

# PUMP UP YOUR RATING

by Axel Smith

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Unlock  
your chess  
POTENTIAL

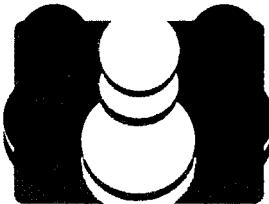
QUALITY CHESS



# Pump Up Your Rating

By

## Axel Smith



Quality Chess  
[www.qualitychess.co.uk](http://www.qualitychess.co.uk)

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# PUMP UP YOUR RATING

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# Foreword

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When I joined Kristiansund SK chess club in April 2012 it was with the intention of finding a better chess environment – and to get training from Axel Smith. I had not improved my Elo for about six months, which felt like a long time.

We started by looking at my games and making lists of my mistakes, so we could see which kind of mistakes were recurring. I was good at spotting my own tactical opportunities, but I missed a lot of my opponents' moves. Another recurring mistake was that I did not play the critical moves when I departed from preparation. I was playing too fast at that point. Furthermore I had a tendency to play a bit too much according to the opponents' level.

I began thinking about these things during my games, even though it is not easy to change your habits and the way you play. I also started annotating my own games, with both variations and words. At the same time, I started solving exercises online every day. There you use a chess clock, which can sharpen the concentration. When you are running out of time in a game, it can be vital to be able to calculate essential variations quickly.

It went well in the following year, especially at the Norwegian Open Championship in Fagernes in April 2013. Axel was my second and helped me with files for opening preparation, with both moves and explanations. I had also started making such files myself, understanding that this work makes it much easier to handle the opening and its aftermath. You simply understand everything better if you have worked seriously on the lines in advance.

Before the event I felt well prepared and in good form. I got off to a strong start and fought hard to hold on till the end. I had improved my ability to concentrate and I managed to score six points in the nine rounds, collecting my first Grandmaster norm.

From April to May I won almost 100 rating points. Quickly thereafter I made two IM norms and passed the 2400 mark in July 2013, earning the title. By that point I had won 200 points in a year. Some people made comparisons between Magnus Carlsen and me. This is rather silly; among other points, I am 14 years old and Magnus was already a grandmaster at 13.

Axel has taught me a lot about chess, but most of all I appreciate that he showed me a good way to organize my training. I feel that I know what I need to do now, even though I still feel the need for someone to lead the way.

I have changed a lot in the last year, become more eager, worked a lot on chess and started to concentrate a lot better. It is not easy to say what the defining factor is; nor is it important. I am happy to enjoy chess and to play tournaments. I love the social aspects of chess: travelling, making new friends and then, of course, winning.

International Master Aryan Tari  
July 2013

# 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
↑	with an initiative
?	unclear
?	a weak move
??	a blunder
!	a good move
!!	an excellent move
!?	a move worth considering
?!?	a move of doubtful value
□	only move
#	mate

# Preface & Contents

---

I have been playing and coaching chess fulltime for five years. To friends and family, I have said I enjoy travelling the world. Playing chess isn't a socially-acceptable reason for giving up a normal life, but visiting fifty countries is. As a matter of fact, I have spent those years with chess only because it's so fascinating. The game itself has always been my main driving force.

However, during the last couple of years I have also had another aim – to write this book. I wished to become a Grandmaster before I started; the working title was *Grandmaster Training Manual*. In the beginning of May 2012, I suddenly realized that the book was more important than my results. It was time to start writing, immediately and at once.

I want to teach how to ‘think chess’ and how to practise chess. It is not a small aim, and there are inevitably other views whatever I write. Nevertheless, I strongly believe in what I say.

I feel that the book holds a part of me that I will lose when it’s published, but that is a sacrifice I am happy to make.

There is a reason I have a strong opinion of how to practise chess: I started training seriously only as an adult and hence know which methods worked for me and which didn’t. The first year after I started to practise methodically, in 2006 when I was 20 years old, I improved from Elo 2093 to 2205. The second year brought me up to 2458.

During the past five years, I have made chess my priority over other hobbies (often), friends (more often) and school (always). However, I have often found myself coaching rather than playing. In 2011-12, I lived and worked as a coach in Kristiansund, Norway, and had the chance to teach the methods I propose. In that way, I could see which parts the students understood and which parts had to be explained in other ways.

Thus, those students have helped me with the book, as has every student I have coached over the years. At the time of writing, I have moved back to Lund in Sweden, but I am still coaching the Swedish and Norwegian National Junior Teams from time to time. I spend more energy coaching than playing, and even though I have not made any GM norms (yet), I am happy about the three norms that Nils Grandelius and Aryan Tari achieved when I was their second.

There are also a lot of other people to thank. Jesper Hall was my first coach when I started to play chess, and his pedagogical approach has been an important source of inspiration. In the final phase of writing, he read the whole draft and gave me a lot of advice.

Håkan Lyngsjö has helped me extensively with the language; my last name is English but it was 400 years ago one of my ancestors left Scotland to try his luck as a gardener in Sweden.

There are also many friends who have read what I have written and given fruitful feedback: Stellan Brynell, Nils Grandelius, Andreas Skytte Hagen, Jens Karlsson, Brede Kvistvik, Silas Lund, Sebastian Nilsson, Henrik Olsson, Daniel Semcesen, Aryan Tari, Hans Tikkanen, Michael de Verdier and Patrik Öhagen.

I have to thank Quality Chess for believing in the idea, and last but not least my wife, for accepting everything I do, like writing all night.

After collecting examples over several years, and writing for the last year, I have finally reached the goal of my five years with chess. I understand that most readers will not be able to find the same amount of time, but I hope that this book will encourage more people to study chess. Nothing is more fascinating.

Axel Smith, July 2013

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# Introduction

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This book is mainly for the ambitious player, but don't let the word *ambition* frighten you! It only means that you really want to improve.

My ambition is to teach you what you need to get started; the book is both about "thinking chess" and about practising chess. And I do mean "thinking chess" not "thinking about chess" – in the same way that "speaking English" and "speaking about English" are different things.

Fulfilling these two aims obviously can't be done without showing a lot of instructive games. Since our game is universal, players of different strength can learn from the same examples. I have strived to explain in a way that makes the annotations understandable, but still not too simple.

In 2006, when I switched from being a human to being a chess player, I worked through 26 chess books from cover to cover. But somehow I arrived at the conclusion that improving at chess requires more active learning than what is possible by simply reading. My approach became to look for moves rather than generalizing them into verbal rules, and it worked well.

It would not be the best selling point to claim that reading books is unnecessary, but luckily, I don't claim that. Firstly, this book contains a fair share of exercises, forcing your brain to work with the material. Secondly, I think there are some *rules of thumb* and *thinking techniques* that you need to learn before working by yourself. I refer to sayings like "Put your rook on the same file as the opponent's queen", and methods like candidate moves, blunder checks and critical positions.

The first question is whether rules of thumb and thinking techniques are useful at all. I found an extensive debate about this while I was finishing this book and got myself up to date on the latest chess literature of the last few years.

Willy Hendriks takes the most extreme position in *Move First, Think Later* (2012). He argues that there's nothing but concrete moves; Alexander Kotov's mechanical variation trees, from *Think Like a Grandmaster* (1971), and other thinking techniques are oversimplifying and of no use at the board.

Since the debate covers a fundamental view of our game, I think I have to make my position clear. Hendriks' book is a good starting point, since it's fantastically well written.

## Rules of Thumb

Hendriks uses "The best reaction to an attack on the wing is a counterattack in the centre" as an example of a rule of thumb. He writes that the rule is useful for coaches when in hindsight explaining why their students erred, but that it's useless as a prescription when playing. A small statistical research is done to prove his opinion: only in 2 of 34 games was the best reaction to 17.g4 a pawn move in the centre.

Nor is Hendriks delighted with Mark Dvoretsky's modification, that an *unprepared* wing attack should be met by a *timely* counterblow in the centre. Such conditions transform the rule to a truism, in the end not saying more than "If the move is the best, play it!"

I agree with much of his writing, but I think he takes it too far. The rule to “open the centre when the opponent attacks on the wing” is a part of the inner logic of chess. What he doesn’t mention in his statistical research is that the players with White also know this rule! White played 17.g4 only when seeing that it doesn’t allow action in the centre.

However, even though there are some useful rules, modern chess has a pragmatic attitude towards them. They may even be harmful.

A psychological experiment (Hooler et al, 1996) explains my view in an illustrative manner. Two groups of subjects, consisting both of beginners and experts, tasted various brands of wine. One of the groups in addition wrote down a verbal description of what they tasted. A week later the two groups were tested on their ability to recognize the wines. The group that wrote down the verbal descriptions scored much worse!

The conclusion to this surprising result was that the wines were too complex to describe verbally. Many details were not possible to verbalize, and the subjects forgot them when they wrote down the others. The phenomenon is called verbal overshadowing.

The analogy with chess is simple to make – chess is also too complex; every unique position requires an individual approach. It’s not possible to play according to an instruction manual.

However, in Sweden, the holy land of IKEA, instruction manuals have a special place. They not only help us to assemble our furniture, but also to live our lives. But living with chess is living a different life. Chess is complex and there is no single book that can teach the secret behind finding the best moves.

The only proverb Hendriks approves is “No proverb can beat a good move.” It’s witty, but more than anything else a truism. The proverbs are there only to help us find good moves! Many of them are useful if they are used with caution.

Verbal overshadowing is not only a problem for subjects in psychological experiments. I completely agree with Jonathan Rowson in *Chess for Zebras* (2005) that the main problem for many ambitious players is that they focus on knowledge.

A good chess player is not someone with well-defined knowledge, but rather one with great skills.

## Thinking techniques

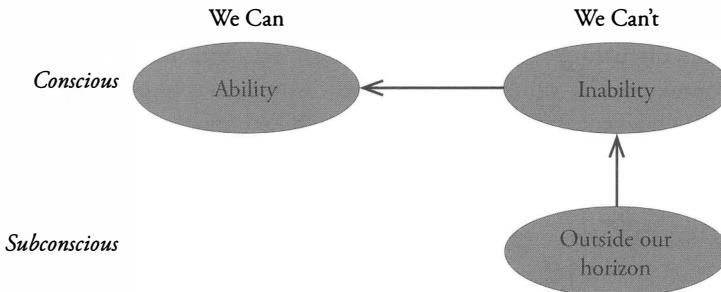
Willy Hendriks argues that thinking techniques such as ‘critical positions’ are of little value. Humans are not like that; we look for moves before we define the characteristics of a position.

He is right when he says that we see several moves before anything else. However, we need the thinking techniques when deciding which of them to play. His title, *Move First, Think Later*, would be less entertaining but more to the point if it read *Moves First, Thoughts Later*.

During a game, it’s too time-consuming to always look for candidate moves and make blunder checks. Instead, I think those techniques should be used extensively in training during a limited period. I will explain what I mean with a short theoretical discussion.

Abilities are things we know that we can do, like playing the first moves of opening theory in our favourite opening. There are also things we know that we can't do – inability. I guess one example is winning with two knights against a pawn. Other things we don't even know that we can't do – it's completely beyond our horizon. For understandable reasons, giving an example is impossible.

If we put those three things in a matrix (see below), there is an empty fourth parameter.

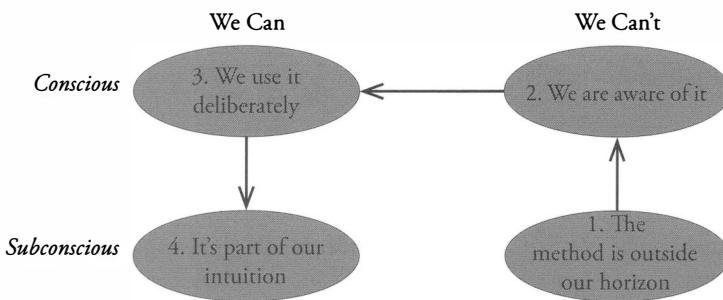


The empty box is for the skills we aren't conscious of, but still possess. And they are what we mainly use in chess.

Making a blunder check is such a skill for some players. They do it, but not deliberately. Looking for pawn levers may be a less known example.

To learn a skill, it has to pass through all the stages above; the technique has to be discovered, studied and repeated, consciously and extensively. And finally it becomes a part of our intuition.

#### *Learning process*



It may not give the best short-term results to make a blunder check before every move; it takes time and disturbs the normal thought process. However, hopefully the blunder check will gradually be internalized. After some time, the subconscious intuition automatically makes a blunder check when needed, without a big effort.

Over the years I have internalized different thinking techniques into my intuition. I have from time to time lost games unnecessarily because I used too much energy on one aspect of the game. But there is no doubt that those losses have been worth their weight in Elo.

I have tried to be consistent in my approach to rules and thinking techniques throughout the whole book, but I hope you can forgive me if sometimes I failed. Chess isn't easy, neither for players, nor for coaches.

### **First part: How to think chess**

The first four chapters lay the foundation for positional chess. The first chapter is about pawn levers, with the thesis that they are the essential part of planning. The next chapter moves on to the pieces, mainly discussing exchanges but also positions with material imbalances. I think they are a good foundation for understanding which factors make a piece good or bad. In the third chapter, the pawn levers and piece exchanges are linked together to form a list of auxiliary questions, where critical positions and general game theory are two of the added topics.

However, to be able to play positional chess, it's also necessary to calculate. Calculation is the subject of the fourth chapter.

### **Second part: How to study chess**

The next four chapters show an approach to serious chess training. It can be summarized in five words: *active learning through structured training*. I'll go deeper into the subject in the introduction to Part Two.

The four pillars of chess training described in this book, in decreasing order of importance, are:

- ▲ The List of Mistakes – analysing your games and categorizing the mistakes
- ▲ The Woodpecker Method – learning the tactical motifs and solving simple exercises to internalize them into your intuition
- ▲ Openings – studying them in such a way that you also learn middlegame positions and standard moves
- ▲ Theoretical Endgames – studying them only once

### **Learning from our mistakes**

One important characteristic for a chess player is self-knowledge; to understand that you don't lose by chance but because you still have things to learn. To show what I mean, I dive directly into action – a game.

#### **Mikhailo Oleksienko – Axel Smith**

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Vasylyshyn Memorial, Lviv 28th November 2010

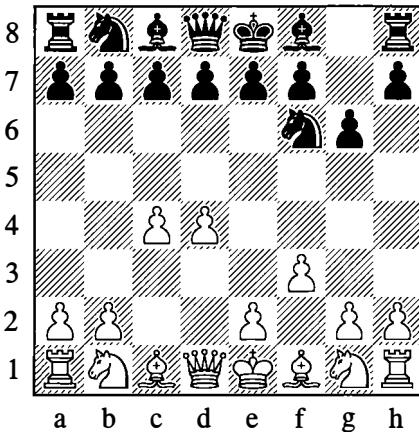
#### **1.d4 $\mathbb{Q}f6$ 2.c4 g6**

My plan was to play the Grünfeld after 3. $\mathbb{Q}c3$  d5. Black exchanges one of his centre pawns but plans to put pressure on White's centre. With such a strategy, time is crucial. Therefore, it's important that Black can take on c3 after 4.cxd5  $\mathbb{Q}xd5$  5.e4. It's seldom correct to retreat pieces in the Grünfeld.

To avoid retreating, Black generally avoids playing ...d5 until White has placed his knight on c3. However, White has another way to prepare e2-e4.

### 3.f3!?

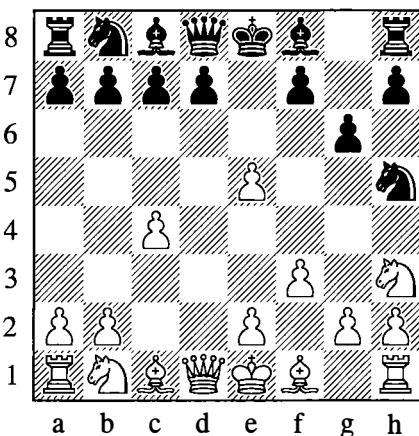
This looks ugly, but the idea is clear; if 3...d5 4.cxd5 ♗xd5 5.e4, Black has to retreat the knight.



### 3...e5!?

I didn't expect 3.f3 and hadn't examined the lines for many years. During the eleven minutes I spent before deciding to go for this pawn sacrifice, I lost more and more self-confidence. 3...e5 tries to pinpoint the weakness White created with f2-f3.

### 4.dxe5 ♗h5 5.♗h3



It looks as if two beginners are playing, but the knight moves to the edge are not bad. Black started by threatening 5...♘h4† 6.g3 ♗xg3 and White defended.

### 5...♗c6 6.♗c3!

6.♕g5 ♕e7 7.♕xe7 ♔xe7 8.♘c3 0–0 9.g4 ♘g7 10.f4 d6 11.exd6 ♔h4† 12.♘f2 ♕xg4 13.dxc7 was played in Tiger Hillarp – Thomas Ernst, Swedish Championship 2004. White's lack of development gives Black enough compensation for the two pawns.

### 6...♘xe5 7.♕g5

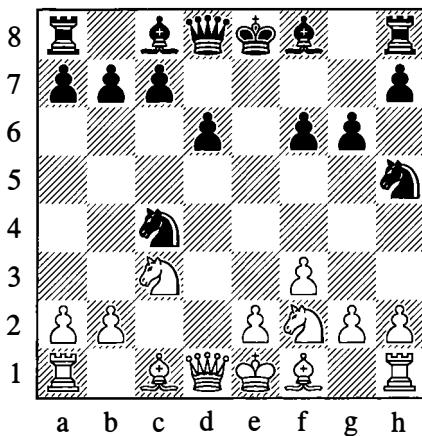
White has given back the pawn and disturbs Black's queen. If 7...♕e7 8.♕xe7 ♔xe7 9.♘d5, White places the knight in the centre with gain of tempo.

### 7...f6 8.♔c1 d6

I calculated 8...♘xc4 9.e4 ♘b6 but couldn't really make an assessment and decided to play safely. Normally, I try to play the move I think is best, but here I already felt I was under great psychological pressure.

### 9.♘f2 ♘xc4

I regretted my last decision and thought: why should I be a coward just because I have been surprised? Then I took the pawn without calculating concretely.



### 10.♔a4†

When the move came, I did my best to act unaffected, as if it was part of the plan. After a few minutes I came to my senses and resigned. The following evening was not the nicest I have had.

**1–0**

The game above is short and annotated from the first until the last move. For the rest of the book, I have focused on the relevant part of the games. Personally, I don't find the game moves interesting if they precede the critical position or come after the relevant explanation, but I have included a few of them for the curious reader. However, those moves are left unannotated. In that way, there is more space left for the relevant game fragments.

This game is my insurance against taking myself and everything regarding chess too seriously. How could I, when I lose in ten moves?

The reason I use a lot of examples from my own games, or my students and friends, is simply that I know those games best and, of course, since I think they are good examples. Actually, many of the moves I'll show are painful mistakes, like in the game above.

For some themes, I have not found any good examples and instead created them myself. In those cases, I have tried to keep everything as game-like as possible.

The biggest disadvantage with playing a lot of chess is that, inevitably, a lot of great games are forgotten. The game against Oleksienko is neither great, nor easy to forget! However, I think that the mistakes I made in the game will help me to explain three general principles that follow throughout the whole book:

### **Every detail counts**

It's easy to say that I lost because I blundered a piece, but I think it's possible to learn more from the game. Questions that spring to my mind are: Why did I become nervous when I was surprised in the opening? Why did I let my emotions affect the way I reasoned?

In some sense, chess is only about making good moves. At the same time, there are a lot of important internal and external factors. To work with those is important for every ambitious chess player. The first principle that runs throughout the whole book is therefore that *every detail counts*.

### **Internalizing thinking techniques**

I have already mentioned this subject above. However, you may have noticed that my intuition was not good enough in the game against Oleksienko. Today, I automatically become extra careful if I feel that I am being influenced by a lot of feelings, and I put more effort into blunder checking.

The second principle is to use thinking techniques extensively during a limited period, to internalize it in your intuition.

### **Active learning**

I believe in *learning by doing*, which is the third principle that applies throughout the book. To get the most out of the time you devote to chess, you must give maximum effort. For that reason, there are exercises in every chapter.

When I learned the variation with 3...e5 that I played against Oleksienko, I had only read about it in a book. I studied passively without questioning anything or analysing on my own. It's hardly surprising that I had problems remembering the moves a few years later.

I have often tried to discuss the theoretical or philosophical part of chess with strong players, but many of them are simply not interested. I interpret this as another sign that skill should be preferred over knowledge. Strong players are interested in moves and specific evaluations, not general principles. This attitude has given them their strength.

I want to present some of those players. They had a strong impact on this book, by being friends and training partners for many years. I have learned a lot from them.

## Model players

When I became serious about chess in 2006, I was lucky to live in Lund, a town with 100,000 inhabitants and many aspiring players. We have trained together, travelled together, won together and lost together. Over a period of four years, six players in Lunds ASK became International Masters and another two became Grandmasters.

Nils Grandelius is one of them. Since he will appear with a lot of instructive mistakes in this book, I hasten to say that he is the chess player I admire the most. He has positional understanding like an experienced grandmaster, a divine tactical creativity and an elaborate opening repertoire. He plays the endgame well, can win with the least possible advantage and has a strong mind – keeping motivation through losses and wins. I struggle to understand why he is still below 2600, but I guess that the answer can be found somewhere in the fact that he follows periods of hard work with periods of enjoying life. This is, by the way, also something I admire.

Hans Tikkanen is another player with whom I have spent countless hours. For many years, we analysed most of my games together. After an extensive tactical training program, Tikkanen improved 100 Elo points during the summer of 2010 and made his three GM norms in seven weeks.

Many of the chapters in the book will have a model player. Tikkanen will be presented in Chapter 6, where his secret method is revealed, and Grandelius in Chapter 7, about openings.

I have also learned a lot from other players. We have had several training camps in Lund with Peter Heine Nielsen and Ulf Andersson. It's an exceptional experience to see Ulf Andersson analyse. He moves the pieces around, talks about pawn structures, coordination, outposts and disturbances. When he sees a specific pawn structure, he immediately knows where the pieces are better and worse placed. Without hesitation, he refers to games from 40 years back. When everyone else is exhausted, Andersson continues to analyse. His enthusiasm for the game is palpable, as is his knowledge. This is something he has worked out on his own – Ulf Andersson has a unique understanding that is highly esteemed around the world. Three of his games, which he has partly annotated himself, are included in the book.

## Attitude

There is a saying that we all play chess for different reasons, but it's also possible to turn the argument the other way around. All of us like the game and are curious about learning more, all of us appreciate when the pieces suddenly coordinate in an unexpected way and all of us enjoy the feeling when we understand something new. And none of us likes to lose. It's the same with me. I love the game, but even more to win. (Winning is nice partly because it's a way to avoid losing!)

The last chapter is titled *Attitude*. It's a mix of themes, but they have in common that they may stop us from getting the most out of our potential. If I had kept a cool head against Oleksienko, I don't think I would have blundered the piece.

Among the themes are: practical tournament tips for the serious player, how to win drawn positions, an appeal against draws, keeping focus and time management. Chess players always have a tendency to end up in time trouble, which reminds me that it's really time to start the book.

# PART I

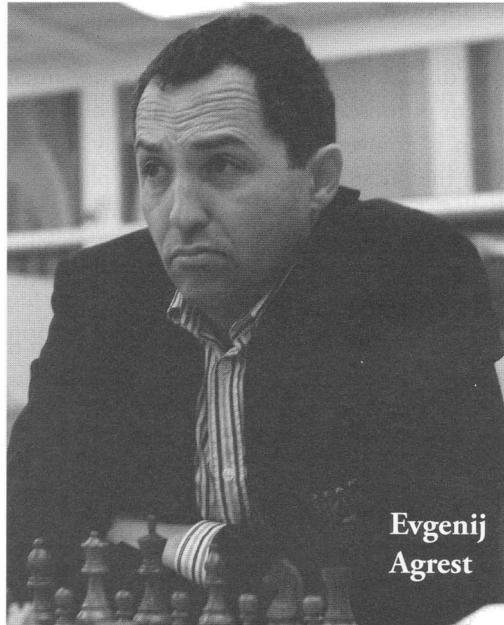
# POSITIONAL CHESS

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# Chapter 1

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## No Pawn Lever No Plan



Club: Team Viking

Born: 1966

GM: 1997

*Agrest was raised in Vitsebsk, Belarus, but moved to Sweden in 1994. He has won the Swedish Championship four times and is known for his solid but powerful play. His club, Team Viking, competes with Lund for the gold medal in the Swedish Team Championship every year, and has been successful most of the time.*

*“The pawns are the soul of chess”*

The quote is 260 years old but still very valid. Actually, what Philidor wrote in his book *Analyse du jeu des Échecs*, was: “(...) de bien jouer les pions; ils sont l’âme des Echecs”. Literally, it’s translated as “Play well with the pawns; they are the soul of chess.”

As *play* is an active verb, I interpret the sentence as a request, not only to handle the pawns well but also to move them. It hits the point even better – pawns should be used actively.

That’s also why I have decided to use the term *pawn lever*, instead of the more common *pawn break*. The word lever comes from Philidor’s native French and is “a rigid bar resting on a pivot, used to move a heavy or firmly fixed load” according to the Oxford Dictionary. It is a simple machine that can achieve wonders. Or in Archimedes’ words: “Give me a place to stand, and I shall move the Earth.”

It is the same in chess. A pawn lever is a pawn move that allows the opponent to capture the pawn with one of his own pawns. It does not only move the pawn closer to promotion, but also achieves one or more other important purposes.

The aim of this chapter is to discuss why pawn levers are so fundamental when creating a plan. I’ll start by discussing different purposes of pawn levers, and conclude the first section with four exercises. The second section is arranged in the opposite way: it starts with five introductory exercises and continues with the question of how to form a plan when there are no achievable pawn levers. The difficulty of doing so is the underlying message of the whole chapter. The Swedish Grandmaster Evgenij Agrest is the model player in this section.

Positions without pawn levers lead us to the next topic: prophylactic moves – how to stop the opponent from carrying out pawn levers.

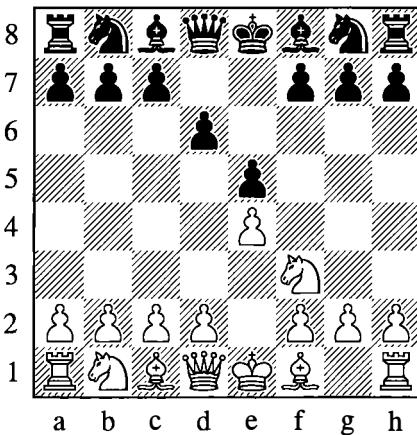
After having talked so positively about pawn levers, the last section tries to balance the picture by discussing the disadvantages of them. The conclusion is nevertheless still the same.

### Purposes of pawn levers

There are many reasons to advance pawns; they gain space, control squares or simply move closer to promotion. However, *pawn levers* put the pawn in contact with one of the opponent’s pawns, thus offering him the chance to capture. Such pawn levers have other strategical reasons:

- ▲ To take control over the centre
- ▲ To increase the scope of the pieces
- ▲ To open lines on the wing where you are strongest
- ▲ To improve the pawn structure

Pawn levers are often difficult to achieve, but not always. One early example is from Philidor’s opening, arising after 1.e4 e5 2.♘f3 d6:



With 3.d4! White creates a pawn lever. I am sure Philidor liked such moves, even when played against his own opening. 3.d4 gains control over the centre and opens up for the bishop.

Often a pawn lever is instead played to release a cramped position, opening a diagonal for the bishop or a file for the rook. It may also be played to open up on the wing where you have the advantage. One good example is the Mar del Plata variation of the King's Indian (1.d4  $\mathbb{Q}f6$  2.c4 g6 3. $\mathbb{Q}c3$   $\mathbb{Q}g7$  4.e4 d6 5. $\mathbb{Q}e2$  0–0 6. $\mathbb{Q}f3$  e5 7.0–0  $\mathbb{Q}c6$  8.d5  $\mathbb{Q}e7$ ) where White plays for the pawn lever c4-c5 and Black, sometimes, plays for ...f5-f4 followed by the pawn lever ...g6-g5-g4. An attack on the king is often connected with such a plan.

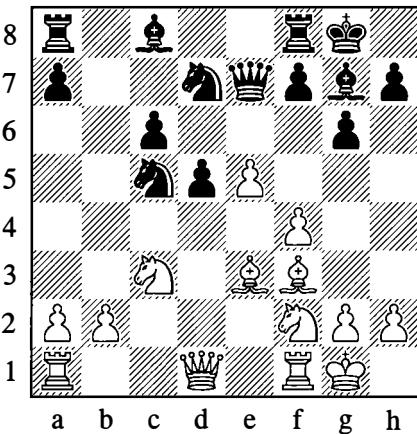
Lastly, pawn levers can be played simply to improve the pawn structure, either getting rid of a weak pawn or creating a weak pawn in the opponent's camp. Of course, many pawn levers achieve several of the mentioned goals, as in the following game.

### Alexander Grischuk – Anish Giri

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Tata Steel, Wijk aan Zee 25th January 2011

1.d4  $\mathbb{Q}f6$  2.c4 g6 3.f3  $\mathbb{Q}c6$  4.d5  $\mathbb{Q}e5$  5.e4 d6 6. $\mathbb{Q}c3$   $\mathbb{Q}g7$  7.f4  $\mathbb{Q}ed7$  8. $\mathbb{Q}h3$  0–0 9. $\mathbb{Q}e2$   $\mathbb{Q}c5$  10. $\mathbb{Q}f2$  e6 11.0–0 exd5 12.cxd5 c6 13.dxc6 bxc6 14. $\mathbb{Q}f3$   $\mathbb{Q}e7$  15. $\mathbb{Q}e3$  d5 16.e5  $\mathbb{Q}fd7$



I played the same variation with Black against Jon Ludvig Hammer in January 2012. While I followed the game between Grischuk and Giri, Hammer reinvented most of the moves himself. He deviated with 15... $\mathbb{E}e1$ .

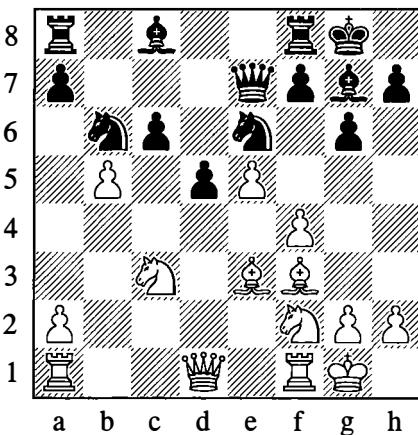
Which pawn levers does Black have? It seems unrealistic to advance the hanging pawns without making them too weak, so Black will clearly try to play ...f6. It opens up for the queen, the rook and the bishop, and challenges White in the centre. If White can't hold on to the centre, Black will get a very active position. Black should not forget about tactics, though, since an immediate ...f6 would be met by  $\mathfrak{Q}xd5$ , exploiting the undefended rook on a8. In addition, Black can also try to undermine the centre with the pawn lever ...g5.

It sounds very promising for Black, but White also has a pawn lever to play for. Since it's his turn to move, he grabs the initiative.

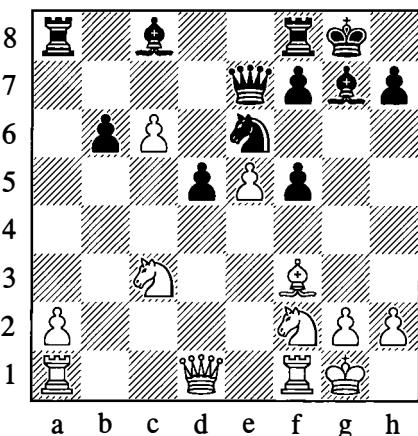
### 17.b4! $\mathfrak{Q}e6$ 18.b5

Black's hanging pawns are undermined. He will not be able to defend those pawns, but he can try to save himself with a tactical operation.

### 18... $\mathfrak{Q}b6!$

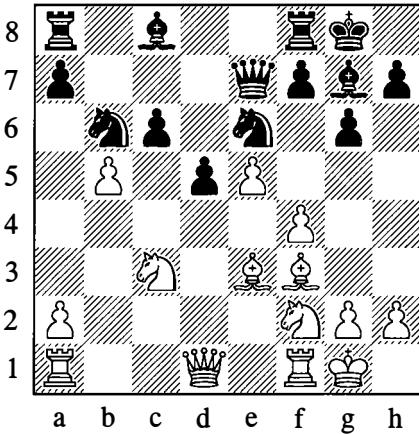


19.f5 gxf5 20. $\mathfrak{Q}xb6$  axb6 21.bxc6



White's centre has been destroyed, but so has Black's. Both sides have their assets; White has a strong pawn on c6 and has managed to demolish Black's pawn structure in front of the king, while Black has a strong bishop. The position is dynamically balanced and the game ended in a draw after 48 moves.

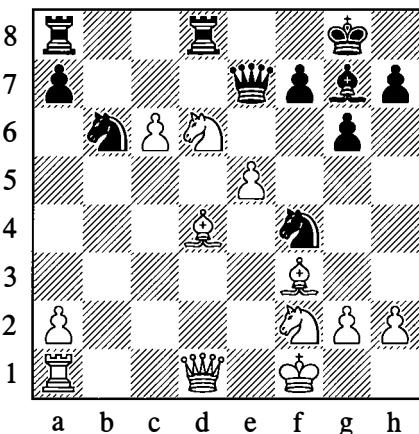
Instead, White can try another 19th move.



**19.bxc6 d4! 20.Qxd4 Qd8 21.Qb5 Qa6**

White has to give up an exchange.

**22.Qd6 Qxf1 23.Qxf1 Qxf4**



White only has one pawn for the exchange, but it's a strong one. If he wants, he can return it with 24.c7 to restore the material balance. The knight on d6 is strong, but since the pawn on e5 is also a slight weakness, White has no way to gain an advantage.

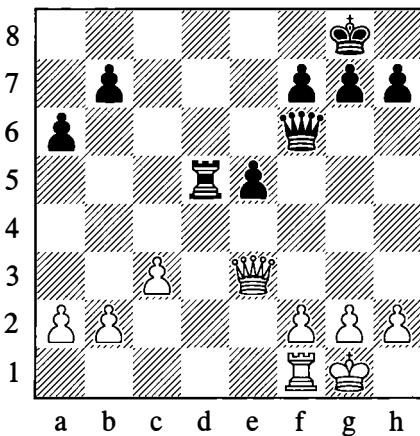
In this example, both sides had strong pawn levers to play for. It was a question of time; if Black had been first with ...f6, he would have gained the initiative with his strong bishop on g7.

There is seldom any need to open lines for the pieces in the endgame, but the question about pawn levers doesn't disappear.

### Ellinor Frisk – Eirik Gullaksen

Norwegian Open Championship, Fagernes 30th April 2012

1.e4 c5 2.Qf3 Qc6 3.d4 cxd4 4.Qxd4 e5 5.Qb5 d6 6.Q1c3 a6 7.Qa3 Qe7 8.Qd5 Qf6 9.Qxf6† Qxf6 10.Qc4 Qe7 11.Qe3 Qe6 12.Qb6 Qb8 13.Qe2 0–0 14.Q–0 Qg5 15.Qxg5 Qxg5 16.c3 Qe7 17.Qc4 Qbd8 18.Qc1 Qf6 19.Qe3 d5 20.Qxd5 Qxd5 21.Qxd5 Qxd5 22.exd5 Qxd5 23.Qad1 Qfd8 24.Qxd5 Qxd5



Black is slightly better with control over the open file, but to get something out of the position, he needs to play with the pawns. Since Black has control of the position, he can choose whether to advance his pawn majority or the pawn minority. However, firstly it's White to move.

#### 25.f4!

This pawn lever weakens the king, but it creates open files for White's pieces. It's seldom good just to defend passively.

#### 25...Qd6 26.fxe5?

26.c4! was a good option, forcing Black's rook to leave the open file.

#### 26...Qxe5 27.Qf3 Qe7 28.h3

After a few natural moves, Black has to decide which plan to opt for. To me, it doesn't look realistic to advance the kingside pawns, since it opens the king too much. A minority attack is thus the most logical plan.

#### 28...h6!

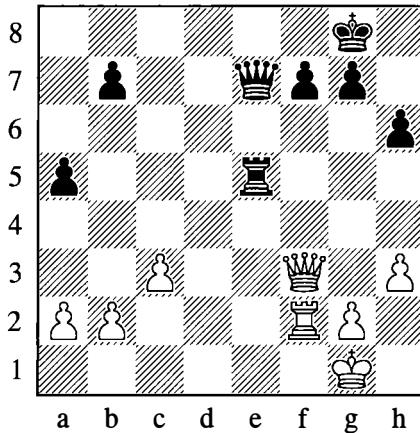
Not hurrying – avoiding tempo-winning threats against the back rank.

**29...g2**

With 29...d1 White could also claim an open file. In the endgame, the file furthest away from the king is better in principle, because the entry squares are harder to protect. However, king safety is still a motif, and Black holds a small advantage. Starting with 29...b5 Black may hope to divert White's pieces to the queenside, before attacking the king.

**29...a5**

I think it's better to start with 29...b5 as 30...a8† ♔h7 31...xa6 doesn't work because 31...♔e1† wins – a line that shows the difference in king safety.



How should White react on the queenside? I never know in such positions, but I always have the feeling that everyone else knows. When I asked a friend he said exactly the same thing – that he doesn't know but believes that others do. It seems we should not be dejected if we experience that chess is difficult.

What I will do instead is to go through all possible reactions, one by one:

- 1) Leaving the pawns as they stand will not work, since Black can threaten the one on a2.
- 2) b2-b4 doesn't look good, since White will never be able to coordinate his pieces to advance his pawn majority. If the pawns can't advance, it's just weakening.
- 3) a2-a4 leaves a pawn undefended. If Black has the time to attack it, with for example ...g6, ...♔g7 and ...♗e4, b2-b3 may be the only good defending move. Then it's starting to look like White has too many weaknesses.
- 4) a2-a3 allows the minority attack with ...b5-b4, but White exchanges twice and is left with an isolated passed pawn on b2. One weak pawn is not enough. To win, Black must keep one of his own pawns on the queenside. Instead, Black might go for ...a4 and ...b5, fixing the majority. The pawn on b5 looks as weak as b2, but the important question is whether Black can advance his majority. It seems risky, but if he takes one step at a time with ...g6, ...♔g7, ...h5, ...h4, ...f5, ...g5, it's not clear how White should react. It doesn't seem pleasant.

5) b2-b3 and c3-c4 builds a pawn chain. To make progress, Black can try ...a4. If White doesn't react, he might play ...a3 with a dangerous pawn due to  $\mathbb{B}b2$ -ideas later, or he might play ...axb3 followed by an attack against the b3-pawn. Probably White is better advised to play b3xa4, in a moment when c4 is defended. Some counterplay along the b-file might arise.

It's still a mystery to me which is the best option, but none seems pleasant. Let's see how the game continued.

**30.  $\mathbb{W}f4$   $\mathbb{B}e4$  31.  $\mathbb{W}f5$   $\mathbb{B}e5$  32.  $\mathbb{W}f4$   $\mathbb{W}e6$  33. a3**

Alternative four – allowing the majority to be fixed.

**33...b5 34.  $\mathbb{W}d4$   $\mathbb{B}d5$  35.  $\mathbb{W}f4$  a4 36.  $\mathbb{W}b8\#$  h7 37.  $\mathbb{W}f4$  f6 38.  $\mathbb{W}h2$   $\mathbb{B}e5$  39.  $\mathbb{W}d4$  g5**

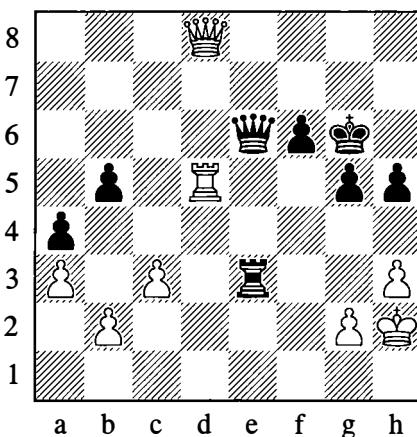
Black consistently starts to advance his pawn majority.

**40.  $\mathbb{B}d2$   $\mathbb{B}g6$  41.  $\mathbb{W}d8$   $\mathbb{B}e3$  42.  $\mathbb{B}d5$**

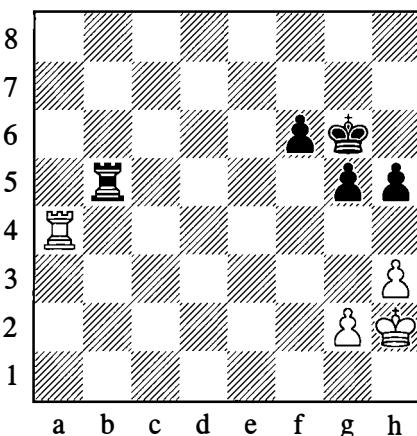
42.  $\mathbb{W}d5$   $\mathbb{W}e8$  and Black plays ...h5-h4 next, while White has to prepare for a tough defence.

**42...h5!**

Suddenly, ...g5-g4 is a devastating threat. White only has one defence, but it's enough.



**43.  $\mathbb{W}d6!$   $\mathbb{W}xd6\#$  44.  $\mathbb{B}xd6$   $\mathbb{B}e2$  45.  $\mathbb{B}b6$   $\mathbb{B}xb2$  46. c4  $\mathbb{B}b3$  47.  $\mathbb{C}xb5$   $\mathbb{B}xa3$  48.  $\mathbb{B}a6$   $\mathbb{B}b3$  49.  $\mathbb{B}xa4$   $\mathbb{B}xb5$**



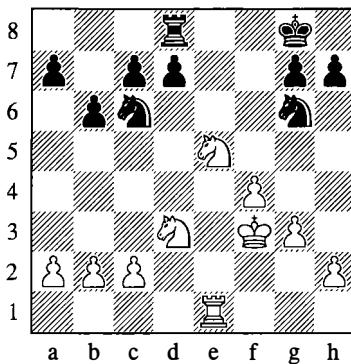
This is a theoretical draw, since White's pawns are ideally placed. The simplified material in the first position made this ending a quite logical outcome. Black tried for another 23 moves, but White held a draw.

50.♔g3 h4† 51.♔f3 ♜b6 52.♗c4 f5 53.♗a4 ♔f6 54.♗a3 ♜d6 55.♗e3 ♜d4 56.♗a3 ♔e5  
 57.♗a5† ♜d5 58.♗a3 ♜b5 59.♗e3† ♔d4 60.♗e8 ♜b3† 61.♗f2 g4 62.hxg4 fxg4 63.♗d8†  
 ♔e5 64.♗e8† ♔f6 65.♗f8† ♔e7 66.♗f4 ♜g3 67.♗f5 ♜a3 68.♗f4 ♜a2† 69.♗f1 ♜a1† 70.♗e2  
 h3 71.gxh3 gxh3 72.♗f1

½–½

In the endgame, the creation of passed pawns is one of the main plans. Even though those pawn moves are not really pawn levers, it's still important to take them into consideration. Consider the future pawn moves in the following position, to decide which knight White should capture.

Smith 2012



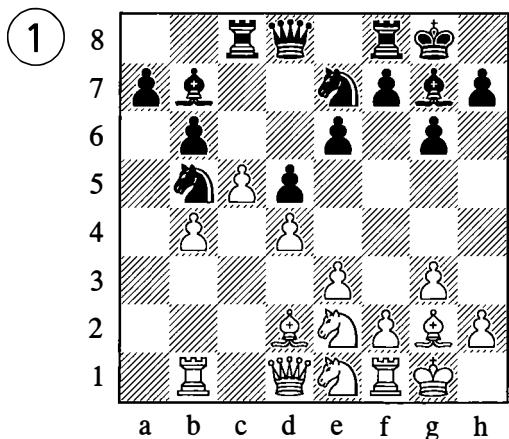
1.♘xg6 hxg6 gives Black doubled pawns. However, the g-pawns still work just as well to stop White's pawn majority. They have no intention of moving (other than to capture) and are quite easy to defend since they are close to the king. So the right choice is:

**1.♘xc6! dxс6** With pawn majorities on both sides, the main plan is to create a passed pawn. The doubled pawns make that impossible for Black. The game might continue: 2.f5 ♘f8 3.♗e7 ♜d7 4.♗e8 White has a huge advantage.

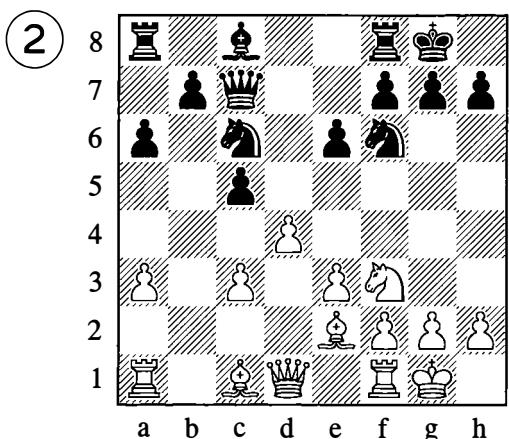
### Pawn levers

When you know which pawn lever to play for, it's much easier to find the best positions for the pieces. In the following four positions, your task is to find a desired pawn lever and look for a way to carry it out. Sometimes preparatory moves are needed, sometimes not. I propose using a total of twenty minutes for the first four positions.

