plays this in order to transfer his a1-rook to the third rank, from where it can help with the defence of the kingside.

14...♖a6

In response, Black retreats to protect the sensitive d6-pawn.

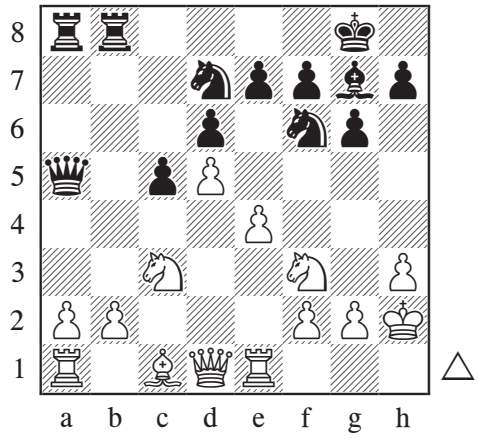
15.♖a3

Both the queen's rooks are being used along both files and ranks.

In the following position from the Benko Gambit, it is crucial how both sides manage to use their rooks.

Alexander Graf – Kiril Georgiev

Recklinghausen 1998



The Benko Gambit is one of few positionally correct gambits. Black has sacrificed a pawn, not for a lead in development or an attack on the king, but for long-term strategic pluses.

While Black has only one pawn island, with its only visible part being a perfectly protected c5-pawn, White has two pawn islands, and the one consisting of the a2- and b2-pawns is extremely weak. Also, White's central pawn structure is relatively sensitive because it can be attacked from the queenside.

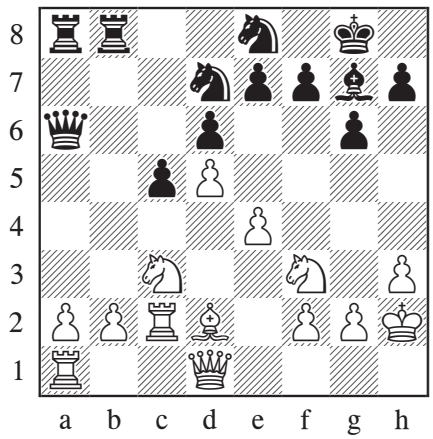
Black shouldn't have enough strength to capture the a2- or b2-pawns if his opponent is playing sensibly. However, by applying pressure on these pawns, Black can limit the white pieces' ability to move, so that they don't have enough strength for aggressive action in the centre or on the kingside.

Especially interesting is the fate of the a1-rook. If Black succeeds in sentencing it to the passive defence of one of the queenside pawns from behind, he will have full counterplay. However, if White manages to use the rook both in defence and attack, he will be better. But first, the other rook has to help out:

14.♖e2! ♘e8 15.♖c2

On this modest square, the rook cements the queenside and allows the development of the c1-bishop.

15...♕a6 16.♗d2



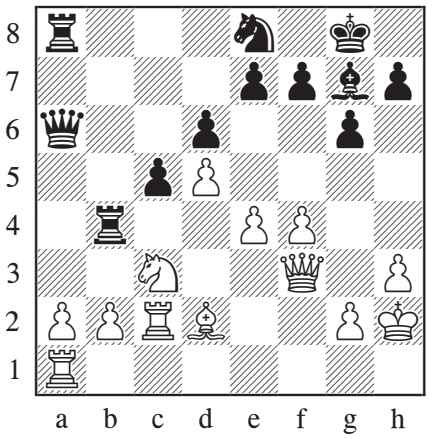
16...♘e5?

In general, Black doesn't mind knight exchanges in the Benko Gambit. As has already been said in *Understanding the Beast* (page 72), these pieces have the ability to defend a weakened pawn structure. However, here the exchange on e5 loses precious time, which White uses effectively for the activation of the a1-rook.

An expert on the Benko Gambit, Igor Stohl, a grandmaster from Bratislava, recommends that Black should either try to exchange the other knight by 16...♘c7, with the idea of ...♘b5, or provocatively use the energy of the black rook along the 4th rank by 16...♖b4!?, with the threat of capturing on c3 and then e4.

17.♘xe5 ♗xe5† 18.f4 ♗g7 19.♕f3 ♖b4

This move comes too late. The e4-pawn is no longer hanging, and White can easily neutralize the intrusion to the d4-square.



20.♖e1 ♖d4 21.♖e3!

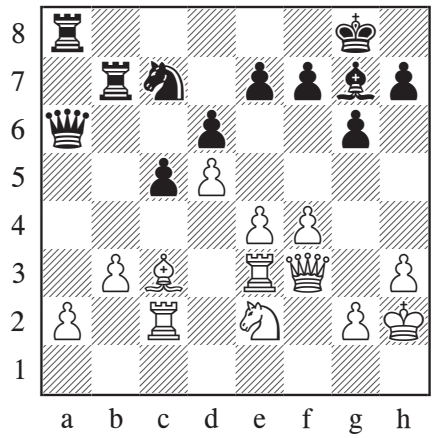
A great move. White simply covers the d3-square, and the rook on d4 suddenly stops feeling safe. Notice that White has managed to use both his rooks for play along both files and ranks.

21...♖b4

A sad necessity.

After 21...♘c7 22.b3, the rook would in any case be forced to retreat because of the threat of ♘e2.

22.b3 ♘c7 23.♘e2 ♖b7 24.♗c3±



White has managed to activate both his rooks and, in addition, is exchanging his opponent's strongest piece, the g7-bishop. Black's compensation has vanished – a difficult defence awaits him in the middlegame a pawn down.

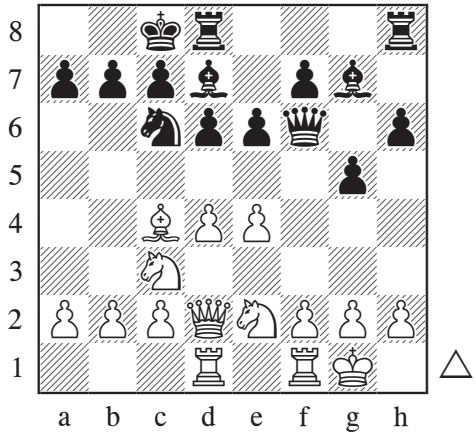
Provoking weaknesses to benefit the rooks

One of the ways to ensure work for your rooks is through targeted weakening of the opponent's pawn structure. As the pawn structure is a relatively stable element, some of the weaknesses that you create in the current position may manifest themselves a dozen or more moves later.

Let's have a look at two positions. The first example was played in the final match of the knockout tournament for the 1998 World Championship:

Viswanathan Anand – Anatoly Karpov

Lausanne (6) 1998



White lacks an object to attack. After 11.f4 his rook would conquer the f-file, but the black rooks would, in return, gain the g-file. And what's worse, the dark squares around the white king would be weakened, and White is missing the dark-squared bishop for their protection.

It would be ideal to play against the black king, but advancing the a- and b-pawns all the way to the sixth rank would require too much time. Therefore, Anand played the smart:

11.♘b5!

Black cannot tolerate this knight because of the threat of d4-d5. Therefore, he answered:

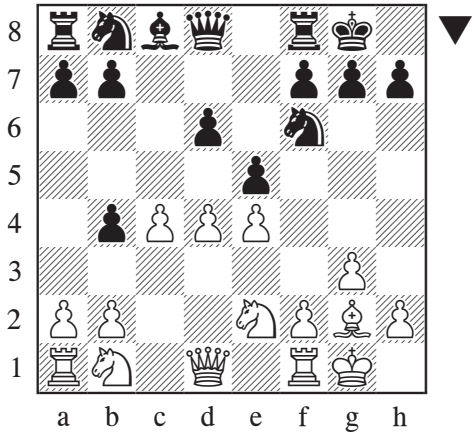
11...a6 12.♘a3

Not only will White stabilize the centre with c2-c3, but he also enjoys a clear plan – to break open the opponent's king position with b2-b4-b5.

The second example is from my praxis. The foresight I showed in caring for my rooks paid off in the form of a beautiful combination.

Peter Poobalasingam – Jan Markos

Zurich 2011



This position arose from the Bogo-Indian Defence. White has more space and the better pawn structure, whereas Black has the opportunity to play on the weakened dark squares. Neither of the black rooks has moved, and yet, in a sense, their fate will be decided right now. Black played a clever move:

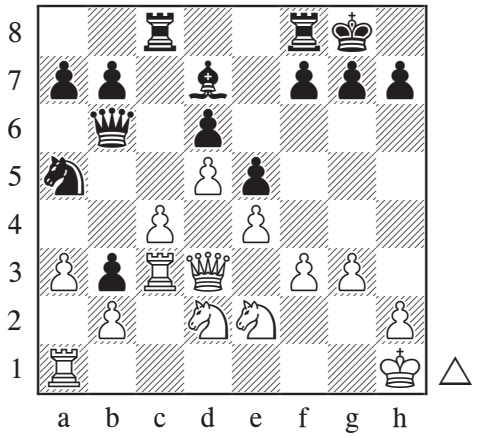
9...♗g4!

This threatens to capture the e2-knight and then move a black knight right into the centre by ...♘c6-d4. White doesn't want to play 10.d5, after which the b8-knight would quickly appear on c5, another great square. And so White replied:

10.f3 ♗d7

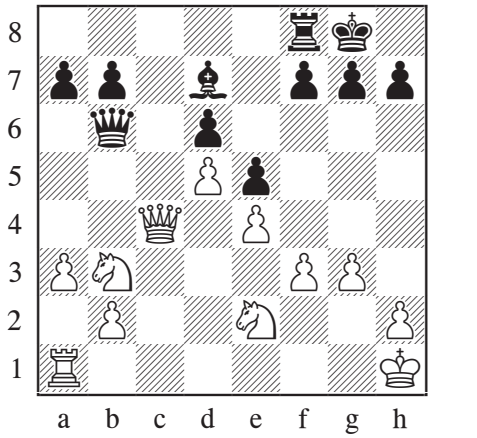
Black can be satisfied with the outcome of his guerrilla action. His queen will be able to occupy the a7-g1 diagonal with tempo, and if his rooks ever manage to penetrate to White's second rank, they will be much more effective because they will fully cut off the white king.

Let's now skip several moves and return to the game after Black's 19th move:



The position is quite balanced. Black has a weak b3-pawn, whereas White has strangely-placed pieces and an exposed king. Poobalasingam decided to force a draw, but miscalculated. Before reading on, try to calculate why White cannot capture on b3.

20.♘xb3? ♘xc4 21.♖xc4 ♖xc4 22.♕xc4



White took into consideration only 22...♗b5? with an equal continuation: 23.♕c2 ♗xe2 24.♕xe2 ♕xb3 25.♖c1= However, composers of chess problems might say 22...♗b5? is so natural and tempting that there is a good chance it is wrong.

It is good to remember that the second-best move in a position is often a serious mistake. If you see a good continuation in a position, look carefully for any better options. Maybe you will find a significantly better move hidden behind the seductiveness of the first continuation.

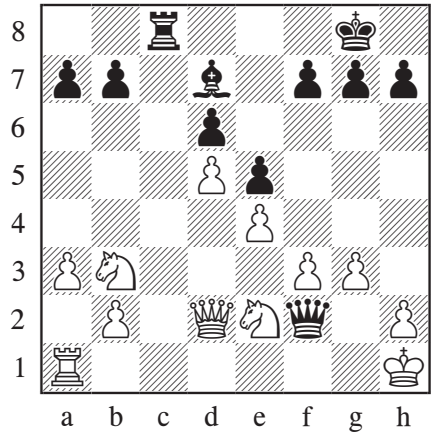
The best move for Black in the diagram position is the hidden:

22...♖c8! 23.♕b4

After 23.♕d3 ♗b5 24.♕d2 ♗xe2 25.♕xe2 ♕xb3, the position is no longer balanced as White is unable to fight for the c-file.

Black now made use of the weakness of the white king, created many moves ago:

23...♕f2! 24.♕d2



24...♖c2!

A stab!

After the direct 24...♗h3, White can avoid immediate loss with 25.♘f4, and so Black attracts the white queen to an unprotected square.

25.♕a5

25.♕xc2 ♗h3 26.♘ed4 leads to an attractive mate: 26...♗g2#

25...b6 26.♕xa7 ♕xe2

White is defenceless.

0–1

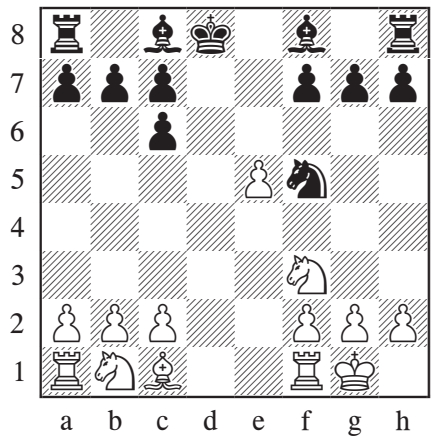
Cooperation of the rooks

The rook is the best piece for creating batteries. Two rooks plus a queen is the only battery on the board consisting of three pieces. By the way, the cooperation of a pawn with a rook behind it is also a form of a battery, as the strength of the two pieces acting in the same direction is increased.

Two connected rooks not only act in the same direction with doubled power, but also protect one another and so create a crystal (see page 30). The safety and strength of rooks increase rapidly when they are connected; separated rooks are weaker and much more vulnerable.

Let's have a look at a position from the famous Berlin Endgame which arises from the Spanish Opening:

1.e4 e5 2.♘f3 ♘c6 3.♗b5 ♘f6 4.0–0 ♘xe4 5.d4 ♘d6 6.♗xc6 dxc6 7.dxe5 ♘f5 8.♕xd8† ♔xd8



White has a pawn majority on the kingside;

Black has two bishops as compensation. The position is a little similar to the Exchange Variation of the Spanish Opening (1.e4 e5 2.♘f3 ♘c6 3.♗b5 a6 4.♗xc6 dxc6 5.d4 exd4 6.♕xd4 ♕xd4 7.♘xd4). However, in comparison with that, Black's position here has one serious advantage and one serious disadvantage.

It is an advantage for Black that White's e-pawn is already standing on e5. Thanks to this, and the fact that White no longer has a light-squared bishop, it is often possible for Black to effectively block the advance of the white pawns along the c8-h3 diagonal.

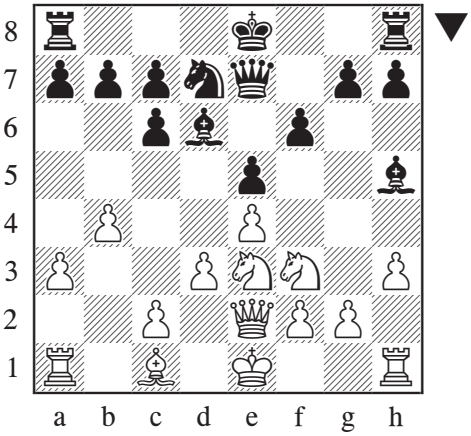
The disadvantage to Black, compared to the Spanish Exchange, is that his king is awkwardly stuck in the centre, and so becomes a kind of cork standing in the way of the coordination of the rooks.

Any exchange of rooks is, therefore, advantageous for Black. **If we removed all four rooks from the diagram position, Black would stand slightly better**. However, that is not easy to achieve; and so Black often finds an alternative use for his rooks by means of the pawn marches ...h5-h4 or ...a5-a4.

The following example is very complex. It might seem that Black is doing everything right: attacking the weakened structure, playing with a rook on the a-file. However, he underestimates the need for harmony between his rooks, and White cleverly refutes his play.

Magnus Carlsen – Wesley So

Bilbao 2016



In this position from the Spanish Opening, it seems that the rooks will have to wait a while longer for some work. The position is blocked and quite standard: Black has a bishop pair, but also a structural flaw in the form of doubled pawns. The only strange feature of this position is the pawn on b4, which Carlsen had previously used to force the bishop from c5.

So decided to use the vulnerability of this pawn and played:

12...a5!?

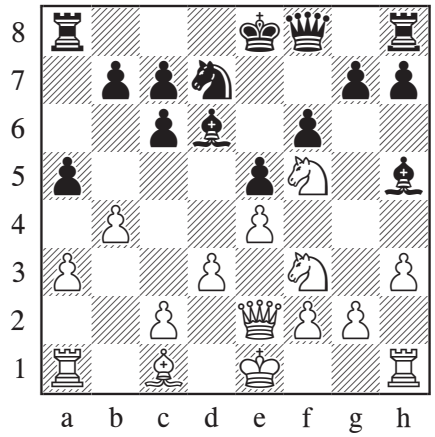
From the strategical point of view, this is certainly the right decision. But does Black have enough coordinated pieces to open the game? If he judges that he hasn't, he could simply castle.

The game continued:

13.♘f5 ♕f8?!

This, however, is a mistake; Black cannot mess with his coordination like this.

13...♕f7 would certainly be more natural, but apparently So didn't want to permit 14.♖b1 axb4 15.axb4, when White keeps the pawn on b4 without having to exchange on d6.



14.bxa5!

White is not afraid of weaknesses in his pawn structure, but bets on the difference in cooperation of the white and black pieces.

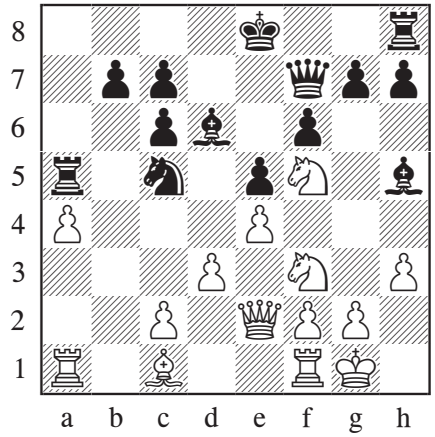
The faint-hearted 14.♖b1 axb4 15.♘xd6† ♕xd6 16.axb4 doesn't give White anything.

14...♖xa5 15.0–0 ♕f7

Natural, but maybe worth considering is the speculative 15...♖a4, which would delay White on the queenside.

16.a4 ♘c5

Black, unfortunately, cannot play the natural 16...0–0 because of 17.♗h6!+–.



Black's position is already very dangerous. He still cannot castle, and White can think about the breaks d3-d4, or ♘d2 followed by f2-f4, as well as playing on the open queenside.

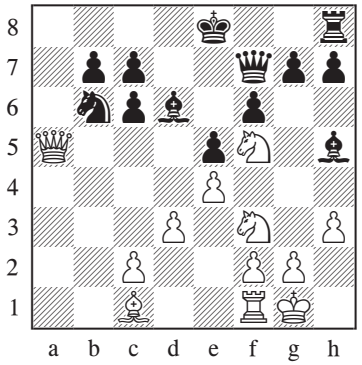
However, if Black managed to get his king to safety, he would be strategically very well off, because of the opponent's weak a4-pawn. Therefore, Carlsen quickly responds:

17.♕e1!

White unpins his knight with tempo and, at the same time, prepares to transfer his queen to the queenside.

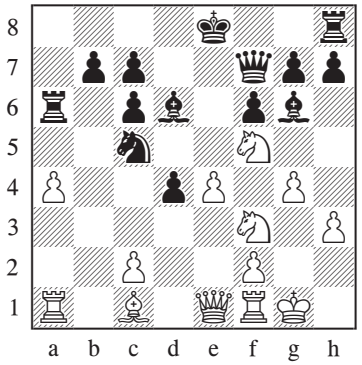
17...b6

17...♖xa4? loses material after: 18.♖xa4 ♘xa4 19.♕a5 ♘b6

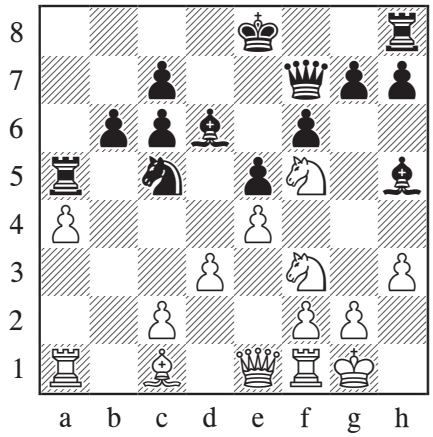


20.♕xb6+–

If Black retreats the rook, d3-d4 will follow, for example: 17...♖a6 18.d4 exd4 19.g4 ♗g6



20.e5! White has a decisive attack.



18.♘d2 ♖xa4?!

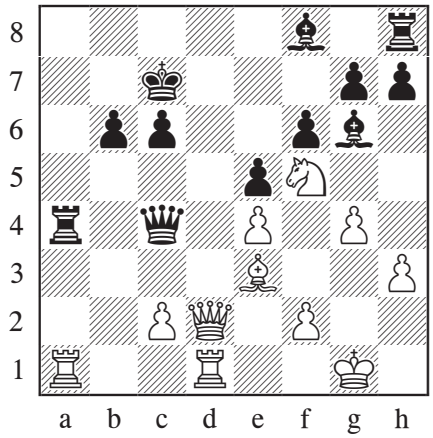
Black finally takes the pawn and hopes that he will survive the opponent's initiative. In fact, he is only opening the pathways into his camp. Retreating the rook was preferable.

19.♘c4 ♗f8?!

19...♖xa1? 20.♘cxd6† would cost Black his queen.

Black had to try: 19...♗e7 20.♗e3 ♔d7 21.♖xa4 ♘xa4 22.f4 White retains a strong attack.

20.♗e3 ♔d7 21.♕c3 ♘xe4? 22.♘xb6† cxb6 23.dxe4 ♕c4 24.♕d2† ♔c7 25.g4 ♗g6 26.♖fd1
1–0



The final position deserves a diagram. Black is a pawn up, he has the better pawn structure and the bishop pair. However, that is not of any importance. He didn't manage to connect his rooks, and so he cannot prevent White from penetrating along the d-file.

If you only remember four brief pieces of information from this entire chapter about rooks, let it be these:

Rooks feel as good on the edges of a board as in the centre, and they have a manoeuvring advantage on the edge of the board in comparison to the other pieces.

The rooks often lack employment in the openings and early middlegames. If you can use them, ideally along both files and ranks, this will provide relief to the other pieces.

The rooks' activity depends on the pawn structure. You can ensure that they will have work in the future by creating weaknesses in the opponent's structure.

Connected rooks are much more effective than separated rooks.

Chapter 12

Princesses of the Chess Board

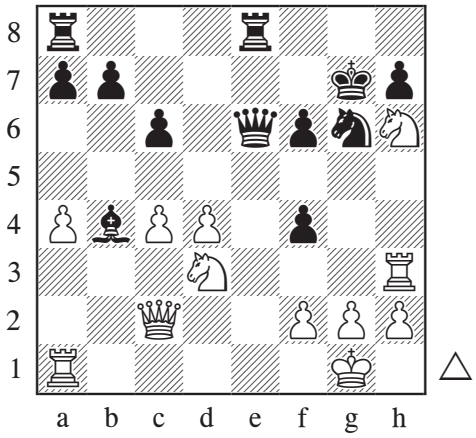
What kind of job is most suitable for queens?

Queens are the most mobile pieces on the board, which is what makes them unique. It also means that, provided they are reasonably situated, it is usually not so important which specific square they occupy, as they can move from one place to another with amazing speed.

Let's have a look at an example that nicely illustrates this quality of the queen:

Jan Markos – Alexander Beliavsky

Plovdiv 2008



The white queen stands on a relatively modest square. Up to this moment, she has been patiently waiting. However, Black's kingside is now weakened, so she can switch to attacking mode. It is not difficult to find the correct continuation. All that is needed is to overcome a mental block against backward moves.

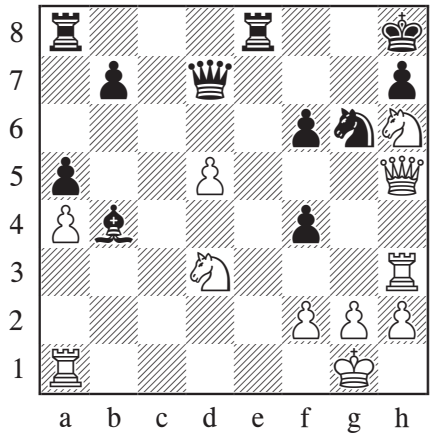
27.♕d1! a5

With the e1-square covered by the queen, the bishop was now hanging.

28.♕h5 ♔h8

The situation on the chess board has changed radically in a couple of moves. Black is putting all his efforts into defending against the threats on the kingside. Therefore, the time is ripe for a break in the centre.

29.d5 cxd5 30.cxd5 ♕d7



31.♘xf4!

An additional piece joins the attack. The rest is simple.

31...♘xf4 32.♘f7† ♕xf7 33.♕xf7 ♘xh3† 34.gxh3 ♖f8 35.♕xb7 ♖ab8 36.♕a7 ♖bd8 37.♖d1 ♖d6 38.♔f1 ♖g8 39.♖c1 ♖xd5 40.♕f7
1–0

Queens are very swift, and therefore there is no need to put them into the front line from the very beginning. In the opening, they should be developed with restraint, so that they are not trapped or bullied by the opponent's pieces of lower value.

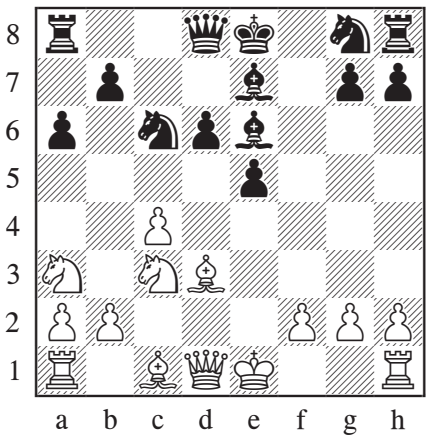
Also, the queen might be missed in its own camp. Let's have a look at a game in which White determined the fate of his queen too early, and its presence was missed in the centre of the board.

David Varga – Jan Markos

Banska Stiavnica 2012

1.e4 c5 2.♘f3 ♘c6 3.d4 cxd4 4.♘xd4 e5 5.♘b5 d6 6.c4 ♗e7 7.♘1c3 a6 8.♘a3 f5 9.exf5 ♗xf5 10.♗d3 ♗e6

If Black had exchanged bishops on d3, the light squares in his camp would have become accessible for several white pieces, as described in *Hierarchy on the Board* (page 27).



11.♕h5†

Who could resist giving such a check?

This manoeuvre has several positives: it forces the e6-bishop to the less favourable f7-square, where it will be blocking the rook in the future; and (after ♕h3) the queen will control the light squares on the kingside, making it more difficult for Black to castle.

Yet, these positives might not compensate for one big disadvantage of this manoeuvre. From h3 the queen will not be able to control the centre, and exactly this area of the board will soon become a playground for the black pieces.

11...♗f7 12.♕h3 ♘f6 13.♘c2

How should Black make use of the absence of the white queen from the middle of the board? I chose to employ an immediate and radical method, as White has not castled yet.

13...♘d4!? 14.♘xd4 exd4 15.♘e2?

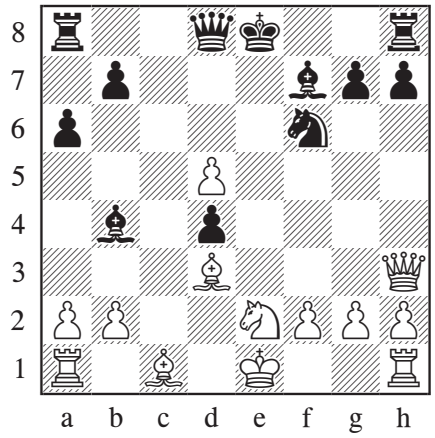
White's position cannot bear so many retreats from the centre.

White could still fight for an advantage, provided he tries to stabilize the situation in the middle of the board. The best way to do this would be the courageous sacrifice of a pawn: 15.♘d5 ♘xd5 16.cxd5 ♕a5† 17.♗d2 ♕xd5 18.0–0 The activity of White's pieces fully compensates for Black's sickly extra d6-pawn. Of course, Black is by no means obliged to accept the sacrifice.

15...d5!

Black annexes the space abandoned by the white pieces.

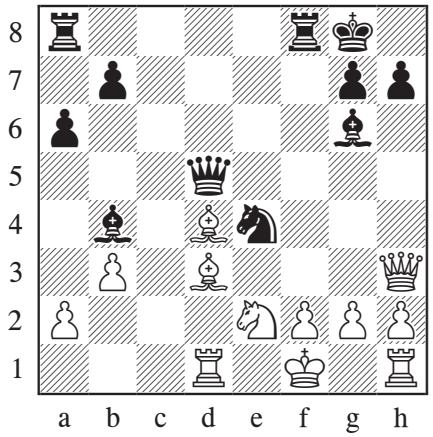
16.cxd5 ♗b4†



Were the queen on its initial square, White would simply play 17.♗d2, and after 17...♗xd2† retake with the queen, followed by castling. Now he will lose his right to castle.

17.♔f1 ♕xd5 18.b3 0–0 19.♗b2 ♘e4 20.♗xd4 ♗g6 21.♖d1

The situation is ripe for a final combination. The white queen will return to the centre only one move before mate.



21...♘xf2! 22.♗xf2 ♖xf2† 23.♔xf2 ♖f8† 24.♘f4 ♖xf4† 25.♔e2 ♕e5† 26.♕e3 ♗h5† 0–1

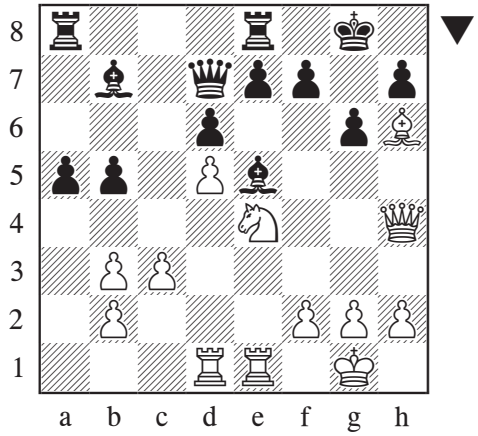
The queens are by far the most valuable pieces on the chess board. This makes them vulnerable, and it also makes them poor defenders. To protect something with a queen is similar to putting a golden lock on your bicycle – you would not protect your bicycle, and the lock would vanish as well.

Sometimes it is psychologically difficult not to assign a defensive task to your queen. Especially when a player's king is being attacked, he might feel a compulsion to parry the attack with the queen. After all, it is the strongest piece, so it should be able to defend something...

In fact, using a queen in the defence usually only makes things worse. It will itself become a target for the attacking pieces, and a source of extra tempos for the opponent. This is what happened in the next example:

Peter Velicka – Jan Markos

Czech Republic 2015



At first sight, Black's position is not very attractive. All White's pieces are aiming at his king. Still, he is not without counter-chances. He has a pair of bishops and attacking possibilities on the queenside. The correct continuation was to fearlessly pursue his plan with 25...a4 or 25...b4. After these moves, a sharp and unclear position would arise. But I saw the storm approaching on the kingside, and decided to try to help my monarch, using my strongest piece.

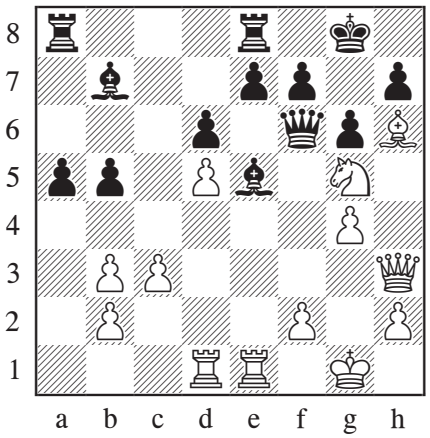
25...♕f5?!

White immediately sensed his chance and started to chase the queen all around the kingside:

26.g4! ♕f3

It is too late to admit the mistake: 26...♕d7? 27.f4 ♗h8 28.f5 White has a crushing attack.

27.♘g5 ♕f6 28.♕h3

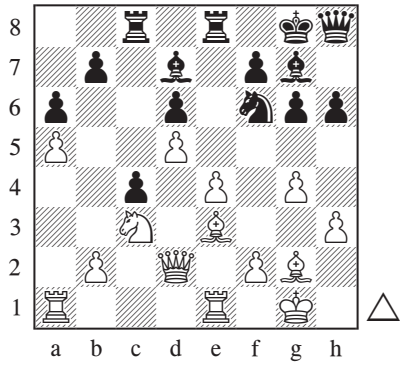


28...e6?

The retreat 28...♕h8! does not look especially appealing, but from this modest square the queen protects the vulnerable h7-pawn and is itself very safe. And who knows, maybe in the future it will cooperate excellently with the bishop along the long diagonal?

I remember that the idea of 28...♕h8! crossed my mind, even though I decided to play otherwise. My inspiration at the board was a game by my club colleague, Zbynek Hracek, who also treated his queen in such a strange fashion. True, he also did it mostly because of a lack of suitable alternatives. At an earlier stage of the game, he needed to evacuate his pieces from their shaky positions in the centre.

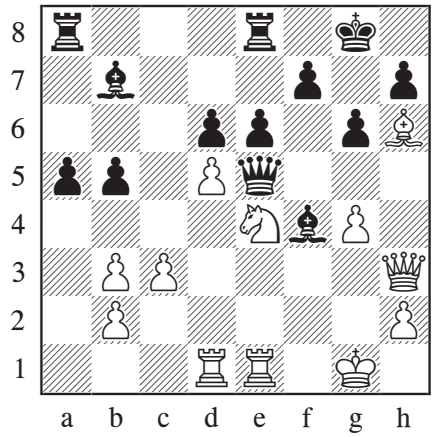
Ostenstad – Hracek, Plovdiv 2010



The queen is perfectly hidden behind its own pieces. Black is, of course, worse, but he succeeded in drawing the game.

Let's return now to my game. After 28...e6? the conclusion was:

29.f4 ♗xf4 30.♘e4 ♕e5



31.g5!

A lovely blow. Now both the black king and queen are in compromised positions; Black loses material. I allowed myself to give one final check:

31...♗xh2† 32.♕xh2
1–0

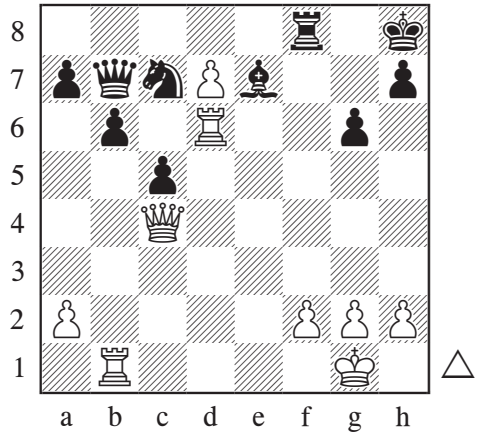
Queens do defend poorly, but they are brilliant attackers – really brilliant. When attacking, they remind me of fireworks. True, they need a clear, open space. Their attack needs to be prepared by less valuable pieces. However, as soon as they fly into an open space full of unprotected targets, they become true empresses of the board.

When attacking with the queen, it is very important to patiently calculate all the possible moves, one by one. Queens are so incredibly mobile that if you don't calculate absolutely systematically, it is very easy to overlook the decisive blow.

Let me show you one classical example:

Garry Kasparov – Josef Pribyl

Skara 1980



With his previous moves, White has managed to advance a pawn to d7, even sacrificing material to achieve this goal. The d7-pawn cuts the black forces into two separate camps: the queen and knight on the queenside, and the rest of the pieces on the kingside.

This is a position I use a lot when coaching my pupils. How should White continue?

Most of my pupils get the main idea quickly, but barely anyone can find the most accurate way to implement it. There are simply too many possible queen moves.

Maybe you should try to solve the position yourself. If you simply replay the following moves, you will get a false impression of simplicity, and will not be able to appreciate the clarity and depth of Kasparov's calculation.

26.d8=♕!

A lovely and paradoxical move. The pawn serves as a detonator.

26...♗xd8

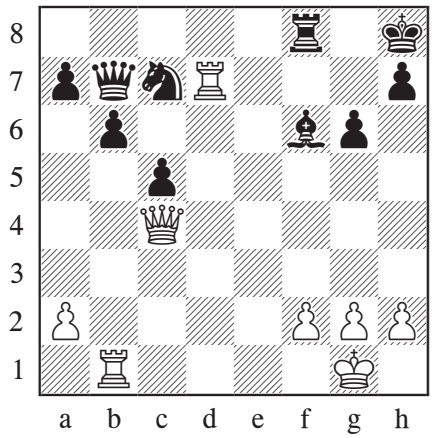
26...♖xd8 27.♖xd8† ♗xd8 28.♖d1 leaves the black pieces helpless, for example: 28...♕c8 29.♕f7 ♗g5 30.♖d7+–

27.♕c3† ♔g8 28.♖d7 ♗f6 29.♕c4†

A journey there and back again.

29.♕b3† ♔h8 30.♕e3 ♔g8 only leads to a draw. Other continuations are even worse.

29...♔h8



30.♕f4 ♕a6?

This loses immediately.

However, even 30...♗g7 31.♕xc7 ♕xc7 32.♖xc7 ♗d4 33.♖f1 is close to lost for Black. For example: 33...a6 (or 33...a5 34.a4!+–) 34.♖c6 b5 35.♖xa6 b4 36.g3 c4 37.♖c6 c3 38.♖c4+– White captures another pawn.

31.♕h6

The concerto for one queen has finished.

1–0

On what occasions is it good to exchange queens, and when is it better to avoid the exchange?

With the exchange of other pieces, the decision is often rather simple. If my piece is worse than the opponent's, the exchange is justified. If my piece is better than the opponent's, I will leave them both on the board.

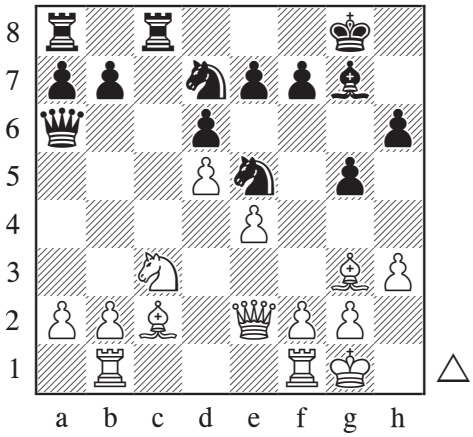
However, the queen is so mobile that its current position does not tell much about its future prospects. At one moment my queen might seem to be better placed, in another moment it will be the opponent's queen that stands better. Therefore, we have to look elsewhere to answer the question of whether to exchange queens or not.

We know already that the queen is a great attacker and a poor defender. And what is the best target for an attack? Naturally, the king is. That implies that when my king is safer than the opponent's, I should avoid exchanging queens, as I have the advantage of an attacking queen versus a defensive queen.

Should I exchange queens or not? It all depends on the safety of both kings.

Magnus Carlsen – Sergey Karjakin

Bilbao 2016

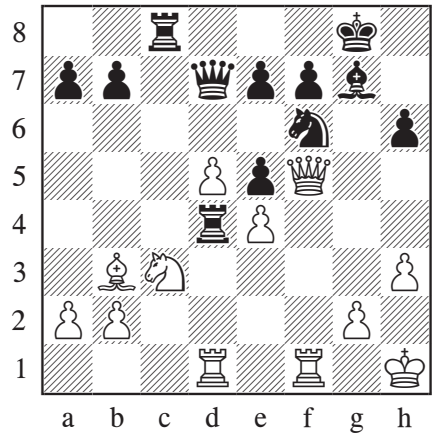


With his last move, Black has offered an exchange of queens. Should White exchange or not?

Let's compare the safety of the kings. Whereas White's king is safe and cosy, Black's monarch will have problems in the future, either along the b1-h7 diagonal, or on the f-file (after f2-f4). White therefore correctly refrains from the exchange and prefers to make a backward move, even though it may appear unattractive.

20.♕d1! ♖c4 21.♔h1 ♖ac8 22.f4 gxf4 23.♗xf4 ♕b6 24.♕h5 ♘f6 25.♕f5 ♕d8 26.♗b3 ♖d4 27.♗xe5 dxe5 28.♖bd1 ♕d7

Several moves later, the situation is repeated. White has achieved f2-f4, and his better access to the kingside means that the black king still cannot feel safe. Karjakin has again offered an exchange of queens, and he will again be refused.



29.♕f3

After this apparently modest move, Carlsen decided the game with a kingside attack within a dozen moves.

29...♖b4 30.♖d2 ♖f8 31.g4 a5 32.♖g2 ♘h7 33.h4 ♖b6 34.g5 ♔h8 35.♖fg1 f5 36.♕h3 ♖b4 37.gxh6 ♗xh6 38.♕g3 ♘f6 39.♕g6 ♘g4 40.♖xg4
1–0

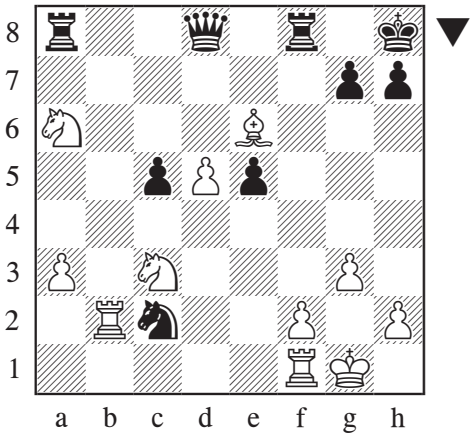
Sometimes one side has a queen while the other has not.

In such circumstances, the most important aspect is whether the queen can acquire objects for its attack or not.

If you fail to find attacking options for Her Majesty, and let her only fulfil defensive tasks, the game will probably end badly. That was (unfortunately for me) the case in the next example:

David Navara – Jan Markos

Czech Republic 2007



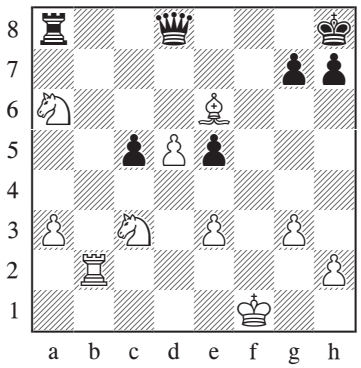
In the previous course of the game, White played very riskily in order to avoid a slightly inferior position. He sacrificed his queen for two minor pieces and a pawn. His strategy paid off in the end, because he managed to force my queen into defence. The decisive moment of the game is depicted in the diagram. My understanding of the position was very shallow and based on abstract strategical reasoning. I simply returned my knight to the centre.

27...♘d4?

However, having an active queen would have been much more important than having a well-placed knight.

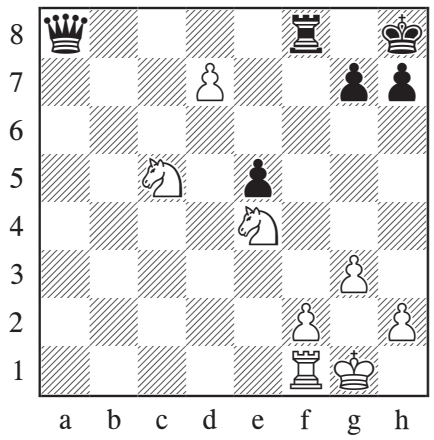
27...♘e3! was the correct path, weakening White's pawn structure and creating targets

around his king: 28.fxe3 (28.♖e1 ♘c4–+) 28...♖xf1† 29.♔xf1



29...♕a5! The queen accelerates. 30.♘c7 ♕xc3! With an easy win for Black. This line shows just how strong a queen can be, provided it has unprotected targets to attack.

28.♘xc5 ♖xa3 29.♘3e4 ♘xe6 30.dxe6 ♖a7 31.♖d2 ♕a8 32.♖d7 ♖xd7 33.exd7



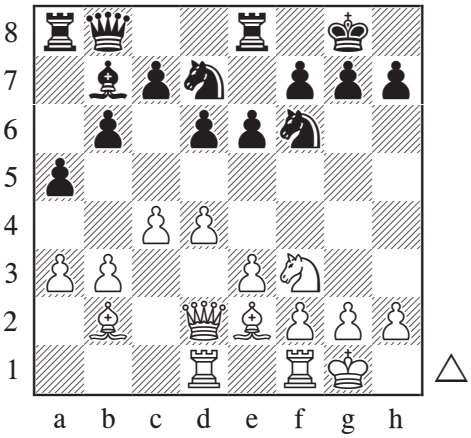
White's pieces, especially the two knights, are protecting each other excellently. On the other hand, the black queen is forced into a humiliating defensive task: to guard against the d7-pawn.

White went on to win in 49 moves.
...1–0

When the chess board is full of minor pieces, the queens have to show some restraint and take care of their own safety. But this does not mean that they should be idle. Quite often they can be used effectively, for example in batteries, where they enhance the attacking force of rooks or bishops. Usually the queen supports the rook or the bishop from behind, from a position of safety. But sometimes it is possible to use it as the leading piece in the battery, in front of a less valuable piece.

Markus Ragger – Jan Markos

Tromso (ol) 2014



This position originated from the Bogo-Indian Defence. White has the bishop pair, but he needs to achieve better control of the central squares, e4 and d5, in order to hope for an advantage. Therefore, he would like to transfer the f3-knight to another square, and play f2-f3 and e3-e4. However, he does not want to play 13.♘e1, where the knight has nothing to do and merely obstructs his rooks. It would prefer to jump to d2. But where should the white queen go? The c2- or c1-squares are fine, but perhaps the queen can be put to even better use?

White played:

13.♕c3!

With a very unpleasant threat of d4-d5, as Black cannot take the intrusive pawn because of the mate on g7. This threat is so strong that just a move later I felt obliged to play ...d5 myself. In general, this is not a move Black wants to play when he no longer has a dark-squared bishop.

It is important to add that after 13...♘e4 14.♕c2, White is better off than after the immediate 13.♕c2. When the knight is standing on e4, it does not control this square. On the contrary, it becomes a target for attack itself.

(That is why can White hope for an advantage in the Petroff after the moves 1.e4 e5 2.♘f3 ♘f6 3.♘xe5 d6 4.♘f3 ♘xe4 5.d4 d5, whereas in the French Defence after the moves 1.e4 e6 2.d4 d5 3.exd5 exd5 4.♘f3 ♘f6, the position is very close to equal.)

Let's sum up what we have learned about queens in this chapter:

Queens love to attack and hate to defend.

In order for queens to attack effectively, they need an open space full of unprotected targets. Therefore, their attack usually needs to be prepared by less valuable pieces.

Queens are very precious, and on a full board they are easily bullied by the opponent's cheaper pieces. Therefore, it is okay for them to do more or less nothing in the opening and early middlegame.

When considering an exchange of queens, we always have to focus on the situation of the kings. If my king is less well protected, I will happily exchange queens. If my king is safer, I will avoid the exchange.

Queens are the true princesses of the chess board: precious, unique and too elegant for dirty work.

The author at the 2008 Dresden Olympiad

Part III

About Time in Chess

Time in chess passes differently compared to real life. The pace of the fight sometimes moves fast forward, sometimes, it slows down. And sometimes, the events on the board stop completely.

In ***Does Time Play against You?*** we will find out why time in the opening is different from time in the middlegame, and also why sometimes a slow game is more suitable for one of the players, while a fast game suits the other one better.

In ***Brake*** you will learn why it is sometimes good to slow down the attack and be satisfied with the dominant position of your pieces.

Walking without Moving, Progress without Change is a joke which conceals a serious message – you don't always have to improve the position of your own pieces in order to improve your chances of winning the game.

Chapter 13

Does Time Play against You?

About the mysteries of time in chess

I love Japan and almost everything related to it. While I was recently watching traditional sumo wrestling on television, I realized that, even though chess and sumo are two completely different sports, they have one important feature in common. This common feature is their internal dynamics, their tempo.

Imagine the beginning of a sumo bout: two wrestlers stand opposite each other, bow to each other and throw salt all around. Then the referee starts the bout, and they start running towards each other as fast as possible. However, when they collide, and nobody falls, the course of events slows down. In a clinch, both wrestlers breathe heavily and make every effort, but it seems that nothing is happening, nobody falls or retreats. There is no visible movement.

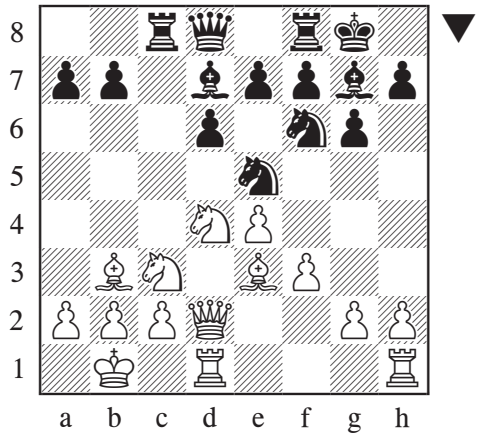
A chess game begins in exactly the same way: during the initial moves, while the pieces are not in contact, both sides try to develop and occupy the centre at the maximum possible speed. However, once the armies meet, the game quite often slows down, and in some cases almost completely stops.

"In the opening, time is gold." This rule has been banged into the heads of perhaps all of us. However, even relatively strong players have the tendency to generalize this knowledge to the entire game. They get the impression that chess is something like a race, in which it is all about which side manages to realize its plan more quickly. However, this generalization is a huge mistake.

Chess is not Formula 1. Although it is necessary to play some positions quickly, it is correct to play others slowly, with patience. Speed is in many positions rather harmful.

It is very important for a player to be able to distinguish a 'fast' position from a 'slow' one. When you try to play a 'slow' position too swiftly or, vice versa, a 'fast' position too slowly, it usually has disastrous consequences.

One of the most typical 'fast' positions comes from the Sicilian Dragon, and is shown in the diagram below.



The local imbalances on both flanks are so big that neither side is able to prevent the opponent's advance against their king. It is almost unthinkable, for example, that Black would decide to withdraw and simply try to defend his kingside. The king on g8 is such a great weakness in this position that it is not possible to protect it successfully in the long run.

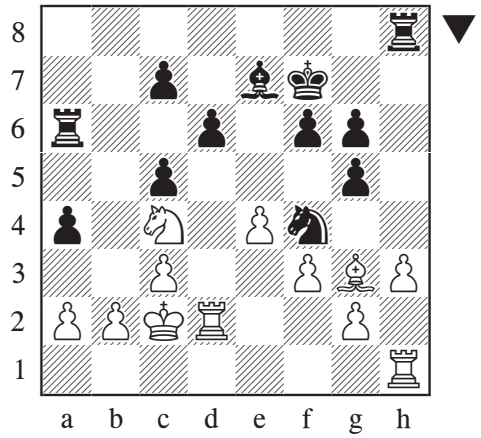
The situation of the white king is similar. And so, "The best form of defence is attack," applies to this position, as does, "First-come, first-served."

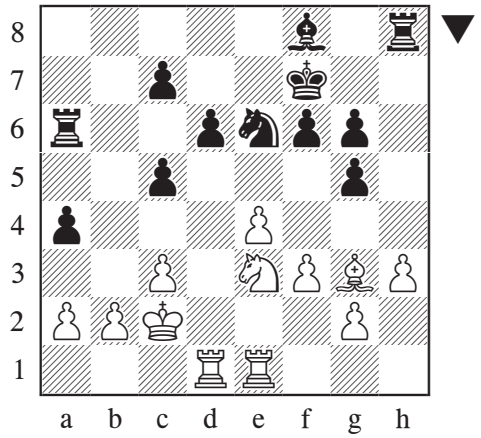
Now, let's have a look at the opposite extreme. The following two diagrams are from the game:

Luke McShane – Nigel Short

London 2009

Please, try comparing them and estimate how many moves they are apart. Three? Six?





In fact, the positions are thirty (!) moves apart. How is it possible that two strong grandmasters appreciate time so little that they failed to constructively improve their position in thirty moves?

The answer is, of course, as follows: it is precisely because both players are strong grandmaster that practically nothing happened on the board over such a long time.

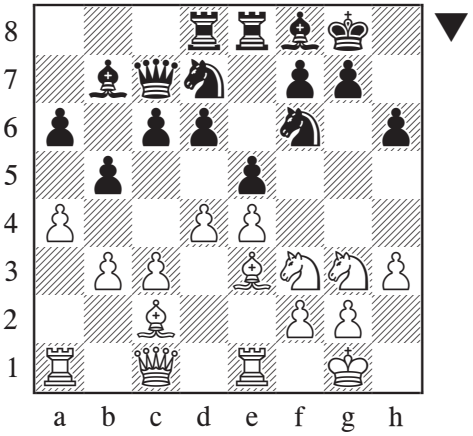
The positions in these diagrams have a blocked character; the pieces are hardly in contact. In order to change the character of the position, there would have to be a break, which means that pawns would have to be moved. However – and this is important – one side cannot afford to move his pawns. Black's structure includes doubled pawns on the c- and g-files; and as you already know, this formation is very sensitive with regard to moving forward. Usually, every movement of doubled pawns creates a weakness. Black, therefore, cannot open the position; he can only wait for White to come up with something. Short is aware of this and, therefore, is patiently waiting.

White, on the other hand, can open the position (with the break h3-h4; or maybe even b2-b3). However, he doesn't hurry with the break, but manoeuves his pieces to and fro. There are two reasons for this procrastination: as well as allowing the player to choose the most appropriate moment for the break, it is also psychologically very uncomfortable for the opponent. McShane won in 163 moves.

Here is another example from the London tournament; however, this time McShane was on the defensive side.

Michael Adams – Luke McShane

London 2009



Adams wrote about this position: "The black pieces are standing ideally; therefore, Black has nothing to do but wait."

Adams is indeed an authority, but the board is full of pieces. Is waiting really the best plan for Black?

McShane has two alternatives to the plan of waiting: he can try to improve a piece, or start some action in the centre.

The only piece that I can imagine standing in a better place is the f8-bishop. Its transfer to g7 is hampered by the attacked h6-pawn, and ...♔h7 enters the range of the c2-bishop. Therefore, it is perhaps not possible to improve the black pieces.

Action in the centre is also not favourable for Black. Capturing ...exd4 gives the centre to White. After ...c5 and d4-d5, Black will again suffer from a lack of space. The immediate ...d5 loses material.

Black's situation is paradoxical in a sense. Even though his pieces are standing ideally, they are not standing well enough to open the game. Black is therefore worse, and the correct plan is to wait. Black's following three moves were ...♕b8, ...♕c8 and ...♕c7.

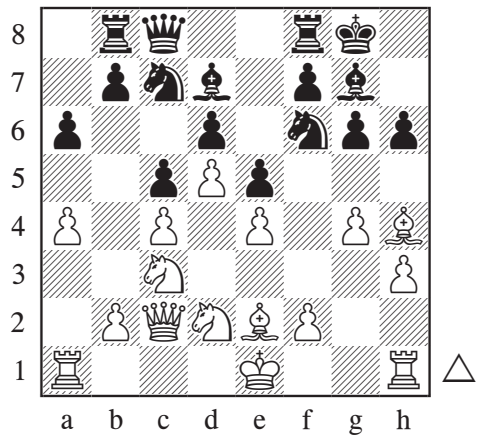
The distinction between fast and slow positions is itself quite a difficult task. **Among slow positions there are positions which are largely blocked, positions with an unclear centre (such as the Hedgehog), many technical endgames, and positions in which one side lacks an active plan.**

However, the real hard nuts to crack are positions in which Black's tempo is different from White's. In that case, one side wants to play the position fast, while the other side prefers a slow game.