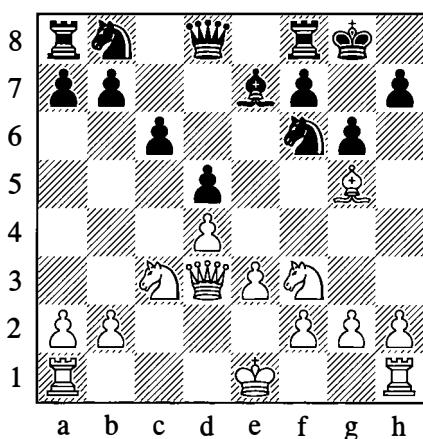
**Åberg – Smith, Göteborg 2012**



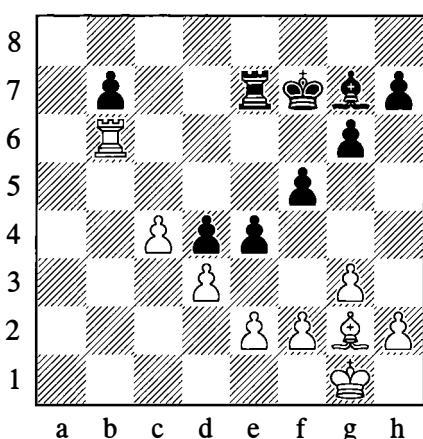
**Brynell – Smith, Lund 2011**



**Grabarczyk – Grandelius, Copenhagen 2009**

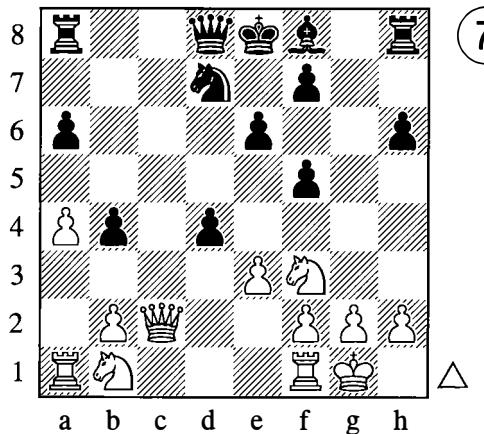


**Bejtovic – Smith, Lund 2011**



**No pawn levers**

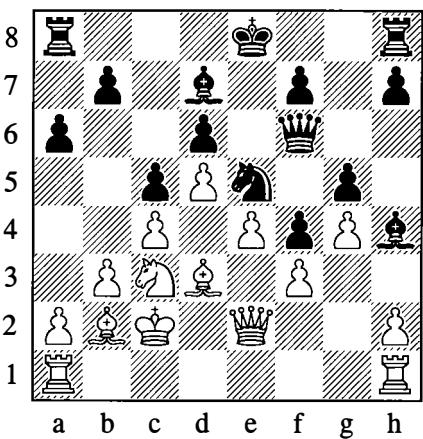
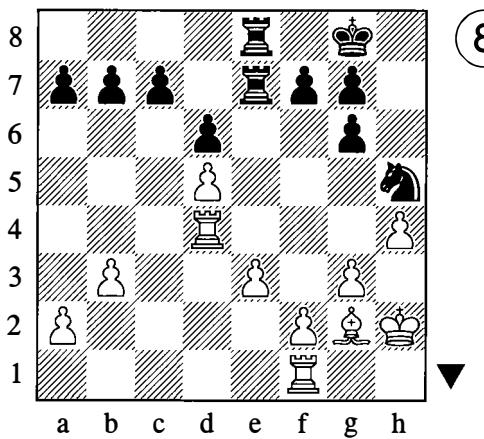
The following five positions are all noteworthy for the fact that the defending side lacks an effective pawn lever. I recommend that you spend a bit of time assessing each position, with particular emphasis on plans and potential pawn levers for both sides. There are no hidden tactics, only positional considerations. The side to move may or may not have the advantage.

**Agrest – Smith, Malmö 2008**

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**Smith – Agrest, Stockholm 2007**

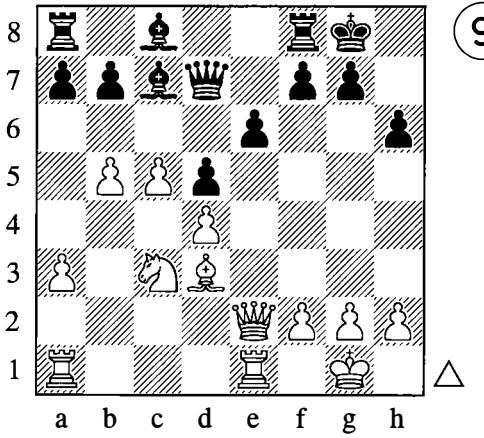
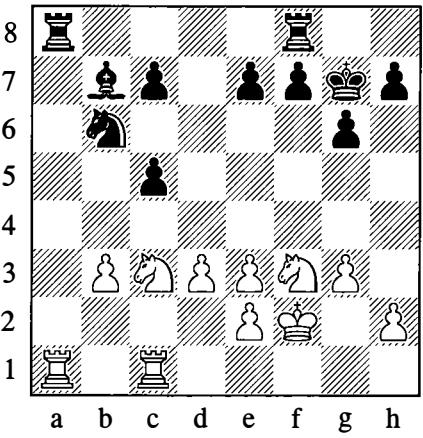
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**Agrest – Grandelius, Stockholm 2008**

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**Agrest – Grandelius, Växjö 2008**

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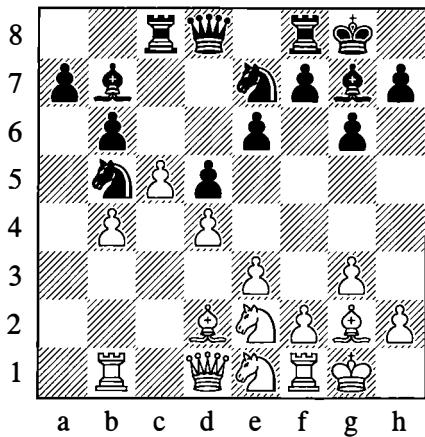
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## Solutions to – Pawn levers

### 1. Anton Åberg – Axel Smith

Swedish Team Championship, Göteborg  
18th February 2012

1.c4 c5 2.♘f3 ♗c6 3.g3 g6 4.♗g2 ♗g7  
5.♘c3 e6 6.0–0 ♗e7 7.d3 0–0 8.a3 d5  
9.♗d2 b6 10.♗b1 ♗b7 11.b4 ♘d4 12.♘e1  
cx b4 13.axb4 ♗c8 14.e3 ♘df5 15.♘e2 ♘d6  
16.c5 ♘b5 17.d4



17...e5!

The pawn on c5 is almost like a protected passed pawn, but with the text move Black starts undermining it. I actually wanted to play 17...♘c6 during the game, to take back on e5 with the knight, but was afraid of 18.♗a4, threatening the knight on b5. 18...a6 weakens the c5-square since I can't take back on b6 with the pawn. I considered the tactical solution 17...♘c6 18.♗a4 ♘b8?! before I suddenly realized what I was thinking about. To move the knight back to its initial square and allow White to set up a bind with 19.f4 can't be clever.

I hurried to play 17...e5 before I had any new dangerous thoughts.

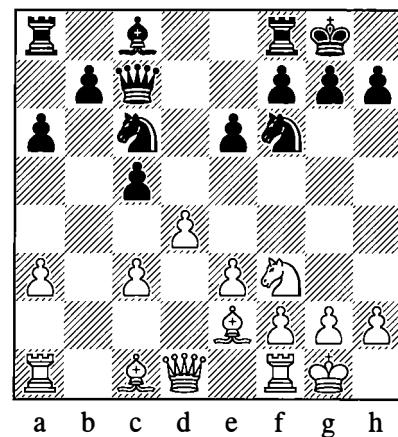
18.dxe5 ♘xe5

White is still slightly better, but it is not much. Åberg won in 83 moves.

### 2. Stellan Brynell – Axel Smith

Schackstudion GM, Lund 19th April 2011

1.d4 ♘f6 2.c4 e6 3.♘c3 ♗b4 4.♘f3 d5 5.e3  
0–0 6.♗d3 c5 7.0–0 ♗c6 8.a3 ♗xc3 9.bxc3  
dxc4 10.♗xc4 ♗c7 11.♗b5 a6 12.♗e2

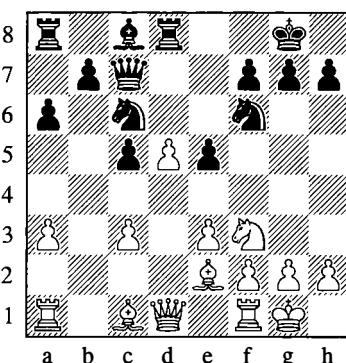


Black wants to play ...e5 to decrease White's influence in the centre and open a line for the bishop.

12...♗d8!

This move is good, since White won't be able to stop ...e5 next.

The immediate 12...e5 13.d5 ♗d8 looks more straightforward, but there is a tactical problem.



14.c4 b5 gives counterplay but 14.e4! is strong. The tactical point is 14... $\mathbb{Q}xe4?$  15. $\mathbb{W}c2$  and both Black's knights are attacked.

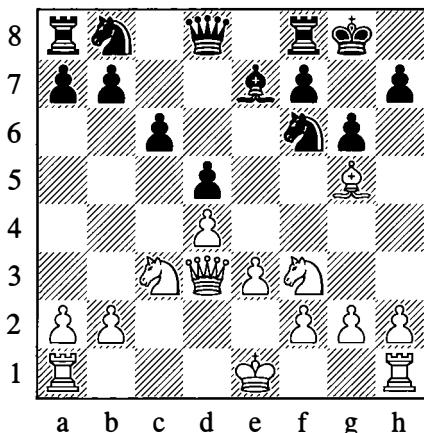
I overlooked a possible tactical solution with 12...e5 13.d5 e4 14.dxc6  $\mathbb{Q}g4$ , but I am still not sure how to assess the position after 15.g3 exf3 16. $\mathbb{Q}xf3$   $\mathbb{Q}e5$ .

The text move 12... $\mathbb{Q}d8!$  makes more sense. After 13. $\mathbb{W}c2$  e5 the game was eventually drawn in 54 moves.

### 3. Miroslaw Grabarczyk – Nils Grandelius

Copenhagen Chess Challenge, 10th May 2009

1.d4  $\mathbb{Q}f6$  2.c4 e6 3. $\mathbb{Q}f3$  d5 4.cxd5 exd5  
5. $\mathbb{Q}c3$  c6 6. $\mathbb{W}c2$  g6 7. $\mathbb{Q}g5$   $\mathbb{Q}e7$  8.e3  $\mathbb{Q}f5$   
9. $\mathbb{Q}d3$   $\mathbb{Q}xd3$  10. $\mathbb{W}xd3$  0–0?!



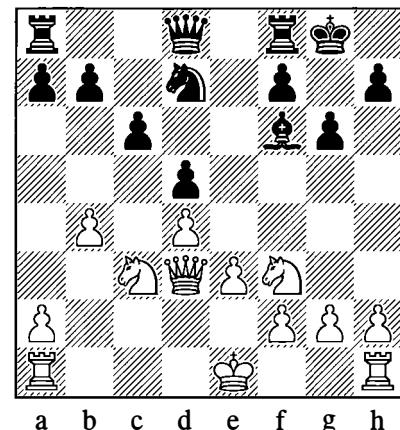
White has two possible pawn levers – e3-e4 and b2-b4-b5. The first is scarcely dangerous – in the isolated pawn position, too many minor pieces will already have been exchanged. The second is a typical minority attack, striving to create a weak black pawn after b5xc6. In the diagram position White has the chance to immediately start pushing the b-pawn.

11. $\mathbb{Q}xf6!$   $\mathbb{Q}xf6$  12.b4

White's position is pleasant. Black's 10...0–0?! was actually a slight mistake. After

10... $\mathbb{Q}bd7$ , it's possible to take back on f6 with the knight and still control b4 with the bishop.

12... $\mathbb{Q}d7$



13.b5?!

A bit too hurried. White has not completed development yet, which allows Black to carry out the thematic pawn lever ...c5. 13.0–0  $\mathbb{Q}b6$  14. $\mathbb{E}fc1$  was more refined. If Black plays 14... $\mathbb{E}c8$ , it's still not good to push b4-b5, but White can also play for a4-a5 and  $\mathbb{Q}a4-c5$ .

13... $\mathbb{Q}b6$  14.bxc6 bxc6 15.0–0 c5! 16.dxc5  
 $\mathbb{E}c8$  17. $\mathbb{E}ac1$   $\mathbb{E}xc5$

With well-placed pieces, Black shouldn't have any problems making a draw. If White directs all his forces against the isolated pawn, Black gets counterplay on the queenside.

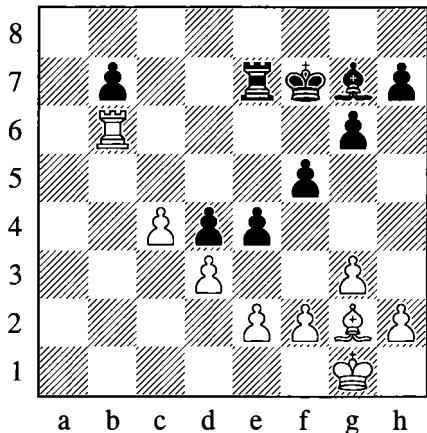
18. $\mathbb{Q}e2$   $\mathbb{E}c4$  19. $\mathbb{Q}d2$   $\mathbb{E}xc1$  20. $\mathbb{E}xc1$   $\mathbb{W}d7$   
21.g3  
½-½

### 4. Jasmin Bejtovic – Axel Smith

Schackstudion GM, Lund 15th April 2011

1. $\mathbb{Q}f3$  d5 2.g3 g6 3. $\mathbb{Q}g2$   $\mathbb{Q}g7$  4.0–0 c5 5.c4  
d4 6.d3  $\mathbb{Q}c6$  7.a3  $\mathbb{Q}f6$  8.b4  $\mathbb{Q}d7$  9. $\mathbb{Q}bd2$   
0–0 10. $\mathbb{Q}b3$  e5 11. $\mathbb{Q}g5$  cxb4 12.axb4  $\mathbb{Q}xb4$

13.♕e4 a5 14.♔a3 ♕a6 15.♗d2 f5 16.♕ec5 ♔xc5 17.♔xc5 ♕b6 18.♔a4 ♕bf6 19.♔xb4 axb4 20.♗xb4 e4 21.♗ab1 ♕e8 22.♗b6 ♕f7 23.♔xc8 ♕xc8 24.♗b6 ♕e6 25.♗b5 ♕e5 26.♗b6 ♕e6 27.♗b3 ♕c7 28.♗b2 ♕ee7 29.♗b6 ♕xb6 30.♗xb6 ♕f6 31.♗fb1 ♕xb6 32.♗xb6 ♕f7



White has a healthier pawn structure, more active rook and a statically better bishop. Black's only hope is that the pawns on f5 and e4 will manage to keep White's bishop passive, but that pawn wall is much too fragile. It is time for White to combine his advantages by opening the diagonal for the bishop to pick up the b7-pawn.

### 33.g4!

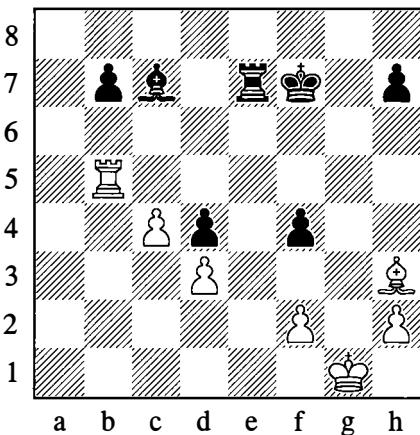
If Black doesn't react, White exchanges on f5, plays ♔h3 and finally gets control over e4. Instead after 33.f3 exd3 34.exd3 Black has the resource 34...f4! so White seeks other ways.

### 33...♔e5?!

I tried to defend with the help of tactics. 33...exd3 is best, but after 34.♔d5† ♔e8 35.exd3 fxg4 36.♗xb7 White has every possibility of playing for a win. When I analysed the position, I concluded that White would win about half the time, while Black would manage to hold on in the rest.

34.gxf5 gxsf5 35.♔h3 exd3 36.exd3 ♔c7 37.♗b5  
37.♗xb7?? ♔xh2† was maybe too much to hope for.

37...f4



38.♗g2!

38.♗xb7 does win a pawn, but after 38...f3 39.♗b1 ♕f6 I can't really see how White should proceed, since 40.♗g4 ♕g7 drops the bishop.

38...b6 39.♗d5 ♕e5 40.♗f3

The disadvantage of defending with the pawns on the same colour as the bishop has seldom been more apparent. White easily penetrates with the king and has many weaknesses to attack. In the game I lost a pawn and was close to losing, but when I managed to exchange the rooks at the cost of a second pawn, the draw was suddenly within reach.

40...♔f6 41.♗g4 ♕a7 42.♗b5 ♕b7 43.c5 ♕c7 44.♔e4 ♕b8 45.c6 ♕e8† 46.♔xd4 ♕e5 47.♗b1 ♕c5 48.♔d7 ♕c2 49.f3 ♕e2 50.h3 ♕e3 51.♔g4 h5 52.♔xh5 ♕e6 53.♗b5 ♕e5† 54.♔c4 ♕xc6† 55.♔b4 ♕d6 56.♔a4 ♕d4† 57.♔b4 ♕xd3 58.♔xb6† ♕d6 59.♔b1 ♕d4† 60.♔b3 ♕b4† 61.♔c2 ♕xb1 62.♔xb1 ♕e5 63.♔g4 ♕e7 64.♔h5 ♕d6 65.♔g4 ♕e7  
½-½

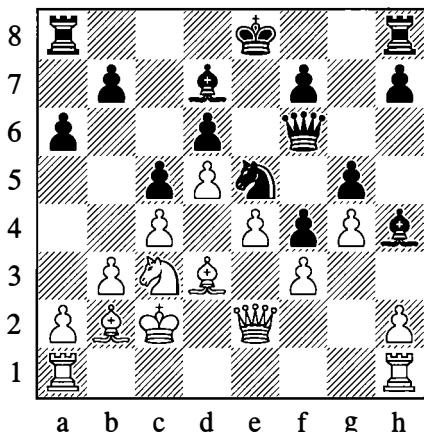
## Solutions to – No pawn levers

As you can see, the positions come from games which Nils Grandelius or I have played against the Swedish Grandmaster Evgenij Agrest. He is the best player in Sweden and naturally we wanted to test our playing strength against him. Let's see the games in chronological order.

### 5. Axel Smith – Evgenij Agrest

Rilton Cup, Stockholm 31st December 2007

1.d4  $\mathbb{Q}f6$  2.c4 c5 3.d5 e5 4. $\mathbb{Q}c3$  d6 5.e4  $\mathbb{Q}e7$  6. $\mathbb{Q}d3$   $\mathbb{Q}bd7$  7.f3 a6 8. $\mathbb{Q}ge2$   $\mathbb{Q}h5$  9.g4  $\mathbb{Q}h4\uparrow$  10. $\mathbb{Q}d2$   $\mathbb{Q}f4$  11. $\mathbb{Q}xf4$  exf4 12. $\mathbb{Q}c2$   $\mathbb{W}f6$  13. $\mathbb{W}d2$  g5 14.b3  $\mathbb{Q}e5$  15. $\mathbb{W}e2$   $\mathbb{Q}d7$  16. $\mathbb{Q}b2$



I entered this pawn structure with the hope that the bishop on h4 was out of play, but I forgot to think about a reasonable plan for White. There is none! The kingside is closed and it seems suicidal to push the pawns on the queenside, in front of my king.

As a matter of fact, the bishop on h4 is doing a great job. Black's plan is simply to play ...h5 and double or triple behind the pawn. White must play h2-h3 to keep the pawn structure intact. After that, Black follows with ... $\mathbb{Q}g3$  and chooses when to open the h-file. Agrest started with 16...h5. Instead of sitting passively

and waiting, I tried to create counterplay, but lost without much resistance.

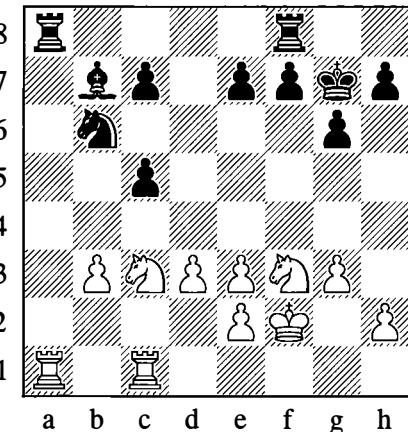
16...h5 17.h3  $\mathbb{Q}e7$  18. $\mathbb{Q}a4$   $\mathbb{B}h6$  19. $\mathbb{W}d2$   $\mathbf{hxg4}$  20. $\mathbf{hxg4}$   $\mathbb{B}ah8$  21. $\mathbb{W}g2$   $\mathbb{Q}g3$  22. $\mathbb{B}xh6$   $\mathbb{B}xh6$  23. $\mathbb{B}h1$   $\mathbb{B}h4$  24. $\mathbb{B}xh4$   $\mathbf{gxh4}$  25. $\mathbb{Q}f1$   $\mathbb{W}h8$  26. $\mathbb{W}d2$  h3 27. $\mathbb{Q}xe5$   $\mathbb{W}xe5$  28. $\mathbb{W}c3$   $\mathbb{W}xc3\uparrow$  29. $\mathbb{Q}xc3$  h2 30. $\mathbb{Q}g2$   $\mathbb{Q}f2$  31. $\mathbb{Q}d3$   $\mathbb{Q}f6$  32. $\mathbb{Q}b1$   $\mathbb{Q}el$  33. $\mathbb{Q}d2$   $\mathbb{Q}xd2$  34. $\mathbb{Q}xd2$   $\mathbb{Q}g5$  35.a4 b5 36.cxb5 axb5 37.a5  $\mathbb{Q}c8$  38. $\mathbb{Q}e2$   $\mathbb{Q}f6$  39. $\mathbb{Q}d2$  b4 40. $\mathbb{Q}e2$   $\mathbb{Q}e5$  41.g5  $\mathbb{Q}d4$  42. $\mathbb{Q}d2$  c4 43.bxc4  $\mathbb{Q}xc4$

0-1

### 6. Evgenij Agrest – Nils Grandelius

Rilton Cup, Stockholm 2nd January 2008

1.c4  $\mathbb{Q}f6$  2. $\mathbb{Q}c3$  d5 3.cxd5  $\mathbb{Q}xd5$  4.g3 g6 5. $\mathbb{Q}g2$   $\mathbb{Q}b6$  6.d3  $\mathbb{Q}g7$  7. $\mathbb{Q}e3$   $\mathbb{Q}c6$  8. $\mathbb{Q}xc6\uparrow$   $\mathbf{bxc6}$  9. $\mathbb{W}c1$  0-0 10. $\mathbb{Q}h6$  c5 11. $\mathbb{Q}xg7$   $\mathbb{Q}xg7$  12. $\mathbb{W}e3$   $\mathbb{W}d4$  13. $\mathbb{Q}f3$   $\mathbb{W}xe3$  14.fxe3  $\mathbb{Q}b7$  15.b3 a5 16. $\mathbb{Q}f2$  a4 17. $\mathbb{B}hc1$  axb3 18.axb3



During the tournament I shared an apartment with Grandelius. In the next round, he was paired with Agrest.

Early in the game, Agrest played  $\mathbb{Q}g2xc6$  to give Grandelius isolated, doubled pawns. He quickly exchanged the dark-squared bishops and methodically fixed the doubled pawns.

With his light-squared bishop, Black wants to get some compensation for his worse pawn structure, but to do that he needs to get some pawn play. That isn't easy! In the diagram position, White is clearly better and once again Agrest won without allowing any counterplay worth mentioning.

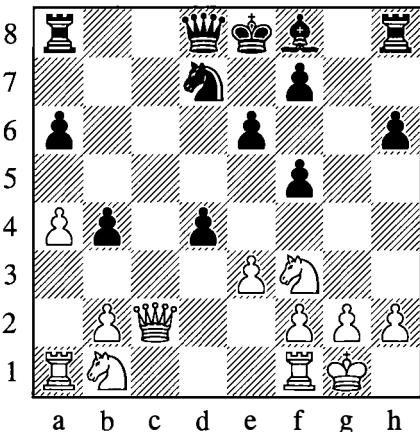
18... $\mathbb{B}fb8$  19. $\mathbb{Q}d2$   $\mathbb{Q}d7$  20. $\mathbb{B}xa8$   $\mathbb{Q}xa8$   
 21. $\mathbb{B}a1$   $\mathbb{Q}c6$  22. $\mathbb{B}a7$   $\mathbb{B}b7$  23. $\mathbb{B}a5$   $\mathbb{B}b8$  24.e4  
 e6 25. $\mathbb{Q}e3$   $\mathbb{Q}f6$  26. $\mathbb{B}a6$   $\mathbb{B}b6$  27. $\mathbb{B}a3$   $\mathbb{B}b8$   
 28. $\mathbb{Q}c4$   $\mathbb{B}a8$  29. $\mathbb{B}xa8$   $\mathbb{Q}xa8$  30. $\mathbb{Q}b5$   $\mathbb{Q}c6$   
 31. $\mathbb{Q}xc7$   $\mathbb{Q}e5$  32.h3  $\mathbb{Q}xc4\#$  33.bxc4  $\mathbb{Q}e5$   
 34. $\mathbb{Q}a6$   $\mathbb{Q}d6$  35.e5 $\dagger$   $\mathbb{Q}xe5$  36. $\mathbb{Q}xc5$  g5  
 37.d4 $\dagger$   $\mathbb{Q}f5$  38. $\mathbb{Q}d3$   $\mathbb{Q}g2$  39. $\mathbb{Q}e5$   $\mathbb{Q}xh3$   
 40.c5  $\mathbb{Q}g2$  41.c6  $\mathbb{Q}f6$  42.c7  $\mathbb{Q}b7$  43. $\mathbb{Q}c4$   
 e5 44.dxe5 $\dagger$   $\mathbb{Q}e6$  45. $\mathbb{Q}d6$   $\mathbb{Q}a6$  46.c8= $\mathbb{W}$   
 $\mathbb{Q}xc8$  47. $\mathbb{Q}xc8$   $\mathbb{Q}xe5$  48. $\mathbb{Q}e7$  h5 49. $\mathbb{Q}c6\#$   
 $\mathbb{Q}d5$  50. $\mathbb{Q}d4$   $\mathbb{Q}e5$  51. $\mathbb{Q}d3$  f5 52. $\mathbb{Q}f3\#$   $\mathbb{Q}f6$   
 53. $\mathbb{Q}d4$

1-0

## 7. Evgenij Agrest – Axel Smith

Sigeman & Co, Malmö 24th April 2008

1. $\mathbb{Q}f3$  d5 2.d4 c6 3.c4 e6 4. $\mathbb{W}c2$   $\mathbb{Q}f6$  5. $\mathbb{Q}g5$   
 h6 6. $\mathbb{Q}h4$  dxc4 7. $\mathbb{W}xc4$  b5 8. $\mathbb{W}c2$   $\mathbb{Q}b7$  9.e3  
 $\mathbb{Q}bd7$  10. $\mathbb{Q}d3$  a6 11.a4 c5 12. $\mathbb{Q}xf6$  gxf6  
 13. $\mathbb{Q}e4$   $\mathbb{Q}xe4$  14. $\mathbb{W}xe4$  b4 15.0-0 f5 16. $\mathbb{W}c2$   
 cxd4



A few months later I played Agrest again, this time in the Sigeman tournament. It was the first time I had played a really strong tournament and my play was still influenced more by youthful optimism than strategic reasoning.

I barely considered his move until he played it.

### 17.exd4!

The d4-pawn controls e5 and c5, two squares where Black's knight may have wanted to jump, and it also closes the diagonal for the black bishop on g7. The fact that the pawn is isolated doesn't bother White, since it is easily defended. The only positive thing about Black's position is the square on d5, but that alone isn't enough to create any play. When I started to look for pawn levers to open the position, I couldn't find any. For his part, White is happy to keep the position closed, since he has clear weaknesses to play against. His plan is to attack Black's queenside pawns and take control of the weak squares on the queenside. White is slightly better.

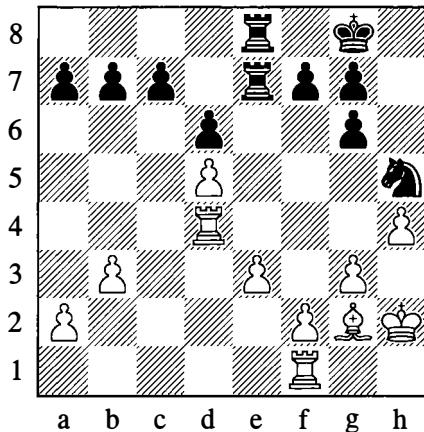
17... $\mathbb{Q}g7$  18. $\mathbb{Q}bd2$  0-0 19. $\mathbb{Q}b3$   $\mathbb{Q}b6$  20.a5  
 $\mathbb{Q}d5$  21. $\mathbb{Q}fc1$   $\mathbb{Q}h8$  22. $\mathbb{W}d2$   $\mathbb{W}d6$  23. $\mathbb{Q}e5$   
 $\mathbb{Q}h7$  24. $\mathbb{Q}c4$   $\mathbb{W}e7$  25. $\mathbb{Q}e3$   $\mathbb{Q}xe3$  26.fxe3  
 h5 27. $\mathbb{W}e2$   $\mathbb{W}g5$  28. $\mathbb{Q}f1$   $\mathbb{Q}h6$  29. $\mathbb{Q}f3$   $\mathbb{Q}g8$   
 30. $\mathbb{Q}af1$   $\mathbb{W}g4$  31. $\mathbb{Q}c5$   $\mathbb{Q}g6$  32. $\mathbb{Q}f1f2$   $\mathbb{Q}ag8$   
 33. $\mathbb{Q}f1$  h4 34.h3  $\mathbb{W}h5$  35.e4  $\mathbb{W}g5$  36. $\mathbb{Q}d3$   
 $\mathbb{Q}8g$  37.exf5 exf5 38. $\mathbb{Q}xf5$   $\mathbb{W}d8$  39. $\mathbb{Q}e4$   
 $\mathbb{W}c7$  40. $\mathbb{Q}h5$   $\mathbb{W}g3$  41. $\mathbb{Q}e5$   $\mathbb{W}h2$  42. $\mathbb{Q}xh6\#$   $\mathbb{Q}xh6$  43. $\mathbb{W}xh4\#$

## 8. Evgenij Agrest – Nils Grandelius

Deltalift Open, Laholm 3rd May 2008

1.c4  $\mathbb{Q}f6$  2. $\mathbb{Q}c3$  e5 3. $\mathbb{Q}f3$   $\mathbb{Q}c6$  4.g3  $\mathbb{Q}b4$   
 5. $\mathbb{Q}d5$  e4 6. $\mathbb{Q}h4$  0-0 7. $\mathbb{Q}g2$   $\mathbb{Q}e8$  8.0-0 d6  
 9.d3  $\mathbb{Q}xd5$  10.cxd5 exd3 11. $\mathbb{W}xd3$   $\mathbb{Q}e5$   
 12. $\mathbb{W}c2$   $\mathbb{Q}c5$  13.b3  $\mathbb{Q}g4$  14.h3  $\mathbb{Q}h5$  15. $\mathbb{Q}b2$   
 $\mathbb{Q}d7$  16.e3  $\mathbb{Q}g6$  17. $\mathbb{Q}xg6$  hxg6 18. $\mathbb{Q}h2$

$\mathbb{W}g5$  19.  $\mathbb{B}ac1$   $\mathbb{Q}f6$  20.  $\mathbb{W}d1$   $\mathbb{E}e7$  21.  $\mathbb{B}c4$   $\mathbb{Q}b6$   
 22.  $\mathbb{W}f3$   $\mathbb{E}ae8$  23.  $h4$   $\mathbb{W}h5$  24.  $\mathbb{W}xh5$   $\mathbb{Q}xh5$   
 25.  $\mathbb{Q}d4$   $\mathbb{Q}xd4$  26.  $\mathbb{B}xd4$



Nine days later it was Grandelius's turn to face Agrest. Once again – surprise! – he soon found himself in a position without pawn levers.

In the position above, Black has a backward pawn on  $c_7$ , and he will never be able to free himself with ... $c_6$ , since White has too many pieces controlling that square. White can choose whether to play on the queenside, in the centre or on the kingside – or combine all of these.

White is clearly better. The rest of the game involved great suffering for Grandelius.

26...  $\mathbb{Q}f6$  27.  $\mathbb{B}c1$   $\mathbb{E}b8$  28.  $\mathbb{B}dc4$   $\mathbb{Q}e8$  29.  $g4$   
 $\mathbb{E}e5$  30.  $\mathbb{B}g3$   $\mathbb{Q}f8$  31.  $\mathbb{B}4c3$   $\mathbb{E}a8$  32.  $g5$   $f6$   
 33.  $f4$   $\mathbb{E}e7$  34.  $\mathbb{B}f2$   $\mathbb{Q}f7$  35.  $\mathbb{B}f1$   $a6$  36.  $\mathbb{B}d3$   
 $\mathbb{B}d7$  37.  $\mathbb{B}f3$   $\mathbb{E}e7$  38.  $\mathbb{B}3c2$   $f5$  39.  $\mathbb{B}c3$   $\mathbb{E}d8$   
 40.  $b4$   $\mathbb{E}a8$  41.  $\mathbb{B}1c2$   $\mathbb{B}d7$  42.  $e4$   $fxe4\#$   
 43.  $\mathbb{B}xe4$   $a5$  44.  $b5$   $b6$  45.  $\mathbb{B}e3$   $a4$  46.  $\mathbb{B}ce2$   
 $\mathbb{B}a5$  47.  $\mathbb{B}d3$   $\mathbb{E}a8$  48.  $\mathbb{B}e6$   
**1-0**

Playing against Agrest was not like playing against the other top Swedish players. Neither I, nor Grandelius, stood a chance! For several months I wondered how Agrest managed to

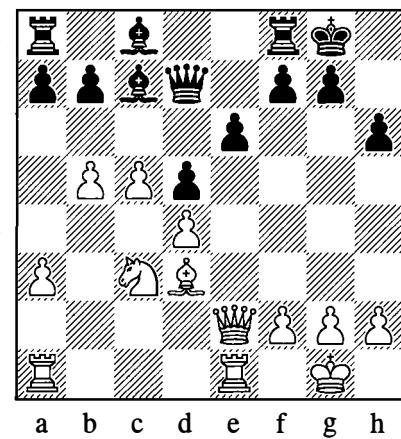
stop us from getting any counterplay at all. One day, I finally realized what he did: he strived for positions where his opponent had no achievable pawn levers. It felt like a very important insight, and “No pawn lever – no plan” has been my motto ever since.

On the 9th of June I had a training session with Nils Grandelius on that theme, and a month later we both played Agrest again, this time in the Swedish Championship.

## 9. Evgenij Agrest – Nils Grandelius

Swedish Championship, Växjö 6th July 2008

1.  $c4$   $\mathbb{Q}f6$  2.  $\mathbb{Q}c3$   $e6$  3.  $\mathbb{Q}f3$   $\mathbb{B}b4$  4.  $\mathbb{W}c2$   $c5$   
 5.  $a3$   $\mathbb{Q}a5$  6.  $e3$   $\mathbb{Q}c6$  7.  $\mathbb{Q}e2$  0–0 8. 0–0  $d6$   
 9.  $d4$   $cx d4$  10.  $exd4$   $h6$  11.  $\mathbb{B}d1$   $d5$  12.  $b4$   $\mathbb{Q}c7$   
 13.  $b5$   $\mathbb{Q}e7$  14.  $c5$   $\mathbb{Q}g6$  15.  $\mathbb{Q}b2$   $\mathbb{Q}h7$  16.  $\mathbb{Q}c1$   
 $\mathbb{Q}f4$  17.  $\mathbb{Q}xf4$   $\mathbb{Q}xf4$  18.  $\mathbb{Q}d3$   $\mathbb{Q}f6$  19.  $\mathbb{Q}e1$   $\mathbb{Q}c7$   
 20.  $\mathbb{W}e2$   $\mathbb{W}e7$  21.  $\mathbb{Q}e5$   $\mathbb{Q}d7$  22.  $\mathbb{Q}xd7$   $\mathbb{W}xd7$



The theme should be clear by now – Black is lacking good pawn levers. The best would be to play ... $e5$ , but the pawn on  $d5$  would become too weak. White's long-term plan is to advance the pawn majority on the queenside. Before he did this, Agrest improved his knight with  $\mathbb{Q}c3$ - $b1$ - $d2$ - $f3$ - $e5$  and gained space on the kingside with  $g2$ - $g3$  and  $h2$ - $h4$ .

However, Black's position is solid and White only has a slight advantage. Unfortunately, Agrest did not get the chance to show how to break through, since Black collapsed tactically.

23.♗c2 ♕d8 24.♗ad1 ♔d7 25.♗d3 g6 26.a4  
 ♘h4 27.g3 ♘f6 28.♗e3 ♘g7 29.♗e2 ♘ac8  
 30.♗b3 ♖h8 31.♗b1 ♘fd8 32.♗f3 ♖a5  
 33.♗e3 ♖e8 34.♗d2 ♖d7 35.♗f3 ♖h7  
 36.♗e5 ♖e7 37.♗f3 ♖d8 38.h4 ♖h8 39.♗g2  
 h5 40.♗e3 ♖g8 41.♗d3 ♖h7 42.♗d2 ♖g8  
 43.♗de3 ♖ec7 44.♗f3 ♖d7 45.♗e1 ♘f8  
 46.♗e5 ♖e8 47.♗xd5 ♖f6 48.♗f3 ♖d8  
 49.♗a5 b6 50.cxb6 axb6 51.♗xb6 ♖c2  
 52.d5 ♖d6 53.♗a7

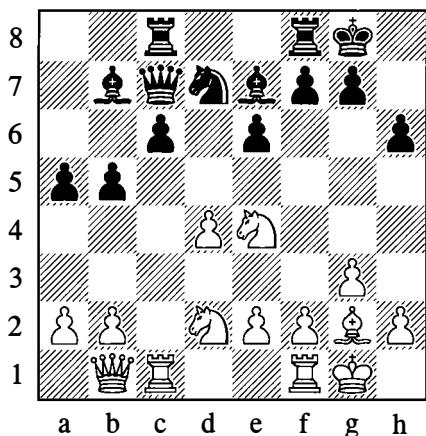
1-0

Grandelius knew what kind of position he had to avoid, but still found himself in a position without pawn levers. However, we got another chance when I played Agrest in the final round.

### Evgenij Agrest – Axel Smith

Swedish Championship, Växjö 11th July 2008

1.c4 c6 2.♗f3 d5 3.d4 ♖f6 4.♗c3 e6 5.♗b3  
 dxc4 6.♘xc4 b5 7.♗d3 ♖e7 8.♗g5 0-0 9.g3  
 ♗bd7 10.♗g2 ♖b7 11.0-0 h6 12.♗xf6 ♖xf6  
 13.♗e4 ♖e7 14.♗c2 ♘c7 15.♗ac1 ♘ac8  
 16.♗b1 a5 17.♗fd2



It looks like a Catalan, but actually started as a Semi-Slav. There is no doubt Black wants to achieve the pawn lever ...c5, since it opens the diagonal for the bishop, the c-file for a rook and exchanges the backward c-pawn. With White to move, ♗b3 would take complete control over c5. I didn't hesitate.

17...c5!

This works tactically.

18.♗xc5

18.dxc5 ♖xe4 19.♗xe4 ♗xc5 is equal.

18...♗xc5 19.♗xb7 ♘xb7 20.dxc5 ♘xc5

In the Catalan, White often gets advantageous endgames with the knight on d3 and the heavy pieces controlling the c6-square, but in this position Black is more active than usual. The knight is also a few moves away from d3; the position is equal.

21.♗xc5 ♘xc5 22.♗f3 ♘c8 23.♗c1 ♖e7  
 24.♗xc8† ♘xc8 25.b3 ♘c3 26.♗g2 ♘c6  
 27.♗d3 a4 28.e4 axb3 29.axb3 b4 30.♗d4  
 ♘b7 31.h4 h5 32.♗f1 g6 33.♗e2 ♖c5  
 34.♗c2 ♘b6 35.♗e3 ♘a7 36.♗d1 ♘a2†  
 37.♗f3 ♘a1 38.♗c2 ♖d4 39.♗e2 ♘a6†  
 40.♗f3 ♘a1 41.♗e2 ♘a6† 42.♗f3 ♘a1  
 ½-½

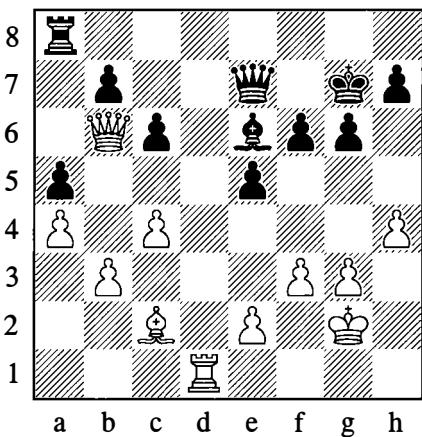
When I finally managed to carry out a pawn lever against Agrest, I went to the restroom and celebrated with Grandelius. The game also brought me half a point.

However, the story didn't end there. The next year Lund played against Sollentuna in the Swedish Team Championship, where Agrest is both a player and team captain. In Sweden, it's possible to change the board order from rating order, but only two steps up or down. Since Agrest usually takes White, it was not difficult to figure out that he would play on the second board. I volunteered to face him.

## Evgenij Agrest – Axel Smith

Swedish Team Championship, Stockholm  
14th March 2009

1.c4  $\mathbb{Q}f6$  2. $\mathbb{Q}c3$  e5 3. $\mathbb{Q}f3$   $\mathbb{Q}c6$  4.g3  $\mathbb{Q}d4$   
 5. $\mathbb{Q}g2$   $\mathbb{Q}xf3\uparrow$  6. $\mathbb{Q}xf3$   $\mathbb{Q}b4$  7. $\mathbb{Q}g2$  0–0 8.0–0  
 $\mathbb{E}e8$  9.d4 d6 10.dxe5 dxe5 11. $\mathbb{W}b3$   $\mathbb{W}e7$   
 12. $\mathbb{Q}g5$   $\mathbb{Q}xc3$  13. $\mathbb{W}xc3$   $\mathbb{Q}e4$  14. $\mathbb{Q}xe4$   $\mathbb{W}xg5$   
 15. $\mathbb{Q}fd1$  c6 16. $\mathbb{W}b4$  a5 17. $\mathbb{W}b6$   $\mathbb{W}e7$  18.a4  
 $\mathbb{Q}e6$  19.b3  $\mathbb{Q}ed8$  20. $\mathbb{Q}c2$   $\mathbb{Q}xd1\uparrow$  21. $\mathbb{Q}xd1$  g6  
 22.h4  $\mathbb{Q}g7$  23. $\mathbb{W}e3$  f6 24. $\mathbb{W}b6$   $\mathbb{Q}g4$  25.f3  
 $\mathbb{Q}e6$  26. $\mathbb{Q}g2$



The game started with the usual story. In the diagram position, White dominates the d-file while Black's rook is tied to the defence of the a-pawn. In addition, my seventh rank is weak. White's plan is probably to walk his king to b2 and then open up the kingside in one way or another. However, I was eager to carry out my pawn levers before it was too late.

26...h5!?

Gaining some space.

27. $\mathbb{Q}d2$   $\mathbb{Q}h7$  28. $\mathbb{Q}f2$

White starts to evacuate his king to the queenside, where he has full control.

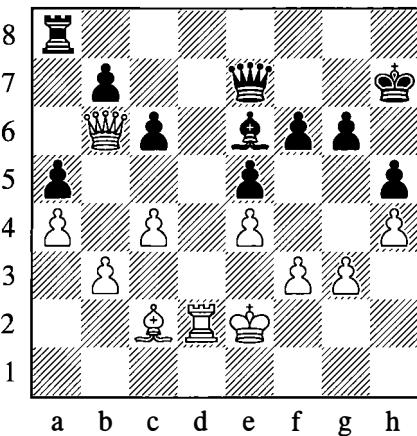
28... $\mathbb{Q}f5\uparrow$ ?

If White exchanges on f5, I get counterplay on the g-file, pressuring the pawn on g3. At the same time it's a double-edged decision, since ...gx5 weakens my king. Anyway, I thought that anything was better than waiting for Agrest to stop all my pawn levers, like so many times before.

29.e4!?

Agrest also takes an interesting positional decision. He makes the bishop on c2 passive, but wins a tempo which keeps the position closed until White's king has reached the queenside.

29... $\mathbb{Q}e6$  30. $\mathbb{Q}e2$



30...g5!

Yes, I had learned the lesson! I still have a strategically worse position, since the pawn on b7 is weak and White controls the d-file. I have to do something and without unnecessary preparatory moves, I immediately played a pawn lever.

31. $\mathbb{Q}d1$

31.hxg5 fxg5 would allow a passed pawn on the h-file.

31... $\mathbb{gxh4}$  32. $\mathbb{gxh4}$   $\mathbb{Q}g8\uparrow$

I happily exchange my weakness on a5 for another pawn. Black has managed to get

enough counterplay, even though I later lost anyway. It is quite instructive to see how I misplayed.

### 33.♔c1 ♜g3 34.♔b2

Agrest is consistent – when Black has weakened his king, he happily gives up the pawn on f3 to reach safety.

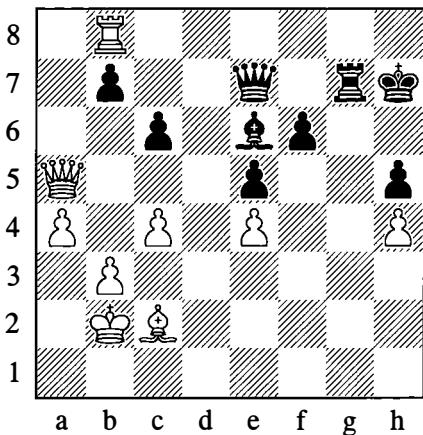
### 34...♜xf3 35.♜d8

Planning ♜d8-b8xb7.

### 35...♜g3

Probably I could have played more actively, but this is good enough.

### 36.♜b8 ♜g7 37.♛xa5



It is time to decide which pieces to keep and which to exchange. White's pawn structure is better, since his candidate for promotion is an outside pawn, while my candidate is the e-pawn, which is easy to stop for White's king. Therefore I should keep the queens and play against White's king. When White starts to advance his majority – his only winning try – I should be able to find perpetual checks. A rook exchange on the other hand is okay for Black, which suggests 37...♜g8.

### 37...♛d6 38.♛d8 ♜xd8??

38...♝d7 39.♛f8 ♜d4† draws, as does 38...♛c5 39.♛xf6 ♜d4† and 38...♝d7 39.♝xb7 ♜d4†.

### 39.♝xd8

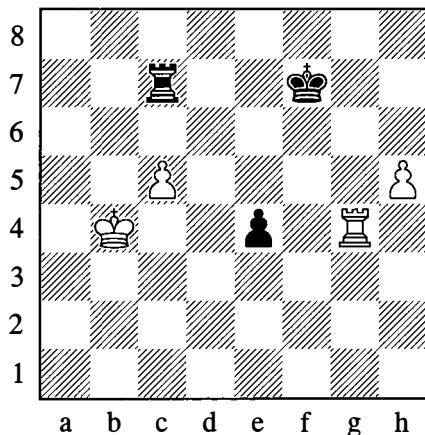
I am strategically lost, since I lack counterplay. I have neither time to attack h4, nor the possibility of achieving the pawn lever ...f5. White plays ♜d6, ♔b2-c3-b4-c5, b3-b4 etc.