Our first example is from the game**:**

Tigran Petrosian – Anatoly Lutikov

Tbilisi 1959



In blocked positions, a slow game suits the side which has more space.

This is logical: it is easier to place pieces ideally in greater space. In cramped positions, we cannot get the maximum from our pieces, even if we manoeuvre for a thousand moves. Furthermore, in King's Indian structures, White is happy in endgames, especially those in which Black ends up with a sensitive weakness on d6 and a bad bishop on g7. That is why White has no need to hurry.

In contrast, Black would like to open the position and provoke a tactical clash, using the fact that the white king will not be entirely secure on either flank. A slow fight suits White, a fast one suits Black. Petrosian therefore doesn't force any conflict and plays 'small', prophylactic moves. The game continued:

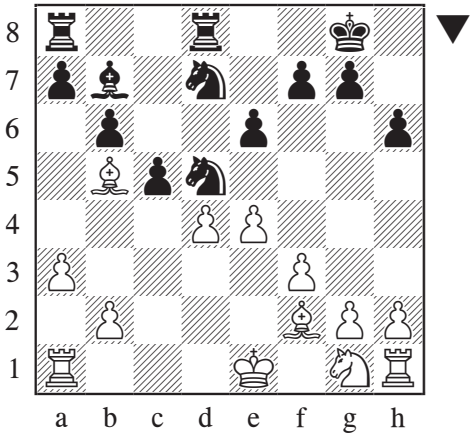
18.b3 b6 19.♘d1 b5 20.a5 ♔h8 21.♗g3 ♘g8 22.♘e3 ♘e7 23.♗h4

And so on in similar fashion.

The position below is from the match in which Kasparov lost his World Championship title.

Vladimir Kramnik – Garry Kasparov

London (8) 2000



White has the advantage of the bishop pair. **Open positions suit bishops; their scope increases with every exchange. And the longer the game lasts, the more exchanges take place.**

Therefore, using the bishop pair correctly requires patience and the willingness to wait until deep in the endgame.

On the other hand, Black has a lead in development. However, it will disappear in a slow game; it may even disappear within a

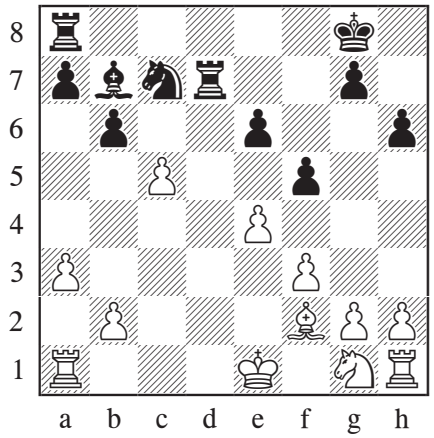
move or two. Black's chances, therefore, are decreasing with every move.

That is the reason Kasparov decided to play 'fast' and sacrificed a pawn:

16...♘c7!

16...♘5f6 would cover the d7-knight and thus also the c5-pawn.

17.♗xd7 ♖xd7 18.dxc5 f5!



The game has become very sharp, and Kramnik was eventually glad to escape with a draw.

To adjust the pace of the game to the character of the position is often not easy, even from a purely psychological point of view. To patiently defend a worse position is terribly tedious; a strong opponent knows this and can try to bore you to death. For this reason, many theoretically drawn positions are in practice almost undefendable.

A hesitant and less courageous player may find it difficult to dramatically change the nature of the position, even though he feels it is necessary. A strong opponent may detect this weakness during his preparation, and force him into an opening in which a slow game leads to self-destruction.

Chapter 14

Brake

Domination is one of the possible results of an attack

Approximately half a century ago, a professor from Stanford, Walter Mischel, conducted a series of experiments with young kids and marshmallows. Today, his experiments belong in the hall of fame of psychology. He seated kids aged three to five in front of one of these sweets, and told them to resist the temptation to eat the candy for fifteen minutes. If they succeeded, they would get two candies instead of one, he said. Then he left the room.

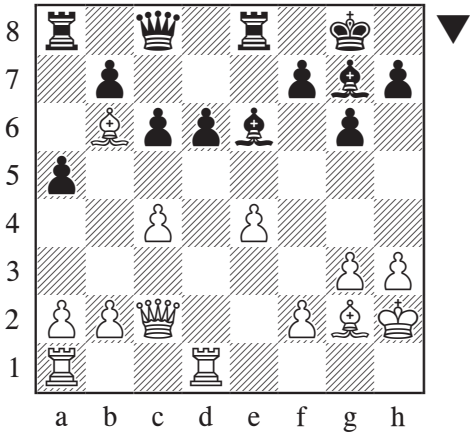
About half of the children couldn't resist the temptation and ate the marshmallow immediately, or after a few minutes. Mischel continued to monitor the lives of his subjects until their maturity, and claimed that the children who were able to resist the temptation turned out to be much more successful in their personal and professional lives. They were able to sacrifice instant pleasure for future gains.

Very strong players have mastered a similar virtue. They are able to develop an attack, let it crash into their opponent's position with its full force, and then slow it down again. They are able to wait with the decisive blow, relying on the dominant position of their pieces. Psychologically, this is a very difficult thing to do, as we usually think that an attack should end with an explosion and bring an immediate victory. However, carrying out an attack often resembles driving a car on a curvy road: accelerate, brake, accelerate, brake. An ambitious player needs to know how to use a brake in his games.

The Polish grandmaster Kamil Miton definitely knows how to use the brake pedal. He showed me this beautifully in our encounter. In the opening, I had some problems to solve, but in the diagram position I started to become optimistic:

Kamil Miton – Jan Markos

Slovakia 2016



All the knights have been exchanged. Therefore, Black does not suffer much from his space disadvantage. However, his d6-pawn is weak. Black would love to cover it with his rook from d8, but this square is controlled by the troublesome b6-bishop. How to get rid of it? Perhaps it has been too courageous, and Black can try to trap it?

I calculated several lines and became enthusiastic. I decided to play for a win. However, I made a very instructive mistake – I calculated only continuations in which my opponent tried to make an instant profit. I underestimated that he can simply accept the loss of material and play on slowly, improving his pieces.

19...c5?

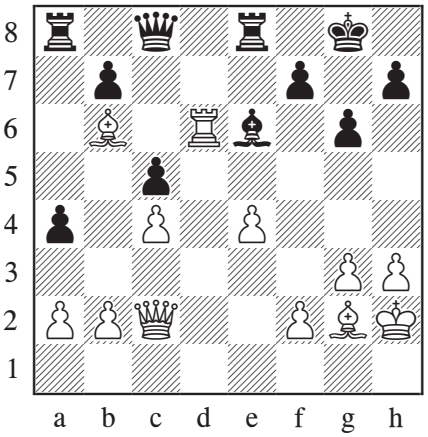
The quiet 19...♕b8 or the active 19...a4 should be enough to get an equal game. Against the latter, if White continues with 20.♖xd6 a3 21.♗d4 axb2 22.♗xb2 ♗xb2 23.♕xb2 ♗xc4, then Black is just fine.

20.♖xd6 ♗e5

This is what Black planned. The rook on d6 is under attack and it can't retreat, as after ...♖a6 White would lose his bishop. White has to sacrifice an exchange.

21.♖ad1 ♗xd6 22.♖xd6 a4

Suddenly, White's compensation was becoming pretty obvious to me. He has perfect control of the central squares, and the black pieces lack coordination. But how should White proceed?



23.b3!?

Probably not the best move, but definitely a very self-confident one. White improves his pawn structure and refuses to believe that the open a-file for the black rook in any way changes the evaluation of the position.

23...axb3 24.axb3 ♗d7

The best practical chance. Black needs to exchange White's active rook.

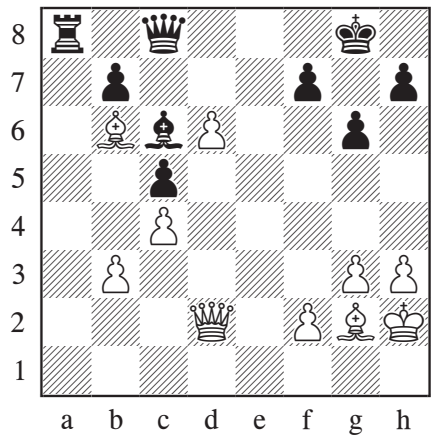
25.♕d2 ♖e6! 26.e5

26.♖xd7 ♖xb6 would spoil White's position, as the bishop on b6 controls important squares in the black camp.

26...♖xd6 27.exd6 ♗c6

In this position, I felt again that I had done a good defensive job. The unpleasant white rook has disappeared. True, now I have to cope with an advanced passed pawn instead, but after the

exchange of light-squared bishops I should be able to hold the draw. The thought that White can play for domination did not even cross my mind. He does not need to hurry. Despite his material disadvantage, it is White who rules over the board.

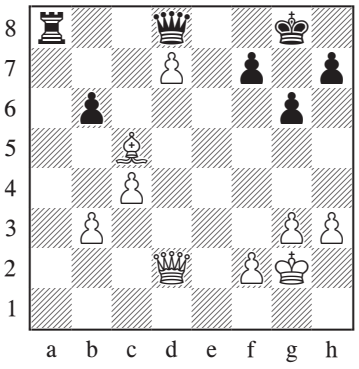


Miton played:

28.♗d5!!

This is the only move that gives White a huge advantage. Now he threatens to take on c5, and Black has no adequate response.

I calculated only: 28.♗xc5 ♗xg2 29.d7 ♕d8 30.♔xg2 b6



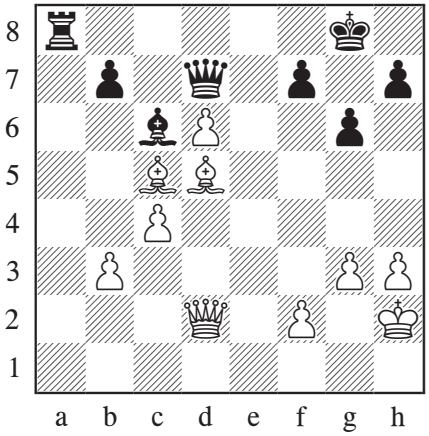
31.♗e3 (Funnily, 31.b4 is also enough for equality: 31...bxc5 32.bxc5 ♖a6 33.♕d5 ♖a5 34.♕d4 ♖a6 35.♕d5 with a repetition of moves.) 31...♖a7 32.♗xb6 ♖xd7 With an equal game.

After 28.♗xc6 ♕xc6 29.♗c7 h5, Black is also out of danger.

28...♕d7

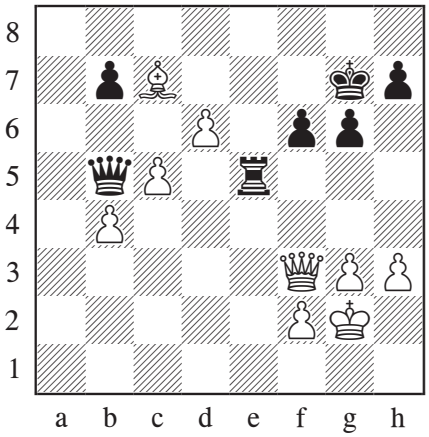
Alas, there is no way to save the c5-pawn.

29.♗xc5



Let's now skip several moves and then take a look at what happened immediately after the time control:

29...♖e8 30.♗e3 ♗xd5 31.♕xd5 ♔g7 32.b4 f6 33.♗d4 ♕f7 34.♗b6 ♕d7 35.♗c7 ♖e2 36.♔g2 ♖e6 37.♕b5 ♕c8 38.c5 ♖e5 39.♕d3 ♕d7 40.♕f3 ♕b5



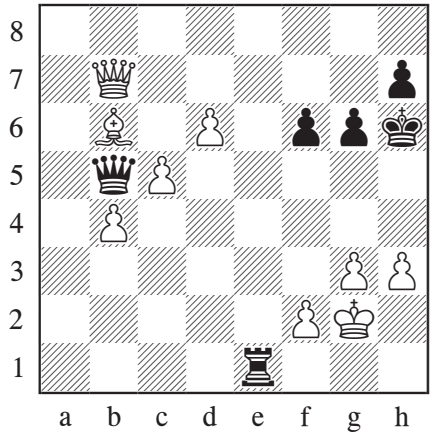
White has managed to march forward with his pawns and should be winning. However, now he has to solve a dilemma. How does he cross the a4-e8 diagonal, which is guarded by the black queen, without getting mated on the first rank? Computers suggest 41.g4!?, freeing the g3-square for the white king. But from a human point of view it is very difficult to decide to play such a move. It might in the future prove to be a decisive weakening. Miton managed to combine attack and defence in a very interesting way.

41.♗b6!

From a practical point of view, this is an excellent decision. Now Black can either return his queen to d7 and probably lose the game anyway, or go for a desperate attack, giving up the pawn on b7. I decided to try my luck in the attack.

41...♖e1?! 42.♕xb7† ♔h6

White has achieved his goal, and now he has to use the brake pedal again in order to keep his monarch safe.



43.♔h2!

The only move.

43...♕d3 44.♕g2

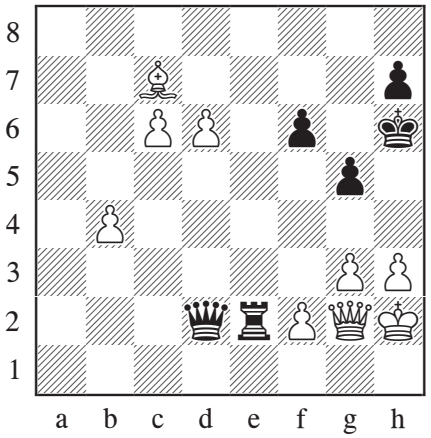
The safest way.

44.d7 ♖e2 45.c6 ♕f3 46.c7!+– is more direct, but why should White bother with tactics?

44...g5 45.♗c7

It transpires that the white pawns are perfectly able to march forward, even without the support of the queen. White intends to play c5-c6.

45...♖e2 46.c6 ♕d2



47.♗b6

White can afford to return the pawn captured on b7.

47...♕xd6 48.♕f3 ♖e8 49.b5

That's it. White's pawns have crossed the a4-e8 diagonal, and nothing can stop them now.

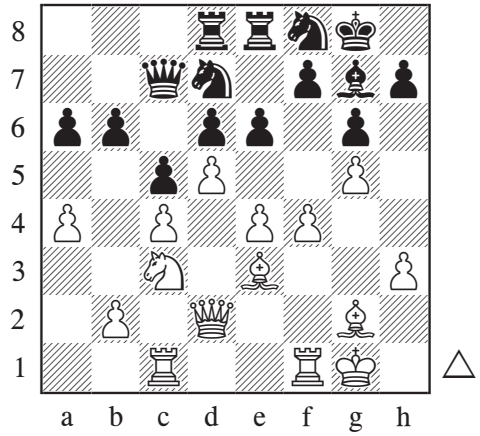
49...♔g7 50.♕f5 ♖e6 51.♗c5 ♕e5 52.♕xe5 ♖xe5 53.♗d6
1–0

A peaceful move in a tense situation can be a weapon of awesome strength. Not only is it quite often the strongest continuation, it also sends a silent message to the opponent: "You are playing against a person who can control himself."

Here is a simple example:

Jan Markos – Milan Drtina

Slovakia 2016



White's position is fantastic. He has a space advantage, as well as the bishop pair. He has also managed to force the black knights to very humble posts. Black's last move was 18...e6. Of course, instead of this move he could have tried to close the centre by playing 18...e5. Still, that would have allowed White to play 19.f5 with a strong attack.

As Black did not play 18...e5, he will certainly not play 19...e5, losing a tempo. He also will not play 19...exd5, as that would invite the white knight to the best square on the board. So, what is he planning? I decided to find out.

19.♔h1!?

It is useful to have the king not on a dark square.

19...f6?

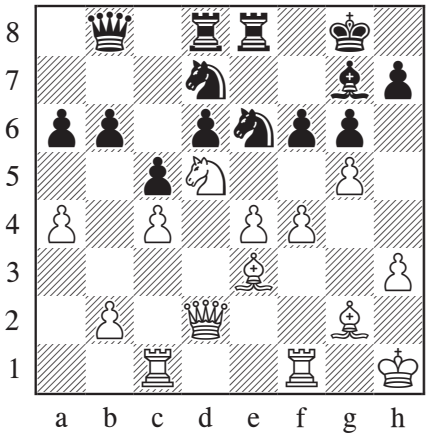
This is a positional mistake.

Perhaps the best chance is the speculative 19...♗d4!?, sacrificing a pawn for a dark-squared blockade. However, after 20.♗xd4 cxd4 21.♕xd4 e5 22.fxe5 ♘xe5 23.b3 White is simply much better anyway.

20.dxe6 ♘xe6

Here lies the problem. After ...f6 Black can't retake on e6 with a pawn, and thus the white knight gets the d5-square. After that, Black's position will collapse.

21.♘d5 ♕b8



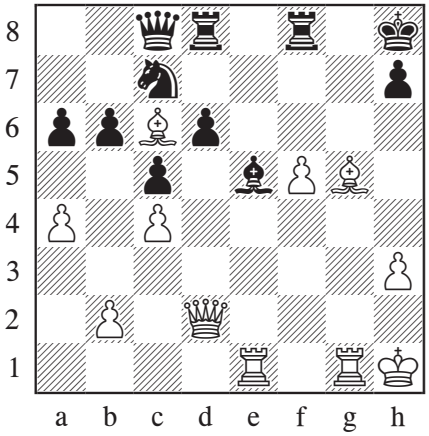
22.f5 gxf5 23.exf5 ♘c7

Now White wins with an attack on the kingside.

24.gxf6 ♘xf6 25.♘xf6†

25.♗h6 is even better, for example: 25...♖d7 26.♗xg7 ♘fxd5 27.♗h6+–

25...♗xf6 26.♗g5 ♗e5 27.♖g1 ♔h8 28.♖ce1 ♖f8 29.♗c6 ♕c8



30.♗xd8?
Too materialistic.

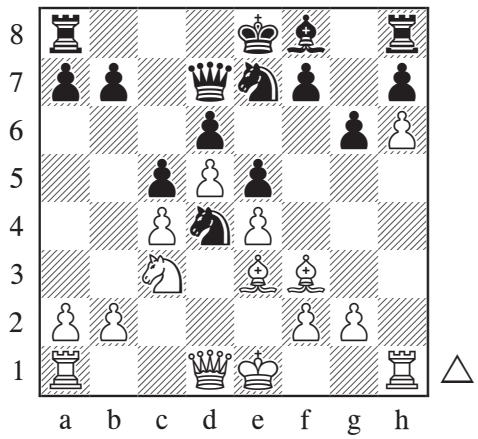
White can win on the spot: 30.♖xe5! dxe5 31.♕g2! The mate on g7 can be prevented only at the price of huge material losses.

30...♕xf5??
Overlooking White's reply.

31.♖xe5
1–0

Jan Markos – Peter Petran

Slovakia 2013



Black has managed to install his knight on the dominant d4-square. However, that is the only positive aspect of his position. And frankly, White can exchange it at any moment for his bishop or knight. Therefore, it is appropriate to see the d4-knight more as a precursor of a passed pawn, which may soon originate on this square. Black is lacking his important light-squared bishop, and also his other bishop is facing problems, oppressed by the h6-pawn. White is much better.

I really wanted to play:

13.♗g4
This brings my bishop closer to the potentially weak e6-square. However, I could not immediately find the right answer to the obvious reply:

13...f5
It took me more than ten minutes until I realized that I am by no means obliged to force events, but can simply play:

14.♗h3!
Black has problems along the c8-h3 diagonal. In the game, Petran choose an imprecise move and had problems with coordination until the very end of the game.

Instead of the effective bishop retreat, the forcing 14.exf5 gxf5 15.♗h5† ♘g6 would have given Black excellent chances to fight for equality.

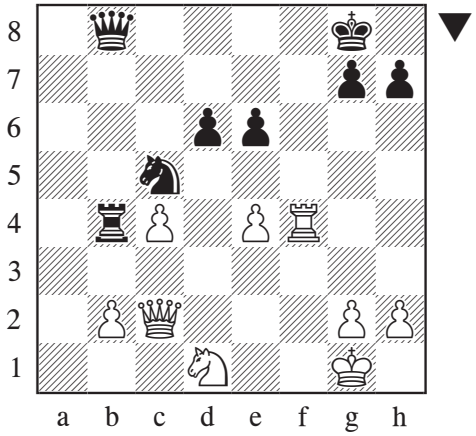
When preparing the Slovak version of this book, I thought that the smart 14.♗h3 would be the point of this example. However, the computer proved me wrong. Although White remains better after 14...0–0–0 15.0–0 ♔b8, Black would have good chances to get rid of the pin.

Therefore, returning to the diagram position, it is perhaps best not to force matters and play simply 13.a3, preparing a typical queenside pawn march.

It is true that it is much easier to play calmly when you have a big advantage. However, in the first example of this chapter, Miton showed that he was capable of playing for domination even when the exchange down. In the next example, I was only a pawn down, but that was sufficient for me to lose my inner peace.

Tadeas Kriebel – Jan Markos

Slovakia 2014



In the opening (a Sveshnikov Sicilian), I lost a pawn for some (barely adequate) compensation, and I did my best to keep this compensation alive for a dozen moves. Still, all the time I was a bit afraid it would disappear and that I would simply be a pawn down. Therefore, I did not hesitate much when I spotted the following opportunity:

30...d5?

Had I been able to suppress my fears, I would probably have been able to notice 30...♕b6!. All my pieces are in dominant positions and their pressure more than compensates for White's extra pawn. For example, 31.♕f2 ♘d7 and it is not clear how White should untangle his pieces. I feel that White having to return his extra pawn and ending up in an inferior position is a more likely scenario than his being able to activate his poor d1-knight while keeping his material advantage.

31.♖f1 ♘xe4 32.cxd5 exd5 33.♕c6 ♕b6† 34.♕xb6 ♖xb6 35.♘c3 ♘xc3

The position had simplified and the game ended immediately in a draw.

½–½

When is it safe to slow down an attack? Your pieces have to dominate, to control all the important squares. If they do so, there is no need to look for an instant decisive blow. In fact, the domination of the pieces is one of the possible results of an attack, in addition to mate or material gains.

In some positions, you might have an intuitive feeling that your attack should be correct, but you are not able to support your feeling with calculation. If this happens, try to broaden your thinking about the position. Quite possibly you can play for domination at some stage of the attack. Try to look at all the calm, good moves, which improve your pieces.

Try to use your brake pedal! Your attack will end in a crash less often.

Chapter 15

Walking without Moving, Progress without Change

Uncovering a fictional chess sect

Recently I have managed – entirely by chance – to make a major discovery that surely rewrites the history of chess. I have suddenly understood why some players play strongly with such ease, while others remain patzers, even though chess is their lifelong love and they devote to it an unlimited amount of time and effort.

Dear friends, it's like this – there is secret, esoteric wisdom in the world of chess, and it is accessible only to the chosen ones. There are secret societies and fraternities in the world of chess, not unlike the Freemasons or the believers in the Holy Grail.

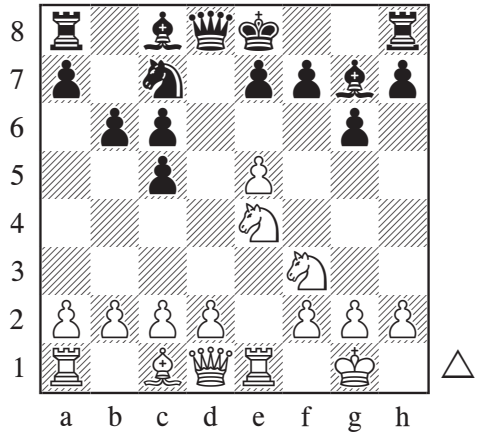
I managed to discover the most influential of these chess fraternities, members of which were the strongest chess players of the past and present, among them World Champions. This fraternity was founded somewhere in the early 19th century by an unknown Zen master, and Zen is also the basis of the doctrine.

In the spring of 1854 that unknown Zen master gave chess players in a Vienna club this koan: "Is it possible to walk without moving? Is it possible to progress without changing anything?"

A secret chess sect has been trying to find a solution to this koan for generations. They are called the ***Moveless Movers***. Dutch grandmaster Jan Timman, once the challenger in a world championship match, is surely a member of this secret fraternity of ***Moveless Movers***. However, he didn't progress far in the order; he probably remained only a novice. He solved the koan in a game with Kramnik, but in an entirely ordinary way.

Jan Timman – Vladimir Kramnik

Riga 1995



Timman played:

10.♘f6† ♔f8

Taking the knight is wrong: 11...exf6 12.exf6† ♔f8 13.fxg7† ♔xg7 14.b3 The long dark diagonal would become a source of permanent problems for Black.

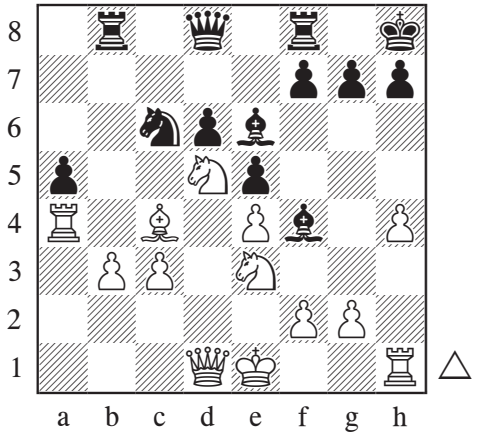
11.♘e4

Although White's pieces are standing exactly as before, he has improved his position, because Black cannot castle anymore.

Peter Leko got a little bit further in the fraternity. His game with Radjabov proves it:

Peter Leko – Teimour Radjabov

Linares 2006



The Hungarian grandmaster played the very strong:

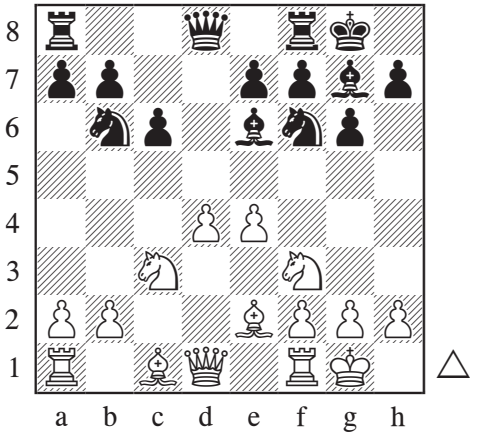
19.♘f5!! g6 20.♘fe3

Although White's position remained unchanged, he acquired an interesting possibility of play against the opponent's king because, thanks to the new position of the black g-pawn, there is a threat of h4-h5 to open the h-file.

Czech grandmaster Pachman was surely among the superiors of the ***Moveless Movers***. In a game played at the 1958 Olympiad in Munich, he showed his mastery in all its glory.

Ludek Pachman – Arturo Pomar

Munich (ol) 1958



Pachman started by playing:

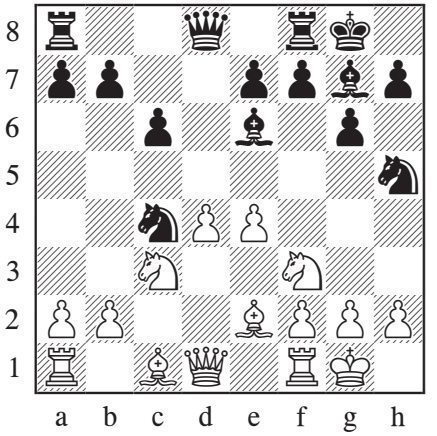
11.♗f4

Black in turn chased the bishop:

11...♘h5 12.♗e3 ♘c4

Pachman now returned his bishop to the original square:

13.♗c1

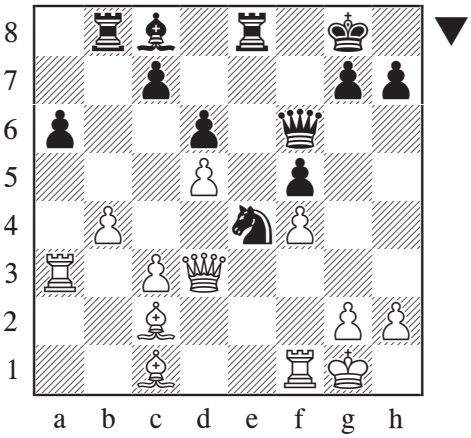


It is as if Pachman didn't do anything at all – and yet he gained a significant advantage. Since both Black's knights are exposed, the Spanish grandmaster cannot prevent the threat of ♘g5xe6.

Moving up the ladder of the secret fraternity, we are coming right to the two leaders, gurus of the order. We don't know about all of the high priests, but what we do know is that in the past the great Aron Nimzowitsch himself was at the head of the ***Moveless Movers***. His game with Behting, about which the Dane wrote in his book *Chess Praxis*, proves it.

Karl Behting – Aron Nimzowitsch

Riga 1910



Nimzowitsch wrote: "White is planning to centralize (♗c1-e3-d4) and then Black would be somewhat worse off. How can the planned set-up be prevented? ... I count the following combination among my favourites."

Black played:

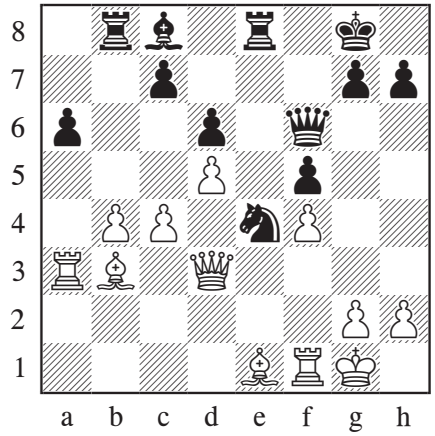
21...♕f7 22.♗e3 ♘f6 23.♗b3 ♗b7 24.c4

We shall keep following Nimzowitsch's analysis; Behting played the weaker 24.♖d1.

24...♗c8 25.♗d2 ♘e4 26.♗e1 ♕f6

After six moves, all Black's pieces have returned to their original posts, as if they never

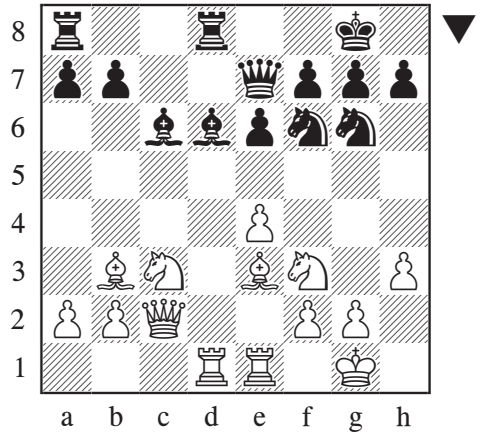
moved at all. However, the transfer of White's bishop to the long diagonal has been effectively prevented.



Nobody will be surprised that current top guru of the order of ***Moveless Movers*** is the former World Champion, Vishy Anand. Nobody has so far been able to imitate his solution of the koan in a game against Karpov.

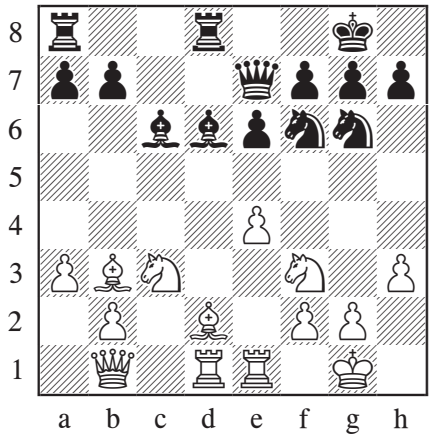
Anatoly Karpov – Viswanathan Anand

Brussels 1991



In this seemingly boring position, Black began to skilfully manoeuvre, creating one threat after another, and Karpov was forced to defend carefully.

18...♖dc8 19.♕b1 ♗b4 20.♗d2 ♖d8 21.a3 ♗c5 22.♘a4 ♗d6 23.♘c3

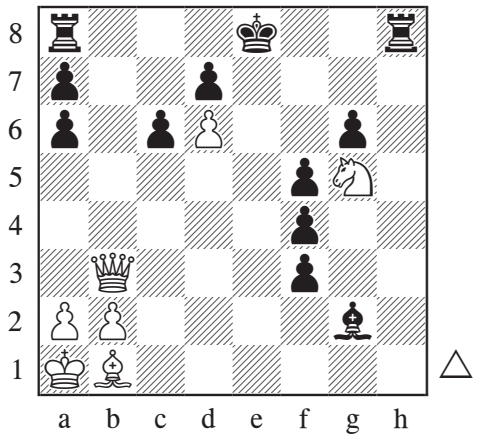


Or actually... Did Black move at all? His pieces are standing just like they always have been; but the white pieces are standing on worse squares.

The tentacles of the secret fraternity also gripped the world of chess problems a long time ago. Here is the evidence:

Nikola Petrovic

Problem 1959, 1st prize



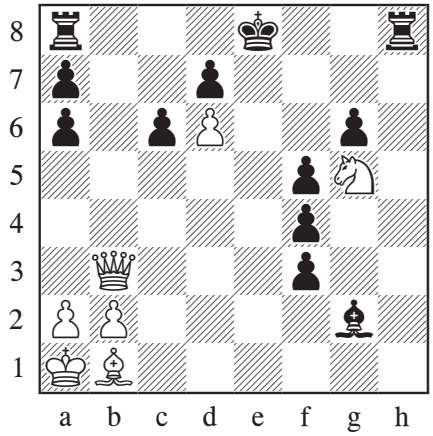
Mate in 8 moves

1.♕b7

It is quite interesting that my Stockfish 8 experiences serious difficulties finding the solution. All it sees is the mate in 9 moves: 1.♕f7† ♔d8 2.♘e6† ♔c8 3.♘c5 ♖d8 4.♗d3 ♗f1 5.♗xf1 ♖b8 6.♗xa6† ♖b7 7.♕b3 ♖h8 8.♕xb7† ♔d8 9.♕xd7#

1...♖d8 2.♕b3 ♖a8

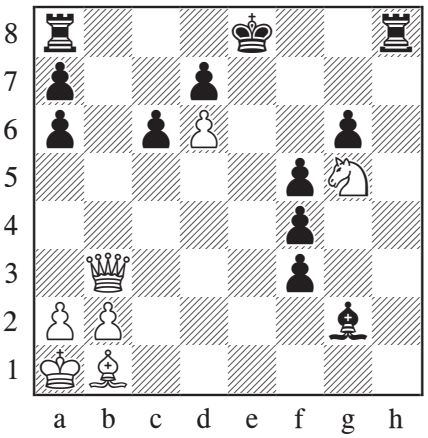
After 2...♖f8, the route to mate is considerably shorter: 3.♕c3 ♖a8 4.♕g7 ♖f7 5.♘xf7 f2 6.♕g8#



3.♗d3 ♖h1†

3...♗f1 4.♗xf1 f2 5.♕f7† ♔d8 6.♕f6† ♔c8 7.♗xa6† ♔b8 8.♕xh8#

4.♗b1 ♖h8



Now that Black can no longer castle on either side, the white queen comes in for the kill:

5.♕c3 ♖h7 6.♕f6 f2 7.♘xh7 f1=♕ 8.♕e7#

To create such a problem in 1959, without any aid from engines, is pure witchcraft.

I assume that under the weight of the many pieces of evidence presented in this chapter, the secret fraternity of ***Moveless Movers*** will finally come out of its shell, show its true face, and share its knowledge with the rest of the chess community. I personally would be very happy to glance into Nimzowitsch's *My Secret System*, whose only copy is hidden somewhere in the underground bunkers of the fraternity...

Part IV

About Openings

The majority of chess literature is about openings. It is easy to write a book about the theory of this or that opening, and chess players like to buy these books because it gives them an (illusory) sense of security. However, writing about general rules which apply in openings is something quite different. This is what I will try to do in this part.

In ***Find Five Differences*** you will learn why is it important to have basic knowledge even about openings that you don't play, and how you can use comparison to find out how you are standing in an unfamiliar position.

Equal and More Equal will change your point of view on the concepts of advantage and equality, and show you how to choose opening variations that are tailored for you.

The Tragedy of the Knight is devoted to one particular phenomenon which is repeated in various openings. It is that in blocked positions, Black usually has difficulties placing all four minor pieces properly – one of them often stands badly.

And in ***The Scheme*** I will show you how to set up your repertoire so that you won't have to study theory all the time, and yet will still achieve perfectly playable positions.

Chapter 16

Find Five Differences

The method of comparison

In comics for Slovakian children, there is often a little puzzle called, "Find five differences." On the page, there are two pictures next to each other, which seem to be the same but differ in small details. In the picture on the left, there are three leaves on the twig, while on the right side there are only two. The boy in the picture on the right has a birthmark above his right eye, while there is no birthmark on the left side. You notice some of the differences immediately, but it takes longer to find the rest of them.

You can also play this game at the chess board, especially in the opening. Imagine, for example, that your opponent deviates from the main line, and you suddenly find yourself in an unfamiliar position. You don't know whether the opponent's move was good or not, whether he stands better or whether the position is still balanced. And you have no clue how to continue the game. How should you deal with this?

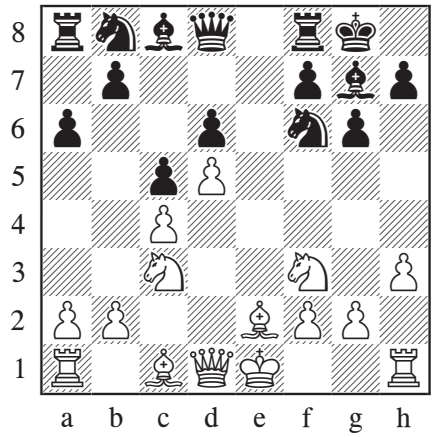
One of the most effective ways how to get around these difficulties is to **compare the unfamiliar position with a similar position whose strategic character and evaluation you know**. Such a position, of course, may occur in a different opening or a different line, but it is important that they have the same strategic features (in particular, the same pawn structure).

Let's have a look at a simple example:

Jan Markos – Pierluigi Piscopo

Sardinia 2011

1.d4 ♘f6 2.c4 c5 3.d5 g6 4.♘c3 ♗g7 5.e4 d6 6.♘f3 e6 7.♗e2 0–0 8.h3 exd5 9.exd5 a6

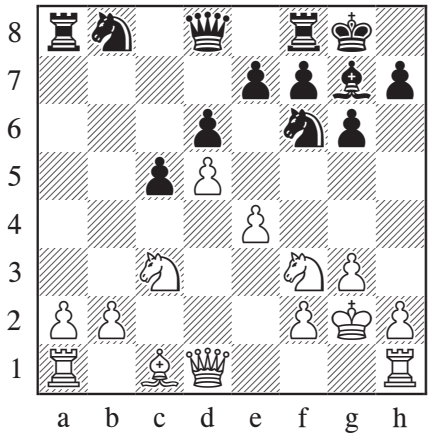


Black has clearly indicated with his last move that he is ready to play the gambit-like ...b5, sacrificing a pawn for active piece play and pressure on the a2 and b2 pawn duo. Is it necessary to prevent this with the move 10.a4, or can White ignore the opponent's plan, confident that Black wouldn't get enough compensation for the pawn?

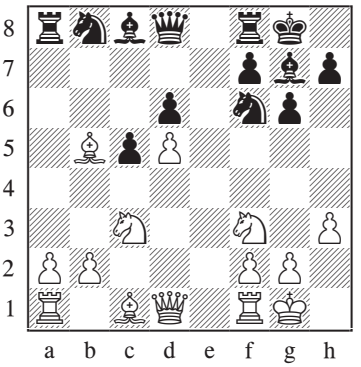
It is difficult and tiring to solve this issue purely by calculating lines. To decide according to your mood is also incorrect – you should do that only if you first convince yourself that both possibilities are objectively roughly equivalent.

The easiest way to solve our dilemma is with a comparison. We recall the main line of the Benko Gambit, whose main tabiya occurs after the moves:

1.d4 ♘f6 2.c4 c5 3.d5 b5 4.cxb5 a6 5.bxa6 ♗xa6 6.♘c3 d6 7.e4 ♗xf1 8.♔xf1 g6 9.♘f3 ♗g7 10.g3 0–0 11.♔g2



Let's make some more moves in the game Markos – Piscopo (10.0–0 b5 11.cxb5 axb5 12.♗xb5), and let's compare both positions.



In both positions, Black is to move.

As for the pawn structure, in Markos – Piscopo, the e-pawns are missing. That probably suits White because he gains counterplay against the d6-pawn, while in the Benko Gambit he only gradually searches for any activity. (This pawn is weaker also because the g7-bishop has left the a3-f8 diagonal.)

Furthermore, the c8-bishop is still not developed, while in the position from the Benko Gambit it is gone.

Thirdly, the white king is standing slightly safer.

And fourthly, White has already played h2-h3, which is a move that fits quite well

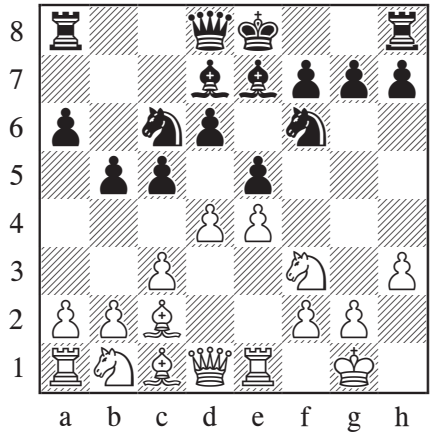
into the Benko-type positions, the transfer ...♘g4-e5 being among Black's main plans.

The position from the Benko Gambit is theoretical, and so somewhere between equalizing and an advantage for White. If, after 10.0–0, Piscopo sacrificed a pawn, there would arise a position in which White, compared to the tabiya from the Benko Gambit, has 4 (!) different 'technological improvements'. And so he has to be much better.

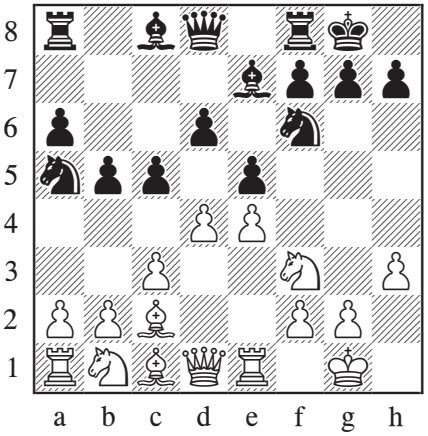
Prophylaxis with 10.a4, therefore, is not necessary; the strongest move is castling.

Sometimes, positions from two completely different openings miraculously 'come together' at the beginning of the middlegame. For example, one sideline of the Sicilian Defence leads to a position which is indistinguishable from the Chigorin Variation of the Spanish Opening.

Sicilian Defence: **1.e4 c5 2.♘f3 ♘c6 3.♗b5 d6 4.0–0 ♗d7 5.c3 ♘f6 6.♖e1 a6 7.♗a4 b5 8.♗c2 e5 9.h3 ♗e7 10.d4**



Spanish Opening: **1.e4 e5 2.♘f3 ♘c6 3.♗b5 a6 4.♗a4 ♘f6 5.0–0 ♗e7 6.♖e1 b5 7.♗b3 0–0 8.c3 d6 9.h3 ♘a5 10.♗c2 c5 11.d4**



In the position arising from the Sicilian Defence, Black has an extra tempo. His knight is already on c6, where the a5-knight in the Chigorin Variation often heads. (The difference has arisen because in the Spanish, Black needs three moves to get the b8-knight to c6, while in the Sicilian, one move is all he needs. White, on the other hand, saved a tempo in the Sicilian by not taking two moves to retreat the bishop from a4 on c2.)

However, the move ...♗c8-d7 may not be so useful. If White plays d4-d5, the value of a tempo drops quite noticeably in the closed position.

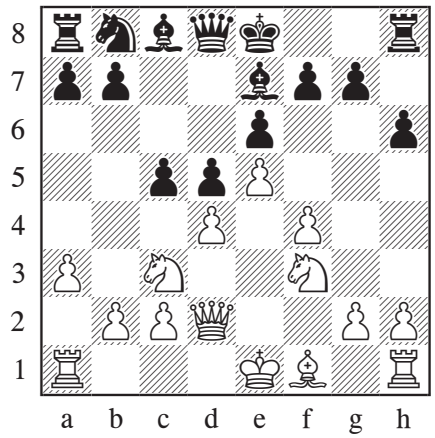
The positions are both approximately equal.

Finally, I will show you a slightly more complex example. We will compare a relatively unknown position from the Trompowsky Attack with one of the main variations of the French Defence.

Zhang Penxiang – Evgeny Alexeev

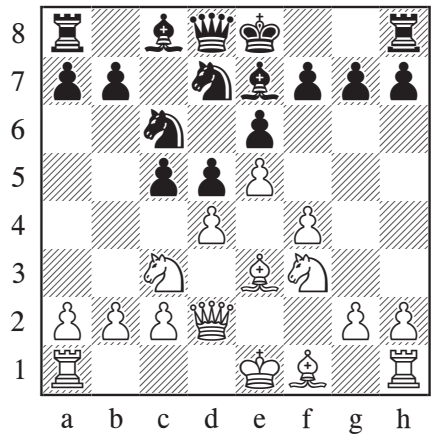
Nizhnij Novgorod 2007

1.d4 ♘f6 2.♗g5 e6 3.♘c3 h6 4.♗xf6 ♕xf6 5.e4 ♗b4 6.♕d2 d5!? 7.e5 ♕d8 8.a3 ♗e7 9.f4 c5 10.♘f3



Alexeev played the opening in an original way; rather than 6...d5!?, Black usually plays 6...d6 in an effort to harmonize the pawns with the c8-bishop. The structure in the centre now has a purely French character – therefore it makes sense to look among the positions arising from that opening for a twin of the current position.

French: **1.e4 e6 2.d4 d5 3.♘c3 ♘f6 4.e5 ♘fd7 5.f4 c5 6.♘f3 ♘c6 7.♗e3 ♗e7 8.♕d2**



As far as tempos are concerned, Alexeev does not seem to be well off. His knight is still on b8, while in the French that knight is already on c6. Also, the move a2-a3 is quite handy for White because it allows him to fight (after b2-b4) for the central squares c5 and d4. Whether the move ...h6 is also handy for Black, I cannot say. On the one hand, White doesn't have the move ♘f3-g5; on the other hand, the b1-h7 diagonal is slightly more vulnerable and so it will be difficult for Black to castle on the kingside.

However, Alexeev has achieved a small strategic miracle. He exchanged the inactive and hindering d7-knight for the very important e3-bishop, which is fighting for the central d4-square. He has not only improved his chances in the fight for this square, but also has the bishop pair and is less cramped. Exchanges usually suit the side which has less space.

It is difficult to objectively assess all of these advantages and disadvantages. However, I would prefer to play Alexeev's position rather than the Black side of the French position.

The method of evaluating unfamiliar positions by means of comparison is a very useful tool. Once you learn it, you will feel as if you have been given a compass while travelling through the wilderness. You won't have to memorize so much theory, nor fear surprises so much.

In order for this method to work, you have to know a lot of different positions from various openings – not only their evaluation and the main moves, but also the typical strategic ideas and plans. Therefore, it is very important not to limit your studies only to openings that you currently play.

A one-sided chess player is a vulnerable chess player; a chess player who is confident in many different positions stands firmly on the ground with both feet.

Chapter 17

Equal and More Equal

How do you gain the advantage from an opening?

Recently, one of my pupils asked me: "How can I gain an advantage in the Petroff as White?"

I responded by quoting a joke by David Navara: *"Do not worry. Not all variations in the Petroff are equal; in some of them, Black is better."*

Many other debates from tournaments, training sessions, leagues and internet forums came to my mind, and they were all about one single topic – how to crack the tough nut called the Petroff Defence. I have come to realize that this opening has gradually become a bugbear for all those who in a chess game look for an interesting fight and for a win. Although I play 1.d4, and so this discussion doesn't affect me personally, my trainees often have to solve this question. Therefore, in this chapter, I will try to show a possible recipe for how to defeat this opening.

But first, we need to clarify the meaning of two chess terms, which are 'advantage' and 'equality'.

Many chess players understand the term 'advantage' in too narrow a perspective; they use it to describe a better position on the board. Chess programs are even able to express this 'advantage' in numbers, and so we can sometimes hear this strange sentence spoken by the younger generation: "I was winning, plus 1.8." However, this is only one 'objective' part of an advantage.

An advantage is basically anything that increases your chances to win. You can have an advantage on the clock. An advantage may lie in the fact that you know the position better than your opponent, or that you had it at home on the board, while the opponent didn't. Or it may mean that the position 'doesn't suit' your opponent, it is unpleasant for him, but you enjoy playing it. It may mean that you have a clear plan and your opponent doesn't. Or perhaps you are just a slightly better chess player. All these factors together form the 'subjective' part of an advantage.

The stronger the players are, the more important the objective part of the advantage is. Grischuk has often played seven consecutive best moves just before the time-control, even though he had only a minute left. Although boring positions don't really suit Topalov, he can still play them very well, almost perfectly. That's why he is a world-class player. If you want to succeed against a really strong player, you have to get an objectively good position.

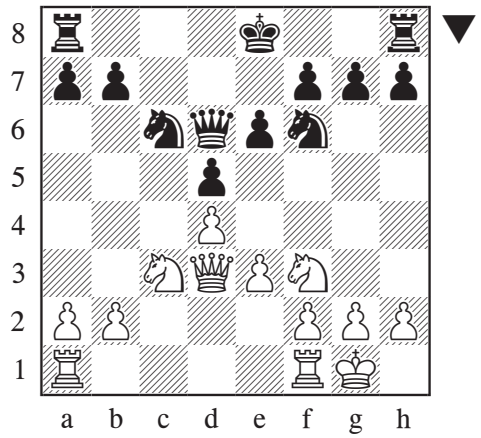
As the strength of the players decreases, the importance of the subjective part of advantage increases. Below a certain level, it is no longer important whether Rybka declares +0.21 or +0.54,

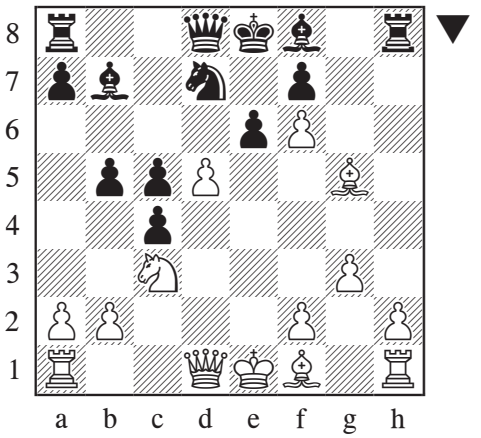
because the players are not strong enough to feel and make use of this difference. It is much more important whether they are able to play the position properly, with minimal errors.

Also, the term 'equal position' is usually understood, too simplistically, as a position in which the computer shows 0.00 or something close to it.

However, the truth is that (paraphrasing Orwell) "some positions are equal, but some are more equal than others."

Both of the following positions (in both Black is to move), Rybka correctly assesses with the sign '='. However, the first one is 'more equal' than the other.





While in the first position there is almost perfect symmetry, in the second, not even material is equal. The second position is equal in the sense that the pluses for White and Black are roughly equivalent.

In the first position, your subjective advantage (home preparation, chess strength, etc.) won't really help you. The position is too banal to allow your opponent to commit a big mistake. In contrast, in the second position, your subjective advantage has the value of gold: the better-prepared player or the better tactician will win in a vast majority of cases.

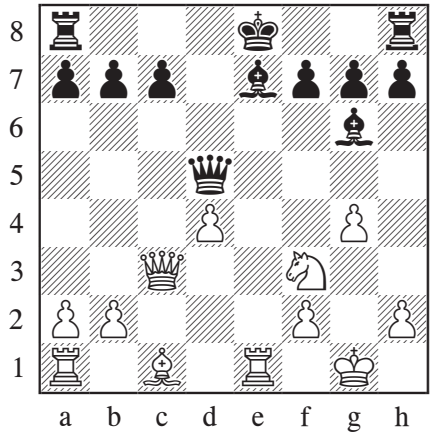
When playing for a win, there is no reason to avoid equal positions. What is important is to avoid 'more equal' positions. Always look for some inherent imbalance in the position, such as the bishop pair in return for doubled pawns, development versus material, an advantage on the kingside versus an advantage on the queenside, and so on. That gives you decent enough chances to outplay your opponent.

Now, let's return to the Petroff Defence. For a club player, it is pointless to look for an objective advantage while preparing for the game. It is not easy to gain an objective advantage in the Petroff, even for the best players in the world, and also the value of such an advantage at the amateur level is not big. Let's accept that the position we reach will be equal. However, it shouldn't be 'more equal'; there has to be a certain imbalance so that you can play well to win.

A player who is playing the Petroff Defence with the black pieces is usually a player who doesn't mind peaceful, simple positions and drawing as Black. (As you surely know, White can always enter the 5.♕e2 line, which leads to a symmetrical queenless middlegame with an extra tempo. It is almost impossible for Black to win such a position.) For such a player, two extremes are very troublesome: first, when he comes under a strong attack; and second, when he himself is forced to attack.

An equal position in which Black comes under a strong attack occurs, for example, in the following variation:

1.e4 e5 2.♘f3 ♘f6 3.♘xe5 d6 4.♘f3 ♘xe4 5.d4 d5 6.♗d3 ♗e7 7.0–0 ♘c6 8.c4 ♘b4 9.cxd5!? ♘xd3 10.♕xd3 ♕xd5 11.♖e1 ♗f5 12.g4 ♗g6 13.♘c3 ♘xc3 14.♕xc3



Black has to enter this position; all the moves after 9.cxd5 are practically forced. The position is equal, but this equality is created by the mutual balancing of two huge pluses: on one side of the scale there is Black's positional advantage (two bishops, the better pawn structure); on the other side of the scale there is White's lead in development (the black king is stuck in the centre).

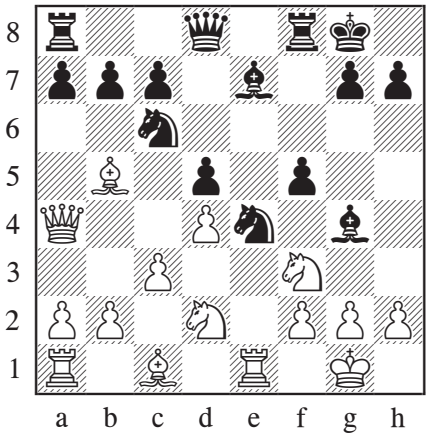
Black has to defend accurately to survive White's dangerous initiative. I am absolutely sure that against a good tactician who has prepared the position at home, the great majority of amateur chess players would have only tiny survival chances with Black.

However, perhaps you are not an attacking player. You prefer solid positional chess and you don't mind defending, provided your position is sound. So, here is the line for you:

1.e4 e5 2.♘f3 ♘f6 3.♘xe5 d6 4.♘f3 ♘xe4 5.d4 d5 6.♗d3 ♗e7 7.0–0 ♘c6 8.♖e1

Instead of 8.c4.

8...♗g4 9.c3 f5 10.♕b3 0–0 11.♘bd2 ♘a5 12.♕a4 ♘c6 13.♗b5



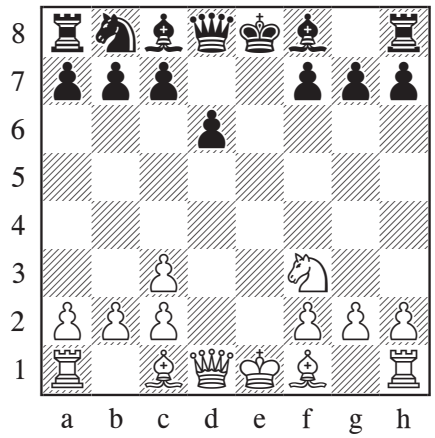
This position is – from the strategic point of view – the exact reverse of the previous position. It is also equal, but in a completely 'opposite' way. White has a long-lasting positional advantage, based on the weakness of the e5-square. If he manages to oust the c6-knight and play ♘e5 and f2-f3, he will be strategically winning. Black's counterplay is based on the (currently) strong e4-knight, and on the fact that he is able to move his pieces to the kingside more quickly.

While in the previous variation Black was forced to defend carefully, in this variation he

is forced to aggressively attack the white king, even at the cost of sacrifices. If he tries to play this position peacefully and 'positionally', he will be significantly worse within a couple of moves. However, lovers of the Petroff don't like to attack aggressively...

We have created an imbalance of "initiative versus positional pluses" in both variations, in the first one with White having the initiative, in the second one, vice versa. White, however, might wish for a different kind of imbalance, such as "wing versus wing".

1.e4 e5 2.♘f3 ♘f6 3.♘xe5 d6 4.♘f3 ♘xe4 5.♘c3 ♘xc3 6.dxc3



In this variation, White has created a pawn structure that Petroff fans are not accustomed to. He has also gained faster development and pressure along the central d-file. (Black's compensation lies in the fact that White has doubled pawns.) In addition, White plans to castle on the queenside. If Black hides his monarch on the kingside (castling on this side is much simpler to prepare, because all you need to do is move the f8-bishop, rather than three pieces), a position with opposite castling occurs, and so the imbalance of "wing versus wing" is created.

Preparation for a chess game is similar to the preparation for investing. If you intend to invest and you define your goals with the vague, "I want to make money," you will probably end up in the red. Similarly, chess preparation where the main goal is to "gain an advantage" will most likely not be very efficient.

Before investing, it is important to define in what time scale we want to make money, what risks we are willing to take, how much money we have, and in what area we want to invest.

Also in chess, it is important to first make clear where your chances against this particular opponent lie. Are you a better tactician? Do you use your time in a more effective way? Then you can think about what type of position would suit you best against this opponent. Should it be a tiring manoeuvring game? Or rather a tactical storm? What kind of imbalance do you want to create? Only after these preliminary thoughts should there come the choice of an opening line.

A chess player who has learned to use the concept of the subjective advantage, and who can distinguish equal positions from more equal ones, will find out after some time that no opening is an unsolvable problem. Not even the Petroff Defence.

Chapter 18

The Tragedy of the Knight

About the piece which suffers the most in blocked positions with a white d5-pawn

Many players waste lots of time and effort studying openings. They follow the theoretical novelties, carefully select their repertoire, and analyse every major variation using a computer. But once their theoretical knowledge comes to an end, they play badly, because they absolutely don't understand the position. And so they lose the advantage which Stockfish or Houdini has promised them.

It is much more appropriate to approach openings from the opposite end.

Instead of analysing all the lines of an opening separately, it is better to try to understand what they all have in common, what the main theme of the opening is. A proper understanding of the main features of a specific opening helps you much more than hours spent over sharp variations.

What features should you focus on? What is typical for this or that opening? The important aspects are mainly the long-term strategic factors, the characteristics of the position which don't change very often during the game. Such factors could be, for example, the placement of kings (since they don't often change their position in the middlegame), the relative value of the pieces which remain on the board after exchanges (for example, two bishops versus bishop and knight), or the central pawn structure.

The number of playable central pawn structures is lower than the number of playable openings, as the same pawn structure may occur in several different openings. Therefore, it makes good sense not to study a specific opening, but to focus directly on the pawn structure. After all, the right plan depends on the current position of the pieces on the board, and not on the opening which was played. For example, an isolated pawn may arise from the Panov Attack as well as from the Queen's Gambit; but even though it arises from different openings, the plans of both sides in this type of position remain the same.

In this chapter, I want to focus on the positions in which White manages to advance a pawn to the d5-square. Such positions arise not only from the Spanish Opening or the King's Indian Defence, but also from, for example, the Modern Benoni.

When White wedges one of his pawns into the opponent's half of the board (on e5 or d5), Black is usually left with too little space to comfortably accommodate all four of his minor pieces.

And so, if he is not able to exchange at least one minor piece, then one knight or bishop will probably appear on a square where they would prefer not to be standing. In the French Defence, this poor piece is Black's light-squared bishop. **In a position with a white d5-pawn, it is usually Black's b8-knight.**

The d5-pawn controls the most natural square of development for the black knight, the c6-square. Furthermore, White often plays the advance d4-d5 after Black forces him with ...♘b8-c6 to act in the centre. The attacked knight must then hide somewhere on the edge of the board.

Knight on a5

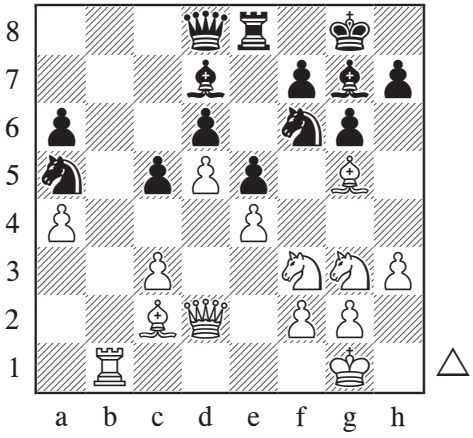
Very often, especially in the Spanish Opening, the knight jumps from c6 to a5. As White's light-squared bishop often stands on b3, this jump makes perfect sense.

However, the knight is rather exposed on a5; its only escape route sometimes being the thorny manoeuvre ...♘a5-b7-d8.

The knight was doing very badly, for example, in the following game:

Mikhail Tal – Svetozar Gligoric

Leningrad 1973



25.c4!

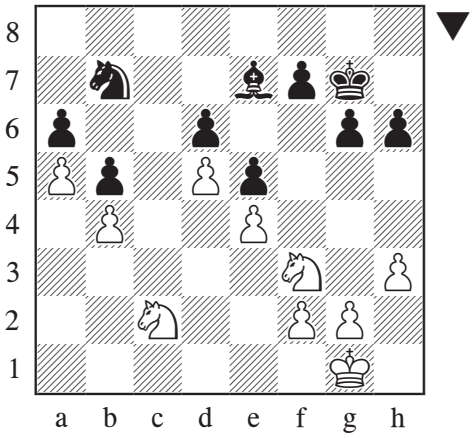
This obliges the black queen to defend the knight forever. Since there is a threat of ♕c3 followed by ♗d2, Black decided to capture:

25...♘xc4 26.♕d3 ♘a5 27.♕xa6

However, the difficulties of the black knight were still far from over.

Boris Spassky – Ratmir Kholmov

Yerevan 1962



This is an example from the later phase of a game. With a well-timed b2-b4, White has managed to expel the a5-knight to b7, where it doesn't have any sensible work to do, and is also a tactical weakness. Thanks to the unfortunate position of the knight on b7, White threatens to play ♘c2-a3xb5 and to march with the a-pawn. Kholmov considered his position to be so bad that he played:

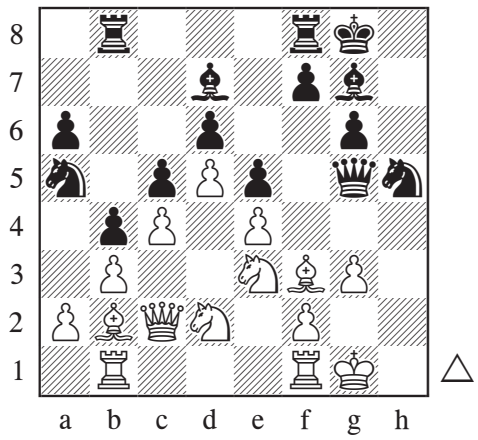
30...♗d8

With the idea of sacrificing the poor knight for two pawns with ...♘xa5.

Although the following example doesn't belong among those Spanish ones, (the Yugoslav Variation of the King's Indian Defence was played), it doesn't really differ from the previous examples. Black has 'forgotten' his knight on a5, and White took advantage of its absence for immediate action in the centre.

Mihail Marin – Viktor Bologan

Sanxenxo 2004



21.♗xh5! ♕xh5 22.f4!

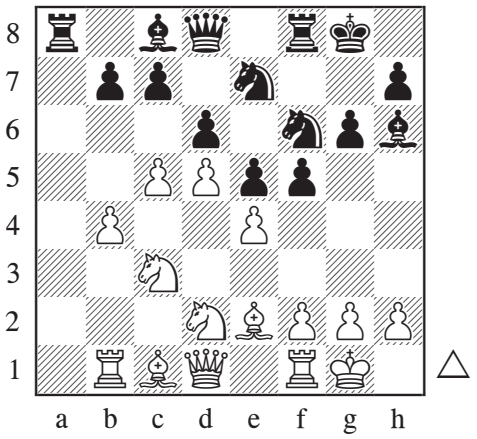
Black had to face the clash in the centre while being practically a piece down.

Knight on e7

In the main variation of the King's Indian Defence, the b8-knight ends up in a more central place, on the e7-square. And yet, even there it can get into trouble. Although I have already mentioned one such example in the chapter *Understanding the Beast* (page 70), let's have a look at one more similar example.

Maxim Rodshtein – Jan Markos

Plovdiv 2009



15.f3!

White played this, even though it meant tolerating an unpleasant check on e3. The dark-squared bishops will sooner or later disappear from the board, but the e7-knight will remain locked in for a long time.

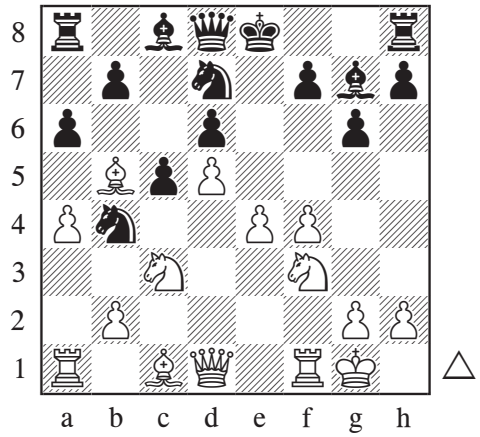
After the weaker 15.♗f3, Black might consider capturing on e4 followed by the transfer ...♘e7-f5-d4.

Knight on b4

The final example is from the following game:

Garry Kasparov – John Nunn

Lucerne (ol) 1982



The Modern Benoni has been played; Nunn used the manoeuvre ...♘b8-a6-b4 to place his knight on a seemingly very active square.

However, with the following moves, Kasparov showed that the knight on b4 is useless; the d5-pawn has safely cut it off from the events in the centre and on the kingside. Kasparov played:

12.♗xd7†!? ♗xd7 13.f5!

With a sharp attack on the kingside. In order to make White's strategy work, it is crucial that Black cannot use the hole on e5 effectively, because his knight is standing in an offside position.

The story of Black's b8-knight can continue in several different ways; many knights, for example, have suffered throughout a game on the c7-square, when Black (in a structure from the Modern Benoni) has played ...♘b8-a6-c7 and White didn't let him break with ...b5.

The aim of this chapter was not to explore in every detail the possible paths of a stray knight; rather to show you that those are very often tragic paths.

I wanted to demonstrate two things: first, that the character of the position doesn't really depend on the opening, but on the pawn structure; and second, that in the structure with a wedge on d5, Black's queen's knight usually suffers. I am convinced that if the reader remembers from this chapter only these two simple pieces of knowledge, his chess strength will benefit from it much more than from several hours spent with an engine working on some super-sharp variation in the Sicilian Defence.

Chapter 19

The Scheme

Opening for one

In openings, the majority of club players look for a way between two extremes. On the one hand, they don't want to spend hours and hours memorizing the main variations that are often full of tactics. And they certainly don't want to memorize it all over again every six months, because the river of theory has over time meandered in an unexpected direction. On the other hand, they would like to achieve a reasonable position from the opening; they don't want to always be equal with White, and worse with Black.

And so they look for the middle path between the Scylla of the main lines and the Charybdis of pure improvisation; however, this middle path is often rather hesitant and full of compromises. In this chapter, I would like to show you an interesting way out of this dilemma. I will show you how to avoid the main lines, yet still fight successfully for the advantage (or equality) in the opening. The solution is a magical word: the scheme.

The scheme is a relatively stable system of development, usually away from the main lines. It is not defined by a precise order of moves, rather by a pawn structure. The best schemes are rich in strategic content, that is, both sides have many different plans at their disposal. Ideally, the pawn structure that arises in a good scheme is neither completely fixed nor totally open, so that the game can end up in either open or closed positions. And, of course, a good scheme must be achievable in a healthy portion of a player's games, otherwise it is worthless. In brief, a scheme is an 'opening for one'.

The player heads to a certain kind of a position, almost regardless of what his opponent is doing. And since he often finds himself in this type of position, he usually knows it much better than his opponent. Even though a scheme is not objectively the most ambitious opening (if it were, it wouldn't be a scheme, but rather mainstream theory), its adherent compensates for this drawback with his superior knowledge of the arising positions.

Sometimes a player picks up a scheme in his youth and plays it persistently, creating a lifelong relationship. There is a kind of beauty in this, to devote yourself to one scheme for dozens of years and to know it perfectly. And if the scheme proves its worth and the player who plays it is one of

the best players of his time, the scheme may be named after the player – just like in a marriage. This happened, for example, to Sveshnikov and his variation of the Sicilian Defence.

Everything I have written about the scheme so far might have sounded slightly abstract. And so now I'm going to show two examples of such a relationship between a player and his scheme.

The first one is the bond between Sergei Movsesian and one particular way of playing the King's Indian Attack. It lasted only a few years; then Movsesian, on his way up, decided that he had to play more ambitiously with White, and began devoting himself to other openings.

The second example of the fusion of a player with a scheme is the Stonewall of Evgeny Gleizerov; this relationship is very stable, lasting for decades, and it is probably going to last for some years yet.

Movsesian and the KIA

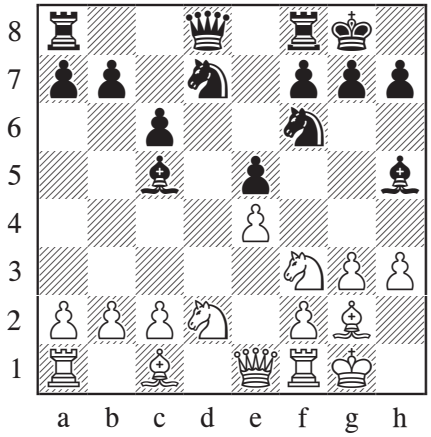
Sergei Movsesian is an incredibly creative player, who can fashion problems for his opponents even in seemingly safe and boring positions. He likes to play provocatively and force his opponents away from the places that are familiar to them and where they feel comfortable. He prefers less popular openings with a slightly unusual 'taste', rather than dealing with theorists somewhere in the main lines. Maybe that's why he is very strong in Fischer Random Chess, where there is no defined theory.

It was reluctance to fight in the main lines that led him to start playing the KIA. He usually played, in rapid succession, ♘f3, g2-g3, ♗g2 and 0–0; this kingside formation he knew very well from the King's Indian Defence, which he had played with the black pieces from his childhood. He played dozens of games in this way, many of which later reached a position identical, or very similar, to the diagram below.

Sergei Movsesian – Rainer Buhmann

Germany 2009

1.♘f3 d5 2.g3 ♘f6 3.♗g2 c6 4.0–0 ♗g4 5.d3 ♘bd7 6.h3 ♗h5 7.♕e1 e5 8.e4 dxe4 9.dxe4 ♗c5 10.♘bd2 0–0



A typical example of a scheme. The pawn structure is not immobilized, but is also not completely amorphous. The situation of Black's h5-bishop creates the strategic content in the position. This bishop has found itself 'in the desert' and White might harass it, or exchange it for the f3-knight, gaining the bishop pair. Alternatively, White can start action on the queenside and take advantage of the fact that the bishop is missing from the defence. On the other hand, White's g2-bishop stands well. It is safe and, after f2-f4, or h3-h4 and ♗h3, or even ♗f1-c4, it may become very active.

Movsesian reached this scheme quite often, because Black's development is very logical: Black develops his light-squared bishop to the kingside so that the structure d5-c6-b7 won't hinder it, and then the exchange on e4 limits the g2-bishop.

In contrast to many of his opponents, Movsesian was familiar with this position. He already knew the usual routes of the white pieces. Also, White's plan is a bit clearer than Black's. It usually looks like this:

White plays ♘c4 and attacks the e5-pawn. Then he plays ♘h4-f5 (or captures the bishop on g6), the c1-bishop often 'drops in' on g5 to provoke ...h6, which helps the f5-knight stay in position. Then White either advances the pawns on the queenside (a2-a4, b2-b4), or prepares f2-f4, or blocks the opponent's h5-bishop with f2-f3 and starts fighting for the d-file. We have already talked about the career prospects of the g2-bishop.

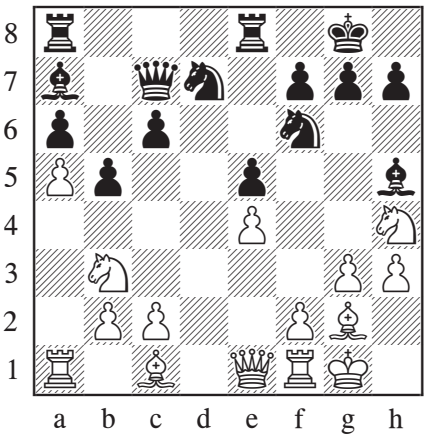
Black, on the other hand, often doesn't know what to do. Should he give up the bishop pair by exchanging the h5-bishop, or should he rather risk that this piece will be left offside? Should he play ...a5 or not? Will he answer ♗g5 with ...h6, or rather tolerate the bishop there? And what plan should Black actually choose? The seemingly active black minor pieces are standing in front of the pawns; therefore, Black can advance his pawns much less frequently than White.

Is White objectively better? Hardly. But he can play the position slowly, and if the opponent doesn't find his way (and this is not easy at all), White can easily win the game. Let's have a look at how this game progressed.

11.♘c4 ♖e8 12.a4 ♕c7 13.♘h4 b5 14.♘a5!

There is more play in the position without an exchange of pawns; Black will now also have to take care of the c6-pawn.

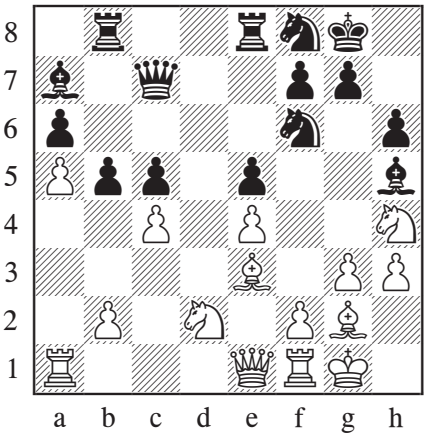
14...♗b6 15.♘b3 a6 16.a5 ♗a7



17.♗g5!

Black has already displaced both his bishops, like billiard balls on the cushion. With his last move, White is fighting for the d-file (the d8-square). If Black chases away the bishop, the h4-knight will be pleased (the f5-square!), and the h5-bishop will be sad.

17...h6 18.♗e3 c5 19.c4 ♖ab8 20.♘d2 ♘f8



White's d2-knight made a circle around the queenside and returned to its place. Both black bishops are bad. Buhmann has indicated with his last move that he would like to get his knight to the d4-square; such a strong knight in the centre would automatically guarantee him at least an equal game. Movsesian, therefore, begins to play 'fast':

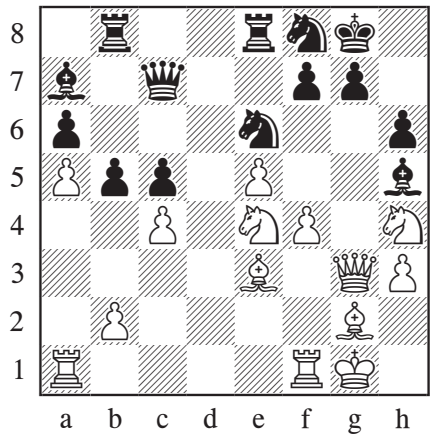
21.f4! exf4!?

Buhmann really doesn't want his light-squared bishop to end up on h7.

22.gxf4

White could have gained an exchange after 22.♗xf4, but Black would obtain excellent compensation on the dark squares. How would White heal the e5- and d4-squares, and the h2-b8 diagonal? Therefore, Movsesian wisely prefers to rely on the initiative.

22...♘e6 23.e5 ♘d7 24.♕g3 ♘df8 25.♘e4



White suddenly has an excellent position. His knight is aiming at d6, and there is no black minor piece that can stop it. The black bishops make a comical impression. Buhmann lost relatively quickly:

25...♔h8 26.♘d6 ♘d4 27.♗xd4 cxd4 28.♘hf5 ♘e6 29.♘xe8 ♖xe8 30.♘d6 ♖b8 31.cxb5 axb5 32.f5 ♘g5 33.h4 ♘h7 34.♔h2 1–0

You have surely noticed that I haven't marked any of Black's moves with a question mark. Of course, Buhmann didn't play flawlessly, but it is not the aim of this chapter to look for where exactly he made a mistake. What is important is the fact that even such a strong player as him (2600+) failed to find a sufficient weapon against Movsesian's seemingly toothless scheme. And he lost without any resistance. That would probably never happen in some standard main line.

I was personally present during the following game; we were playing the closed Slovakian Championship in Banska Stiavnica. From the next board, I observed how Black's position gradually fell apart.

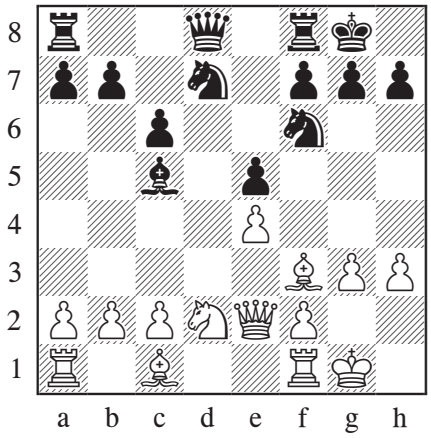
Sergei Movsesian – Jan Plachetka

Banska Stiavnica 2007

1.g3 d5 2.♗g2 ♘f6 3.♘f3 c6 4.0–0 ♗g4 5.d3 ♘bd7 6.h3 ♗xf3

Plachetka has decided to solve the problem of his light-squared bishop simply and radically. But this solution is not without consequences; White's g2-bishop is already looking forward to the weakened light squares.

7.♗xf3 e5 8.e4 dxe4 9.dxe4 ♗c5 10.♘d2 0–0 11.♕e2



11...a5 12.a4 ♕e7 13.♗g2 ♖fe8 14.♔h2 h5

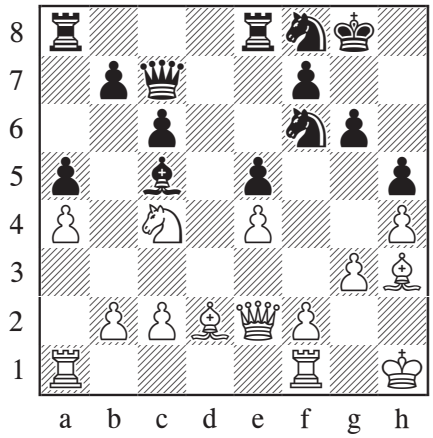
Black has made the moves ...a5 and ...h5 much too soon. Thanks to the first one, the d2-knight will feel very stable on c4;

the second one guarantees that the coming f2-f4 will be very strong.

15.h4!

One check won't kill you. White is preventing ...h4 and opening a way into the game for his bishop.

15...♘g4† 16.♔h1 ♘f8 17.♗h3 ♘f6 18.♘c4 g6 19.♗d2 ♕c7



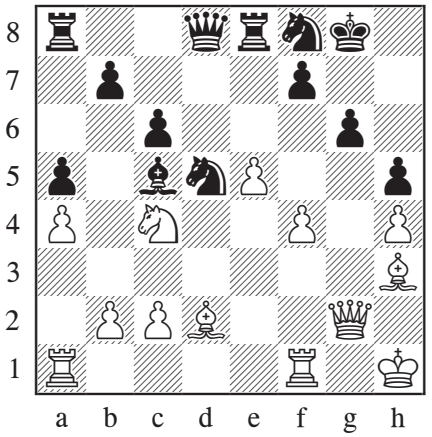
Are White's pieces standing ideally now? Is it time to attack in the centre? Many of us would probably answer, "Yes." However, the answer from Movsesian is, "No," as he found a peculiar way to improve the position of his queen:

20.♕f3 ♘6h7 21.♕g2! ♘f6

Thanks to the 'fianchetto', the white queen has disappeared from beneath the X-ray of the black rook, and begins to look towards opponent's king. Movsesian has left the a1-rook in its initial position, perhaps because it is still not clear whether it should go to the open d-file or to e1.

22.f4 exf4 23.e5 ♘d5 24.gxf4 ♕d8

After an opening full of gentle manoeuvres, there now follows an utterly violent murder. At this stage, Black was surely regretting the careless ...h5.



25.f5! ♕xh4 26.b3 ♕d4 27.fxg6 fxg6 28.♖xf8† ♗xf8 29.♕xg6† ♗g7 30.♖g1 1–0

Once again, it is not about an objective review of Black's moves. He could definitely defend himself better; after all, White's position was not so great that Black couldn't resist at all. The aim of these examples is something completely different – to illustrate what a terrible weapon the scheme can be in the hands of somebody who knows it very well.

Gleizerov and the Stonewall

The winner of the 2011 Slovakian Open Championship has been a fan of the Stonewall ever since he was a child, and they have been together through thick and thin. And he remains true to it even today, although the Stonewall is currently out of fashion.

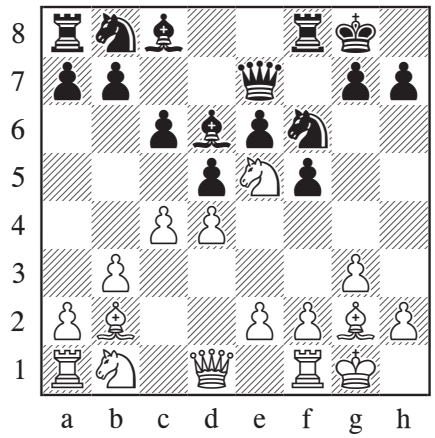
He told me after our game in the championship: *"It is a beautiful opening. Active, full of play, and White usually doesn't know it very well. And in addition – on 1.d4 I don't have to prepare with a computer at all. All I need is to understand where the pieces belong in this structure."* And he was right – my engines have broken their megahertz teeth on his 'wall'.

Let's have a look at two examples in order to understand why the Stonewall serves the Russian grandmaster so well, and why in this scheme too, strong players occasionally remind us of helpless children.

Marian Jurcik – Evgeny Gleizerov

Banska Stiavnica 2011

1.d4 e6 2.c4 f5 3.g3 ♘f6 4.♗g2 c6 5.♘f3 d5 6.0–0 ♗d6 7.b3 ♕e7 8.♘e5 0–0 9.♗b2



This is only one of many mutations of the Stonewall, which can be insidious because there is no exact way to deal with it. Put simply, every position where Black has pawns on c6-d5-e6-f5 is a Stonewall. The other pieces of both opponents can stand on a variety of squares: White can fianchetto both bishops, only one, or neither of them; Black can develop the c8-bishop to h5 or b7, and the b8-knight to d7 or a6. Black sometimes prefers ...c6-c5, at other times he remains passive in the centre, playing the wild ...g5. White sometimes captures on d5, but other times he refrains from this exchange.

In other words, it is a jungle, and it cannot be memorized. The important thing is to understand the strategic peculiarities and subtleties of this pawn structure.

However, in the case of the Stonewall, the understanding of even very strong players playing with the white pieces ends somewhere near: "Black has a weak e5-square which I must keep under control. The best place for the knight is d3, and if I exchange the dark-squared bishops, I will be better."

The Stonewall is such a rare phenomenon in tournaments that players usually pragmatically decide to ignore its existence.

And therein lies the great advantage for Gleizerov. Even if the Stonewall weren't a completely correct opening (and nobody has proved so far that it isn't), his much wider experience in this structure gives him enough of a subjective advantage to play a balanced game. And sometimes even more than that...

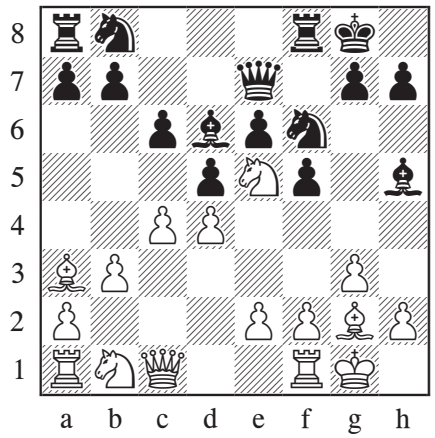
Gleizerov is basically the chess equivalent of a left-handed tennis player. Because he is serving with the opposite hand, he often finds his opponents unprepared.

Let's have a look at what happened to White in our game:

9...♗d7

Apart from this move, White also has to be ready for 9...♘bd7 and 9...b6. Each of the possibilities gives the game a slightly different character.

10.♕c1 ♗e8 11.♗a3 ♗h5



White's dreams came true – the exchange of dark-squared bishops will happen soon. Therefore, he should be doing well. Or is he? There is a pawn hanging on e2.

12.f3?

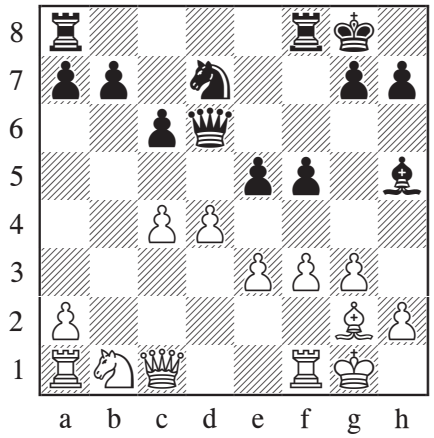
What a bad move! White's g2-bishop is now looking at the back of its own pawn, and the dark squares around the white king are weak. It is no longer so clear who actually benefits from the exchange of bishops...

White should have played 12.e3 or 12.♗xd6 ♕xd6 13.c5 followed by 14.♘c3.

12...♘bd7 13.♗xd6 ♕xd6 14.♘xd7 ♘xd7

Is there any reason Black should be worse? He has finished his development, the h5-bishop is not weaker than the g2-bishop, and the e5-square is under the control of the black pieces.

15.e3 dxc4! 16.bxc4 e5



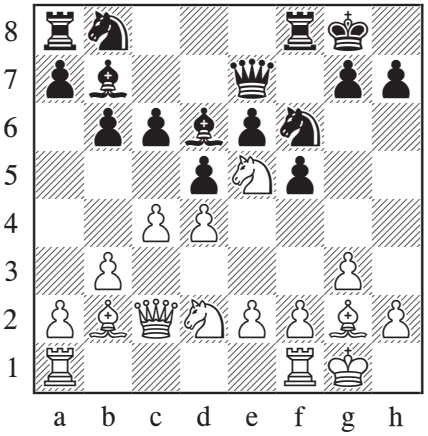
Suddenly, it becomes clear that it is White who is worse. Black has successfully healed all of the disadvantages of the Stonewall with a beneficial transformation in the centre; the weakness on e5 has ceased to exist. What's left is White's terrible development and poor control of the centre. Gleizerov won without any difficulties. And yet his opponent wasn't any amateur, but one of the strongest Slovakian players.

In the next game, White was much more cautious, playing good, logical moves. Suddenly, it became clear that this wasn't enough – although all his pieces were standing in ideal places, there was no clear plan in sight. White's game ran aground, and Black gradually took control.

Tomas Polak – Evgeny Gleizerov

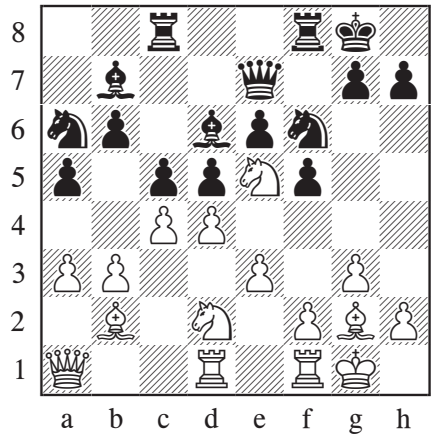
Saint Vincent 2001

1.d4 e6 2.c4 f5 3.g3 ♘f6 4.♗g2 c6 5.♘f3 d5 6.0–0 ♗d6 7.b3 ♕e7 8.♗b2 0–0 9.♘bd2 b6 10.♕c2 ♗b7 11.♘e5



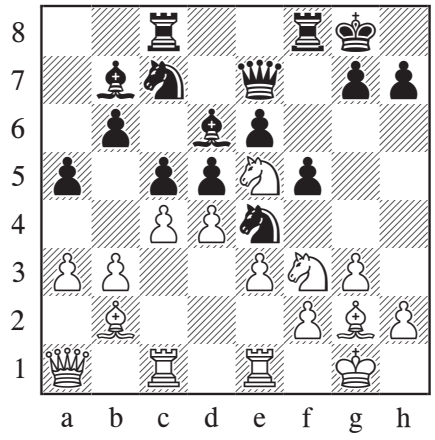
White has developed nicely, and it seems there is nothing to be afraid of. After all, he has no weaknesses and the centre is under his control. However, this doesn't make any impression on the opponent, who is slowly developing. What plan should White choose against him? White somehow doesn't have anything to play against – no breaks, no open lines, no weaknesses. It is as if Black's position were made of rubber.

11...a5! 12.♖ad1 ♘a6 13.♕b1 ♖ac8 14.e3 ♘b4 15.a3 ♘a6 16.♕a1 c5



Black has finished his development and carried out the ...c6-c5 break, and suddenly it seems that his pieces have started to cooperate better. And the same question is still there in White's head: what plan should he choose? Polak prefers not to do anything committal, but makes small, insignificant moves.

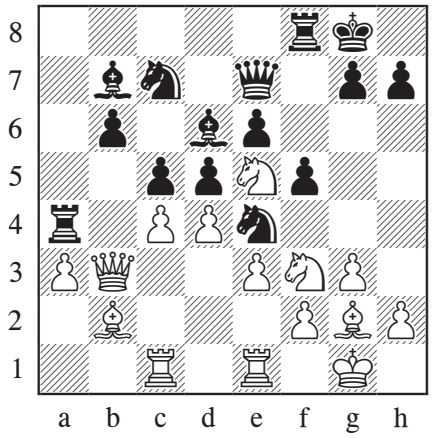
17.♖fe1 ♘e4 18.♘df3 ♘c7 19.♖c1



White has already made three moves with his rooks, and it is not clear whether he has improved their positions at all. (What good is the rook on e1?) In contrast, Black gives the impression that he knows exactly what he's doing. He builds up a dangerous initiative on the queenside:

19...a4! 20.bxa4 ♖a8 21.♕a2 ♖xa4 22.♕b3

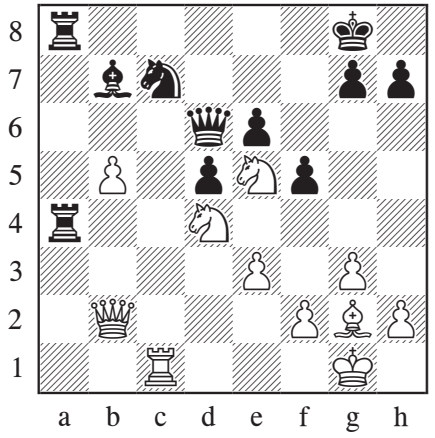
The fifth move with the queen. From White's play, we can read his confusion and helplessness.



22...b5!

Just like in the previous game, the pawn structure is transformed. Black is aiming to create a strong passed pawn on c4, and then to regain the sacrificed pawn. Polak decided to avoid this by sacrificing the exchange, but he didn't obtain sufficient compensation.

23.cxb5 ♖fa8 24.dxc5 ♘xc5 25.♖xc5 ♗xc5 26.♘d4 ♗xa3 27.♖c1 ♗xb2 28.♕xb2 ♕d6



Black was better, and after a long battle he won the game.

We have seen four games in which four strong players (three grandmasters and one international master) fell into the clutches of a scheme and lost surprisingly easily. The scheme can truly be a dangerous weapon and can bring its adherent lots of scalps and joy at the chess board. There is also the feeling of lightness which comes with breaking free from the heavy load of chess theory.

In case the readers would like to find their 'own' scheme, I can provide you with several ideas. White can, for example, play the Torre Attack: 1.d4, 2.♘f3, 3.♗g5 (or the London System with 3.♗f4). Also, Anti-Sicilian lines with ♗c4 or ♗b5 might serve you well. Another magical scheme is the English Opening with e2-e4, à la Botvinnik, that is: c2-c4, g2-g3, ♗g2, ♘c3, e2-e4, d2-d3, ♘ge2.

The situation is a little more complicated for Black, as he is a tempo behind from the start. Therefore, his schemes have to be more modest. Gleizerov's Stonewall is an extremely healthy scheme. Less healthy, but perhaps more attractive, is the famous Hippopotamus: ...g6, ...♗g7, ...b6, ...♗b7, ...e6, ...d6, ...♘d7, ...♘e7, ...h6, ...a6. Black almost completely ignores his opponent. In order to do so, he remains deep within his camp. The entire scheme is therefore rather suspicious, but it can certainly serve you well at club level.

Finally, I would like to offer a warning. Quite often I see coaches teaching their young students various schemes, such as the English Opening, 1.g3, and so on. They probably do this because they are afraid of their opponents' preparation. However, I don't think this approach is correct – a young player doesn't have sufficient positional knowledge to feel secure in difficult strategical positions. He will be bored, he won't know which plan to choose, and the unclear nature of the position will confuse him.

Young players should play active positions where there is a clear plan available. It's better to play the Evans Gambit than 1.g3.

After all, we don't force first-graders in music school to play Beethoven, do we? A children's song is sufficient.

The scheme is like a fruit tree. It is necessary to have a relationship with it: to spend many hours with it; to know how to enjoy it. Our care will bear fruit after a certain amount of time. But it can serve us for the rest of our lives.

Part V

About Decision-Making

Chess, more than anything else, is a game of making decisions. In each game, there are a few dozen decisions awaiting you. Some of them are trivial, others very difficult. If you manage to deal with these decisions better than your opponent, you win. In this part, we are going to talk about how to make good decisions in chess.

Seeing a Move talks about the difference between seeing and calculating. What can we do in order to come up with the right moves at critical moments of the game?

The Freezer is a place for storing the strategic and tactical motifs we spot, which may come in useful later.

In ***Smart Retreats*** we deal with backwards moves, which a player often doesn't notice while calculating.

On the Breaking Ice talks about the need to distinguish difficult decisions from easy ones.

Then ***Following the Beaten Track*** shows you how we can minimize the number of difficult decisions by choosing the right plan.

Looking for a Move, No Commitments is about the principle of universality. According to this, moves that don't reveal too many cards to the opponent are better than those involving binding decisions.

On the Edge considers the basic fact that three results (win, draw, loss) are possible in chess, and I show you how this should influence your decisions.

Exchanges as a Weapon fights against the prejudice that is often connected to exchanges, namely that they are cowardly and colourless moves. In reality, they are one of the most dangerous weapons that we can employ in chess.

Chapter 20

Seeing a Move

What precedes calculation?

Calculation is not a mechanical thing. Stronger players have built up certain inner habits, subconscious processes that have got into their blood, just like we all develop our morning or work rituals. However, there are no instructions about how to calculate that guarantee you will make no mistakes.

Calculating is comparing. You calculate lines because you are choosing what to do next, you are choosing the best move out of several options. But how do you know which moves you should calculate? It is easy for a computer: for at least a split second, it takes a look at all of the possibilities. But we cannot afford that luxury, because we are only able to look at one or two positions in a second, while the machine needs the same time to look at several million of them.

The selection of candidate moves is a subconscious thing. Before you start calculating a move, you have to see it; somehow it has to sneak into your view. And how does this happen? If you are not a genius who is able to produce ideas out of nowhere, you usually see a good move or a motif because you have already seen something similar in the past.

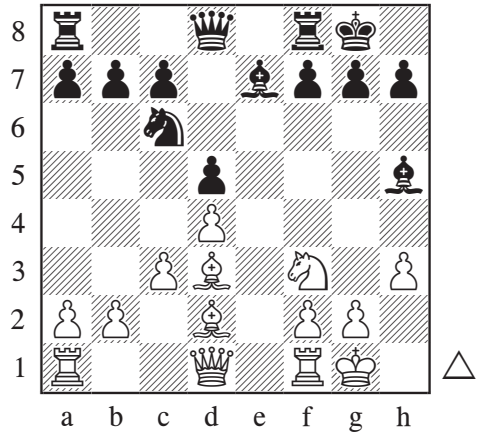
Here we come to the importance of chess culture. Just as art allows us to see the world anew, from unexpected angles and through fresh eyes, chess culture allows us to see ideas and moves in a position, which would otherwise remain hidden.

That's why it is important to read chess books, and to watch the games of strong chess players. And if there is an idea that surprises you or grabs your attention, explore it. If it is good or interesting, you will remember it.

This way of collecting ideas never ends – even grandmasters are constantly confronted by new and surprising moves or ideas. I would like to show you several positions in which I was surprised.

Fabiano Caruana – Leinier Dominguez Perez

Dortmund 2016



What would you play in this position? White is facing an unpleasant pin.

The first move I would notice is 12.♗e2, but that is clearly not the way for White to fight for an advantage: the bishop is standing well on d3.

Then my brain automatically notices 12.g4. That, however, terribly weakens the kingside.

I would certainly also study 12.♕c2, but after 12...♗xf3 it becomes clear that White can hardly play 13.♗xh7†? ♔h8 14.gxf3, because of 14...g6 followed, if required, by ...♖g8.

And so maybe I would play the 'normal' 12.♖e1, and leave resolving the pin for later. But not Caruana – he played a move that was invisible to me:

12.g3!

This move seems to be very illogical – if I have difficulties with the pin of the knight on f3, why should I weaken it? In fact, it doesn't make the problem of the pinned piece bigger, but solves it. White plans 13.♔g2 followed by moving the queen; even though Black might lure the white king to f3, he cannot harm it there.

For example, 12...♕d7 13.♔g2 ♖ae8? would be refuted by 14.♘e5!.

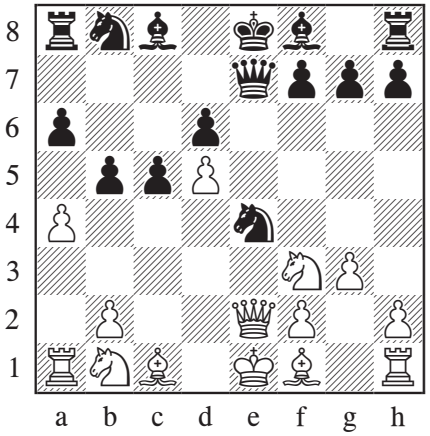
12...♕c8?! attempts to improve by keeping the queen out of range of the f3-knight, but after 13.♔g2 h6, for example, White simply plays 14.♕c2. If Black grabs the pawn with 14...♗xf3 15.♔xf3 ♕xh3?, White continues 16.♗h7† ♔h8 17.♗f5 ♕h5† 18.♔g2, and it transpires that the h-file was opened solely for the benefit of the white rooks.

The following position is from my own chess praxis. I hadn't prepared for the game very well, and after only nine moves there arose a position where I was probably on the verge of losing. Fortunately, my opponent could not come up with the strongest move.

Peter Michalik – Jan Markos

Slovakia 2011

1.d4 ♘f6 2.c4 e6 3.g3 c5 4.d5 exd5 5.cxd5 b5 6.♘f3 d6 7.e4 a6 8.a4 ♘xe4 9.♕e2 ♕e7



When I captured the e4-pawn one move ago, I was feeling very good about my position. Black has managed to break up the mass of white pawns in the centre, which has also made the d5-pawn weak. This factor should be enough for me to equalize, at least so I thought. But while I was standing up from the board to make myself a cup of coffee, I experienced a cold sweat. I had suddenly noticed a beautiful, and at the same time extremely dangerous, move:

10.♖a3!

White is threatening to move the rook to e3, which will oblige Black to fight hard to avoid losing material – there are too many pieces gathered on the e-file. Black still has some chances to save himself, but a lot of non-trivial calculation would be required. If you fancy, you can sit down and analyse the position for yourself...

I tried to come up with a quick analysis while I was pouring myself a coffee with shaking hands, and I preferred not to return to the board too quickly, to avoid inspiring my opponent with a careless glance at the a3-square. What a relief it was when Michalik, after only short consideration, played the 'ordinary' 10.axb5...

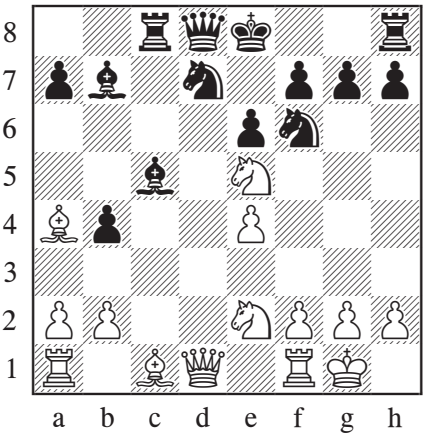
After a peaceful course, the game ended in a draw.

In the next example, I was the one who saw less.

Jan Markos – Jiri Stocek

Slovakia 2016

1.d4 ♘f6 2.c4 e6 3.♘f3 d5 4.♘c3 c6 5.e3 ♘bd7 6.♗d3 dxc4 7.♗xc4 b5 8.♗b3 b4 9.♘e2 c5 10.0–0 ♗b7 11.♗a4 ♖c8 12.♘e5 ♗e7 13.dxc5 ♗xc5 14.e4



I was very optimistic; I assumed that I was on the brink of winning. The opponent's d7-knight is pinned, and it is not clear how Black can finish his development. I expected a purely defensive move like 14...h6, and I was looking forward to my next attack.

I didn't see Black's next move at all. Furthermore, even after it was played, I was unable to believe that it was a good move, that it did not lead to any big problems. And yet, it is the best move in the position, and it allows Black to fight for equality.

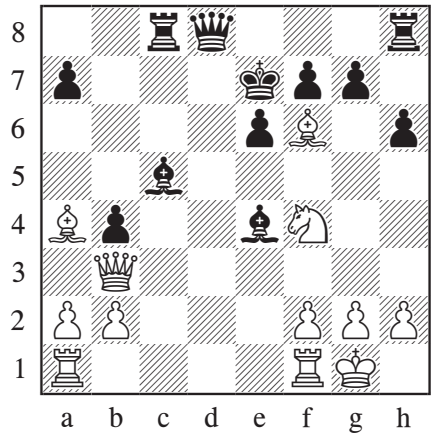
Stocek (of course) played:

14...♔e7!

The black king steps forward, and the situation has changed. My knight on e5 is suddenly unstable and the a4-bishop can easily find itself out of the game. On the other hand, Black's bishops are positioned ideally. The game continued:

15.♘xd7 ♘xd7 16.♕b3 ♘f6 17.♗g5 ♗xe4 18.♘f4 h6 19.♗xf6†

In this tricky position, and with mutual time pressure starting, I cowardly offered a draw, and it was accepted. Stocek told me after the game that he was planning to capture on f6 with the king...

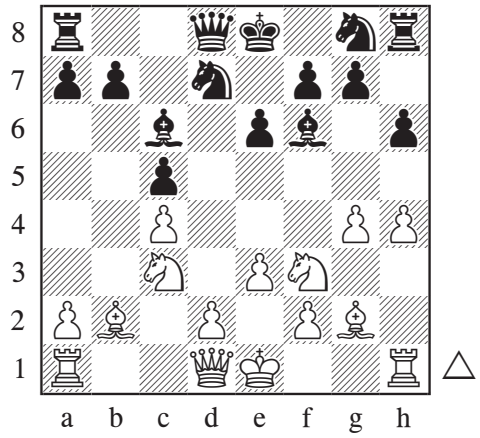


This is again a perfect position for your own analysis. Chances are pretty much equal – Black's troubles with his king are balanced by the extra pawn, the bishop pair and the badly-placed white bishop on a4. The former hero lost its job five moves ago when the black king, just like a bullfighter, stepped away from its path.

Maybe Stocek's king move would have entered my mind if I had known the following game:

Vladimir Kramnik – Sundar Shyam

Doha 2014



White in this relatively normal position (although, it is true that the advanced pawns on the kingside are quite exotic) played:

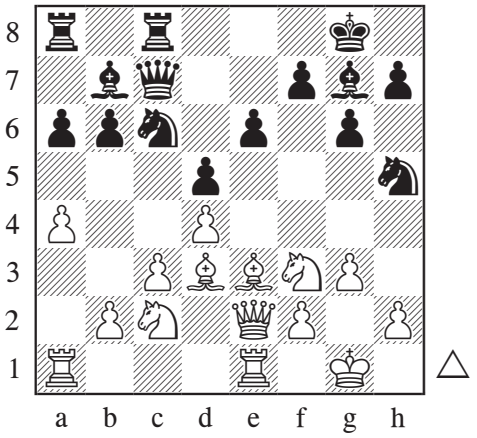
11.♔e2!?

Surprisingly, it is probably the best place on the board for the white monarch, since it would be safe neither on the kingside nor the queenside.

Computers are a great source of inspiration when looking for invisible moves. They neither have prejudices nor are they afraid, and so they sometimes do interesting and original things with pieces and the pawn structure. I talk a lot about this topic in ***New Silicon Horizons*** (page 209); here I would like to mention just one example:

Naum – Vajolet

Engine game 2016



This position from the Caro-Kann with an exchange on d5 is pretty much equal. White has defended well against the minority attack, but it is not at all clear where he should show activity. Moving pawns forward on the queenside would lead to weaknesses, while the black king is well defended by the fianchetto bishop.

Naum solved this situation in a very interesting way:

20.♘b4!?

White offers his opponent the chance to break up his pawn structure. However, this weakness is not as bad as if White played, for example, 20.b4?; in the game continuation, the pawn from c3 disappears, and the d4-pawn is easy to protect.

20...♘xb4 21.cxb4 ♕e7 21.b5

Black now captured on b5, which mended White's structure.

After 21...a5 White would have the powerful 22.♘e5. This strong knight on e5 would be the most visible gain of the entire plan – the c3-pawn moved to b5, fixing the b6-pawn in the sights of the e3-bishop, thus making it quite impossible for Black to capture on e5.

White's unusual procedure was possible thanks to the offside h5-knight, which could not take advantage of the holes created in White's pawn structure.

Like in real life, where it is impossible to fully control our thoughts and emotions, also in chess you cannot control consciously which moves will enter your head. If you simply cannot reliably come up with good moves, if your opponents constantly surprise you with unexpected replies, it means that you need to do your homework. Watch lots of grandmaster games and read chess books.

Collect ideas, just like flowers in a herbarium.

Chapter 21

The Freezer

About storing your ideas

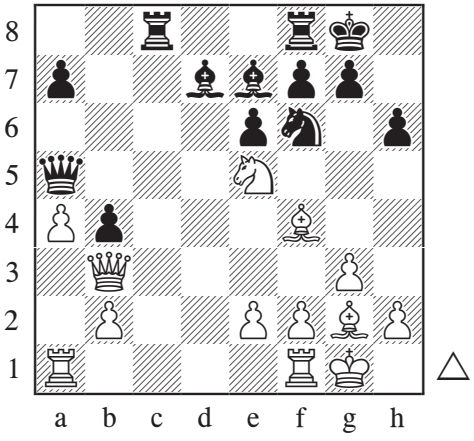
The situation on the board changes relatively slowly, gradually, move by move. A pawn or a piece moves to another square, but the character of the position usually remains unchanged. And the same applies not only to the strategic characteristics of a position, but also to tactical motifs.

Therefore, it is a good idea to 'buy a freezer' for your head, to create a place for storing any strategic and tactical motifs that you find, but which have not appeared on the board yet. Maybe the circumstances will change a move or two later, and you can defrost and use the frozen motif. Or you may actively work on changing the situation in favour of the tactical possibility. When a combination cannot be used successfully, ask yourself: "What can I do to make it work?"

A little abstract, isn't it? Let me show you an easy example:

Jan Markos – Jan Konak

Slovakia 2015



The difference between the activity of White's and Black's pieces is evident. It is so huge that the black queen and the c8-rook are even in immediate danger. I know from my own experience that **rooks hate coordinated bishop pairs**, and so first I examined 18.♗b7. However, after 18...♖cd8 there is still little going on, as after 19.♘c4 Black runs away with his queen to the kingside.

The theme of trapping the rook is tempting, and so I put it into the freezer, while I considered how to make it stronger. The best way would be to take away the d8-square from the opponent's rook. Therefore, I played the very natural:

18.♖fd1

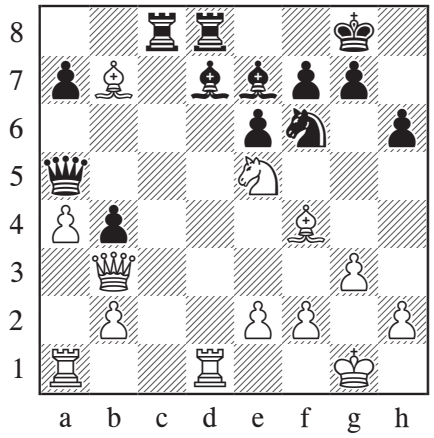
Black answered superficially:

18...♖fd8?

Note that 18...♗e8 is refuted by 19.♘g6!.

Black probably should have played 18...♖cd8, but his position would still be difficult.

19.♗b7

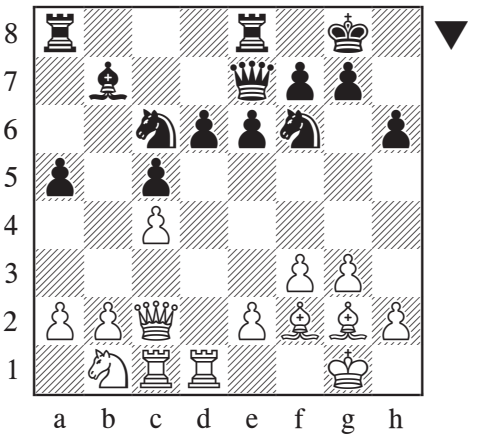


White's follow-up of ♘c4 will cost Black the exchange.

The following is a much more difficult example from the experience of a leading English grandmaster:

Thien Hai Dao – Michael Adams

New Delhi/Tehran (2.3) 2000



Black's position is fine, probably even slightly better. Although White has a pair of bishops, they are standing on relatively modest squares. Moreover, f2-f3 is a flaw in the pawn structure close to the king, which is difficult to heal. The white pieces on the queenside are also quite awkwardly situated.