### 39...♚g6 40.a5 ♜e7 41.♜d6 ♔f7

White wins easily after: 41...♜d7 42.♝xd7 (The rook is trapped after 42.♝xe6? ♔f7.) 42...♝xd7 43.♔c3 For example: 43...♔f7 44.♔b4 ♔e7 45.♔c5 ♔d8 46.♔b6 ♔c8 47.c5 ♔e8 48.b4 ♜d7 49.♔a4 ♔e8 50.a6 bxa6 51.♔xc6

42.a6 bxa6 43.♜xc6 ♜a7 44.b4 ♔e7 45.♔c3 ♜d7 46.♜b6 ♜c8 47.c5 ♜c7 48.♜d1 a5 49.♜xh5 axb4† 50.♜xb4 f5 51.♖xf5 ♜xf5 52.♜g6 ♜xg6 53.♜xg6 ♔f7 54.h5 e4 55.♜g4?

This gives me an opportunity to save the game. Instead, White was winning after 55.♔c4.



### 55...♜e7?

Instead, I should have played:  
55...♛e6! 56.♔c4

56.  $\mathbb{E}xe4\#$   $\mathbb{Q}d5$  57.  $\mathbb{E}c4$   $\mathbb{B}b7\#$  58.  $\mathbb{Q}c3$   $\mathbb{Q}c6$  is a draw, since White loses one of the pawns. After 56.  $h6$   $e3$  White has a few tries, but nothing works. 57.  $\mathbb{Q}c4$   $\mathbb{B}h7$  58.  $\mathbb{B}g6\#$   $\mathbb{Q}f5$  or 57.  $\mathbb{B}g7$   $e2!$  or 57.  $\mathbb{E}e4\#$   $\mathbb{Q}d5$  58.  $\mathbb{E}xe3$   $\mathbb{B}b7\#!$  also draws.

56...  $\mathbb{Q}f5$  57.  $\mathbb{B}h4$   $e3$  58.  $\mathbb{B}h2$   $\mathbb{Q}e4!$  59.  $h6$   $\mathbb{B}h7$  60.  $c6$   $\mathbb{B}h8!$

Incredibly, White is one tempo short in both variations:

After 61.  $\mathbb{Q}c5$   $\mathbb{Q}f3$  62.  $c7$   $e2$  63.  $\mathbb{E}xe2$   $\mathbb{Q}xe2$  64.  $\mathbb{Q}b6$  Black can take on  $h6$  with check. 61.  $c7$   $\mathbb{B}c8$  62.  $\mathbb{Q}b3$   $\mathbb{E}xc7$  63.  $h7$   $\mathbb{B}xh7$  64.  $\mathbb{E}xh7$   $e2$  65.  $\mathbb{Q}c2$   $e1=\mathbb{Q}\#!$  with a draw.

### 56. $h6$ $e3$ 57. $\mathbb{B}g7\#$ $\mathbb{Q}f6$ 58. $\mathbb{E}xe7$ $\mathbb{Q}xe7$ 59. $\mathbb{Q}c3$

**1-0**

So far, we have learned that against Agrest, pawn levers are necessary to have a plan at all. How is it against other opponents? *Pawn lever* and *plan* can't be synonyms.

Two other options are playing with the initiative against uncoordinated pieces, and attacking a chronic weakness. That requires, of course, that the opponent has either badly-placed pieces or a weakness. Do I have to say that Agrest usually avoids both these things?

So what is a chronic weakness? It is something that cannot run away easily, such as:

- ▲ The king
- ▲ A weak pawn
- ▲ A weak square

The idea is actually similar to Iossif Dorfman's *Move Search Algorithm*, which he presented in *The Method in Chess*. His idea was to measure the static balance in a position according to the following four factors, in decreasing order of importance:

- ▲ The king's position
- ▲ Material
- ▲ Who has the better position after the exchange of queens?
- ▲ Pawn formation

The player who has a disadvantage concerning the static factors has to play dynamically. Pawn levers are one way of doing so!

I want to show a masterpiece by Ulf Andersson to illustrate how to play against a chronic weakness.

Andersson was one of the best players in the world in the seventies and eighties, even though he was not interested in competing in the Candidates Cycle. In 1994 he started to play correspondence chess. Many of his opponents already used computers, but Ulf just sat in a café and analysed all day. And all night. For eight years. Listening to him explaining his games is the most valuable chess experience I have ever had.

In one training session with Grandelius and me, Andersson showed his game against the highest-rated correspondence chess player, Gert Timmerman. After 20 moves, he had created a chronic weakness in his opponent's camp and could play without pawn levers. I know I can't live up to his comments, but here is the game:

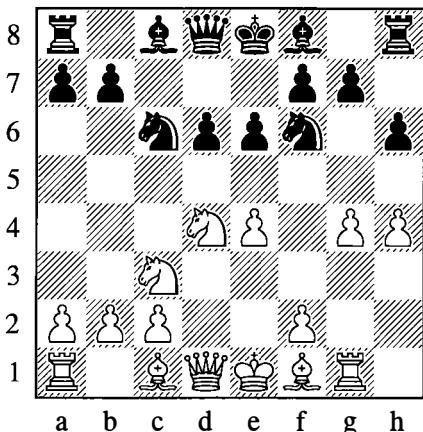
## Gert Timmerman – Ulf Andersson

Norwegian Corr. Fed. 50th Anniversary 1994

**1.e4 c5 2.Qf3 d6 3.d4 cxd4 4.Qxd4 Qf6  
5.Qc3 e6 6.g4**

The Keres Attack – the reason the Scheveningen isn't played so often at the top level nowadays. The Najdorf move order with 5...a6 and 6...e6 has instead become more popular, because the bishop on c8 stops g2-g4 for another move when the pawn stays on e7. However, there are also some things that argue in favour of using the Scheveningen move order. Against the Najdorf, 6.Qg5 is one of the popular responses, but that bishop move loses its bite when Black hasn't spent a tempo on ...a6. There are also other lines where ...a6 may become superfluous.

**6...h6 7.h4 Qc6 8.Bg1**



White has played the most consistent moves and is ready to kick Black's knight back with g4-g5 on the next move. Andersson follows the positional schoolbook, and counters the flank attack with a pawn lever in the centre.

**8...d5**

Andersson: "Against the Keres Attack, I used to answer with 8...h5 over the board. I played

in a tournament where Boris Spassky played 8...d5. He lost, but I thought that if he plays like that, it must be okay. I trust his intuition, so I think this is the way to counter g2-g4. Actually, I have seldom believed in White's stereotyped kingside pawn push, as it creates too many weaknesses."

**9.Qb5**

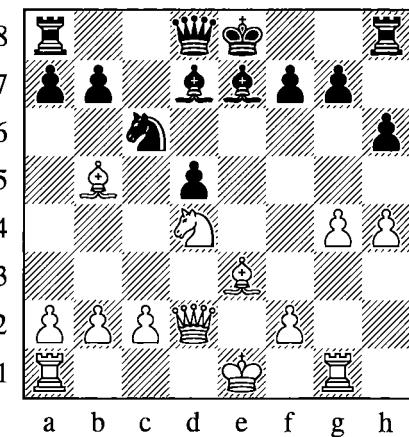
9.exd5 Qxd5 10.Qxd5 exd5 11.Qe3 is a way for White to play without Qb5, but it gives Black the extra possibility of 10...Wxd5, even though I don't think Andersson would have moved the queen so early.

9.Qb5 gives Black an isolated pawn by force – the first chronic weakness in the game.

**9...Qd7 10.exd5 Qxd5**

Black's idea with 10...d5 was to take away the strength of g4-g5 by exchanging the knight.

**11.Qxd5 exd5 12.Qe3 Qe7 13.Wd2**



**13...0-0!**

13...Qxh4 14.0-0-0-0 was played in the game Karpov – Spassky, Tilburg 1980. Spassky's king became caught in the centre, and he had to give up an exchange to rescue the king (1-0, 35).

Andersson: “Spassky’s decision to take on h4 was erroneous. I found improvements and worked out everything in detail. I thought I had complete control over everything.”

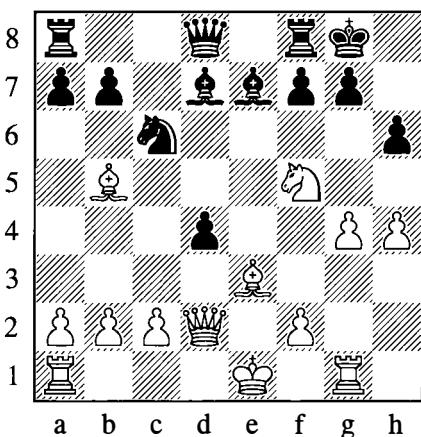
#### 14. $\mathbb{Q}f5$

Andersson: “This was the move I expected, but everything is forced for the next few moves and ends up with a fine position.”

White would like to castle long, but after 14.0–0–0  $\mathbb{Q}xd4$  15.  $\mathbb{Q}xd7$  comes an in-between move: 15...  $\mathbb{Q}f3!$  Black goes an exchange up after 16.  $\mathbb{W}xd5$   $\mathbb{Q}xg1$  17.  $\mathbb{Q}xg1$   $\mathbb{Q}xh4$ .

Taking on c6 on the 14th move would strengthen Black’s centre and retreating with the bishop is not what White wants.

#### 14... d4!



This is not a pawn lever, in the way I have defined it, but it’s still thematic. Black opens up the position before White has managed to castle.

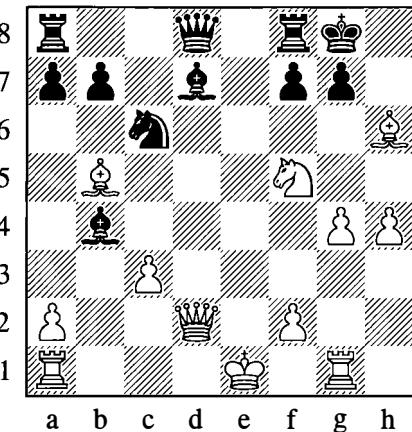
#### 15. $\mathbb{Q}xh6$

This time 15.  $\mathbb{Q}xd4$  isn’t working at all: 15...  $\mathbb{Q}xd4$  16.  $\mathbb{Q}xd7$   $\mathbb{Q}f3\#$  wins the queen.

15.  $\mathbb{Q}xd4$   $\mathbb{Q}xd4$  16.  $\mathbb{W}xd4$  is clever, but after 16...  $\mathbb{Q}xf5$  17.  $\mathbb{W}xd8$   $\mathbb{Q}fxd8$  18.  $gxh5$   $\mathbb{Q}xh4$  Black is simply better due to White’s weak pawns.

15.  $\mathbb{Q}xc6$   $dxe3$  16.  $\mathbb{W}xd7$   $exf2\#$  17.  $\mathbb{Q}xf2$   $\mathbb{Q}c5\#$  18.  $\mathbb{Q}f3$   $\mathbb{Q}xg1$  gives Black an extra exchange.

#### 15... $\mathbb{Q}b4$ 16. c3 $dxc3$ 17. $bxc3$

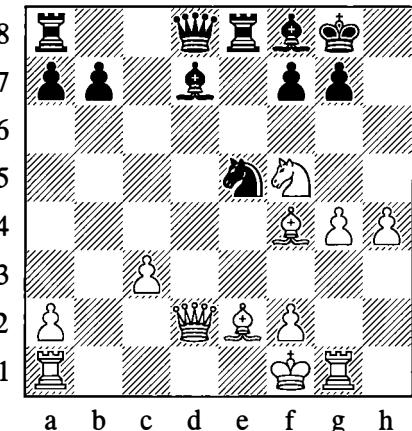


If White had plans to castle long, he could dismiss them by now.

#### 17... $\mathbb{Q}e5$

The double threat of ...  $\mathbb{Q}f3\#$  and ...  $\mathbb{Q}xb5$  forces White to retreat.

#### 18. $\mathbb{Q}e2$ $\mathbb{Q}e8$ 19. $\mathbb{Q}f1$ $\mathbb{Q}f8$ 20. $\mathbb{Q}f4$



I think one of the keys to Andersson’s way of thinking is the concept of outposts. An outpost is a good square for a piece, either for offensive or defensive tasks. The piece is defended by

a pawn, and it's difficult for the opponent to threaten it with a pawn. However, it doesn't have to be completely cemented, only safe for a reasonable number of moves.

In this position, Andersson is a pawn down but has an outpost on c6, where it's natural to place the bishop. For White, the c6-square can be said to be a chronic weakness in his pawn structure – he lacks the b- and d-pawns that could have challenged the square. In addition, White has several other chronic weaknesses. Many pawns are weak, but above all, the king will never be able to find a safe shelter. Black's compensation for the pawn is thus long-term, and he doesn't have to create anything immediate. It's easy to imagine that the engines of 1994 miscalculated the position.

When Andersson showed the game, he said: "It's at least a draw. I have some pressure, and when he didn't manage to solve his problems, I started to look for more."

"At least a draw" is only an expression of Andersson's mentality. When he says that, he is already better. The diagram position is favourable for Black, and it's interesting to see how Andersson managed to create a winning position without moving a single pawn for the next 19 moves.

#### **20... $\mathbb{W}a5$ 21. $\mathbb{B}g3$ $\mathbb{B}ad8$ 22. $\mathbb{Q}d4$ $\mathbb{Q}a4$**

Andersson decides to play simply with ... $\mathbb{Q}c6xd4$ . For the rest of the game, most of the moves are quite simple to explain. Even though I don't doubt that there are still many ways to go wrong, the difficult part is clearly to reach this position, not to win from it.

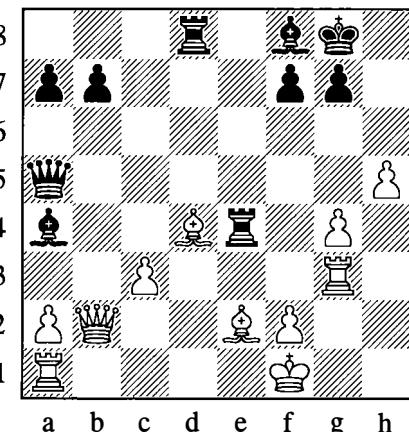
#### **23.h5 $\mathbb{Q}c6$ 24. $\mathbb{Q}e3$ $\mathbb{Q}xd4$ 25. $\mathbb{Q}xd4$**

After 25.cxd4 Black has a pleasant choice between exchanging queens followed by taking back the pawn, or keeping the queens on with 25... $\mathbb{Q}b4$ .

#### **25... $\mathbb{B}e4$**

Threatening the bishop on d4.

#### **26. $\mathbb{W}b2$**



#### **26... $\mathbb{Q}c5!$**

White's best piece is exchanged.

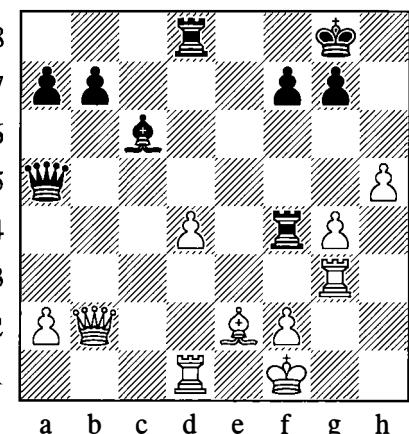
#### **27. $\mathbb{B}b1$ $\mathbb{Q}xd4$ 28.cxd4 $\mathbb{Q}c6$**

Finally, the bishop has reached the outpost.

#### **29. $\mathbb{B}d1$**

White could also have given back the pawn with 29. $\mathbb{Q}f3$   $\mathbb{B}exd4$  30. $\mathbb{Q}xc6$   $bxc6$  to exchange the bishops, but the problem of his weak king remains.

#### **29... $\mathbb{B}f4$**



**30.d5!**

White gives back the pawn another way, to exchange a pair of rooks. However, it doesn't turn out well for him.

**30... $\mathbb{E}xd5$  31. $\mathbb{E}gd3$   $\mathbb{W}c5!$** 

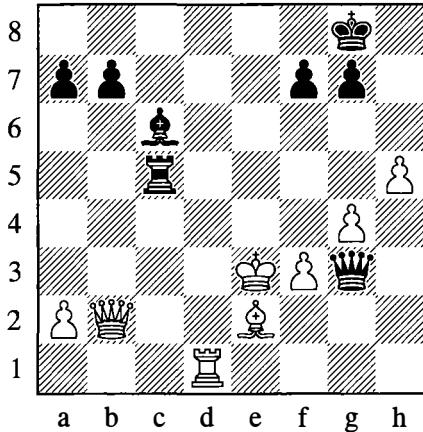
Forcing White to weaken his king even more.

**32.f3  $\mathbb{E}xd3$  33. $\mathbb{E}xd3$   $\mathbb{W}g5$** 

Black threatens the g4-pawn; White has no safe square for his king.

**34. $\mathbb{Q}e1$** 

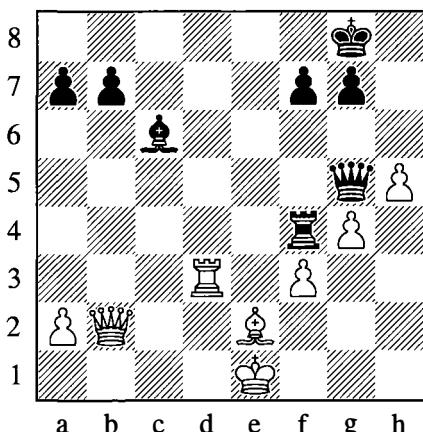
34. $\mathbb{Q}g1$   $\mathbb{W}h4$  is no better and 34. $\mathbb{Q}g2$  loses immediately after 34... $\mathbb{W}xg4\#$ .



The main threat is 38... $\mathbb{E}e5\#$  39. $\mathbb{Q}d2$   $\mathbb{E}xe2\#$  40. $\mathbb{Q}xe2$   $\mathbb{W}g2\#$ . White has no satisfactory defence and tries to counterattack, but in vain.

**38. $\mathbb{E}d8\#$   $\mathbb{Q}h7$  39. $\mathbb{Q}d3\#$   $\mathbb{f}5$** 

Finally, Andersson played a pawn move, but only because he was forced to.

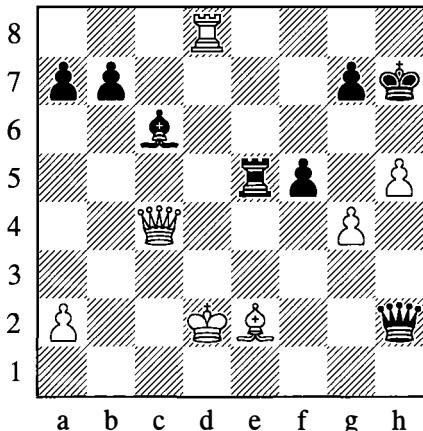
**40. $\mathbb{W}d4$   $\mathbb{W}xf3\#$  41. $\mathbb{Q}d2$   $\mathbb{W}g2\#$  42. $\mathbb{Q}e3$   $\mathbb{W}g3\#$   
43. $\mathbb{Q}d2$   $\mathbb{W}h2\#$  44. $\mathbb{Q}e2$   $\mathbb{E}e5$  45. $\mathbb{W}c4$** **34... $\mathbb{E}c4$  35. $\mathbb{Q}f2$** 

The exchanging manoeuvre 35. $\mathbb{E}d8\#$   $\mathbb{W}xd8$  36. $\mathbb{Q}xc4$  simply leaves a pawn undefended: 36... $\mathbb{W}xf3$

The best way to defend was 35. $\mathbb{E}d4$   $\mathbb{E}c1\#$  36. $\mathbb{Q}f2$   $\mathbb{W}h4\#$  37. $\mathbb{Q}e3$   $\mathbb{E}c5$  38. $\mathbb{Q}d3!$  when 38... $\mathbb{E}e5\#$  can be met with 39. $\mathbb{Q}e4$ . Without a doubt, White's position is still worse.

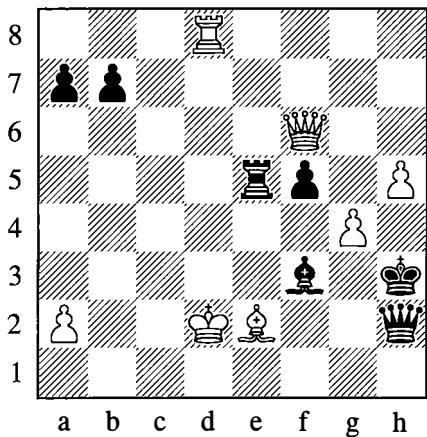
**35... $\mathbb{W}h4\#$  36. $\mathbb{Q}e3$   $\mathbb{E}c5$** 

It's no longer possible to play  $\mathbb{Q}d3-e4$ .

**37. $\mathbb{E}d1$   $\mathbb{W}g3$** **45... $\mathbb{Q}f3!$** 

White will get some checks, but the black king can hide on h3.

**46. $\mathbb{W}g8\#$   $\mathbb{Q}h6$  47. $\mathbb{W}h8\#$   $\mathbb{Q}g5$  48. $\mathbb{W}xg7\#$   
 $\mathbb{Q}h4$  49. $\mathbb{W}f6\#$   $\mathbb{Q}h3$**



**0-1**

Andersson: "This is one of the games I am most satisfied with."

When I asked Andersson about the final standings in the tournament, he only knew that he had won. That's typical; Andersson played only to "analyse positions and send some moves". In another game, he had to decide whether to play ... $\mathbb{W}e7$  or ... $\mathbb{B}fc8$  first. He spent five hours a day for two weeks, while being on vacation on Majorca. It turned out that there was no difference between the moves; he played both.

Andersson won the tournament with 11½/14, one point in front of Timmerman, and became the new Number 1 on the ICCF (International Correspondence Chess Federation) rating list. However, he was happy when he stopped playing; it was too exhausting.

There were many weaknesses to attack in the game above. If there is neither a weakness, nor an achievable pawn lever to play for, like in many of the games against Agrest, it's difficult to find a good plan. That's why pawn levers are the first thing to look for when creating a plan.

Many of the positions against Agrest looked quite grim, but it can also happen that a position looks nice and yet no good plan is

apparent. Here is an example that confused me for more than a year.

### Brede Kvisvik – Edwin David

Kristiansund 17th September 2011

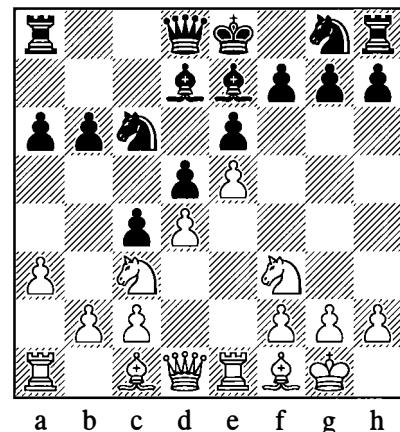
**1.e4 e6 2.d4 d5 3.♘c3 ♖b4 4.e5 b6 5.a3 ♖f8**

This is an unusual line. Black does not mind losing time with his bishop. Having provoked e4-e5, he can now prepare ...c5 without worrying about a weak d5-pawn.

**6.♗b5†**

The idea is to prevent Black from exchanging the French bishop on a6. White answers 6...♗d7 with 7.♗d3 and 6...c6 with 7.♗a4.

**6...♗d7 7.♗d3 c5 8.♗f3 ♗c6 9.0-0 ♖e7  
10.♗e1 c4 11.♗f1 a6**



White has space in the centre, but since Black plays the French, I guess he is happy with his lot. However, Black's pieces on the kingside are stepping on each other. Especially the knight on g8 seems difficult to develop. White also has a lead in development, so it's natural to look for a pawn lever.

b2-b3 is well answered with ...b5, so f2-f4-f5 is the only possibility. Unfortunately all White's pieces are wrongly placed. The rook

has moved from the f-file, the bishop stops it from going back, and the knight blocks the f-pawn. So even though White's position looks good, it's difficult for him to find a plan.

I think White made an instructive mistake with 8.♗f3?!. If he had played the temporary pawn sacrifice 8.f4 instead, he would have had the possibility to play f4-f5 later.

The next question is how to evaluate the diagram position. I thought it was pleasant for Black, since he had the possibility of advancing his pawns on the queenside. He can also try to control f5 by playing ...h5 and ...♗h6. I wasn't bothered that Houdini disagreed, giving an evaluation of +0.32.

However, Hans Tikkannen argued for White's position. He noticed that White is able to close the queenside if he plays ♜c3-e2. He can then answer ...b4 with a3-a4 and either ...b3 with c2-c3 or ...c3 with b2-b3. White's progress on the kingside is slow, but still exists. If he manages to play g2-g4 and ♜g3, he might get time to go for f2-f4 later. White should also take care, though, since Black may castle long and attack the king if White opens up too much.

It's interesting that it's difficult for both sides to find a good plan, since they both have problems achieving a pawn lever. The position is quite balanced.

The game actually ended in a win for Black in 67 moves, but the moves are not relevant to our theme.

## Prophylaxis

Prophylactic moves defend against your opponent's threats before they appear, and sometimes they may stop his entire plan. And since a plan is so strongly connected to a pawn lever, this is what you should look for, exactly as Evgenij Agrest does. I will show two games

where one of the players finds a prophylactic move which stops the opponent's pawn levers. The first game below was played by Mr Prophylaxis himself, Tigran Petrosian.

### Tigran Petrosian – Samuel Schweber

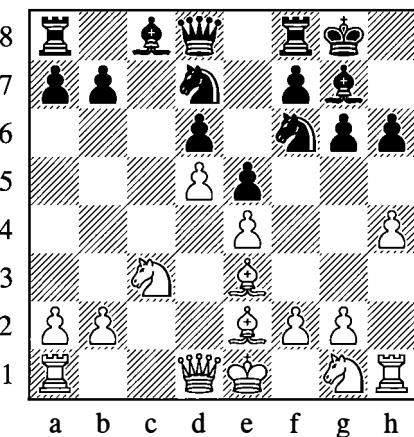
Stockholm Interzonal, 28th February 1962

**1.d4 ♜f6 2.c4 g6 3.♗c3 ♛g7 4.e4 d6 5.♗e2 0-0 6.♗g5 h6**

The Averbakh variation. One rule of thumb I have used in the King's Indian is to play ...c5 when White has played ♛g5. It makes sense, since the bishop is controlling neither b2 nor d4. However, I am sure there are many exceptions to that rule!

**7.♗e3 e5 8.d5 c6 9.h4 cxd5 10.cxd5 ♜bd7**

In the King's Indian, Black normally plays for the pawn lever ...f5. When he played 6...h6 he left the pawn on f7 as the only defender of the g6-square. For that reason, it's less probable now that Black will manage to play ...f5. Petrosian continues to stop the pawn lever forever.



**11.h5! g5 12.f3 a6 13.g4**

The f4-square also looks weak, but with white pawns on d5 and h5, Black has no route for a knight to that square. Instead, Black's

only chance to create counterplay is to take space on the queenside. However, ...b5-b4 is not dangerous, since White has defended the e4-pawn with f2-f3.

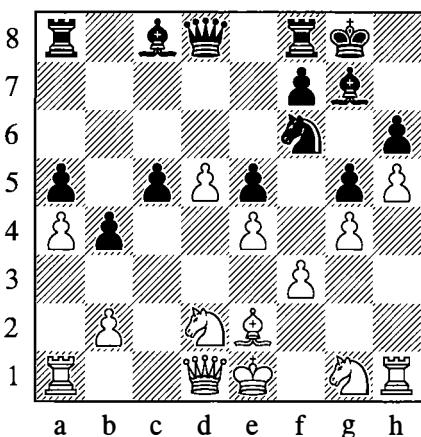
### 13...b5 14.a4! b4 15.Qb1 a5

Neither player has any possible pawn levers, but it doesn't bother Petrosian since he has clear weaknesses to play against – the light squares on f5, b5, c4 and not least c6.

### 16.Qd2 Qc5!

Black simplifies White's task of taking control of the light squares.

### 17.Qxc5! dxc5



White has three minor pieces that can control the light squares and Black two – giving White a 3-2 advantage. For every exchange, White's advantage increases, since 2-1 and 1-0 are proportionally greater differences than 3-2. In chess terms, the reason is that only one piece can occupy a square, but many can threaten it. White thus wants to exchange Black's minor pieces – except the ugly bishop on g7.

### 18.Qb5!

Now Black has a hard time preventing White from exchanging this bishop.

### 18...Qb7

This seems to lose a tempo, but what else can Black do?

### 19.Qe2 Qe8 20.Qxe8! Qxe8

This position really pleases me aesthetically

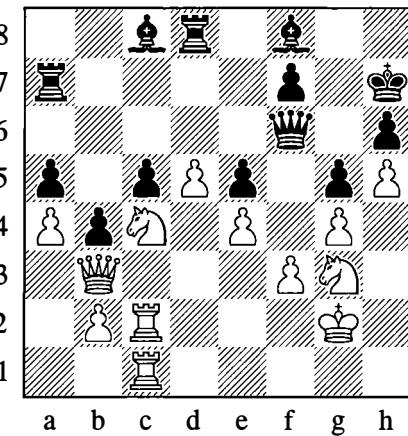
- Black is completely deprived of any counterplay.

### 21.Qc4 Qa6 22.Qb3 Qf6 23.Qc1 Qf8

### 24.Qg3 Qc8 25.0-0 Qd8 26.Qg2

Why hurry when you are enjoying such a position?

### 26...Qa7 27.Qf2 Qh7 28.Qfc2



### 28...Qa6?

Unnecessarily giving away a pawn. However, there is no doubt that White would break through anyway. I think the most convincing plan is to prepare d5-d6. Black will probably have to play ...Qd6 sooner or later, after which White exchanges and plays the knight to c4 or d3, winning material. Looking at Black's position, I want to put the bishop on a6 to be able to play ...Qxc4. Unfortunately, I can't find a way to be in time to defend the pawn on a5 and stop d5-d6 at the same time.

After the pawn sacrifice, the game is no longer interesting. The rest of the moves follow without annotations.

29.♕xe5 ♜c7 30.♕c4 ♔g7 31.♗d3 ♕g8  
 32.♗d2 ♜e7 33.e5 ♜xe5 34.♕e5 ♜xe5  
 35.♗xa6 ♜xa6 36.♗xc5 ♜c8 37.♗xa5 f5  
 38.gxf5 ♜xf5 39.♕xf5 ♜xf5 40.♗b5 ♜d8  
 41.d6 ♜xb5 42.axb5 ♜f7 43.d7

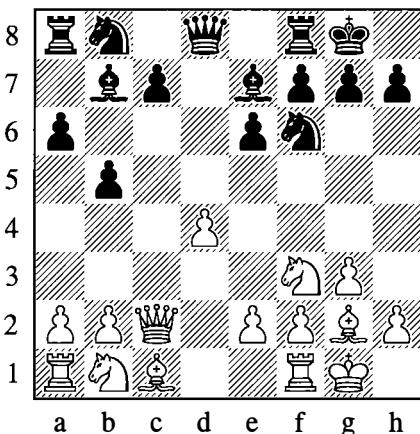
1–0

Nowadays every player does whatever he can to create counterplay instead of falling into positional binds. That's why old games are much more instructive when showing clear positional themes. However, the following game is also very illustrative. Kramnik manages to stop Carlsen's pawn levers with prophylactic moves.

### Vladimir Kramnik – Magnus Carlsen

Dortmund 27th June 2007

1.♘f3 ♘f6 2.c4 e6 3.g3 d5 4.d4 ♜e7 5.♗g2  
 0–0 6.0–0 dxс4 7.♗c2 a6 8.♗xc4 b5 9.♗c2  
 ♜b7



10.♗d2

The modern move, but played a lot in the 1970's as well. The idea behind the move is purely prophylactic. Black wants to play ...♗bd7 followed by the pawn lever ...c5 to get rid of the backward pawn. After 10.♗d2, White is able to meet ...♗bd7 with ♜a5, pinning the pawn.

10...♗c6 11.e3 ♘b4 12.♗xb4 ♜xb4 13.a3  
 ♜e7

I don't think Carlsen's move will get many followers. 13...♗d6 is the main move. White then has the possibility of playing ♘bd2 followed by e3–e4 and threatening a fork. That's not White's most dangerous plan, though.

14.♘bd2 ♜c8

Threatening ...c5.

15.b4

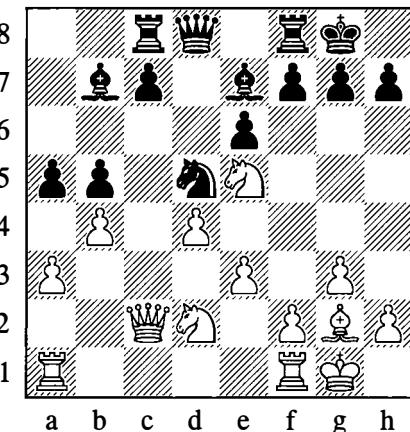
White has to keep the c5-square under control.

15...a5

A pawn lever, trying to undermine White's control over c5.

16.♗e5 ♘d5?!

16...♗xg2 17.♗xg2 c6 would have been better and has been played, but it doesn't solve Black's strategic problems.



17.♗b3!

White can neither defend the b4-pawn, nor allow 17.bxa5 c5. However, the text move is very strong.

17...axb4 18.♗a5 ♜a8 19.♗ac6 ♜xc6  
 20.♗xc6 ♜d7

**21.♕xd5!**

The only way to retrieve the temporarily sacrificed pawn, but entirely sufficient to retain a crushing positional advantage.

**21...exd5 22.axb4**

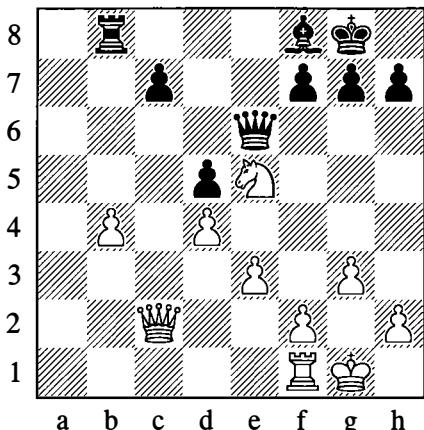
Kramnik played four moves before he took back on b4. During those moves he placed a knight firmly on c6 that fixes Black's pawn on c7 and makes it difficult for Black to defend the b5-pawn. When I saw the position, I thought Black's only chance was to play ...h5-h4 and go for a desperate kingside attack. One of many problems with this unrealistic plan is that Kramnik was sitting at the other side of the board.

**22...♝fe8**

22...♜a8 23.♜a5! is good for White.

**23.♜a5 ♛f8**

Now ...♝e8-e6-h6 may have been Carlsen's idea, which is quite desperate.

**24.♞e5 ♜e6 25.♝xb5 ♜b8 26.♝xb8 ♜xb8****27.♛xc7!**

An accurate finish.

**27...♝d6 28.♛a5 ♜xb4**

28...♜xe5 29.dxe5 ♜xe5 30.♝d1 ♜e4

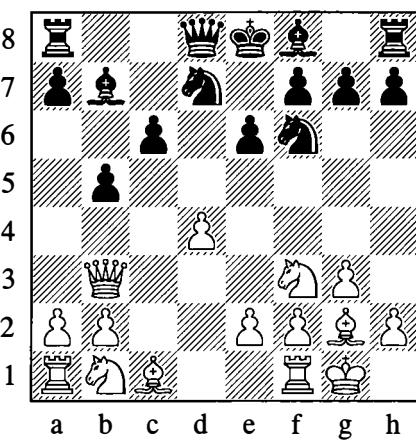
31.♛xd5 ♜xb4 32.♝d8† ♜f8 is probably drawn, but 31.♝xd5! wins, although it would have required some accurate calculation to foresee that he can avoid perpetual check in the most convenient way with 31...♜b1† 32.♝g2 ♜e4† 33.♝f1 ♜b1† 34.♝e2 ♜b2† 35.♝f3 ♜f6† 36.♝g2, as mentioned by Mihail Marin.

**29.♝b1 ♜d6 30.♛a4**

Kramnik exchanges on b8 and picks up the pawn on d5.

**1–0**

I used this example at a training camp in Kristiansund in March 2012, but I thought that I needed one more example. Find Black's pawn lever in the following position and look for a way to carry it out.



Black's pawn lever is clearly ...c5. Black should postpone developing his kingside and try to carry it out as soon as possible.

In McShane – Grandelius, Rilton Cup 2009/10, Black played 9...a6 and White tried to stop ...c5 with 10.a4 but after 10...c5! 11.axb5 ♛d5, Grandelius had a completely fine position.

Most of the young players managed to get in ...c5 in an effective way. So far, so good.

The next weekend it was time for the last rounds of the Swedish Team Championship. Who would accept Black against Evgenij Agrest?

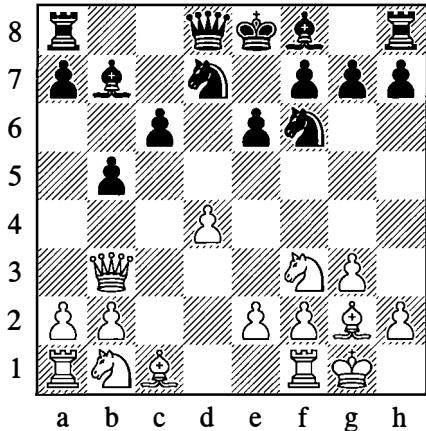
In 2010 I had tried once again and managed to hold a draw, although I needed some luck. In 2011 the match was important since we were playing for the gold medals; hence, neither Grandelius nor I was allowed to play Agrest. The match was more important than our hobby of losing against him.

In 2012 Grandelius thought he was ready. He said: "It doesn't matter that I have lost a few times against him when I was still a kid."

### Evgenij Agrest – Nils Grandelius

Swedish Team Championship, Västerås  
11th March 2012

1.  $\mathbb{Q}f3$  d5 2. c4 e6 3. g3  $\mathbb{Q}f6$  4.  $\mathbb{Q}g2$  dx $c$ 4  
5.  $\mathbb{W}a4\#$  c6 6.  $\mathbb{W}xc4$  b5 7.  $\mathbb{W}b3$   $\mathbb{Q}b7$  8. 0–0  
 $\mathbb{Q}bd7$  9. d4



9...a6

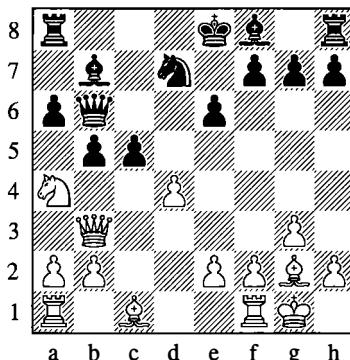
How surprised was I when I saw that Agrest had steered the game into the position from the training camp! Grandelius played in the same way as against McShane, but was met with a stronger reply.

### 10. $\mathbb{Q}e5$ !

The knight move opens the diagonal for the g2-bishop and so stops ...c5. However, that's usually only temporary, since Black can defend the b7-bishop with ... $\mathbb{W}b6$ .

### 10... $\mathbb{Q}xe5$

In this position, 10... $\mathbb{W}b6$  is strongly met by: 11.  $\mathbb{Q}xd7$   $\mathbb{Q}xd7$  12.  $\mathbb{Q}c3$  c5 (12... $\mathbb{W}xd4$  13.  $\mathbb{Q}a4$  gives White good compensation) 13.  $\mathbb{Q}a4$ !



13...  $\mathbb{W}a7$  14.  $\mathbb{Q}xb7$   $\mathbb{W}xb7$  15.  $\mathbb{Q}xc5$   $\mathbb{Q}xc5$   
16. dxc5  $\mathbb{Q}xc5$  Black has managed to play ...c5 but is one move too late to consolidate: White plays 17.  $\mathbb{W}c3$ ! and 17... $\mathbb{Q}c5-f8$  isn't a move to play with great confidence. I am sure Agrest had done his homework and seen this position.

After 10... $\mathbb{Q}xe5$ , Grandelius will manage to carry out the pawn lever ...c5, but at the same time he moves the knight from f6 a second time before castling. 11. dxe5 also gives White control over the d6-square.

### 11. dxe5 $\mathbb{Q}d7$

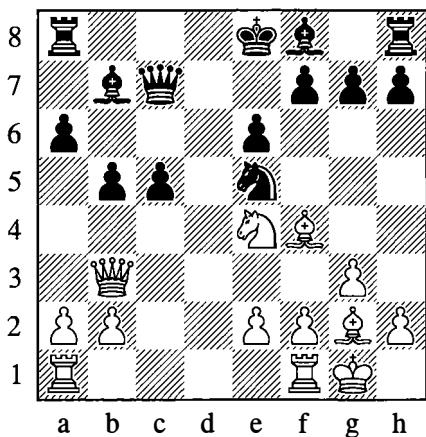
11...  $\mathbb{Q}d5$  is less natural since the knight would not control c5 or attack e5 and it also blocks the diagonal. Still, it's interesting since it stops White from defending the e5-pawn with  $\mathbb{Q}f4$ .

### 12. $\mathbb{Q}c3$ ! $\mathbb{W}c7$

12...  $\mathbb{Q}xe5$  13.  $\mathbb{Q}f4$  gives White fantastic compensation for the pawn.

**13.♕f4 c5 14.♕e4 ♕xe5**

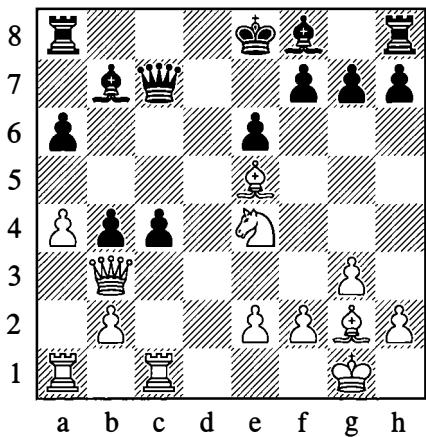
14...♕xe4 15.♕xe4 is better for White with the two bishops, and 14...♕c7 15.♕d6† ♕xd6 16.exd6 ♜b6 17.♕fd1 ♜xg2 18.♕xg2 0–0 is also better, due to the passed pawn. During the game Grandelius thought that his only chance was to capture the e5-pawn, but I think it just makes things worse. He should have chosen one of the other continuations.

**15.a4!?**

15.♕xe5 ♜xe5 16.♕f6† gxf6 17.♕xb7 ♜a7 is also strong, as both 18.♕c6† and 18.♕xa6 would give White an advantage, with a clearly better king.

**15...b4 16.♕fc1 c4 17.♕xe5**

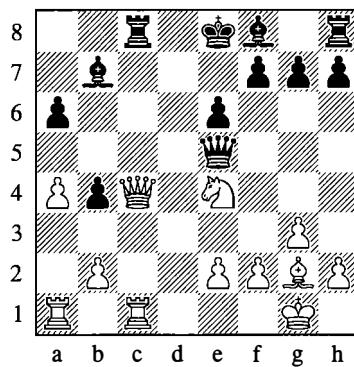
17.a5! is even stronger.

**17...♗xe5 18.♗xc4**

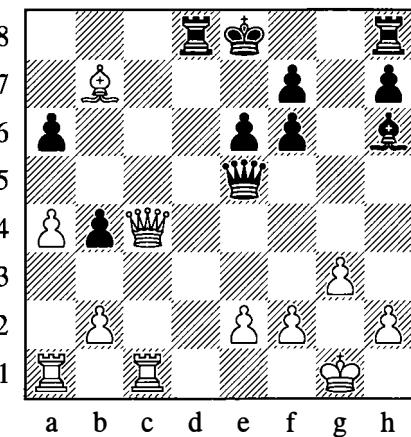
18.♗xc4 is possible. 18...♔d5 19.a5 ♜xc4 20.♗xc4 weakens the light squares before Black is able to castle.

**18...♗d8**

After 18...♗c8 Agrest must have planned:



19.♗xc8† ♜xc8 20.♗xc8† ♔d7 21.♗ac1, with a position that is very promising due to Black's weak king and the passive rook on h8.

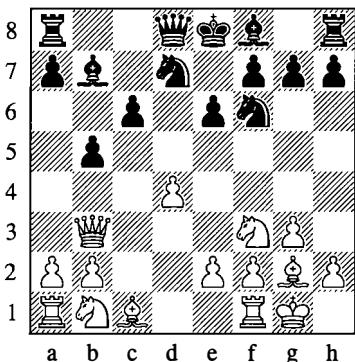
**19.♕f6† gxf6 20.♕xb7 ♔h6?****21.♕xb4!**

With this last tactical trick – 21...♗xc1 22.♕c6† – White puts the final nail in the coffin. Grandelius fought on for a few more moves.

21... $\mathbb{W}d6$  22. $\mathbb{W}xd6$   $\mathbb{B}xd6$  23. $\mathbb{B}c8\uparrow$   $\mathbb{B}d8$   
 24. $\mathbb{B}xd8\uparrow$   $\mathbb{Q}xd8$  25. $\mathbb{Q}xa6$   $\mathbb{Q}e7$  26. $\mathbb{Q}b7$   $\mathbb{B}b8$   
 27. $\mathbb{Q}f3$  f5 28.a5 e5 29. $\mathbb{Q}d5$   $\mathbb{Q}d6$  30. $\mathbb{Q}xf7$

1–0

Finally, it's time to examine Black's best move in the key position near the start of the game.



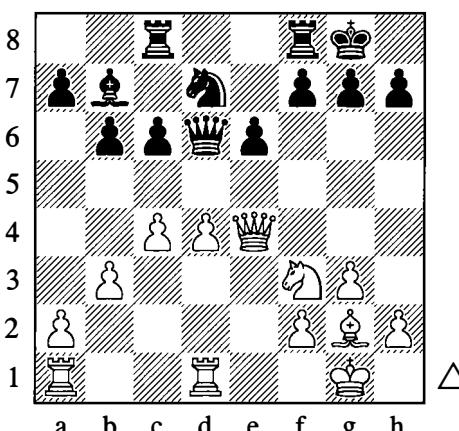
I think it is 9... $\mathbb{W}b6$ , defending not only b5 but also the bishop on b7, making ...c5 easier to achieve. However, White can play 10.a4 without allowing the trick from the game against McShane (9...a6 10.a4?! c5!). I don't think Black is able to equalize completely.

At the end of 2012 Grandelius finally realized what he needed to do to handle pawn levers better. He hired Agrest as a coach.

Below you will find two final exercises on the theme – prophylaxis against pawn levers. Start by identifying the opponent's pawn levers, and then try to find prophylactic moves against them.

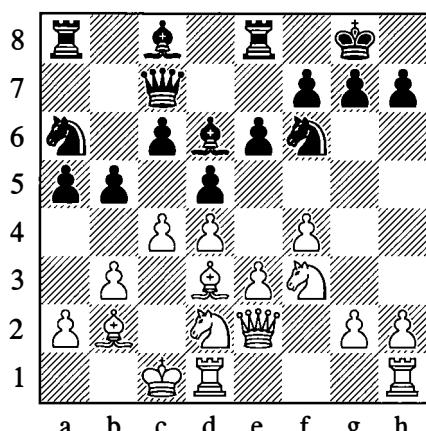
Smith – Leer-Salvesen, Oslo 2010

10



Smith 2012

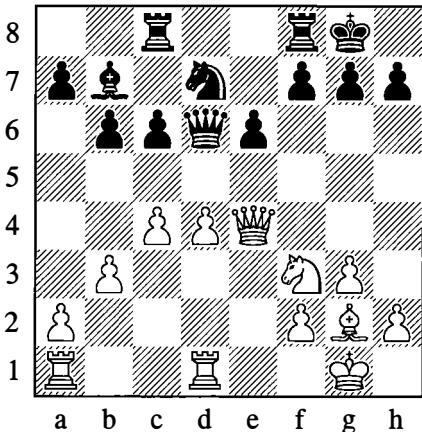
11



## 10. Axel Smith – Bjarte Leer-Salvesen

Norwegian League, Oslo 8th January 2010

1.c4 e6 2.g3 d5 3.Qg2 Qf6 4.d4 c6 5.Wc2 Qbd7 6.Qf3 Qe7 7.0-0 0-0 8.b3 b6 9.Qd1 Qb7 10.Qc3 Qc8 11.e4 Qxe4 12.Qxe4 dxe4 13.Wxe4 Wc7 14.Qf4 Qd6 15.Qxd6 Wxd6



Black wants to play ...c5 to release the bishop.

### 16.c5! W e7

16...bxc5 17.dxc5 Qxc5 18.Wb4 is the tactical point White needs to find. After 18...W e7 White plays a rook to c1 and wins the knight.

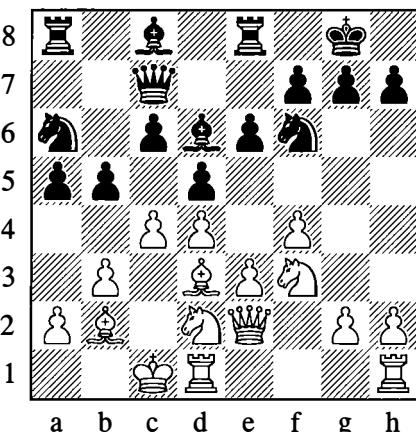
### 17.b4

The d6-square is much more valuable than the d5-square, not only because it's further into the opponent's camp but also because White can capture the knight on d5 whenever he wants.

17...Wfd8 18.We1 b5 19.a4 a6 20.axb5 axb5 21.Qa7 Qf6 22.Qe5 Qd5 23.h4 Wc7 24.Qd1 Qa8 25.Qxa8 Qxa8 26.Qxd5 exd5 27.Qf3 Qb7 28.Qa7 Qf8 29.Qe5 Wb8 30.Wxb8 Qxb8 31.Qd2 Qe8 32.Qb3 Qc8 33.Qa5 Qd7 34.Qg2 Qc8 35.Qf3

Qe7 36.Qe3 Qe6 37.Qb7 Qe8 38.Qd6 Qe7 39.Qf4 Qf6 40.g4 h6 41.g5† hxg5† 42.hxg5† Qg6 43.f3 f6 44.Qxb5 fxg5† 45.Qg3 g4 46.fxg4 Qe3† 47.Qf2 Qb3 48.Qxd7 Qb2† 49.Qg3 Qb3† 50.Qh4 cxb5 51.Qxd5 Qxb4 52.c6 Qc4 53.Qc5  
1-0

## 11. Smith 2012



White's pawn formation with d4 and f4 makes his centre really solid, so he is strategically justified in attacking on the kingside with g2-g4-g5. Before this advance is carried out, it makes a lot of sense to play two prophylactic moves against Black's counterplay.

### 12.c5! Q e7 13.a3!

Now ...a4 is met by b3-b4, or ...b4 with a3-a4. Black has no possibility whatsoever of starting an attack on White's king, so White can attack 'for free'. Strategically the position is already won, but Houdini's modest assessment of +0.15 suggests that there might be some work left before White can collect the whole point.

Mr Prophylaxis had an influence on the last position. In the 7th game of the 1966 World Championship match, Tigran Petrosian had a similar position against Boris Spassky, but with reversed colours. Petrosian played ...c4

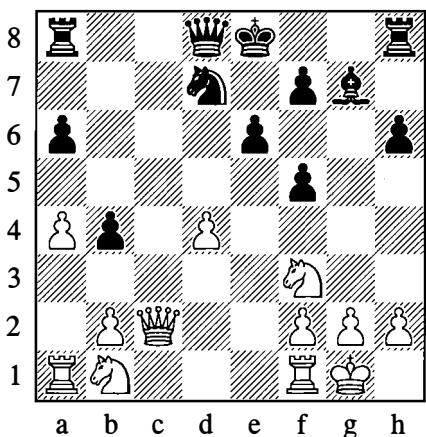
followed by ...a6, stopped all counterplay; he won convincingly.

### Every pawn move weakens at least one square

This chapter has been about the advantages of pawn levers. However, it should not be forgotten that the pawns can't move backwards. Therefore, every pawn move also weakens at least one square. This is explained most easily by going back to one of my positions against Evgenij Agrest, shown in the beginning of the chapter.

#### Evgenij Agrest – Axel Smith

Sigeman & Co, Malmö 24th April 2008



I have already concluded that White is slightly better, since Black doesn't have any good pawn levers. It's time to think about the reason.

When I played ...gxf6 earlier in the game, I thought that the slight weakness in my pawn structure wasn't problematic. The doubled pawns aren't weak, and I didn't worry too much about my king either. In my most optimistic thoughts, I even saw myself using the g-file for one of my rooks. The main disadvantage with doubled pawns is that they are static and have difficulties advancing, which is mostly a

problem if they are part of a pawn majority. That's no big problem in the diagram position, since Black has no plans to advance the kingside pawns.

What I didn't think of was what squares were weakened by ...gxf6. It permanently weakened all the squares on the h-file and slightly weakened the squares on the f-file. The squares on the h-file aren't that important, but the 'semi-weakened' squares on the f-file are actually what decide the fate of Black's bishop! With the f5-pawn still on g6, I would have been able to carry out the pawn lever ...e5 and get a nice position. But since the pawn is on the f-file, I need to keep the e-pawn on e6 to protect the f5-square.

It took me months before I figured out that ...gxf6 prevented me from freeing my bishop with ...e5, but it felt like a real eye-opener when I understood it. Isn't it enlightening that the biggest disadvantage with a pawn move (...gxf6) is that another pawn can't move? It says something about the importance of pawn levers.

It's actually possible to formulate a general principle: *when you make a pawn capture to a file, you have to be cautious when moving the pawn on the adjoining file*. In this case, Black captured something on the f-file with ...gxf6, and thus has to be careful when moving the e-pawn; the other neighbour to the f-file.

It can also be formulated in another way: you have to be careful when moving pawns whose neighbour doesn't have a neighbour. It's the same if the neighbour exists, but has advanced. Hence, moving pawns that have one empty file in between them weakens the same squares. For example, d2-d4 and f2-f4 often don't look good together. This is why the opening from the previous example, the Stonewall, does not have a good reputation with some people.

Ulf Andersson once made a legendary comment about a game which started with 1.f4: "Black is already slightly better!" Moving the f-pawn weakens the a7-g1 diagonal and thus the position of the king. It weakens the second rank for the endgame, but it also semi-weakens the squares on the e-file and makes d2-d4 less attractive. To conclude that Black is already slightly better is maybe a bit too much, but the point is clear enough.

Well, this is just a rule of thumb, and as I made clear in the introduction, it should be used mainly when practising or during limited periods. One day the intuition will hopefully warn against a pawn move that is too weakening; the knowledge will have been transformed into a subconscious skill.

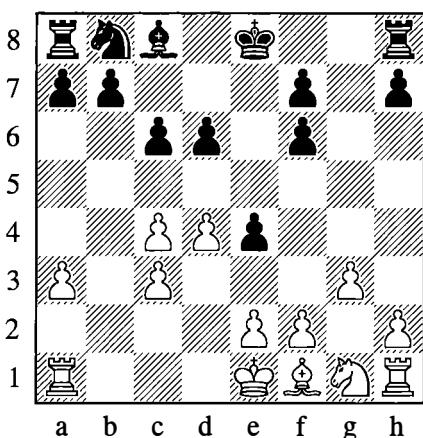
Doubled pawns are mainly a weakness when they advance. This is not surprising, since the pawn capture already weakened a lot of squares.

### Marco Kuehne – Peter Slovak

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Pobeskydy Alpress, Frydek Mistek 2  
5th March 2005

1.c4 ♜f6 2.♗c3 e5 3.g3 c6 4.d4 e4 5.♗g5  
♗b4 6.♗b3 ♜a5 7.♗xf6 gxf6 8.a3 ♜xc3†  
9.♗xc3 ♜xc3† 10.bxc3 d6



In the diagram position, both sides have doubled pawns but the disadvantages with them are not the same.

When White played 10.bxc3, he weakened the squares on the c-file. Since he has also moved the neighbour (the d-pawn), the c4-square has become permanently weak. As White has a pawn there, Black can try to attack it.

It would be even worse for White if he played 11.d5?!, which weakens the square on c5.

With 7...gxf6, Black weakened the squares on the f-file. By then, he had already moved his e-pawn three squares forward. For that reason, the squares on f4 and f5 are permanently weak.

Black's f-pawns have not moved and are therefore not weak in themselves; White can't attack them.

The position is balanced, since neither c4 nor f5 is easy to attack with more than one piece. The game ended in a draw after 44 moves, but didn't illustrate the theme, so I shall stop here.

Of course there certainly can be many positions where pawn moves are justified even though they weaken squares.

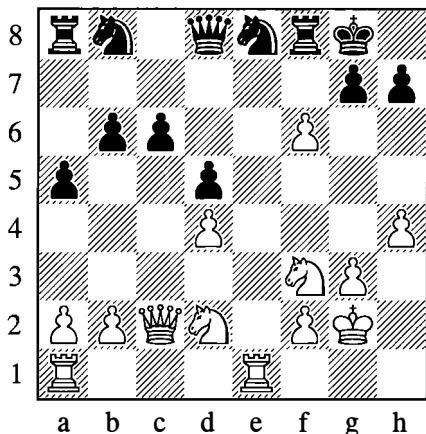
### Axel Smith – Stellan Brynell

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Swedish Team Championship, Malmö  
4th February 2012

1.d4 ♜f6 2.c4 e6 3.♗f3 b6 4.g3 ♜a6 5.♗c2  
♗b4† 6.♗d2 ♗xd2† 7.♗bx2 0–0 8.e4  
d5 9.cxd5 ♗xf1 10.♗xf1 exd5 11.e5 ♜e8  
12.♗g2 c6 13.h4 f6 14.♗h1 a5 15.exf6

Black is worse, with bad development and a backward pawn on c6. In addition, he has weakened the squares on e5 and e6 by moving the d-pawn two steps and exchanging the f-pawn.



15... $\mathbb{Q}xf6$  16. $\mathbb{Q}g5$  gives White a clear advantage, since the knight reaches e6 on the next move.

15... $\mathbb{W}xf6$  tries to stop  $\mathbb{Q}g5$ , but I was actually planning: 16. $\mathbb{Q}g5!$   $\mathbb{W}xf2\uparrow$  17. $\mathbb{Q}h3!$  White is just winning, e.g. 17... $\mathbb{Q}f6$  (or 17... $\mathbb{g}6$  18. $\mathbb{Q}f1$   $\mathbb{W}xd4$  19. $\mathbb{Q}xf8\uparrow$   $\mathbb{Q}xf8$  20. $\mathbb{Q}e6\uparrow$ ) 18. $\mathbb{Q}f1$   $\mathbb{W}xd4$  19. $\mathbb{Q}xf6$ .

I like Brynell's decision in the game.

### 15...gxf6!

Black stops  $\mathbb{Q}g5$  but also takes control over the important e5-square. At the same time, there are two disadvantages with the move.

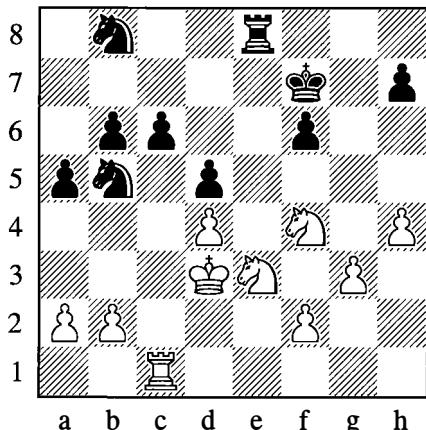
1) The pawn on f6 gets isolated. However, since Black has his pawn majority on the queenside, there's no reason to advance the f-pawn further. The pawn is quite safe if it stays close to the king.

2) ...gxf6 also weakens the squares on the h-file and the f-file. Since Black is also missing his e-pawn, the squares on f4 and f5 become permanently weak.

Anyway, I think Brynell chose the lesser of two evils. In the game, I began by doubling on the e-file to avoid the exchange of rooks. Then, I

tried to manoeuvre the knights to f4 and f5. Let's see the position 14 moves later.

16. $\mathbb{E}e3$   $\mathbb{E}a7$  17. $\mathbb{E}ae1$   $\mathbb{E}g7$  18. $\mathbb{W}f5$   $\mathbb{Q}c7$   
19. $\mathbb{Q}g1$   $\mathbb{W}d7$  20. $\mathbb{W}xd7$   $\mathbb{Q}xd7$  21. $\mathbb{Q}e2$   $\mathbb{E}e8$   
22. $\mathbb{E}xe8\uparrow$   $\mathbb{Q}xe8$  23. $\mathbb{Q}f4$   $\mathbb{Q}c7$  24. $\mathbb{Q}f3$   $\mathbb{Q}f7$   
25. $\mathbb{E}cl$   $\mathbb{Q}b8$  26. $\mathbb{Q}f1$   $\mathbb{Q}b5$  27. $\mathbb{Q}e3$   $\mathbb{E}g8$   
28. $\mathbb{Q}d3$   $\mathbb{E}e8$  29. $\mathbb{Q}e3$



I haven't played perfectly, but at least I managed to manoeuvre the knights to the squares which were weakened by ...g7xf6.

### 29... $\mathbb{Q}d6$

Covering f5. White's best plan is probably f2-f3 and g3-g4 followed by  $\mathbb{Q}f4-h5-g3-f5$ , simply because f5 is a better square than f4. I started with a few reasonable moves.

30. $\mathbb{E}c2$   $\mathbb{E}c8$  31.a3  $\mathbb{Q}a6$  32.g4  $\mathbb{Q}b8$  33.f3  $\mathbb{E}e8$

In this position I went for an interesting tactical possibility. The rest of the game can be found at the end of Chapter 2.

### Summary

The final example shows that a whole strategy can be built upon possible pawn levers even just after a few moves of the opening.

## Michael Richter – Jasmin Bejtovic

Göteborg 18th August 2011

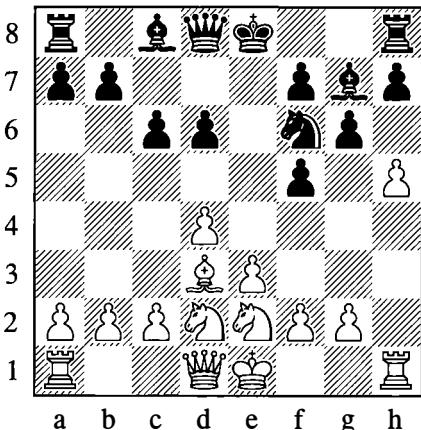
**1.d4 ♜f6 2.♗g5 g6 3.♕xf6 exf6 4.e3 ♜g7**

With a fianchettoed bishop, Black wants to put pressure on d4 with ...c5, to force White to take and thus lengthen the diagonal. To avoid this, White will arrange his pawns on c3-d4-e3. Normally, Black then puts more pressure on d4 with ...e5, but that is not possible due to the doubled pawns. Every pawn move weakens some squares, and ...exf6 compromised Black's ability to attack the d4-square.

So how should Black play? A good strategic idea is to put a knight on d5. It supports the pawn levers ...b4 and ...f4. White will probably chase the knight away with either c3-c4 or e3-e4, but then – tada! – he has weakened his control over d4.

Let's see what happened.

**5.♕d3 d6 6.♘e2 ♜d7 7.♘d2 c6 8.h4 f5  
9.h5 ♜f6**



**10.♘g3**

I would suggest 10.♘f4 to avoid ...♘d5.

**10...♘e6 11.c3 ♜d7 12.♗c2 ♘d5**

Black would like to play ...f4 next move.

**13.c4 ♜b4 14.♗b3 ♘xd3† 15.♗xd3 ♜e7  
16.♘e2 c5**

Black has managed to execute his strategy. However, White is still okay, since he has good control over d4. The game ended in a draw in 58 moves.

To sum up what has been learned: If the opponent has no chronic weaknesses and there are no achievable pawn levers, there is a risk that it may be impossible to find a good plan. For that reason, pawn levers are very important to consider.

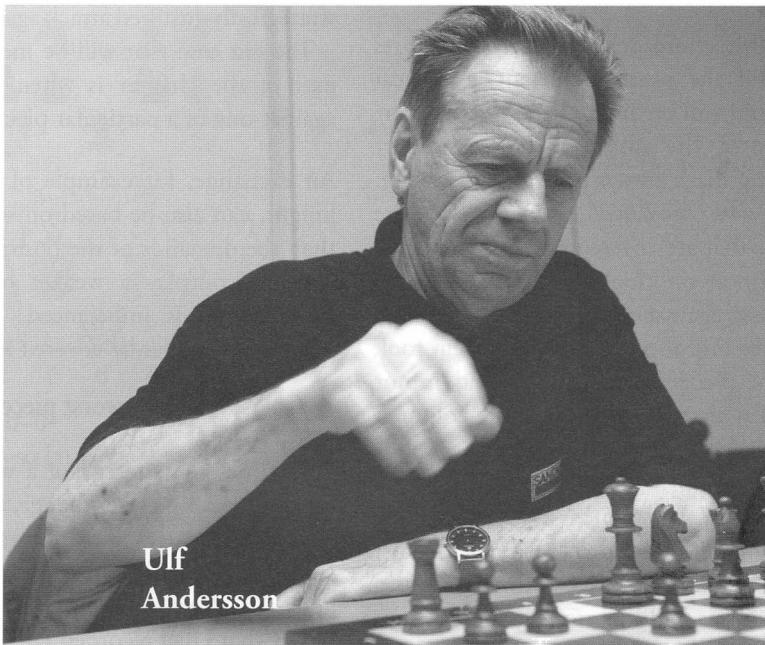
There are many reasons to play for pawn levers; to open up for the pieces, attack the opponent's king, take control over the centre or improve the pawn structure. However, every pawn move also weakens at least one square. One therefore has to be careful when moving a pawn if one of the pawns two files away has been exchanged or has advanced.

I am sure I have many tough games against Evgenij Agrest in front of me, and I will surely find myself in positions where my pawn levers have been stopped. However, I will never forget that planning in chess often starts with finding out which pawn lever the position calls for. That's the take-home message of this chapter: always look for pawn levers, both your own and the ones of your opponent. It will make the rest much easier.

# Chapter 2

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## Fair Exchange is No Robbery



Ulf  
Andersson

Club: Arboga SK

Born: 1951

GM: 1972

*Andersson became Swedish Champion in 1969 and reached Number 4 in the world in 1983. He was one of the early advocates of the Hedgehog and is also famous for his exchange sacrifices. In the 90s, Andersson became the highest-rated correspondence player in the world, even though he played without the help of a computer.*

## About piece exchanges and material imbalances

*Ska vi byta?* (“Wanna exchange stuff?”) is a famous Swedish children’s song by artist and chess enthusiast Hasse Alfredson. He exchanges a toy car for a rusty screw, then the screw for a yellow balloon, the balloon for an electric guitar, and so on.

It doesn’t concern anyone at all that the various items seem to have different values. Fair exchange is no robbery – they are both happy with the exchanges. It’s the same in chess: sometimes you shouldn’t mind exchanging a rook for a tricky knight.

To be a bit more serious, *piece exchanges* are some of the most important strategical decisions and will be discussed in the first part of the chapter. The subject of the second part is something that’s always difficult to evaluate: *positions with material imbalances*. The imbalances that are covered are bishop against knight, bishop or knight against rook, two minor pieces against rook, two rooks against queen, three minor pieces against queen, rook plus minor piece against queen, and minor piece against three pawns. Opposite-coloured bishops are also added to the list.

Ulf Andersson is the chapter’s model player. He has already had one game in the book, against Timmerman. In that game, Andersson was a pawn down but had long-term compensation due to his safer king. I wrote that he often thinks in terms of outposts, but he also has a fantastic feeling for the pieces. He is never in a hurry, and methodically improves his pieces, step by step. It is like he always knows where they want to be.

### Piece exchanges

There are many different reasons to exchange pieces. The three most common causes are

that you have a material advantage, that the opponent has more space, or simply that the opponent’s piece is better. An exchange can also be based on a transition to the endgame; with a better endgame or a worse middlegame, it’s generally good to exchange pieces. The most obvious example is exchanging queens when you have an exposed king.

The pawn structure can set the strategical reason for piece exchanges. With a better pawn majority far away from the king, it’s often good to exchange heavy pieces, but when playing against an isolated pawn, it’s instead good to exchange minor pieces. Actually, it’s generally good to exchange pieces if you are conducting a strategically-justified attack against a weakness.

The last case that will be mentioned in this part of the chapter is when you have two-against-one of a particular piece.

An exchange, for example of a bishop for a knight, can also be based on something other than the demands of the position. It is simply easier to outplay a weaker opponent when the material is imbalanced. However, such situations will not be covered here.

### The worst piece

Sometimes the strategy of a whole game can rely only on a piece exchange, as in one of Ulf Andersson’s correspondence games which we shall see below. I was very impressed by the apparent effortlessness of the game and was happy that I had recorded Ulf when he showed me the game.

When Andersson demonstrates a game his gestures and mimicry are fascinating; it’s possible to see in his face when he evaluates a move as bad. Those visual effects are lost when his comments are transcribed below, but nevertheless the words give a good picture of how he thinks. Enjoy!

*Annotations by Ulf Andersson*

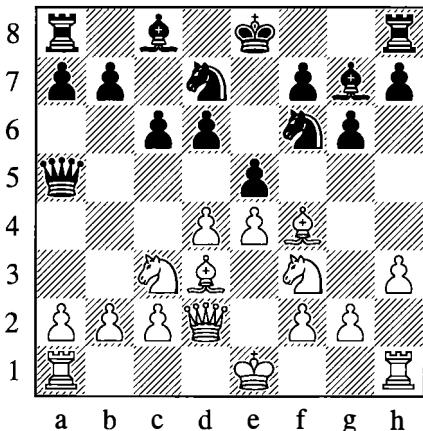
**Ulf Andersson – Colin McNab**

Norwegian Corr. Federation 50th Anniversary  
1994

**1.d4 d6 2.e4 g6 3.♘c3 ♜g7 4.♘f3 ♜f6  
5.♗f4**

I always tried new openings in correspondence chess. In this game, I wanted to play simply and exchange on h6 to weaken his king.

**5...c6 6.h3 ♜a5 7.♗d3 ♜bd7 8.♗d2 e5**



**9.♗e3!?** 0–0 10.0–0

Normal moves so far.

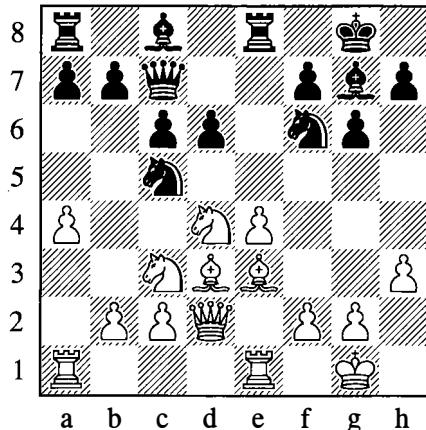
**10...exd4**

We played this type of position for a while. With the white c-pawn on c4, it would have been a King's Indian. But here, my idea was to give up the bishop on d3 for a knight in all cases, and take back with the pawn. I wanted to exchange dark-squared bishops – nothing else!

**11.♗xd4 ♜e8 12.♗fe1 ♜c7**

Still normal moves. I thought Black planned ...b5 here.

**13.a4 ♜c5**



**14.♗h6**

Finally, I manage to exchange his bishop. If Black retreats to h8, it may be possible to disturb him with ♜f5.

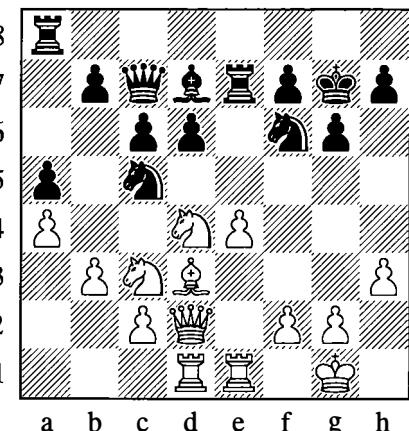
**14...a5**

A sound positional move, securing a square on b4.

**15.♗xg7 ♜xg7 16.b3**

Defending a4, to free the knight on c3 later on.

**16...♗d7 17.♗ad1 ♜e7**



**18.♗f4**

His king's position was slightly weakened when his dark-squared bishop was exchanged.

I was also considering playing on the long diagonal with the queen on b2, but decided on this instead.

### 18... $\mathbb{Q}h5$

18... $\mathbb{E}ae8?$  allows 19. $\mathbb{Q}db5!$  cxb5 20. $\mathbb{W}xf6\#$  with advantage.

### 19. $\mathbb{W}e3$ $\mathbb{E}ae8$ 20. $\mathbb{Q}f3$

I am keeping it simple, playing against d6.

### 20...b6

Black secures the knight on c5, so I haven't any tricks with e4-e5; otherwise this would have been an interesting idea for me.

### 21. $\mathbb{W}d4\#$ $\mathbb{Q}f6$

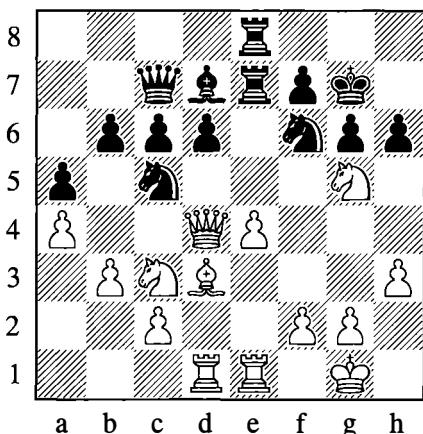
Black wants to play ... $\mathbb{Q}e6$  here.

### 22. $\mathbb{Q}g5$

If he plays ... $\mathbb{Q}e6$ , I'll exchange and continue to play. I thought: My bishop has a defended square while the black bishop is quite passive. I think White is slightly better.

### 22...h6!

Now follows a funny move!



### 23. $\mathbb{Q}h7!$

It's good for White to exchange another defender of Black's king.

### 23... $\mathbb{Q}xh7$ 24. $\mathbb{W}xf6$ d5?

Normal, to free himself. It's logical.

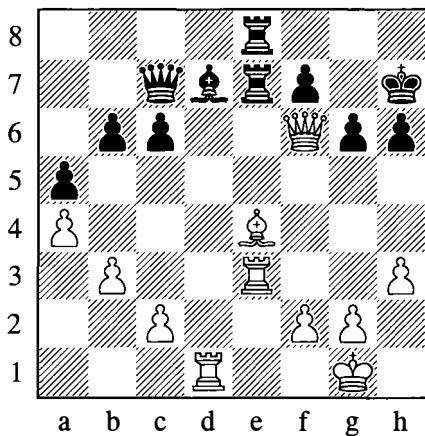
### 25. $\mathbb{E}e3$

Threatening to take on d5, since f7 is hanging in the event of a rook exchange.

### 25...dxe4?

This simplifies the position.

### 26. $\mathbb{Q}xe4$ $\mathbb{Q}xe4$ 27. $\mathbb{Q}xe4$



It's not possible to take the bishop since the seventh rank is too weak. White threatens to take on g6.

### 27... $\mathbb{Q}c8$

After 27... $\mathbb{Q}e6$ , 28. $\mathbb{E}de1$  renews the threat. When Black defends, White can play h4-h5 to attack Black's weak king.

### 28. $\mathbb{E}de1!$

Once again,  $\mathbb{E}xg6$  is a threat.

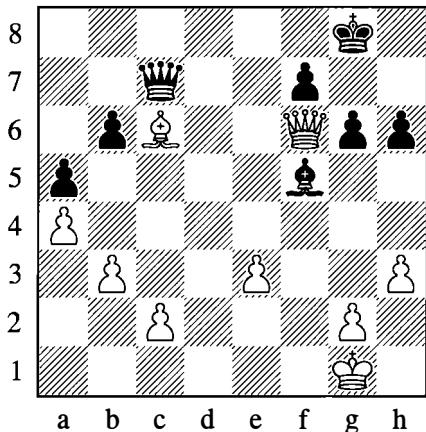
### 28... $\mathbb{Q}g8$

He had to go back, but it's a good move.

### 29. $\mathbb{E}xc6$

I win a pawn, but only temporarily.

### 29... $\mathbb{E}xe3$ 30. $\mathbb{E}xe3$ $\mathbb{E}xe3$ 31.fxe3 $\mathbb{Q}f5$



**32.Qd5!**

I didn't want to play 32.e4, because he can just move the bishop. After 32...Qe6 33.Qd5 Qxd5 34.exd5, Black should not take on c2, but instead check and take White's most dangerous pawn. I am a pawn up after 34...Qc5† 35.Qh2 Qxd5 36.Qxb6, but have an open king. It's an easy draw. It's better to keep the bishops.

**32...Qxc2 33.e4!**

I have given the pawn back but I got something else. The bishop on c2 is out of play, while the bishop on d5 is really great. The square on d5 is worth a pawn – what a wonderful bishop! I think Black's best option is to play ...Qf8 at some moment, to sacrifice a pawn and try to get out of the grip. Instead, he defended passively.

**33...Qh7?!**

I can't take on f7, since ...Qxe4 defends g6.

**34.Qf2**

Interestingly, it's zugzwang here. Black can never move back with the king. He has no moves!

**34...g5**

Probably he understood what had happened.

After 34...Qb1 35.Qf3 my plan was to defend e4 and take on f7. He has no checks at all.

Or 34...Qc5† 35.Qf3 Qd1† 36.Qg3 Qc7† 37.e5 and he has only one more check. I will take with the bishop on f7. It's resignable for Black.

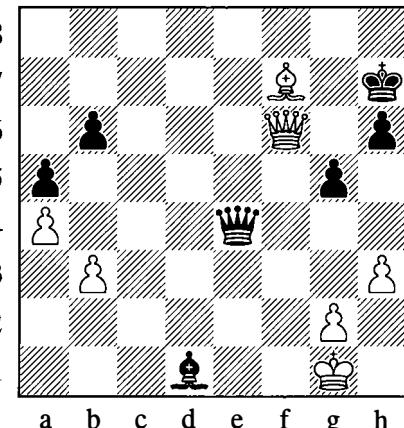
**35.Qe2!**

I just moved the king here, as I didn't want to allow him to manoeuvre the bishop to h5.

**35...Qb1! 36.Qf3!**

Black has no check on d1. I threaten to take on f7.

**36...Qc2 37.Qxf7 Qd1† 38.Qf2! Qc2† 39.Qg1 Qxe4**



**40.Qe6!**

The final winning move.

**40...Qe3† 41.Qh1 Qf4 42.Qf5†**

White will win the bishop or deliver mate.

**42...Qg8 43.Qg6† Qf8 44.Qxh6† Qf7 45.Qe6† Qf8 46.Qc8† Qg7 47.Qd7† Qf6 48.Qe6†**

Now 48...Qg7 49.Qe7† Qg8 50.Qe6† Qh8 51.Qd8† Qg7 52.Qxd1 wins, so...  
1-0

Two things decided the game; the small weakness on the kingside after the exchange of dark-squared bishops and, later, the square on d5. Nothing else; it was enough.

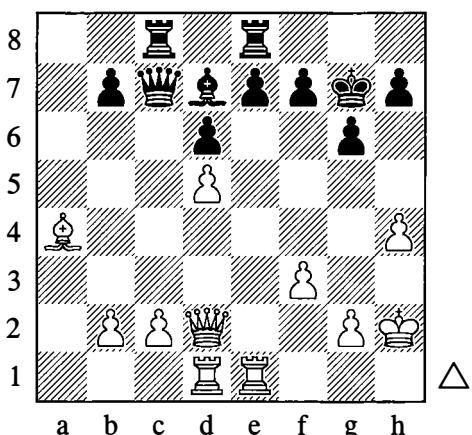
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That is the end of Ulf Andersson's annotations. I really like White's simple plan of exchanging Black's fianchettoed bishop. That bishop was maybe not the strongest piece to use actively, but it was important for the black king's safety.

It's also instructive to see Andersson's comments at move 32. It is generally good to exchange pieces when having a material advantage, but many players overdo it. In the game, Andersson even gave back a pawn to keep the bishops on the board.

A bishop is usually defined as bad if it's blocked by its own pawns. For that reason, it's usually good to exchange such a bad bishop if we have one. However, it's not that simple. Grandelius pointed out that a bishop seldom is bad if a player has more space.

## Smith 2012



The pawn on d5 is very strong. With more space, White's pieces have influence on both

sides of the board, while Black's pieces are more limited. Black also has to think twice before carrying out the pawn lever ...e6 or ...e5 since White will play d5xe6 and give Black an isolated pawn on d6 (if he recaptures with a piece on e6) or hanging pawns (in case of ...fxe6). White's plan can be to try a kingside attack with h4-h5, or double rooks on the e-file. Firstly, he has to decide whether to exchange bishops.

### 1.♗b3!

White's bishop is technically bad on b3, since it's blocked by its own pawn on d5. But there are a lot of reasons to keep it. Without the bishop, Black would get counterplay on the queenside, with the aim of exchanging queens in order to prevent White from attacking the king. On b3, the bishop shields b2 and defends c2 and d5. At the same time, Black's bishop doesn't have any clear tasks at all.

White is better after 1.♗b3! and can start with one of his plans, attacking the king with h4-h5 or doubling rooks on the e-file with ♜e3.

So somewhat surprisingly, it was best to keep the bishops.

The game is as much about pawn structure as about piece exchanges, but strategical themes never work alone. Good and bad pieces are defined only in connection with the rest of the pawns and pieces.

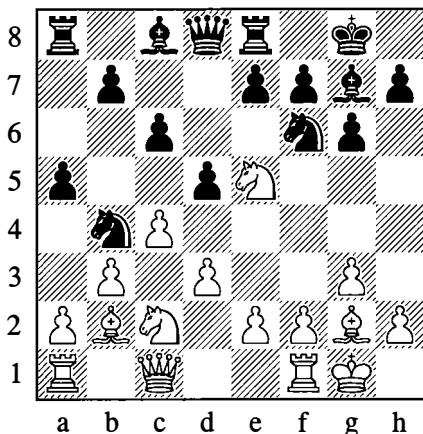
### Less space

With a lot of space, it's usually good to avoid exchanges. An interesting question arose in the next game, which is an old classic. Friðrik Ólafsson earned the Grandmaster title after the previous round, so this was his first game as a Grandmaster.

## Friðrik Ólafsson – Yuri Averbakh

Portoroz Interzonal 1958

- 1.c4 ♕f6 2.g3 c6 3.♗g2 d5 4.♗f3 g6 5.b3  
 ♕g7 6.♗b2 0–0 7.0–0 a5 8.♗a3 ♔a6 9.d3  
 ♕g4 10.♗c2 ♕e8 11.♗e5 ♕c8 12.♗c1 ♕b4



The position has three happy bishops, all fianchettoed. The fourth bishop has not yet found a good square!

White's long-term plan is to carry out the pawn lever b4-b5, not only grabbing space on the queenside but also undermining the squares on the long diagonal. Since Black lacks good outposts on the queenside, it makes sense to force him to keep pieces that are placed there.

### 13.♗e1!

White follows up with a2-a3 and later b3-b4, with an advantage.

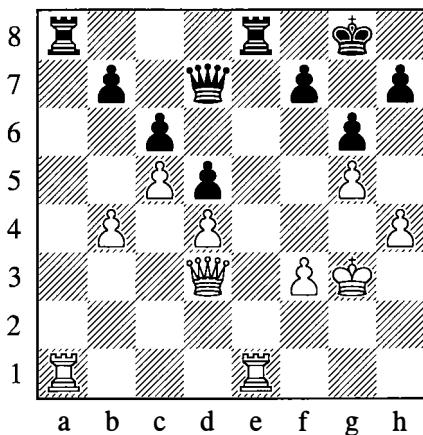
Instead, Ólafsson played 13.a3?! ♗xc2 14.♗xc2, but still managed to win after 59 moves.

Technically, White doesn't have more space in the diagram position, but since it's easy for him to push a2-a3 and b3-b4, he should have

kept as many pieces as possible on the board. The only pieces to exchange may be the dark-squared bishops, trying to weaken Black's king in the same manner as in Andersson's game.

So White should have kept the pieces on the board, since his plan was to grab more space. And with too many piece exchanges, it can even become a burden to have more space.

## Smith 2012



White has gained space on both wings. With a few minor pieces on the board, that would be an advantage since it would have been easier for White to find good squares for the pieces. In the following endgame, White is instead unhappy with all his space, because there aren't enough pieces to cover all the weak squares.

### 1...♕xa1! 2.♕xa1 ♕c7† 3.f4

3.♗g2 ♕f4 wins a pawn and 3.♗g4 ♕h2 delivers mate with ...h5† followed by ...f5† or vice versa.

### 3...♕e4 4.♗d2 ♕e7

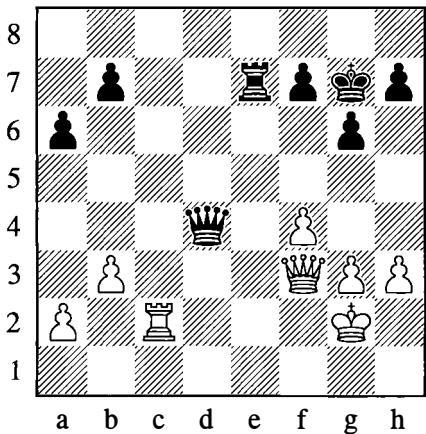
Black is clearly better and will soon infiltrate with the heavy pieces.

## The better endgame

The next example is also an ending with heavy pieces, but in a quieter position.

**Mihajlo Stojanovic – Arman Gadheri**

Winter rapid, Trondheim 24th February 2012



Black played 1... $\mathbb{W}e4$ . Is it a good move?

Many moves should lead to a draw, but that doesn't mean that the different moves are of equal value. After the game, the discussions were lively. Stojanovic assessed his opponent's move as okay, but the Ukrainian Grandmaster Aleksandar Goloshapov considered it to be a big strategical mistake. I agree with him.

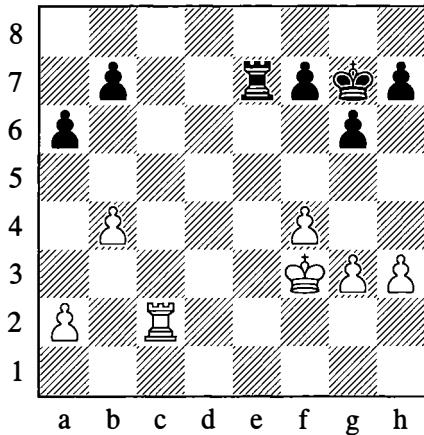
Firstly, White's king is weaker. Black can try to attack with 1... $\mathbb{W}e3$  2. $\mathbb{W}f2$ . It doesn't lead to anything special, but White is tied up.

Secondly, White controls the file furthest away from the opponent's king, which is an advantage in the ending.

2. $\mathbb{W}xe4$   $\mathbb{B}xe4$  3. $\mathbb{Q}f3$

The king defends the entry square on e2 – Black cannot do the same with his king, since c7 is far away.

3... $\mathbb{B}e7$  4.b4



Stojanovic starts to advance his pawns on the queenside. Black's best move is 4... $f5$ . It controls e4 and allows ... $\mathbb{Q}f6$  on the next move. The rook shall stay on e7 to cut off White's king. It's still easily drawn, but the decision to exchange queens was a strategic mistake anyway. Instead, Black played 4... $\mathbb{B}d7$  and lost after a mistake later on.

Simply stated: if one player has a better middlegame and the second player potentially a better endgame, then the second player wants to exchange pieces. However, there is a big difference between exchanging minor and heavy pieces. The following example illustrates that different pieces should be exchanged in different kinds of endgame.

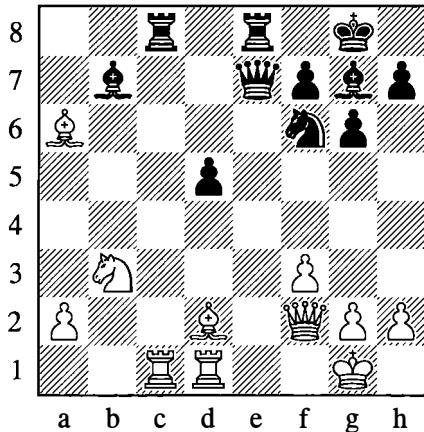
## The right piece constellation

**Bengt Lindberg – Nils Grandelius**

Swedish Championship, Falun 12th July 2012

1.e4 c5 2. $\mathbb{Q}f3$  d6 3.d4  $\mathbb{Q}xd4$  4. $\mathbb{Q}xd4$   $\mathbb{Q}f6$   
 5. $\mathbb{Q}c3$  a6 6. $\mathbb{Q}e2$   $\mathbb{Q}bd7$  7.0–0 g6 8. $\mathbb{B}e1$   $\mathbb{Q}g7$   
 9. $\mathbb{Q}f1$  0–0 10. $\mathbb{Q}g5$   $\mathbb{Q}e8$  11. $\mathbb{W}d2$   $\mathbb{W}b6$  12. $\mathbb{Q}a4$   
 $\mathbb{W}c7$  13.c4 b6 14. $\mathbb{E}ac1$   $\mathbb{Q}b7$  15.f3  $\mathbb{E}ac8$   
 16. $\mathbb{E}ed1$   $\mathbb{W}b8$  17.b4 e6 18. $\mathbb{Q}b3$  d5 19.exd5

**exd5 20.c5 ♖c6 21.♕xb6 ♕xb6 22.cxb6  
♘xb6† 23.♗f2 ♘xb4 24.♔xa6 ♖b7 25.♔d2  
♗e7**



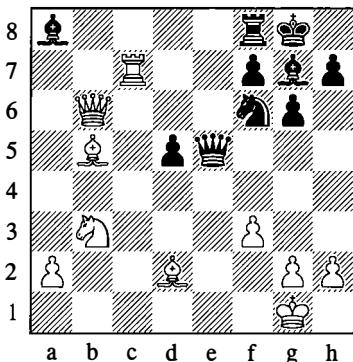
**26.♔b5!**

White's plan is very simple: a2-a4-a5-a6-a7-a8=♖.

**26...♗xc1 27.♗xc1 ♗c8?**

When Ulf Andersson saw this move, he immediately pointed out that it's a positional mistake. It's good to have rooks when trying to control an outside passed pawn.

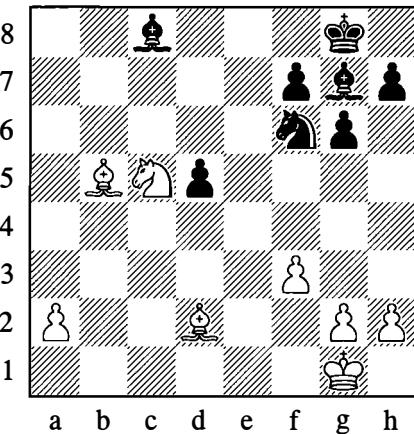
A good setup for Black is with the bishop on a8 and the rook on the eighth rank. Black has to fish for counterplay with his knight. Grandelius was afraid of White's initiative with ♘b6 followed by ♗c7, but exchanging rooks is the greater evil. Instead, he should have played 27...♗f8 28.♗b6 ♖a8 29.♗c7 ♗e5.



White is slightly better, but the a-pawn is not as dangerous as in the game.

Let's see what happened after the rook exchange.

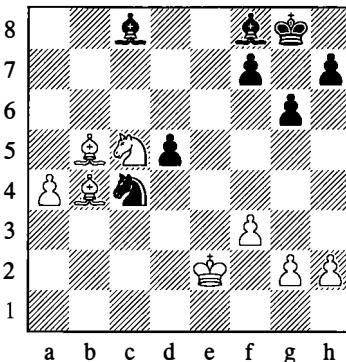
**28.♗xc8† ♖xc8 29.♗c5! ♗xc5† 30.♗xc5**



The a-pawn should win the game in the long run. White should keep the dark-squared bishops on the board to prevent Black blockading the pawn.

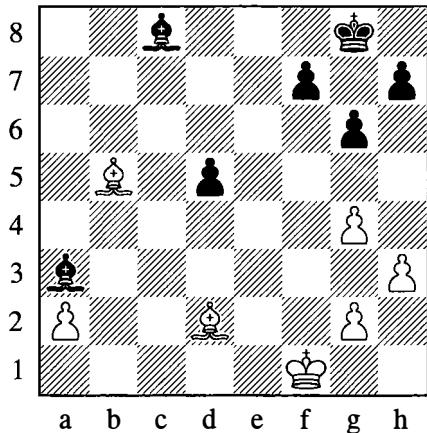
**30...♗g4 31.fxg4?**

Better is 31.♔f1! ♖e5 32.♔e2 ♖c4 33.♔b4 ♖f8 34.a4.



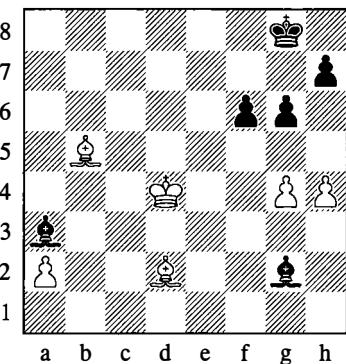
This doesn't threaten a4-a5 yet, but White can start by advancing his king.