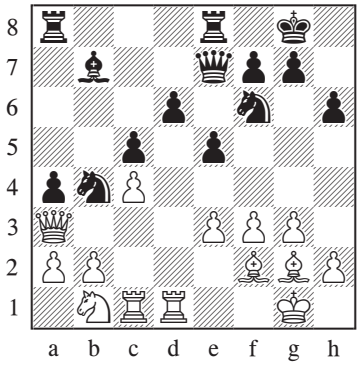
Black would like to take advantage of this last-mentioned circumstance. However, the immediate 21...♘b4 22.♕b3 a4 23.♕a3 does not lead to anything specific. It is true that the queen on a3 is not standing well, but the immediate positive influence of 21...♘b4 is not visible.

And so Adams put his idea into the freezer and began investigating another destiny for the knight on c6, the jump to the centre:

21...e5!

This move creates a great stronghold on d4, but what to do after 22.e3, which prevents the

knight from playing to the d4-square? Let's defrost the plan with ...♘b4 and see what would happen. 22...♘b4 23.♕b3 a4 24.♕a3 Black can suddenly play the brilliant move:



23...e4! After 24.f4 the knight gains the stronghold on d3 and Black is practically winning.

White, therefore, played:

22.♘c3 ♘d4

White had to tolerate the opponent's knight in this dominant position in the middle of the board.

The theme of ...♘b4 followed by ...a4 didn't appear on the board at all. But its influence on the course of the game was enormous, allowing Black to put a piece in the centre that could never be expelled.

Many authors have tried to offer a system of how to calculate correctly in chess, how to consistently find the best move possible. It is easy with a computer: it analyses one possibility after another and then from the whole tree, it chooses the line that, on the basis of hundreds of criteria, is evaluated as best. However, I think that a person proceeds differently.

A chess player doesn't systematically search one line after another, like a computer program. He rather gets to know the position, collects pieces of information about it and sorts them. With every new piece of information, his overall understanding of the situation on the board changes. And when he has enough information, he finds solutions that would not have entered his mind at the beginning.

People don't analyse the position systematically from A to Z like machines do. They are more like archaeologists investigating a site. They go back and forth, picking up a shard here, picking up a piece of carbon from the fireplace; they keep returning and try to imagine how life in that city from deep in the past might have looked.

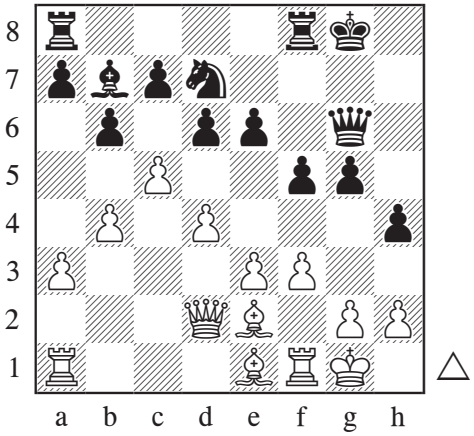
A solution cannot be forced onto a position. It rather shows itself if we have done enough work and collected enough pieces of information about the position. In a similar way, the picture printed on a jigsaw puzzle shows itself only if we put together a sufficient number of pieces.

I have always thought that dreaming and impractical searching should be allowed while calculating, because otherwise it is often not possible to achieve deep understanding.

The following game illustrates very well the view I am putting forward in these somewhat poetical paragraphs. We will stop at two critical points, and I will show you, step by step, how I was thinking in order to gradually come up with the right decision.

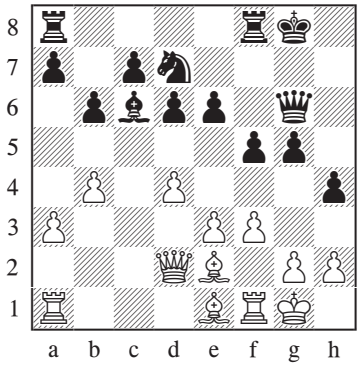
Jan Markos – Stefan Macak

Slovakia 2012



It's clear that White should be better because his king is safer and he has the bishop pair. Also, there is play on both flanks and that should suit the bishops. It is also clear that White should be playing on the queenside, where he has marched with his pawns, and that he should play there pretty quickly. Otherwise, Black might build a dangerous attack on the other side of the board.

But what exactly should he do? I began collecting pieces of information about the position. It is, of course, correct to try the most obvious continuations first; so let's start with 19.c6. Black has to answer 19...♗xc6, after which White can enter the opponent's position with either the rook or the queen.



a) 20.♕c2 ♗d5 21.♕xc7 doesn't lead anywhere after the exact 21...♖ad8; the queen is too lonely in the opponent's camp. After 22.♕xd6 ♘b8 23.♕c7 ♘c6 Black will at least be able to force a repetition of moves by attacking the queen. Capturing the other pawn with 22.♕xa7 looks frightening after 22...h3!, as the queen is too far offside.

b) 20.♖c1 ♗d5 21.♖xc7 (From the initial diagram, this position can also be reached by a different route: 19.♖c1 ♗d5 20.cxd6 cxd6 21.♖c7) This looks a little better for White, but it is still not ideal. After 21...♘f6 Black has good control over the central area and the white rook has nothing to attack.

And so there is no place for a direct attack. But why is this? It is especially because the bishop that regularly appears on d5 holds together Black's position just like a bolt. (This is knowledge that I didn't have when I began thinking about the position, it arose from analysing the lines.) But how can I prevent it from landing on d5? I need to play c5-c6 as fast as possible.

Then it was easy to find the right move:

19.♗b5!

White attacks the knight and at the same time threatens to play c5-c6. Black can play 19...c6 himself, but this move would make a cripple out of his bishop. Therefore, he preferred to play:

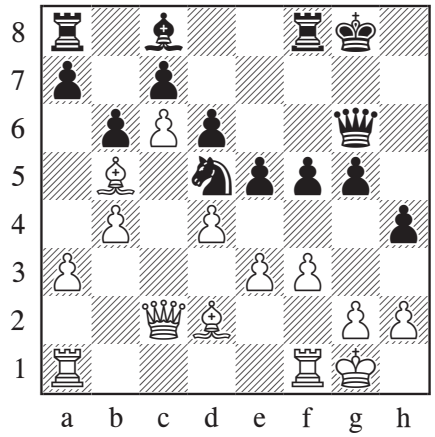
19...♘f6? 20.c6 ♗c8

But now his bishop is standing even worse. The game continued:

21.♕c2 ♘d5 22.♗d2 e5?!

Despair, as otherwise Black could hardly mobilize the c8-bishop and a8-rook. But to open the position against the bishop pair after weakening your king cannot be a good idea.

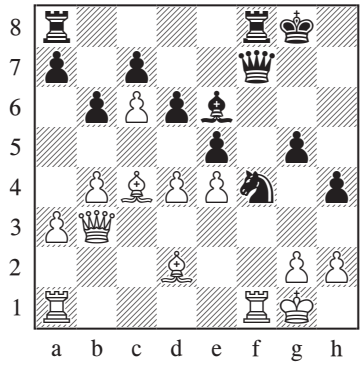
The vulnerability of the d5-knight, furthermore, encourages a tactical solution.



First, let's try the most direct method – simply to tie down and later capture the knight. However, the straightforward 23.♗c4 ♗e6 24.♕b3 ♕f7 25.e4 ♘f4! 26.♗xf4?? ♗xc4 leads only to a lost position.

And so let's try playing e3-e4 sooner: 23.♗c4 ♗e6 24.e4 fxe4 (Black has to capture because 24...♘f4 fails to a tactical point: 25.♗xf4 gxf4 26.exf5 ♖xf5 27.♗d3 Black loses the exchange.) 25.fxe4 ♘f4 Black is all right.

So how should White continue? Let's try to combine both ideas: 23.♗c4 ♗e6 24.e4 fxe4 25.♕b3 ♕f7 26.fxe4 ♘f4

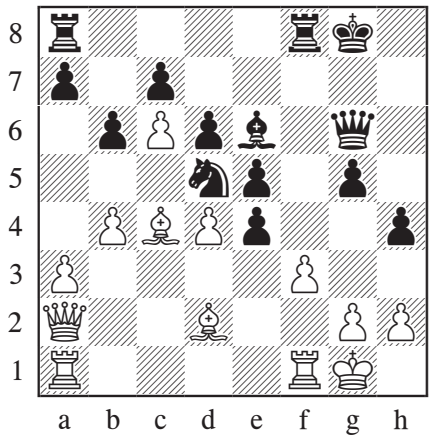


27.♖xf4 A new theme appears! 27...♗xc4 28.♖xf7 ♗xb3 29.♖xc7 White has great chances to win in an opposite-coloured bishop endgame.

But it is still not enough from the position. How great it would be if White, at the end of the variation, could capture something more valuable than the c7-pawn! Where could we lure the black bishop so that we could then capture it?

The black bishop is going to capture the white queen. So if we place the queen on a protected square, the bishop will be attacked at the end of the line. So the game continued:

23.♗c4 ♗e6 24.e4 fxe4 25.♕a2!



25...e3

25...♕f7 now leads to a significantly worse outcome: 26.fxe4 ♘f4 27.♖xf4 ♗xc4 28.♖xf7 ♗xa2 29.♖xf8† ♖xf8 30.♖xa2 White emerges a bishop up. And in the game, it won't be any different.

26.♗xd5 exd2 27.♗xe6† ♔g7 28.♖ad1 ♖f6 29.♗d5
1–0

What skills did White need in order to solve both critical situations correctly, to find both the sequence ending with 25.♕a2, and the 19.♗b5 move?

First of all, he needed a freezer in his head. He needed to collect ideas and to try them in new contexts.

Then, he needed the skill to put together the puzzle. He tried and tried combining different ideas until the pieces started to fit together.

And finally, he needed the ability to think about the position in a strategical and tactical way at the same time. He simultaneously needed to calculate the lines and to formulate the significance of the moves in the language of strategy.

To think about the position in words and moves at the same time, that is the secret art of the strong chess player.

Chapter 22

Smart Retreats

About backwards moves

I remember how I used to eat watermelons on holidays at my grandparents' home. As children, we always eagerly ate first the sweetest part of the melon, the middle, and we would finish up nibbling the rind, whereas my grandmother used to cut the middle of the melon out and leave it for later. And once she had finished eating the rest of it, only then she returned to the sweetest part so that the sweetest taste would remain in her mouth (and a sweet memory in her mind).

From childhood, we are taught to give up an immediate pleasure in favour of something more important in the future. We are forced to go to sleep early so that we wake up for school feeling fresh; we must not eat sweets before lunch; we must eat lunch in order not to be hungry; we have to do our homework even though it is May and the chestnuts are blossoming outside the window.

And yet (surely you are aware of it too), somewhere deeply rooted inside us, there is a reluctance to give up the present enjoyment in favour of something good in the future. We prefer buying on credit to saving our money. How difficult it is to give up smoking even though we know that we might be very sorry for this vice twenty years later...

We are probably all familiar with this human characteristic. However, we are less familiar with its manifestation on the chess board.

Although the general public often perceives chess players as 'those who see many moves ahead', in reality, we are often not able to give up the current good position of a piece in order to move the piece elsewhere, to a better square.

As a coach, I have often observed that tasks with backwards moves are the most difficult ones. Several times it has happened that even strong chess players were unable to find a relatively easy solution, because they were not able to temporarily 'reverse' their pieces while calculating the lines.

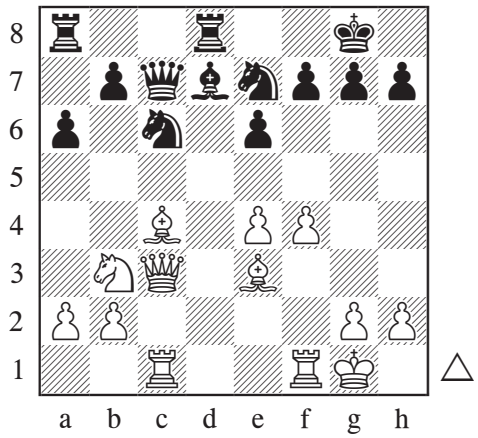
One of the reasons why backwards moves are so poorly visible is the inherited prejudice from childhood, because we were taught to 'move pieces forward, to the centre'. Usually this applies, but not always.

The second, more important, reason is that weaker chess players are not able to think in the

language of manoeuvres, but only in the language of individual moves. They are simply not able to imagine a manoeuvre as a whole. And since the initial move is only a part of this whole and, in addition, is often the less attractive part, they are not able to find the solution.

Vasily Smyslov – Boris Spassky

Leningrad 1959



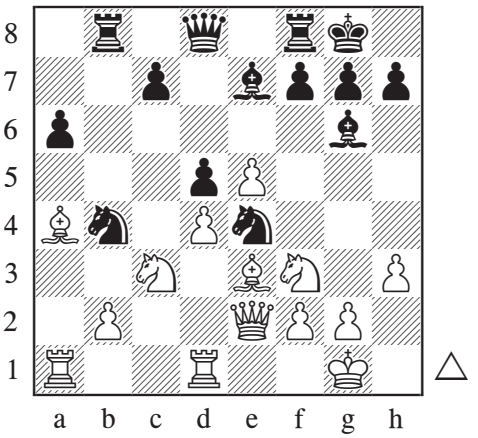
White has the bishop pair, and since his dark-squared bishop is not hindered by the opponent's pawns on the queenside, he would like to place it on b6, which would end the battle over the d-file. The second bishop may enter the game after the f4-f5 break; this break would also please the rook on f1. This all means that the best square for the queen is f2; from there it can be active both on the f-file and on the diagonal. Smyslov, therefore, didn't hesitate and played:

16.♕e1!

This move is not difficult for a former World Champion; however, it is practically invisible to anyone who lives, as it were, 'from one move to the next', and starts thinking from scratch after every reply from the opponent.

Nigel Short – Anatoly Karpov

Linares (8) 1992



In one junior training camp, none of the participants (several titled players were present) could solve this position. Black has many weaknesses on the queenside, and only the strong b4-knight keeps them all together. White needs to exchange that knight and not the centralized e4-knight, which isn't doing anything at all, only blocking the view of its own bishop. Short, therefore, played:

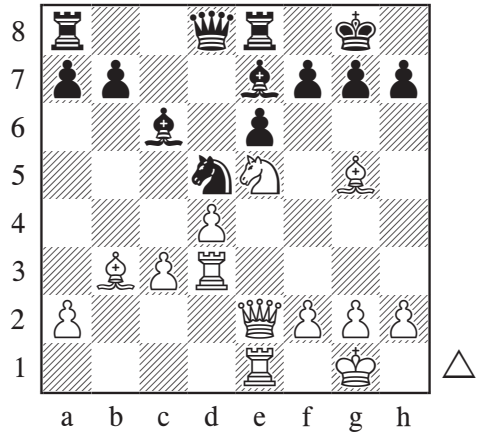
18.♘a2!

When asked why nobody found this move, the reply was that they didn't pay any attention to a move that placed the knight so close to the corner of the board. No one was able to see that the knight would disappear completely from the board only a single move later.

The following position was also very difficult for a whole bunch of talented young players:

Mikhail Tal – NN

Riga (simul) 1958



Tal played this position in a simultaneous display against sixteen opponents, and so he had to find the following combination in less than one minute. And yet he played brilliantly:

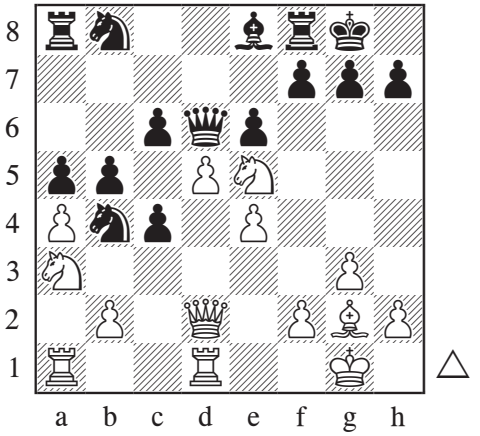
18.♘xf7 ♔xf7 19.♕xe6† ♔f8 20.♗c1!!

By threatening to bring his bishop to the a3-square, White prevents the move ...♗f6 and thus adds crucial vigour to his attack. It is true that White would also win after 20.♗xe7†, but he would have to calculate a long forcing line. In a simultaneous display, it was easier for Tal to find a quiet move that nevertheless has great strength. He simply saw the move. But none of my students was able to see it.

I was sitting in the audience at the Military Club in Sofia during the 4th game of the World Championship match, while Anand was thinking about how to support his initiative in the centre.

Viswanathan Anand – Veselin Topalov

Sofia (4) 2010



During the 12-15 minutes of waiting for the move, we were also thinking about how to solve the position, calculating continuations such as 16.♕c3, 16.dxc6 or 16.♘xc6. We didn't consider even for one second that White would move his centralized knight backwards:

16.♘g4! ♕c5 17.♘e3!

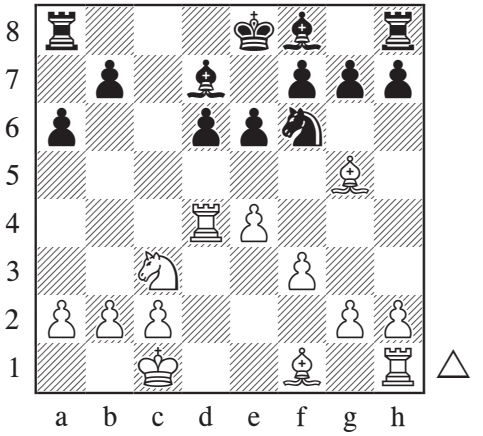
And what's more, we were beating our brains out long after this manoeuvre appeared on the board – what positional factors could make this seemingly 'wrong' play work?

Perhaps the most important of them is the stability of the knight. On e5 it was vulnerable, and the opponent could use it to generate active counterplay, but on e3 it is safely protected and still has the same contact with everything relevant in the centre. Furthermore, after the retreat of the knight, Black has to reckon with the move e4-e5 coming.

For the sake of clarity, I have so far given only examples with very short manoeuvres, consisting of two moves. However, in the practice of strong players, much longer transfers occur, and not only in blocked positions.

Garry Kasparov – Mikheil Mchedlishvili

Bled (ol) 2002



In this position, Kasparov didn't care at all about developing his kingside. On the contrary, the manoeuvre of his knight, consisting of four moves, destroyed his opponent's position on the opposite side of the board.

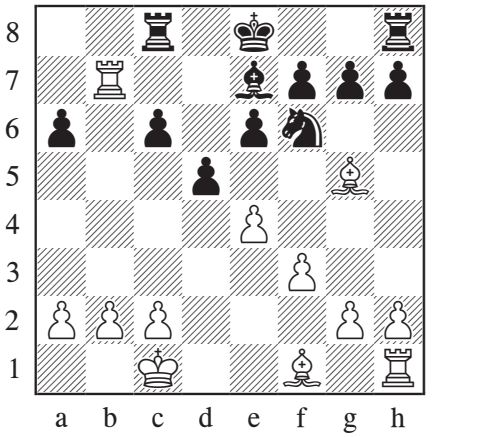
12.♘a4! ♗c6

Otherwise White gains at least the bishop pair.

13.♘b6 ♖d8 14.♘c4 ♗e7 15.♘a5 ♖c8 16.♖b4!

The rook also joins the direct attack.

16...d5 17.♘xc6 bxc6 18.♖b7±

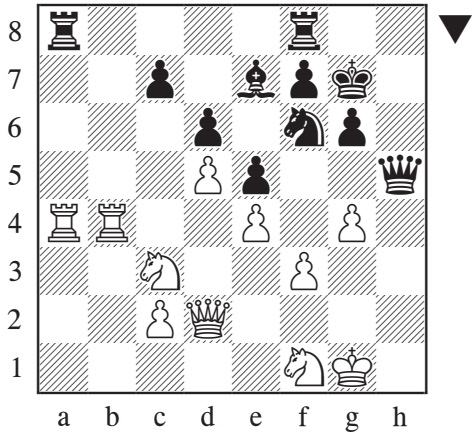


With a rook on the seventh rank, the bishop pair and an attack on the weak a6-pawn, White comfortably strolled to victory. This is also a game that was played in front of my eyes. The Russian team did not achieve a 4–0 win in the first round, and so they played the second-round match on about the 15th table. It was a shock for me to see Kasparov sitting among ordinary grandmasters, but an even greater impression on me was made by the above-mentioned circle of the knight, which seemed to negate everything that I had learned so far about play in open positions.

The following example is deep and beautiful. It is almost impossible to believe that it was played in a rapid game.

Veselin Topalov – Magnus Carlsen

Paris (rapid) 2016



With his last move 33.g3-g4, White considerably weakened the position of his king. However, he (and most of the people in the press centre and auditorium) thought that it would not matter much, as the queens will be exchanged soon.

Suddenly Carlsen's second, Peter Heine Nielsen, noticed that the computers were

tending to favour a very strange move, 33...♕h8. After analysing it for a minute or two, he realized that this idea is really very strong. However, he was sure that no human would play in such a way, especially in a game with a short time limit. However, Carlsen showed he is not an ordinary human player. After a brief thought, he played:

33...♕h8!!

Although this move seems to be very counterintuitive, its idea is simple and sound. Black's king is safer, therefore Black does not want to exchange queens. The queen can wait on h8 until his minor pieces get to g5 or f4, and only then re-enter the game with their support. Also, from h8 the queen might support the rooks or even enter White's position via the queenside.

The 'normal' continuations lead to an exchange of queens, for example, 33...♕h4 34.♕h2 ♕e1 35.♕d2 or 33...♕h3 34.♕g2, with an equal game.

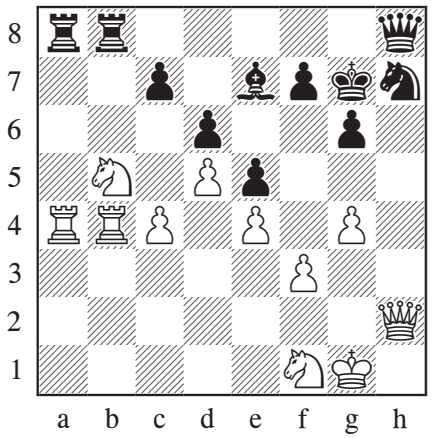
34.♘b5

After 34.♕h2, Black would play another strange and beautiful move, 34...♘h7! with the intention of ...♗g5-f4.

34...♘h7 35.♕h2

White could not take the pawn. After 35.♘xc7? ♘g5, Black's sudden initiative on the kingside is overwhelming. A possible line is: 36.♘h2 ♖xa4 37.♖xa4 ♘h3† 38.♔f1 ♗g5 39.♕e2 ♘f4 40.♕f2 ♕h3† 41.♔g1 ♗h4 42.♕f1 ♕g3† 43.♔h1 ♖h8 With the total destruction of White's kingside.

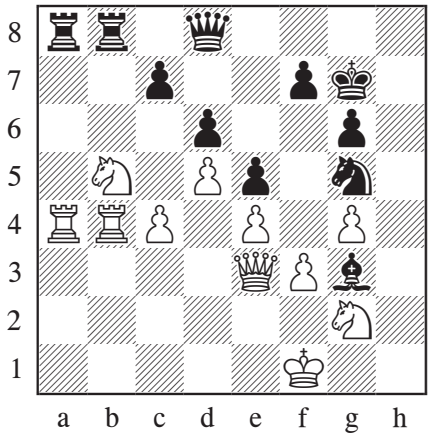
35...♖fb8 36.c4



36...♕d8!

Another great move with the queen. Now the c7-pawn is protected, and Black is ready to use the g5-square as a springboard for his minor pieces. White is lost, as he can't protect his dark squares.

37.♘e3 ♗g5 38.♕e2 ♗f4 39.♘g2 ♗g3 40.♕e3 ♘g5 41.♔f1



41...♕h8!

A lovely final touch. The queen comes back to its previous territory, and its intrusion along the h-file will end the fight very soon. Therefore Topalov decided to resign.

0–1

Moving a piece is like travelling. A passenger wants to get from point A to point B safely, and as soon as possible. He is willing to tolerate some discomfort and to sit for long hours in a car, train, or plane, provided the destination is worth the effort. Likewise, the path of a piece to the ideal square can lead through mountains and swamps; through squares where we would prefer not to see the piece standing. However, the important thing is not where the pieces are standing during their transfer, but whether we manage to get them where we need them, soon enough and safely.

Chapter 23

On the Breaking Ice

About decisions and the importance of chess culture

If I were ever forced to visit managers, bankers or stockbrokers, and ask them for sponsorship money for chess, I would tell them: "We do exactly what you do. Chess is neither about crazy geniuses nor about playing at soldiers; not even about wooden pieces. **Chess is basically a decision-making process.** A good broker is a broker who makes good decisions. A good chess player is a chess player who, from a variety of options, almost always chooses the right one."

There are stacks of management literature whose aim is to teach you to make the right decisions. However, I think that chess teaches you about the right choice much more effectively. A game is a set of a few dozen decisions, and you are given a relatively short amount of time to make all these decisions.

How should you handle this difficult situation?

Every strong chess player distinguishes tough decisions from easy ones. We play some moves (such as recapturing a piece as part of an exchange) almost automatically. Some other moves we play quickly because we can intuitively feel that the right choice simply cannot be determined, or that there is no danger of making a fundamental error; such a situation occurs, for example, when the armies are barely in contact. At other times we keep thinking and thinking because we feel that the position is critical, and that the fate of the whole game depends on the right decision at this instant.

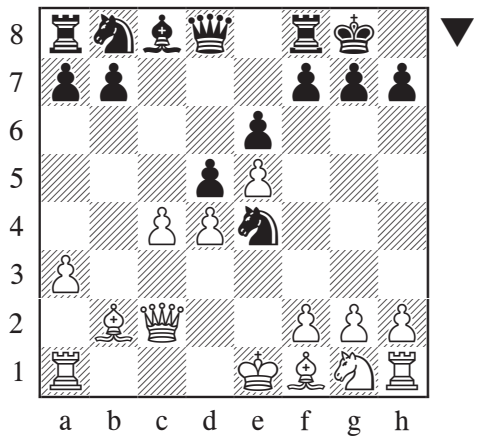
A chess game is like a river in springtime – one bank is the current position, the other bank is the successful outcome. There are blocks of ice floating in the river, and there is also ice on both banks. The chess player tries to get from one bank to the other one: walking on the ice, jumping from one block of ice to another. Sometimes he is relatively safe (for example, when he is standing on thick ice near the shore), at other times there is a lot at stake (when jumping from one block of ice to another). His main goal is not to drown; not to make the mistake that would cost him everything.

Strong chess players try to minimize the number of risky jumps (that is, tough decisions). They study openings (which allows them to stand on safe ice near the shore), they study endgames (allowing them to rely on the ice on the other side of the river). They try to have available as many 'blocks of ice' in the middle of the river as possible. They collect into their arsenal tactical and strategic themes, which they can rely on in the wild flow of the game. That's why the world's top chess players face really difficult decisions only a few times throughout the whole game; most of the time they are pretty sure what to do and how to do it.

In the following position, I was standing on the thick ice of my home preparation, but my opponent was already swimming in murky water.

Jan Markos – Tomas Kulhanek

Czech Republic 2010



Black played the most natural move:

10...♕a5†? 11.♔e2

However, he now found that he had fallen into a clever trap. It transpires that the e4-knight doesn't have sufficient support and has to escape. Black played the depressing:

11...f6 12.f3 ♘g5 13.h4 ♘f7 14.exf6 gxf6 15.♔f2

This is where my preparation ended. White has the bishop pair, and Black has a weak king – White is much better.

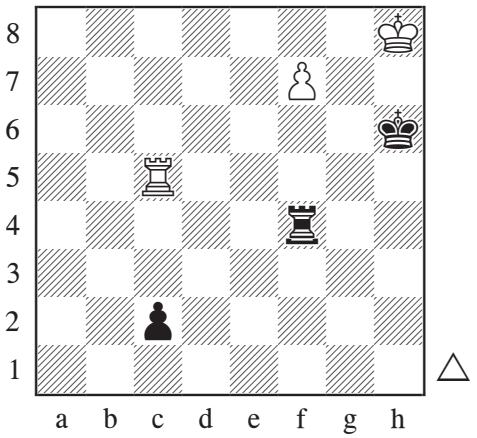
If Black had known this opening line, he would have known that his queen has to remain on d8, ready to attack the white king from h4 in case of an early f2-f3. Black's strongest move in the diagram position is probably 10...♗d7.

I'm not saying that it is impossible to figure this move out at the board; but it is an unnatural and therefore a tough decision that takes time and energy. After all, who could resist forcing the white king to e2?

In the next position, Jansa was on the thick ice of the endgame.

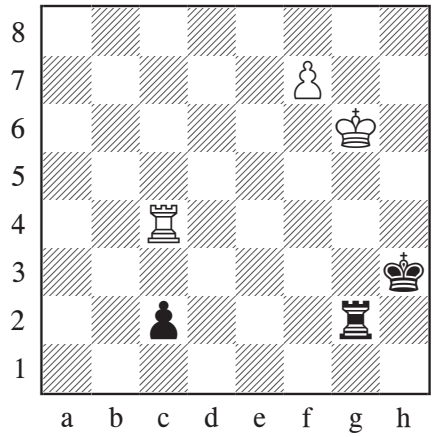
Vlastimil Jansa – Efim Geller

Budapest 1970



Since Jansa was familiar with Lasker's study, he knew that he was winning, as well as how to proceed in order to win. Enjoy once more the famous 'Lasker stairs':

69.♖c6† ♔h5 70.♔g7 ♖g4† 71.♔h7 ♖f4 72.♖c5† ♔h4 73.♔g7 ♖g4† 74.♔f6 ♖f4† 75.♔e6 ♖e4† 76.♔f5 ♖e2 77.♔g6 ♖g2† 78.♔h6 ♖f2 79.♖c4† ♔h3 80.♔g6 ♖g2†



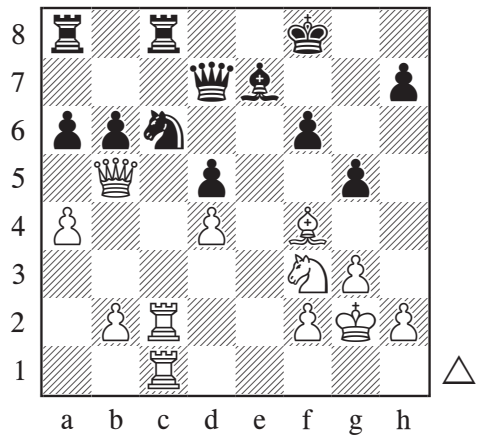
81.♔h5 ♖f2 82.♖c3† ♔h2 83.♖xc2 1–0

The knowledge of basic endgames is also very useful for middlegame play. The player who has a clear idea which potential endgames are won and which are not, also knows how to handle the fight preceding the endgame. He knows which pieces to exchange and which to avoid exchanging, how to shape the pawn structure, and so on.

Knowledge of chess studies greatly helped me while looking for the right move in the following position.

Jan Markos – Vyacheslav Dydyshko

Czech Republic 2008

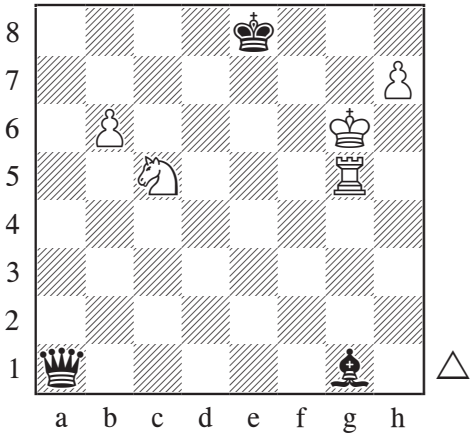


20.♕xb6 ♗d8 21.♗c7!!±

The bishop plays to the square where the lines of two different black pieces intersect. I can remember that during the game the following study came to my mind:

T. Kok

1934

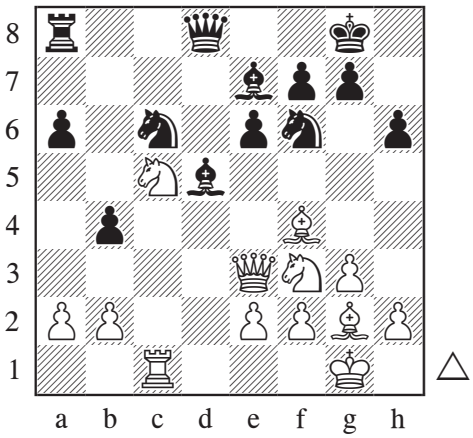


1.b7 ♗h2 2.♖e5†!!+–

The final example in this chapter is a position in which making the right decision is far from easy.

Jan Markos – Dragan Kosic

Budapest 2010



There are many pieces on an open board. There are also many different possible moves and tactical themes. Plans available for White are, for example, ♘a4-b6, or ♕d3 followed by e2-e4. Black may capture on a2, or play ...g5, or even ...♕a5.

I examined this position for almost a quarter of an hour, calculating moves such as ♕d3, ♘e5, ♘a4, b2-b3, h2-h3, h2-h4; but none of them satisfied me. Finally, I played:

20.♘b7!

The computer agrees that this really is the strongest move. The game ended with a repetition of moves:

20...♕d7 21.♘c5 ♕d8 22.♘b7 ♕d7 23.♘c5 ♕d8 24.♘b7

White can't deviate from the repetition without getting into an inferior position.

½–½

Before considering what move to play, I usually try to decide whether it is a tough or an easy move, and therefore how much time I am willing to invest in the decision. I always remember the fact that the most important decisions come up when the pieces are in direct contact. The 'face-to-face' fight often comes relatively late in the game, after the 30th move; and so it often coincides with emerging time pressure.

In openings and early middlegames, I quite often give up any attempt to play with machine-like precision, so that I gain a time advantage for this later part of the game. It is exactly at these moments that pawns, pieces and points are handed out.

Finally, I would like to draw your attention to the golf concept of a 'lucky mistake'. Golf players know that they are fallible, so they try to play their strokes in such a way that a small deviation in the strength or direction of the stroke shouldn't cause them too much trouble. They try to hit the hole; but if they are to make a mistake, let it be in the direction where there is more green, so that the ball does not end up somewhere in the rough. Also, when putting the ball, they prefer a stronger stroke at the hole, to make sure that if the direction of the ball is right, it will fall in the hole rather than stop just a few inches in front of it.

How can a chess player make use of the concept of the 'lucky mistake'? Generally speaking, by matching the importance of the decision to the time spent making the decision.

If I know that I have to choose from several equally promising possibilities, I just quickly decide on one of them. I don't spend too much time contemplating it, and I don't blame myself for the decision later on.

If I know that I am under time pressure and that I won't be able to make an optimal decision, I try to put off the important choices until the phase of the game after time trouble.

If I know that the fate of the game is likely to depend on the following move, or that the risk of tactical error in the position is great, I spare neither time nor effort, and try to be as precise as possible.

And most importantly, I try to control myself and use my head when making a decision, not my ego or emotions.

Chapter 24

Following the Beaten Track

How to play chess efficiently?

This has surely happened to you as well. It's the weekend, you are playing for your local team, two hours have passed since the match began. You are trying to figure out your position; it is awfully unclear, full of danger and tactics. You are not even sure if you are better; your opponent has considerable counter-chances. And so you keep calculating until your head is about to explode.

To relax your eyes a little, you look to the side; and suddenly it is as if you have teleported from the African jungle to a city park. Your teammate on the left already has a simple position with a clear advantage, and even has more time than you. He is walking around the room, slowly eating a sandwich, while his opponent is thinking.

An hour and a half later, you are in time trouble; there is still chaos on the board, and so you are playing pretty much at random, hoping you don't blunder anything. On the next board, your teammate's opponent has just resigned. The nature of their game did not change; your teammate's clear advantage proved to be sufficient. Another hour and a half later, you make a mistake in a better endgame, and the game that has cost you so much effort ends in a draw. Your teammate is by this time at home, enjoying deserved relaxation after lunch with coffee and a newspaper.

You put on your coat, telling yourself: "Is this fair? I have to play such an awful, tough game and he won without even having to think! How is it even possible?"

Effort in chess doesn't count. Indeed, it doesn't count in any sport. Nobody appreciates the energy that you had to invest in the game – only the result counts. A draw in eight moves may be awkward, but it gives you half a point anyway, just the same as a draw in a game full of fight, played all the way until only bare kings were left.

As with the half-point, there are also different routes to victory. Some of them are thorny and crooked, and you can easily get lost while walking them; others are straight and comfortable. Strong chess players always choose the easiest way; if they didn't, they wouldn't win so often, and hence they wouldn't be strong players.

What does an 'easy win' look like?

Ideally, the opening gets you a position in which you have a clear plan, and your opponent cannot find any active counterplay nor antidote. You have no weaknesses; there is no trace

of any dangerous tactics. You slowly realize your plan, and finally your opponent resigns.

If you have a clear plan in a position and your opponent does not, you have a considerable advantage. It is as if both of you were walking through a thick forest. However, you are walking along the beaten track, while your opponent is fighting his way through the undergrowth.

To have a plan is like having a compass; the chance of making a mistake is much smaller. You should, therefore, always try to lead the game into positions in which you know exactly what to do. If you manage at the same time to get your opponent into a position where he does not know what to do, you have the reins of the game even more firmly in your hands.

There are several categories of easy wins, such as 'fighting a bad piece', or 'moving from the opening to a favourable endgame'. Perhaps the most typical easy win is, in my opinion, the 'victory of the passed pawn'.

The passed pawn

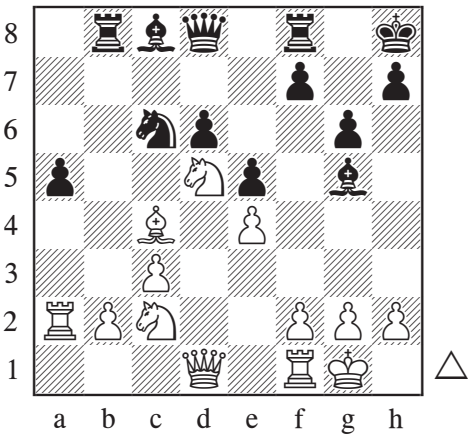
The victory of the passed pawn looks like this: after the opening, a position is created in which the structure allows you to create a passed pawn. You create it, and try to prepare its advance. Then the passed pawn either gets to the eighth rank, or ties down so many of the opponent's pieces that you gain a decisive advantage on another part of the board.

A pawn majority is like outnumbering the opposing players in ice hockey or football. In these games, and also in chess, '3 on 2' or '2 on 1' means potential danger for the weaker side. The passed pawn is then a sort of parallel of a penalty shot; in both cases the 'goal' is very close.

Recently, I showed the following position from the Sicilian Sveshnikov during a training session:

Viswanathan Anand – Peter Leko

San Luis 2005



"What plan should White choose here?" I asked the chess players present, who had an average rating around 2200. I was very surprised that none of them mentioned the simple b2-b4-b5-b6-b7-b8=♕. Honestly, I don't see any other way that White could play the position. The plan to create and promote the passed pawn is so straightforward, and so difficult to defend against, that in the 80s Sveshnikov had a busy time proving that Black was not strategically losing in his variation.

Anand didn't hesitate for a single moment, and played:

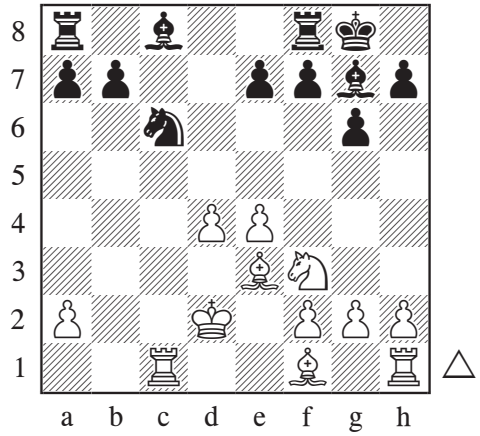
18.b4!

By the 35th move, the b-pawn was already on b7, and Leko was able to draw only thanks to a mistake made by his opponent.

The following position is from the Grünfeld Defence.

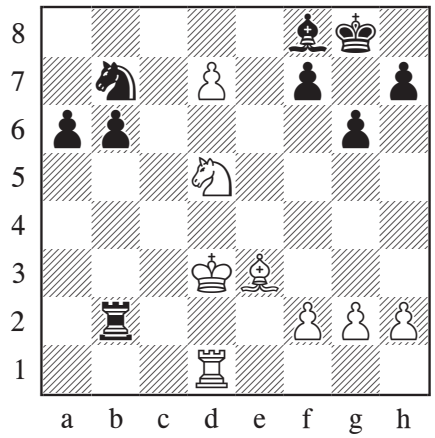
Vladimir Kramnik – Loek van Wely

Wijk aan Zee 2001



White's plan is again no mystery. Kramnik wants to push the d4-pawn all the way to d8, and he even manages to do so, due to the inaccurate defence of his opponent. To understand the overall impression of the course of the game, it is entirely sufficient to compare the two diagrams.

13.d5 ♖d8 14.♔e1 ♘a5 15.♗g5 ♗d7 16.♗d3 ♖dc8 17.♔e2 e6 18.♗e3 exd5 19.exd5 b6 20.♗a6 ♖d8 21.♖hd1 ♗c8 22.♗xc8 ♖axc8 23.♖xc8 ♖xc8 24.♘d4 ♗f8 25.♘b5 a6 26.d6 ♖c2† 27.♔d3 ♖xa2 28.d7 ♘b7 29.♘c3 ♖b2 30.♘d5

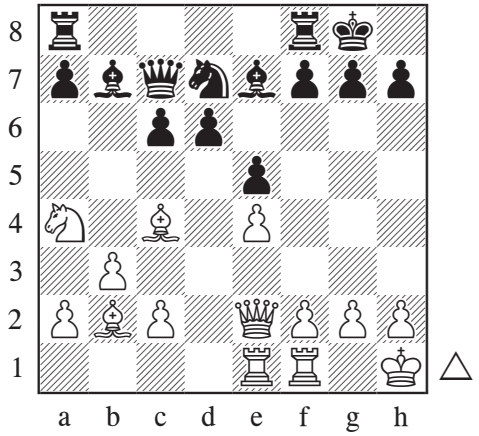


White can celebrate the success of his surprisingly simple strategy. Black's effort at counterplay led only to the misplacement of his rook. White's passed pawn has brought confusion to Van Wely's camp, and it will soon cost him a piece. Kramnik won a few moves later.

Here is a slightly more difficult example.

Anatoly Karpov – Leonid Stein

Leningrad 1971



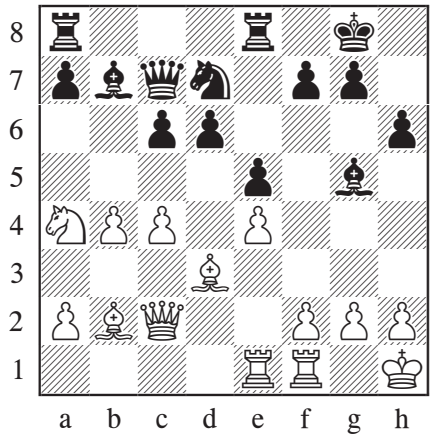
White's pieces (except for the a4-knight) seem to be ready to open the centre. Many players would, therefore, consider the f2-f4 break. Such a break would, however, lead to a 'hole' on e5, or (if prepared with g2-g3) to the weakening of the h1-a8 diagonal.

Karpov wants to win easily; he doesn't want any weaknesses, he doesn't want to allow any counterplay. That is why he turns his attention towards the pawn majority on the queenside.

15.♗d3! ♖fe8 16.c4! ♗g5 17.♕c2 h6 18.b4!

The last three exclamation marks do not describe the objective value of the move; rather they honour the clarity of Karpov's plan. Indeed, Black holds his ground during

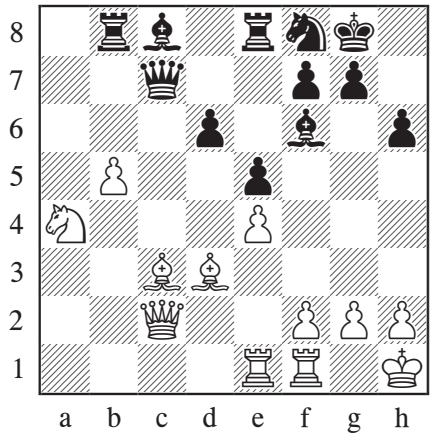
the following moves and is objectively never worse. Yet his moves are more difficult to find.



18...a6 19.♕b3 ♖ab8 20.a3 ♗c8 21.♕c3 ♗f6 22.♕c2 a5

However, this is a questionable point; Stein doesn't want to have a weakness on a6 after the possible c4-c5, but he helps Karpov with his plan.

23.♗c3 axb4 24.axb4 ♘f8 25.b5 cxb5 26.cxb5

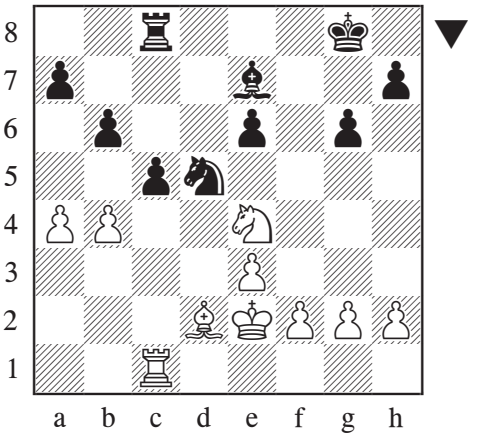


White has obtained the passed pawn. Although objectively the position is still about equal (as White's minor pieces are standing rather clumsily), White has made clear progress. In the following moves, Karpov pushed his pawn up to b7 and won rather easily.

Of course, a passed pawn doesn't automatically mean victory. If it is not sufficiently supported by the other pieces, it can easily become a weakness. The following position is very famous.

Tigran Petrosian – Mikhail Botvinnik

Moscow (5) 1963



Black played the optimistic:

23...c4?!

His idea may be to push the pawn as far as possible. However, all White's pieces are very close; on the other hand, Botvinnik's king is far from the centre. White, therefore, does not have to be afraid of the c-pawn running all the way to c1; in fact, this pawn is a weakness rather than a strength. Petrosian used the 'divide and conquer' strategy, playing:

24.b5!

He later captured the c-pawn.

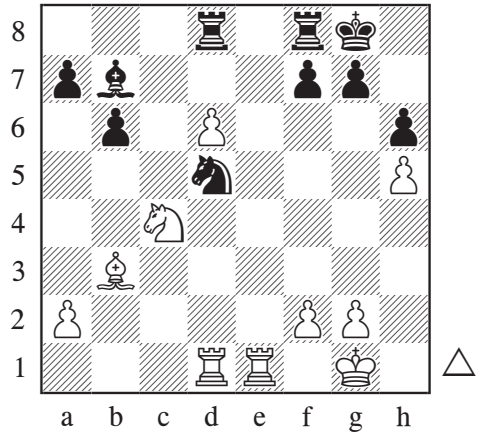
A pawn's best friend is the knight, which is best able to help with unblocking the

squares in front of the pawn. This is logical: a bishop 'doesn't see' on the squares of the opposite colour; the rooks are so valuable that they can only force out the queen, which is anyway unsuitable for blockading. Moreover, the passed pawn can also help the knight: the pawn can create valuable outposts for the knight.

It is much more difficult to push a passed pawn without a knight. In the next example, I underestimated this rule. This mistake, unfortunately, cost me a most valuable scalp.

Jan Markos – Viktor Korchnoi

Dresden 2006



White's position is on the brink of winning; the passed pawn is far enough advanced. It would be sufficient to remove the obstructing knight with 25.♖e5, and Black's position would fall apart in a few moves. However, instead of this, I played:

25.♘a5? bxa5 26.♗xd5 ♗xd5 27.♖xd5 ♖d7=

It transpires that the passed pawn cannot guarantee success in such a double-rook endgame – a draw resulted.

Like any other chess player, I search for beauty in chess, and I am proud when I manage to execute a beautiful and complicated idea on the board. But the life of a chess professional has taught me a lesson. When you need to win a game or a tournament, efficiency is more valuable than effect, simplicity is better than complexity. Therefore, I try to play simply and efficiently.

People play chess, and people are not infallible. The more difficult decisions they are forced to make, the more errors they make; this is an inevitable consequence. And so in my games, I try to face as few difficult dilemmas as possible. On the contrary, I like to pass them over to my opponents.

Chapter 25

Looking for a Move, No Commitments

About the principle of universality

I can remember that when I was a youngster I couldn't understand where the incredible popularity of the Sicilian Najdorf came from. I used to tell myself: "The move 5...a6 is so silly, so useless. There must be a better move available for Black, something that actually helps him to develop his pieces or achieve something tangible."

Kasparov kept playing 5...a6 again and again, and I kept wondering...

There is a saying that habit is a shirt made of iron; and I gradually got used to the idea that 5...a6 is 'normal', accepting that I don't have to understand everything.

Today, I am a stronger player and the meaning of the move 5...a6 is no longer a mystery to me. However, I suggest you think about it yourself. Make it clear to yourself whether you accept the Najdorf Variation because it 'normal', or out of respect for the thirteenth World Champion, or whether you really understand where its advantage lies compared to the developing moves like 5...e6, 5...♘c6 or 5...g6.

At the poker table, the following applies: the more pieces of information I have about the cards that the other players hold, the more successful I will be. A player who, by some fraudulent method, knows what cards his rivals possess, will surely end the evening with a massive profit.

One of the most important principles of positional chess is, therefore:

Do not reveal how your position and your plan will look in a few moves time! If your opponent does not have to think about alternative scenarios, he will be able to focus all his energy on countering your plan, and will be much more effectively prepared for it. You should, therefore, choose universal moves: that is, moves that do not tie you too early to this or that plan.

The strength of the Najdorf's 'small and silly' move lies in its universality.

If Black plays 5...e6, he admits that the pawn will not stand on e5 in the near future.

If he plays 5...♘c6, he admits that he doesn't want to place the knight on d7.

However, the move 5...a6 fits into almost any Sicilian position. In 99% of them Black needs to cover the vulnerable d6-square (against ♘b5), and also he plans ...b5. Black, therefore, first plays the move that fits everywhere, and delays more committal decisions until White reveals his intentions. For example, the response to 6.♗g5 would probably be 6...e6, but to 6.f4 it would be 6...e5.

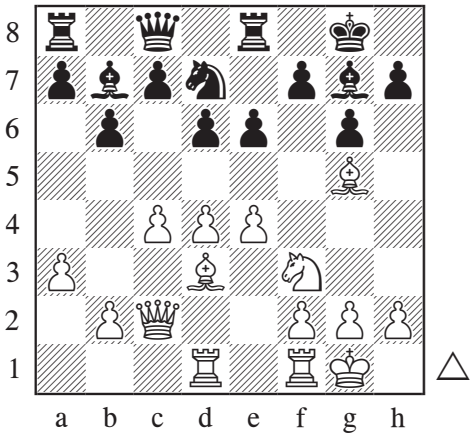
And yet, ...a6 slows down Black's development. Black can afford such a move only because in the Sicilian Defence his position is rather compact. White needs to make several active moves before there is a clash; he needs to overcome the (often empty) fifth rank. In other openings, the attempt to be 'mysterious' may end up badly. I definitely don't recommend playing, for example, 1.e4 e5 2.♘f3 ♘c6 3.♗c4 a6? in the Italian Game.

The most common types of committal moves are: pawn moves (pawns cannot go backwards); moves which determine the structure in the centre; and exchanges or sacrifices.

Let's have a closer look at each of these types separately. The following position is special for me; it is from a game played at my first Olympiad, when I was only 15. I was given the opportunity to play against Ukraine, and I really wanted to prove that I deserved the trust of our captain.

Jan Markos – Oleg Romanishin

Istanbul (ol) 2000



Romanishin chose an opening leading to a fluid centre, aiming to give the young player the opportunity to make a mistake. I can remember I was sitting at the chess board in a strange state of mind. On the one hand, it was clear to me that I was better; on the other hand, I absolutely couldn't figure out what to play. Should I manoeuvre? But how? From where to where? Black has no weaknesses. Finally, out of helplessness, I decided to create a conflict by playing:

15.h4?!

Romanishin responded by closing the centre:

15...e5 16.d5 h6 17.♗e3 ♘f6

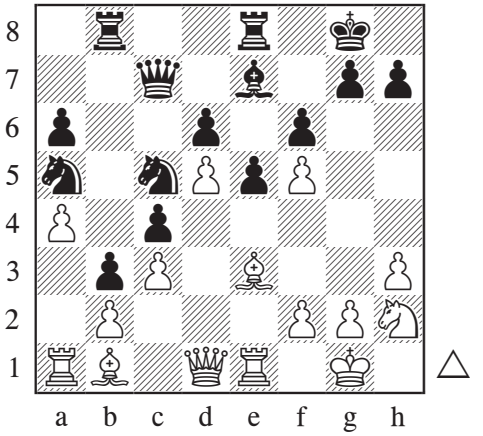
It immediately became clear that h2-h4 was only an unnecessary weakening. The game ended after a turbulent course in a draw.

Today I wouldn't even think about such a committal move as h2-h4. Without long consideration, I would first play ♖fe1, and then decide between ♗f1, b2-b4 or h2-h3.

Strong players generally play more with pieces and less with pawns. What plan would you choose if you were White in the following position?

Emil Sutovsky – Jan Plachetka

Kaskady 2002

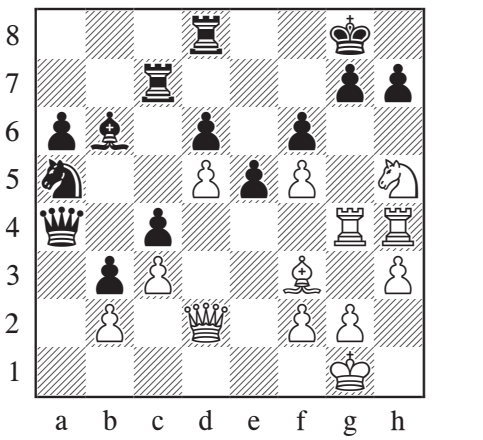


The pawn march on the kingside, right? You will probably be surprised, but Sutovsky didn't move a single pawn throughout the rest of the game. Instead, he placed all his pieces on the kingside. And for this, he needed first to gain access to the 'transfer station' (in Nimzowitsch's theory, the manoeuvring 'axis') on the e4-square. White played:

23.♗xc5!

Then began a long series of transfers:

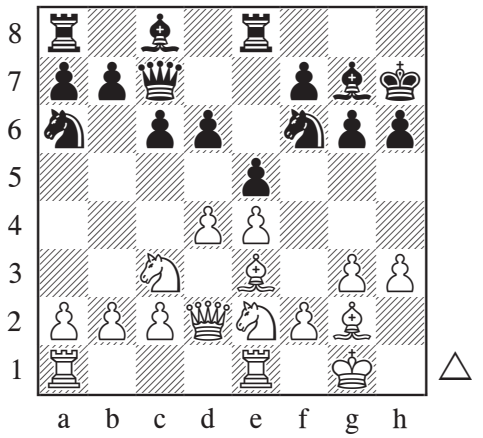
23...♕xc5 24.♖e4 ♗d8 25.♘f1 ♗b6 26.♕d2 ♕c7 27.♘g3 ♕f7 28.♖g4 ♖bc8 29.♗e4 ♔h8 30.♗f3 ♖ed8 31.♖e1 ♕d7 32.♖ee4 ♖c7 33.♖h4 ♔g8 34.♖eg4 ♕xa4 35.♘h5



The entire white army is ready to attack the black king. The attack was, of course, successful. When I watched this game live, I swore never to move a pawn again if there is a good move with a piece.

Anatoly Karpov – Jan Timman

Montreal 1979



Black doesn't want to play ...exd4 because he doesn't want to give his opponent too much space in the centre. And so it will be up to White whether he opens the centre with dxe5 or, on the other hand, closes it with d4-d5. Karpov decided not to hurry. While the centre remains undefined, Black has to place his pieces in such a way that they would be placed well after both dxe5 and d4-d5. Firstly, Karpov played the natural:

13.♖ad1! ♗d7

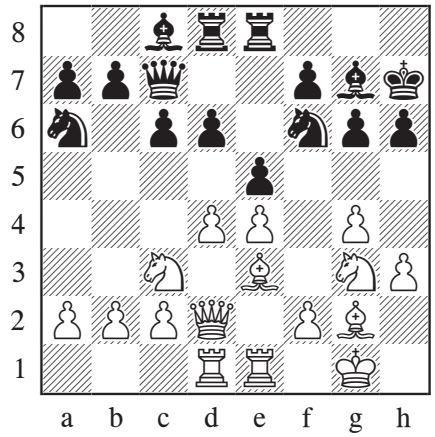
Karpov now improved the position of the e2-knight with the less obvious:

14.g4!

The game continued:

14...♖ad8 15.♘g3 ♗c8

Not even in this position did Karpov resolve the centre. On the contrary, he increased the tension with the advance:



16.f4!

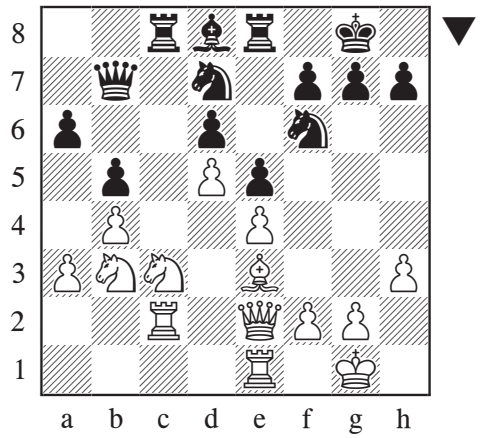
Timman could not continue to withstand the pressure, and he soon captured with ...exd4, giving White control over the central squares.

Strong players generally do not change the pawn structure in the centre while they are able to improve their pieces in the present structure.

The following example is from a local championship in my hometown, Bratislava.

Karol Motuz – Milan Pacher

Bratislava 2010



Pacher had suffered a lot during the opening, but by now the position is quite tenable for Black. The most logical move is 21...♗b6, exchanging the 'bad' bishop. However, Black was probably longing for activity, and so he changed the character of the fight with an exchange sacrifice:

21...♖xc3?

Black hopes to get both centre pawns in return. This decision is very unnatural, and so it is not surprising that it has a direct tactical refutation.

22.♖xc3 ♘xe4 23.♖c6 ♘b8

White missed the chance to play the smart:

24.♕c2!

After this, Black would gain only one pawn for the exchange, and so would end up in a lost position.

In the game, the weaker 24.f3? occurred, and Black won pretty effortlessly.

Every sacrifice is a very serious business. A position often holds more defensive options than might appear. That's why you should sacrifice only reluctantly and after due consideration; never in a state of winning euphoria, or because you are feeling adventurous.

Excessive activity is often harmful in chess. An advancing pawn cannot be made to return, nor can anybody give you back the material you sacrificed. In any position, there are usually many more moves that make it worse than there are that improve it. Patience and the ability to control yourself are, therefore, important virtues of a chess player.

Chapter 26

On the Edge

About positions in which points are given away

Chess logic often contradicts human intuition. Think about the famous Reti study in which the white king is able to capture the uncatchable pawn only because it goes the geometrically longer way. The theme of this chapter is a similar paradox that reveals the contradiction between the way people think in everyday life and the nature of chess.

Chess players often subconsciously believe that their most important task in a game is to outplay the opponent, to gain an advantage. Therefore, they put lots of energy into balanced positions. If they succeed in gaining an advantage, they think that the hardest part is over. However, this is simply not true.

Why is this? I will give an example: imagine that you are about to travel by a train which leaves every hour from the station. When will you run, spending your energy to be on the platform as quickly as possible? Probably when your watch shows something like 14:57, 8:59 or 15:04 (...maybe the train is late). This is because you know that if you arrive a minute later, it might cost you an entire hour.

If you have lots of time until the train leaves, you can mess around, buy a newspaper, use the toilet; it is not important whether you arrive at the platform twelve or seventeen minutes before three o'clock, either way you take the train leaving at three.

In chess, the 'train doesn't leave' in balanced positions. In a balanced position, you have to do a lot of bad things to put yourself on the verge of losing. Your army can handle some inaccuracies; maybe you will stand worse, but you will still be safely in the drawing zone.

In chess, the 'train leaves' when the evaluation of a position is between a win and a draw, or between a draw and a defeat. In such situations, every detail can be crucial to the final result; and so it is important to put most of your energy into these situations. If you arrive a minute later, the train of victory (or draw) might be gone.

Very often, the better a chess player stands, the worse is the quality of his moves. However, the opposite approach is the right one: maximum effort should be put into positions with a considerable advantage or disadvantage.

Why do chess players lose concentration and interest in a game in which they already have a big advantage? Why do many chess players despair when they are on the verge of defeat, and start playing worse than usual? Many chess players play the game with a subconscious psychological goal. They want to prove that they are better at understanding the Royal Game. And when they gain a big advantage, they consider this goal to be fulfilled, and their self-esteem is satisfied. The opponent is already down on his knees; he won't resist for long.

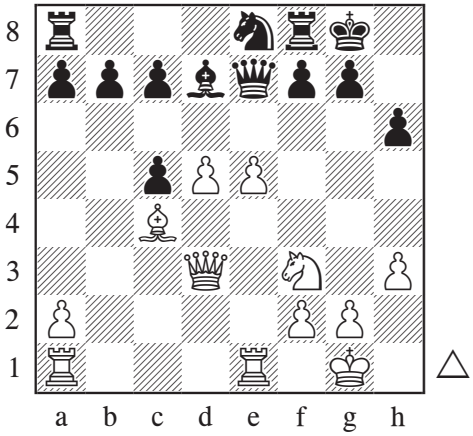
If you are winning or on the verge of victory, don't think this way. You haven't reached your goal yet; you reach it once your opponent stops the clock. The fact that your opponent is in a desperate situation doesn't mean that he is a weak player. Maybe he has only made one mistake; you also make mistakes quite often. And even if he has been playing poorly so far, that doesn't mean that he is also going to play poorly in the future. Maybe he will suddenly start defending with energy, like a cornered rat.

If you are standing on the edge of victory, but you only draw, don't say, "Nothing happened." **Remember that a draw is a half-point away from victory, the same as it is from defeat.**

One of the typical mistakes that a player makes in an objectively won position is lack of vigour in the final attack. If you have a good position, you can usually play many good moves, and so it is difficult to choose the best one.

Dominik Csiba – Petr Bazant

Frydek-Mistek 2009



Black is passive; the opponent's pawn centre restricts him. And so White decided that a little prophylaxis wouldn't harm him:

19.♗b3?

White won the game quite safely. And yet we cannot praise him, because the shortest and most direct way to victory was 19.e6 fxe6 20.dxe6 ♗c6 21.♕d7!. White ends up with an extra piece.

In this game, White committed two breaches of efficiency in his work at the board. First, he didn't invest enough effort into a forcing line, although forcing moves are easy to calculate and often very strong. Second, he didn't invest energy at the right moment. If he had thought properly, he would not have had to play another fifteen moves, and so he would have saved his time, his nerves and his grey matter.

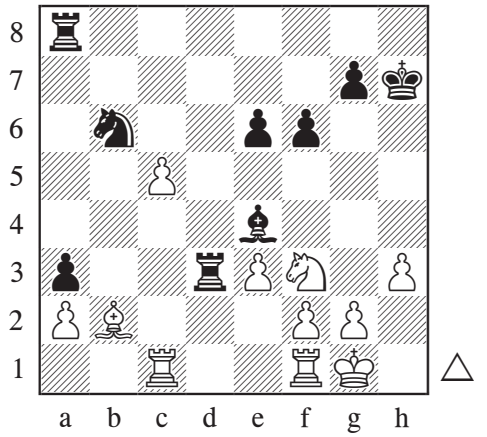
If you find yourself in the situation of being too lazy to use your brain in a won position, say to yourself, "It is better for me to work hard for fifteen minutes now and find a forced win, than to play an indifferent move now and then spend another two or three

hours winning the game in some difficult endgame."

The second common mistake in utilizing an advantage is carelessness, underestimating your opponent's possibilities. The following example is from a game that I played during a Czech Team Championship. I am sure our team captain can remember it most vividly...

Jan Markos – Vlastimil Nedela

Czech Republic 2010



White is two pawns up in a relatively peaceful position. The clock was showing 30 against 30, but in my case it was minutes, whereas for my opponent only seconds... I recklessly believed that I could win the game any way at all, and I played:

30.♗xa3?

30.♗xf6 gxf6 31.cxb6 would have quickly ended the fight.

After the text, Black's pieces suddenly came back to life:

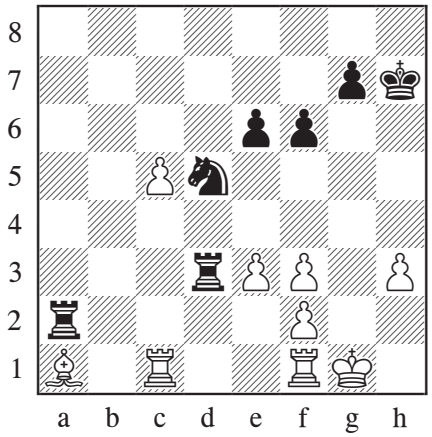
30...♘d5! 31.♗b2 ♖xa2

Paying more attention to the clock than to the position, I quickly played:

32.♗a1?

This met a witty response.

32...♗xf3 33.gxf3



33...♘xe3!

The position is now equal. If White captures the knight, the black rooks will check his king forever. However, I had not ceased to be optimistic, and I impulsively moved:

34.c6?

Nedela calmly captured the rook.

34...♘xf1

I realized that the best possible scenario awaiting me is an ugly endgame, in which even dividing the point between the two of us might be beyond my reach. And so I played the strongest move in the position – I offered a draw along with my reply.

35.c7

My offer was fortunately accepted. The entire episode didn't last longer than ten minutes. And yet during those ten minutes, I played more grievous errors than in several previous games put together.

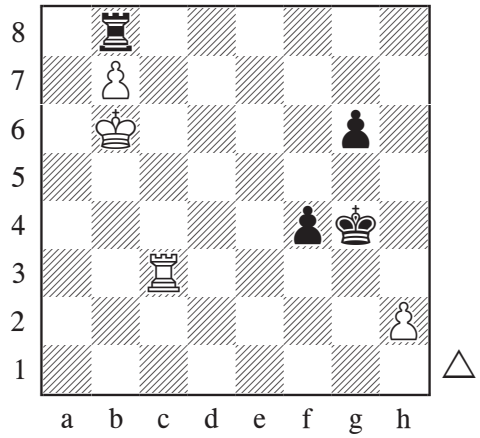
Never underestimate your opponent's counterplay! Make use of every chance to

extinguish or limit it! At the chess board, wariness is the mother of wisdom and the grandmother of good results.

Sometimes an advantage is objectively not sufficient for victory. In such cases try to put as many obstacles in the path of your opponent as possible, because there is a direct connection – the more difficult decisions your opponent has to make, the more bad decisions he will make.

Milan Pacher – Ralph Buss

Chur 2010

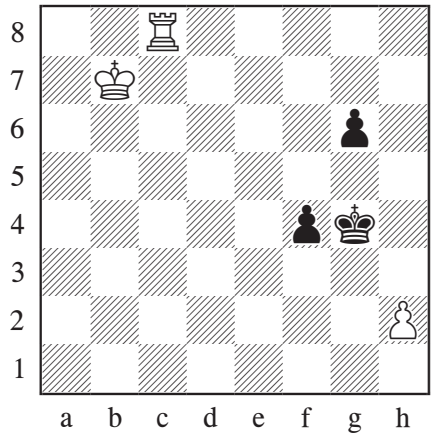


The position is objectively equal. However, not every drawing line is easy to find. In the game, Pacher played 49.h3†? and, after 49...♔h4, all Black needed to do to achieve a draw was to advance the g-pawn and sacrifice the rook for the b7-pawn at the last possible moment.

Instead, White should have tried:

49.♖c8! ♖xb7† 50.♔xb7

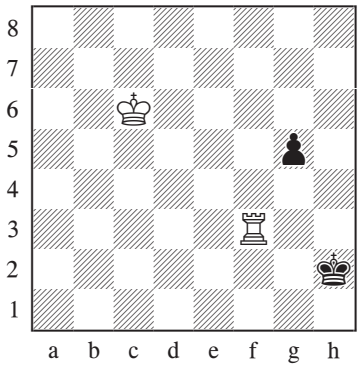
Now Buss would have had to make a much more difficult decision – should he move a pawn or his king?



50...f3?

This natural choice loses because of an easily missed detail:

51.♖f8 g5 52.♔c6 ♔h3 53.♖xf3† ♔xh2



54.♖f2†!!

The king is lured to the accursed h3-square, where it will hinder the knight that later appears on g1.

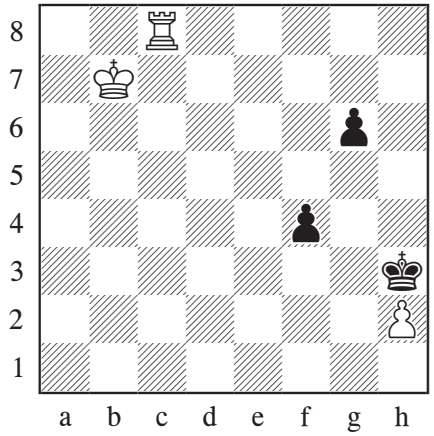
54...♔h3 55.♔d5 g4 56.♔e4 g3 57.♖f8 g2 58.♔f3 g1=♘† 59.♔f2+–

The knight is trapped.

Returning to the 50th move, Black, therefore, has to play:

50...♔h3!

Black will promote to a knight again, after a long, forced line.



51.♖h8† ♔g2 52.h4 f3 53.♖g8 ♔h3 54.♖f8! ♔xh4 55.♖xf3 g5 56.♖f7 g4 57.♔c6 g3 58.♔d5 g2 59.♖g7 ♔h3 60.♔e4 ♔h2 61.♔f3 g1=♘†=

This time Black secures a draw, as the black king stands on h2, leaving the h3-square free for the knight.

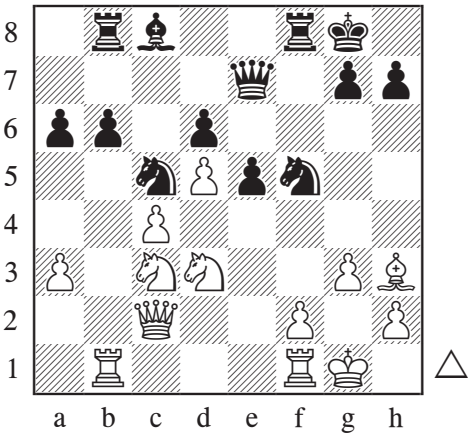
The two options end in almost identical positions. After 50...f3? Black promotes the g-pawn with his king on h3, while in the second line he promotes it with the king on h2. This detail is worth half a point and could easily escape the attention of even such a strong player as Buss. It is likely that Pacher's chances to win this game would have been somewhere around 50/50; he practically threw a quarter-point out of the window with 49.h3†?.

When you are defending a lost position, don't despair. Admit that you are losing; knowing that you have nothing to lose, but a lot to gain, should fill you with extra energy. Also, say to yourself, "My opponent probably wouldn't win this against a computer." Believe that you have something to fight for. You should also realize that your opponent is probably concentrating less than he was before: that is a natural reaction of the human mind. Make yourself comfortable; take a sip of tea or juice – and fight.

No chess player can avoid mistakes; even the strongest ones can make stupid mistakes. But the strongest chess players in the world are, without exception, tenacious and resourceful fighters.

David Navara – Jan Markos

Czech Republic 2007



Navara had miscalculated in the previous course of the game and landed in a worse position. However, the prospect of defending a much worse position without any counterplay did not appeal to him. Therefore, he aims for counterplay:

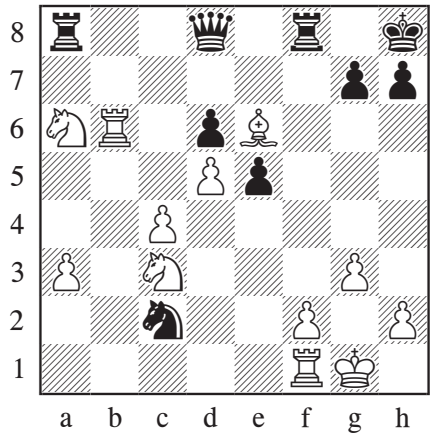
21.♘xc5!? ♘d4!

Navara's idea is to now sacrifice his queen:

22.♗xc8!? ♘xc2 23.♗e6† ♔h8 24.♘xa6

Continuing to play actively.

24...♖a8 25.♖xb6 ♕d8



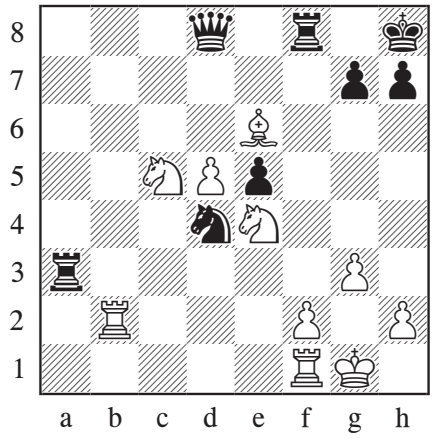
26.c5!

Navara knows that he has to gain counterplay; he needs to get me under pressure so that I will start making mistakes. That's why he is creating a passed pawn.

26...dxc5 27.♖b2 ♘d4?

And here is the mistake! The winning move is 27...♘e3, after which the white king is much weaker than in the game. You can find this position discussed in greater detail on page 113 of Chapter 12.

28.♘xc5 ♖xa3 29.♘3e4



In this position, you can see the result of Navara's defensive work. Even though White still has only two minor pieces for the queen, these pieces are occupying the centre. The black queen is tied down to the defence, which reduces its value greatly. The queenside pawns have disappeared, allowing White to hope for various defensive fortresses.

It is not difficult to guess the result of the game. I was so surprised by Navara's tenacious resistance that I started making one mistake after another, until I finally lost the game.

To err is human. And so you should become familiar with your errors. Bear your fallibility in mind, and you will play won positions more carefully, and lost ones more calmly. Encourage mistakes from your opponents: you will win many drawn positions, and you will save many disastrous situations.

Chapter 27

Exchanges as a Weapon

The most modest forcing moves

Chess is a game for grown-ups. You have to be prepared to deliver and accept punches. In the majority of cases, the most forcing move is also the best, because it keeps the opponent busy, limiting his possibilities. For example, after 1.e4 e5 you may ask whether 2.♘f3 is a better move than 2.♘c3. Both moves develop a knight, but whereas after 2.♘c3 Black can play various good moves, after 2.♘f3 he can play only three: 2...♘c6, 2...♘f6 and 2...d6. The move 2.♘f3 is forcing events because it contains the threat of capturing the e5-pawn. The move 2.♘c3 is not forcing anything, and your opponent is thus free to do anything he wishes.

There are three types of forcing moves: threats, checks and exchanges. However, chess players often don't see exchanges as active moves, and so they deprive themselves of an important way of developing and sustaining the initiative.

An exchange is undoubtedly a forcing move, one which limits the opponent. If the opponent doesn't recapture a piece or pawn, he will find himself at a material disadvantage. However, exchanging has a bad reputation among players – the reputation of being drawish, cowardly and unmanly.

In reality, a correctly used exchange can be even spicier than chilli. You may judge for yourself – the following game is a classical example of effectively used exchanges.

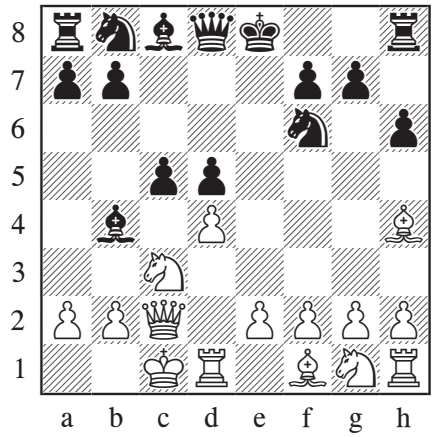
Paul Keres – Mikhail Botvinnik

Moscow 1941

1.d4 ♘f6 2.c4 e6 3.♘c3 ♗b4 4.♕c2 d5 5.cxd5 exd5 6.♗g5 h6 7.♗h4 c5 8.0–0–0?

Both opponents have created considerable tension on the board. The dark-squared bishops are standing in active positions; the centre is very fluid. However, with his last move, White overestimated his position. He wanted to hide his king in safety and at the same time push along the d-file but, as we will see soon, none of this will actually happen. In reality, the king on c1 is worse than on e1, because there are only a few pawns and just one minor piece around to

defend it. That is too little for His Majesty to feel safe and cosy. All Black needs to do is to remove the only defending minor piece. The major pieces won't be able to defend the king.



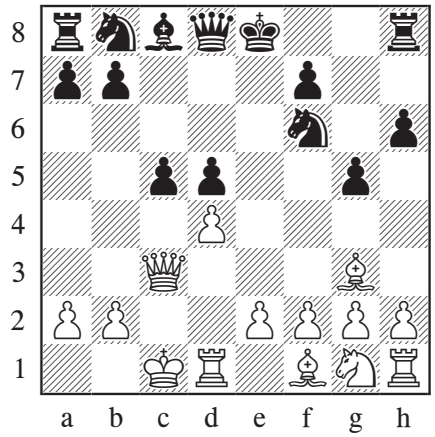
8...♗xc3! 9.♕xc3

The ugly 9.bxc3 is not very tempting either, as the king would have nowhere to hide.

9...g5!

Active again!

10.♗g3



It still seems that White's situation is not so bad. He has developed more pieces than Black, who has, in addition, a broken pawn structure and is facing a bishop pair. If the white king were on a1, Keres would be better. But it will not get there, because Botvinnik demolishes White's defences with another exchange.

10...cxd4! 11.♕xd4 ♘c6 12.♕a4 ♗f5

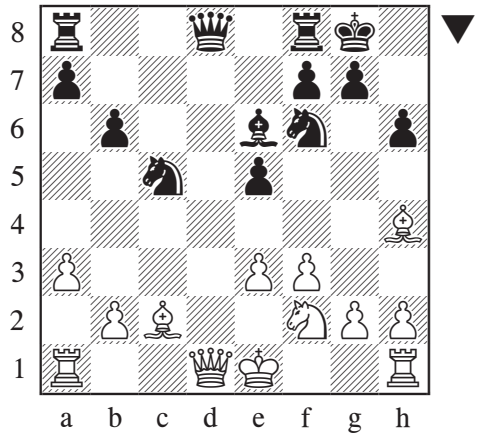
And the king is nailed down on the c-file.

13.e3 ♖c8 14.♗d3 ♕d7 15.♔b1 ♗xd3† 16.♖xd3 ♕f5 17.e4 ♘xe4 18.♔a1 0–0 19.♖d1 b5 20.♕xb5 ♘d4 21.♕d3 ♘c2† 22.♔b1 ♘b4
0–1

I saw the following game live. It arose from the Nimzo-Indian Defence, in which Black often gets a slight lead in development in exchange for the bishop pair. If he fails to make use of it, he will get a worse middlegame. In this position, Black is therefore trying to launch some active play before his opponent castles.

Viktor Laznicka – Alexander Grischuk

Ohrid 2009



17...♕xd1†!

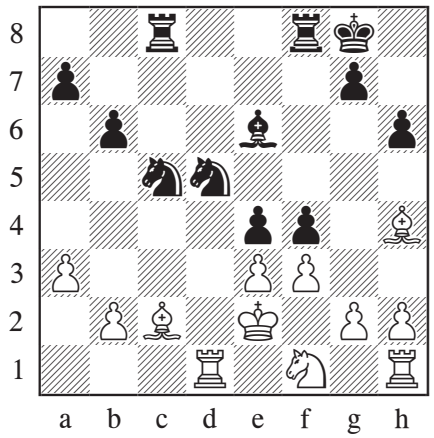
I must admit that this great solution left me speechless, as I peered at the board next to me. I could hardly have come up with this move. It seems to be so illogical to develop the opponent's rook. However, Grischuk

impressively shows us that the placement of White's rook is not significant; more importantly, the knight disappears from the f6-square without losing time, and after that the h4-bishop will be positioned quite awkwardly and uselessly. The game continued:

18.♖xd1 ♘d5 19.♔e2 ♖ac8 20.♘e4 ♘b7!

There is a time to exchange and a time to avoid exchanges. Black has more space and can easily chase the e4-knight away.

21.♗b1 f5 22.♘d2 ♘c5 23.♗c2 f4 24.♘f1 e4

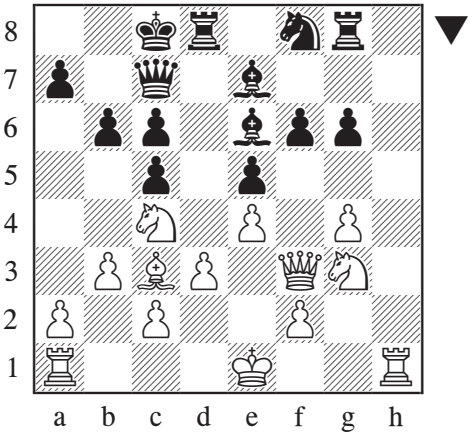


Black's pressure is visible to the naked eye. White failed to consolidate and eventually lost the game.

We have already seen the exchange of a defensive piece, and an exchange that earned a tempo. The following example is slightly more positional:

Vitezslav Rasik – Jan Markos

Czech Republic 2015



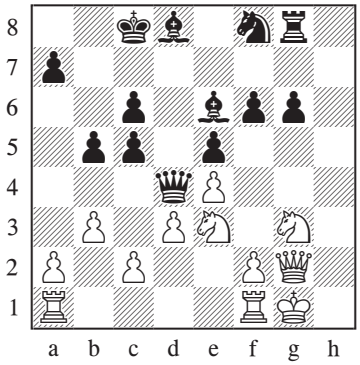
I felt that I was probably better. I have the bishop pair, and if I manage to put my knight on e6, it will stand better than either of the white knights. Although White controls the h-file and does not suffer from doubled pawn, his pawn structure on the kingside is full of holes.

What should I do next? Attacking the g4-pawn with 22...♕d7 wouldn't solve anything after 23.♘e3. Nor did I like any of the possible retreats of the bishop from e6 – it seemed to me that White's minor pieces were standing in too active positions for me to afford such moves.

Finally, I came up with a daredevil journey which included an unclear sacrifice of the exchange.

22...b5?! 23.♘e3

White wisely refuses the sacrifice: 23.♗a5 ♕d7 24.♗xd8 ♗xg4 25.♕g2 ♗xd8 26.♘e3 ♕d4 27.0–0 ♗e6



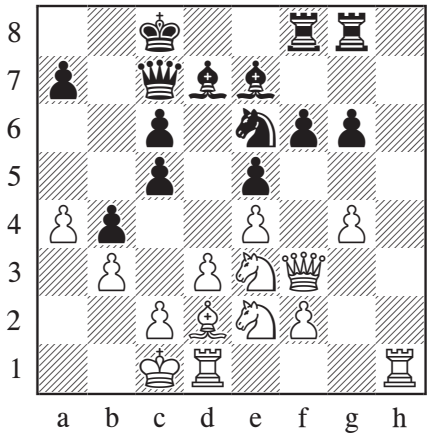
Black has full compensation, and his bishop pair may play a starring role in the future course of events.

In the game continuation, Black is left with a weakness on c5.

23...♗d7 24.a4! b4

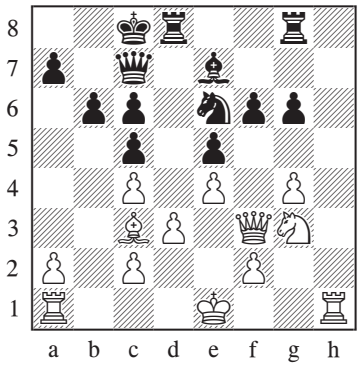
Deciding to close the position, even at the cost of the weakness on c4.

25.♗d2 ♘e6 26.♘e2 ♖df8 27.0–0–0



White has nothing to complain about; he has covered all possible entry squares and has even gained the strategically important c4-square.

Returning to our starting position, the best possible solution is at the same time the simplest and most forcing option. Black should capture the knight: 22...♗xc4! 23.bxc4 (23.dxc4 ♘e6 is an even better version for Black) 23...♘e6



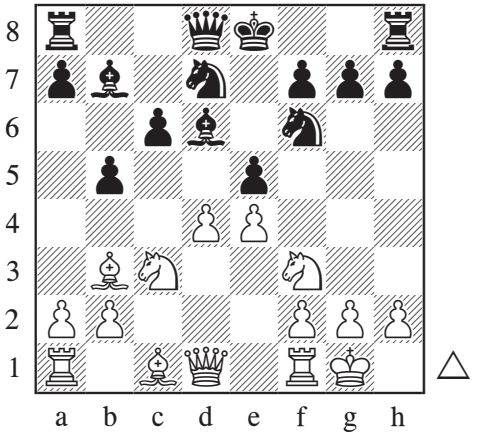
Black enjoys a comfortable advantage: the structure on the queenside has become equivalent for both players, and neither of the remaining bishops is playing. Black's advantage is based on the better knight and the superior structure on the kingside.

It's simple, isn't it? Just like the Egg of Columbus. And yet invisible – who would part with the bishop pair so easily?

The next position is reminiscent of one of the main lines of the Semi-Slav. However, White's light-squared bishop has a more active (and safer) position; it is standing on b3 instead of the usual d3. This difference allows White to be very optimistic.

Jan Markos – Vojtech Straka

Czech Republic 2015



Firstly, I examined the sacrifice on f7, but nowhere does White obtain enough compensation for the sacrificed material.

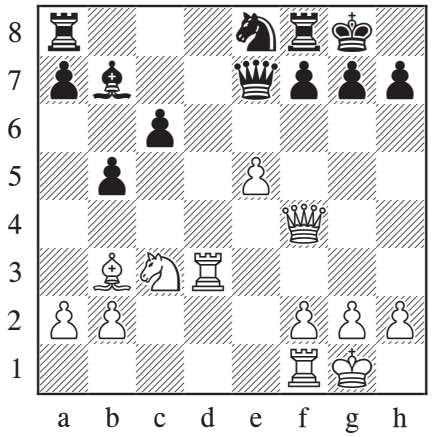
Then I examined various developing moves: 11.♗e3, 11.♗g5 and 11.♖e1.

It only occurred to me relatively late that White doesn't really need to do anything special to keep the advantage. Black's b7-bishop is a terrible piece that won't get involved in the game anytime soon. So actually all I need to do is to exchange all my opponent's remaining good pieces. This procedure may not be the most creative, but it is nevertheless very effective. The game continued:

11.dxe5 ♘xe5 12.♗f4! ♘xf3† 13.♕xf3 ♗xf4 14.♕xf4 0–0

Black needs to castle and is therefore unable to prevent e4-e5.

15.♖ad1 ♕e7 16.e5 ♘e8 17.♖d3

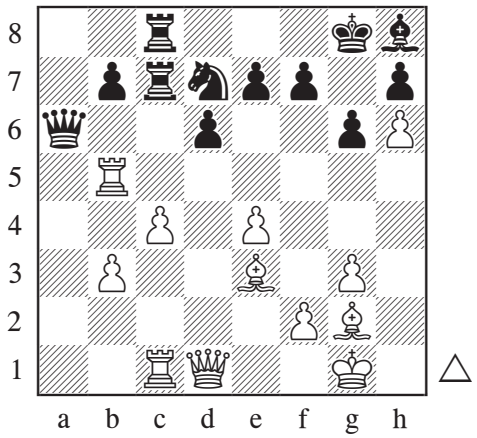


White has a decisive advantage.

The next example is from blitz chess. I usually don't take examples from blitz games, but here it makes sense. It is remarkable that it took the World Champion only a few seconds to find the following manoeuvre, which ordinary players would only be able to find after long consideration (as in the previous example), if at all. The art of using an exchange like a weapon is simply in Carlsen's blood.

Magnus Carlsen – Eduardo Bonelli Iturrizaga

Dubai (blitz) 2014



White is undoubtedly better. He has the bishop pair, a superbly-placed rook on b5

preventing traditional breaks, more space, and a wedge on h6 tormenting the opponent's king. On the other hand, it is not clear how he should continue the game. If he exchanges the dark-squared bishops on d4 to gain access to that square for his queen, he risks ending up in a worse endgame with bishop against knight.

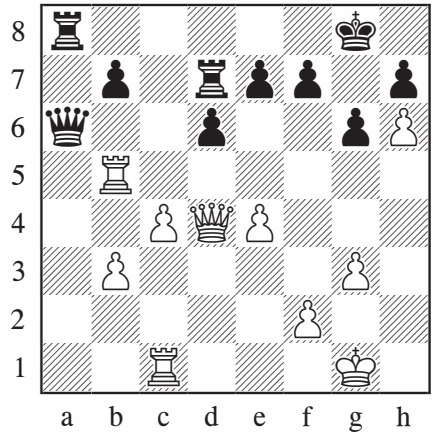
Computers suggest 24.f4, with the plan of the other pawns joining the advance on the kingside. Such a plan is, however, risky, especially in a blitz game. What if the position gets out of hand and White ends up with a completely bare king?

Carlsen found a Solomonic solution to the situation. He exchanged both pairs of minor pieces and based his play on the h6-pawn, whose value increases without the h8-bishop on the board.

24.♗h3 ♖a8

24...e6 prevents the exchange of pieces, but weakens the d6-pawn.

25.♗xd7 ♖xd7 26.♗d4 ♗xd4 27.♕xd4

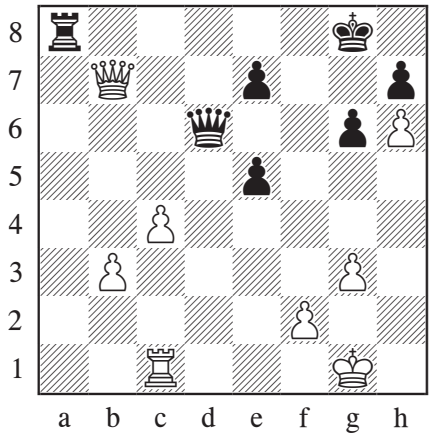


White has achieved his goal. Black's king is suddenly in danger and, in order to defend it, Black will have to part with material.

27...f6 28.e5!

Striking while the iron is hot, before Black protects the d7-rook.

28...fxe5 29.♖xe5 dxe5 30.♕xd7 ♕d6 31.♕xb7+–



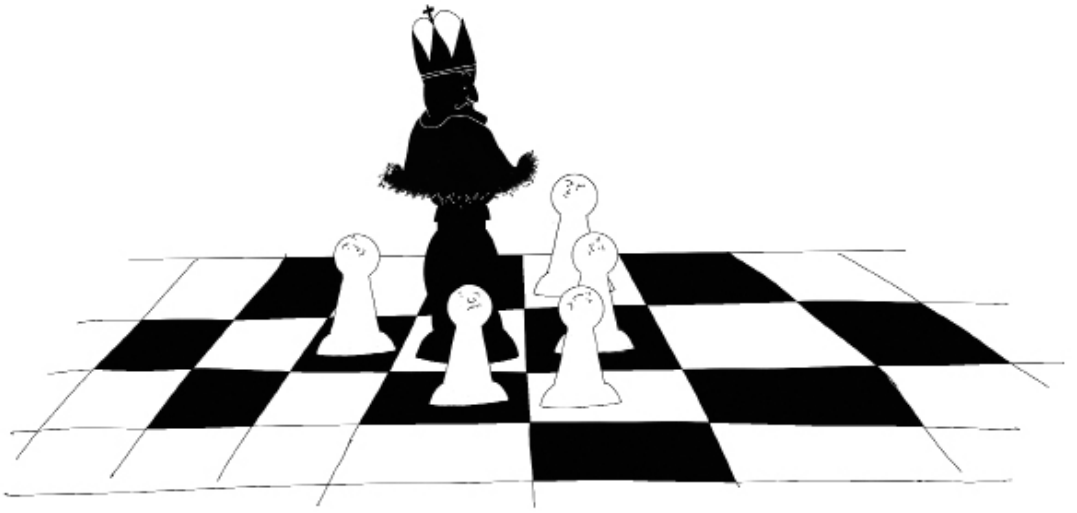
White has obtained two connected passed pawns on the queenside. The rest is a matter of simple technique.

It is certainly more appealing for a club player to sacrifice than to exchange, to win with an attack rather than in the endgame, to move forward and not retreat.

It is just like when we were playing football in the school playground – we all wanted to attack, but nobody wanted to defend.

However, when the boys in the playground said, "Look, we also need somebody in defence, let's divide the jobs among us," they made the first step from amateur football and set off on the journey towards football mastery. Who knows, maybe a place at Chelsea or Barcelona awaits them at the end of the journey.

And the same applies in chess: if you can rejoice at a well-played exchange just like you rejoice at a well-played sacrifice, you have left amateur chess and are well on the way to mastery.



Part VI

About Computers

Computers have greatly influenced chess during the last few decades. They have become a necessity for a professional chess player, and also club players use them a lot. It is, therefore, important to know how to use them properly. A computer is just like fire: a good servant but a bad master.

You can learn more about the limitations of computer programs and how to use them correctly in ***What Rybka Couldn't Tell You and Fritz Didn't Know***. You will find out that in a few (exceptional) positions, even an amateur can be stronger than a computer, and also learn how matches between computer programs can be of use.

New Silicon Horizons has an ambitious goal: looking at games of computers to uncover some previously unknown strategic patterns that practical players can make use of in their games. I will show that computer programs understand chess time differently, and that they can find very creative solutions.

The Magician from Brno is an interview with the World Number 1 in correspondence chess, the Czech grandmaster Roman Chytilek. Since correspondence chess is nowadays mostly about the ability to harmonize the intelligence of a machine and a person, the answers of the strongest player in the world will tell us much about the nature of computer programs.

It is much easier to go through large amounts of data with the advent of computers. ***The Biggest Lie*** presents various statistics about chess openings and endgames that fifty years ago could have been created only with great difficulties.

Chapter 28

What Rybka Couldn't Tell You and Fritz Didn't Know

How Should You Use Chess Engines?

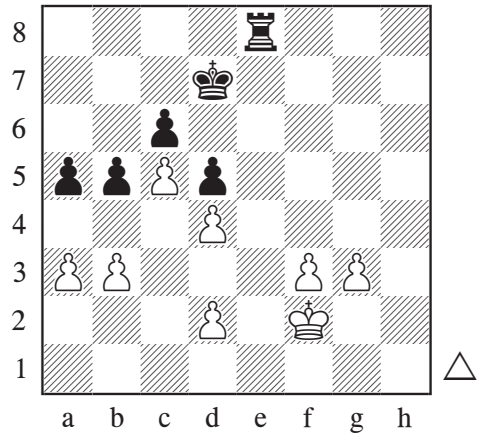
Chess programs are part of the everyday life of chess players. We use them while analysing, during preparation, and sometimes we even play against them. A player who doesn't have a computer at home, with Rybka or Houdini installed, comes to the board at a considerable handicap.

And yet hardly anybody understands these chess engines. Many players have prejudices or antipathy against them; others use them instead of their own heads. And so, in this chapter, I will try to explain briefly when it is suitable to use computer programs, how to work efficiently with them, and when it is better to get by without them.

How strong are computer programs?

One of the most common prejudices that I meet among players is the belief that "although computer programs are very strong in tactics, they don't understand strategy". This statement was probably valid fifteen years ago, but today no longer describes reality. Computer programs understand strategy and play extremely strongly in every part of the game and in every type of position; probably more strongly than any of the readers of these pages. And so if your intuitive assessment of the position differs from what the computer says, please accept the (sad) truth that in 95% of cases you are wrong, not the machine.

According to my personal experience, there are only three significant weaknesses of the engines, which derive directly from the way computers work. The first of them is the fact that computers are not able to detect fortresses. Let's have a look at the following example:



White to move plays 1.♔f1 and the position is a draw because his king can, from the squares f1, f2, g1 and g2, control attempts by the rook to enter through the e- and h-files. The pawns on f3 and g3 are effective barriers to the black king. The queenside is in effect blocked; on ...a4 there comes b3-b4, and on ...b4 comes a3-a4.

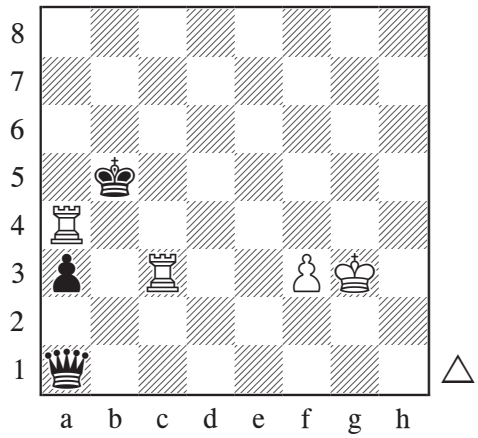
All computer programs evaluate this position as easily won for Black. Why is this?

The engine looks for a line of finite length with the best moves for both sides, and then evaluates the final position according to many criteria (material, the activity of the pieces, the position of the kings, the pawn structures and so on). The fortress is, however, something permanent, something 'eternal'. The position in the above diagram doesn't really change in a hundred or a thousand moves. Programs always analyse only to a certain final depth, and so cannot recognize the fortress.

The second weakness of computer programs is their inability to analyse simple endgames to the very end. Here is a position from a world championship match.

Viswanathan Anand – Veselin Topalov

Sofia (9) 2010



Anand captured 74.♖cxa3?! and his king became caught in a net of perpetual checks.

But could White win if he captured the a3-pawn with the other rook? Unfortunately, no chess program can give a clear answer to this question. The position is too complex to be able to calculate all the way until draw or mate. Stockfish 8 shows an evaluation of +0.30 and a sign expressing that White is slightly better. However, this piece of information is useless – White doesn't have a slight advantage in this position; he either is winning or not.

Thus it is necessary to look for the correct answer via other means: look in books, use online databases of elementary endgames, and rely on your own judgment.

By the way, the criterion used to evaluate a position is rather doubtful, because it doesn't address the goal of the game. The goal is to mate the opponent's king, and not to capture as many pieces as possible. It is not important whether I capture a rook or not while delivering a checkmate.

Evaluations such as +3.2 (pawns) only indirectly tell us whether a mate might

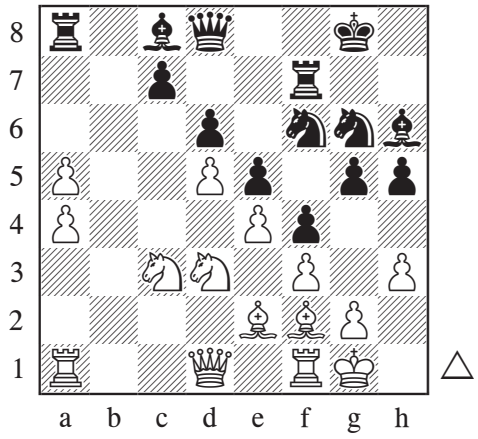
occur. A more helpful criterion would be a percentage for the chances of getting the point or the half-point. Instead of +3.2 pawns, the engine might estimate that White could expect, for example, 92% of the points in the given position. This means that if players approaching perfection were to play a hundred games from the given position, White would get approximately 92 points.

The third weakness of chess programs is the most frequent and probably the most serious – their inability to appraise the power of an attack on the king.

Let's take a look, for example, at the following position:

Viktor Korchnoi – Garry Kasparov

Amsterdam 1991



All the computer programs I have at my disposal evaluate this position as okay for White. He has an extra passed pawn and a big advantage on the queenside. However, both Korchnoi and Kasparov agreed in their comments that White's position is extremely dangerous. In a practical game, White is on the verge of losing: Black's attack is simply too strong. The game ended in a quick victory for Kasparov.

Why are computers not able to calculate the correct evaluation of the position? The answer is hidden in the question itself: computers calculate. In order to be able to calculate they need countable, comparable variables. 'Mate' and 'pawn advantage' are not comparable; the value of mate cannot be expressed in the 'currency of pawns'. (An analogy from life: try to estimate the value of health in euros or dollars!)

In the above position, we first need to judge whether Black will break through with the attack or not, and then we can start counting material. However, computers are not able to do this; calculating everything until the very end is too difficult even for the best processors. And so there is nothing left but to try counting apples and pears together, and then reach a provisional (and in this case probably mistaken) result.

How can you help your computer?

While evaluating a position, chess programs go through every legal move in the position, one by one. They consider, at least briefly, every possible answer of the opponent, and then consider all possible moves after each answer, and so on, until the processor is no longer able to go any deeper. Although computers are able to go through millions of positions per second, as the number of half-moves increases, the number of positions increases exponentially, until it acquires monstrous dimensions. (Remember the fairy tale about a chess board and a grain of rice...)

What greatly helps a chess program is when we make the obvious or critical moves for it. By determining the first few moves in a critical

line, we save lots of irrelevant work by the computer, and the computer, in turn, evaluates more precisely what really interests us.

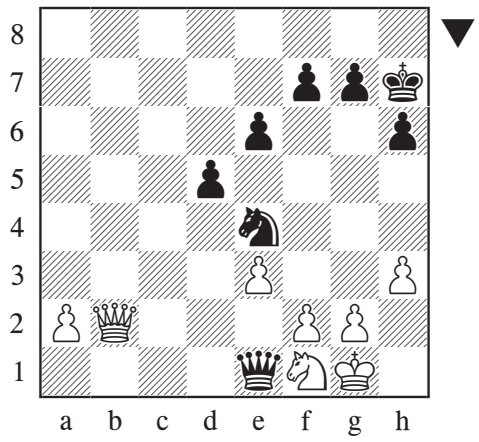
Another very effective method of obtaining the maximum information about a position is to organize a match between two programs. When two programs play, for example, a dozen of games against each other, it gives you a better idea how the position can develop in the near future. Even the result of such a match can be very interesting.

Let's go back to the game Korchnoi – Kasparov. Although all the engines evaluate White as having an advantage, a blitz match I arranged between Rybka and Robbolito on this topic ended 5–1 in Black's favour. (+0 =2 –4; the programs were switching colours so the result doesn't reflect any possible difference in their strength.) This debacle for White provides fairly clear proof that in the position in the diagram, White really is in trouble.

Let's have a look at a different example:

Boris Gelfand – Magnus Carlsen

Bazna 2010



Gelfand offered a draw in this position, and Carlsen accepted. Later he justified the decision saying, "I used most of the time that I had left looking for victory. When I couldn't find anything decisive, I shook hands with Boris." However, computer programs evaluate this position as clearly better for Black (somewhere between –0.6 and –0.8).

Should Carlsen have continued playing the game or not? The method of 'simulation', that is a match between two machines, is an appropriate way to answer this question. I employed both the aforementioned programs, and the result of an 8-game blitz match rather surprised me. White won twice, and the other games ended in draws. It was also clear from the games how White should get rid of the pin along the first rank: either by playing g2-g3, ♔g2 and ♘h2-f3, or by preparing f2-f3 and ♔f2. The active position of the black pieces is more or less only an optical superiority, which cannot be turned into anything more concrete. Carlsen's decision was therefore (also taking into account the state of the tournament) correct.

While the first method of helping a computer program (moving back and forth in critical lines) requires your active assistance, simulation using a match between two engines doesn't require your presence.

How can your computer help you?

All civilization's inventions provide people with both good and bad service. On the one hand they save us time and simplify our lives; on the other hand, they turn us into incapable consumers who depend on help from outside. I can buy bread and cheese in a few minutes in a shop; I no longer need to breed cattle, milk them, mess about with rennet, leavening, baking, etc. But if the shop is closed, I simply have no cheese and bread, because I cannot make them on my own.

The situation is similar with computer programs. Engines greatly simplify the lives of chess players, but at the same time make the players more stupid. Today many players prefer to turn Houdini on, rather than calculating with their own heads. But when they are sitting at the board, they then find out that they have become too lazy and are no longer able to solve even relatively simple problems.

It is, therefore, important to find some kind of balance in training, and not to follow the path of least resistance all the time.

We should use computer programs primarily to check games or analysis. The best way to work with your games is, in my opinion, the following procedure consisting of three steps.

First, analyse without a computer, identifying mistakes and finding out the reasons they occurred.

Second, analyse with the engine, identifying mistakes both in the game and in the previous analysis.

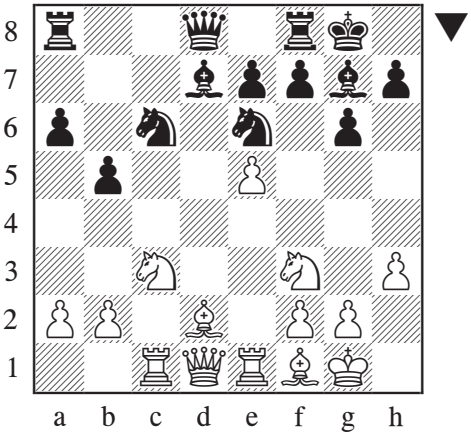
Third, it is necessary to generalize and understand what kind of mistakes you committed, and the reasons that led to the mistakes.

If you don't want to invest so much time and effort into your chess development, you can sometimes omit the first step. However, you must not – and this is extremely important – omit the third and final step. Without it, the computer analysis is worthless.

Here is a nice example:

Rafal Antoniewski – Milan Pacher

Ohrid 2009



Black's choice in the game was:

16...♕b8?

He later found out in his home analysis that the computer criticizes this move, and instead recommends 16...♘cd4 or 16...♘ed4. If he were satisfied only with this conclusion, he wouldn't learn anything. The information "16...♘cd4 is in Antoniewski – Pacher stronger than 16...♕b8" is so specific that it is useless (unless, of course, you reach an identical position). We need to apply the third step, to generalize the conclusions of the engines. The computer can no longer help us in this third step; our knowledge of chess strategy and our talent help us much more.

Black's position is quite cramped; particularly problematic is the d7-bishop, which is awkwardly placed, as it blocks an open file and can hardly move. Here every chess player should think of a standard guideline – in such positions we use exchanges to help us. The jump of a knight to d4 leads to an exchange of minor pieces; this gives more space to the rest of Black's army. In addition, you should think of another standard guideline – it is good to

move a knight to the centre, where this piece can be most useful. In support of these words, after 16...♕b8 White didn't hesitate in the game, and jumped with his knight:

17.♘d5!

Black never succeeded in freeing his position, and duly lost the game.

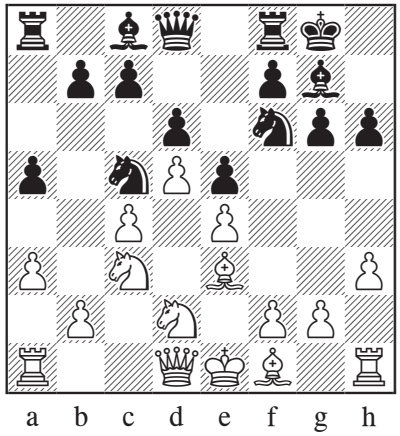
A computer program can help us identify a mistake. However, a player must identify the reasons for the mistake (in the above case, it was an inaccuarcy in a cramped position). It is therefore very important for young players to have access to good coaches and literature, even in the computer era; computer programs can give you specific pieces of advice, but they are not able to generalize them into strategic laws, nor formulate these laws in words and sentences.

Another interesting feature of computer programs is that they don't have any prejudices. They are not burdened by the history of chess thinking; they are barbarians when it comes to high chess culture. Anybody who lets an engine play without an opening book can witness this; the openings that Rybka or Fritz create on the board have hardly anything in common with the traditional openings we know.

This lack of prejudices can be great when searching for new openings. Computers can cast new light on worn-out positions; and although most of their ideas are not worth following, sometimes they manage to find gold where everybody else can see only dirt and rocks.

Michal Krasenkow – Teimour Radjabov

Dos Hermanas 2001



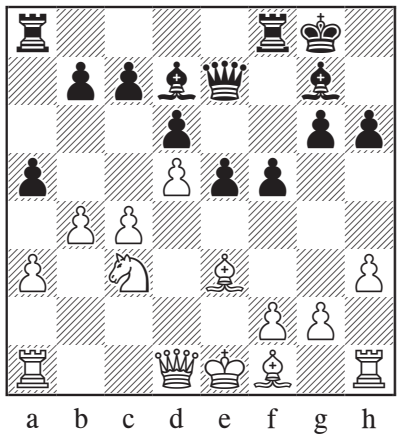
This position used to be the subject of hot theoretical discussions. Experts usually agreed that Black would have to retreat with the knight from c5, and thus White gets a slight advantage from the opening. (In the game, Radjabov played 11...♘e8 12.b4 axb4 13.axb4 ♖xa1 14.♕xa1 ♘d7.)

However, Stockfish didn't agree. It found the beautiful:

11...♗d7! 12.b4

Otherwise ...a4 will come.

12...♘cxe4! 12.♘dxe4 ♘xe4 13.♘xe4 f5 14.♘c3 ♕e7!!



Black sacrificed a piece for a single pawn and now plays a quiet move, calmly improving his position. Nevertheless, he has sufficient compensation – White has lost the fight in the centre and is lagging behind in development, and also the a1-h8 diagonal is weakened. White has to be very careful not to find himself on a slippery slope.

Such paradoxical ideas can hardly be found without a computer; and even if they are, it will cost you incomparably more time. Therefore, even though it is true that the extravagant ideas of engines usually fail when tested, computers are still a great source of help when dealing with openings.

Computers in chess shouldn't arouse emotions. They have become an essential part of the chess world; it's necessary to cope with this if we don't want to give up the royal game. The computer is neither angel nor devil; it is only a tool. I hope that in this chapter I have given you the manual that is largely missing for this tool.

Chapter 29

New Silicon Horizons

Computers Teach Humans Chess Strategy

Chess engines were created by chess players. Using programming skills, they patiently taught them what a weak pawn or the advantage of the bishop pair is, and how to play closed positions. At first, the engines weren't very good at playing chess, because they were naïve as children. However, they gradually grew and became stronger.

Today we can in all conscience say that chess programs have grown up. Thanks to the incredibly high performance of processors, any decent computer is now able to beat anyone in the world, including the World Champion. And what's more, Magnus would hardly have a chance.