**31...♔d4† 32.♔f1 ♖xc5 33.h3 ♖a3!**



34.♘c3?

The best winning chance was 34.♗e2, but Black should manage to draw after: 34...♝b7! 35.♕d3 d4! 36.♗xd4 ♝xg2 37.h4 f6!



The black king will soon reach e6. Black's tactical point in this variation is that White can't save the pawns with 36.g3 ♘g2 37.h4? due to 37...♞f1†.

34...d4! 35.♕xd4 ♝e6 36.♗f2

½-½

So why are heavy pieces important when trying to stop outside passed pawns? One reason is that they can attack and blockade the pawn at the same time. Bishop and knights can only do one of these things.

That also explains why it's best to keep heavy pieces when pressing against a weak pawn.

A heavy piece can block a pawn while attacking it. However, with bishops or knights on the board, it might not be easy to find a safe blockading square in front of the pawn. That's why the player who plays against an isolated pawn should exchange minor pieces but keep heavy ones.

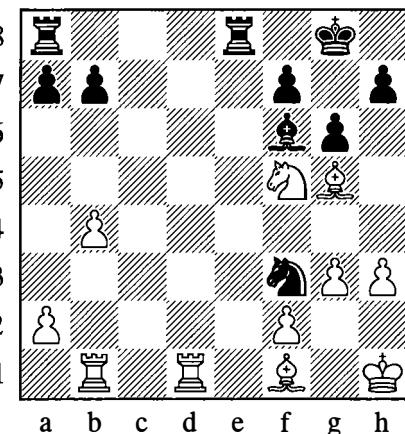
When the passed pawn is in the middle of the board, the situation is actually the opposite; the defender wants to exchange heavy pieces. By doing this, the king can join the defence. The same strategy doesn't work against outside passed pawns, since the king is a very slow piece.

Sometimes, the piece constellation defines who wants to exchange pieces, like the position after 25 moves in the following game.

### Mihail Marin – George Gabriel Grigore

Romanian Championship 1999

1.c4 g6 2.♘f3 ♝g7 3.d4 ♘f6 4.g3 0-0 5.♗g2 d6 6.0-0 c6 7.♗c3 ♜a5 8.e4 e5 9.h3 exd4 10.♗xd4 ♘bd7 11.♗e1 ♘e5 12.♗f1 ♜e8 13.♗b1 d5 14.b4 ♜d8 15.cxd5 cxd5 16.♗g5 dxе4 17.♗xe4 ♘f5 18.♗xf5 ♜xd1 19.♗xf6† ♘xf6 20.♗exd1 ♘f3† 21.♗h1



21...♝xg5

21... $\mathbb{Q}xg5$  was played in Smith – Martin Lokander in 2011, a correspondence training game without computers.

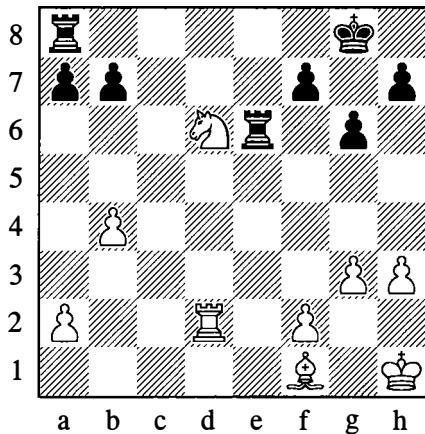
## 22. $\mathbb{Q}d6 \mathbb{Q}d2!$

After 22... $\mathbb{E}e7$  23. $\mathbb{Q}g2$   $\mathbb{Q}d2$  24. $\mathbb{E}b2$ , White threatens  $\mathbb{E}xd2$ , f2-f4 and  $\mathbb{Q}xb7$ .

## 23. $\mathbb{E}b2 \mathbb{E}e6!$ 24. $\mathbb{E}bx d2$

24. $\mathbb{Q}xb7$   $\mathbb{Q}xf1$  25. $\mathbb{E}xf1$   $\mathbb{Q}f6$  gives enough compensation, according to Igor Stohl in his annotations of the game.

## 24... $\mathbb{E}xd2$ 25. $\mathbb{E}xd2$



Black has a rook for two minor pieces. To make a successful attack with two rooks against one, they must cooperate against a target. That often requires some work, since obviously they can't stay on the same square and maybe even need different files. It's much easier with only one rook on the board.

## 25... $\mathbb{E}d8!$

Black is in principle right to exchange the rooks.

## 26. $\mathbb{Q}e4 \mathbb{E}xd2$ 27. $\mathbb{Q}xd2 \mathbb{E}e1$ 28. $\mathbb{Q}g2$

Without the queenside pawns, this would be a draw, as shown in José Raul Capablanca – Emanuel Lasker, St Petersburg 1914. White

must try to hold on to at least one of his queenside pawns.

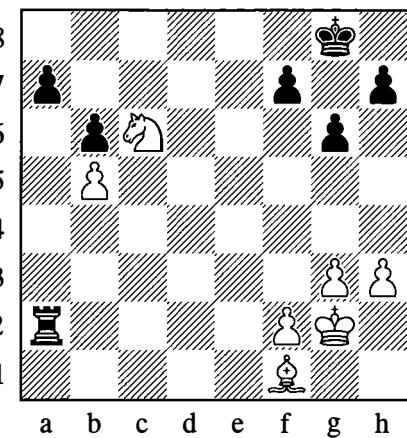
## 28... $\mathbb{E}c1$ 29. $\mathbb{Q}b3 \mathbb{E}c3?$

Black stops a2-a4.

## 30.b5

White threatens 31. $\mathbb{Q}a5$  b6 32. $\mathbb{Q}c6$   $\mathbb{E}a3$  33. $\mathbb{Q}c4$ . After  $\mathbb{Q}b3$  the king will move to the queenside.

## 30...b6! 31. $\mathbb{Q}d4?$ $\mathbb{E}a3$ 32. $\mathbb{Q}c6$ $\mathbb{E}xa2$



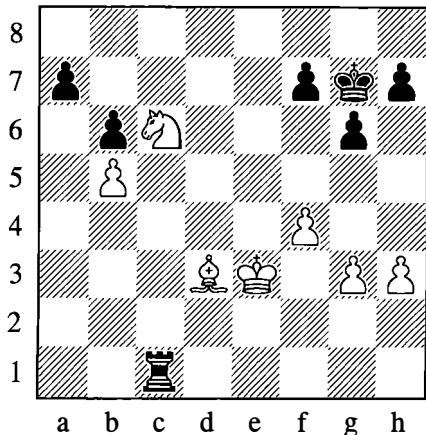
Black has won a pawn but his queenside pawns have been fixed. White's winning try is to advance his pawns on the kingside, in order to create a second weakness. After that, it would be great to march his king to the queenside. However, Black's counterplay is probably fast enough to stop such ideas working.

It's presumably a draw but, without a doubt, White has practical chances. With an extra pair of rooks, the position would probably be winning.

## 33. $\mathbb{Q}e5$

White threatens to take on f7.

## 33... $\mathbb{E}c2$ 34. $\mathbb{Q}f3$ $\mathbb{Q}g7$ 35. $\mathbb{Q}d3$ $\mathbb{E}c1$ 36. $\mathbb{Q}e3$ $\mathbb{Q}f6$ 37.f4 $\mathbb{Q}g7$ 38. $\mathbb{Q}c6$



**38...a5??**

After 38... $\mathbb{Q}a1$  White would still have a long way to go to win the game.

**39.bxa6!  $\mathbb{Q}xc6$  40.a7  $\mathbb{Q}e6\#$  41. $\mathbb{Q}f3$**

**1-0**

With a material imbalance, a rule of thumb is to exchange if you have two pieces of the same type. Often, the second piece doesn't work as well as the first. For this rule, remember that the light- and dark-squared bishops count as two different types of piece.

### Controlling squares

Another situation when it's advantageous to exchange is when playing to control weak squares.

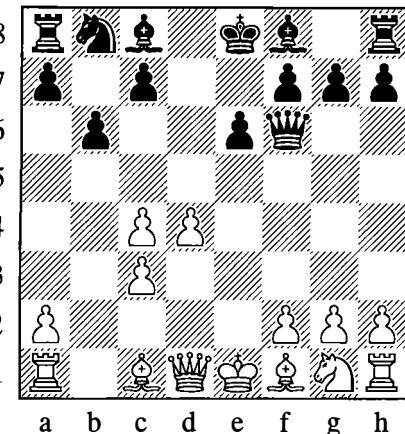
**Daniel Semcesen – Michael de Verdier**

Copenhagen Chess Challenge, 1st May 2010

**1.c4  $\mathbb{Q}f6$  2. $\mathbb{Q}c3$  e6 3.e4 d5 4.e5 d4 5.exf6 dx $c$ 3 6.bxc3  $\mathbb{Q}xf6$  7.d4 b6**

Black's main moves are 7...e5 and 7...c5. The fianchetto solves the problem of developing his light-squared bishop, but the light squares on the queenside will become weak if the bishop is exchanged. Therefore, White should

try to exchange the light-squared bishops. This is exactly what he does with his next move.

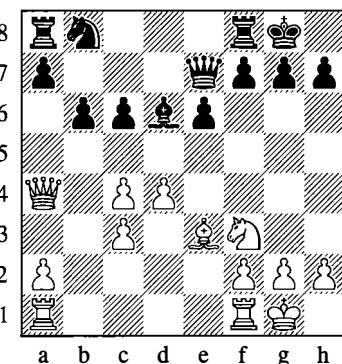


**8. $\mathbb{Q}e2!$   $\mathbb{Q}b7$  9. $\mathbb{Q}f3$   $\mathbb{Q}xf3$  10. $\mathbb{Q}xf3$**

10. $\mathbb{Q}xf3$  would exchange queens. White prefers to keep his queen, though, since it can be used on the queenside.

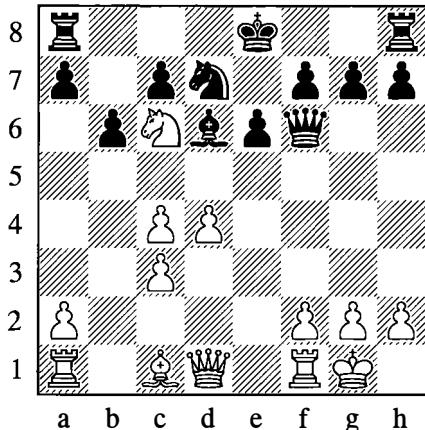
**10... $\mathbb{Q}d8?$**

Instead Stuvik Holm – Van Heirzeele, Reykjavik 2012, continued: 10... $\mathbb{Q}d6$  11. $\mathbb{Q}a4\#$  c6 (11... $\mathbb{Q}d7$  12. $\mathbb{Q}c6$  gives White a firm grip) 12.0-0 0-0 13. $\mathbb{Q}e3$   $\mathbb{Q}e7$



Now 14. $\mathbb{Q}ab1$  would have secured a slight advantage. White threatens to take on b6 and forces Black's queen to defend. Instead Stuvik Holm didn't play  $\mathbb{Q}ab1$  until move 21, when the b-file was completely open.

11.  $\mathbb{Q}e5 \mathbb{Q}d7$  12.  $\mathbb{Q}c6 \mathbb{W}f6$  13. 0-0  $\mathbb{Q}d6$



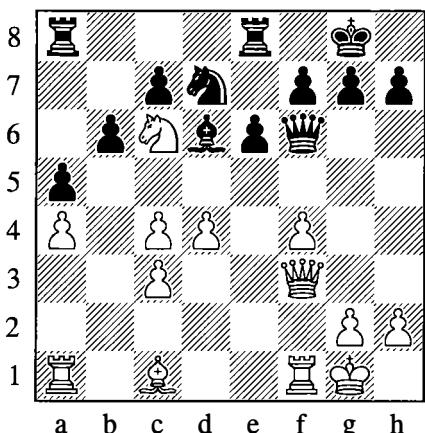
14.  $f4$

This move prepares  $\mathbb{W}f3$ , which increases the control over c6.

14... 0-0 15.  $\mathbb{W}f3 \mathbb{E}fe8$  16.  $a4$

White tries to carry out the pawn lever a4-a5, to exchange the isolated a-pawn and take control of the a-file.

16...  $a5$



Black made a good decision and stopped White's plan. Still, it was in White's favour to insert the pawn moves. If he, for instance, manages to play c4-c5, the pawn on b6 (if

White plays cxb6) or the pawn on a5 (if Black plays ...bxc5) might become weak.

After exchanging the light-squared bishops, White has gained good control over the light squares. It's still not easy to make progress, and the rest of the game is not important for the theme. White won in 47 moves.

The strategy of exchanging off defenders only works if the attack is strategically justified. In the next example, White again plays to increase his control over a weak square by exchanging the opponent's defenders. If White had fewer pieces than Black controlling the key square, every exchange would instead have given the opposite effect.

Eduard Goroviykh – Axel Smith

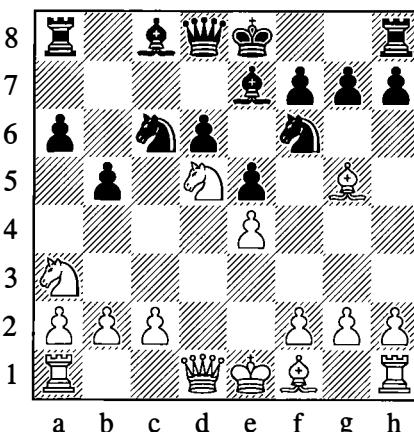
Czech Open, Pardubice 2007

1.  $e4$   $c5$  2.  $\mathbb{Q}f3$   $\mathbb{Q}c6$  3.  $d4$   $cxd4$  4.  $\mathbb{Q}xd4$   $\mathbb{Q}f6$   
5.  $\mathbb{Q}c3$   $e5$

Black 'sacrifices' the d5-square but in return will get some space on the queenside and easy development.

For the moment, White and Black have three minor pieces each which can potentially control d5.

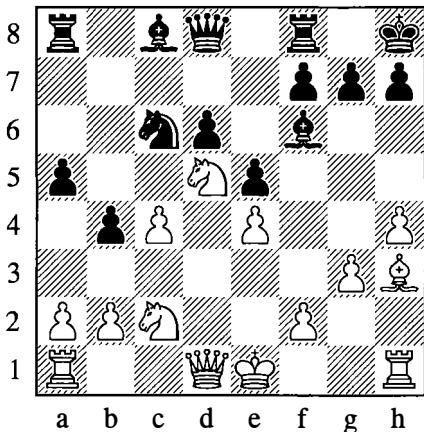
6.  $\mathbb{Q}db5$   $d6$  7.  $\mathbb{Q}g5$   $a6$  8.  $\mathbb{Q}a3$   $b5$  9.  $\mathbb{Q}d5$   $\mathbb{Q}e7$



**10.♕xf6**

White takes the lead – 3-2.

**10...♕xf6 11.c4 b4 12.♗c2 a5 13.g3 0–0  
14.h4 ♘h8 15.♗h3**



This example shows an important characteristic regarding exchanges: the player who strives for the exchange loses time. In this example, White had to play three moves to exchange the light-squared bishops. If possible, it's normally better to let the opponent do the job!

**15...♗xh3?!**

An instructive mistake. 15...♗e6! keeps some influence over d5, since ...fxe6 would be nice to play.

When the bishops are exchanged, White has improved his control over d5 from 3-2 to 2-1. If he reaches the ideal case, 1-0, Black would never be able to capture the piece on d5. The first exchange already gives Black fewer possibilities.

In the position above, White is for the moment unable to control d5 with the bishop. Even if he would have been, let's say from c4, the arguments for exchanging would have been the same.

**16.♗xh3 ♖d7 17.g4 ♕d8 18.♖e2**

White is slightly better.

**18...♗b8 19.b3 ♕b6 20.♗xb6 ♗xb6 21.♗d1  
♗c7 22.♗hd3 ♔e7 23.♗e3 ♗d8 24.♗d2  
f6 25.f3 ♔g8 26.♗d5 ♗xd5 27.♗xd5 ♗c6  
28.♗b5 ♗a8 29.♗d5† ♗f8 30.g5 ♔e7  
31.gxf6† ♕xf6 32.♗e2 g6 33.h5 g5 34.h6  
♗ca3 35.♗b7**

1-0

**Attacking a weakness**

In the last two examples, piece exchanges have been the key in a strategically-justified fight for a weak square. The same method can be used when attacking other weaknesses. A chronic weakness was in the previous chapter defined as something that doesn't disappear easily: a pawn, a square or the king. Hence, it's logical that a strategically-justified attack on the king can be enhanced by exchanging off defending pieces. This is exactly what Alexander Alekhine did, as Lars Bo Hansen pointed out in *Foundations of Chess Strategy*. While Mikhail Tal attacked in a normal manner by throwing all his pieces into the attack, Alekhine attacked by luring away or exchanging the opponent's defenders.

Still, there must be more attacking than defending pieces for the exchanging method to work. Only then is the attack strategically justified.

It doesn't even need to look like an attack on the king when the exchange takes place, as in the following example.

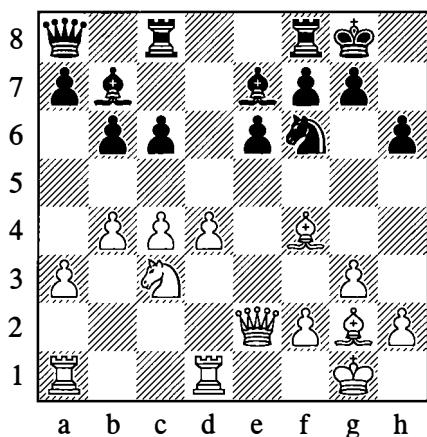
**Axel Smith – Tobias Røstgaard**

H. C. Andersen Mindgames, Odense  
19th May 2012

**1.♗f3 d5 2.g3 ♗f6 3.♗g2 e6 4.0–0 ♕e7 5.c4  
0–0 6.d4 c6 7.♗c2 b6 8.♗d1 ♗b7 9.♗c3  
♗bd7 10.b3 ♗c8 11.e4 dxe4 12.♗g5!**

I have played this move five times – every time my opponent has seemed surprised. That is the advantage of using different move orders to reach the closed Catalan: 1.d4, 1.c4, 1.Qf3 and 1.g3.

12...h6 13.Qgxe4 Qxe4 14.Wxe4?! Qf6  
 15.We2 Qb4? 16.Qb2 Wc7 17.a3 Qe7  
 18.Qc1! Wb8?! 19.Qf4 Wa8 20.b4

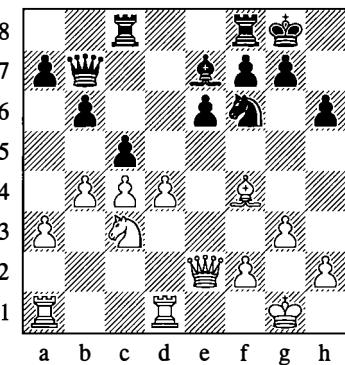


Now if Black played a normal move such as 20...Qfd8? then White could kill the influence of Black's pieces on the long diagonal with 21.c5!.

**20...Qa6?!**

Black stops c4-c5, but at the same time pins himself along the long diagonal.

Instead, he had to go for 20...c5 21.Qxb7 Wxb7.



White has a pleasant choice. 22.dxc5 bxc5 23.b5 gives an advantage with the outside pawn majority. 22.bxc5 bxc5 23.d5 is even better, since Black can't block the passed pawn on the d-file.

How should White proceed after the game move?

**21.Qe4!**

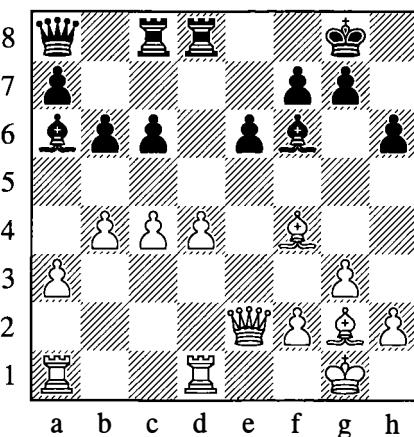
Simple and strong. Since Black has two inactive pieces on the queenside, it's dangerous if White attacks the king. After exchanging Black's knight, White can continue with either Wg4 or Qe4-d3 followed by We4.

Even if White doesn't attack the king, it's good to exchange Black's active pieces and leave him with the passive bishop and queen.

**21...Qfd8**

It doesn't change much if Black exchanges on e4.

**22.Qxf6+ Qxf6**



**23.Qe5!**

Continuing with the same strategy: exchanging off Black's defenders.

**23...Qxe5**

If instead:

23... $\mathbb{Q}e7$

Then my plan was to continue playing on the kingside:

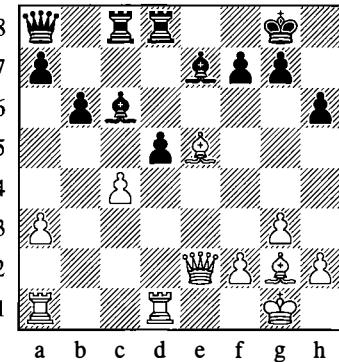
24. $\mathbb{W}g4$   $\mathbb{Q}f8$

After 24...g6 25. $\mathbb{Q}e4$  the threat of  $\mathbb{Q}xg6$  decides.

25. $\mathbb{E}ac1$

White can continue with f4-f5,  $\mathbb{W}xf5$  and  $\mathbb{Q}e4$ . However, even stronger is:

24.b5!  $\mathbb{Q}b7$  25.bxc6  $\mathbb{Q}xc6$  26.d5! exd5



27. $\mathbb{Q}xg7!$

Black is definitely missing the knight that was exchanged!

27... $\mathbb{Q}xg7$  28.cxd5!

With c6 and e7 hanging, Black can't hold on to the piece, but he can try a counterattack.

28... $\mathbb{Q}a4$

28... $\mathbb{Q}xd5$  29. $\mathbb{E}xd5$   $\mathbb{E}xd5$  30. $\mathbb{Q}xd5$   $\mathbb{W}xd5$   
31. $\mathbb{W}g4\#$  picks up the rook on c8.

29. $\mathbb{W}g4\#$

White will be a pawn up with a much safer king.

Black was forced to exchange on e5 to survive, but he didn't want to, since it gives White a good square on d6.

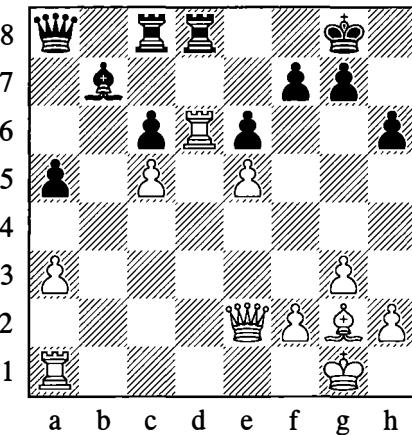
24.dxe5  $\mathbb{Q}b7?$

I would have preferred to sacrifice a pawn with 24... $\mathbb{E}xd1\#$  25. $\mathbb{E}xd1$   $\mathbb{E}d8$  26. $\mathbb{E}xd8\#$   $\mathbb{W}xd8$  27. $\mathbb{Q}xc6$ . There is no compensation, but still better chances to make a draw than in the game.

25.c5 bxc5 26.bxc5 a5

26... $\mathbb{E}d5$  27. $\mathbb{E}xd5$  cxd5 28. $\mathbb{E}ac1$  d4 29. $\mathbb{E}xd4$   $\mathbb{Q}h1$  tries to create play on the white squares, but White simply defends with 30.f4. It's not dangerous at all.

27. $\mathbb{E}d6$

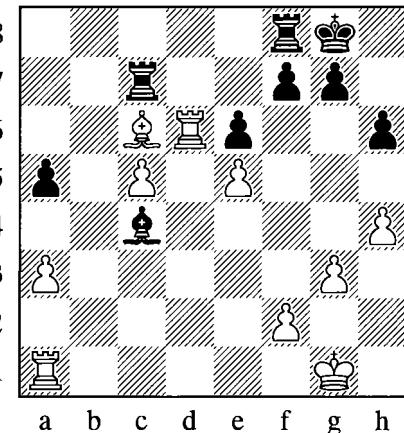


Black's remaining pieces are all passive. With the outpost on d6, White is positionally winning. The rest is easy.

27... $\mathbb{Q}a6$  28. $\mathbb{W}e4$   $\mathbb{E}f8$  29. $\mathbb{W}d4$   $\mathbb{W}b7$  30. $\mathbb{Q}e4$   $\mathbb{W}b5$  31.h4  $\mathbb{W}c4?$

Giving away a pawn doesn't help.

32. $\mathbb{W}xc4$   $\mathbb{Q}xc4$  33. $\mathbb{Q}xc6$   $\mathbb{E}c7$



34.  $\mathbb{B}c1!$   $\mathbb{Q}e2$  35.  $\mathbb{Q}e4$  g6 36. c6  $\mathbb{B}fc8$  37.  $\mathbb{B}c5$   
 a4 38. f3  $\mathbb{B}b8$  39.  $\mathbb{B}d7$   $\mathbb{B}bc8$  40.  $\mathbb{Q}f2$   $\mathbb{Q}a6$   
 41.  $\mathbb{B}xc7$   $\mathbb{B}xc7$  42.  $\mathbb{B}a5$   $\mathbb{Q}c4$  43.  $\mathbb{B}xa4$   $\mathbb{Q}b5$

44.  $\mathbb{B}b4$

1–0

White's exchanging strategy worked well – to save the king, Black was obliged to give White full control over the d6-square.

There are many different reasons to exchange pieces. The following list is a short summary.

- ▲ The opponent's piece is better
- ▲ The opponent has more space
- ▲ You have a worse middlegame or a better endgame
- ▲ With a weak king, it's good to exchange queens
- ▲ With a better pawn majority far away from the king, it is good to exchange heavy pieces
- ▲ Playing against weak pawns, it is good to exchange minor pieces
- ▲ You have two against one of that particular piece
- ▲ There is a strategically-justified attack against a weakness
- ▲ You have a material advantage

### Material imbalances

The most common situation with a material imbalance is when one of the players has won a pawn or a piece, but those are not so interesting. What's usually meant is instead when the two sides have different pieces, like a rook against a bishop or a bishop against a knight.

I think studying such positions is a good way to learn about the pieces. In positions with material imbalances, their weak and strong characteristics become apparent. I will examine bishop against knight, opposite-coloured

bishops, exchange sacrifices, two minor pieces against a rook, queen against two rooks, queen against three minor pieces, and queen against rook and piece. Some of the examples will also include pieces exchanges, others not.

When we started to play chess, we learned a points system to evaluate material imbalances. Today, I would be happy if I could forget it. Much more important than comparing the static value of the pieces that have been captured is looking at what the pieces on the board are doing. A bishop can be stronger than a rook, in some circumstances.

Before writing this chapter, I collected guidelines to the different pieces. However, I soon noticed that there are so many general principles that they always oppose each other in some way. Ideally, the principles should be learned, understood and forgotten. More is written about this in the introduction.

A general rule might even be harmful. One example is "Two pawns on the sixth rank are worth a rook". As I see it, it's almost exclusively concrete factors that determine the evaluation of the position in such cases. The same is valid for the points system: it is useful to know, but every position must be evaluated separately.

Hence I think the examples and principles should be understood, but used only with caution.

Five of the following positions would work well for training games, with a rapid time control or even longer. I think it's good to play with an increment to give the time control less impact. I have marked those suitable positions with: *Training position*. There are four additional training positions at the end of the chapter.

### Bishop against knight

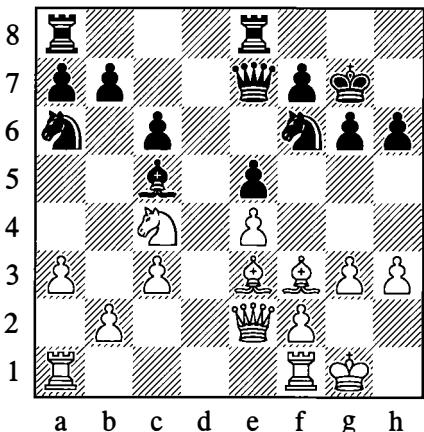
The most common material imbalance is bishop against knight. One important factor

when evaluating such positions is the other bishop – has it been exchanged or not? The bishops are much stronger when they are a pair.

In 1999, GM Larry Kaufman used several hundred thousand games to run statistical analyses, and later used his findings when he helped develop the piece algorithm for the chess engine Rybka. He argued that having the bishop pair would by itself give another  $\frac{1}{2}$  point (half a pawn), compared to the normal points system. That's interesting to know, but still not a strict rule.

It often makes sense to retreat with the pair of bishops to avoid exchanging one of them. The bishops may be passive for some time, but will hit back in the endgame.

### Smith 2012



A typical position from the King's Indian Attack. White has the bishop pair, but for the moment the light-squared bishop is passive and the dark-squared bishop is threatened by an exchange. However, since the bishop pair is mainly an endgame advantage, White does best to retreat.

#### 1. $\mathbb{Q}c1$

This is better than 1.  $\mathbb{Q}d2$ , since it leaves the

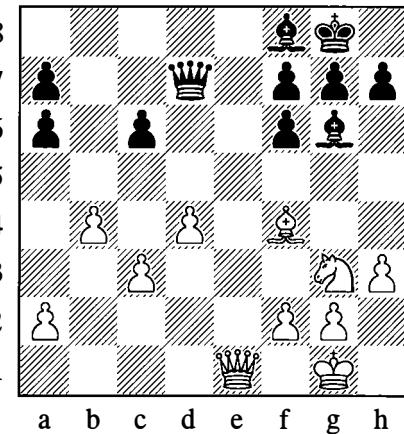
square on d2 free for the knight. White's plan is to gain space on the queenside. It also makes sense to improve the position of the light-squared bishop – maybe with the manoeuvre  $\mathbb{Q}g2-f1$ . White is slightly better.

The bishop pair is mostly strong, but a single bishop risks becoming bad since it can only control half of the squares on the board. The following example shows why it's important to keep other pieces on the board, when having a single bishop against a knight.

### Axel Smith – Rune Myhrvold

Norwegian League, Oslo 3rd April 2011

1.e4 c6 2.d4 d5 3.  $\mathbb{Q}c3$  dx $e$ 4 4.  $\mathbb{Q}xe4$   $\mathbb{Q}f6$   
 5.  $\mathbb{Q}xf6\uparrow$  ex $f$ 6 6.c3  $\mathbb{Q}d6$  7.  $\mathbb{Q}d3$   $\mathbb{W}c7$  8.  $\mathbb{Q}e2$   
 0–0 9.  $\mathbb{Q}e3$   $\mathbb{E}e8$  10.h3  $\mathbb{Q}a6$  11.0–0  $\mathbb{Q}e6$   
 12.  $\mathbb{W}d2$   $\mathbb{E}ad8$  13.b4  $\mathbb{W}d7$  14.  $\mathbb{Q}f4$   $\mathbb{Q}f8$   
 15.  $\mathbb{E}fe1$   $\mathbb{Q}f5$  16.  $\mathbb{Q}xa6$  bxa6 17.  $\mathbb{Q}g3$   $\mathbb{Q}g6$   
 18.  $\mathbb{E}xe8$   $\mathbb{E}xe8$  19.  $\mathbb{E}e1$   $\mathbb{E}xe1\uparrow$  20.  $\mathbb{W}xe1$



From move five, when Black recaptured with the e-pawn on f6, White has played for the endgame. Black's doubled pawns are bad in different ways. The doubled pawns on the a-file are weak since it is difficult to defend the a7-pawn if the queens come off. The doubled pawns on the f-file are not at risk of being lost,

but they damage Black's pawn majority on the kingside; Black will not manage to create a passed pawn there.

Black's pair of bishops is not active for the moment, but he should keep them as they might become strong later.

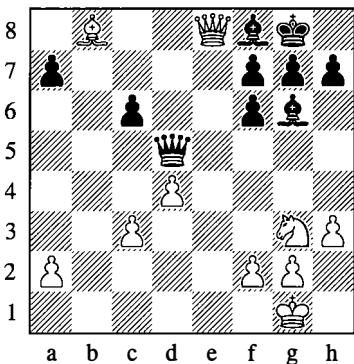
### 20...a5!?

Sacrificing the flank pawns is quite common in the middlegame, but often players forget that it's not the same in the endgame. It's useful to capture such pawns!

Black should have tried to create some play with 20...h5. The plan is ...h4 followed by ... $\mathbb{W}f5$ .

### 21.bxa5 $\mathbb{W}e6$ !?

This exchange is wrong, simply because White is a pawn up. After 21... $\mathbb{W}d8$  I had planned 22. $\mathbb{W}e2$   $\mathbb{W}xa5$  23. $\mathbb{W}e8$ . Black can defend against  $\mathbb{W}d6$ , but it doesn't help: 23... $\mathbb{W}d5$  24. $\mathbb{B}b8$



Now, he doesn't have time to move the a-pawn due to  $\mathbb{B}a7-c5$ , so White wins the pawn.

I still suggest 21...h5.

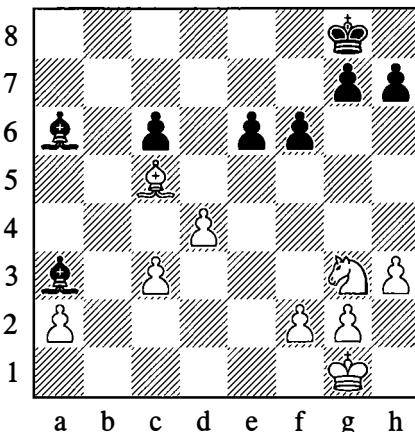
### 22. $\mathbb{W}xe6$ $\mathbb{fxe6}$ 23.a6!

I fix the pawn on a7, in order to exchange my doubled pawn.

### 23... $\mathbb{B}a3$ 24. $\mathbb{B}b8$ $\mathbb{B}d3$ 25. $\mathbb{B}xa7$ $\mathbb{B}xa6$

Black threatens ... $\mathbb{B}c4$ , winning back the pawn.

### 26. $\mathbb{B}c5$



A critical moment in the game. In principle, Black wants to keep the bishop pair, but at the same time he gives White doubled pawns if he exchanges on c5. What is most important?

### 26... $\mathbb{B}xc5$ ?

It was better to keep the pair of bishops with 26... $\mathbb{B}b2$ . White starts with 27. $\mathbb{B}b4$ , then activates his king and finally uses the knight to push the pawn. White is winning or close to winning, but there is still a lot to play for.

### 27.dxc5

The downside of playing with a single bishop will be clearly seen in the game. Black can't challenge White on the dark squares.

### 27... $\mathbb{B}f7$ 28.f4!

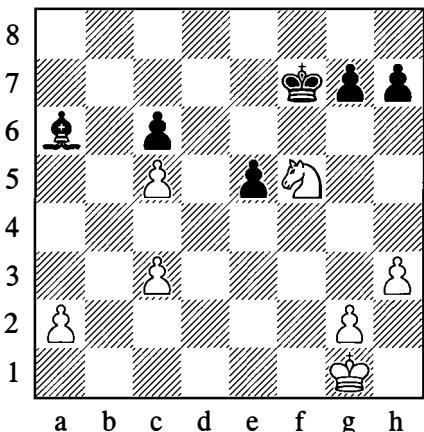
Stopping Black from taking space, since he will get an isolated pawn if he plays ...e5.

### 28...e5

For some time I was worried about 28...g5 29.fxg5 f5 30. $\mathbb{B}f2$   $\mathbb{B}g6$  31.h4 e5 but Black's pawns are actually not dynamic at all.

White wins with 32.a4 ♜d3 33.a5 ♜a6 34.♘e2 f4 35.g3.

### 29.fxe5 fxe5 30.♗f5



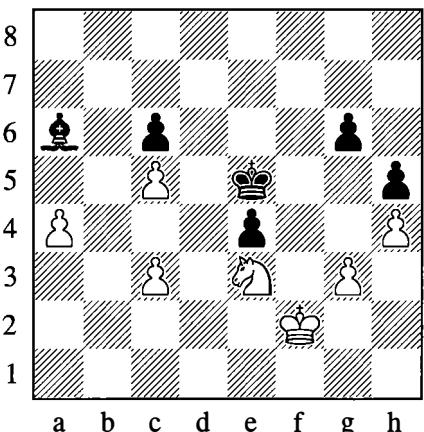
### 30...g6

After 30...♗e6 I wouldn't consider 31.♗xg7† since it gives Black the activity that suits the bishop. White should instead play 31.♘e3.

### 31.♘e3

31.♗d6† ♗e6 32.c4 was easier. For the moment, the knight has to stay on d6 to defend the c4-pawn, but Black's bishop is even worse on a6. White can play ♗e4 followed by a4-a5 and ♘e8-c7.

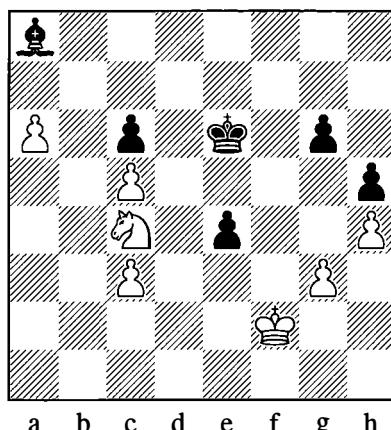
### 31...♗e6 32.a4 e4 33.h4! h5 34.♗f2 ♗e5 35.g3



The only possible way for Black to get an entry point for his king is ...g5, ...♗xg5 and ...h4. But if Black plays those moves, White will have time to manoeuvre the knight and push the a-pawn.

35...♗f6 36.♘c2 ♗e5 37.♘b4 ♗b7 38.a5 ♗f5 39.a6 ♗a8 40.♘c2 ♗e5 41.♘e3 ♗e6 42.♘c4

1–0



A friend noted that the bishop on a8 looks like a soldier on top of a mountain, who is searching for his comrades with binoculars. The problem is that the comrades are far away, and he is looking straight into a tree.

The bishop on a8 moves (well...) on the same colour as the pawn on c6. That's the definition of a bad bishop, especially when there are central pawns fixed on the same colour. However, often it's not so simple to define good and bad bishops – a "bad" bishop might, for example, be fulfilling a vital defensive task.

It's easier to see if a knight is strong or not. They are normally best placed on an outpost in the centre or on a good blockading square. However, it happens less often that strong knights dominate a game. One reason is that the bishops have "the power of exchange" – it's

easier to capture a strong knight with a bishop than vice versa.

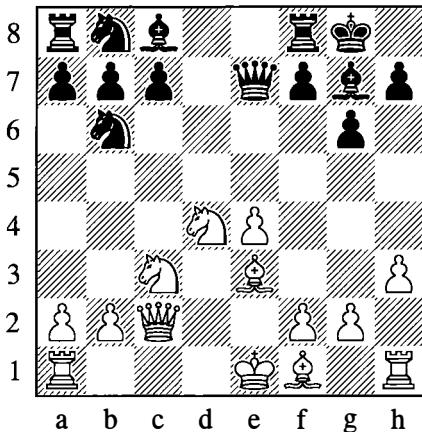
The player who exchanges the bishop for a knight often gets something other than a strong knight in return. It can be a pawn, extra space, time or some other advantage. He should then base his forthcoming play on this imbalance.

The positions where the side with the knight has a development advantage are especially interesting. It's often in that player's interest to open up the position, even if it's said that the bishop is at its best in open positions. The idea is to try to decide the game or get another type of advantage before the endgame, when the bishop reaches its full strength.

The following exchange might be a bit surprising.

### Smith 2012

1.d4  $\mathbb{Q}f6$  2.c4 g6 3. $\mathbb{Q}c3$  d5 4.cxd5  $\mathbb{Q}xd5$   
 5. $\mathbb{Q}d2$   $\mathbb{Q}g7$  6.e4  $\mathbb{Q}b6$  7. $\mathbb{Q}e3$  0–0 8.h3 e5  
 9. $\mathbb{Q}f3$  exd4 10. $\mathbb{Q}xd4$   $\mathbb{W}e7$  11. $\mathbb{W}c2$



11... $\mathbb{Q}xd4$ !?

12. $\mathbb{Q}xd4$   $\mathbb{Q}c6$

Black has given up a strong bishop and weakened his own dark squares. As compensation, he gets easy development. I analysed the position when preparing for one

of Nils Grandelius's games in the European Youth Championship in 2008. GM Stellan Brynell was coach for the Swedish delegation and also took part in the analysis.

11... $\mathbb{Q}xd4$  was Rybka's suggestion, but none of us believed in the move. We tried to keep the pair of bishops by retreating and retreating, starting with:

13. $\mathbb{Q}e3$

A couple of alternatives are:

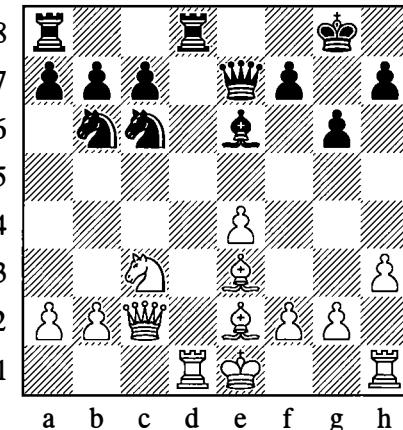
13. $\mathbb{Q}xb6$   $\mathbb{Q}b4$ ! 14. $\mathbb{W}c1$  axb6 gives Black easy play with ... $\mathbb{Q}e6$  and ... $\mathbb{Q}d8$ .

After 13. $\mathbb{Q}d1$   $\mathbb{Q}xd4$  14. $\mathbb{Q}xd4$  two pieces have been exchanged. That's in Black's favour, since he gets a good square on e6 for his bishop: 14... $\mathbb{Q}e6$ . Since White is still behind in development, he will not have any time to use his 4 versus 3 majority on the kingside. In addition 15. $\mathbb{Q}e2$   $\mathbb{W}g5$  is annoying and stops White from castling.

13... $\mathbb{Q}d8$  14. $\mathbb{Q}d1$

Instead, White does best to play 14. $\mathbb{Q}e2$   $\mathbb{Q}d4$  15. $\mathbb{Q}xd4$   $\mathbb{Q}xd4$  16.0–0 with equality.

14... $\mathbb{Q}e6$  15. $\mathbb{Q}e2$



15... $\mathbb{Q}b4$  16. $\mathbb{B}xd8\#$   $\mathbb{B}xd8$  17. $\mathbb{W}b1$   $\mathbb{Q}c4$   
18. $\mathbb{Q}c1$   $\mathbb{W}c5$

White's play has backfired.

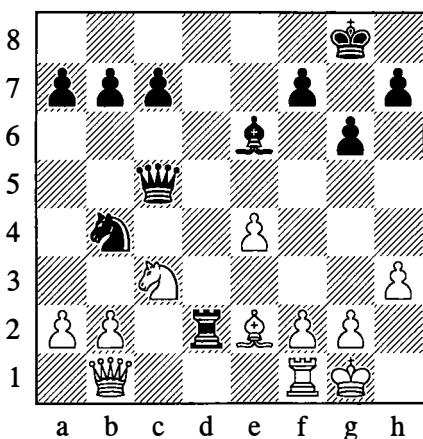
### 19.0–0

Black threatens 19... $\mathbb{Q}a3$  20. $\mathbb{Q}a4$   $\mathbb{W}c3\#$ .

### 19... $\mathbb{Q}d2$

White has to give back the bishop in any case.

### 20. $\mathbb{Q}xd2$ $\mathbb{B}xd2$



Black is slightly better with more active pieces.

White should not try to escape immediately:  
21. $\mathbb{B}d1?$   $\mathbb{Q}d3!$  22. $\mathbb{B}xd2$   $\mathbb{W}xf2\#$  23. $\mathbb{Q}h1$   $\mathbb{Q}e1$  and Black wins a pawn, since White has to give back the rook.

Black also keeps the advantage after 21.a3  $\mathbb{Q}a2$  22. $\mathbb{Q}xa2$   $\mathbb{B}xe2$ .

Grandelius's game never reached the position where he could play 11... $\mathbb{Q}xd4$ !. As I see it, the move sacrifices some material but Black gets an initiative in return. In the variations we analysed, Black didn't try to get a strong knight but instead used his lead in development.

### Opposite-coloured bishops

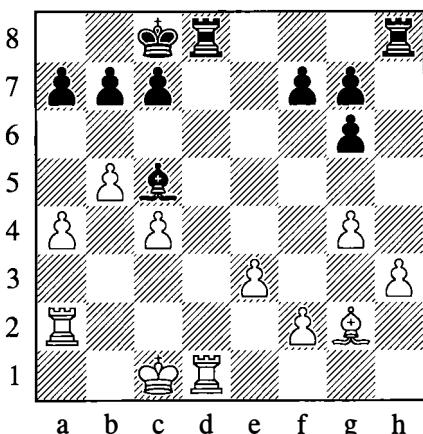
If there are heavy pieces on the board, opposite-coloured bishops favour the side that is playing with an active plan. An attack is much easier to carry out with a clear dominance over either the light or dark squares. To stop such an attack, the defender can place his pawns on the opposite colour to his bishop. Then at least some squares are covered.

Without heavy pieces, it's often possible to build a fortress with the pawns on the same colour as the bishop. This setup tends to be very static, but without heavy pieces to worry about, the king might be able to help the defence.

The most interesting positions are the ones which are between those situations – with heavy pieces but no attack on the king. The defender can try to build a fortress, but it's not clear if he can cover all the weak squares. He can also try to set up an aggressive defence with the pawns on the opposite colour to the bishop, but that is risky since the pawns might become weak.

### Tiger Hillarp – Axel Smith

Svein's 4th Memorial, Oslo 27th June 2011  
*Training position*

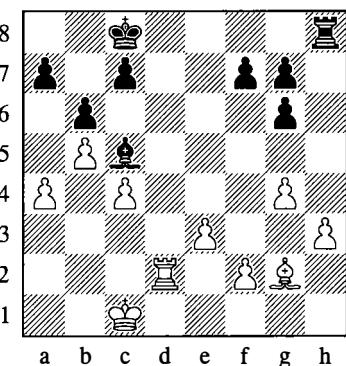


White is a pawn up, but with both pairs of rooks exchanged it would be an easy draw. White's main plan is to advance his pawn majority – the e- and f-pawns. To do this, he needs to support them with the king. For that reason Black should avoid exchanging on d1, since that would help the white king to cross the d-file.

Black also wants to place his king in front of the pawn majority, but he cannot cross the d-file either.