In the chess world, we have found ourselves in a situation often described in various sci-fi movies – machines created by men cease to be dependent on the human race; on the contrary, the machines are the ones in charge. The truth is that the situation is not as critical as in the movie *The Matrix*: Rybka or Stockfish will surely not try to take over the world of people and make slaves of them. However, in a sense, they have already taken control of the chess world.

The situation requires a great deal of humility: the work of our hands has overtaken us. Until now, we have been teaching our computers how to play the royal game. However, it now seems that computers can start teaching us.

How is this possible? How is it that chess programs which we taught step by step the basics of strategy can suddenly teach us the same thing?

Well, the microscope was also created by people, and then showed scientists a world that they haven't even dreamt of. The microscope is only a means of looking into the depths of matter.

Computer programs are likewise only a means of looking deep inside the world of chess, and bringing to the surface laws and patterns that were previously unknown to us. However, this work can only be done by a human.

Out of curiosity, I undertook to find out more about it. I replayed hundreds of computer games, over and over again, so that in a small percentage of them I could find gold in the mud – the sparkles of a new chess strategy based on computer chess. I know – Nimzowitsch would turn in his grave. But that is what I want to do – to find out what Nimzowitsch overlooked and what we,

his heirs, cannot see because of the habit that has become a shirt made of iron.

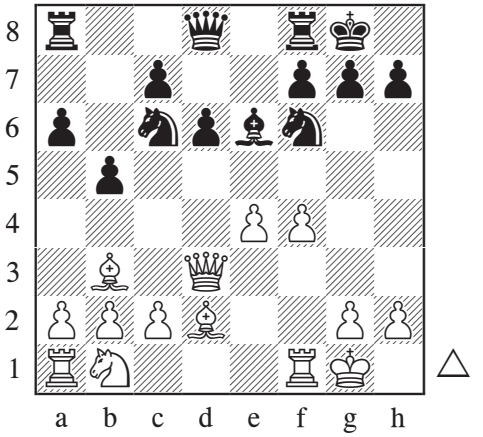
Computers provide us with a mirror: their strength shows us our weaknesses; their originality show us our deep-rooted prejudices. We can learn a lot.

Original solutions

Let's start with a simple statement: engines are barbarians that haven't read a single book about chess. They don't know anything about chess culture, they have never heard of Alekhine or Fischer. And all this gives them great creative freedom: computers happily play unconventional moves, whereas the flesh-and-blood hands of a chess player might rather fall off than play a move that is 'against the rules'. I will show you several examples:

Rybka – Ivanhoe

Engine game 2011



In this position, almost every chess player would try to develop as quickly as possible. However, Rybka spends a tempo playing a purely prophylactic move which, in addition, allows its pawns to be doubled next move.

13.a3!?

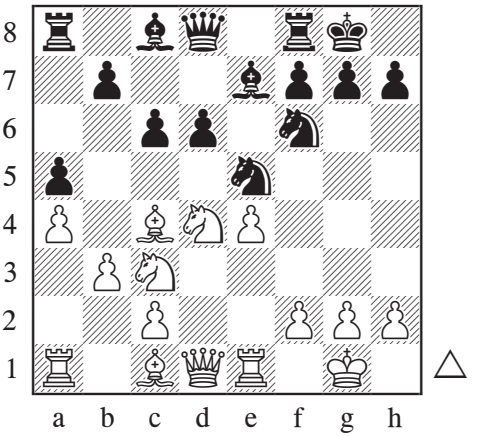
White is preparing ♘c3, and does not want to be bothered by ...♘b4.

13...♗xb3 14.cxb3±

In this original way, Rybka acquired dangerous pressure along the c-file, where the weak c7-pawn is standing. This pressure fully compensates for White's broken pawn structure on the queenside.

Ivanhoe – Stockfish

Engine game 2011



I am sure that almost any titled player would retreat the c4-bishop in this position; probably the most logical move is 14.♗f1. However, Ivanhoe not only voluntarily surrenders the bishop pair, but also allows the creation of isolated doubled pawns:

14.♗f4!? ♘xc4 15.bxc4∞

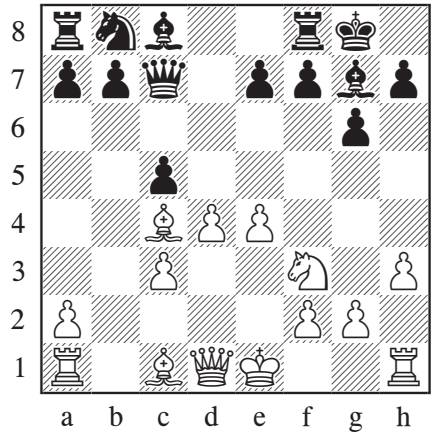
The computer gains play along the b- and d-files in exchange for these strategic concessions. The pressure on the d6-pawn is particularly annoying because it is no longer shielded by the e5-knight.

In the following example, we see an unusual use of the queen:

Gull – Komodo

Engine game 2015

1.d4 ♘f6 2.c4 g6 3.♘c3 d5 4.cxd5 ♘xd5 5.e4 ♘xc3 6.bxc3 ♗g7 7.♘f3 c5 8.h3 0–0 9.♗c4 ♕c7

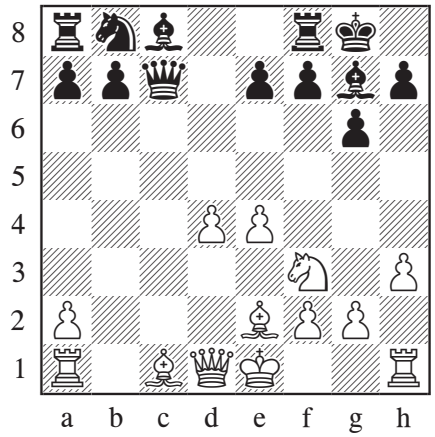


10.♗e2

Already this move is paradoxical for a human player; the bishop retraces its steps.

White usually plays 10.♗b3, but it is true that the bishop is often vulnerable on this square. For example, Boris Gelfand made use of it in Borges-Mateos – Gelfand, Tallinn 1989, in which he soon attacked the bishop again with a fine game: 10...b6 11.0–0 ♘c6 12.♗g5 ♗b7 13.♖c1 ♘a5=

10...cxd4 11.cxd4



11...♕c6!

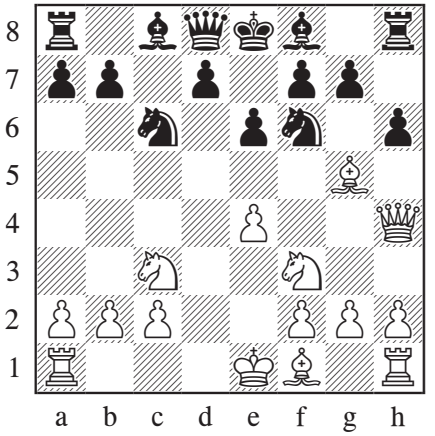
If I were White, I would be expecting various moves in this position, such as 11...♘c6, 11...♘d7, 11...♖d8 or 11...b6; but I doubt that I would come up with the move played in the game. And yet it is probably the best continuation, because it forces White to defend the e4-pawn. Of course, 12.d5?? is not possible because of 12...♕c3† and the a1-rook is doomed.

In the following example, Black solved his problems in the opening in an interesting way:

Rybka – Stockfish

Engine game 2011

1.d4 ♘f6 2.♗g5 c5 3.♘c3 cxd4 4.♕xd4 ♘c6 5.♕h4 e6 6.♘f3 h6 7.e4



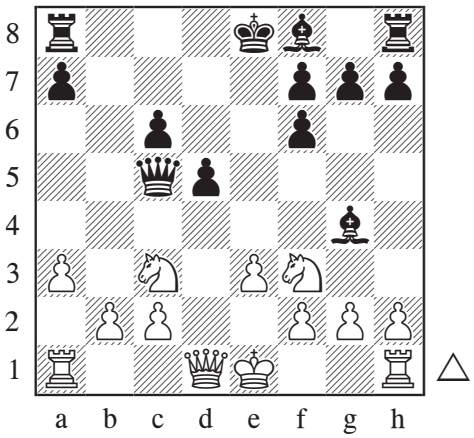
An unorthodox opening has led to an unusual position. White has pinned the f6-knight and is about to attack it with the e4-e5 break. Black has no time for ordinary moves; after 7...d6 White would restore the threat with 8.0–0–0. Stockfish solved the problem in a most elegant way. It broke the prejudice that in the opening you have to keep the possibility of castling, and played the paradoxical:

7...♖g8!

After this move, Black's position is already slightly more promising. Following the exchange on f6, Black gets not only the bishop pair, but also play along the g-file.

Stockfish – Rybka

Engine game 2011



This example of the original approach of computers to chess is interesting because of how both sides played. First, White, for no apparent reason, 'lost' a tempo on an unforced, prophylactic move; then Black handed over his bishop pair, without at least waiting to be 'kicked' by the move h2-h3.

11.♖b1

Every human being would, of course, castle.

11...g6 12.0–0 ♗xf3!?

In order to understand this exchange, we have to focus on the line 12...f5 13.♕d4!. After the exchange of queens, the g4-bishop would be left offside. And yet – is this a good enough reason to get rid of the bishop pair?

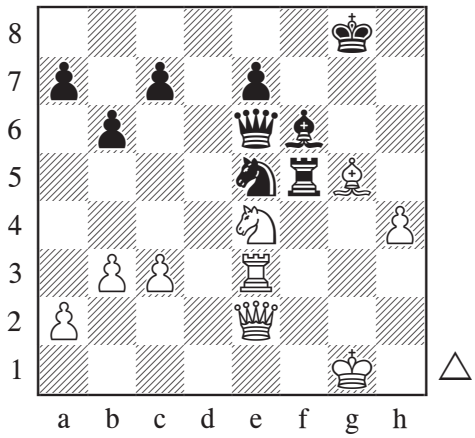
13.♕xf3 f5

I prefer Black, thanks to the advantage of the long-legged bishop over the knight.

The strangest ever demonstration of the originality of computers is from the year 2015, from a match between the two strongest chess programs of that time:

Stockfish – Komodo

Engine game 2015



The position in the centre is very tense, and you would expect White to pay attention to this part of the board. However, Stockfish played (from the human point of view) perhaps the least likely move:

30.a3

White not only fails to pay any attention to the problem of the centre, but also makes a move that makes no sense and, in addition, weakens the b3-pawn. And yet this continuation leads to an equal game, just like 30.♕g2 or 30.c4. The game continued:

30...♕xb3 31.♘xf6† exf6 32.♗xf6 ♕b1† 33.♔g2 ♖xf6 34.♖xe5 ♖g6† 35.♖g5 ♖xg5† 36.hxg5 ♕f5

Reaching a level queen endgame.

We have seen how computer programs don't 'respect' an intact pawn structure, the bishop pair, the possibility of castling, or time in

chess. My provocative question would be this. Is it really true that computers are not able to appreciate these strategic factors? Or is it rather that we overestimate these factors?

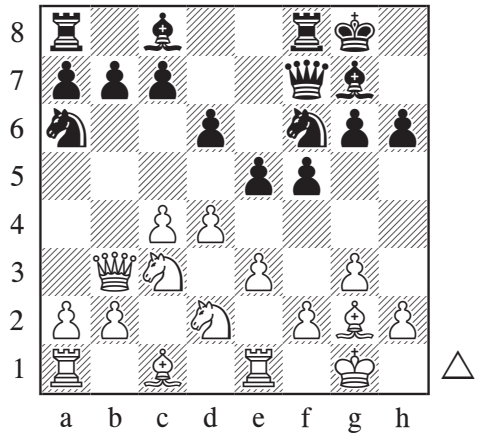
I have decided to focus on one specific feature of the play of the engines – their relationship to time on the chess board. Readers who are interested in my wider opinions about the flow of time on the chess board can go back to Chapter 13 on *Does Time Play against You?*

Here, we are going to analyse only the relationship between chess programs and the 'value of time'. I will show an interesting paradox: super-fast computers, capable of processing millions of positions per second, often play chess surprisingly slowly.

Computer time passes differently

Naum – Stockfish

Engine game 2011



With engines, we often witness the kind of play which, in the case of a flesh-and-blood chess player, we might call 'groping'. Engines don't play with plans; they consider the position anew after every move. And so sometimes they can create a sequence of moves that makes very little sense to the human eye. For example, in this position, Naum played:

12.♕a4 ♔h7 13.a3 ♖e8 14.♘e2 ♘h5 15.♕d1

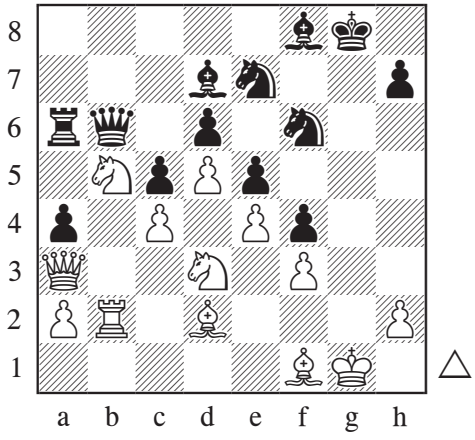
If one of my students created this sequence of moves, I would say he was irresponsibly wasting precious time. However, we need to be much more cautious with strong computer programs. Maybe time isn't so valuable in this kind of position, who knows? The evaluation of the position has not dramatically changed between the 12th and the 15th moves.

But imagine the psychological effect that these moves might have on a human opponent. He would surely aggressively try to punish you for your 'ridiculous' play. Yet you haven't done anything too bad – you've only been playing illogically.

My favourite example of *slowness* in a game between chess engines arose from the following position. White sacrifices a piece for two passed pawns. However, then something unexpected happens: he doesn't immediately start running with the pawns to promote them, as every human player probably would. Instead, he uses them as a shield against the opponent's pieces, and slowly strengthens his position.

Stockfish – Hiarcs

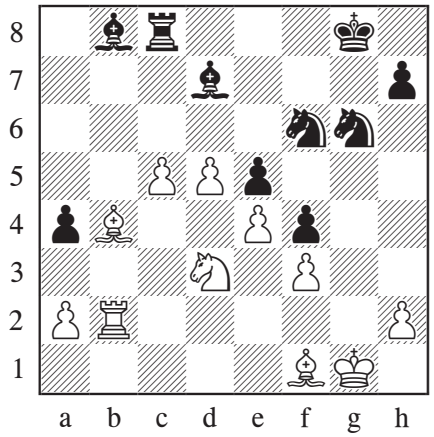
Engine game 2011



31.♘xd6!

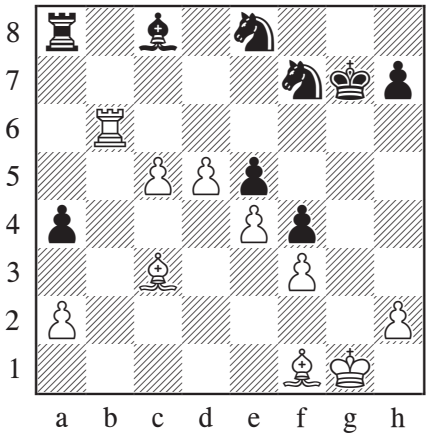
An absolutely correct sacrifice and, at the same time, almost the only way to break Black's fortress.

31...♕xd6 32.♕xc5 ♕xc5† 33.♘xc5 ♖a8 34.♘d3 ♘g6 35.♗c3 ♗d6 36.c5 ♖c8 37.♗b4 ♗b8



I (and certainly many other players, too) would try to push c5-c6 in this position. If I failed to get an advantage through this, I would become nervous and start blaming myself for sacrificing the piece in the first place. Stockfish, of course, doesn't become nervous. It starts playing the position as if there was equal material on the board. It soon becomes evident that the two advanced pawns really provide full compensation for the extra black knight. Black's position gradually becomes worse.

38.♗e1! ♗a7 39.♗f2 ♔f8 40.♖b7 ♖a8 41.♘b2 ♘h8 42.♘c4 ♘f7 43.♘b6 ♗xb6 44.♖xb6 ♘e8 45.♗e1 ♔g7 46.♗c3 ♗c8



47.a3!

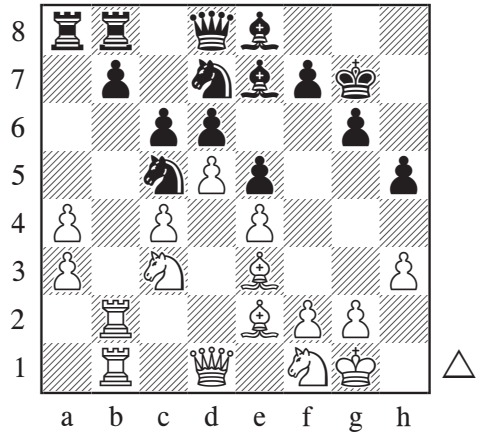
You can see such confident moves only in the games of strong players or computers! White has no reason to hurry, but can peacefully enjoy his positional advantage. The rest of the game was pure misery for Black.

47...♘f6 48.♔f2 ♘d7 49.♖c6 ♘f6 50.h4 ♘d7 51.♗b4 ♘f6 52.♖b6 ♔g6 53.♖c6 ♖b8 54.♖c7 ♘e8 55.♖e7 ♘g7 56.♖a7 ♘e8 57.♖xa4 h5 58.♖a7 ♘f6 59.♔e1 ♘e8 60.♖e7 ♘g7 61.♔d2 ♔f6 62.♖a7 ♘e8 63.♔c3 ♖b7 64.♖xb7 ♗xb7 65.c6
1–0

White also sacrificed a piece in the following example, though not to create passed pawns. At first glance, it seems that it was in order to mate the opponent's king. However, the moves that follow don't meet this expectation... What was White really after? The sacrifice that I am about to show you is one of the most complex I have ever seen.

Stockfish – Houdini

Engine game 2015



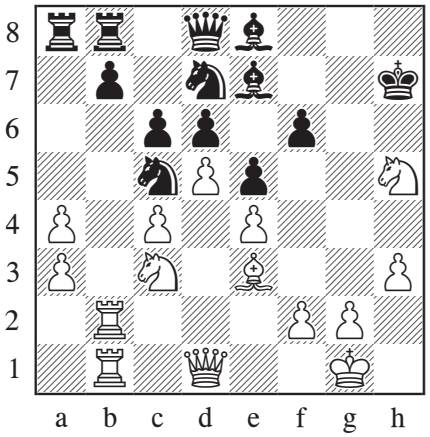
This position arose from the King's Indian Defence. When Black sacrificed his a-pawn, White bravely captured it and surprisingly managed to keep the extra doubled pawn on the a-file. However, its defence costs White a lot of energy that might be missed elsewhere. How should White continue?

He won't break through on the b-file, because the c5-knight is standing too well to allow it. The advance f2-f4 might lead to a weak e5-square.

White, therefore, decided to sacrifice a piece. The sacrifice doesn't bear any immediate fruit, but it exposes the black king and hence makes the situation difficult for the black pieces. They will have to concentrate on both wings as well the centre, where there is always the threat of the break d5xc6.

28.♗xh5! gxh5 29.♘g3 f6 30.♘xh5† ♔h7

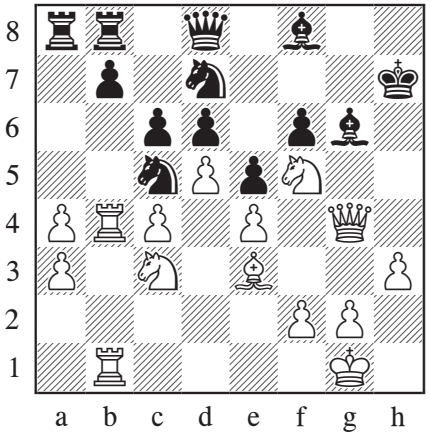
White would play the position slowly even after 30...♗xh5, for example, 31.♕xh5 ♗f8 32.h4 with great compensation.



31.♘g3!

This move underlines that a mating attack is not the main theme in the position. The knight approaches the weak f5-square, and Black has difficulties finding a reasonable plan for untangling his pieces, as his following two moves indicate:

31...♕a5 32.♖b4 ♕d8 33.♘f5 ♗f8 34.♕g4 ♗g6



35.a5!

After improving the position of his knight on the kingside, there comes an unexpected move on the other flank.

35...♕c7

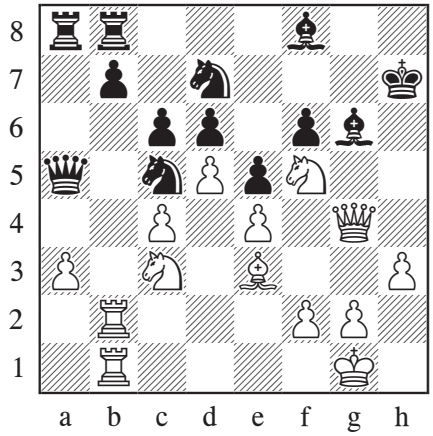
It is not possible to capture the ambitious pawn, at least not right away:

35...♖xa5? 36.dxc6 bxc6 37.♖xb8 ♘xb8 38.♗xc5 ♖xc5 39.♖b7† ♘d7 40.♘xd6+– With the total disintegration of Black's position.

35...♕xa5 36.♗xc5 ♘xc5 37.dxc6+– Black cannot recapture because the rook is hanging on b8.

36.♖4b2 ♕xa5

Black captures the pawn after all. However, the queen leaving the centre allows a lovely finish.



37.♘h4!

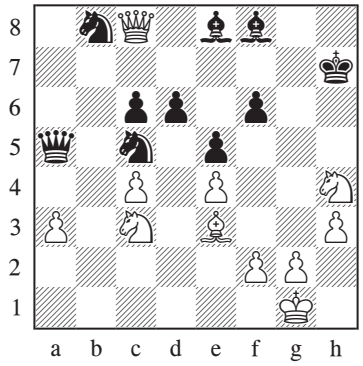
Attack on the kingside...

37.♗e8 38.dxc6

...and then also in the centre!

38...♕xc3

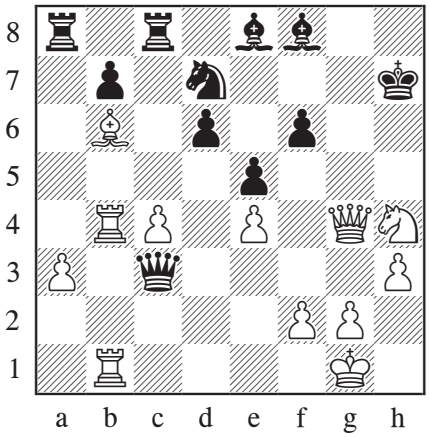
38...bxc6 39.♖xb8 ♖xb8? (39...♘xb8 is not much better, for example: 40.♗xc5 ♕xc5 41.♖b7†+–) 40.♖xb8 ♘xb8 41.♕c8+–



A position that is the dream of every queen. The white queen has many targets in the opponent's camp, starting with the king and ending with almost all the minor pieces. Despite having a piece less, White is comfortably winning.

But let's go back to the game, which concluded:

39.cxd7 ♘xd7 40.♖b4 ♖d8 41.♘f5 ♗g6 42.♗b6 ♖dc8 43.♘h4 ♗e8



44.♖4b3 ♕d2 45.♕e6 ♕f4 46.♖g3 ♕xg3 47.fxg3 ♘xb6 48.♖xb6

1–0

We can ask ourselves the question: is the occasional 'slow' game by computers just a manifestation of their imperfection? Or is it the other way around: is our 'fast' game a manifestation of *our* imperfection?

The times we live in are extremely fast: everyone around us teaches us that time has to be used effectively and efficiently. Daydreaming, a long conversation during the morning coffee, wandering around the city – none of these has value in the eyes of today's world. Such things are valuable only to artists and people in love.

If we transfer the same understanding of time to the world of chess, we will be good at sharp, dynamic positions, but slow positions will cause us great difficulties. And we won't be able to understand the groping, searching and losing time in positions in which the value of a tempo is relatively small.

It is quite paradoxical and funny that computers – the fastest of our fast children – should teach us to slow down.

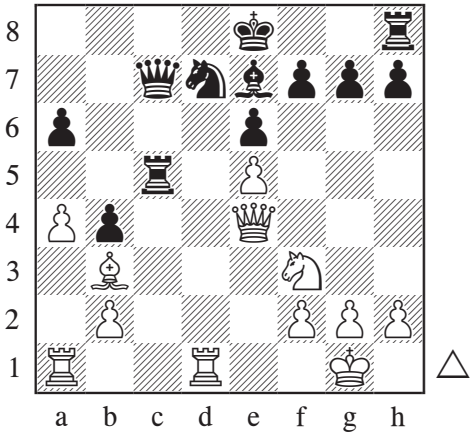
No fear

Computers are completely lacking in human emotions. And they don't make tactical mistakes. Therefore, in a given position, they sometimes find a plan that a person wouldn't play because it is too risky or seems to be too dangerous. Such assertive plans impress us with their courage. But don't be fooled – computers are not courageous. After all, can a calculator or a fridge be courageous? No, computers are neither brave, not cowardly – but their play can lead us to show greater courage.

Let's take a look at some examples:

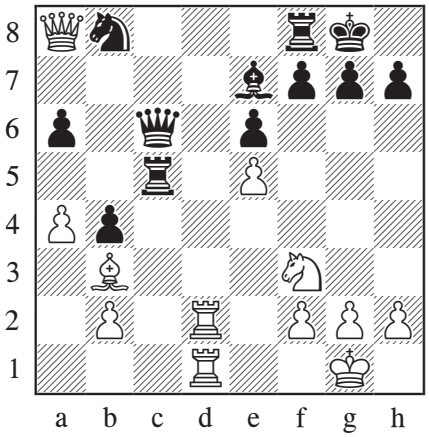
Rybka – Houdini

Engine game 2011



White cannot be satisfied with the result of the opening: he definitely has not gained any advantage. There are opposite-coloured bishops on the board and, in addition, the e5-pawn is weak. If Black completes his development without any difficulties, he could even obtain the initiative. However, Rybka found a daring plan which involved putting its queen on the edge of the board. A person would hesitate: "Won't I lose the most powerful piece I have?" But Rybka knows that Her Majesty is safe.

19.♕a8†! ♘b8 20.♖d2 0–0 21.♖ad1 ♕c6



Hurray! The queen in the corner is saved. Now I can exchange it and have one thing less to worry about! Or not? Rybka is searching for its own way through the game...

22.♕a7!? ♖e8 23.h4 ♕c8 24.♕b6

Already the third move of the queen in the dangerous territory. And yet the queen is still alive and healthy.

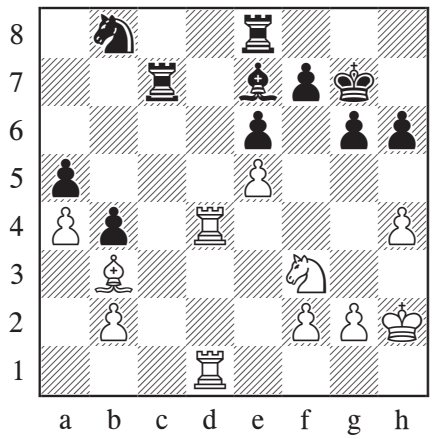
24...a5 25.♖d4 ♕c6 26.♕a7!?

An exchange? No way!

26...g6

There follows another computer lesson about slowness. White cannot see any clear plan; however, he is sure that his queen is safe. And so he starts dancing with his king.

27.♔h1 ♔g7 28.♔g1 h6 29.♔h2 ♕c7 30.♕xc7 ♖xc7=

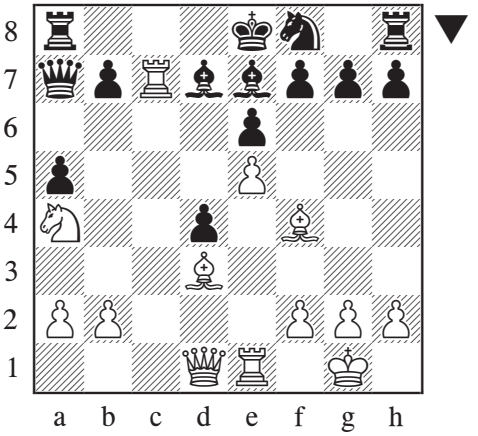


The story of the courageous queen has come to an end. The position is as balanced as it was in the beginning.

In the following example, the brave individual was not the queen but her husband. He decided he would put things in order in his camp:

Komodo – Stockfish

Engine game 2015

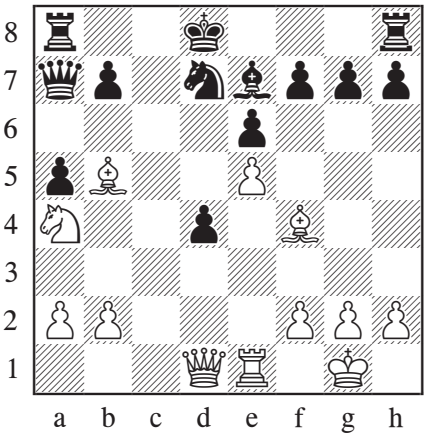


White is a pawn down, but has a nice-looking offensive position. His pride is in particular the c7-rook, which has entered the seventh rank. Black can try to force out this intruder in various ways, for example with 18...♕b8 or 18...♗d8. However, the role of bouncer can also be taken on by the king itself.

18...♔d8!? 19.♖xd7†

If a human being was playing White, we might assume that he was trying to punish the opponent for an extravagant move... However, the sacrifice is also objectively the critical continuation.

19...♘xd7 20.♗b5

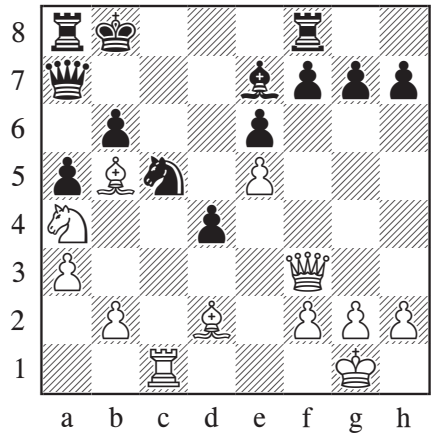


It might seem that Black has made a mistake in his calculations. His king is stuck in the centre, and the white pieces have control over important squares. The only question seems to be when the d4-pawn, the last defender of the king, will be captured. However, Black has not yet used all the cards up his sleeve...

20...♔c7!

The king behaves as if it was the owner of the entire board! And yet the move is absolutely logical – with the queen being on a7, the queenside is the best place for the king. The game continued:

21.♕g4 ♘c5 22.♖c1 b6 23.a3 ♔b7 24.♕f3† ♔b8 25.♗d2 ♖f8

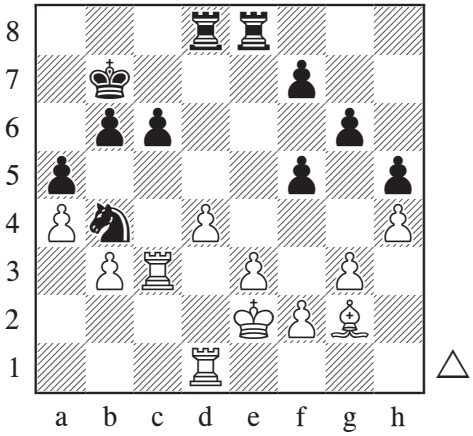


With an unclear position.

The next example is even more beautiful. Rybka, after trying for many moves to overcome the walls of the opponent by normal methods, decided on a seemingly crazy trip with the king. And the plan worked! White's king remained unharmed and even became a very active piece. And yet this example belongs in the category: "Do not try this at home."

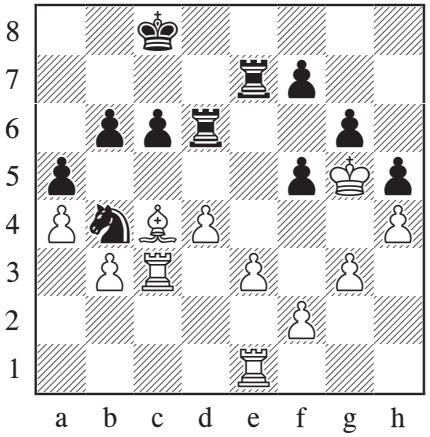
Rybka – Houdini

Engine game 2011



How can White's position be strengthened? There are no breaks in sight, and it seems that all his pieces are standing ideally. But maybe one piece is not standing that well – the white king! Rybka decides to improve its position by moving it forward on the kingside:

73.♔f3! ♖d5 74.♔f4! ♖d6 75.♔g5! ♖c8 76.♗f1 ♖c7 77.♖e1 ♖e7 78.♗c4 ♔c8



The black knight is the piece that could bother White's monarch. However, the knight is standing far away on the queenside and cannot move to d5 because it would be

captured by the c4-bishop. And so the white king doesn't have to be scared at all. And indeed he is not afraid, but continues unhurriedly on his long journey:

79.♔h6! ♔c7

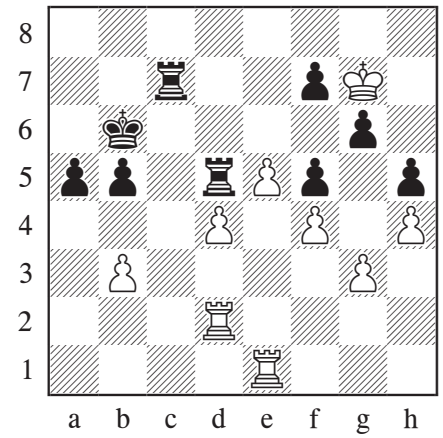
Slow manoeuvring now follows, very typical for computer chess. It is not by chance that our example started on the 73rd move, even though from looking at the position I would have guessed that no more than 50 moves had been played.

80.♖cc1 ♔b8 81.♖e2 ♖b7 82.♖d2 ♖dd7 83.♖e1 ♖d8 84.f3 b5 85.♗f1 ♔c7 86.e4 ♔b6 87.e5 ♘d5 88.axb5 cxb5 89.f4 ♖c7 90.♗g2 ♖c3 91.♔g7!

It's just like climbing an eight-thousander!

91...♖c7 92.♗xd5 ♖xd5

White finally convinced his opponent to allow the exchange of minor pieces. In the endgame with four rooks that has arisen, the activity of the king is a significant factor.



93.♔f6! b4 94.e6±

White is much better.

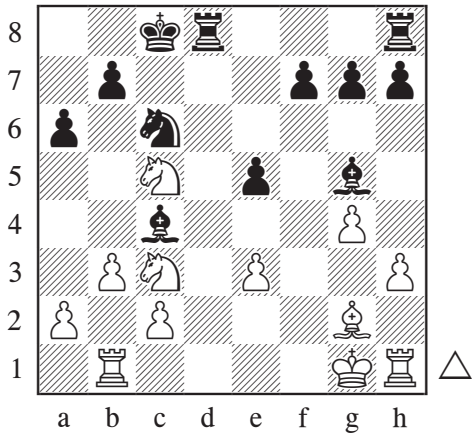
Although for flesh-and-blood chess players, such royal walks belong in the category of extreme sports, occasionally there are some brave souls who are willing to try such things. After all, there were also people with an adventurous spirit who were brave enough to fly around the world in a balloon, to explore the North Pole, and so on.

One such daredevil is David Navara. The following game of his was, according to the ChessBase website, the most beautiful game of the year in 2015. But who was the real author of the king's walk? It is very difficult to tell, since Navara had some of the positions from the game on the board already during his home preparation.

Although it sounds incredible, the white king was almost never in mortal danger during its journey around the world. Only at one moment could Black have punished the king's trespassing, but the refutation was so deep and complex that it took several days for people armed with excellent computers to find it.

David Navara – Radoslav Wojtaszek

Biel 2015



The position is pretty tense. White has the worse pawn structure, a strange rook on h1, and he has conceded the bishop pair. It might

seem that Black must be better. However, Black's c4-bishop is in serious trouble, and that gives White good chances. Wojtaszek is trying to solve this problem tactically, by attacking the e3-pawn. This cannot be protected by the rook because of the stab ...♗h4, followed by returning with ...♗g5.

And so the king takes over the defensive task:

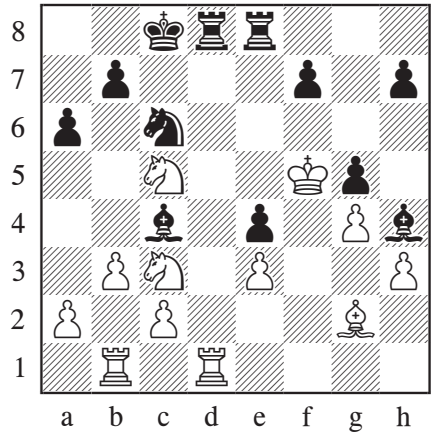
20.♔f2!?

Objectively we should evaluate this plan with a question mark. However, no fan of the royal game could do that.

20...♗h4† 21.♔f3

21.♔g1 ♗g5 leads only to a repetition of moves.

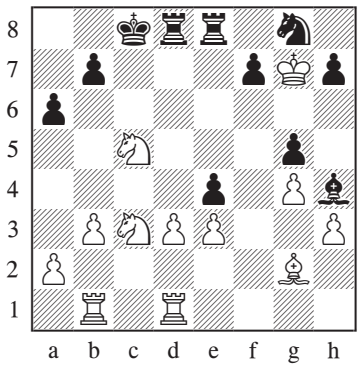
21...e4† 22.♔f4 g5† 23.♔f5 ♖he8 24.♖hd1



24...♖e5†?!

A very natural move, its only drawback being that it is not winning.

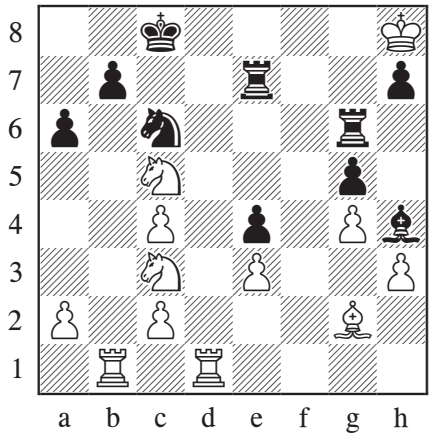
As Grandmaster Knaak pointed out, the only winning continuation for Black was 24...♗d3!!, sacrificing the bishop in order to divide the white army into two groups – the lone king and the rest. 25.cxd3 ♘e7† 26.♔f6 ♘g8† 27.♔g7



27...♗g3!! The only move. 28.♔xh7 ♘e7 29.♔g7 ♗e5† 30.♔xf7 ♘c6 The brave white king will end up being mated.

It is obvious that without home preparation, even Wojtaszek could have found this refutation only by accident. Indeed, Navara did check the position after White's 24th move with his computer, but did not reach the depth of over 30 half-moves needed to find the refutation.

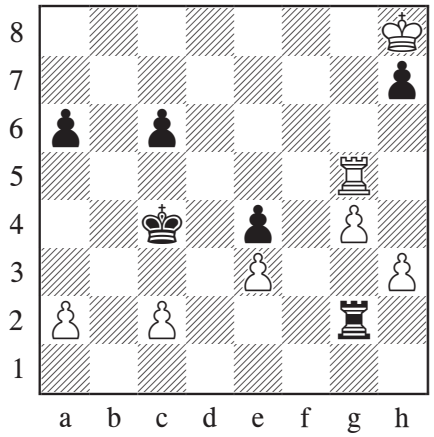
25.♔f6 ♖g8 26.bxc4 ♖g6† 27.♔xf7 ♖e7† 28.♔f8 ♖f6† 29.♔g8 ♖g6† 30.♔h8



The white king has reached the chess Mount Everest. There is nowhere further to go. Now it is important only to survive at the top, to take some good selfies and then get back to the camp in good health.

30...♖f6 31.♖f1 ♗f2 32.♖xf2 ♖xf2 33.♖f1 ♖xg2 34.♖f8† ♔c7 35.♘d5† ♔d6 36.♘xe7 ♔xc5 37.♖f5† ♔xc4 38.♘xc6 bxc6 39.♖xg5

After all the action, an equal rook endgame has arisen on the board. During the previous course of events, Black simply held his ground. But the goddess Caissa is righteous and rewarded the superhuman creative performance of White with a full point.



39...♖g3

39...♖xc2 40.♔xh7 ♖e2 was probably an easier draw – the c2-pawn is worth the tempo.

40.h4 h6?

Correct was 40...♖xe3 41.♔xh7 ♖g3 42.h5 e3 43.h6 ♔c3 44.♔g8 e2 45.h7 e1=♕ 46.h8=♕† ♔xc2 with an equal endgame.

41.♖g6 ♖xe3 42.♔g7 ♖g3 43.♔xh6 e3 44.♔g5 ♔d5 45.♔f4 ♖h3 46.h5 c5 47.♖g5† ♔d4 48.♖e5
1–0

No stories, please

Another feature of the human mind, which does not affect computers, is the need to connect individual parts into a coherent whole. "Chess is not played in individual moves, but in plans," I was taught when I was younger. However, computers don't plan. Their game is opportunistic; the flow of the game can be changed with every move.

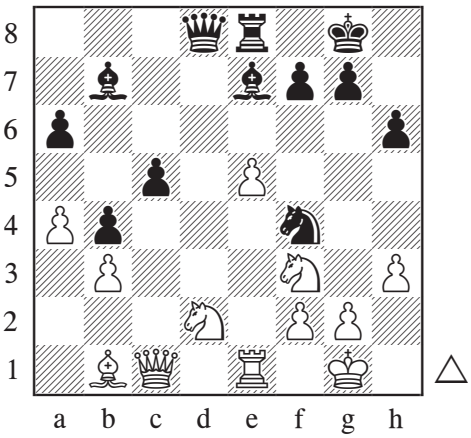
People at the board (and also beyond it) often become victims of their own opinions. For example, if you believe that you are winning, you can easily overlook a continuation that leads to a draw. Or if you start to believe that the position has a strategic character, and your opponent suddenly starts using unexpected tactics, it can have a considerable effect. We are often unable to see the whole wealth of the position because it simply 'doesn't fit into the story' that we have created about the game in our heads, whether this story was created consciously or not.

However, engines do not fall into these traps. And so they sometimes play games in which the individual moves do not seem to make any sense together. And yet they are – most likely – the best moves.

The engines make us face an interesting paradox: it turns out that a move doesn't have to be logical to be strong. Or to put it better: our learned logic, which we use to try to understand the position, sometimes has to retreat in the face of deeper, more mysterious, laws that are unknown to us.

Houdini – Rybka

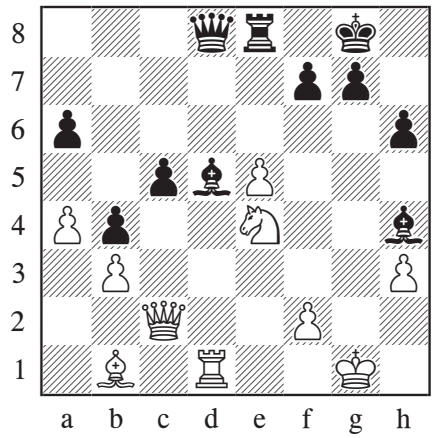
Engine game 2011



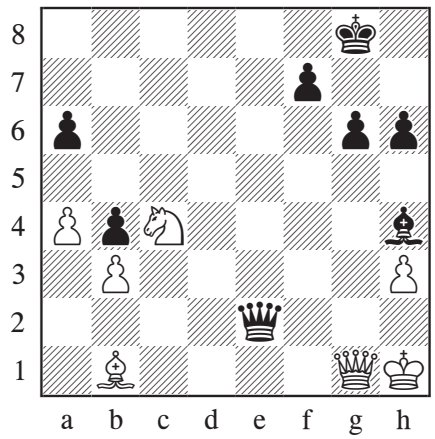
The following fight seems to me as if it were artificially stuck together from several combinations. One side sacrifices a piece, but the other side doesn't capture it. One side threatens something; the other side ignores the threat. Unexpected twists constantly unsettle the viewer; when he thinks he is beginning to understand something, there comes a bolt from the blue.

33.♕c4 ♘xg2 34.♕c2 ♗g5 35.♖d1 ♘h4 36.♘xh4 ♗xh4 37.♘e4 ♗d5

After a moment's relaxation, now comes the second part of the tactical carousel:



38.f4 c4 39.♘d6 ♕b6† 40.♔f1 g6 41.♖xd5 ♕e3 42.♕e2 ♕xf4† 43.♔g1 ♕g3† 44.♕g2 ♕e3† 45.♔h1 ♖xe5 46.♖xe5 ♕xe5 47.♘xc4 ♕e1† 48.♕g1 ♕e2



It seems that both sides have used all of their gunpowder. But it is not true – with a final sacrifice, White transfers the game into a balanced minor piece endgame:

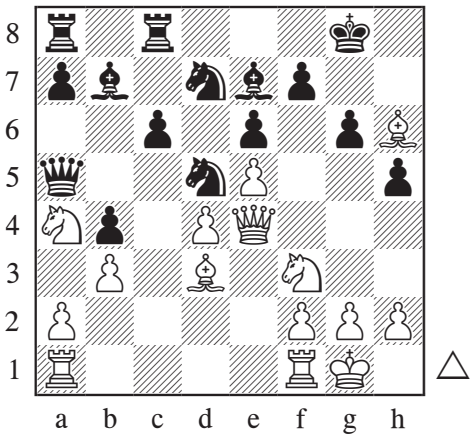
49.♗xg6 ♕f3† 50.♕g2 ♕xg2† 51.♔xg2 fxg6 52.♘e5

White will capture a pawn, either the g6-pawn or one of the queenside pawns, and secure the draw.

The following attack belongs among the most mysterious that I have seen in computer chess.

Critter – Stockfish

Engine game 2011



18.g4!?

Very interesting. White is not afraid of the potential strength of the b7-bishop, and tries to break down his opponent's bastions on the kingside. It does not even concern him that with his next move he will lock in his own bishop on h6.

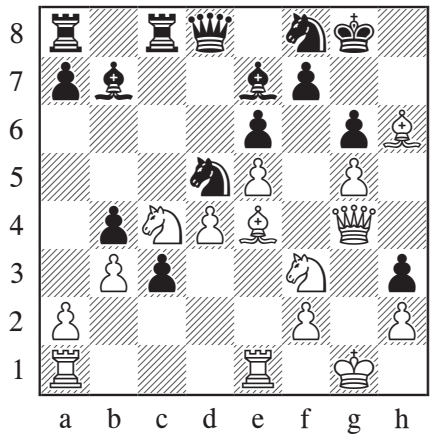
18...h4 19.g5 ♕d8 20.♕g4 c5 21.♖fe1 ♘f8 22.♗e4!?

An absolutely unexpected move. White doesn't capture on h4, nor does he transfer some piece to the kingside. Instead, he starts

to play slowly – prophylactically neutralizing the opponent's light-squared bishop.

22...c4 23.♘b2 c3 24.♘c4 h3

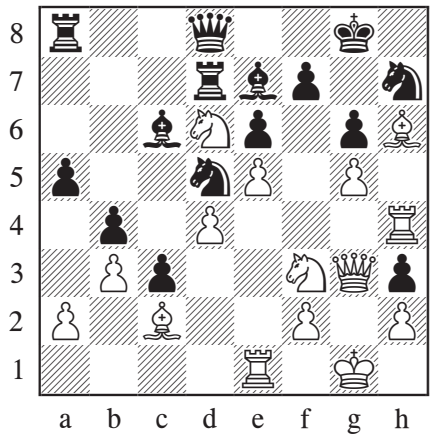
Don't ask me what this move is for.



25.♕g3!?

And again, a very innovative way of building up the pressure. The black h3-pawn is sentenced to death and does not bother White at all. He calmly uses the available g3-square and prepares a jump of the c4-knight to the centre.

25...♖c7 26.♘d6 ♗c6 27.♗c2 ♘h7 28.♖e4 ♖d7 29.♖ae1 a5 30.♖h4



Finally, White's attack has 'normalized' a little; the bishop retreated and released the e4-square for the rook, which transferred across to the kingside. Black now tries to get rid of the pressure by sacrificing an exchange. However, there is another surprise awaiting him...

30...♖xd6! 31.♕xh3!!

Computers don't suffer from preconceived ideas. The imperative of recapturing obviously doesn't mean anything to them.

31...♖d7 32.♖ee4 ♗f8 33.♗xf8 ♔xf8 34.♖xh7+–

A beautiful and mysterious attack.

To end this chapter, I would like to show you a unique game that is a nice synthesis of everything that has already been said about computer chess. We are about to see unexpected moves, established strategic guidelines being ignored, great courage, attractive sacrifices and also, in some phases, the characteristic slow pace of computer chess.

Superhuman achievement

Rybka – Naum

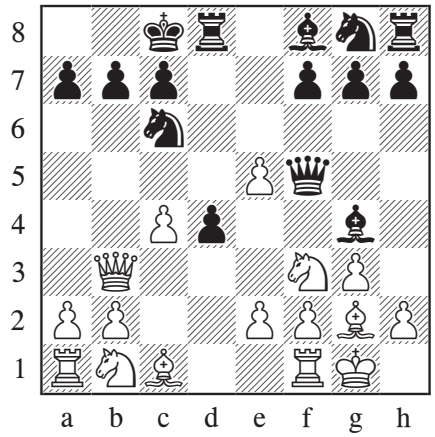
Engine game 2010

1.d4 d5 2.c4 e5 3.dxe5 d4 4.♘f3 ♘c6 5.g3 ♗g4 6.♗g2 ♕d7 7.0–0 0–0–0 8.♕b3 ♕f5

A rare move whose idea is probably to threaten ...d3, and to press on the e5-pawn.

Here 8...♘ge7 is usually played, or 8...♗h3.

In tournaments and matches, engines usually change openings according to a predetermined plan, in order to be tested in all kinds of positions. In this game the opening was prescribed until 8.♕b3; therefore, 8..♕f5 is the first independent move of the game.



9.♘g5!!N

The first independent move of Rybka – and what a gem! The engine plays a completely 'illogical' move that has never crossed the mind of any human player. It jumps with the developed knight, although the queenside is still asleep. In addition, this knight was protecting the e2- and e5-pawns, and it does not feel too stable on g5.

The tactical justification of 9.♘g5 lies in the vulnerability of the black queen and f7-pawn.

So far, people have played only the ordinary 9.♖d1.

9...h6

This is practically the only answer.

9...♘ge7?? 10.f3+–

9...♗xe2?? 10.♗h3 ♗g4 11.♗xg4 ♕xg4 12.♘xf7+–

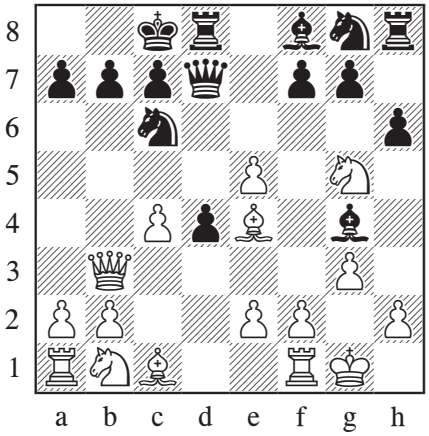
9...d3? 10.exd3 (10.♗e4 ♕xe4 11.♘xe4 dxe2 is less clear) 10...♖xd3 11.♘c3+–

10.♗e4

It is helpful first to divert the black queen.

Immediately capturing on c6 is weaker: 10.♗xc6 bxc6 11.♘f3 ♗c5 12.♘bd2 d3 Black has plenty of counterplay.

10...♕d7



11.♗xc6!?

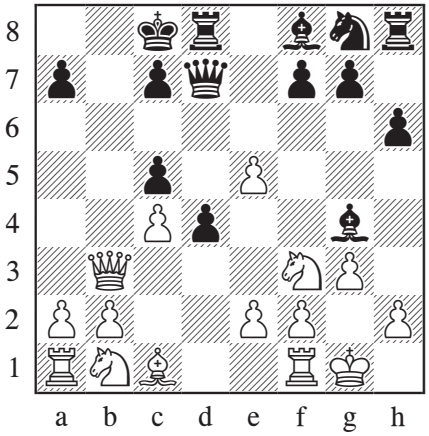
Again, a concrete move that would be a very difficult decision for a human player – will White's weakened kingside survive? However, Rybka is not afraid.

A person might well timidly keep the bishop: 11.♘f3 ♘ge7 12.♘bd2 With a slight advantage.

11...bxc6

11...♕xc6? 12.♘xf7 ♗xe2 13.♘xd8 ♔xd8 14.♖e1 ♗xc4 15.♕d1+– doesn't give Black any compensation.

12.♘f3 c5



Nor would this move be the choice of a grandmaster. Developing moves are more natural. On the other hand, with this move Black improves his structure and prepares his initiative on the light squares, which is especially dangerous for White because he no longer has the bishop that would watch over them.

13.♕a3

Rybka again proves that it is not made of flesh and blood – it would surely not pass the Turing Test! Instead of safe development, it aims to take care of the inconspicuous a7-pawn, placing the queen on a strange square. If Black protects the pawn, his king would enter a vulnerable zone.

13...♕c6!

Challenge accepted. There is a threat of ...d3.

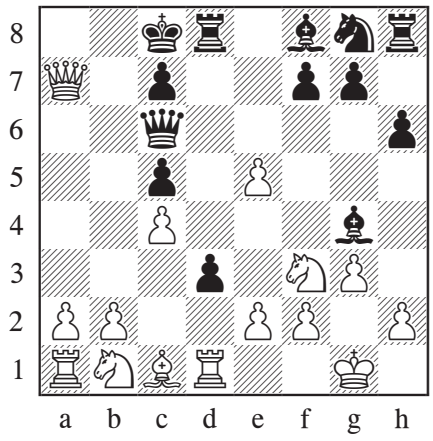
14.♕xa7?!

Played with a great deal of courage.

Any move preventing ...d3 would probably be prioritized in a game between grandmasters, for example, 14.♖d1.

14...d3! 15.♖d1

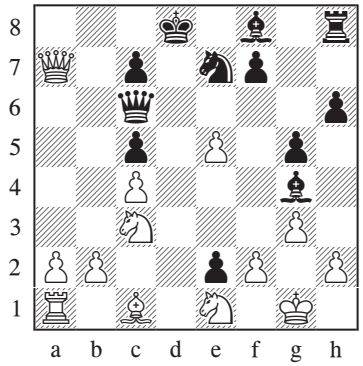
15.♖e1 dxe2 16.♘fd2 looks very unattractive.



15...♘e7?!

This move is, in my opinion, a mistake. Of course, it is difficult to criticize engines; but here Naum chooses a worse position without any counterplay, instead of choosing a suspicious position with counterplay.

After 15...dxe2! 16.♖xd8† ♔xd8 17.♘e1 ♘e7 18.♘c3, Black can play 18...g5! with the idea of weakening the e5-pawn.



Black obtains significant counter-chances. Although White is a pawn up, his king doesn't look secure. I let two strong programs play blitz games from this position, and the results were slightly in Black's favour; clear proof that it is very difficult to defend the position of the white king.