With opposite-coloured bishops, it's an interesting question how Black should arrange his pawns on the kingside. ...g5 followed by ...f6 gives safe pawns, but may allow White's king to penetrate to g6. The more active approach is to play ...f5, but it might just result in additional weaknesses.

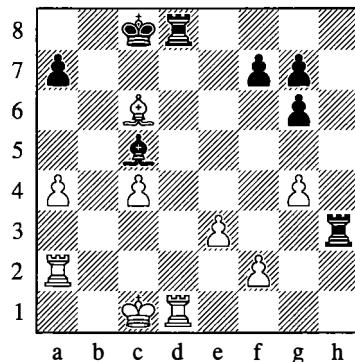
To be completely passive is a bad idea: 20...b6 21.♗ad2! ♜xd2 22.♗xd2



White has exchanged Black's rook on the d-file but keeps the second rook, since Black can't play 22...♜d8 due to 23.♗b7†. White will play ♔d1-e2 and start to advance the kingside pawns. After e3-e4, f2-f4, h3-h4 (with the king on g3) and g4-g5, he will open up with f4-f5. It seems like a winning position.

I think Black would be happy to play ...c6 followed by ...♝c7. The c-pawn is placed on a light square to cover d5.

The immediate 20...c6!? might be worth a try. However, White has several interesting options after 21.bxc6 bxc6 22.♗xc6 ♜xh3.



White can exchange rooks and try to get the bishop to e8 or he can try to keep both rooks to play for an attack on the king. In principle, I don't believe in Black's position, since the bishop isn't stable on c5.

Instead, Black's two main candidate moves are 20...f5 and 20...g5, the active and passive defence.

#### a) 20...f5

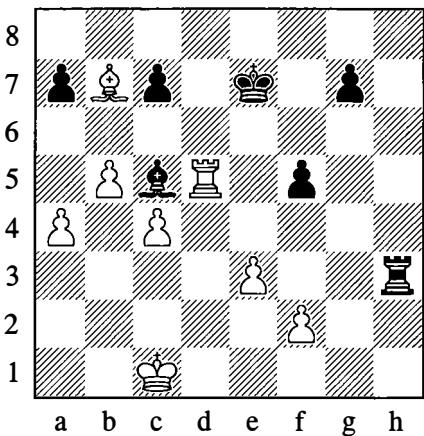
Hillarp thought this was right, saying Black was strategically lost if he defended passively. However, Ulf Andersson, who had his 60th birthday while the game was played, dismissed ...f5 on principle. He thought it just created an additional weakness. Both Hillarp's and Andersson's reasoning sounds logical, but they can't both be right!

I tried to gain some clarity by analysing the position with Grandelius and Tikkanen. Nothing has helped, but here is my best try to find a logical line.

#### 21.♗d5!? ♜xd5 22.♗xd5 ♔d7

22...♜xh3 23.gxf5 gxh5 24.♗e6† ♔d8 25.♗xf5 must favour White, since he gets a passed pawn.

23.♗xb7 ♗xh3 24.♗d2† ♗e7 25.gxf5 gx5  
26.♗d5

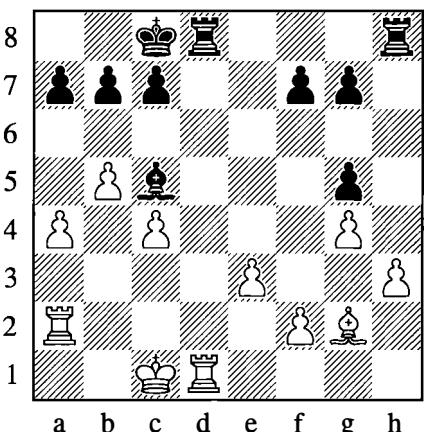


Again, Black's bishop is unstable on c5.

26...♗a3† 27.♗d2

Black has coordination problems – I think White has increased his advantage compared to the starting position.

b) 20...g5



I decided to defend passively.

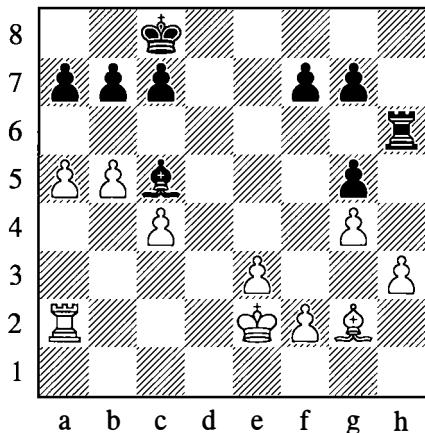
21.a5 ♘xd1†

I didn't play this with confidence, but I couldn't find anything else.

22.♘xd1 ♘h6

22...c6 tries to defend the light squares but backfires: 23.a6! bxa6 24.♗xa6 White wins the pawn since 24...cxb5 loses to 25.♗c6†.

23.♗e2



23...♗d6?!

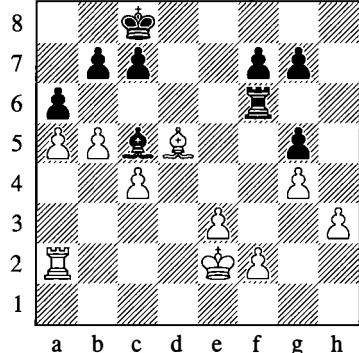
23...c6? still doesn't work due to 24.a6! bxa6 25.bxc6 with a clear advantage.

To avoid being in a "strategically lost" position, I should have fixed White's a-pawn on a5, since it gives long-term possibilities for counterplay.

23...a6! 24.♗d5

White wants to force ...f6 to shut out the black rook.

24...♗f6!



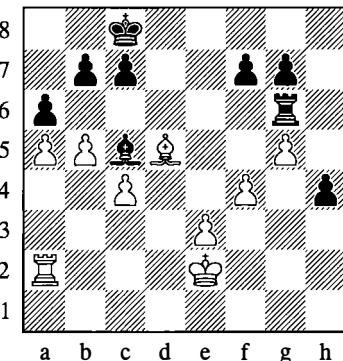
On the next move, Black will play ...c6 to chase away the bishop.

25.h4!

Grandelius pointed out that White has to carry out the pawn lever immediately, before Black solves his coordination problems.

The alternative is 25...a1, when the rook heads for the h-file. After 25...c6 26.bxc6 bxc6 27.♗e4 ♖c7 Black's rook is again free to move. I think it's a draw.

25...gxh4 26.g5 ♘g6 27.f4

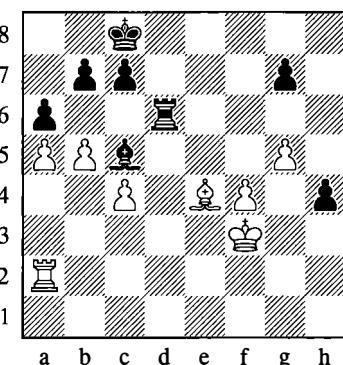


We thought this position was very good for White, but Houdini found:

27...f5! 28.e4

Again there is a calm alternative: 28.♗a1 ♘d6 Black threatens ...axb5. 29.♗g8 ♖d7 With an “aggressive” defence like ...f5, the king has to help defend the pawns. I think it's a draw – Black will get counterplay against the pawn on a5.

28...fxe4 29.♗xe4 ♘d6 30.♗f3



White has a dangerous majority, but there is also a lot of counterplay. It's impossible to say if the position is won for White or drawn.

To stop 23...a6, White could have played 23.♗b2!.

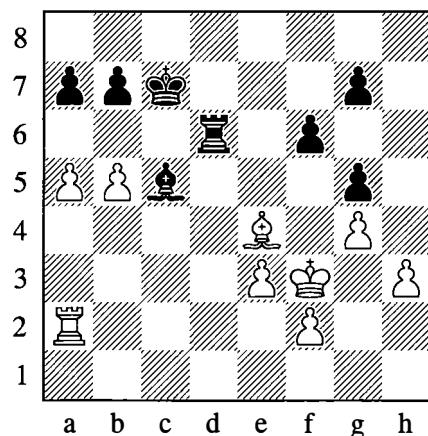
**24.♗d5 f6 25.♗f3**

The king starts to penetrate on the light squares.

**25...c6 26.♗e4 cxb5?**

26...a6! was still possible, with drawing chances.

**27.cxb5 ♖c7**



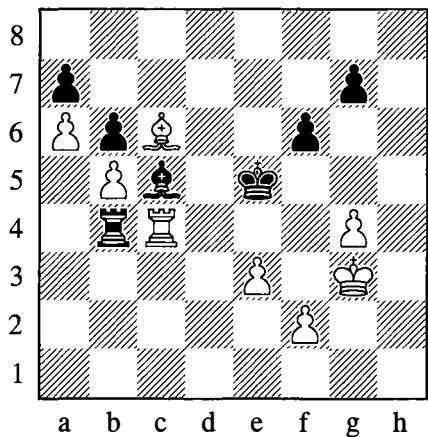
**28.♗c2! b6**

Black has one weakness with the missing pawn on the kingside. The pawn on a7 becomes a second weakness – normally that is what is required to win. Black could still make an easy draw after a rook exchange, but that is just a dream.

**29.♗g3 ♘d1**

I tried to defend actively in the eleventh hour, but in vain.

**30.h4 gxh4† 31.♗xh4 ♖d6 32.a6! ♖e5  
33.♗c4 ♘d2 34.♗g3 ♘b2 35.♗c6 ♘b4**



**36.♕c1**

White's plan is easy: ♕h1-h8-a8xa7.

**36...f5?**

36...♗d6 37.♕h1 ♔e6† 38.f4 ♔f7 39.♕h8 ♕f8 defends the eighth rank, but White would win by advancing his pawns.

**37.gxf5 ♔xf5 38.♕d1 g5 39.♕d7 g4 40.♕xa7 ♕d6† 41.♔g2**

**1-0**

Opposite-coloured bishops favour the player who is active, since he can use the domination on the squares of that colour. The defender has a difficult choice between putting up resistance on those squares by placing his pawns on the same colour as the opponent's bishop, or trying to build a fortress with the pawns on the same colour as his own bishop. In the first case, the question is whether the pawns become weak and in the second whether the opponent will penetrate.

What is the conclusion in the game above – active or passive defence? If only I knew... Hillarp gave me a nice endgame lesson as a gift on my 25th birthday, but it created more questions than answers. Since I need to say something, I would recommend starting with the passive defence (20...g5) but continuing with the active (23...a6!). After that move,

Black has long-term chances of gaining counterplay.

### Exchange sacrifices

The compensation when sacrificing the exchange is often pawn(s) and the pair of bishops, but can also be something else, like an initiative, control over key squares, better pawn structure or a safer king. Also, it's common that the opponent's rooks are temporarily passive, without any open files.

I want to point out two other circumstances that often decide if an exchange sacrifice is good.

The first circumstance is whether the queens are still on the board. In the middlegame, a rook can sometimes be no stronger than a bishop. There is some truth behind the name – *exchange sacrifice*.

It's often only in the endgame that the rook shows its full strength. In many positions, the player with an extra exchange tries to exchange queens and the evaluation of the position depends a lot on if he manages. This is the case in the first example below.

The second circumstance that favours the player who sacrifices the exchange is opposite-coloured bishops. In the previous section I mentioned that opposite-coloured bishops generally favour the side which is active. That's often the one who has sacrificed – there must be some reason why he gave up the exchange! The domination of light or dark squares increases the possibility that his play will succeed.

The side with the extra exchange has a long-term material advantage, but must defend against some play that is not as focused on the long term. The opposite-coloured bishops help such play to succeed, as in the second example.

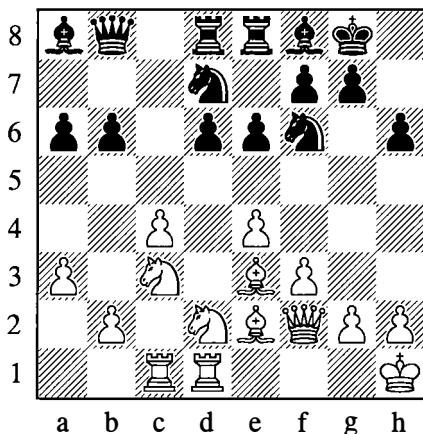
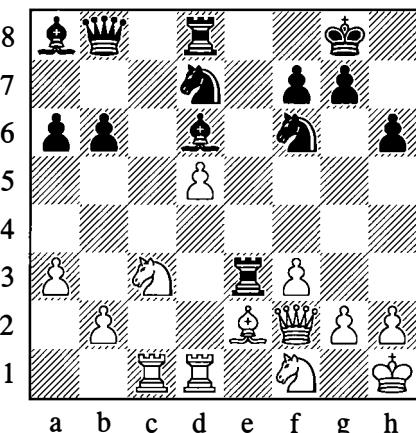
The following game is famous because it was

Karpov's first loss after he became World Champion. 35 years after the game, I recorded Andersson's thoughts about his exchange sacrifice.

### Anatoly Karpov – Ulf Andersson

Milan 28th August 1975

1.e4 c5 2.♘f3 e6 3.d4 cxd4 4.♕xd4 ♘c6  
 5.♘b5 d6 6.c4 ♘f6 7.♘c3 a6 8.♘a3 ♘e7  
 9.♗e2 0–0 10.0–0 b6 11.♗e3 ♘b7 12.♗c1  
 ♗e8 13.♗b3 ♘d7 14.♗fd1 ♘c8 15.♗d2  
 ♘c7 16.♗d1 ♘b8 17.f3 ♘a8 18.♗f1 ♘ce5  
 19.♘ab1 ♘f6 20.♗h1 h6 21.♗dd1 ♘f8  
 22.♗d2 ♘cd8 23.♗f2 ♘ed7 24.a3



*Training position*

"This was a tournament when I wasn't in good form. I won three games and lost four. Against Karpov, I could have lost as well, but that day I played really well. I was in terrible time trouble and neither Karpov nor I believed that I would continue to make good moves. He tried to use my time trouble but it didn't work."

#### 24...d5

"The thematic pawn lever in the hedgehog."

25.cxd5 exd5 26.exd5 ♘d6 27.♗f1 ♘xe3

"I didn't have many minutes left, not more than three. Karpov chose to take back with the knight. If he takes with the queen it would probably peter out to a draw, since I win back the pawn with ...b5 and ...♗b6. He gambled but my moves stayed at a decent level. Surprisingly – to both of us. If I had more time, I think he would have taken with the queen – he must have understood that it was dangerous not to. If I was White, I would have taken with the queen without thinking! I still like to sacrifice the exchange."

#### 28.♘xe3 ♘xh2

"I get such nice squares. The whole diagonal! My pieces also get coordinated. Well, White also has okay coordination, but he will lose it shortly. After that, my position will be fantastic; I can just improve and improve."

29.♗f1 ♘f4 30.♗c2 b5 31.♗d3 ♘b6 32.♗e4  
 ♘c4 33.a4 ♘e8 34.axb5 axb5 35.♗e2 ♘e5  
 36.♗c5 ♘d6 37.♗a2 ♘dxe4 38.fxe4 ♘d6  
 39.♗c2 ♘e5 40.g3 ♘e8 41.♗d1 ♘b7  
 42.♗g1 ♘h7 43.♗c1 ♘g5 44.♗d2 ♘b4  
 45.♗f2 ♘xd2 46.♗xd2 ♘xe4† 47.♗xe4  
 ♘xe4 48.♗e2 ♘c8 49.♗c3 ♘e1 50.♗e2  
 ♘a1 51.♗d4 ♘d8 52.♗c6 ♘d7 53.♗d6 ♘e8  
 54.♗f4 ♘c8 55.b4 ♘h3 56.♗e4 ♘f5 57.♗e3  
 ♘c2 58.g4 ♘d7 59.♗e4 ♘b3 60.♗d3  
 ♘b2 61.♗e4 ♘a8 62.♗e3 ♘a2 63.d6 ♘a8

64.  $\mathbb{B}e4$   $\mathbb{Q}c6$  65.  $\mathbb{W}d4$   $\mathbb{W}b1$  66.  $\mathbb{B}e7$   $\mathbb{W}h1$   
 67.  $\mathbb{W}f4$   $\mathbb{W}g2\uparrow$  68.  $\mathbb{Q}e1$   $\mathbb{B}a1\uparrow$  69.  $\mathbb{Q}d2$   $\mathbb{W}d5\uparrow$   
 70.  $\mathbb{W}d4$   $\mathbb{B}a2\uparrow$  71.  $\mathbb{Q}c3$   $\mathbb{W}f3\uparrow$  72.  $\mathbb{B}e3$   $\mathbb{B}a3\uparrow$   
 73.  $\mathbb{Q}d2$   $\mathbb{B}a2\uparrow$  74.  $\mathbb{Q}e1$   $\mathbb{W}h1\uparrow$  75.  $\mathbb{Q}f2$   $\mathbb{W}g2\uparrow$   
 76.  $\mathbb{Q}e1$   $\mathbb{W}h1\uparrow$  77.  $\mathbb{Q}f2$   $\mathbb{B}a1$  78.  $\mathbb{B}c3$   $\mathbb{W}g2\uparrow$   
 79.  $\mathbb{Q}e3$   $\mathbb{W}f3\uparrow$

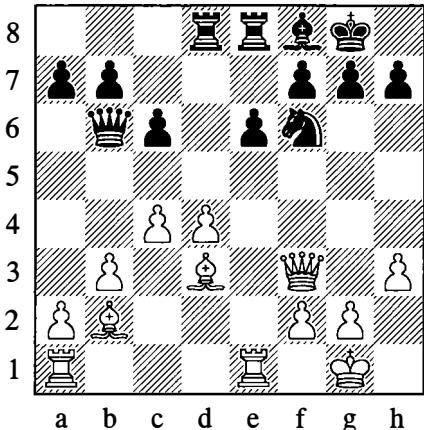
0–1

In this game, Andersson managed to keep the queens on the board all the way from the exchange sacrifice on the 27th move until the end of the game 52 moves later. However, it's possible to play an exchange down even without the queens on the board.

### Axel Smith – Nikola Sedlak

Istanbul Olympiad 29th August 2012

1.  $\mathbb{Q}f3$  d5 2. d4  $\mathbb{Q}f6$  3. c4 c6 4.  $\mathbb{Q}c3$   $\mathbb{W}b6$  5. e3  
 $\mathbb{Q}g4$  6. h3  $\mathbb{Q}xf3$  7.  $\mathbb{W}xf3$  e6 8.  $\mathbb{Q}d3$   $\mathbb{Q}bd7$   
 9. 0–0  $\mathbb{Q}e7$  10.  $\mathbb{B}d1$  0–0 11. b3  $\mathbb{Q}fe8$  12.  $\mathbb{Q}b2$   
 $\mathbb{Q}f8$  13. e4 dx4 14.  $\mathbb{Q}xe4$   $\mathbb{B}ad8$  15.  $\mathbb{Q}xf6\uparrow$   
 $\mathbb{Q}xf6$  16.  $\mathbb{B}e1$

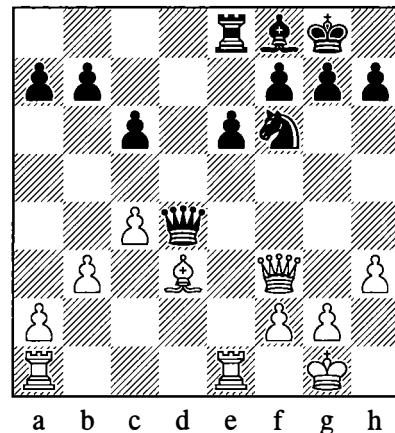


Training position

If I had played 15.  $\mathbb{B}e1$  without exchanging knights, the d-file would not be open for Black's rook. The reason that I took on f6 was actually a bit embarrassing.

It was quite far to the toilets at the Olympiad in Istanbul. Even running back and forth took 2–3 minutes. When Sedlak left the board, I saw my chance to earn a few minutes. Not only would his clock be ticking, but I could also decide on my next move while he was away. He came back after five minutes, and when he took back on f6 with the knight I made my next move immediately. However, the consequences of my early exchange were bigger than I expected.

16...  $\mathbb{B}xd4\uparrow$ ! 17.  $\mathbb{Q}xd4$   $\mathbb{W}xd4$



Fair exchange is no robbery; both players were satisfied.

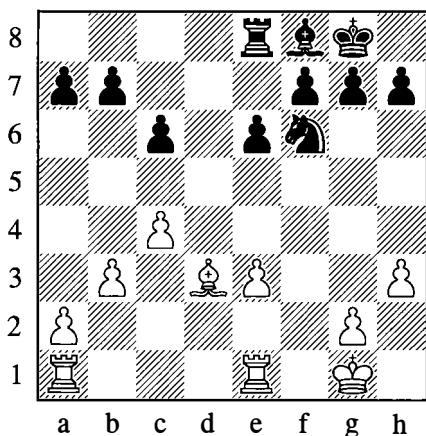
When I played 16.  $\mathbb{B}e1$ , I thought this position was slightly better for White. Black doesn't have anything special in compensation for the exchange – only a pawn and the opposite-coloured bishops. The problem is that White has a hard time finding a plan. It would be ideal to exchange rooks – since I have two – or to exchange off my light-squared bishop. However, those plans aren't achievable, because Black will not allow  $\mathbb{R}d8$  and there is nothing to exchange the bishop for! Instead, White has to open more files for the rooks. It is difficult to do anything on the queenside, since Black controls the dark squares. Instead, White's best plan is to push g2-g4-g5. It may

not look so convincing, but there is nothing else.

### 18. $\mathbb{W}e3?$ !

Consequently, the best move was 18.g4. Sedlak evaluated the position as equal; I believe modestly in White.

### 18... $\mathbb{W}xe3$ 19. $fxe3$ ?



19.  $\mathbb{E}xe3$  would be equal. Black's dark-squared control on the queenside hinders White from opening files, and Black also controls the entry squares on the d-file.

My last two moves have involved a queen exchange and a change in the pawn structure. Very critical moments, but I didn't ponder much. I was blinded by Black's possibility to play ... $\mathbb{A}d4$  followed by ...e5. If he is allowed to do this, the bishop will be at least as strong as one of my rooks and I would be happy if I could sacrifice back the exchange. The e5-square didn't worry me as much. In addition, I was happy that the queens came off, something that's usually good news when an exchange up.

There are two reasons why my decision was terrible. The first is that it's actually wrong on principle to exchange the last piece that could defend the dark squares, such as e5 and g5.

Black has strategically-justified play on the dark squares, which means that he increases his control with every exchange.

It is good for White to reach the endgame, but the problem is that a rook exchange is just a fantasy. That takes us to the second reason why 19.fxe3 was bad. It makes White's only plan, to advance the kingside pawns, useless. Instead, White has an e-pawn that will never manage to exchange itself.

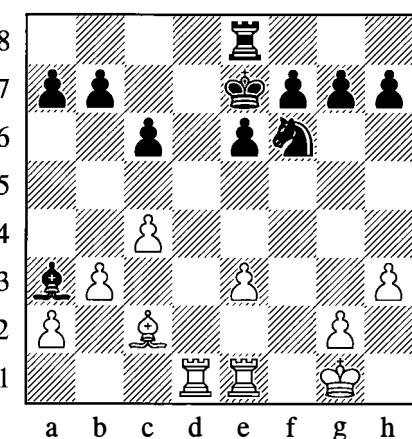
### 19... $\mathbb{A}a3!$

Sedlak stops me from playing a2-a3 and b3-b4, to create some counterplay. In the post-mortem, he was barely interested in seeing the rest of the game. He simply evaluated the position as lost for White! That may be a bit over the top, but Black's position is at least clearly preferable.

At this point in the game, it began to dawn on me what I had done, and I suddenly felt robbed. But exchanged is exchanged – I can't get back my dark-squared bishop.

### 20. $\mathbb{E}ad1$ $\mathbb{Q}f8$ 21. $\mathbb{A}c2$ $\mathbb{Q}e7$

The king defends d8 to stop White's dream of exchanging rooks.



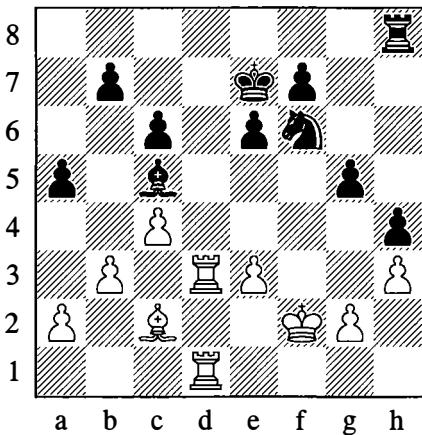
### 22. $\mathbb{E}d3$

White threatens 23.b4, which would open a much-needed file.

**22...a5! 23.♗ed1 h5 24.♔f1?!**

24.g3 was better. Black will try to win with ...g5-g4 followed by attacking the pawn on g3, but at least he is not clearly winning.

**24...h4 25.♗e2 ♜h8 26.♗f3 ♜c5 27.♗f2 g5**

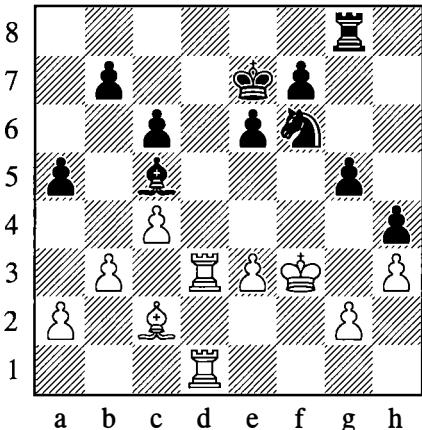


I have almost nothing that defends my kingside. It would have been better to put the bishop on f3.

**28.♗f3?!**

My king ran into problems in the game. 28.♗d2 g4 29.♗h1 was best but Black is still better.

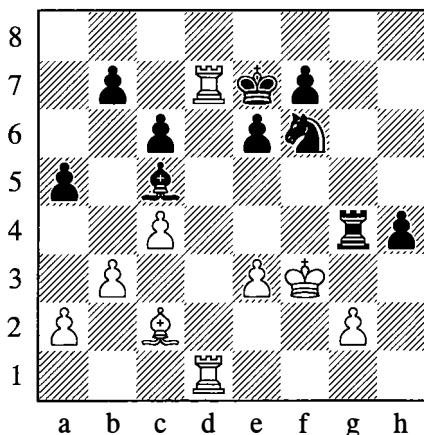
**28...♜g8**



**29.♗d2?**

The decisive mistake, simply miscalculating the variation that follows in the game. Better was 29.g4 hxg3 30.♗xg3, with a clear advantage for Black.

**29...g4† 30.hxg4 ♜xg4† 31.♗d7†**



**31...♔f8**

The rest is as easy as it is painful.

**32.♗xb7 ♜g3† 33.♗e2 ♜xg2† 34.♗d3 h3 35.♗c3 h2 36.♗h1 ♜xe3 37.♗d1 ♜f4 38.♗d3 ♜d2† 39.♗c3 ♜e4#**

It is fitting that White's king has four dark squares to choose between, but all of them are covered. The exchange sacrifice showed its full strength when there were opposite-coloured bishops on the board.

### Different numbers of pieces

Material imbalances where one of the players has more pieces than his opponent are special cases. With two minor pieces against a rook, and two rooks or three minor pieces against a queen, the player with more pieces has a static advantage. If he manages to get good outposts for the pieces, he will usually control the position.

What the player with the single piece wants to do is create dynamic play. This is important to remember, and a recurring theme in the following examples. The pawns are the most common tool in creating dynamic play: either playing for passed pawns or (first) attacking weak pawns in the opponent's camp. The pawn structure is thus of utmost importance in all these positions.

The Swedish Grandmaster Tom Wedberg has pointed out that there is an advantage in having only one piece: your full force can move in only one move.

If three pieces are badly coordinated, it can take several moves to rearrange them, but a single queen can't have bad coordination! I will return to this subject in the upcoming examples.

### Two minor pieces against a rook

The player with a rook against two minor pieces often has one or two pawns as compensation. However, as pointed out by Silas Lund in his great book *Rook vs. Two Minor Pieces*, dynamic factors are much more important than the number of pawns. As mentioned in the previous section, the player with the rook needs to create dynamic play, often with the pawns.

The player with the rook should also try to exchange pieces, for many different reasons:

- ▲ It becomes easier to create passed pawns – the most common kind of dynamic play
- ▲ There are more open files for the rook.
- ▲ It becomes difficult for the minor pieces to defend all the entry squares, and also all the pawns.
- ▲ As mentioned in the quote from Wedberg, the two pieces are slower to move. That is more important the fewer pieces there are on the board, since each piece must cover a bigger part of the board.

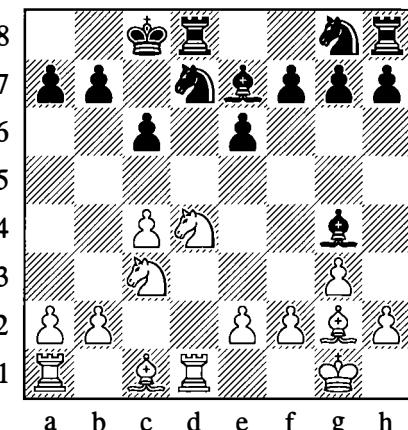
In the following game there is one variation with a position that illustrates the kind of play that suits the rook.

#### Aryan Tari – Jon Ludvig Hammer

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Nordstrand Rapid, Oslo 19th August 2012

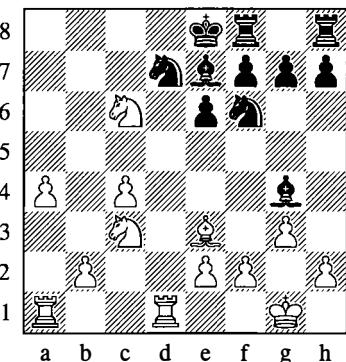
1.  $\mathbb{Q}f3$  d5 2. g3 c6 3.  $\mathbb{Q}g2$   $\mathbb{Q}f5$  4. 0–0 e6 5. c4  $\mathbb{Q}e7$  6. d3 dx $c$ 4 7. dx $c$ 4  $\mathbb{W}xd1$  8.  $\mathbb{B}xd1$   $\mathbb{Q}d7$  9.  $\mathbb{Q}d4$   $\mathbb{Q}g4$  10.  $\mathbb{Q}c3$  0–0–0



**11.♕xc6! ♜b6**

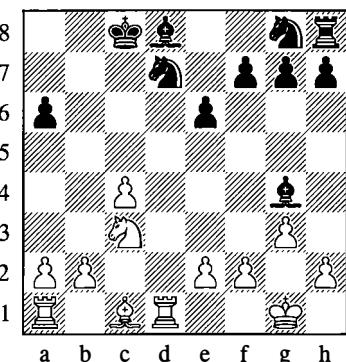
If Black accepts the sacrifice with 11...bxc6 12.♕xc6, then he has two ways to continue.

- a) 12...♝f8 13.♛xa7† ♔d8 14.♛e3 White is usually better in this kind of position with three pawns against a piece. It doesn't help that Black also has a lot of problems developing. 14...♝gf6 15.♛c6† ♔e8 16.a4



The pawn is unstoppable! White wins.

- b) 12...a6 13.♛xd8 ♚xd8



A position with two minor pieces against a rook has arisen. The first thing to look for in such positions is whether the player with the two minor pieces has outposts. In this position, Black doesn't have any clear outposts and will not be able to coordinate his minor pieces against one target. The second thing to look for is whether the pawns can create

dynamic play. They can – if White advances his queenside pawns, he will get two connected passed pawns.

White is slightly better. His only risk is that he will weaken squares when he advances on the queenside, so he has to be careful.

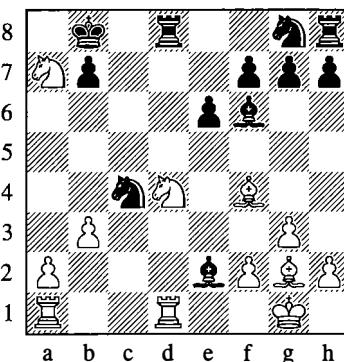
The game continuation keeps the material equal, but White gets a strong initiative. I'll give the next few moves.

**12.♗g2 ♜xc4 13.b3 ♔f6**

After 13...♜b6 14.♛e3 Black's queenside will collapse when White plays ♜db5 on the next move.

**14.bxc4?**

14.♛cb5! would have won: 14...♝xe2 (Black can also try 14...♝xd4 15.♝xd4 ♜xd4 16.♝xd4 ♜b6 17.♝f4, but at the very least White has ♜c1† followed by ♜xb7.) 15.♛xa7† ♔b8 16.♝f4†



16...♝xa7 (Or 16...e5 17.♝dc6† bxc6 18.♝xc6† ♔c7 19.♝xd8 ♜xd8 20.♝xe5† ♜xe5 21.♝ac1† and the bishop on d8 drops off.) 17.♝b5† ♔b6 18.♝xd8 ♜xd8 19.bxc4 Black can't defend the queenside.

**14...♝xd4**

Black is back in the game, and the rest of the moves are another story.

**15.♝xd4 ♜xd4 16.♝d2 ♜e7 17.♝b1 ♜c6**

18.  $\mathbb{Q}b5$   $\mathbb{Q}c5$  19.  $\mathbb{Q}e3$   $\mathbb{Q}xe3$  20.  $fxe3$   $\mathbb{E}d8$   
 21.  $c5$   $\mathbb{Q}a5$  22.  $\mathbb{Q}xa7\uparrow$   $\mathbb{Q}c7$  23.  $\mathbb{Q}b5\uparrow$   $\mathbb{Q}b8$   
 24.  $\mathbb{Q}d6$   $\mathbb{Q}xe2$  25.  $\mathbb{Q}xb7$   $\mathbb{Q}xb7$  26.  $\mathbb{Q}xb7\uparrow$   
 $\mathbb{Q}c8$  27.  $\mathbb{Q}xf7$   $g5$  28.  $\mathbb{Q}xh7$   $\mathbb{Q}c4$  29.  $\mathbb{Q}f3$   $\mathbb{Q}d2$   
 30.  $h4$   $gxh4$  31.  $gxh4$   $\mathbb{Q}xa2$  32.  $h5$   $\mathbb{Q}a5$  33.  $h6$   
 $\mathbb{Q}xc5$  34.  $\mathbb{Q}a7$   $\mathbb{Q}d3$  35.  $e4$

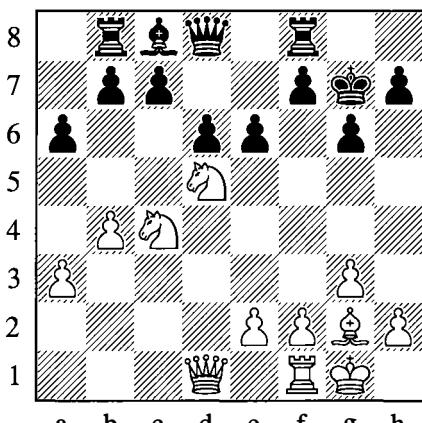
1–0

Given a choice, it is usually best to have two bishops against a rook, and then next best is bishop and knight against a rook, and last is two knights against a rook. The following game is an example of the latter. When the material imbalance arises, the position is balanced and a good illustration of typical play.

### Nils Grandelius – Alexander Ipatov

World Junior Championship, Athens  
 7th August 2012

1.  $d4$   $\mathbb{Q}f6$  2.  $c4$   $e6$  3.  $\mathbb{Q}f3$   $\mathbb{Q}c6$  4.  $a3$   $d6$  5.  $\mathbb{Q}c3$   
 $g6$  6.  $g3$   $\mathbb{Q}g7$  7.  $\mathbb{Q}g2$  0–0 8. 0–0  $a6$  9.  $d5$   $\mathbb{Q}a5$   
 10.  $\mathbb{Q}d2$   $\mathbb{Q}b8$  11.  $b4$   $\mathbb{Q}xc4$  12.  $\mathbb{Q}xc4$   $\mathbb{Q}xd5$   
 13.  $\mathbb{Q}xd5$   $\mathbb{Q}xa1$  14.  $\mathbb{Q}h6$   $\mathbb{Q}g7$  15.  $\mathbb{Q}xg7$   $\mathbb{Q}xg7$



*Training position*

The exchanging operation seen in the previous moves can happen in various positions in the King's Indian. White gets two knights for a

rook and two pawns. The position doesn't suit the rooks – there are no open files. At the same time, it doesn't suit the minor pieces either, since there are no outposts and no attack on the king.

What Black needs to do is keep a dynamic pawn centre and advance with ...d5 and ...e5 without creating any weak squares. Ideally, he will manage to create passed pawns on both the c- and d-files. White, in contrast, wants to fix the centre by playing f2-f4 and e2-e4-e5.

Ulf Andersson's intuition says that White is better, even though it might be difficult to play. However, when we analysed the position, we didn't reach a clear conclusion.

### 16. $\mathbb{Q}d4\uparrow?$

The game move is very natural, centralizing the queen when Black can't answer with ... $\mathbb{Q}f6$ . However, stronger might be:

### 16. $\mathbb{Q}f4!$ ?

White plans e2-e4 on the next move to control Black's d-pawn.

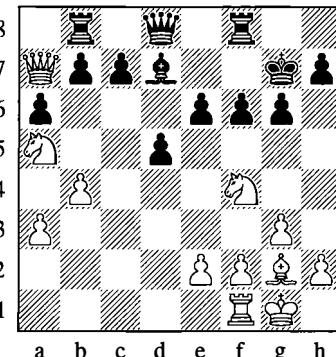
### 16... $d5$

If 16... $e5$  17.  $\mathbb{Q}d5$ , White threatens e2-e4. Black's best is probably 17... $f5$ , but White can start to undermine the centre with 18.  $f4$ .

### 17. $\mathbb{Q}d4\uparrow!$

This starts a sequence of forced moves that are not so natural to me, but it leads to a good result.

17... $f6$  18.  $\mathbb{Q}a7$   $\mathbb{Q}d7$  19.  $\mathbb{Q}a5$



19... $\mathbb{W}c8$

19...b6 20. $\mathbb{Q}c6!$   $\mathbb{Q}xc6$  21. $\mathbb{Q}xe6\#$  wins Black's queen.

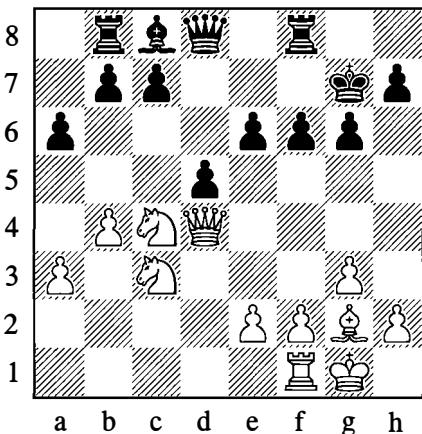
20. $\mathbb{B}c1$

Black's centre pawns are tamed; it is enough to claim an advantage.

16...f6 17. $\mathbb{Q}c3$

It would be a strategic mistake to block the e-pawn with 17. $\mathbb{Q}de3$ .

17...d5



Where should White move his knight?

18. $\mathbb{Q}a5?$

A tactical mistake. 18. $\mathbb{Q}b2$  is better. Before examining that move, I will show the game continuation.

18...c5! 19. $\mathbb{W}f4 \mathbb{Q}d7!$

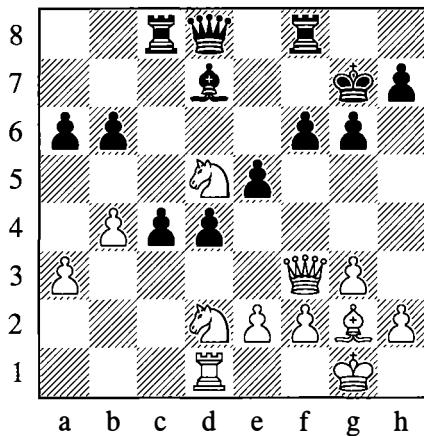
Grandelius overlooked this move; now he has to retreat and is simply worse.

20. $\mathbb{B}d1?$

20. $\mathbb{Q}b3$  cxb4 21.axb4 was the lesser evil but the position has already changed in Black's favour. He has an open file for the rooks and he can create a passed pawn on the a-file. Meanwhile White has not managed to create any outposts for his minor pieces.

20...b6 21. $\mathbb{Q}b3$  c4 22. $\mathbb{Q}d2$  e5 23. $\mathbb{W}f3$  d4

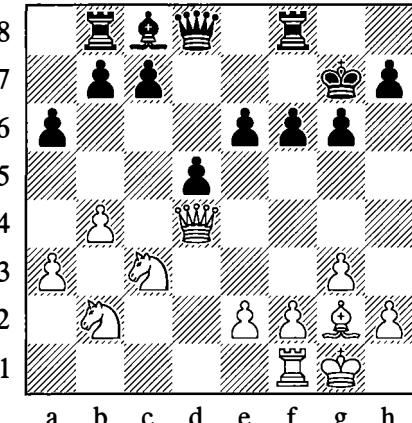
24. $\mathbb{Q}d5$   $\mathbb{B}c8$



A completely different position from the first diagram! Black is clearly winning.

25.e4 c3 26. $\mathbb{Q}f1$   $\mathbb{B}b5$  27.h4 f5 28. $\mathbb{B}c1$   $\mathbb{Q}c4$   
29.h5 b5 30.hxg6 hxg6 31.g4  $\mathbb{W}g5$  32. $\mathbb{W}g3$   $\mathbb{B}fe8$  33.gxf5  $\mathbb{W}xg3$  34.f6#  $\mathbb{Q}f8$  35.fxg3  $\mathbb{Q}xd5$  36.exd5 e4 37.d6  $\mathbb{E}cd8$  38.g4 e3 39.g5 e2 40. $\mathbb{Q}f2$  d3 41. $\mathbb{Q}e3$   $\mathbb{E}xe3$  42. $\mathbb{B}h1$  e1=+=  
0-1

The interesting position would have appeared after 18. $\mathbb{Q}b2$ .

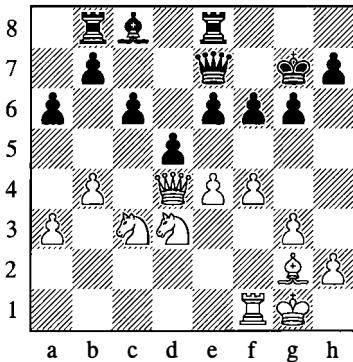


The knight will continue to d3, from where it controls both Black's pawn levers: ...b6

followed by ...c5, and ...c6 followed by ...e5. White still cannot create effective play against the black king, but he can try to fix Black's pawns.

### 18...b6!

This is the best move. 18...c6?! prepares ...e5 but White is first with 19.f4!  $\mathbb{W}e7$  20. $\mathfrak{Q}d3$   $\mathbb{E}e8$  21.e4.



White threatens e4-e5 with a bind, and if Black pushes ...e5 himself, the queen can move with gain of tempo. 21...e5 22.fxe5 fxe5 23. $\mathbb{W}a7!$   $\mathfrak{Q}e6$  24.exd5 cxd5 25. $\mathfrak{Q}xe5$  and Black's proud pawn structure has collapsed.

### 19. $\mathfrak{Q}d3$ $\mathbb{W}d6$

Black will play ... $\mathfrak{Q}d7$  or ... $\mathfrak{Q}b7$  followed by ... $\mathbb{E}c8$  and ...c5. White has one way to fight against this.

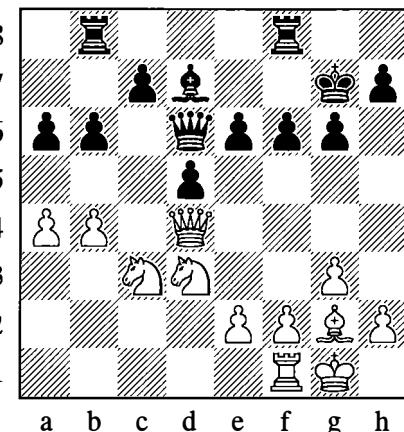
### 20.a4

20.e4?! is a mistake, because after 20...dxe4 White has to take back with the queen since he doesn't want to exchange queens. After 21. $\mathbb{W}xe4$   $\mathfrak{Q}b7$  22. $\mathbb{W}e3$   $\mathfrak{Q}xg2$  23. $\mathbb{W}xg2$   $\mathbb{E}bd8$ , Black has an open file for the rooks, while White's knights are still passive.

### 20... $\mathfrak{Q}d7$

Black can stop b4-b5 with 20...c6 but the pawn move has two disadvantages. Firstly, it weakens the c5-square by no longer being able

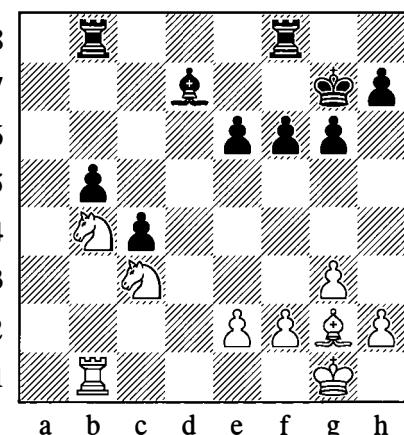
to recapture with ...cx b6. Secondly, it leaves the queen undefended, which allows e2-e4. White starts with 21.f4  $\mathfrak{Q}d7$  and can then get an advantage after either 22.e4 or 22.a5.



### 21.b5 axb5 22.axb5 c5! 23.bxc6 $\mathbb{W}xc6$

23... $\mathfrak{Q}xc6?$  is a mistake, since White plays 24.e4! then exchanges on d5 and gets good outposts.

### 24. $\mathbb{E}b1$ $\mathbb{W}c4??$ 25. $\mathbb{W}xc4$ dxc4 26. $\mathfrak{Q}b4$ b5



The final position of our analysis. The position is balanced; White can't do anything active but he does control all the key squares.

I think the variation is a good illustration of typical play with two minor pieces against a

rook and pawn(s). The player with the minor pieces tries to create outposts, while the player with the rook tries to open files. He also wants to push his pawns, but has to be careful to avoid weakening squares.

### Queen against two rooks

The queen's favourite activity is capturing undefended pawns. Due to its mobility, it creates double threats more easily than other pieces. The rooks are strong when attacking isolated pawns. For that reason, it's generally to the rooks' advantage if the minor pieces are exchanged. The minor pieces are otherwise natural defenders of the pawns.

The pawn structure is an important issue: the player with the weakest pawns often has the worse position.

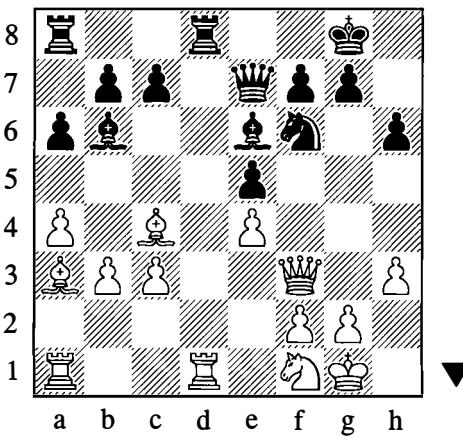
Both the rooks and the queen have weak sides. The queen is the worst blockading piece and is therefore not good when fighting against a passed pawn. The rooks are, on the other hand, often quite helpless if they lack open files. That is why the combination of a queen and some pawns is a very strong attacking unit against a castled king – the rooks are not there to defend.

The first example is illustrative since it shows both cases: a position which is superior for the rooks and a position where the queen has both a weak king and weak pawns to play against.

### Axel Smith – Daniel Kovachev

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Norwegian Championship, Oslo 6th July 2011



**16...♝xd1!!**

In fact the game ended in a draw after 16...♝e8 17.♜xe6 ♛xe6 18.c4 ♜d4.

Instead, Black could have taken on d1 before moving the queen. I can't take back with the rook, since the bishop on a3 hangs, and after 17.♝xd1 ♛e8 I have some coordination problems. Either I lose control over the d-file after 18.♛e2 ♜d8 or I get bound to the defence of the b3-pawn after 18.♜xe6 ♛xe6.

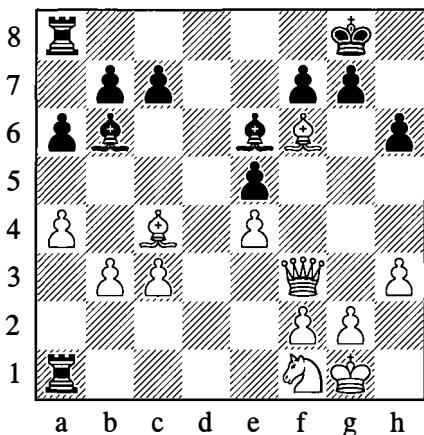
However, White would of course try the critical move.

### 17. $\mathbb{Q}xe7 \mathbb{B}xa1$

With a queen for two rooks, White would like to get at least an extra pawn.

### 18. $\mathbb{Q}xf6!$

18.  $\mathbb{Q}xe6 fxe6$  19.  $\mathbb{Q}xf6?$  isn't doing the job. Black has 19...  $\mathbb{E}f8!$  which takes back on f6 and wins the pawn on f2.

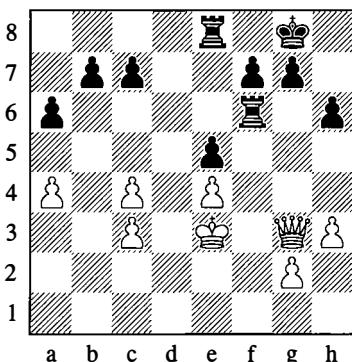


### 18... $\mathbb{Q}xc4!$

After 18...  $\mathbb{Q}xc4?$  19.  $\mathbb{Q}xe6 fxe6$  20.  $\mathbb{W}xf6$  the queen does what it's best at: capturing weak pawns.

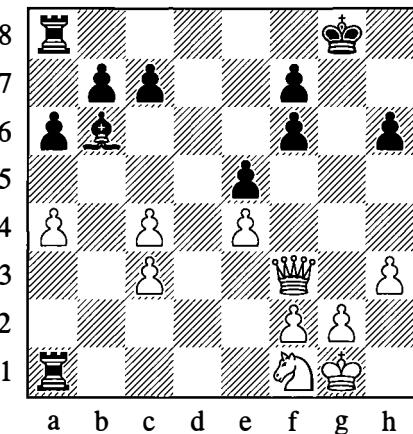
### 19. $bxc4$

Not: 19.  $\mathbb{W}g3?$   $\mathbb{Q}xf2\#!$  20.  $\mathbb{Q}xf2 \mathbb{E}xf1\#$   
 21.  $\mathbb{Q}e3 \mathbb{Q}xf6$  22.  $bxc4 \mathbb{E}e8$



This position is a good example of what the rooks dream about. There are a lot of weak pawns to gradually double up against. White will neither be able to defend them, nor create any play of his own. Hence, Black is winning.

### 19... $\mathbb{g}xf6$



### 20. $\mathbb{W}e2!$

A quiet move that is very difficult to find when calculating. White follows up with  $\mathbb{Q}h2$  to unpin the knight and then plays  $\mathbb{Q}f1-g3-f5$ , with a dangerous attack.

Instead I had planned 20.  $\mathbb{W}xf6$  and thought that White was better. However, Black gets enough counterplay after 20...  $\mathbb{E}a2$  21.  $\mathbb{W}xe5 \mathbb{Q}xf2\#$  22.  $\mathbb{Q}h2 \mathbb{E}a1$  23.  $\mathbb{Q}d2 \mathbb{E}d8$ .

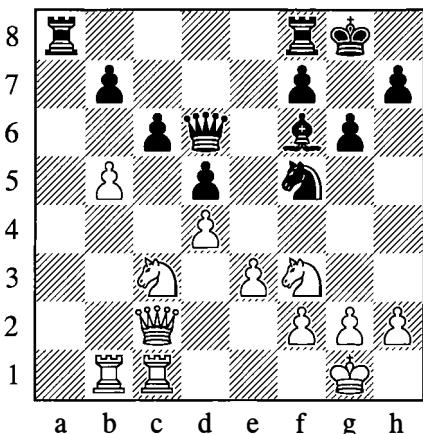
The final verdict on 16...  $\mathbb{E}xd1?$  is that it leads to a situation where the queen enjoys the position. The next example suits the rooks better. Or so I thought.

### Daniel Semcesen – Ellinor Frisk

Rilton Cup, Stockholm 12th December 2011

1.d4 d5 2.c4 e6 3.  $\mathbb{Q}c3$  c6 4.  $\mathbb{Q}f3$   $\mathbb{Q}f6$   
 5.  $\mathbb{Q}g5$   $\mathbb{Q}bd7$  6.  $cxd5$   $exd5$  7. e3  $\mathbb{Q}e7$  8.  $\mathbb{Q}d3$   
 $\mathbb{Q}f8$  9.  $\mathbb{W}c2$   $\mathbb{Q}e6$  10.  $\mathbb{Q}h4$  g6 11. 0-0 0-0

12.♕ab1 ♔g7 13.b4 a6 14.a4 ♕f5 15.b5 axb5 16.axb5 ♕xd3 17.♔xd3 ♔f5 18.♔xf6 ♕xf6 19.♔fc1 ♕d6 20.♔c2

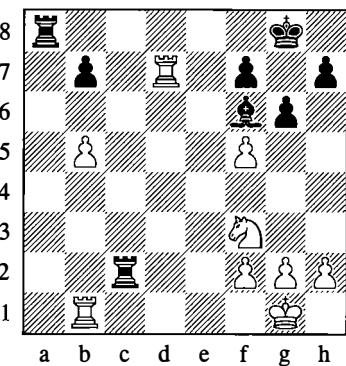


20...♚fc8

This position is a few moves before the material imbalance arises. It illustrates another theme very well – the minority attack.

I propose 20...c5!. I think this is an underestimated way of meeting the minority attack. Black gets an isolated and weak pawn on d5, but the b5-pawn is actually weak as well. It would rather have stayed on b2.

Frisk knew that she wanted to play ...c5, but she saw a tactical problem: 21.dxc5 ♕xc5 22.♔xd5!? After 22...♔xd5 23.e4 ♕d7 24.exf5, Black doesn't want to take with the queen on f5 immediately since White would penetrate with the rook to c7. Instead she has 24...♚fc8 but after 25.♔d1! ♕xc2 26.♔xd7, she thought she was worse.



However, Frisk overlooked: 26...♚b2! White has only one move that defends the b5-pawn, but after 27.♔dd1 ♕xb1 28.♔xb1 gx5, the position is equal.

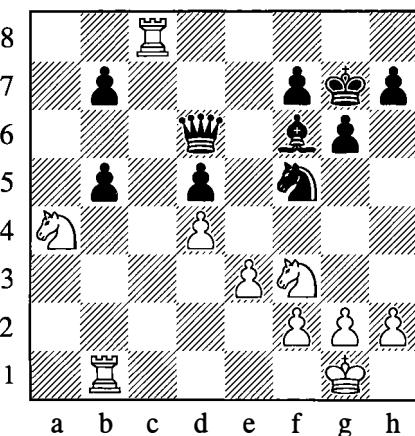
21.♔a4

21.bxc6 bxc6 22.♔a4 is a safe advantage for White, with better rooks and a healthier pawn structure. White will continue with moves like ♔b6 or ♔c5 followed by ♕b6. The position is a good example of a successful minority attack. Black has a weak pawn on c6 without any chances of pushing it. However, Semcesen couldn't see any disadvantage with keeping the b-pawns for the moment.

21...cx b5!

21...♚c7 is the passive defence, but Frisk grabbed the chance to change the game.

22.♕xc8† ♕xc8 23.♕xc8† ♔g7



Positionally, I thought at first that this was splendid for White. Everything seems to suit the rooks: Black's queen has no weak pawns to attack and the rooks will start by gathering up the b-pawns and continue to the seventh rank. It's safe to state that the two rooks have a static advantage.

But wait – not so fast! First, White needs to take care of the pawn on b5. Second, you

have to see if Black can do something in the meantime. As you have learned, the player with the single piece wants to create dynamic play.

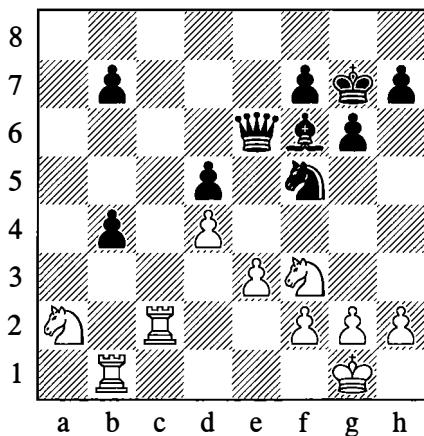
**24.♘c3!**

24.♗xb5? ♜a3 wins the knight on a4.

**24...b4 25.♘a2 ♜e6**

This is played before White has c3 for the rook.

**26.♗c2**



**26...g5!**

Before White has coordinated, Black pushes the pawn against White's king. If you look at White's defensive possibilities, you can see one of the disadvantages with the rooks. They are not so good at defending the castled king's position.

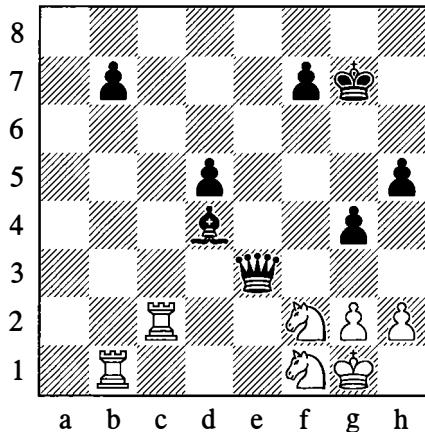
**27.♘xb4 g4 28.♘d2 h5**

The plan is ...h4 followed by ...g3.

**29.♘d3**

White logically manoeuvres the knight to the weakened square on f4. Will he manage to consolidate and claim his positional advantage?

**29...♘xe3! 30.fxe3 ♜xe3† 31.♘f2 ♜xd4  
32.♘fl**



White has two rooks and a minor piece against the queen and three pawns. Since the pawns on the b- and d-file are isolated, it still seems that White is on top. However, he has still not managed to get coordinated.

**32...♜d3?**

32...♜e4! glances at the rooks and g2, as ...h4-h3 may be a plan. On e4, the queen also avoids being threatened with ♜d2 later. White plays 33.♗bc1 and plans ♜d2 but after 33...h4! he only has one move to avoid ...h3. After 34.♗h1 ♜f5, White must go back with 35.♗g1. Black can choose to repeat or play on with 35...b5. It seems promising for Black!

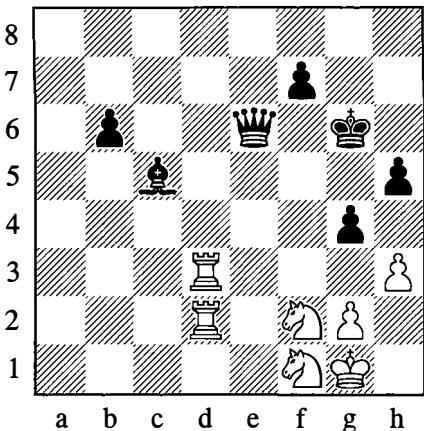
**33.♗bc1 b6?**

Black was in time trouble and allowed White's rooks to begin working. Instead, 33...h4! was unclear.

**34.♗d2 ♜a3 35.♗cd1 ♜c5 36.♗xd5 ♜g6  
37.♗5d3?!**

37.♗g3! was more direct – White threatens both the h5-pawn and ♘e4xc5.

**37...♜a2 38.♗1d2 ♜e6 39.h3**



**39...gxh3?**

This creates two weak pawns, which the rooks will be happy to collect. I think the position is lost after this mistake.

Black had to keep the pawns together with 39...f5!. Then it's not easy for White to make progress. He has to start with 40.hxg4 hxg4 41.g3. My intuition tells me that White should be able to free himself, but I can't prove it with concrete variations.

**40.♕xh3 f5 41.♗f3 h4 42.♔h1 ♕c4 43.♕d3 ♔d6 44.♗xf5 h3 45.♗f3 b5 46.gxh3 b4 47.♗g2† ♔h7 48.♗g4 ♕d5 49.♕d2 b3 50.♕e4 ♕c6 51.♗f5**  
1-0

I think Black's ...g5 is a great example of how to handle a position where the opponent has a static advantage. It's necessary to do something before the opponent has got everything under control.

### Queen against three minor pieces

I once listened to a seminar by Tiger Hillarp on the topic "Queen against two minor pieces". He enthusiastically showed positions where the pieces prevailed. With that in mind, a third minor piece seems to be a luxury!

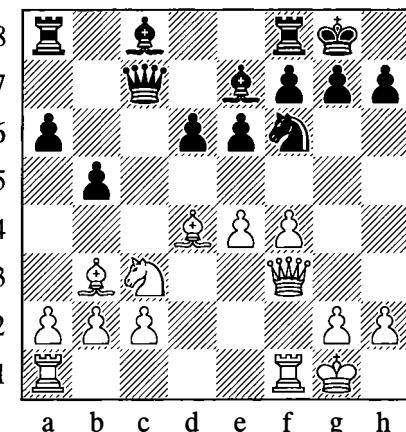
There is some truth behind that. Three minor pieces are usually better than the queen. One exception is when there are a lot of weak pawns that the queen can capture – that habit could be noticed already in the previous section. There are of course also other exceptions when there are enough dynamic resources to compensate, like an attack on the king, badly coordinated pieces or passed pawns.

The general plan with the minor pieces is to attack weaknesses – their numerical advantage will make them impossible to defend. The king is the first weakness to consider, pawns the second. The following example seems very simple; something a Grandmaster can play in a blitz game or even when half-asleep. However, it's interesting since Houdini doesn't understand anything at all.

**Jasmin Bejtovic – Slavko Rosic**

Neum 28th August 2008

**1.e4 c5 2.♘f3 d6 3.d4 cxd4 4.♕xd4 ♘f6 5.♘c3 a6 6.♘c4 e6 7.♘b3 ♘e7 8.0-0 0-0 9.♘e3 ♘c6 10.f4 ♘c7 11.♘f3 ♘xd4 12.♘xd4 b5**



**13.e5 ♘b7 14.exf6!**

This is the most common case where three minor pieces are exchanged for a queen. One

player refuses to move the queen after a threat, but instead captures a piece with a pawn. On the next move, the pawn captures another piece with a new threat.

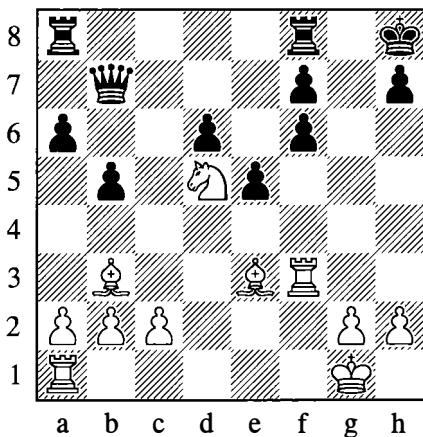
#### 14... $\mathbb{Q}xf3$ 15. $fxe7$ $\mathbb{W}xe7$ 16. $\mathbb{Q}xf3$

Houdini thinks this is slightly better for Black, but that is clearly wrong. White has every chance of coordinating his pieces for an attack against Black's king. The b3-bishop is passive only for the moment.

#### 16... $\mathbb{Q}h8$ 17. $f5!$ $e5$

17... $exf5$  18. $\mathbb{Q}d5$  was Bejovic – Bragi Thorfinsson, four months earlier. After c2-c3, White has safe outposts for all his pieces. Bejovic won the game comfortably.

#### 18. $f6!$ $gxf6$ 19. $\mathbb{Q}d5$ $\mathbb{W}b7$ 20. $\mathbb{Q}e3$



Black's f-pawns are weak, and so is his king; White is winning.

#### 20... $\mathbb{Q}g8$ 21. $\mathbb{Q}af1$ $\mathbb{Q}g6$ 22. $\mathbb{Q}xf6$ $\mathbb{Q}c8$ 23. $\mathbb{Q}d5$ $\mathbb{Q}xc2$

A last trick. White has only one winning move, but if he finds it, it's over.

#### 24. $\mathbb{Q}h3$ $\mathbb{Q}gxf2\#$ 25. $\mathbb{Q}h1$ $\mathbb{Q}xh2\#$ 26. $\mathbb{Q}xh2$ $\mathbb{Q}xh2\#$ 27. $\mathbb{Q}xh2$ $\mathbb{W}e7$ 28. $\mathbb{Q}h6$ $e4$ 29. $\mathbb{Q}cl$ $\mathbb{W}d8$ 30. $\mathbb{Q}b7$ 1-0

When the pieces started to coordinate against Black's queen, there was not much Black could do.

### Queen against rook and piece

This material imbalance is not similar to the previous examples; the queen is simply too strong. It is usually not enough for the side with the rook and piece to have an extra pawn. He must also have an imbalance that is clearly in his favour, like a weak king or a dangerous passed pawn.

It is a different story when the rook and the piece have strong outposts, which is often the case in many fortress-like positions.

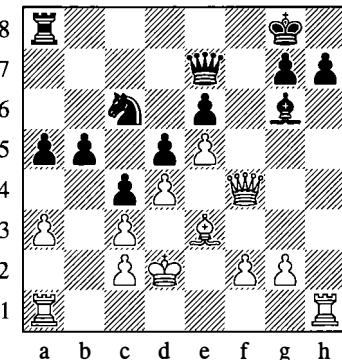
In the following position, the initiative becomes too strong for the queen to handle. I'll start before the queen sacrifice, because another interesting material imbalance could have arisen.

#### Axel Smith – Stefan Schneider

Swedish Team Championship, Lund  
12th January 2008

1.e4 e6 2.d4 d5 3. $\mathbb{Q}c3$   $\mathbb{Q}b4$  4.e5 c5 5.a3  $\mathbb{Q}xc3\#$   
6.bxc3  $\mathbb{Q}e7$  7. $\mathbb{W}g4$  0-0 8. $\mathbb{Q}d3$   $\mathbb{Q}bc6$  9. $\mathbb{W}h5$   
 $\mathbb{Q}g6$  10. $\mathbb{Q}f3$   $\mathbb{W}c7$  11. $\mathbb{Q}e3$  c4 12. $\mathbb{Q}xg6$   $fxg6$   
13. $\mathbb{W}g4$   $\mathbb{W}e7$  14.h4  $\mathbb{Q}f5$  15. $\mathbb{Q}gl1$   $\mathbb{Q}d7$  16. $\mathbb{Q}e2$   
 $\mathbb{Q}e8$  17. $\mathbb{Q}g3$   $\mathbb{Q}f8$  18.h5  $gxh5$  19. $\mathbb{Q}xh5$   $\mathbb{Q}g6$   
20. $\mathbb{Q}d2$  b5 21. $\mathbb{Q}f4$   $\mathbb{Q}f5?$

Black could have sacrificed the exchange with: 21... $\mathbb{Q}xf4$ ? 22. $\mathbb{W}xf4$  a5



There are many reasons why this exchange sacrifice is good:

- 1) The rooks only have two semi-open files, both without prospects
- 2) It is not possible to exchange queens
- 3) There are opposite-coloured bishops

Black doesn't have a single pawn for the exchange, yet I still have a slight preference for the black position.

## 22. $\mathbb{W}h5$ a5 23. g4 $\mathbb{Q}e4$ 24. f3 g5

The only move. After 24...g6 25.  $\mathbb{W}h6$   $\mathbb{Q}xf3$ , White wins with 26.  $\mathbb{Q}xg6$ .

## 25. $\mathbb{Q}h3$

There are a couple of alternatives to consider:

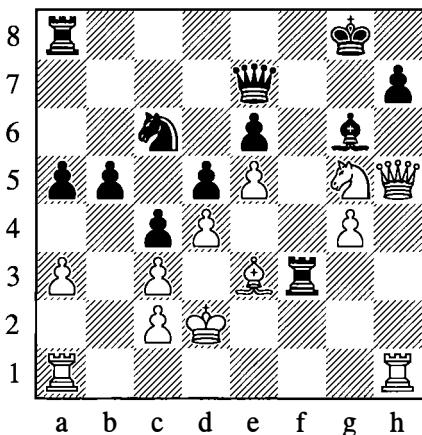
25. fxe4? gxf4 26.  $\mathbb{Q}f2$  dxe4 gives Black dangerous pawns.

25.  $\mathbb{Q}xe6$  loses the knight after 25...  $\mathbb{Q}g6$  26.  $\mathbb{W}xg5$   $\mathbb{W}xe6$  but White gets some compensation with 27. f4. I think Black should try to give back the piece with 27...  $\mathbb{Q}e7$  28. f5  $\mathbb{Q}xf5$  29. gxf5  $\mathbb{Q}xf5$ . The position is equal.

## 25... $\mathbb{Q}xf3$ 26. $\mathbb{Q}xg5$ $\mathbb{Q}g6$

26...  $\mathbb{Q}g3$  27.  $\mathbb{Q}xe4$  dxe4 28.  $\mathbb{Q}af1$  is clearly better for White.

Now it's time for the queen sacrifice.



## 27. $\mathbb{Q}xf3!$

A safe move such as 27.  $\mathbb{W}h6$  would give an unclear position.

## 27... $\mathbb{Q}xh5$

White has to choose whether he wants to create play on the g-file or on the h-file.

## 28. $\mathbb{g}xh5?$

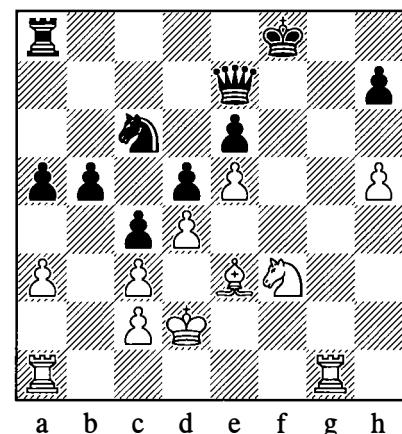
28.  $\mathbb{g}xh5!$  was better. White has two easy moves to play:  $\mathbb{Q}g5$  and  $\mathbb{Q}ah1$ . After 28...  $\mathbb{Q}a7$  29.  $\mathbb{Q}g5$  b4 30.  $\mathbb{Q}xh7$  bxc3† 31.  $\mathbb{Q}xc3$ , Black has to sacrifice back the queen with 31...  $\mathbb{W}xh7$  32.  $\mathbb{Q}xh7$   $\mathbb{Q}xh7$ . White is a pawn up in the endgame.

## 28... $\mathbb{Q}f8?$

28...  $\mathbb{Q}f7!$  was necessary to get the rook to g8. However, 29.  $\mathbb{Q}g5†$  disrupts Black's plan; White has the initiative.

## 29. $\mathbb{Q}hg1$

Suddenly it's all over.



29...  $\mathbb{Q}a7$  30.  $\mathbb{Q}h6†$   $\mathbb{Q}e8$  31.  $\mathbb{Q}g8†$   $\mathbb{Q}d7$

32.  $\mathbb{Q}g7$

1-0

Semcesen – Frisk showed that the queen can fight strongly against several pieces, but in the last two examples the queen has failed.

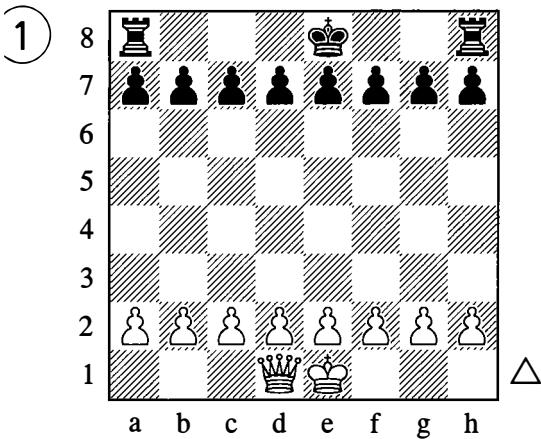
Material imbalances with only one of the sides having a queen give interesting positions, and the first three training positions will cover such cases.

### Training positions

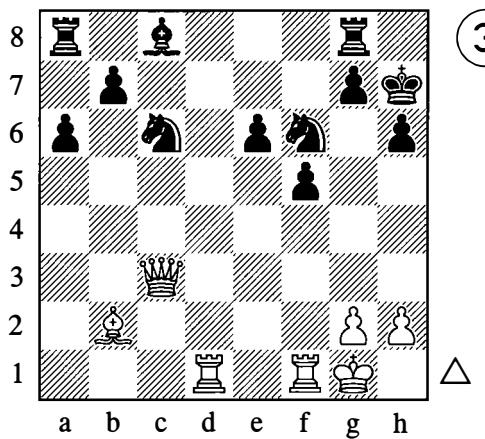
There is a material imbalance in the following four training positions. None of the positions is clearly winning for either side, and there are no “solutions”.

I suggest playing the positions against a training partner.

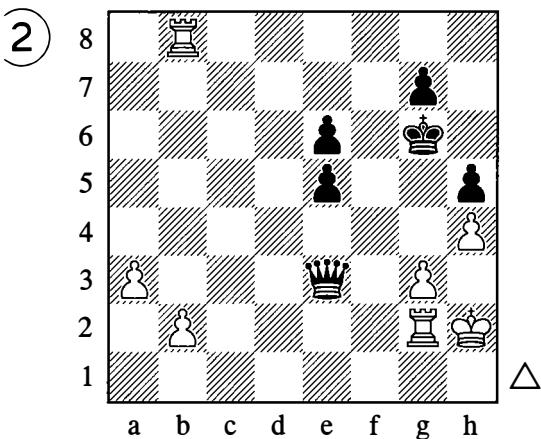
**Queen against two rooks**



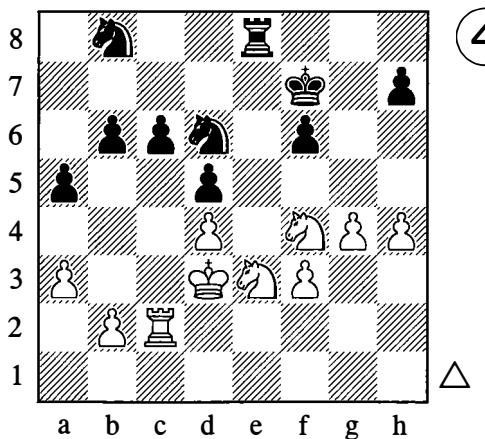
**Sebastian Nilsson 2010**



**Smith – Vymazal, Česká Třebová 2008**



**Smith – Brynell, Malmö 2012**



Start with 34.  $\mathbb{Q} \text{exd5.}$

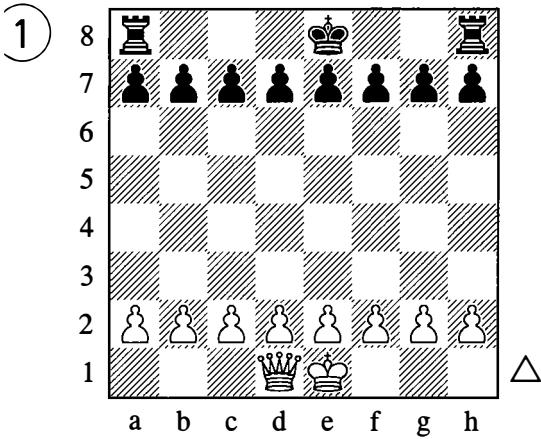
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### Training positions

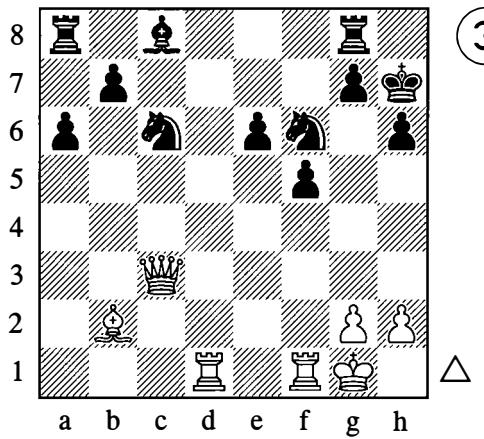
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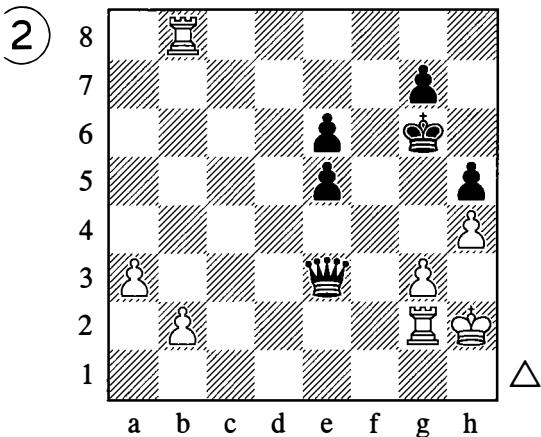
**Queen against two rooks**



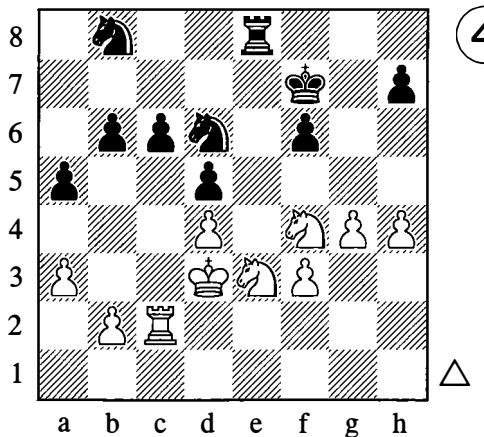
**Sebastian Nilsson 2010**



**Smith – Vymazal, Česká Třebová 2008**



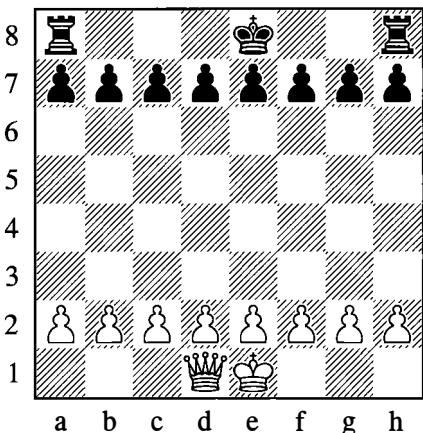
**Smith – Brynell, Malmö 2012**



Start with 34.  $\mathbb{Q} \text{exd5.}$

## Thoughts about the training positions

### 1. Queen against two rooks



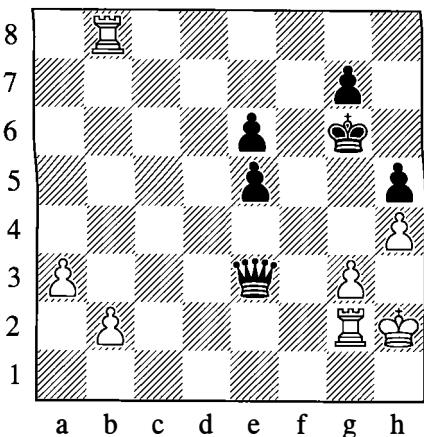
There are many reasons why the queen enjoys this position more than the rooks:

- 1) There are no open files
- 2) There are many undefended pawns
- 3) If Black castles, White might follow up with a pawn storm on that wing

I think White is better, and I don't feel that any moves are needed to back up that claim.

### 2. Axel Smith – Bronislav Vymazal

Česká Třebová 2008



This was one of those pleasant morning rounds which often end tournaments. My feeling is that anyone who doesn't complain about waking up early has a competitive advantage against the others.

With two rooks against a queen, the pawn structure often decides the evaluation of the position. All White's pawns are defended, while Black has two isolated pawns. It's easy to conclude that White is better.

It might be possible to start advancing the queenside pawns quite early, but I think a much easier plan is the following:

- 1) Retreat the rook from b8 to the second rank
- 2) Play one rook to the e-file
- 3) Double on the e-file
- 4) Take both e-pawns
- 5) Promote
- 6) Go and collect my prize at the closing ceremony

The third step is the only which will pose some problems.

Black can try to create counterplay with ...g5 and ...h4, but it will be far too slow.

**52.♖f8 ♖d3 53.♖f2 e4 54.♖d2 ♖b3 55.♖c2**

White threatens ♖c3 with unavoidable doubling next move.

**55...♖f3 56.♖gf2 ♖e3**

56...♗d3 57.♖c3 wins again.

**57.♖ce2**

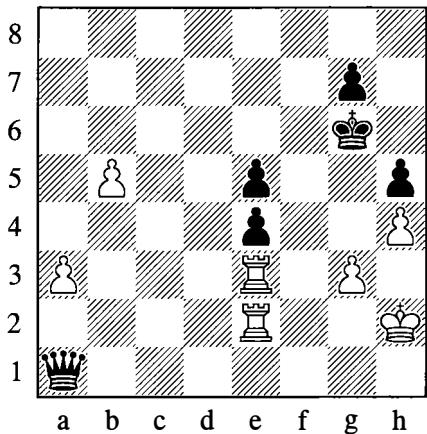
Black can't stop both ♖e1 and ♖f1 next move, so White manages to get both rooks to the e-file.

**57...♗d3 58.♖e1 ♖d4 59.♖fe2 e5 60.b4**

The e-pawns won't run away.

60... $\mathbb{W}c3$  61. $\mathbb{B}e3$   $\mathbb{W}b2\uparrow$  62. $\mathbb{B}1e2$   $\mathbb{W}a1$  63.b5

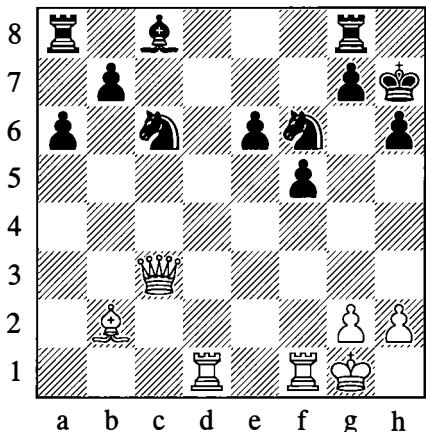
Time for action.



63... $\mathbb{B}h6$  64. $\mathbb{B}b3$   $\mathbb{W}d1$  65. $\mathbb{B}b2$  g5 66.hxg5†  
 $\mathbb{B}xg5$  67.b6 h4 68.gxh4†  $\mathbb{B}xh4$  69. $\mathbb{B}xe4\uparrow$   
 $\mathbb{B}g5$  70. $\mathbb{B}xe5\uparrow$   $\mathbb{B}f4$  71.b7  $\mathbb{W}d3$  72.b8=math  
 $\mathbb{W}g3\uparrow$  73. $\mathbb{B}h1$   $\mathbb{W}h3\uparrow$  74. $\mathbb{B}g1$   $\mathbb{W}g3\uparrow$  75. $\mathbb{B}f1$   
 $\mathbb{W}h3\uparrow$  76. $\mathbb{B}e1$

1-0

### 3. Sebastian Nilsson 2010



This position appeared when my friend Sebastian Nilsson analysed one of his games in the 18th ICCF Olympiad.

Black has two knights and four pawns for the queen. In addition, there are opposite-coloured bishops on the board.

The first time I saw this position, I thought Black was clearly better. He has no obvious weaknesses and White has no entry squares for the heavy pieces. Black's plan may be to start by putting minor pieces on e4 and d5 and then continue with the march of the queenside pawns.

My reasoning was too static. It's difficult for Black to place his minor pieces on e4 and d5, and White has a lot of time to create dynamic play in the meantime.

Hans Tikkanen noticed that Black even has a lot of problems developing the light-squared bishop at all. He evaluated the position as balanced.

Today, I agree. White has some plans of his own. One is h3 and g4, to attack Black's king. Another is to move the queen and threaten  $\mathbb{Q}xf6$ . If the knight jumps to e4, White can try the undermining g2-g4 with greater effect, or even  $\mathbb{B}xe4$  followed by  $\mathbb{B}f7$ . Black has to watch out for all kinds of exchange sacrifices.

A plausible continuation is:

1. $\mathbb{W}g3$   $\mathbb{B}f8!$

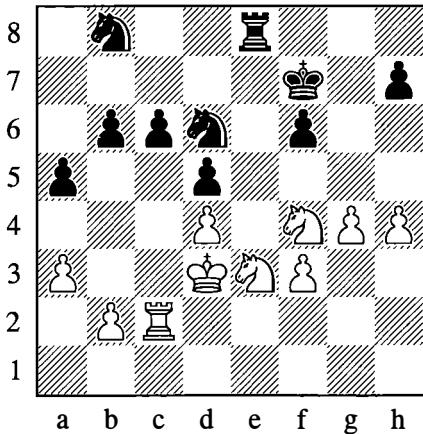
Black is solid enough but still has problems improving his position. The a-pawn alone won't do the job. It's unclear.

1... $\mathbb{Q}e4\text{?}$  2. $\mathbb{W}c7$  and White has some pressure against g7.

1... $\mathbb{Q}d5\text{?}$  2.h4 is a bit annoying for Black.

#### 4. Axel Smith – Stellan Brynell

Swedish Team Championship, Malmö  
4th February 2012



The first 33 moves of this game were given in the previous chapter.

Hasse Alfredson would have said: “Ska vi byta?” A knight for two or even three pawns.

#### 34.♘exd5?

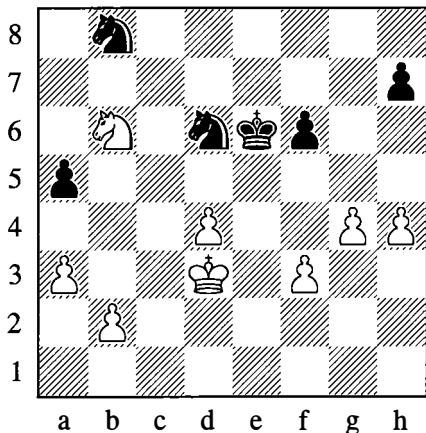
The situation didn't look good for my team, so I desperately needed to win. However, the best strategy in such situations is still to play the best moves! Of course, there is an exception if the best move leads to an immediate draw, but that is not the case here.

I could have continued to play against the weak squares. A good start is 34.♘h5! followed by ♘g3-f5. White can then open up with g4-g5 at a timely situation. It's unpleasant for Black.

#### 34...cx d5 35.♗c7† ♗e7

35...♗g8 36.♘xd5 ♗f8 37.♘xb6 is better for White.

#### 36.♗xe7† ♗xe7 37.♘xd5† ♗e6 38.♘xb6



I have three pawns, but where is my rusty screw, and my yellow balloon?

We have a material imbalance that has not been covered before: White has three pawns against a knight. The pawns are split into three different pawn islands, so it's not easy to create a dangerous passed pawn. If Black manages to activate the knights, he might easily get strong play, so White must try to stop that. White's dream is to win the pawn on a5 but he can also try other plans.

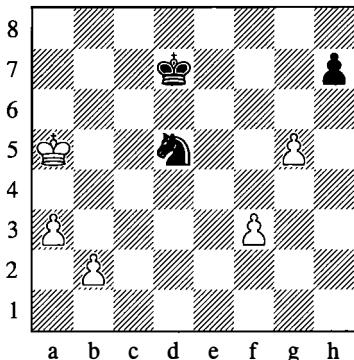
#### 38...♗d7

After 38...♗a6?! 39.f4!? White will either push f4-f5 and make Black's king passive, or answer 39...f5 with 40.g5 and create a dangerous outside pawn majority.

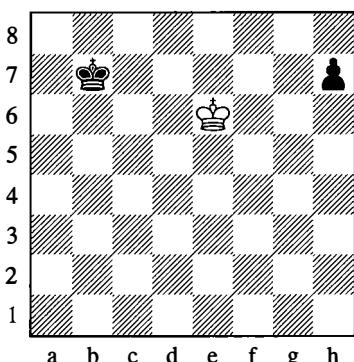
#### 39.♘c4

39.d5† forces Black's king back, but at the same time gives up the square on e5. For that reason, White must exchange the knight on d7. It's better to exchange Black's other knight, since it covers the entry square for the king. Anyway, the position seems to be drawn.

Here is a long variation: 39...♗e7 40.♘xd5 ♗xd7 ♗xd7 41.♗d4 ♗c8 42.♗c5 ♗e7 43.g5 fxg5 44.hxg5 ♗g6 45.♗b5 ♗f4 46.♗xa5 ♗xd5

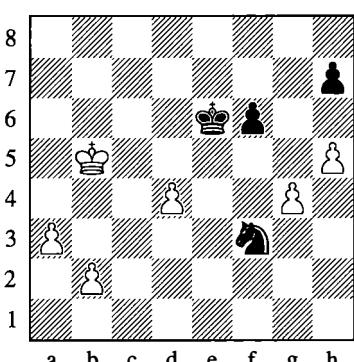


47.a4 ♖c6 48.b4 ♖b7 49.b5 ♖a7 50.f4 ♖xf4  
 51.b6† ♖b7 52.♖b5 ♖e6 53.a5 ♖xg5 54.a6†  
 ♖b8 55.♖c6 ♖e6 56.b7 ♖f4 57.a7† ♖xa7  
 58.♖c7 ♖d5† 59.♖c8 ♖b6† 60.♖c7 ♖d7  
 61.♖xd7 ♖xb7 62.♖e6 With a draw.

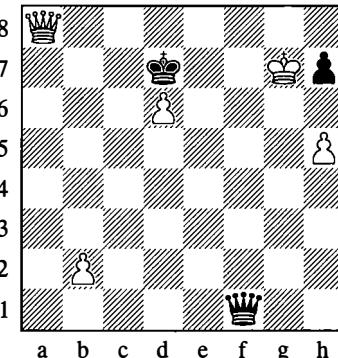


**39...a4**

39...Qxc4? 40.Qxc4 wins for White. 40...a4  
 41.♗b5 ♖f8 42.♗xa4 ♖g6 43.h5 ♖h4  
 44.♗b5 ♖xf3



45.♔c5! ♖h2 46.a4 ♖xg4 47.a5 ♖d7 48.a6  
 ♖c8 49.d5 f5 50.d6 ♖f6 51.♔d4 f4 52.♔e5  
 f3 53.♔xf6 ♖d7 54.a7 f2 55.a8=♕ f1=♕†  
 56.♔g7

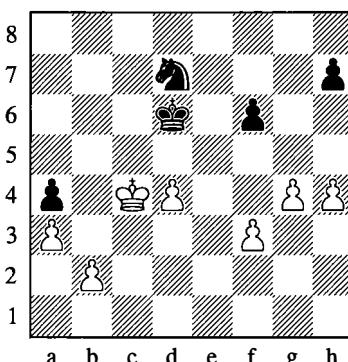


The h-pawn is an easy victim for White's king.

39...Qf8 tries to activate the knight via g6, but White has 40.h5.

**40.♔c3**

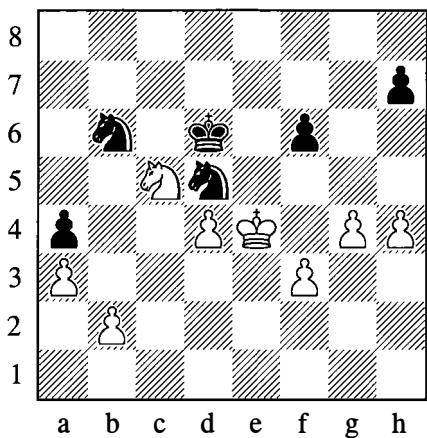
White's 'winning' try starts with: 40.Qxd6  
 ♖xd6 41.♔c4



However, it's just dubious – Black gets immediate counterplay after 41...Qf8! and is the only one who can play for a win.

Instead, the game was drawn without much happening.

40... $\mathbb{Q}b5\#$  41. $\mathbb{Q}d3$   $\mathbb{Q}c7$  42. $\mathbb{Q}d2$   $\mathbb{Q}b6$   
 43. $\mathbb{Q}e4$   $\mathbb{Q}cd5$  44. $\mathbb{Q}c5\#$   $\mathbb{Q}d6$  45. $\mathbb{Q}e4$



45... $\mathbb{Q}e7$  46. $\mathbb{Q}b7\#$   $\mathbb{Q}e6$  47. $\mathbb{Q}c5\#$   $\mathbb{Q}d6$   
 48. $\mathbb{Q}b7\#$   $\mathbb{Q}e6$  49. $\mathbb{Q}c5\#$

½–½

## Epilogue

This chapter has discussed piece exchanges and material imbalances. There are many possible reasons to exchange pieces, or to avoid doing so. Nine are mentioned in the summary of the first section.

Sometimes pieces with unequal value are exchanged. In such positions, concrete factors will always play a big role, but the examples also outline several useful principles. However, don't forget about verbal overshadowing, the phenomenon that's mentioned in the introduction. Verbalizing too much is harmful for your understanding, and no proverb beats a good move.

So get well acquainted with the principles outlined in this chapter – but use them with a grain of salt.

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# Chapter 3

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## Auxiliary Questions

The purpose of this chapter is to bind together the pawn levers and piece exchanges into a smooth list of auxiliary questions, which can be used in most middlegame positions. Well, that's far too simplified a way of playing chess, but I think it's a good idea to have the auxiliary questions in reserve, for when intuition doesn't define in which direction to steer your thoughts.