16.♕a3

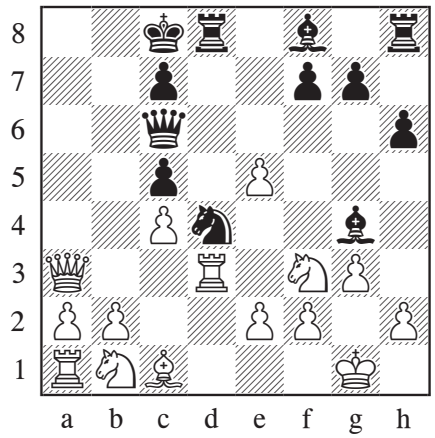
The centralization of the offside queen is a greater priority than the development of the queenside.

16...♘f5

There is something to be said for: 16...dxe2! 17.♖xd8† ♔xd8 18.♕d3† ♔c8 19.♘e1 ♘g6 20.f4 h5 21.♘c3 h4 22.♘xe2 ♗e7 Black has huge counterplay against the white king.

17.♖xd3 ♘d4

The point of Black's plan. The central knight creates lots of threats; if White exchanges it, the e2-pawn will fall.



18.♖xd4!

This is – exceptionally – an entirely human, that is to say, practical solution. White will get three pawns in return for an exchange.

You would really need a strong stomach to enter a pin with 18.♔g2. After 18...♘xe2 19.♖xd8† ♔xd8 20.♘bd2 ♘d4, it is not clear at all how the f3-knight will escape its problems.

18...cxd4 19.♕d3 ♕g6

Hardly any grandmaster would choose this move – the chances for counterplay against the king cease to exist after exchanging queens. In addition, recapturing the queen with the f-pawn will create a new passed pawn for White in the centre. Naum, however, wants to break through the key d3-square.

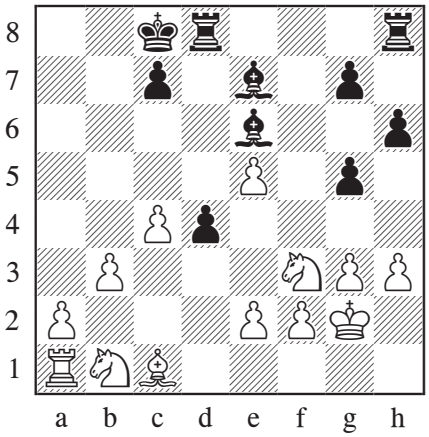
20.♕xg6 fxg6 21.♔g2

Otherwise ...d3.

21...♗e7 22.h3 ♗e6 23.b3 g5

Imagine being in this position as White. What would you play?

In twenty-three moves, Rybka hasn't moved anything on the queenside. Do you think this fact bothers it? Not at all! The following moves are also proof of this – the machine simply decides that there is no need for quick development in this position and, with extraordinary self-confidence, begins playing on the flank where it is nominally weaker.



24.g4!? ♔b7

24...d3 comes too late: 25.♗e3 dxe2 26.♘c3 Black's counterplay is destroyed without any difficulties.

25.♔g3 ♖d7 26.♘e1!

One more blockading move – the queenside is still asleep...

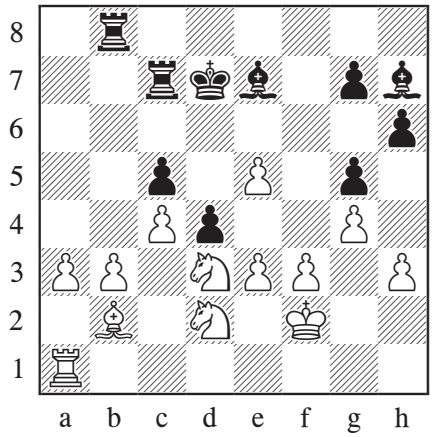
26...c5 27.♘d2 ♖a8 28.a3

Yet another mysterious move – White surely has more useful ways to use his right to move. But the reader has probably already become accustomed to the groping play of the machines.

28...♖c7 29.♗b2 ♔c6 30.♘d3 ♔d7 31.f3 ♗g8 32.♔f2

An extremely concrete approach to the position, which has been the style of Rybka throughout the game. With his last two moves, White has prepared the removal of the d4-pawn.

32...♖b8 33.e3 ♗h7

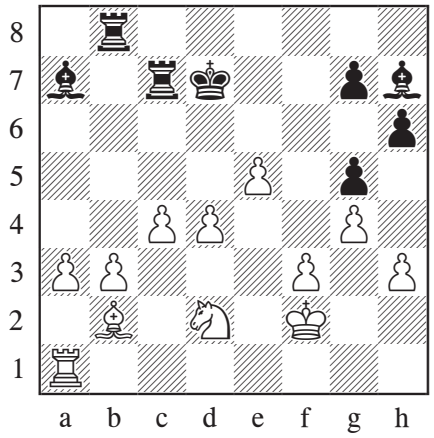


34.♘xc5†!!

The second extraordinarily beautiful jump of White's king's knight. While his colleague from the queenside has made only one move, the knight from g1 has jumped to g5, blocked the important d3-square, and now makes a sacrifice to create an unprecedented phalanx of pawns, against which Black will be helpless.

34...♗xc5 35.exd4 ♗a7

White has five connected passed pawns in exchange for a rook – a very rarely seen material imbalance. The nearest to this situation that I can remember was a classic example, the 13th game of the Spassky – Fischer match in Reykjavik in 1972.



The great phalanx will slowly push Black down like a tidal wave. I recommend that you watch the continuation of the game like an action movie...

36.♖c1 ♗g8 37.♔e3 ♖bc8 38.♔d3 ♗f7 39.b4

One.

39...♗g6† 40.♔e3 ♗f7 41.c5

Two.

41...♖b8 42.♗c3 ♗d5 43.a4

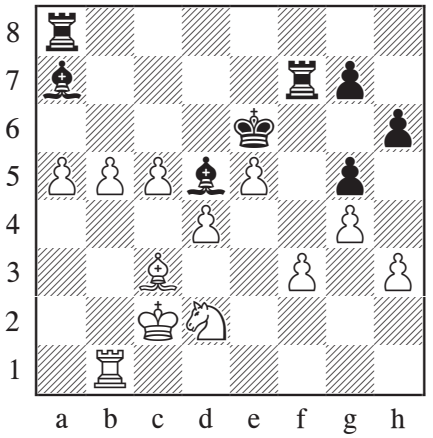
Three.

43...♔e6 44.♖a1 ♖f7 45.b5

Four.

45...♖bf8 46.♖f1 ♖c8 47.♔d3 ♖d8 48.♔c2 ♖b8 49.♖b1 ♖a8 50.a5

Five... Black is helpless – if he couldn't untangle fifteen moves ago, he will hardly find anything now. His situation is only getting worse with every move of a white pawn.



50...♗b8 51.♔d3 ♗c7

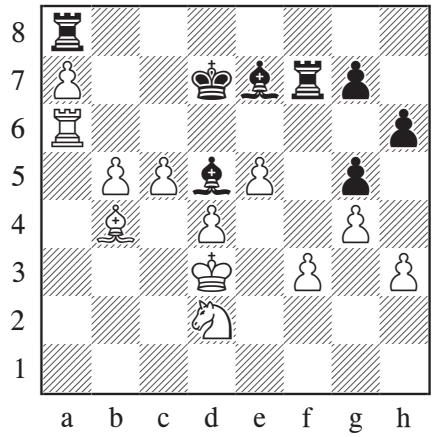
51...♗xf3 52.♘xf3 ♖xf3† 53.♔c4 ♖xh3 54.d5† doesn't need any comment. Black would clearly miss the blockading bishop.

52.a6

Six.

52...♗d8 53.♖a1 ♗c7 54.a7
Seven.

54...♔d7 55.♗b4 ♗d8 56.♖a6 ♗e7
This is the last really interesting point of the game and, at the same time, the last moment when Rybka shows us its 'inhuman' thinking. How would you use White's advantage?



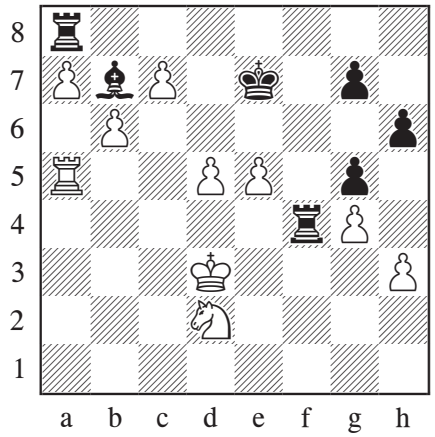
57.f4!!
A paradoxical move, which would probably never cross my mind in a tournament game. White wants to either lure the rook away from the seventh rank or set the d2-knight free to attack.

57...♖xf4
57...gxf4 58.♘c4 f3 59.e6† ♗xe6 60.♘b6† and White can cover the f1-square with the rook.

58.c6†
Eight.

58...♔e8 59.♗xe7 ♔xe7 60.c7
Nine. The rest is agony.

60...♖ff8 61.♖a5 ♗b7 62.b6 ♖f4 63.d5



63...♖b4 64.♘c4 h5 65.gxh5 ♖b3† 66.♔d4 ♖b1 67.♖c5 g4 68.hxg4 ♖d1† 69.♔e4 ♗c8 70.e6 ♖b1 71.♔f5 ♖f1† 72.♔g6 ♖f4
1–0

You have seen it with your own eyes – neglecting development, risky actions on the flanks, unusual material imbalances, waiting moves that are hard to comprehend. I am convinced that nobody in the world would currently be able to play such a game. Not today, but who knows what the future will bring, when strong players find enough humility to turn their computers into their teachers...

Computers undoubtedly bring chess closer to its death. They play so well that there is not enough space for people. They push us from openings to middlegames, from elementary endgames back to endgames that are more complicated. They solve chess like a mathematical problem, like an equation.

But if we come to terms with this situation, and stop looking at engines as if they were enemies, but see them as instruments instead, we can discover new ideas and new beauty through them. I hope that I have managed to show you a little of this beauty in this chapter.

It's certainly a new kind of beauty that comes with computers, a very different kind compared to the beauty of classic games. It's a sad beauty on the edge of normality. It's the beauty of machines. It's the beauty of a factory, not of the forest. But, after all, that's exactly the situation these days – we live among factories rather than in a forest.

This chapter couldn't have been written without the efforts of Martin Thorensen, who organized tournaments and matches between the strongest engines on his website. All the examples that I have used to fill these pages can be found at: http://tcec.chessdom.com/archive.php

Chapter 30

The Magician from Brno

An interview with the world's highest-rated correspondence player about computers in correspondence chess

Roman Chytilek is a man of many talents. He is an international master in over-the-board chess. He is a researcher at the Masaryk University in Brno and, from the beginning of 2015 until the present time, he has been No. 1 in the rating list of International Correspondence Chess Federation.

Since correspondence chess is nowadays inextricably linked to working with computers, Roman is the most competent person to talk about the relationship between computers and the royal game.

Is correspondence chess the most perfect chess regarding the quality of games?

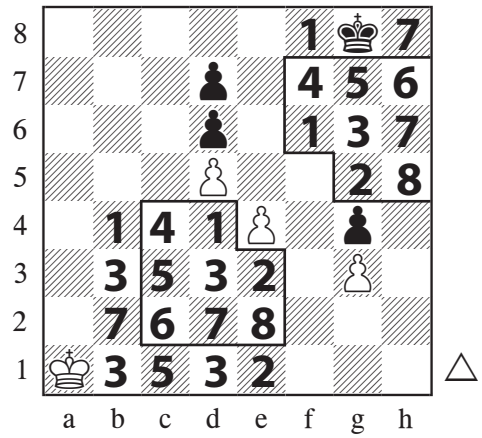
What is perfection and what is quality? I would say that these games are deep, but sometimes too deep. They are so perfect that ordinary mortals have difficulties appreciating them. I, for example, can appreciate my games, which I analysed very profoundly and where I perfectly understand what I did, but not so much the games of other correspondence players that I only play through. It's just like Wagner's operas – are they the most perfect musical compositions?

However, the fact is that I do wonder whether players who very much care about the essence of chess, such as Ivanchuk, would like my manoeuvres with major pieces, which may appear to be meaningless, and whether they would understand them.

But you understand your own games, don't you? You would be able to express an idea that you wanted to explain to Ivanchuk, wouldn't you? Or is your understanding inexpressible in words, does it exist only in the form of concrete lines?

It is usually not the case that something suddenly dawns on you in a position, allowing you to come up with a simple and easily applicable idea. Imagine that you are analysing a pawn endgame and, after a while, you realize that there are corresponding squares. Something similar also happens during a manoeuvring phase of a correspondence game, only in a much more complex

form, because many more pieces relate to each other, not only the kings. So, for example, starting to understand that when the white rook is on d1, the black one must be on e8, but not on c8, this really takes a lot of time. And even though this is a human conclusion, it is based on a lot of computer analysis. And the differences are very small; I think that in an over-the-board game, these differences wouldn't have a chance to manifest themselves.



One of the best-known positions featuring corresponding squares.
After 1.♔b2? Black draws with 1...♔h8!.
So instead how can White win?

That is very interesting! Has any correspondence chess player ever tried to interpret for over-the-board players such deep understanding of certain positions?

I can remember only one book that tries to do so: *Modern Chess Analysis*, written by a correspondence grandmaster, Robin Smith. Unfortunately, it is quite old, and the engines have really improved since then.

Let's talk about manoeuvring a bit more. I have noticed that in computer games with some form of balanced position, there often occurs a long manoeuvring phase. Now, you are talking about something similar in the context of correspondence chess. Is it not possible that chess is actually a slightly slower game than we think? And that human chess players are simply being impatient?

I am not really sure.

On the one hand, there are games full of long manoeuvres, such as, for example, Schön – Persson, corr. 2007, which is absolutely fantastic. It lasted 131 moves, and all the time there was something going on. The way that White, after a pretty sterile opening, imposes himself, without Black making any big mistake, is remarkable.

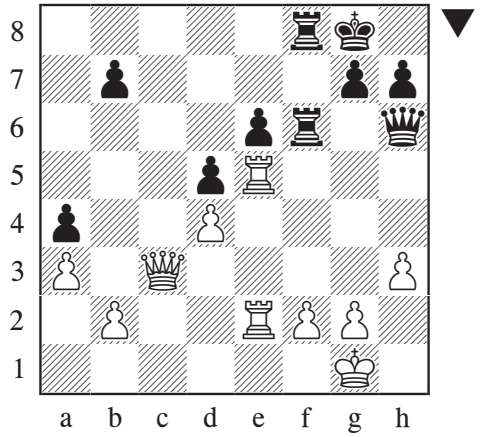
On the other hand, many correspondence players play with an openings book which may extend over 30 moves and lead to a position which has already been clarified.

But it is true that patience is a very important feature in correspondence chess. A player would

gladly switch to a direct attack, but finds that it has a certain flaw. So he starts to manoeuvre for many moves, and the position often becomes clarified much later than in an over-the-board game. Sometimes the manoeuvring lasts six months or more...

Wolfram Schön – Conny Persson

Correspondence 2007



The position after White's 31st move. Who would guess that the game would last exactly 100 more moves?

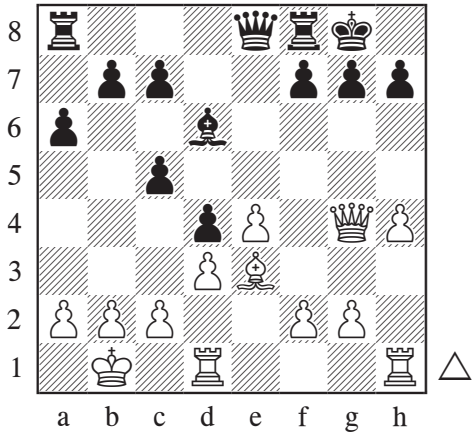
Does such a thing as style exist in correspondence chess? If so, how does it manifest itself?

I suppose it does; some players have their own styles. In correspondence chess, there are probably a few key parameters defining style: the acceptance of risk, pugnacity, and the approach to openings. These three variables fit together like a puzzle and create a style. I, for example, liked to play in a way that forced my opponents to make a lot of difficult decisions, ideally right from the opening, so I chose the lines that were tested only in over-the-board chess, not in correspondence chess, because then there was a good chance my opponents would quickly make a mistake if they decided to follow the game of some grandmaster.

At the same time, I tried to play so that one decision meant there would need to be another decision, which led only to further decisions, not to any clear position. I believed in myself; I believed that I would make the right decision while my opponent would make a mistake. That's why, unlike in my over-the-board chess, I avoided draws in unclear positions, and played everything until the very end. A perfect game to illustrate this concept is the following:

Emanuel Lasker – Wilhelm Steinitz

Moscow (10) 1896



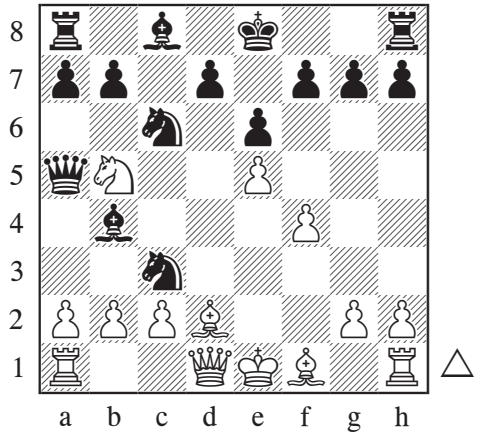
White played 17.♗h6 to attract the black bishop to e5. He then used its position to create a passed pawn. The game continued 17...♗e5 18.♗c1 ♕e6 19.♕e2 f5 20.f4 ♗d6 21.e5 ♗e7 22.h5 with a big advantage for White.

Today, this could also have been a correspondence game between two strong players. Games played by Lasker, who doesn't hurry, but plays classical chess, moves forward and backwards, collects small advantages and finally wins using a direct attack, still greatly impress me.

Wolfram Schön, a German correspondence grandmaster, used to have a style similar to mine. Our drawn game that we played several years ago was quite an extreme case of this type of approach to correspondence chess. On the 11th move, Schön played a strong novelty which immediately placed me on the edge of defeat. From then on, the number of problems which we both had to deal with was enormous. It's a pity that my opponent withdrew from correspondence chess and I never had the chance to talk to him about the game.

Wolfram Schön – Roman Chytilek

Correspondence 2007



White played a strong novelty, the energetic 11.bxc3!.

Is this otherwise common? Do you stay in touch with the opponent and analyse the game that you have just finished?

Usually, yes. Nobody wants to give away their entire analysis, but usually you exchange a few emails about which positions we considered critical, what we saw and how we evaluated them.

How do you work with imbalances in correspondence chess? When you need to win, do you intentionally create an imbalance?

Correspondence chess is a bit different because you begin all the games in a tournament at the same time, so you don't know if 'you need to win', and when you find out, it is already too late to create an imbalance, and so the only thing that you can do is to work even harder in the game.

But I understand the question. For example, when playing against weaker players, I used to risk a lot, playing the Sicilian, Benoni, Benko and Evans Gambit, and I was quite successful.

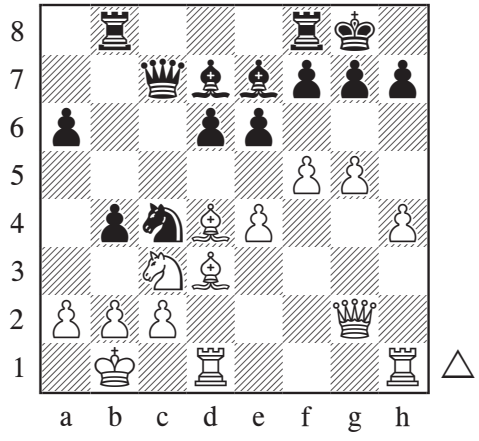
The turning point came around the year 2005, when I first played in some German team competition that my boss from a German club persuaded me to enter. I played like I would in an over-the-board game and, playing a 6.♗e3 e6 Sicilian with Black, I lost to an enthusiastic software user.

The same thing happened to me once again, two years later while playing with the former World Champion Palciauskas, who always used computers in moderation.

By the way, in correspondence chess, the strongest players lose very rarely. I, for example, managed to beat several players for whom it was the only defeat in their entire career.

Vitas Palciauskas – Roman Chytilek

Correspondence 2007



White played the strong 21.♘d5! exd5 22.f6 and was close to victory.

It was then I realized that I had to adjust my style with the black pieces to the fact that computers are calculating better and better, while my chess strength and the time which I devote to the games remains the same at best. In my last two tournaments, I fortunately played hardly any weaker players, and so I didn't have to try to achieve imbalances, and all of my last fourteen games played with Black ended in draws, although often after a great struggle.

Regarding imbalance, it is probably a much broader concept in an over-the-board game, where you can make various sacrifices of material, or experiments with space and time, but most of these things can no longer be carried out in correspondence chess today. I, for example, always liked to sacrifice a pawn for the initiative, but today there are only a few positions where the compensation lasts so long that the computers will not issue a final and conclusive verdict. And if the verdict is positive, the opponent will not let me sacrifice; but if the verdict is not positive, I cannot risk the sacrifice. Basically, I would say that the only source of imbalance is asymmetric pawn structures, preferably with semi-open files or weak squares. I have never avoided this type of imbalance; on the contrary, I have always sought it.

Furthermore, what is an imbalance? In correspondence chess, positions with three possible results are very unusual. A sharp position in over-the-board chess is often one of the easiest positions in correspondence chess, because the correct play for both sides will not include many alternatives, and in that case the engine gives a definitive evaluation in a couple of seconds. The really difficult positions are those in which the players manoeuvre and implement long-term plans, positions where a forced draw is not in sight for either player, and so they must play on and analyse.

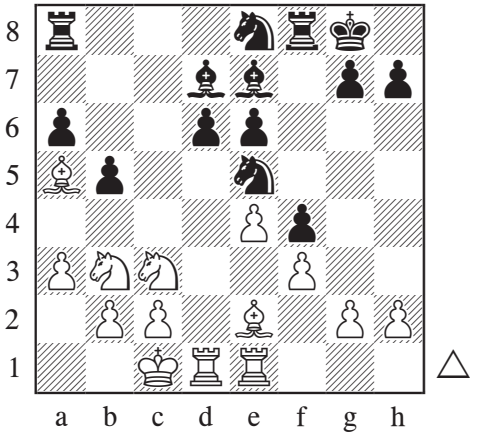
What do you mean when you say that the only source of imbalance in your games are asymmetric pawn structures? Surely there are many other slight imbalances, such as a knight versus bishop, a pair of bishops combined with the weakness of doubled pawns...

These types of imbalances are probably better suited for computer analysis than those associated with the pawn structure. They are much more related to calculation. The bishop might be better or worse than a knight, but that does not necessarily mean that the position causes the opponent difficulty while making decisions.

On the other hand, those semi-closed positions where there are so many opportunities, and the meaning of manoeuvres only becomes clear belatedly, that is the imbalance from which I am able to earn points.

Roman Chytilek – Grigory Sanakoev

Correspondence 2007



In such a position it is possible to defeat even an opponent with a powerful computer. Roman began to manoeuvre with 19.♘a2 and slowly won the game.

So you basically look for a position in which there are important decisions about manoeuvring, in preparation for the crucial clash. When the clash occurs, and the computer can precisely evaluate it, the winner is already clear, because your pieces are standing much better than those of your opponent.

That is the ideal case. I have played maybe ten or fifteen such games. Sometimes, of course, it didn't work and the game ended in a draw, or occasionally even worse. But yes, I strive for such a scenario.

What do you enjoy about playing correspondence chess?

It has varied.

Sometime around 1997, when I started to play more seriously, I enjoyed that I could play games of similar quality to those I replayed in *New in Chess* magazine, which I liked a lot. I often played critical lines in which I relied on being able to calculate better than my opponent's computer.

Then I started to get better, and I enjoyed looking forward to games against players I had read about in magazines.

In the final stage, I have most enjoyed winning tournaments, and forcing my opponents to make difficult decisions.

Over-the-board chess players sometimes look down on correspondence players. They say that the bigger your computer, the better correspondence player you are. Is that true? What skills should a correspondence player have? What computing power do you have access to? Which engines do you use? Is it known which engine other correspondence players use? Does this affect your play?

The belief that winning is due to greater computing power is valid for games by average correspondence players, where everything else is usually the same, and it is the computing power that can make the difference.

However, in games by stronger players, some of them have tremendous computing power. (Many – perhaps most – of my opponents were or are software specialists, network administrators and so on. One of them, for example, was working for NATO, so I was afraid of endangering the security of the Western world by playing the complicated Botvinnik Variation.) Nonetheless, a big difference in computing power does not automatically mean a much greater probability of winning.

For example, I myself played tournaments using a single computer, with a slightly above-average performance so that I could also work on it while it was analysing. Then, in the most complicated positions, I occasionally asked Jiri Dufek for his opinion, as his approach

to correspondence chess was much more scientific, and for whom the concept of computing power was higher than for me. But I know that other players embrace the 'PC just for chess' concept.

For me personally, it was always more important to make a good decision about managing the time that I had to find the best move in every position and, most importantly, to actually find the best move. I would say I was significantly better at selecting the best move than most of my opponents, and this more than balanced the lack of computing power. This approach was also possible due to the fact that I played only a few games at once, no more than fifteen. If I had played more than that, I would have been forced to increase the computing power. Actually, I once tried playing more games, but my netbook started to overheat after two months under the pressure of all the variations, and so I did not try again.

As for the engines, I don't have any favourite right now and, in addition, the differences between them are blurring with time. I would say that the codes are being cloned, but I am a layman in this area. Today I can say that whenever some of our leading over-the-board players asked me about engines, I tried to duck the issue in order not to show how desperately little knowledge I had about this area. But I always tried to find out which engines my opponents were using, because it could be of great help in certain situations.

More could be written about it, but I will give you one example – the way computers evaluate positions is almost as important as the exact lines they suggest. And yet most of my opponents had a major psychological problem accepting that in some line the evaluation would become worse for them, even if the line led to an inferior, yet relatively safe, endgame. They respected the evaluation so much that they were able to sacrifice the result of their game in order to keep the evaluation on the same level for a few more moves. This refers specifically to the evaluations from the engines which started with a minus sign.

At the time I observed this, I had already started to teach courses on decision-making at university, but I did not yet know the work of the Nobel Prize-winning behavioural economist, Daniel Kahneman, who wrote in detail about how difficult it is for people to accept loss, the role context plays in decision-making, and the imaginary zero from which people calculate their benefit from different decisions.

But correspondence chess would delight Kahneman, because the behaviour of correspondence players confirms many of his conclusions. Yet I wouldn't like to preach at my opponents. Although almost all of them, except for the very best ones, probably relied on the recommendations of the engine more than me, and approached it less critically than me, their contact with engines formed their chess understanding. When I met them and we talked about the games, they showed a chess culture and understanding of the game that you would expect from a much stronger player, even though they weren't on the FIDE list or had a low over-the-board rating.

How much do you accept a chess program as an authority?

Of course, I accept that it calculates much better than I do. As for the evaluation of a position and making a decision about what is the critical line, it is still better than me, but not by so much. I can also be right quite often. I am not really sure if my opponents are in a similar position. Here I can see another advantage for players who are also decent over-the-board players – only they have the ability to find a balance between how much they should

trust an engine and how much they should interfere with the game. If I were looking for a reason why I have been so successful in correspondence games, I would probably first mention my abilities in this slightly alchemical discipline.

How do you analyse the position you have? Do you use other techniques than simply turning on your computer? Do you organize matches between engines for certain positions? Do you have any other methods? How much time do you spend on a move?

A 'position' in correspondence chess is quite an impractical unit of analysis. Analysing a 'position' occurs when the course of a game has somehow brought you to that position. During games, I've always relied more on a 'vision'. Especially in the last ten years, I have, just like in over-the-board chess, studied the style of play of my opponent, looking for his strengths and weaknesses, and I have tried to imagine how to use them. This often meant even something like a vision for the entire game, the essential part of which has always been to force the opponent to make decisions that he would rather not face. Of course, I failed to implement some of these visions, and then the games were rather unsuccessful and usually ended in a draw, but this approach often worked for me.

Naturally, the exploration of how good specific engines are in certain positions has been a part of this vision. When a game was played, I usually left an engine – the one which I felt was best in the type of position – to make the first investigation as broadly as possible, which often revealed ideas that I previously haven't seen or underestimated. Then I chose the moves that I liked and tried to persuade the computer that I was right. If it worked – and it worked quite often – it was a very comfortable situation for me. It usually meant that I could present my opponent with a problem that was objectively difficult to deal with, and he had not much time to deal with it, especially in tournaments, where the playing pace was 10 moves in 50 days.

Were I to describe it with a *bon mot*, then my opponents were much better prepared for everything that could have occurred during the game, while I was usually better prepared for what actually happened. I would say that this is where most of my wins were born: that most of my opponents were taken out of their comfort zone.

What I hardly ever did was to leave the computer 'running all night'. I have never believed in that, except for the positions that have already been decided.

What does your 'vision' look like before the game? This is what it might look like before an over-the-board game: "Player XY often gets into time trouble, overestimates the bishop pair and loves dynamics." And so I look for a position where there is less theory, I might give him the bishop pair in return for interesting counter-chances, and aim for the game to be more positional. Is your vision before a correspondence game similar?

Basically, yes. Although I do not rely on time pressure, I always try to find out how many games my opponent is playing at the time – this is quite crucial. I am happy when he is playing a lot, because then the chances are higher that he will not be fully concentrated on our game. And this also applies to computing power – if he concentrates the computing power on our game, he might miss it elsewhere.

Then I try to find out which engines he uses. Knowing this allows me to gain insight into his kitchen, to watch how his program behaves in the positions that I want to play.

And then (if I have enough time before the tournament), I try to prepare a surprise in an opening line which I expect to occur in the game.

How many hours a day did you devote to correspondence chess at the peak of your career?

It is hard to say; I used to play more games than I do now, and I used to think about them even when I wasn't sitting in front of a computer or a chess board. During the Correspondence Chess Olympiad, it would be about two hours a day and, of course, the computer would be turned on even sometimes when I wasn't in front of it. It is almost like a problem for those good with numbers – since I stopped playing so many games, I have saved about four dollars per month on electricity. But I'm lazy. My advantage lay in the fact that I could take full advantage of the time spent at the screen, and especially that I created more problems for my opponents than they did for me.

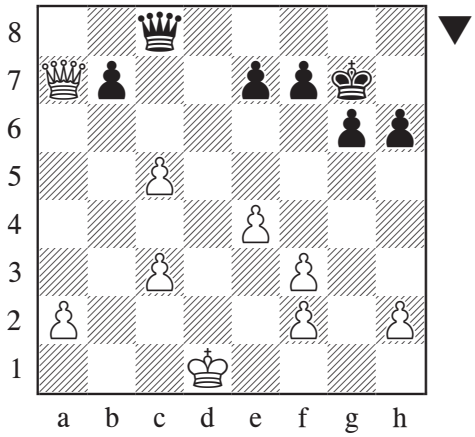
In one of your recent games, your opponent played the Modern Benoni, in another, you played 7.♕a4† in the Grünfeld. Both continuations are considered somewhat inferior in over-the-board chess. How do you decide which opening you are going to play? Which openings are considered inferior in correspondence chess? Do you analyse many openings?

I don't want to give readers the impression that I always had everything prepared in advance, right to the last piece of the puzzle. On the contrary, sometimes my motivation weakened, sometimes it grew stronger. For example, the reason for my good result at the Olympiad was the fact that the competition was really slow, and I managed to catch up, even though I came virtually unprepared.

For instance, I had nothing prepared in the Grünfeld game you mentioned; my opponent surprised me with his choice of the opening. I simply didn't find any other line which would correspond to the way I play – that would force my opponent to make decisions from the very beginning. This is probably one of the main advantages of the white pieces in correspondence chess – the chance to choose the character of the position without risking too much. So I gave a check on a4; the move is objectively rather weak. I counted on making my opponent and his son, a well-known over-the-board grandmaster who, as I knew, was studying at a foreign university at the time, work independently; maybe they wouldn't be able to devote to the game the time which it deserved. This was, basically, confirmed, but when they really were endangered they found an excellent defensive idea, and I did not win.

Roman Chytilek – Ingvar Carlsson

Correspondence 2010-12



Roman considered the position to be won for White, but Black found an outstanding defensive plan. Can you also find it? (see page 243)

Which openings are actually most often used in correspondence chess?

After 1.e4, the most often played line is the Najdorf Variation, with 6.♗e3 e6 or 6.♗e3 e5. There are quite a number of lines that have been more or less solved in dozens of correspondence games – their objective evaluation will not dramatically change anymore. After 1.d4, the Semi-Slav, especially the Botvinnik Variation, is often played.

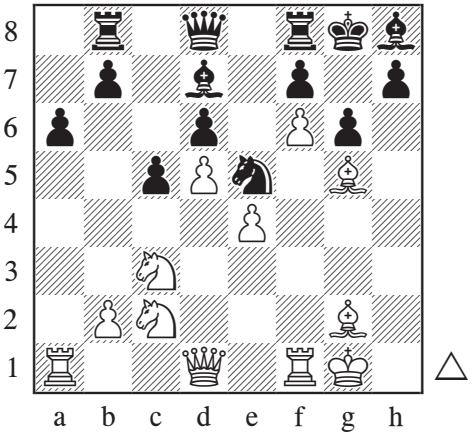
What can you offer to an over-the-board chess player? Do you have a certain understanding of chess which they don't have? Can you analyse better than them? Could you imagine, for instance, that Navara might write that he is interested in the evaluation of some sharp opening line, and that you would determine it for him?

I probably have nothing to offer that an over-the-board player would need, and likewise he has nothing to offer me. I don't know if I can analyse better; I can analyse pretty well, but there is little evidence for 'better'.

For example, a few years ago one of our grandmasters, who had been studying a new opening with Black, wanted me to test him on it. In order to motivate ourselves, we played for a small bet. I was White and had to win and, of course, we both analysed with engines, because it helped us to understand the line better, which especially suited him. Throughout the whole game, which I did not treat lightly, I would say I was a little bit better, and my opponent later told me that some of my moves surprised him. But then he surprised me with a long forcing line, ending in a draw. So it's hard to tell if I analyse better.

If David wanted me to analyse a line for him, I could not offer him great computing power. I would probably be able to offer him a tree that represented the best theoretical knowledge about the position or line. But it's hard to say whether it would also be the best practical knowledge – David might, for instance, have to play a position where he objectively stood slightly better, but in which he wasn't comfortable. In addition, those lines would be very demanding on the memory, and while his opponent might stand worse, the game could be easier for him to play.

I admit that sometimes I didn't play the first choice of the machine in correspondence games because I simply didn't like it, even though I could not disprove the evaluation of the machine. For example, in one game as Black in a Benoni, I could have sacrificed a piece, for which I would have had 3 or 4 pawns and a great superiority on the queenside, but, at the same time, a locked-in bishop on h8.



Would you prefer to be Black or White in this position?

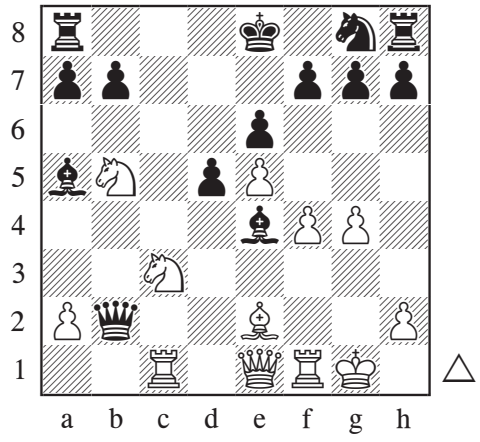
The computers assessed the position around the 25th move as clearly better for Black, and I couldn't break their analysis. When I let the engines play against each other, they manoeuvred in different ways, and the result was completely unpredictable (it was one of very few such positions in my career). Black's position often worsened sometime around the 50th move, and Black would lose. I told myself that going into it would be a big risk, and so instead I played a correct move, sacrificing a pawn and, in the end, the game was a draw.

To my knowledge, some cooperation occurs between correspondence and over-the-board players, but probably none of them would be pleased if I were more specific.

I think that memory is still the factor that limits the ability of over-the-board players to analyse openings in such tremendous depth as correspondence players regularly do. Sometimes they resort to such depth as, for example, in the recent game between Caruana and Vachier-Lagrave, in which White's approach was pretty close to how I tried to cause my opponents problems. In this regard, very instructive was Caruana's comment in *New in Chess*, that he realized only at a certain moment that the position could be described not only by the evaluation of the engine, but also, for example, in terms of having two pawns less. He then became very nervous, because the successful outcome of an irrational position depended on what he remembered. This is exactly the problem that correspondence players don't have.

Fabiano Caruana – Maxime Vachier-Lagrave

Saint Louis 2014



A position in which it is good to remember your home analysis

On the other hand, where I see the potential of correspondence players to benefit over-the-board players is the huge body of games that correspondence players have played over the last ten, fifteen years. These games are of great quality and, for example, in some lines of the Najdorf they provide a pretty objective conclusion.

In the social sciences in which I am professionally involved, there is a quite popular book called *The Wisdom of Crowds*, whose main idea is that the opinion, composed of the partial opinions of all the group's members, about some events or phenomena, is more accurate than the opinion of any single member of the group. This conclusion is quite surprising, but the advances in the Najdorf show that it might be true.

You wrote in a comment to one of your games that computers overestimate pawn moves in the Sicilian; how did you figure that out? What other observations about computer chess could you mention?

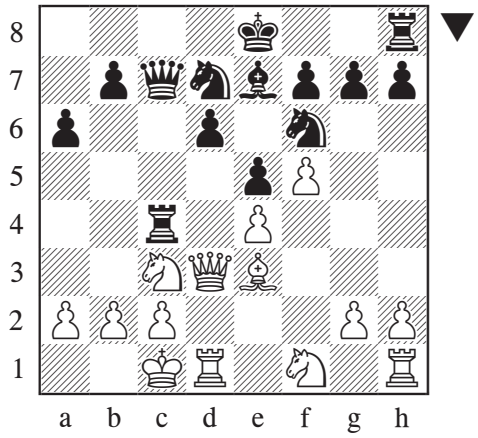
This opinion of mine derived from observations of games and analysis. It seems to me that computers are weaker with Black in the Sicilian; they overestimate the advances of the a- and b-pawns on the queenside, and cannot always cope with the weakness of the d5-square. Their library compensates for their lack of understanding to some extent, so I tried to get my opponent out of theory as soon as possible. However, it is different with White; computers can attack quite convincingly in the Sicilian.

Otherwise, I cannot think of any other openings that engines wouldn't play well. For example, I thought this might be the case in the the Berlin Defence, but that is questionable. On the one hand, the pawn structure is really complicated, which should favour people; on

the other hand, these positions greatly depend on details, and common-sense strategical knowledge often cannot be used, which greatly favours computers. I defended the Berlin endgame four times, and earned four draws. Some of the games are now cited saying that I played quite accurately, but I still had the feeling in all of them that I was a little worse.

Roman Chytilek – Boris Gorochovsky

Correspondence 2010



Black played 14...b5. Roman pointed out that computers overestimate moves with the b-pawn in the Sicilian and suggested an exchange sacrifice on c3 with (unbelievably for an over-the-board player) an almost forced draw.

If we imagine correspondence chess as the joint decision-making of a human and a computer, in what proportion does the human decide and in what proportion the computer? In which types of position is this proportion most in favour of the player?

I can speak only for myself. As I have already said, I often preferred my ideas and neglected those of the machines. I would not let the engines analyse their first-choice line, but feed them with my own lines until they acquiesced. The ideas and preferences were always mine; the machines contributed most to the craftsmanship of them. Naturally, I sometimes had to give up my idea and admit that my vision was wrong.

So do you play the bigger part of a game, or is it your computer?

I don't know. In this case, I wouldn't see myself and the machine as two separate entities. But if you're asking how much computers have affected the world of correspondence chess, it really has been to a crucial extent. For example, the former World Champion Umansky used to risk a lot in his games. He often played the Pirc and other suspicious systems in which unorthodox problems arise, and this approach often worked out well for him. However, sometime around 2005 he began to lose, and in the tournament where I played with him, he even lost six games. The computing power of engines was simply too big for this style to be worth playing.

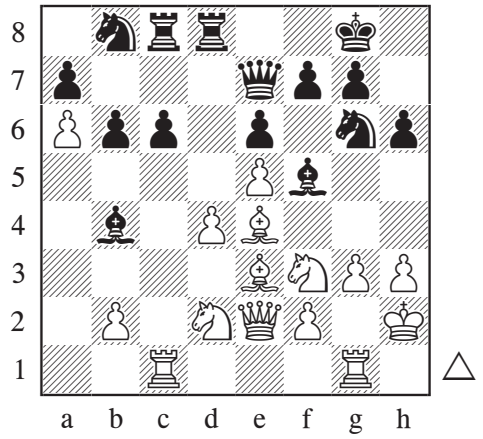
Which positions are the most difficult with regard to decision-making?

Probably those which force you to be objective, even though it is problematic in terms of the tournament situation. For instance, in the Heemsoth Memorial, which was the strongest tournament I've ever played in, at a certain point it became clear that obtaining a score of +4 would be sufficient for me to share first place and win the tournament on tiebreak. I could clearly see +3 in my games, but the fourth plus depended for a long time on my game with an English grandmaster, Richard Hall, who was also fighting for first place. I had my typical position, with pressure against his king, manoeuvring pieces behind the asymmetric pawn structure. At one point, I had prepared everything for a powerful attack,

but gradually I found out that it led only to a draw, even though the tasks facing Black were very difficult. It took me a long time to make a decision, but finally I returned the rook from the kingside back to the centre, and I tried to beat him differently. However, my opponent's defence was fantastic and he remained in the game. That was a really hard decision but, luckily, in another game where I was only slightly better off, my opponent blundered a rook.

Roman Chytilek – Richard Hall

Correspondence 2008



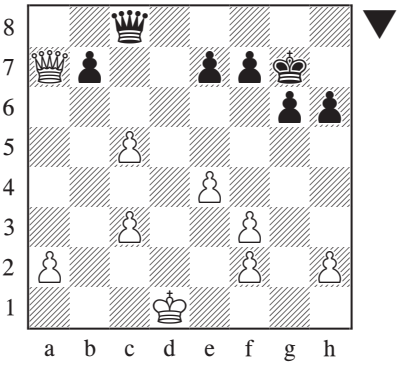
The direct attack with 28.g4 ♗xe4 29.♘xe4 c5 30.g5 is tempting, but unfortunately it probably leads only to a draw.

I suspect you would like to hear an answer that was more tied to the game itself, but as time has passed, I have treated correspondence chess more as a sport rather than science. I always played more like Lasker than Fischer or Botvinnik.

From page 239:

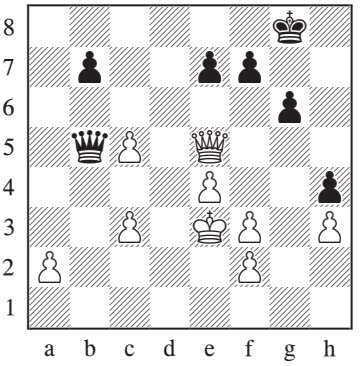
Roman Chytilek – Ingvar Carlsson

Correspondence 2010-12



The defensive plan which Black found was ...h6-h5-h4 then ...♕h3. The game concluded:

26...h5! 27.♔e2 h4 28.♕a4 ♕h3 29.♕d4† ♔g8 30.♕d8† ♔g7 31.♕d4† ♔g8 32.♕e5 ♕d7 33.h3 ♕b5† 34.♔e3



34...♕b1 35.♕xe7 ♕e1† 36.♔f4 ♕xf2 37.♕xb7 ♕xc5 38.♕a8† ♔h7 39.♕d5 ♕xc3 40.♕xf7† ♔h6 41.♕f8† ♔h5 42.♕e7 ♕c1† 43.♔e5 ♕c3† 44.♔d6 ♕xf3 45.♕e6 g5 46.e5 ♕a3† 47.♔d7 ♕a7† 48.♔e8 ♕b8† 49.♔f7 ♕c7† 50.♔f6 ♕d8† 51.♔g7 ♕c7† 52.♕f7† ♕xf7† 53.♔xf7 g4 54.hxg4† ♔xg4 55.e6 h3 56.e7 h2 57.e8=♕ h1=♕ 58.♕e6† ½–½

Chapter 31

The Biggest Lie

Chess and Statistics

As Mark Twain used to say about deception in the world: "There are three kinds of lies: lies, damned lies and statistics." Let's try to look at chess from the perspective of the 'biggest lie' – let's try to employ statistics to benefit chess knowledge. Several interesting surprises await us.

As the capacity of computers increases, chess players will use data analysis to a greater extent, just as is happening in other areas of life. Who knows where this path will lead us? Maybe in ten years' time we will be analysing on which squares the opponent most likes to place his pieces, as routinely as we use the opening tree today...

But let's have a look at what we can find out today using ChessBase and a laptop.

Endgames in general

It is very difficult to deal with the middlegame statistically; it's too diverse. And so I focused on openings and endgames. Let's start from the end.

The following table captures the frequency of occurrence of various simple endgames and how drawish their character is.

The number in the 'Frequency' column answers the question: "How often does this endgame occur in comparison with the most common endgame, the rook vs. rook ending?" In a sample of games, where 100 rook vs. rook endings occur, you can statistically expect 33 knight vs. bishop endings, but only 22 queen vs. queen endings.

The number in the 'Draw %' column indicates how many, on average, of a hundred endgames of each type end up as a draw.

Games by 2200+ players over the last five years form the basis of the table on the next page.

Rook endgames are by far the most frequent. The reason is very simple: rooks are not suitable for fights in front of their pawn chains, and so they remain hidden behind them and become involved in exchanges much more rarely than other pieces. The statement that rook endgames end in a draw is to a great extent true. When it comes to drawish tendencies, rook endgames are overtaken only by pawn endgames and opposite-coloured bishop endgames.

Type of endgame	Frequency	Draw %
♖/♖	100	56
♘/♗	33	42
2♖/2♖	33	49
♗/♗	32	54
[the same colour]	[16]	[46]
[opposite colour]	[15]	[62]
♕/♕	22	47
Pawn	20	59
♘/♘	16	46
♖/♗	15	26
2♗/♗♘	12	49
♖/♘	9	25
♖/♘♗	6.6	28
♕/♖♗	5.2	28
♕/2♖	3.8	42
♖/2♗	1.7	14

The second most frequent endgame is knight vs. bishop. **The most frequent exchange in chess** is the exchange of minor pieces of different kinds. If a knight attacks a bishop (or vice versa), the attacking piece is not itself attacked. It is, therefore, easier to prepare such an exchange than to prepare exchanges of bishop for bishop, or knight for knight.

As for bishop endgames, the endgames with bishops of the same colour are only slightly more frequent than opposite-coloured bishop endgames. However, this ratio changes in grandmaster chess. **While there are 91 opposite-coloured bishop endgames for every 100 same-coloured bishops endgames in games by 2200+ players, this rises to 117 in games by 2500+ players.** Endgames with opposite-coloured bishops have – as is generally known – the biggest drawing tendencies of all the endgames.

The endgame of two bishops vs. bishop + knight is far more frequent than those with two bishops vs. two knights, or two bishops vs. two bishops. At first I didn't understand why this was. However, David Navara showed me that the reason is purely mathematical.

Only two combinations of capturing lead to the material of two bishops vs. two knights – either we capture the dark-squared bishop first and then the light-squared one, or the other way around. However, there are eight combinations leading to the material of two bishops vs. bishop + knight.

To make it clear, I put all of the combinations in the table below.

1st capture	2nd capture	Remaining material
♗1	♗2	♘♘
♗2	♗1	♘♘
♗1	♘1	♗♘
♗2	♘1	♗♘
♗1	♘2	♗♘
♗2	♘2	♗♘
♘1	♗1	♗♘
♘1	♗2	♗♘
♘2	♗1	♗♘
♘2	♗2	♗♘

I was also surprised that the endgame of queen vs. rook + bishop is more frequent than queen vs. two rooks, although we would probably consider the latter to be materially more balanced.

In general, I would like to draw your attention to the relatively large number of endgames with unequal material: rook vs. bishop is on the board approximately as often as knight vs. knight.

Opposite-coloured bishop endgames are only twice as common as endgames with rook against two minor pieces. And so it's worth devoting some time to these endgames too.

If you want to train effectively on endgames, learn how to play rook endgames properly, because they are by far the most frequent guests on the board.

Focus also on the endgame of knight vs. bishop because it occurs quite often and, in addition, is very combative.

When looking at the advantage of the bishop pair, focus on the endgame of two bishops vs. bishop + knight, because it is several times more common than two bishops vs. two knights; the same also applies for the material of rook vs. knight + bishop, compared to rook vs. two knights, or rook vs. two bishops.

If you are heading towards grandmaster level, focus on opposite-coloured bishop endgames; their frequency is increasing in those circles. Devote some time also to endgames with unequal material; they are much more frequent than you might intuitively think.

The relationship of endgames to openings

All the above facts apply to endgames in general. The chances of a specific endgame arising on the board also depends on the opening. The probability that the game will even get to an endgame varies according to the opening. In order to illustrate these factors, I chose four openings and looked at which endgames occur most often in games played with these openings. The results of my research are captured in the following table.

	Slav	Sveshnikov	Ruy Lopez	King's Indian
♖/♖	100	100	100	100
♘/♗	33	25	41	38
2♖/2♖	33	38	26	29
♗/♗	30	42	36	40
[the same colour]	[12]	[7.8]	[16]	[20]
[opposite colour]	[18]	[33]	[19]	[20]
♕/♕	20	17	31	22
pawn	17	14	19	18
% reaching endgame	19%	18.1%	14.6%	11.6%

'Slav' = the position after 1.d4 d5 2.c4 c6 3.♘f3 ♘f6 4.♘c3 dxc4

'Sveshnikov' = the position after 1.e4 c5 2.♘f3 ♘c6 3.d4 cxd4 4.♘xd4 ♘f6 5.♘c3 e5 6.♘db5 d6 7.♗g5 a6 8.♘a3 b5

'Ruy Lopez' = the position after 1.e4 e5 2.♘f3 ♘c6 3.♗b5 a6 4.♗a4 ♘f6 5.0–0 ♗e7 6.♖e1
'King's Indian' = the position after 1.d4 ♘f6 2.c4 g6 3.♘c3 ♗g7 4.e4 0–0 5.♘f3 d6 6.♗e2 e5 7.0–0 ♘c6 8.d5 ♘e7

Although the table may look complicated, everything is similar to the earlier table, giving the frequency of each type of endgame in comparison with rook vs. rook endings.

Only one row has been added, called '% reaching endgame'. Here you can see what percentage of games played in the given opening actually reached one of these elementary endgames.

We can see that elementary endgames occur most commonly when the Slav is played. On the other hand, they are least common when the players choose the King's Indian. This is quite logical because **pieces are exchanged more slowly in blocked positions, and so there is a greater chance of the game finishing before it reaches an elementary endgame.** The first capture in the main line of the Slav occurs as early as the fourth move. On the other hand, on the eighth move of the main line of the King's Indian, all the pieces and pawns are still on the board.

So if you don't like playing endgames, you should play blocked positions. Then you will see your least favourite part of the game on the board less often.

A curious reader will probably be able to read all kinds of information from the table; I would like to draw your attention to one interesting phenomenon. The ratio of the occurrence of opposite-coloured bishop endgames to same-coloured bishop endgames changes dramatically depending on the opening. While in the King's Indian both types of endgame occur approximately equally often, opposite-coloured bishop endgames occur approximately 1.5 times more often in the Slav, and four times more often in the Sveshnikov. Therefore, if you play the Sveshnikov, it's worth putting more energy into studying this specific endgame.

Openings

In my statistical examination of openings, I focused on two questions:

How do the preferences of players with ratings of 1700-1900 and 2200+ differ from those of 2500+ players?

When an untitled player is playing against a grandmaster, what opening should he choose in order to maximize his chances?

This table shows us the frequency of various first moves. Again, the most common move, 1.e4, serves as a yardstick. For example, the number 40 opposite the Sicilian means that in a typical set of 100 games played between players rated 1700-1900 in which 1.e4 was played, you will find 40 Sicilians.

1st moves	frequency 1700-1900	frequency 2200+	frequency 2500+
1.e4	100	100	100
1.e4 c5	40	47	41
1.e4 e5	22	22	32
1.e4 e6	14	12	10
1.d4	51	78	94
1.d4 ♘f6 2.c4 e6	4.8	16	29
1.d4 ♘f6 2.c4 g6	5.7	11	13
1.d4 d5	18	24	33
Moves other than 1.d4, 1.c4, 1.e4, 1. ♘f3	6.4	2.4	1.5

In grandmaster chess, the significance of double-edged attacking openings is less; the game is usually more positional, calm and correct.

We can see this, for example, in the increased occurrence of 1.d4. While players rated 1700-1900 play 1.e4 twice as often as 1.d4, players rated 2500+ play both moves roughly equally often.

Grandmasters are much less likely to play 1.d4 ♘f6 2.c4 g6 compared to 1.d4 ♘f6 2.c4 e6.

The popularity of the Sicilian is highest at the 2000+ level – whereas in the 2500+ club there are statistically two Sicilians for every one Ruy Lopez, among 2200+ players, this number doubles.

Among 2200+ players there are 25 Slavs for every one Chigorin Defence (1.d4 d5 2.c4 ♘c6), whereas among the 2500+ players there are 92 Slavs for each Chigorin.

And similarly, among 2500+ players, the Grünfeld and King's Indian are played approximately equally often, whereas 2200+ players choose the King's Indian approximately twice as often.

In other words, the weaker a player is, the more aggressive and risky openings he plays. There are probably two reasons for this.

First, weaker players play for fun and therefore try to create interesting positions.

And second, weaker players often don't understand the secrets of positional play, and so they are not comfortable in positional openings.

Even though it's true that weaker players prefer ultra-aggressive openings (and so, according to this statistic, I'm a weaker player), it is not the case that stronger players like 'dry' lines that end in a boring draw. It's true that among grandmasters the Petroff Defence is about 20% more common than among 2200+ players. However, when playing White, grandmasters avoid lifeless lines. 2200+ players play the Exchange Variation of the French more often than 2500+ players, and the Exchange Slav almost twice as often. The well-known 5.♕e2 in the Petroff, leading to a very drawish position, is played more than twice as often by untitled players than by grandmasters.

The third tendency I've noticed is that there is a much greater number of marginal openings among 1700-1900 and 2200+ players, compared to grandmasters. For example, in games by 2200+ players, the chances of a move like 1.g3, 1.b3 or 1.f4 appearing on the board is about 60% greater. Among 1700-1900 players, the probability is more than four times greater.

Grandmasters usually have a more positional style than 2200+ players; they play aggressive, attacking openings much less frequently. From this we may deduce that a good way to progress from 2200+ level to GM level is to learn to defend well. Furthermore, grandmasters have higher expectations of the objective quality of their repertoire; so they play gambits and 'special lines' much less often.

What should you play against a grandmaster? Statistics can also answer (at least approximately) this difficult question. I have created a database of games in which one of the players had a rating less than 2400 and the other 2500+. (These are, of course, only the limits; the average difference between the players' ratings was somewhere around 220 points.) Then I studied individual openings, looking for those in which the weaker players scored both best and worst.

The following table describes the situation when a weaker player is playing with the black pieces:

Opening line	Points scored (%)
Berlin Endgame	30
Jaenisch Gambit (Schliemann) in the Ruy Lopez	26
Alekhine Defence	23
Scandinavian Defence	20
Queen's Gambit Accepted	20
1.d4 d6	20
Petroff Defence	19
King's Indian Defence	18
AVERAGE	18
Bogo-Indian Defence	15
Caro-Kann	14

It seems best to play something unusual, active, but not entirely incorrect. It's better to play an active Jaenisch Gambit against a grandmaster, rather than to fight him in a slightly worse position in a main line of the Ruy Lopez. It's better to play an active but suspicious Scandinavian, rather than the solid but passive Caro-Kann.

Weaker players play their A-game when they have the initiative; they can fight even against a grandmaster. Although the Berlin Endgame, ranked highest in the table, is not very active, it has hidden potential (the bishop pair) and, in addition, has a unique flavour. And this is exactly what a weaker player should try to achieve – to get his stronger opponent into a position in which analogies don't apply so much, so that the grandmaster can't use his wider knowledge.

In the following table, the weaker player is White:

Opening line	Points scored (%)
[Petroff Defence]	[50]
[Berlin Endgame]	[34]
Najdorf with 6. ♗g5	31
Exchange French	29
Ruy Lopez	29
AVERAGE	27
Sicilian Defence	26
Exchange Slav	26
King's Gambit	26
English Opening	25
Scotch Opening	22

It seems that **flattening the game with the white pieces against a grandmaster is not especially successful**. Although the Exchange French scores slightly better than the average, the Exchange Slav scores slightly worse. Therefore, capturing on d5 is not a panacea; the position is still difficult and the draw far away. It is better to choose main lines, if possible the more tactical ones. It's not beneficial to turn away from the main lines – don't give up the advantage of the first move too soon.

The openings in the first two rows in the table are in brackets because in these two openings Black consciously flattens the game; the very high percentage of success for White is, therefore, probably caused by Black not really objecting to the draw.

The aim of this chapter has been to demonstrate the interesting results that we can achieve if we re-examine, in a clever way, what we consider to be common, clear and obvious. It is liberating and often surprising to look at things from the outside. We sometimes discover that what we thought was a simple fact is not the full story.

Part VII

About Beauty in Chess

Chess is undoubtedly a very beautiful game. Millions of people worldwide sit at chess boards precisely because of its charm. What is the source of this beauty? Can a chess player decide to play beautifully?

I have tried to find an answer to these questions in the two chapters of this section.

In ***Quality and Style***, I look for the boundaries of freedom for a chess player. To what extent do we have the opportunity to determine the nature of a game at the chess board? And when do we need to comply with necessity and play the strongest move, even though we like it less than other possible moves?

Searching for Beauty is based on an online questionnaire that nearly 150 respondents from the Czech Republic and Slovakia filled in during the winter of 2015. They responded to a variety of questions, such as:

"Can computers play beautifully?"

"Do stronger players play more beautifully than weaker ones?"

"Is the beauty of chess different from what it was a hundred years ago?"

"Can I decide to play beautifully, or is the beauty not in my own hands?"

Chapter 32

Quality and Style

About the artistic freedom of a chess player

The silence of the clubhouse; a coach and a pupil are sitting at a chess board, analysing something. The young chess player suggests a relatively weak move. This is no great surprise; he still has much to learn. The coach starts to explain in a very detailed way why the pupil's decision is suspect, and why some other continuation should be preferred. However, the trainee says, "But I don't like your solution, I like the way I proposed much more."

I myself uttered this archetypal sentence many times, and I have also heard it many times from my pupils. As a coach, I react to it with a variety of procedures.

First, I suppress my dismay, because I know that a chess player learns most when he disagrees, and not when everything is revealed without any trouble.

Then I try friendly persuasion – I repeat my reasons and we analyse the position briefly.

If the trainee is still not convinced, an external authority, the evaluation of an engine, might be employed. However, I usually don't do this; more often I use my authority – which comes not only from my title and position as coach, but often from dozens of blitz games – and I cut off the debate.

Because **if a young player is to become a strong chess player, he has to learn to adjust his thinking and wishes to the needs of the position.** He mustn't look at the position on the board through the distorted lens of his wishes and fantasies.

A club player looks for fun and self-expression. Therefore, it can be upsetting that the requirement to play the position 'correctly' blatantly restricts his freedom. "Do I have to adapt not only to the tax office and my boss at work, but also to the pieces made of wood? I want to play my own way!" However, between necessity and freedom, self-expression and submission, there is a strange, paradoxical relationship.

The more a chess player humbly submits to the needs of the position and tries to play objectively correctly, the more space he gets for his creativity and the development of his style.

Let me give you an example from another area. A violinist cannot choose how to hold the musical instrument, where to touch the fingerboard for a specific tone, or how much to tighten the bow.

He cannot choose his playing technique; if he played uniquely (and awkwardly), he simply would not be able to play more difficult exercises. Only when he adapts to the architecture and features of the instrument does it becomes his real subordinate and allow him to play Mozart, folk songs or anything else. A child who is only getting to know the violin cannot play Mozart; his horizon ends somewhere near 'Twinkle, Twinkle, Little Star.'

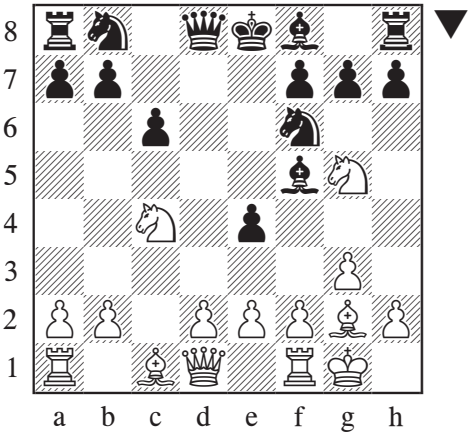
It is similar with chess. A player who doesn't know how to take care of his instrument – the chess pieces – how to ensure they are placed properly, when to exchange some of them and when to keep them; a player who can only attack and cannot defend himself, who refuses to play endgames or 'boring' positions; such a player does not have a style. He is rather a prisoner of his own narrow-mindedness. It is best when a young chess player is given the widest and most universal chess education possible. Only then does the door open to the free choice of style, to creative freedom and originality.

In chess, strong players make a large proportion of their decisions out of necessity and regardless of style, simply because they are the strongest moves. However, in each game there are still many situations in which it is possible to choose from several approximately equal possibilities. In such situations, the player has the freedom to lead the game in a direction that best fits his style, abilities, expectations or current mood.

But first, a player has to be able to distinguish equal opportunities from unequal ones; that is, situations in which he has freedom of choice from situations where there is no such freedom.

Jan Markos – Petr Haba

Erfurt 2010



White's g5-knight stands well and helps to create threats against f7 and e4. If Black continues to develop, then White, with ♕d1-b3, or d2-d3 followed by e2-e4, will gain a dangerous initiative and an advantage.

Black was, of course, aware that after 8...h6 I might sacrifice the knight on f7, and that there was a risk that I might have prepared the sacrifice at home. Nevertheless, he felt compelled to make this move; he recognized correctly that he had no freedom of choice, and that the best move was:

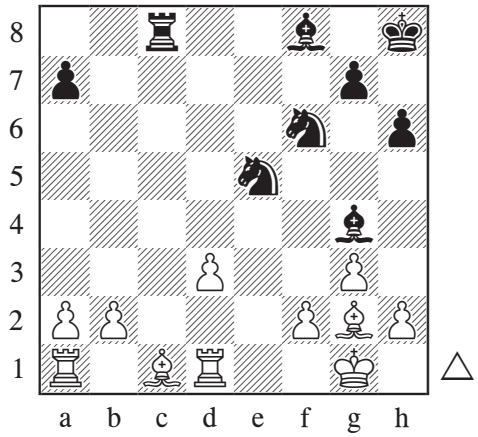
8...h6

In contrast, I did have the freedom to choose.

9.♘xf7!?

Apart from this, I could also have played 9.♘e3 hxg5 10.♘xf5 with a calmer, approximately equal game.

But my heart was set on sacrificing, and so wild complications arose on the board. The following diagram shows the position after Black's 20th move.



It might seem that White has plenty of possibilities to choose from. He may return the rook to f1, or sacrifice an exchange by various moves (for example, 21.d4 or 21.♗f4). But the strongest move is:

21.♗e3

When I figured this out (or rather sensed it), I played the move immediately. The game ended, after time pressure, in a draw.

When the pieces are not in direct contact, the possibility of a player choosing according to his taste is usually greater. It is greatest in the initial position. That's why the choice of opening is one of the freest decisions of a chess player; he can greatly influence the direction that the game will take.

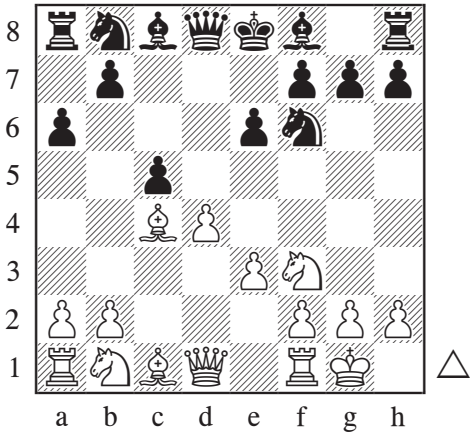
The choice of opening is much more important in matches than in tournaments. If I play 16 or 24 games with the same opponent, it is important to obtain the 'home field advantage' in the majority of them, to reach a middlegame in which my orientation is better than my opponent's.

Kramnik, during his preparations for his match with Kasparov, reckoned that he has the greatest relative advantage in positional middlegames without queens. Therefore, he played the Berlin Endgame with Black, and drew all the games.

He proceeded in a similar way as White.

Vladimir Kramnik – Garry Kasparov

London (4) 2000



In this position Kramnik played:

7.dxc5

This continuation leads to a symmetrical position without queens, and is generally considered to be a prelude to draw negotiations. Kramnik, however, had no intention of making a quick draw. On the contrary, satisfied that Kasparov's great calculating capacity had 'nothing to work on' in such positions, Kramnik continued to slowly play the position, and took his great opponent to the very edge of defeat.

It is said that chess teaches us how to resist stress, work independently and use our grey matter effectively. That's certainly true. It seems to me, moreover, that it teaches us a lot about freedom and bowing to necessity. And also about humility.

Chapter 33

Searching for Beauty

The results of a questionnaire on impractical topics

"As long as nobody asks me, I know everything about it. However, to a direct question, I cannot say anything about it," Saint Augustine wrote about time many centuries ago. But if he wrote similar sentences about the beauty of chess, no one would be surprised. We all know that chess is a beautiful game. What is the source of that beauty? Well, that is another question.

The theme of beauty in practical chess has fascinated me for a long time. However, I have been seeking a way to write about it for just as long. Beauty is somewhere on the border between the subjective and the objective, and if I wrote only about what I find beautiful, I would capture only my own taste.

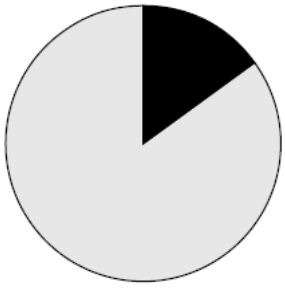
I therefore decided to do a survey among readers of the most popular Czech chess website. I created an online questionnaire and received 149 responses. I offer you the results – together with several examples of chess beauty – in the following pages.

Is beauty important?

A large majority of chess players, regardless of their performance, consider beauty to be an important element of their enjoyment of chess. It matters whether we win a game thanks to a great combination, or because of an embarrassing mistake by our opponent. Chess players are less practical than one might think.

The following pie chart is the evidence.

I'm not interested in beauty in chess. I am interested in the result, the thrill of the game, and other things. Beauty in chess is alien to me.



■ *This statement applies to me* ***[15%]***
■ *This statement does not apply to me* ***[85%]***

Where does the beauty in chess come from?

We clearly consider the beauty in chess to be an important part of the royal game. But where does it come from? It's hard to imagine that chess is such an extraordinary game that beauty is somehow inscribed in its rules. They create only a container, a space in which beauty can occur. If we changed how one piece moves, there would still be beautiful games. If we changed how two pieces move, the same would still be valid. There are beautiful games in draughts, as well as in Go and Shogi.

We could, with just a little exaggeration, say that if there was a game whose aim was to throw a match on squared paper, and the more lines it crosses, the better, a 'culture' of this game would soon be created, and some throws would be considered more beautiful than others. Chess is obviously a more complicated game, but it has no exceptional status in the family of games.

The beauty of chess has more to do with man, with the human spirit, than with chess as a specific game. Chess is only one of the mirrors in which beauty can appear. Others are fine arts, literature, fashion, and so on.

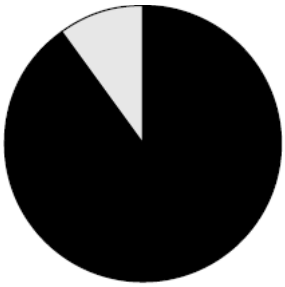
So if we write something about the beauty of chess, we write in a sense about beauty in general or, more precisely, about its reflection in one of the many mirrors.

Can beauty be manufactured?

Is there something a chess player can do in order to play a beautiful game? And can beauty be created to order? Chess players answered unequivocally.

Nobody can start a game and say to himself: today I'm going to play beautifully. Beauty

is something that sometimes occurs and sometimes doesn't; we do not have it at our command. We can only try for it by being combative and ready.

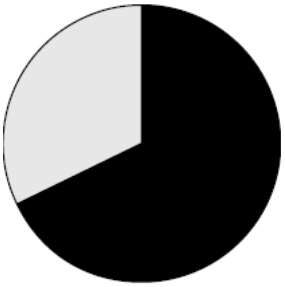


■ *I agree, we don't have beauty at our command.* ***[90%]***
■ *I disagree, beauty is at our command.* ***[10%]***

It seems to me that a special asymmetry applies in chess and perhaps also in other areas of life. A chess player can choose to play in an unbeautiful, uninteresting way, to play for a draw without creativity. However, he cannot decide to play beautifully. He may contribute halfway to beauty, but the other half is in the hands of the stars, the goddess Caissa, or depending on plain luck. Beauty cannot be bound; you can negotiate with it, but you cannot possess it.

Can computers play a beautiful game?

As the following pie chart shows us, around a third of the respondents gave a negative answer to this question, usually with an explanation that computers lack the creative spirit to be able to create a beautiful game. This would lead to a paradox – if you saw a game, you could not tell whether it was beautiful until you found out who actually played it; the moves themselves would not be sufficient. That seems very counterintuitive to me.



■ *Yes, they can* ***[68%]***
■ *No, they cannot* ***[32%]***

Two-thirds claimed that even computers can play beautifully, often referring to specific games which they consider to be beautiful. You can also find several examples of beautiful computer chess in this book.

It appears to me that the correct solution of the dilemma of whether or not computers play beautifully lies in accepting the recognition of beauty as a creative act. **Computers (sometimes) play beautifully, but they don't know that they have. Or more accurately, beauty sometimes occurs even in games by computers, but the computers don't notice it. A human being is the one who recognizes the beauty, and that is his creative contribution. And beauty shines only when it is revealed by (good) taste.**

If you think recognizing beauty is not creative and difficult, never pay a photographer. After all, they only took pictures of what already existed; they just selected and framed it.

And make fun of football talent seekers – all they did was see the talent in Maradona when he was still chasing the ball somewhere in the dust on an Argentinean road.

Does beauty in chess change over time?

Is beauty permanent or does it change? Most chess players responded that it remains the

same, as you can see in the pie chart below. However, many complained that the question was too black-and-white, and that it would be better to offer more answers with finer distinctions.

What was beautiful a hundred years ago is banal today. Chess develops, and therefore other things are beautiful today.

■ *Yes, beauty changes over time* ***[27%]***
■ *No, beauty doesn't change over time* ***[73%]***

In my opinion, Lukas Stary hit the nail on the head when he wrote laconically: "Beauty doesn't change, it evolves."

I might slightly change the words and write:

The beauty of chess doesn't change, but it enriches itself. It expands. What was really beautiful a hundred years ago remains beautiful today. And yet, today there are beautiful games which couldn't have been played a hundred years ago, because the understanding of chess did not allow it.

The same applies to architecture. Prague Castle is still beautiful, but skyscrapers, houses made of glass and other charming buildings simply could not be built at that time; today we have both. And I dare to suggest that the latter, the contemporary, is a little more exciting for us. That is 'our' beauty.

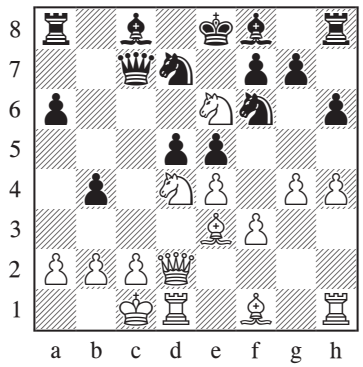
The following game, for instance, could not have been played a hundred years ago. The Sicilian Defence, razor-sharp complications, sudden changes, the original placement of pieces – all of these simply would not have happened in Lasker's time.

I will not make any comments about the game; I leave it to make an impression the way it is, with several diagrams. It is a gem that doesn't need help to shine.

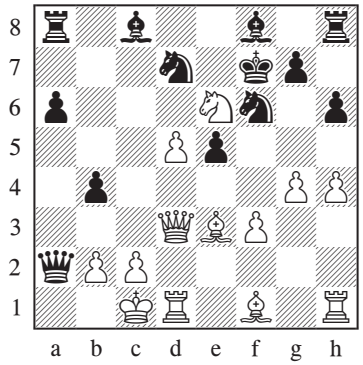
Alexander Morozevich – Maxime Vachier-Lagrave

Biel 2009

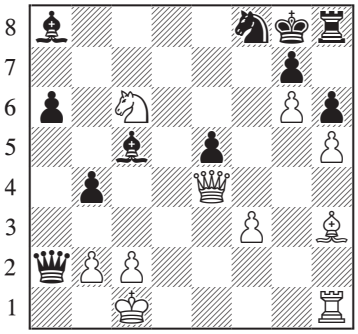
1.e4 c5 2.♘f3 d6 3.d4 cxd4 4.♘xd4 ♘f6 5.♘c3 a6 6.f3 e6 7.♗e3 b5 8.♕d2 ♘bd7 9.g4 h6 10.0–0–0 b4 11.♘ce2 ♕c7 12.h4 d5 13.♘f4 e5 14.♘fe6



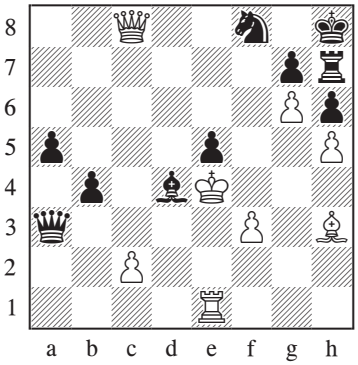
14...fxe6 15.♘xe6 ♕a5 16.exd5 ♕xa2 17.♕d3 ♔f7



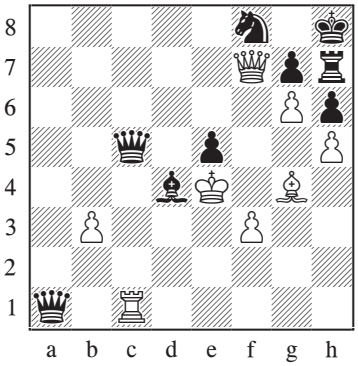
18.g5 ♘xd5 19.♗h3 ♘xe3 20.♘d8† ♔e7 21.♘c6† ♔f7 22.g6† ♔g8 23.♕xe3 ♗c5 24.♕e4 ♘f8 25.♖d8 ♗b7 26.♖xa8 ♗xa8 27.h5



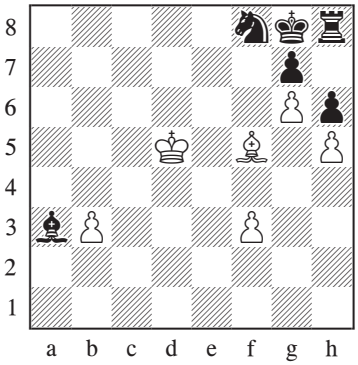
27...♖h7 28.♖e1 ♗xc6 29.♕xc6 ♗d4 30.♔d2 ♕xb2 31.♕c4† ♔h8 32.♔d3 a5 33.♕c8 ♕a3† 34.♔e4



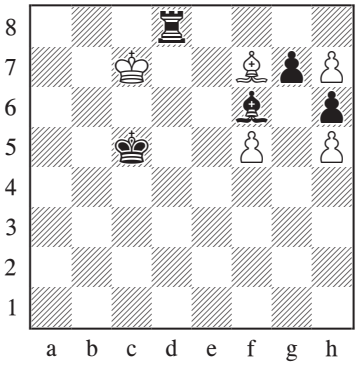
34...b3 35.cxb3 a4 36.♖b1 ♕b4 37.♕c4 ♕b7† 38.♕d5 ♕b4 39.♕c4 ♕d2 40.♗g4 a3 41.♕f7 ♕c2† 42.♔d5 ♕c5† 43.♔e4 a2 44.♖c1 a1=♕



45.♖xc5 ♗xc5 46.♕d5 ♕e1† 47.♔d3 ♕d1† 48.♔c4 ♕xd5† 49.♔xd5 ♗a3 50.♗f5 ♔g8 51.♔xe5 ♖h8 52.♔d5



52...♘h7 53.gxh7† ♔f7 54.♗g6† ♔f6 55.f4 ♗c1 56.f5 ♗d2 57.♔d6 ♗e1 58.♔d7 ♗b4 59.♔c7 ♔e5 60.♔d7 ♗a3 61.♔c6 ♔d4 62.♔c7 ♔c3 63.♔d7 ♔b4 64.♔d6 ♔xb3† 65.♔d5 ♗b2 66.♔d6 ♗f6 67.♔c5 ♔c3 68.♔d6 ♔d4 69.♔c6 ♖d8 70.♔b6 ♔d5 71.♔c7 ♔c5 72.♗f7



72...g5 73.fxg6 ♖d6 74.♗e8 ♗e5 75.♔b7 ♖b6† 76.♔c8 ♔d6
0–1

Do grandmasters play more beautifully than club players?

Is beauty related to chess strength? Do professionals have a monopoly on beauty?

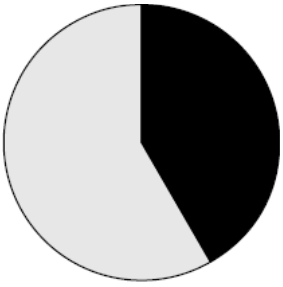
The answers to these questions from the questionnaire are very interesting and go

beyond chess in some aspects, because they remind us of current political dilemmas.

What should be entrusted to the citizens, and what shall be left to professionals? Should a decision about building a new nuclear power plant be decided in a referendum?

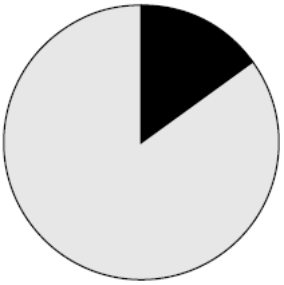
While looking at the following charts and my comments on them, it is good to keep in mind that most of my respondents don't play chess professionally and don't have any international title, while for me (at least in part) chess is my job. We therefore represent different groups.

World-class grandmasters play more beautiful chess than strong club players, who in turn play more beautiful chess than beginners.



Yes ***[46%]***
No ***[54%]***

Beauty in chess is what the strongest players consider to be beautiful, because they understand chess best. This is true even though there are many fewer grandmasters than club players.



Yes ***[15%]***
No ***[85%]***

While disagreement with the statement in the first question was only mild, the second question (perhaps an unnecessarily sharp one) provoked massive disagreement. I, however, cannot agree that the point of view of a professional has the same value as that of someone who occasionally plays chess on the internet.

Imagine a parallel with other activities. Who runs more beautifully, your neighbour or Usain Bolt? Does Messi play football more beautifully than a forward from a local team? Does Julian Barnes write more beautifully than a ten-year-old girl? Who produces more beautiful teacups, a professional potter or an amateur attending an evening class for the second time?

The second reason is empirical. If you take all the games from one of the super-tournaments, Wijk aan Zee, Dortmund, Bilbao or another one, and take a random sample of the games of a local tournament, you will find much more beauty in the games of the chess elite. Try it!

The third reason is that when two distinctly unequal players play together, the stronger one usually wins. And have you ever heard of somebody losing in a beautiful way? You can win beautifully, but you can lose only bravely; hardly beautifully. An error is rarely beautiful.

Club players can, of course, also play well; they may find a nice blow or combination. But some areas of chess knowledge remain hidden to them and, therefore, they simply don't produce any really beautiful things. An orchestra can play a much greater variety of songs than a band consisting of three instruments. Likewise, a grandmaster can produce a greater range of beauty than a club player. In my opinion, the beauty of a chess player's games becomes finer as his understanding of chess grows.

Perhaps it is a good idea to draw a parallel with the love of wine. When you drink wine for the first time, it can be a cheap one, even a wine from a plastic bottle. You get drunk anyway, you are impressed, and you think to yourself, "What a great wine." Just like an amateur chess player when he sees checkmate on f7 for the first time.

But when you taste some other wines, you will discover that a good wine from a vineyard is much better than that weirdness from a supermarket that you drank before. Likewise, a club player later realizes that a precise positional game is far more beautiful than an imprecise but flashy attack.

And when you have drunk wine for many years and studied different wines, you know that some varieties of wine are meditative, appropriate for long evening sipping, while others are suitable with French cheese, and others with fish. Some are good for refreshment, others for enjoyment. You don't despise wine from barrels, because it also has its dignity, but you also know the delicious taste of old and mysterious wines. This is how professional chess players perceive chess. They don't despise a nice little combination, or a good positional game played in classical style; yet they also know other forms of beauty.

On the question of chess taste: imagine that three players are each publishing a book called "The Most Beautiful Games of Chess: My Selection". One of them is Magnus Carlsen, the second is your club colleague, with a rating around 2200, and the third is some random guy who plays chess only on the internet, and who has never played a serious game in his entire life. Whose book would you buy? And why?

How do you define beauty?

In the questionnaire, I also asked what the nature of chess beauty is. Of course, there was a certain shyness among respondents when it came to defining something so lofty and intangible. And yet almost half of them (70 respondents) tried to offer at least some kind of a definition.

These statements about beauty can be divided into four broad areas: beauty as a pleasant emotion, the beauty of originality, of harmony, and beauty as a manifestation of deeper mastery. Let's have a closer look at each of these categories separately.

Beauty as a pleasant emotion

Beauty brings joy to chess, and many chess players wrote that beauty is itself the joy of chess. Here are some typical statements:

"The beauty of chess = the joy of chess."

"Beauty is something that fills a person up, that makes him happy."

"Beauty is a very subjective but joyful feeling that I have experienced something worthwhile."

"Beauty is a subjective feeling of experiencing discovery, admiration, appreciation, enthusiasm."

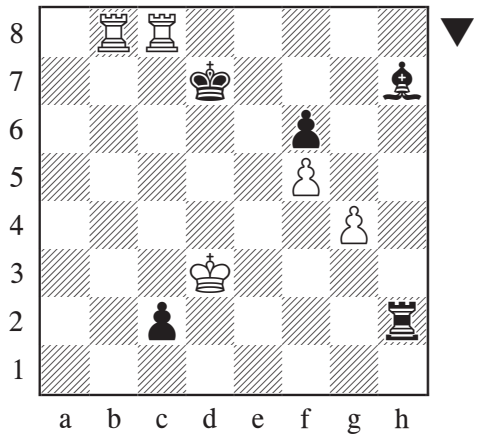
These statements are obviously true. Beauty really is related to joy. And yet, beauty is not only a joyful feeling. Nor is it true that every pleasant chess sensation is inspired by beauty. It may be a pleasant feeling when my opponent loses on time, but this feeling has nothing to do with beauty.

Beauty is connected to unselfish, pleasant feelings. A chess player can rejoice in a beautiful game by somebody else; he may even like a combination that his opponent uses to beat him.

Here is a snapshot from one of my games:

Jan Markos – Zoltan Varga

Slovakia 2013



55...♗xf5†!! 56.gxf5 ♖h8

When Black played this, saving what had been a dead-lost game, I didn't experience very pleasant feelings. And yet, this combination is beautiful...

Beauty of originality

Responses linking beauty to originality probably made up the largest group. Let me quote three of them:

"Beauty is an unexpected, surprising solution to the problems on the board."

"Beauty is a surprising, unusual motif."

"Beauty is an unusual combination, an unusual pattern, or an original ending."

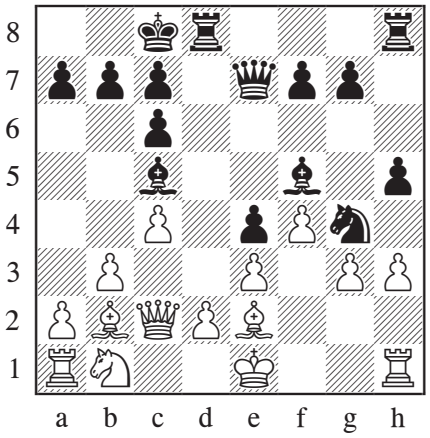
However, not everything that is original is also beautiful. Nakamura's opening with 1.e4 c5 2.♕h5 ♘f6 3.♕h4 ♘c6 4.♗e2 ♘d4 5.♗d1 is perhaps original, but I wouldn't call it beautiful; rather bizarre. And there are even more extreme examples.

Let's have a look at a famous game:

Bent Larsen – Boris Spassky

Belgrade 1970

1.b3 e5 2.♗b2 ♘c6 3.c4 ♘f6 4.♘f3 e4 5.♘d4 ♗c5 6.♘xc6 dxc6 7.e3 ♗f5 8.♕c2 ♕e7 9.♗e2 0–0–0 10.f4 ♘g4 11.g3 h5 12.h3



12...h4 13.hxg4 hxg3 14.♖g1 ♖h1 15.♖xh1 g2 16.♖f1 ♕h4† 17.♔d1 gxf1=♕† 0–1

Whose play was original, and whose beautiful? Larsen was well-known for his unconventional ideas. Spassky played simply – and well.

Beauty is a combination of quality and originality. It's the extraordinary rather than just the unusual. But it is true that 'freshness' is an important aspect of beauty. What is well known loses its refreshing and exciting character. We all have experience of this – people living in Prague don't visit Prague Castle, nor do Venetians take gondola rides.

The variable character of beauty is also described very well by the following answer, which leads us smoothly to the next category:

"Surprisingly, both aspects of some polarities apply here – symmetry or, on the hand, asymmetry; the unexpected or the classical inner logic of positional moves; minimalist simplicity or the complexity of a juggler; harmony of all the pieces or a surprising desperado move; consistency or a series of twists."

Beauty of harmony

Where on the one hand there is originality and unexpectedness, we can find on the other hand another characteristic of beauty: consistency, unity, harmony. Here are two typical quotes from the questionnaire:

"In general, we may say that beauty is when a game – or part of it – fits together, unfolds logically and makes a person feel the coherence, just like a symphony."

"From my point of view, a game is beautiful when it forms a whole from the first move until the last; when every move has its meaning."

In my opinion, this circumstance is important. **It seems to me that what attracts us to such games is the seemingly invincible intellect of the winner.**

And this leads us to the fourth and last category of answers.

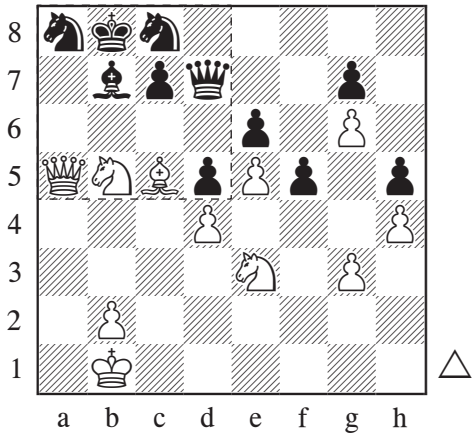
Beauty as a manifestation of greater knowledge or mastery

"The beauty of chess lies in the beauty of thoughts."

"Beauty is the depth of a thought and its realization."

"The definition of beauty? Simple! Beauty is what makes you replay a game over and over again."

In March 2014, the ChessBase website published a test in which a group of grandmasters and club players were shown the following diagram with the task: "Find the best move for White." While thinking, the players wore special glasses that monitored the movements of their eyes.



Of course, we expect the solution to be somewhere in the marked area. It looks as if White is close to giving checkmate. In fact, there is no checkmate in the position, and the strongest move is the positional and surprising:

1.♘g2

Stronger players were able to expand their view of the board and look also at 1.♘g2. The club players were not able to do this; they stared in fascination only at the crowded quadrant in the upper left corner of the board.

The difference lies in understanding. The move ♘e3-g2 cannot be found by calculation. It has to be born in your mind. And this can happen only when you understand chess. The move ♘e3-g2 is, therefore, an embodiment of a deeper understanding of chess. And knowledge is beautiful.

Summary of the results of the questionnaire

Beauty in Chess
It is very important to us; it is one of the main reasons to play chess.
It is related more to the human spirit than to the rules of chess.
If we changed the rules, the beauty would remain.
It happens when we create the right conditions, but it cannot be created to order.
It is always a gift from the goddess Caissa.
Sometimes it may also be created by a computer, but only a human can recognize it.
It becomes enriched over time; what was beautiful a hundred years ago remains beautiful, but new types of beauty are being added.
The stronger a player, the greater his ability to recognize and create beauty in chess.
It evokes pleasant emotions, but is not an emotion itself.
It is related to originality, but is more than originality; it is rather a combination of originality and quality.
It is related to coherence and harmony.
It is related to the understanding of chess.

Conclusion

How to Train Properly

If this book has added at least a little inspiration to your battles over the chess board, and given you the enthusiasm to work on your chess skills, it has clearly fulfilled its purpose. To make sure the time and energy that you dedicate to training in the future is employed as efficiently as possible, I would like to end with a few pages about proper training. Those opinions are, of course, subjective, but they are based on ten years of coaching experience with a wide variety of players.

Motivation

Before you enthusiastically get down to work, it is good to stop for a moment and answer the seemingly simple question: "Why do I want to train?" Of course, there is no right or wrong answer; the motivation of people varies. However, what your training will look like, and also how successful it will be, partly depends on your response.

If the answer is, "I want to succeed in my next tournament," you will probably work mostly on openings and simple tactics, and you won't learn, for example, much about endgames, because they require two or three months of sustained effort.

This means that if your motivation doesn't change in the future, and your horizon never extends beyond the next event, you will never learn endgames (and other interesting stuff), and this will forever limit your game. You will be like a man who tapes another sheet of plastic over a broken window after every storm, but never finds time to have it repaired.

Try to think about your chess career with a horizon of a year or two. What kind of player do you want to be in two years' time?

Perhaps you want to train because you believe that you can be a better player. You will feel better about your play if a higher rating or an international title appears next to your name, or if your team captain assigns you to a higher board.

It's great to have a clearly defined objective, and it will give you strength to train at the beginning. But what happens if achieving your goals proves to be very difficult, or even impossible? The flame of your motivation will start to fade away, and may never burn brightly again. You will be at risk of giving up your training.

(Incidentally, I reckon that about 80% of the chess players I meet consider themselves to be better players than their current rating. It is, of course, statistically impossible for all of them to be right.)

Therefore, approach your goals with detachment; perhaps it is better to focus on the quality of the games themselves. Will it not please you more if you avoid getting into time trouble and stop making tactical errors, rather than if your rating increases by a few points?

Maybe you just like to fight and love winning, and so you want to train in order to win more often. You probably have strong willpower, and will work diligently and tirelessly – you will improve your calculation, study positional games, and follow the developments in openings that are part of your repertoire.

But if you fail to look at the royal game with the eyes of an artist or a passionate researcher, the depth that is hidden in it might escape your attention. And although your pragmatic game will be effective, encounters with stronger players may prove to be flat.

Therefore, try to allow more poetry into your chess. Try an opening that you have never played before, study Tal and Larsen, let yourself dream. Your game will benefit from it like a worker does from a vacation.

Conversely, if your reason for training is because you look for ideas and beauty in chess, and you want to learn about its mysteries as much as possible, you will probably acquire a deeper understanding of the game than your opponents have.

On the other hand, you may lack the qualities of a warrior: endurance and the ability to withstand an attack and punch back.

The challenge for you is to work to the maximum in every position, even in ones which don't inspire you. Defend a close-to-lost endgame like a lion; press your opponent in time pressure; and gain points as often as you can.

Passion and order

It is important for you to enjoy your training, because otherwise it will be very difficult for you to persevere at it. For instance, for somebody who is a tactician with his whole body and soul, it is nonsense to spend long hours and days training on dry technical positions which bore him to death. That is the best way to destroy one's passion for the game. On the other hand, it is sometimes important to devote yourself to issues and activities which do not pull at your heartstrings so much, because otherwise you will never improve at them.

I would reckon that 75% of training should consist of activities that a chess player really enjoys, and the remaining 25% should be activities that he doesn't enjoy, but which are useful for his performance. Players thinking about a professional career should adjust this ratio to 50:50.

However, do not confuse individual preferences and laziness. Fixing the repertoire of a young chess player by switching from the English Opening, whose positional nature doesn't suit him, to the sharp lines of the Sicilian Defence – that is adapting to his chess character. But to allow him in training to replace solving puzzles with playing blitz games on the Internet – that is adapting to his laziness.

Laziness is a tough demon for every player. That's why every chess player who wants to work on his skills on a long-term basis should have a notebook or an electronic document in which he writes, after every training session, how long he trained, what he trained on, and how it went.

Paper can take anything, but it is not easy to fool it. For example, if you want to add 200 points to your rating, and after two months you find out from your notes that you spent only eight hours training, then it is clear that it's time to change either your ambitions or the amount of time you devote to working on your chess skills.

I have met several chess players who set an ambitious training plan (often ten or more hours a week) but, after a couple of months, they were working on chess only once or twice a month. Do not repeat their error: set yourself a lower number of hours, but make sure that you fulfil the plan.

Training and experience

Be aware of the balance between training and playing. If you play only one or two tournaments a year, it will be very difficult for you to motivate yourself to train throughout the year. Conversely, if you play so often that you don't have time to analyse your games properly, you should reduce the number of tournaments and league games, and increase the number of training hours.

A player who has serious ambitions to improve at chess should play at least 50 games a year. Of these, at least two-thirds should be with stronger players. It is best if your opponents are rated an average of 100-200 points higher than you; if they are much stronger than you, there is a risk that you will stop enjoying the game because you lose too often. A club player who wants to play only for pleasure, but at the same time doesn't want to make stupid mistakes because of lack of practice, should play at least 25 games a year.

Analysing your own games

Analysing your own games is the royal discipline of chess training. You should ideally take a look at every (interesting) game for at least an hour, and then check your analysis with a stronger player or computer. The analysis of a game should give you answers to the following three questions:

"Where did I make mistakes?"

"Why did I make them?"

"What will I do differently next time in order to avoid these errors?"

Unfortunately, however, analysis often ends at the first of these questions, and thus brings the player little benefit.

Of course, we have to resist the temptation to check the game with a computer program before we try to analyse it ourselves. The aim of analysis is not to learn as quickly as possible the truth about a game which is already over, but to become a better chess player. And to achieve that, we have to understand ourselves: our strengths, preferences, and blind spots.

Coaches and teammates

As this book has aimed to show, there are a number of rules in chess which are easy to understand, but very difficult to discover. That's one reason why a player who wants to improve should find a coach. A good coach will tell you, in a relatively short time, things about chess that would take you years to discover on your own.

The role of a coach is to make sure that the effort put into training by a player is not in vain. A coach's role is not to do the work instead of a player; on the contrary, the coach should lead the player to greater self-reliance. For every hour spent with a coach, there should be at least three hours of individual work by the player. If your coach does not encourage you to work independently, and does not check that you have done your home assignments, he doesn't care about your chess development.

Training lessons are not cheap. Therefore, a coach should not work with you on exercises or other stuff that you can do on your own. For example, you don't need a coach to give you diagrams to solve and then check them with you; a good book or a specialized database can do that. You should leave every meeting with a trainer with the feeling that you have learned something new.

It is also a great help in your training to have a sparring partner – a friend from your club or city who plays training games with you, and who encourages you and helps you with analysis. Training can be quite lonely work, so it is good to have company sometimes.

Use all available resources!

Our age is a great time for training at chess. Computers together with the Internet have brought chess players options that previous generations could only dream about. In this book I have already written a lot about working with computer programs, so here I would like to draw your attention to other resources that are worth working with.

Online chess servers allow you to work with a coach, or analyse or play with a friend without having to meet physically. This is a great opportunity, especially for players from smaller towns.

Nowadays there are also specialized databases of positions intended for teaching tactics, available either to download to a computer or to access online. This is a very convenient way to train practically anywhere.

Simple endgames (with a maximum of seven pieces) have already been solved; you can check out a specific position in the Nalimov tablebases, which are freely accessible online.

Also, the Internet is full of videos in which the world's top players explain their games, for example, in recordings from the press conferences of super tournaments. To hear Carlsen, Caruana, or Anand talking about how they were thinking during a game is an extremely valuable source of inspiration and chess knowledge.

How not to train

Do not spend too much time studying opening theory. There is so much of it that it is better to direct your attention towards understanding strategy, so that you can find the right plan even in an unfamiliar position.

Do not be satisfied with solving only simple tactical exercises. If you solve the positions within a minute, and almost always correctly, it means that you are wasting your time. Ideal positions are those that you manage to solve correctly only about 70-80% of the time.

Your training must be active. Five hours spent watching a super-tournament should not be called training. Online blitz games are not training; they are good for relaxing after a hard day, but that's it.

Don't be ashamed of your games, even if they ended in catastrophe. If you refuse to analyse a lost game because you find it hard to look at it, you are denying yourself the best source of knowledge. After all, in this book there are dozens of examples where I did not have the upper hand. It is especially in those games that the best examples can be found.

The benefits of training

If you train properly, you will gradually understand chess more and more, and play better. You will also learn something about yourself, because honest work at chess is mostly about finding your own imperfections and mistakes. And finally, chess training teaches you skills that are also useful in other areas of life: hard work, honesty and purposefulness. And that is something.

My wish is that the royal game brings you a lot of joy!

Glossary

Advantages – Subjective and Objective
An objective advantage depends only on the position on the board, and computers are very good at assessing it. A subjective advantage is held by the player who is able to play the position better. This advantage depends on the styles of both players, and computers are, of course, unable to assess it. And yet it often has a great impact on the result of the game. The stronger the players are, the greater is the importance of an objective advantage over a subjective one.

See pages 140-143, 254.

Balloon
The pawn structure, thanks to its ability to restrict the opponent's position, resembles a balloon. The side with an advancing pawn structure tries to acquire as much space as possible (to inflate the balloon). On the other hand, the opponent tries to break this structure and open the game (to burst the balloon).

See pages 24, 53-56.

Bishop – Billiard Ball
Bishops, because of their specific way of moving, have difficulties switching from one flank to the other. Such a transfer resembles the path of a billiard ball rebounding from the edge of the table. The difficulty of such a rebound is that it often needs to take place either in the depth of my own camp (where my own pieces often obstruct the way), or else in the depth of my opponent's camp (where the squares are carefully guarded).

See pages 83-91, 150.

Brake
Although we want to reach our final destination as soon as possible when travelling in a car, sometimes we have to slow down to avoid crashing – at corners, for example. It is similar when attacking; sometimes the best continuation is to slow down the attack. The inability to 'hit the brakes' is the reason for the failure of a large number of attacks.

The purpose of an attack may not only be mate or material gain. It can also be the achievement of dominant positions for your pieces.

See pages 50-51, 123-129, 207-208.

Border Guard
A piece whose task is to control important squares. Exchanging this piece often leads to a weakening of those squares.

See pages 26-27.

Crystal
Two or more pieces protecting each other. For the opponent, it is difficult to break such a structure. The cheapest and thus the most stable crystal is the formation ♙+♗.
See page 30.

Decision before a Decision
In every position, before analysing the moves, it is good to ask if the decision you are facing is important or not. In a position where a lot is going to be decided, it is all right to spend plenty of time on a single move. However, if it is obviously a position with several almost equivalent moves, it is good to avoid wasting time and to quickly choose one of them.
See pages 177-178.

Easy Victory
Some plans are easier to put into practice than others, but they may nevertheless be difficult to defend against. A typical example of such a plan is the creation and advance of a passed pawn.
See pages 179-183.

Equal and More Equal Positions
An equal position is a position in which neither side has an advantage, but which contains some kind of imbalance. This imbalance allows both sides to play for a win. In more equal positions, this imbalance is not present, and so the players have limited chances to avoid a draw.
See pages 140-143.

Forcing Moves
These are moves that restrict the opponent's freedom of choice. The most common forcing moves are checks, threats and exchanges. When calculating, we always start with forcing moves because they are the easiest to calculate (the tree of variations is not very branched), and also because they are among the best continuations in many positions.
See pages 194-199.

Fracture
This is a metaphor for doubled pawns, emphasizing their static nature. The movement of a pawn structure including doubled pawns usually leads to their becoming weaker, just as moving a broken hand leads to pain and the risk of greater injury.
See pages 45-46, 54, 64-68, 119-120, 196-197.

Freezer in your Head
A metaphor that highlights the usefulness of collecting and storing your ideas (e.g. tactical motifs) from the earlier course of the game.
See pages 163-168.

Imbalance
If a player wants to win a game, he doesn't always have to achieve an advantage in the opening. Sometimes all he needs to do is to create an imbalance, which means gaining a certain partial advantage in exchange for a different partial disadvantage. In the subsequent fight, he then tries to emphasize his advantage, while suppressing his opponent's.

Typical examples of imbalances are the bishop pair versus a better pawn structure, an advantage on the queenside versus an advantage on the kingside, a lead in development versus extra material, etc.

See pages 140-143, 240.

Inconspicuous Mate
A position in which the destiny of the game is decided just as surely as by a direct attack on the king, though less experienced players may not realize it. Typical examples are positions with an advanced passed pawn.

See pages 57-63, 88-89, 111-112, 125-126, 262.

Infection
Pieces protecting a weakness cannot move freely, and so they themselves become weak.

See pages 32-35, 47-49.

Invisible Fortress
Computers cannot detect fortresses because they calculate only to a certain depth in each position. However, fortresses are 'eternal' and a different type of intelligence or algorithm is necessary to detect them.

See page 203.

King – The Final Stage of Development
The order of development of the pieces in chess depends on their vulnerability, which increases in line with their value. Pawns usually enter the game first, then the minor pieces (usually the knight and then the bishop) and then the major pieces. According to this logic, development is often completed in the endgame when the king – the most valuable piece – joins the game.

See pages 38, 111-112, 216.

Knight
Best friend of a passed pawn
A knight can greatly help a passed pawn to advance because (unlike a bishop) it can attack squares of both colours, and thanks to its relatively low value, it can expel many of the opponent's pieces from the blockading squares.

See pages 181, 183.

Likes broken pawn structures
Knights like broken pawn structures which are full of weak squares. They can take advantage of the opponent's weak squares and to some extent neutralize our own weaknesses.

See pages 72-74, 78.

The long, short distance
Although the distance 'two diagonally' (e.g. from c6 to e4, or from f2 to h4) is optically not very great, a knight needs four moves to travel this distance on an empty board, the same as it takes to go from a1 to h6.
See pages 71-72, 172.

Lever
Using a pawn to attack an opponent's pawn which is tied down.
See pages 79-80.

Magnetic Skin
A metaphor expressing the defensive function of a pawn structure, which just like a skin protects the pieces and space behind it, and like a magnet adds stability to (usually minor) pieces standing directly in front of it by reliably protecting them.
See pages 42-56.

Mate vs. Material
Mate and material are incomparable quantities, much like wealth and health. However, computers are not able to work with such quantities, and so in positions in which one side has a promising attack and the other a material predominance, computers' evaluations are often unreliable.
See page 204.

Method of Comparison
This a way to evaluate an unfamiliar position in the opening or early middlegame, by comparing it to another position whose evaluation the player knows.
See pages 136-139.

Negative Side of a Move
With every move a player gains something, but at the same time also loses something. The loss that every move brings is its negative side. If there are moves in a position where the player gains much more than he loses, the position is called 'fast'. On the other hand, if there are only moves where the player gains just slightly more than he loses, we are in a slow position. And if there are only moves where the player loses more than he gains, we speak about a zugzwang (that is, the disadvantage of having to move).
See pages 38, 119-120.

Pieces – Three Characteristics
Every piece on the board has three characteristics that together determine whether it is standing well or not:

Activity: Is it doing a useful job? Is it attacking, defending, controlling space or acting preventively?
See pages 13-15, 17.

Physical Presence: Is it standing in the way of my other pieces?
See pages 19-22, 177.

Vulnerability: Is it in danger? Might I lose it? Do I need to spend time and energy defending it?
See pages 15-19, 43-45, 47-48, 145, 176, 195.

Police Officer
A piece that is neither defending nor attacking, but is acting preventively, prophylactically. It resembles a police officer patrolling the city in order to deter people from undesirable behaviour.
See pages 36-39.

Protection – Reliable or Insecure
The lower the value of both pieces involved (the piece that is protecting and the piece being protected), the more reliable the protection is. Pawns offer great protection, and they are also commonly saved by being protected when attacked. Queens, on the other hand, offer only insecure protection, and when attacked will usually save themselves by fleeing.
See pages 28-29.

Queen
Good attacker, bad defender
The queen is a great attacking piece, thanks to its mobility; but it is not a good defender, because of its great value. To protect with a queen is like locking your bike with a golden chain. In addition, protecting is, in general, a static task in which the queen cannot use its mobility.
See pages 110, 113-114.

Likes open space and unprotected pieces
The queen, thanks to its great value, needs other pieces to clear space for it first. Otherwise, the opponent's less valuable pieces can easily expel it. The queen is also a great master of double attacks and thus wins a lot of unprotected material; however, the queen is not able to harm protected pieces.
See pages 90, 112-113.

Whether to exchange queens is decided by the safety of the kings
The side with a weaker king usually wants to exchange queens because otherwise its queen automatically becomes a defensive piece, while the opponent's queen becomes an attacking piece.
See pages 38, 111-112, 216.

Reversed Hierarchy
The weakest pieces are first to occupy space on the board; this is because they are also the least valuable pieces. Thus, pawns are very good at expelling knights and bishops, and minor pieces can expel the major pieces. The pieces of greater value, therefore, usually wait for some exchanges before becoming fully involved in the game.
See pages 23-29.

Rook

Does not need to be centralized

The rook is the only piece which controls the same number of squares from both a corner and a central square. It is, therefore, an ideal piece for an attack along the edges of the board, where it is relatively more mobile than the other pieces.

See pages 92-96.

Hates the bishop pair

The bishops are the only pieces on the board that can annoy rooks effectively. The queen is too valuable to attack the rooks; the knights, pawns and king are not mobile enough. When the opponent has a bishop pair, a rook is not confident on squares of either colour; if one of the opponent's bishops is exchanged, the rook, with a sigh of relief, usually steps onto a square of the colour that the exchanged bishop stood on.

See pages 26, 163-164.

Study rook endgames

The rook is the natural defender of the back two ranks, and it is hard for it to get involved in the game from behind the pawn structure in the opening and early middlegame. It is, therefore, relatively rarely exchanged. Rook endgames are, therefore, by far the most common endgames, and players should pay a lot of attention to them.

See pages 176-177, 244-245

Rule of the Small House

If White obtains a pawn wedge on e5 or d5 in the opening, Black usually has difficulty finding good places for all four of his minor pieces. It is, therefore, a good idea for Black to exchange one of them, provided this can be done without making any other positional concession.

See pages 24, 144-147.

Rule of Three Results

Chess (unlike, for example, tennis) is played not for two, but for three results. This means that the moments when it is possible to gain or lose the most are those positions with a large advantage for one of the players.

See pages 188-193.

Scheme – Opening for one

A relatively stable development in the opening, usually away from the main lines. It is not defined by an exact order of moves, rather by the pawn structure. It has to be achievable quite often in practice. Players who don't want to focus on studying concrete opening theory, but prefer to study strategic plans, often look for schemes.

See pages 148-156.

Seeing or Calculating
The ability to see all the good moves in a position differs from the ability to evaluate these moves by means of calculation. It is subconscious and can be trained mostly by broadening your general chess education – by watching games by strong players, reading chess literature, etc.
See pages 158-162, 211-212.

Space Advantage and Time
A player who has a space advantage in a blocked position usually wants the game to unfold slowly because then he is able make the maximum use of his space advantage. On the other hand, his opponent is not able to perform some manoeuvres in confined space even if he was given a thousand extra moves.
See pages 120-121, 213-216.

Time favours the bishop pair
The emptier the board, the stronger bishops are compared to knights. The board is emptied by exchanges. The longer a game lasts, the more exchanges occur. Therefore, be prepared to play slowly when you have the bishop pair.
See pages 121-122.

Target
Also known as a 'hook'. A pawn that is not a weakness itself, but whose position allows the opponent to open the position advantageously.
See pages 95-96, 101, 131.

Universality
The more universal (less committal) a move is, the better. Then the opponent must reckon with more scenarios of how the game might develop, and choose moves that would be suitable for all of these scenarios.
See pages 184-187.

Game Index

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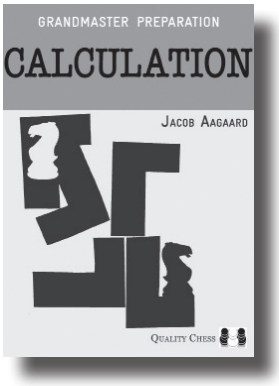

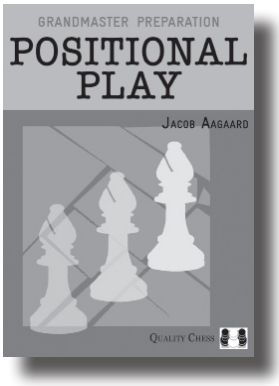

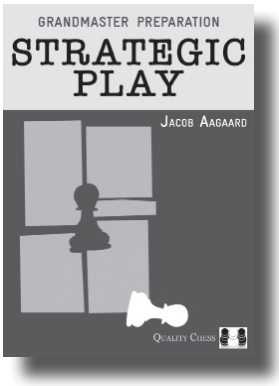

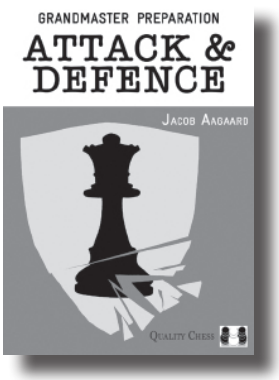

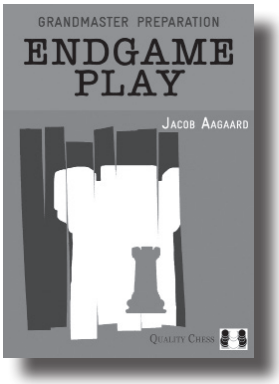

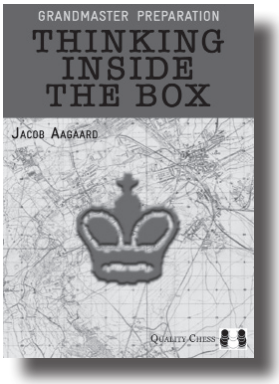

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