I encountered the method of asking questions for the first time in a splendid book from 2001: Jesper Hall's *Chess Training for Budding Champions*. The auxiliary questions I propose are simpler; there are only six of them.

### Chapter overview

#### *Why is it useful to have auxiliary questions?*

When you play, it's easy to miss the forest because of all the trees. There are so many threats to take care of and variations to calculate that there is no time left for the big strategical questions. Two of the heroes from the previous chapters, Nils Grandelius and Ulf Andersson, help each other in the chapter's first game to show why auxiliary questions are important.

#### *When should the questions be used?*

As "auxiliary" implies, they are used when your intuition isn't enough to find a satisfying plan, and especially in critical positions. The second section will give some advice of how to identify those positions during the game. It is recommended to use the questions during the opponent's thinking time, when there is less need to calculate variations.

#### *So what do they consist of?*

Mainly positional considerations. Some important positional themes have already been covered in the previous chapters: pawn levers, piece exchanges and material imbalances. This chapter adds other imbalances.

#### *How should the questions be used?*

They are presented in a list, but used only when encountering difficulties in grasping a position. Afterwards, it will hopefully be easier to find a good plan.

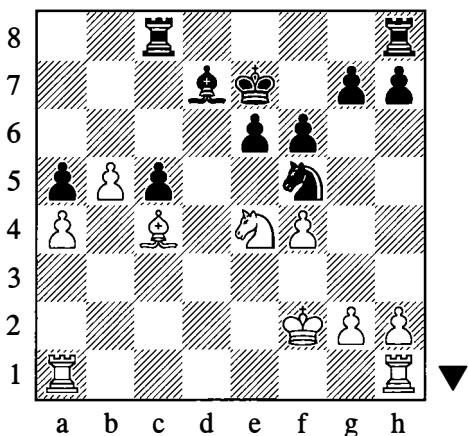
*Is there something they should not be used for?*  
Yes! The auxiliary questions are only there as an aid, and shouldn't compete with your intuition. The first thing to do is still simply look for good moves. But they are useful if you are encountering difficulties getting a handle on a position.

### Using Auxiliary Questions

The first game illustrates why it's useful to use auxiliary questions. Nils Grandelius was Black and has annotated the game.

Vladimir Potkin – Nils Grandelius

Bundesliga, Emsdetten 4th February 2012



With White's last move, 24.a4, his idea is clear: to play slowly and keep it all under control, whereas Black has very few chances to get active himself. At this point I was mostly concerned about my c5-pawn and the very nice knight on e4.

Therefore I played:

24... $\mathbb{Q}d4$

The idea is to push ...f5. However, it didn't help.

25. $\mathbb{Q}ac1$  f5 26. $\mathbb{Q}d2!$

I was clearly worse: Potkin just went  $\mathbb{Q}a2$ ,  $\mathbb{Q}c4$  and picked up my a5-pawn.

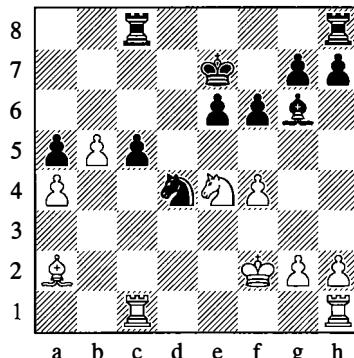
26...h6 27.h4  $\mathbb{Q}f6$  28. $\mathbb{Q}a2$   $\mathbb{Q}e8$  29. $\mathbb{Q}c4$   $\mathbb{Q}h5$  30. $\mathbb{Q}he1$   $\mathbb{Q}hd8$  31. $\mathbb{Q}xa5$   $\mathbb{Q}a8$  32. $\mathbb{Q}b7$   $\mathbb{Q}xa4$  33. $\mathbb{Q}xe6$   $\mathbb{Q}e2$  34. $\mathbb{Q}c4$   $\mathbb{Q}d2$  35. $\mathbb{Q}xe2$   $\mathbb{Q}xe2$  36. $\mathbb{Q}xe2$   $\mathbb{Q}aa2$  37. $\mathbb{Q}e1$   $\mathbb{Q}db2$  38. $\mathbb{Q}xc5$   $\mathbb{Q}xb5$  39. $\mathbb{Q}d7\#$   $\mathbb{Q}e7$  40. $\mathbb{Q}e5$   $\mathbb{Q}f6$  41. $\mathbb{Q}f1$   $\mathbb{Q}ba5$  42.h5  $\mathbb{Q}a1$  43. $\mathbb{Q}xa1$   $\mathbb{Q}xa1\#$  44. $\mathbb{Q}f2$   $\mathbb{Q}a2$  45. $\mathbb{Q}f3$   $\mathbb{Q}a3\#$  46. $\mathbb{Q}d3$   $\mathbb{Q}b3$  47.g3  $\mathbb{Q}a3$  48. $\mathbb{Q}e3$   $\mathbb{Q}a2$  49. $\mathbb{Q}d7\#$   $\mathbb{Q}e7$  50. $\mathbb{Q}xf5$   $\mathbb{Q}a3\#$  51. $\mathbb{Q}f2$   $\mathbb{Q}b3$  52. $\mathbb{Q}e5$   $\mathbb{Q}a3$  53.g4  $\mathbb{Q}c3$  54. $\mathbb{Q}f3$   $\mathbb{Q}a3$  55. $\mathbb{Q}g3$   $\mathbb{Q}c3$  56.g5 hxg5 57.fxg5  $\mathbb{Q}c4$  58. $\mathbb{Q}e5$   $\mathbb{Q}a4$  59. $\mathbb{Q}g6\#$   $\mathbb{Q}f7$  60. $\mathbb{Q}f4$   $\mathbb{Q}g8$  61. $\mathbb{Q}g4$   $\mathbb{Q}h8$  62. $\mathbb{Q}d3$   $\mathbb{Q}a5$  63. $\mathbb{Q}e4$   $\mathbb{Q}b5$  64. $\mathbb{Q}d5$   $\mathbb{Q}a5$  65. $\mathbb{Q}f5$   $\mathbb{Q}h7$  66. $\mathbb{Q}e6$   $\mathbb{Q}a6\#$  67. $\mathbb{Q}f7$   $\mathbb{Q}a7\#$  68. $\mathbb{Q}f8$   $\mathbb{Q}a6$  69.h6  $\mathbb{Q}a4$  70. $\mathbb{Q}g8\#$   $\mathbb{Q}h8$  71. $\mathbb{Q}g6\#$

When showing the game to Ulf Andersson during a training session, he immediately pinpointed the most important aspect of Black's position: the "dead" bishop on d7. Not only is it blocked by the pawns on a4/b5 and e6, but it also blocks the d-file, thus stopping Black from getting an active rook. The solution to the position must be to improve the horrible bishop.

24... $\mathbb{Q}e8!$

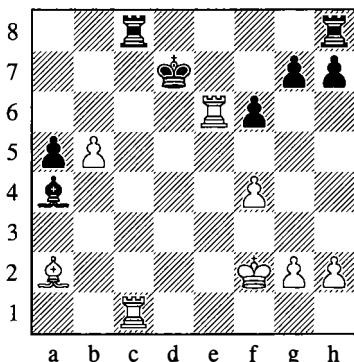
Our mainline was as follows:

25. $\mathbb{Q}ac1$   $\mathbb{Q}g6!$  26. $\mathbb{Q}a2$   $\mathbb{Q}d4$



**27.  $\mathbb{Q}xc5 \mathbb{Q}c2!$** 

The tactics work in Black's favour. For example:

**28.  $\mathbb{Q}xe6 \mathbb{Q}xe6 29. \mathbb{B}he1 \mathbb{Q}xa4! 30. \mathbb{B}xe6† \mathbb{Q}d7$** 

In view of his active king, Black is at least OK.

All this looks pretty easy, you might say? Well, to some extent I actually agree. Finding the bishop manoeuvre is definitely not beyond my abilities or understanding of the game. If I had been given the position after 24.a4 as an exercise, I'm sure I would have solved it. However, that's not the point! The point is that this requires another way of thinking during games. To ask myself questions such as "Which is my worst-placed piece?" might sound trivial, but during a game there are always lines to calculate, pawns that are hanging and threats that have to be taken care of. This is precisely the area where a player like Ulf Andersson excels, and therefore also an area where I can learn the most from him.

(That is the end of Nils Grandelius's annotations.)

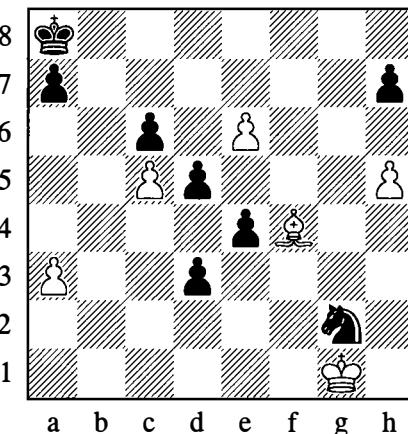
**Critical positions**

The Swedish Grandmaster Lars Karlsson once said: "It was in Russia that I learned to play chess." He was referring to some months when he travelled around in the Soviet Union.

Nils Grandelius and I made our pilgrimage in December 2007, to the snowy city of Vladimir with temperatures at  $-20^{\circ}\text{C}$ . During seven double rounds in ten days, Grandelius followed the advice of declining all draw offers, and lost to a lot of unknown Russian schoolboys in an IM-tournament, while I did the same in a GM-tournament. To lose the following amazing game annoyed me at the time, but later I understood what went wrong.

**Dmitry Lavrik – Axel Smith**

Elizaveta Bykova Memorial, Vladimir  
19th December 2007



The position is ideal to play as a training game, since almost every decision is critical.

**41...  $\mathbb{Q}xf4 42.e7 \mathbb{Q}b7 43.e8=\mathbb{W} d2 44.\mathbb{W}d7†$** 

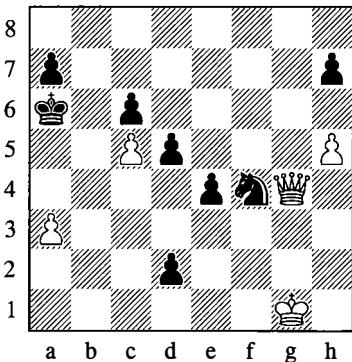
So far three 'only moves', but now Black has an option and thus a chance to go wrong.

**44...  $\mathbb{Q}a6!$** 

White wins after 44... $\mathbb{Q}b8?$  45. $\mathbb{W}g4$ , since the knight on f4 is hanging with check.

**45.  $\mathbb{W}xc6†?$** 

45. $\mathbb{W}g4!$  is better.



Black has two options.

- a) 45...e3 46.♘c8†! The knight will be hanging with check if Black's king reaches the fourth rank. It will end in a repetition after 46...♔a5 47.♘c7† ♔b5 48.♗b8† ♔a6 49.♘c8† ♔a5 50.♘c7† etc.

- b) 45...♔a5!

This is a tougher nut. Since Black threatens ...e4-e3 and ...d5-d4, White has to act.

46.♗d1 e3

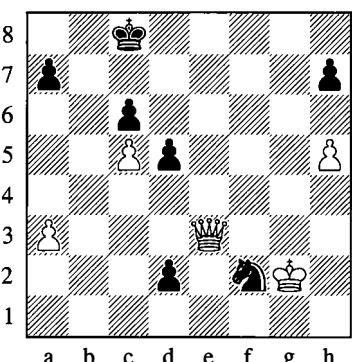
Black threatens ...♝f4-h3-f2.

47.♗b3! ♖h3† 48.♗g2

The only move.

It will be apparent later why 48.♗h2 loses.

48...♝f2 49.♗b4†! ♔a6 50.♗a4† ♔b7 51.♗b3†! ♔c8 52.♗xe3



With the king on h2, Black would have a fork on g4.

52...d1=♗

Black is a pawn up if White takes the knight, but White can start with:

53.♗e8† ♔b7 54.♗d7† ♔a6 55.♗xc6† ♔a5

And then play

56.♗xf2

with a probable draw.

**45...♔a5**

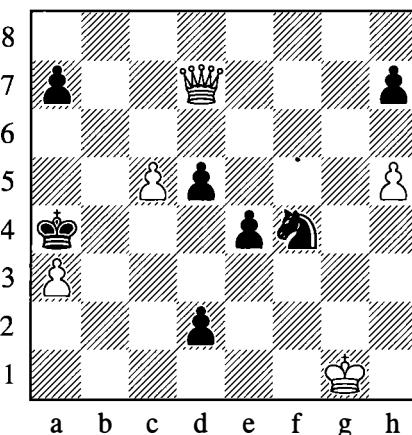
Black is winning, but my engines still don't understand it. I am happy that they don't have all the answers yet.

**46.♗c7† ♔a4**

46...♔a6 is a repetition and 46...♔b5?

47.♗b7† ♔c4 48.♗b4† ♔d3 49.♗b1† ♔e2 50.♗f1† ♔e3 51.c6 wins for White.

**47.♗d7†**



**47...♗xa3?**

This is what I played in the game. I managed to avoid the checks, but soon regretted that my king was so far away from the d-pawn.

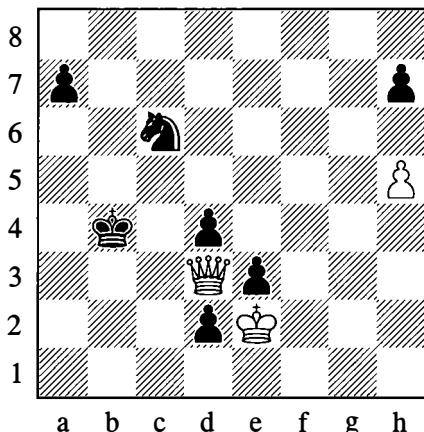
**48.♗g4 e3**

My opponent accidentally knocked the h5-pawn onto the floor and put it back, by mistake, on h4! During the delay, I tried to think about the position, but it was difficult since the arbiters were trying to teach me Russian. However, the game soon resumed.

**49.♕d1 ♔e6?**

49...♔b2 50.c6 ♔e6 was still a draw. In the game I was just lost.

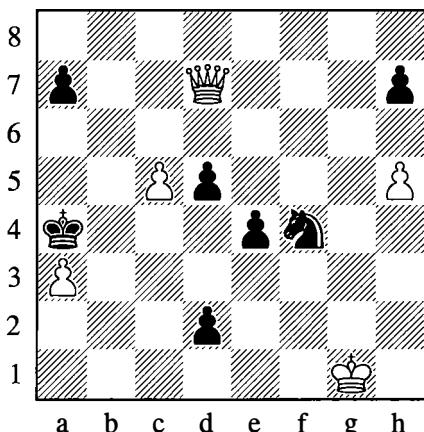
**50.♔f1 d4 51.♔e2 ♔f4† 52.♔f3 ♔d3 53.c6 ♔e5† 54.♔e2 ♔xc6 55.♔a1† ♔b3 56.♔b1† ♔c3 57.♔d3† ♔b4**



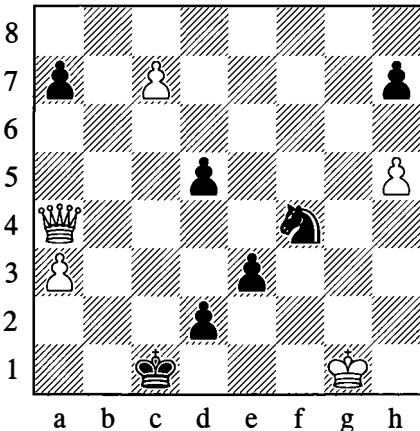
58.♔xh7 ♔c5 59.h6 ♔e5 60.♔xa7† ♔d5  
61.♔a5† ♔e4 62.♔xe5† ♔xe5 63.h7 d3†  
64.♔d1

**1-0**

Let's go back to the position after White's 47th move and examine Black's winning move.



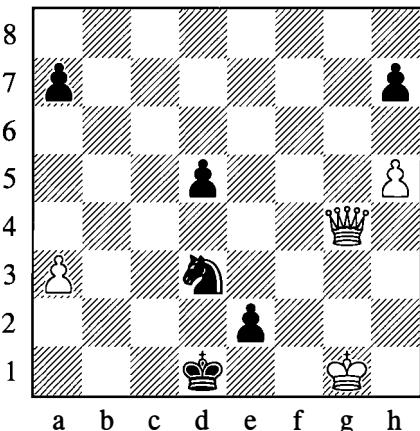
**47...♔b3!** 48.♔b5† ♔c2 49.♔a4† ♔c1  
50.c6 e3 51.c7



**51...d1=♕† 52.♔xd1† ♔xd1 53.c8=♕ e2  
54.♔g4**

The only move to stop ...e1=♕.

**54...♔d3**



White must move his king from the first rank, to prevent Black from threatening to promote with check.

**55.♔h2**

White would have been OK with 55.h6? ♔d2 56.♔g5† ♔c3 57.♔g7† ♔b3 58.♔xh7 were it not for the fact that 58...e1=♕† comes with check.

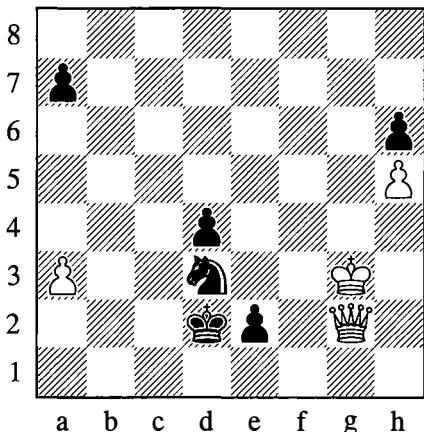
**55...h6!**

Stopping checks from the g5-square.

**56.♔f3 ♔d2 57.♗g2 d4**

Black threatens ...♕e5 followed by ...♔d1.

**58.♔g3**



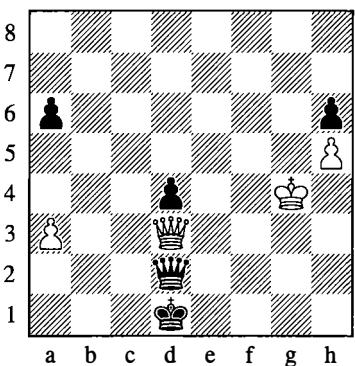
**58...a6!!**

Incredibly, White is in zugzwang! Every move has a downside.

a) With the king on h4, White isn't in time to defend against ...♕d3-e1-c2: 59.♔h4 ♕e1 60.♗f2 ♕c2 61.♗g4 d3 62.♗f3 ♔c1, winning for Black.

b) With the king on h2, he walks into a fork on g4: 59.♔h2 ♕e5 The point is 60.♗f2 ♕g4†.

c) With the king on g4, he walks into a check on e5: 59.♗g4 ♔d1! White can't play ♗g2-f3 anymore. 60.♗g3 e1=♗ 61.♗xd3† ♕d2



The queen ending is won – Black will manage to hide from the checks.

d) With the queen on h2, he can't pin the pawn: 59.♗h2 ♔d1

**59.a4 a5!**

The move deserves only one exclamation mark this time. The zugzwang is now decisive.

So what was the conclusion? When we returned from Russia, I still felt that I didn't know how to play chess. However, the situation became clearer when I analysed my games.

While my opponents played normal moves in most positions and spent their time in the critical ones, I tried hard to find the very best continuation on every move. When we reached the important moments, I didn't have much time left. In the preceding example, it might not have gone wrong with some extra time on the clock.

I drew the conclusion that I had to look for the critical positions and use a greater part of my time there.

The strategy to use most time for the critical decisions is quite obvious and universal for all games, but how do you find the critical positions in chess?

In *Move First, Think Later*, Willy Hendriks writes that the critical moments are easy to find with hindsight, but that there's no good prescription to find those moments during the game. A game doesn't contain five critical moves and thirty-five easy moves; it's rather on a continuous scale.

That's true, of course, but it doesn't disqualify the guidelines for the characteristics of a critical position. It's even useful to find out that some positions are very critical and others somewhat critical.

In the dictionary, the word “acute” is part of the explanation of “critical”. It perfectly hits the mark. A critical position is one where an important decision can’t be postponed – it must be taken immediately. In such positions, the next move creates or avoids creating a permanent change.

I think critical positions can be divided into four categories.

### How to identify a critical position

#### ▲ Pawn structure

All decisions regarding the pawn structure are critical, since pawns can’t move backwards. It’s never possible to take back a move with the pawn, and the change that’s created is therefore permanent.

#### ▲ Piece exchanges or sacrifices

It’s the same reason: a captured piece will never return to the board.

#### ▲ Permanent decisions

Quite often, it’s possible to change your mind about where to play, not losing more than a tempo. Sometimes, it’s not. Such permanent decisions are therefore critical. One example is the choice of whether to castle kingside or queenside.

#### ▲ Tactical positions

Time is the most important factor in highly tactical positions. Every move will thus be critical, since the move risks losing the game at once.

Moreover, the critical positions have two other features: they are *important* and it’s *difficult* to find the best move. Both of those words are subjective, and you have to trust your own evaluation. But it will become clear that many decisions concerning the pawn structure or

piece exchanges are not difficult at all, and others not so important.

The list above is no recipe, only a shortcut to avoid playing a move without understanding that it’s a critical moment.

It would be too time-consuming to actively decide whether every single position is critical or not. I recommend, as in many other places in this book, to do so for a limited period. After a while, your intuition will be improved and you will often automatically spot which positions are critical.

The following game is a good example of the importance of finding the critical moments.

### Stefan Christensen – Axel Smith

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Danish Team Championship, Helsingør  
22nd March 2009

**1.e4 e5 2.♘f3 ♘c6 3.♗b5 ♘f6 4.0–0 ♗xe4  
5.♕e1 ♘d6**

The point of omitting ...a7-a6 is to threaten the bishop with ...♘d6.

**6.♗xe5 ♘e7 7.♗d3**

7.♗f1 is more common. On d3 the bishop is hindering White’s normal development but it sets up a few tricks since it’s placed on an active diagonal.

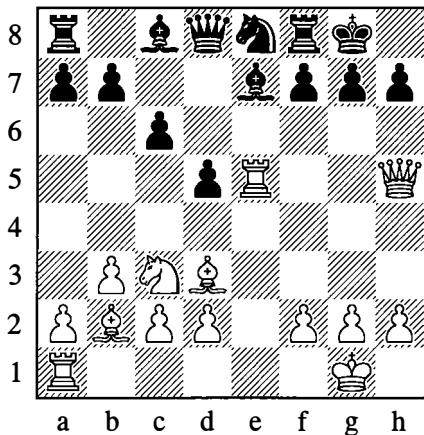
**7...♘xe5 8.♗xe5 0–0 9.♗c3 c6 10.b3 ♘e8**

More or less necessary, in order to develop the light-squared bishop.

**11.♗b2 d5**

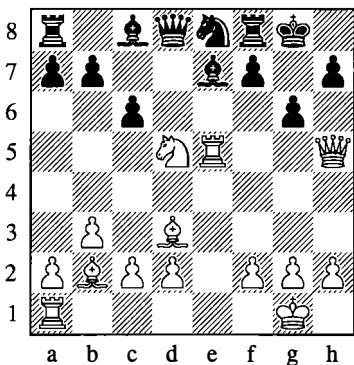
11...♗f6 is a playable alternative, as in Grimberg – Tikkanen, Czech Open 2008, but there is an argument for waiting with ...♗f6 until ♘b2-a3 is no longer annoying.

**12.♗h5**



The previous decision regarding the pawn structure (to play ...d7-d5) was easy. This time, I have some different options: ...h6 or ...g6, perhaps followed by ...f5. It's also possible to avoid all pawn moves by playing 12...Qf6.

To me, the most natural move was 12...g6 to follow up with ...f7-f5 and ...Qf6. Luckily, I had some sense of danger and felt that it's not impossible that White has something tactical. I used a lot of time and concluded that White was winning after 13.Qxd5!!.



- a) 13...cxsd5 14.Qxh7# Qxh7 15.Qh5# Qg8
- 16.Qh8#
- b) 13...Qxd5 14.Qh6 and Qxh7# next.
- c) 13...gxh5 14.Qxe7# Qg7 15.Qxh5# Qf6
- 16.Qxh7#

I also did not like 12...h6, because it rules out

the possibility of moving the f- or g-pawns later on. Therefore, I moved the knight.

### 12...Qf6

I spent a lot of time calculating the consequences of 12...g6 13.Qxd5 and fell far behind on the clock. On the other hand, from now on it's much easier to play with Black. White's pieces are placed only for a quick attack, and if it doesn't work, they have to be regrouped.

However, it would have been easier knowing the opening theory, since the sacrifice has been played before!

### 13.Qh4 Qe6 14.Bg5

Threatening Qxd5.

### 14...g6 15.f4 Qe8

15...Qg4! wins the exchange, but I didn't like it. The a1-h8-diagonal will be very weak without the dark-squared bishop.

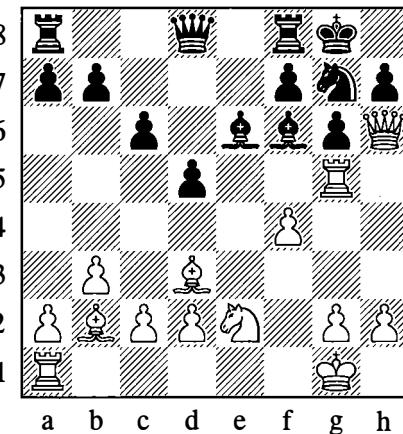
### 16.Qe2 Qg7

Again, I didn't really consider taking the rook.

### 17.Qh6!

This stops Black from playing ...f5 and ...Qf6.

### 17...Qf6



**18.♗xf6?**

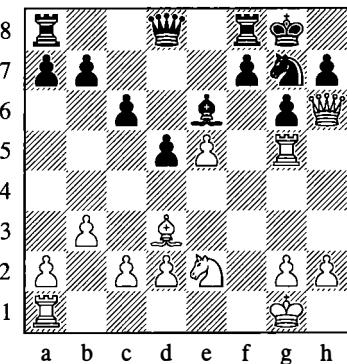
From a strategical point of view, White is ‘forbidden’ to exchange the dark-squared bishop without getting something in return. If he doesn’t succeed with his attack, his remaining pieces will just be misplaced.

The position is critical since a piece exchange is taking place. White should therefore take his time to search for a better move.

**18.♗e5!**

This fixes Black’s kingside. Such moves along a diagonal are often difficult to find if it’s also possible to exchange. The human player automatically rejects moving the bishop only part of the way, while still offering an exchange. We tend to see it in a ‘binary’ way – either exchange or avoid the exchange.

18...♗xe5 19.fxe5

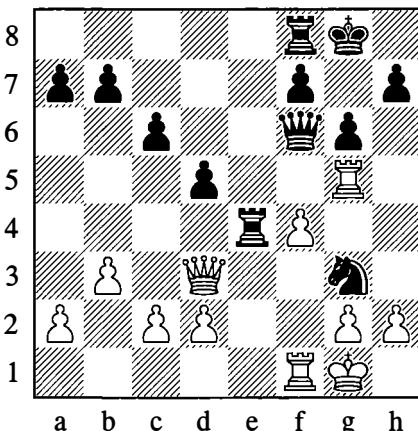


Now there are three options:

- a) 19...♗b6† 20.♔h1 ♗f5 21.♗xf5 ♗xf5 22.♗xf5 gxsf5 is highly dangerous for Black.
- b) 19...f6 20.♗xg6! hxg6 21.♗xg6 wins for White.
- c) 19...f5 20.♗f4 and White has complete control over the dark squares.

18...♗xf6 19.♗f1 ♗f5 20.♗xf5 ♗xf5 21.♗h3 ♗ae8

With simple moves Black has reached his dream – he controls the open file. White’s rook on g5 probably has some sort of midlife crisis, not knowing what to do. The attack has petered out, but the rook can’t easily get back to the centre to control the open e-file.

**22.♗d3 ♗e4 23.♗g3 ♗xg3**

Warning! Another critical position. White’s three possible moves give completely different positions and pawn structures. Should White take back with the rook, the pawn or the queen?

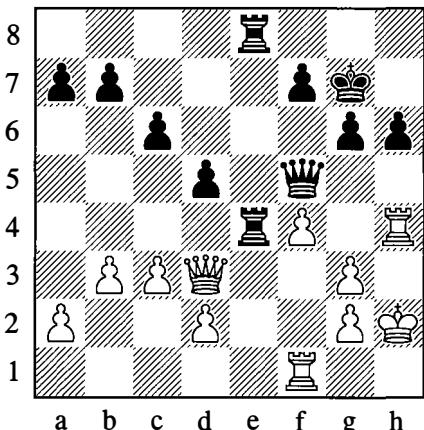
**24.hxg3?**

24.♗xg3 doesn’t work tactically: 24...♗d4† 25.♗f2 ♗xf4! and Black wins a pawn.

24.♗xg3! sacrifices a pawn but gets the rook back into action and also wins control over the open e-file. That’s a cheap price. After 24...♗xf4 25.♗xf4 ♗xf4 26.♗e3 White has reasonable drawing chances. Black’s extra pawn is placed on the kingside, and if he advances it, he will open up his king’s position.

**24...♗fe8 25.c3 ♗g7 26.♗h2 h6 27.♗g4 ♗f5 28.♗h4**

White collapses after 28.♗f3? ♗e2.



28... $\mathbb{B}xf4!$  29. $\mathbb{W}xf5$   $\mathbb{B}xf5$  30. $\mathbb{B}xf5$   $gx5$   
31. $\mathbb{Q}g1$   $\mathbb{B}e4?$

I went for this piece exchange without much thought, not realizing that it's a critical position. I should have done, since one of the characteristics for critical positions is exchanges.

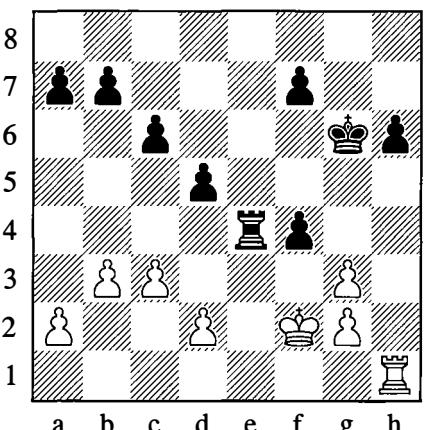
31... $\mathbb{B}e2$  32. $\mathbb{B}d4$   $\mathbb{B}e4!$  33. $\mathbb{B}d3$   $\mathbb{B}e1\uparrow$  34. $\mathbb{Q}f2$   
 $\mathbb{B}a1$  35.a4  $\mathbb{B}a3$  would have won a pawn by force.

### 32. $\mathbb{Q}f2!$

Whoops. I had overlooked this.

### 32... $\mathbb{Q}g6$ 33. $\mathbb{B}h1$ f4

33...d4 was probably better. It threatens ...d4-d3 and forces White to weaken his pawn structure.



Another highly critical moment; this time affecting the pawn structure.

### 34. $\mathbb{gxf4?}$

34.g4 avoids exchanging Black's doubled pawn. I have to take space on the queenside to improve my position, but White has reasonable drawing chances.

### 34... $\mathbb{B}xf4\uparrow$

I didn't have many difficulties winning this, by advancing my h- and f-pawns.

35. $\mathbb{Q}g3$   $\mathbb{B}f6$  36. $\mathbb{B}g1$   $\mathbb{Q}g5$  37. $\mathbb{B}h1$  h5 38.d4  
 $\mathbb{B}e6$  39. $\mathbb{B}f3$  h4 40. $\mathbb{B}c1$   $\mathbb{B}f6\uparrow$  41. $\mathbb{B}e3$   $\mathbb{Q}g4$   
42.c4  $\mathbb{Q}g3$  43. $\mathbb{B}c2$   $\mathbb{B}f1$  44.cxd5 cxd5 45. $\mathbb{B}c5$   
 $\mathbb{B}f5$  46. $\mathbb{B}c2$   $\mathbb{B}f1$  47. $\mathbb{B}c5$   $\mathbb{Q}xg2$  48. $\mathbb{B}xd5$  f5  
49. $\mathbb{B}d7$   $\mathbb{B}f3\uparrow$  50. $\mathbb{B}e2$  h3 51. $\mathbb{B}h7$  f4 52.d5  
 $\mathbb{B}g3$  53.d6 f3 $\uparrow$  54. $\mathbb{B}d2$  f2 55.d7  $\mathbb{B}g8$   
56. $\mathbb{B}g7\uparrow$   $\mathbb{B}xg7$  57.d8=  $\mathbb{W}f1=\mathbb{W}$

0-1

There were four clearly critical positions for each player: moves 18, 24, 32 and 34 for White and 12, 15, 28 and 31 for Black. It would have helped both sides to understand when they appeared.

## Imbalances

In *Reassess Your Chess*, Jeremy Silman writes that it's useful to talk about *imbalances* instead of *advantages*. This is well shown in one of the examples from the previous chapter (page 61), where White's space would be advantageous with the minor pieces on the board, but was disadvantageous without them. Taking that into account, it's better to talk about *more space* than a *space advantage*.

There are nine possible imbalances in chess, all with self-explanatory labels: king safety, material, development, central control, initiative, space, piece placement, control over key squares and pawn structure.

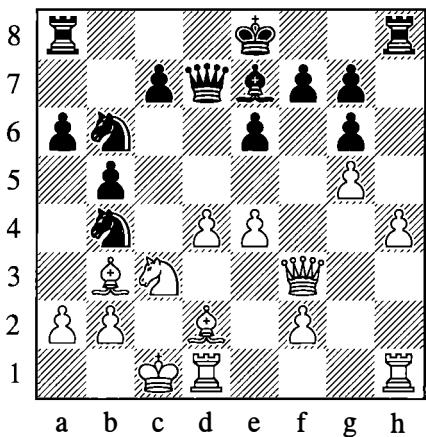
Most often both White and Black have an advantage in one or more of those nine categories. Both players want to make their advantageous imbalance the most important feature in the position. If the pawn structure is better, it's logical to strive for an endgame, but with central control, it's better to keep as many pieces as possible.

The fight between different imbalances is well illustrated in the following game. The players are married, and since their children came to watch early on, I expected a quick draw. Instead, they created a very interesting game.

### Monica Socko – Bartosz Socko

Rilton Cup, Stockholm 3rd January 2012

1.d4 d5 2.♘f3 a6 3.e3 ♘f5 4.c4 e6 5.♘c3 ♘f6 6.♘e5 ♘e7 7.g4 ♘g6 8.h4 dxс4 9.♗f3 ♘bd7 10.♗xg6 hxg6 11.♘xc4 b5 12.♗b3 ♘b6 13.g5 ♘fd5 14.♗d2 ♘d7 15.e4 ♘b4  
16.0–0–0



Let's compare White and Black's positions considering the nine imbalances.

The pawns are equal, since Black can't play 16...♗xd4 due to 17.♗e3 ♘e5 18.♗d4 ♘d6 19.♗xg7, winning the rook. Instead, I would say that White has a small material advantage

with the pair of bishops. White also has space, control over the centre and slightly better development.

The pawn structure is unbalanced with many possible targets: h4, f7 and even c7. I prefer White's structure on principle, since there are two possible pawn levers: h4-h5 and d4-d5.

It's difficult to say who has the better piece placement; neither side has control over important key squares.

It sounds good for White so far, but there are still two imbalances left: king safety and the initiative. The position of both kings seems shaky. The player who gets the initiative will probably have the safer king, because the opponent will need to use his or her pieces for defensive purposes.

Black needs to base his play on one or both of those imbalances: king safety or the initiative. He should avoid an endgame, where the bishop pair might be strong, and also avoid slow positions where the space matters. Therefore, he should act immediately, while White's rook still has to defend h4 and her king is on c1. With a pawn storm on the queenside, Black will get the most use out of his knights. In a messy position it's also pleasant to be able, at any move, to castle in either direction. If White uses all her forces to attack on the kingside, Black might simply escape by castling long, and vice versa.

#### 16...a5!

The idea is ...a5-a4-a3 to weaken White's king. White should probably have stopped it by playing a2-a3 herself.

#### 17.h5?! a4! 18.hxg6 ♘f8!

White doesn't have time to take on f7.

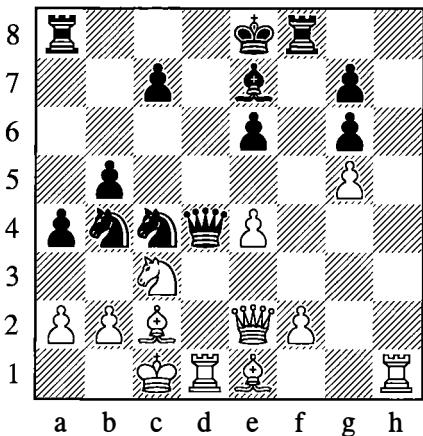
#### 19.♗c2 fxg6 20.♗e3

After the relatively best 20.♗g4 a3, Black has a dangerous attack.

20... $\mathbb{Q}c4$  21. $\mathbb{W}e2$   $\mathbb{W}xd4$

Black has won a pawn in the centre, but even more are coming.

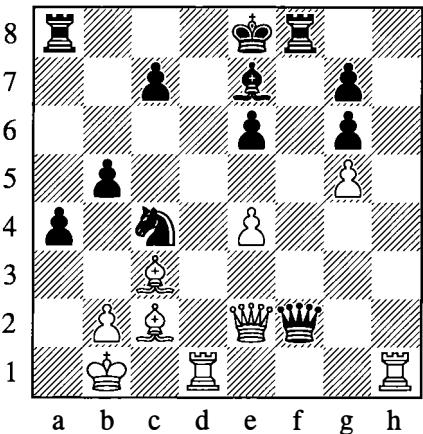
22. $\mathbb{Q}e1$



22... $\mathbb{Q}xa2\#$ ! 23. $\mathbb{Q}b1$

23. $\mathbb{Q}xa2$   $\mathbb{W}xb2\#$

23... $\mathbb{Q}xc3\#$  24. $\mathbb{Q}xc3$   $\mathbb{W}xf2$



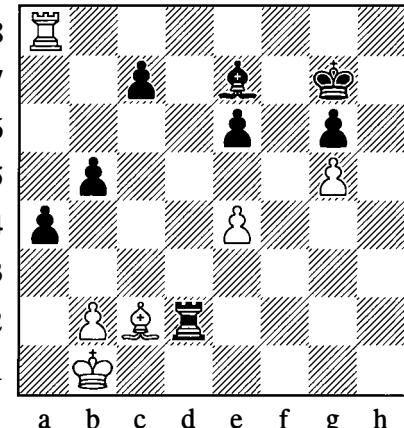
After 25. $\mathbb{W}d3$   $\mathbb{B}d8$  26. $\mathbb{W}h3$  White keeps the queens on, and can try to attack Black's uncastled king. However, the black king is actually quite safe.

In the game, White exchanged queens to take back one of the pawns.

25. $\mathbb{W}xf2$   $\mathbb{B}xf2$  26. $\mathbb{Q}xg7$   $\mathbb{Q}d2\#$  27. $\mathbb{B}xd2$   $\mathbb{B}xd2$

28. $\mathbb{B}h8\#$   $\mathbb{Q}f7$  29. $\mathbb{B}xa8$   $\mathbb{Q}xg7$

With two healthy pawns, Black must be winning.



30. $\mathbb{B}b8$   $c6$  31. $\mathbb{B}b7$   $\mathbb{Q}f7$  32. $\mathbb{B}c7$   $\mathbb{B}g2$  33. $\mathbb{B}xc6$   $\mathbb{B}xg5$  34. $\mathbb{B}a6$   $\mathbb{B}c5$  35. $\mathbb{B}d3$   $g5$  36. $\mathbb{B}e2$   $\mathbb{B}e5$  37. $\mathbb{B}a5$   $\mathbb{Q}f6$  38. $\mathbb{B}f3$   $\mathbb{B}c5$  39. $\mathbb{B}e2$   $\mathbb{Q}e5$  40. $\mathbb{B}a7$   $\mathbb{Q}f6$  41. $\mathbb{B}a5$   $\mathbb{B}e5$  42. $\mathbb{B}f3$   $\mathbb{B}b4$  43. $\mathbb{B}a6$   $\mathbb{Q}c5$  44. $\mathbb{B}e2$   $\mathbb{B}d4$  45. $\mathbb{B}f3$   $\mathbb{Q}e7$  46. $\mathbb{B}a2$   $\mathbb{B}c5$  47. $\mathbb{B}b6$   $\mathbb{Q}f6$  48. $\mathbb{B}b7$   $\mathbb{Q}e5$  49. $\mathbb{B}e2$   $\mathbb{Q}xe4$  50. $\mathbb{B}xb5$   $\mathbb{Q}e3$  51. $\mathbb{B}xc5$   $\mathbb{Q}xc5$  52. $\mathbb{B}d1$   $e5$  53. $\mathbb{B}xa4$   $g4$

0–1

After 16 moves White had a lot of advantages, but that didn't help when Black managed to get his initiative going. Shortly thereafter, White's king became weak – the most important imbalance.

### Positional chess without creativity

No one can play with just one grand gameplan, followed from the start until the end of the game. Rather, the plan may change from move to move depending on the opponent's reactions, and there may be several candidate plans to switch between.

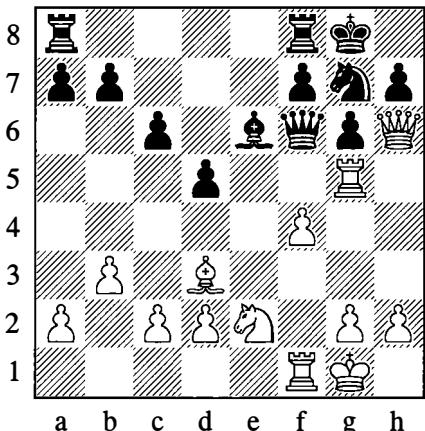
As I see it, positional factors in chess are things

such as pawn structure, weak squares and good and bad pieces. All of them have a few basic principles that are easy to follow.

Nils Grandelius has said that playing positionally means playing without creativity. He argues that positional decisions don't get difficult until the principles are questioned. Often they should be, but in simple positions there is less need for that; simple moves for simple positions.

Sometimes there is actually nothing wrong with making a move without having any plan at all! Occasionally it's best to improve a piece without really knowing what to do on the next move. But only if it's a good positional move.

One example is a move from the game against Stefan Christensen, earlier in this chapter, with Black to move.



I played 19... $\mathbb{Q}f5$  to prevent White's f4-f5. I also saw that my knight looks nice after 20. $\mathbb{Q}xf5 \mathbb{Q}xh5$ , but I didn't calculate further.

However, my thoughts were enough to play the move; there is no need for a deeper plan.

This kind of chess without creativity is also in line with the conclusion from the previous section, to make natural moves in most positions and concentrate our efforts on the critical ones.

I have noticed that many students I've had, including myself, have played in too complicated a style. While trying to take everything into account, we have forgotten that development and piece placement are often the most important things.

The first plan is to complete development. The Swedish IM Emil Hermansson has half-seriously added that it isn't completed until you have created *luft* for the king.

I honestly believe that the advice of playing simply can be enough for many players to improve significantly. At least if it's connected to playing faster.

While positional chess is every positional factor separated, I see strategic chess as all factors interwoven. The pawn structure needs to suit the pieces, and the piece placement should be adapted to the imbalances. When the players have castled on opposite wings, it's still positional to avoid getting a weak pawn, but it's probably not a good strategy to spend a tempo on such a thing.

It's fully possible to have a positionally bad position and yet strategically a good one. Here is one example from the German league, where I play for Greifswalder SV. If I wanted to catch the train and reach the night-ferry to Sweden, the game could only take 2½ hours. I started by violating as many positional rules as possible.

### Axel Smith – Stephan Giemsa

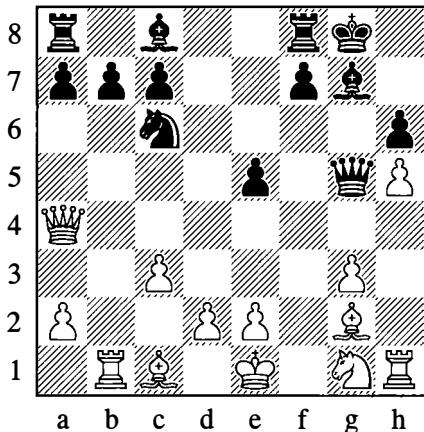
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Oberliga Nord Ost, Berlin 10th April 2011

1.c4  $\mathbb{Q}f6$  2. $\mathbb{Q}c3$  d5 3.cxd5  $\mathbb{Q}xd5$  4.g3 g6  
5. $\mathbb{Q}g2$   $\mathbb{Q}xc3$  6.bxc3  $\mathbb{Q}g7$  7. $\mathbb{B}b1$   $\mathbb{Q}c6$  8.h4 h6  
9. $\mathbb{W}a4$  0-0 10.h5 g5 11.f4 e5 12.fxg5  $\mathbb{W}xg5$

White's position looks like a beginner's. Two minor pieces sit on their initial squares while the queen has already moved; the king

can't castle on either wing and the g-pawn is backward. Black, on the other hand, has developed, castled and occupied the centre. Positionally, Black is much better.



However, the white pieces are cooperating with each other. The rook on b1 stops the c8-bishop from developing. The bishop on g2 stops ... $\mathbb{E}b8$  due to  $\mathbb{Q}xc6$ , and ... $\mathbb{Q}e7$  due to  $\mathbb{Q}xb7$ . The queen stops ...a6 followed by ...b5 due to  $\mathbb{Q}xb5$ . All those pieces work together towards the same goal.

The white king can't be attacked behind the central pawns, at least not for the moment.

White is much worse positionally and he isn't really threatening anything. Despite that, I think his position is better, but it's an extremely risky strategy. One slight mistake and it will backfire. That was what happened to Nils Grandelius when he lost a short game with White to Benjamin Bok in Corus 2010. That game reached the position after 11...e5 and Bok won a brilliancy prize after checkmating in 21 moves. After the game, the computer quickly found the key moves for White on moves 12 and 13. The strategy is incredible – even Magnus Carlsen couldn't believe that it worked. However, it does! Grandelius showed the idea when he took revenge by beating an unsuspecting Eltaj Safarli in the Olympiad later the same year.

### 13.g4!!

Since the bishop on c8 has to stay put, the pawn is untouchable. White plans either  $\mathbb{Q}g1-h3-f2$  or d2-d3 followed by  $\mathbb{Q}e3$ ,  $\mathbb{Q}f3$  and  $g4-g5$ . I can say that it's quite calming to reach this position after having analysed it thoroughly.

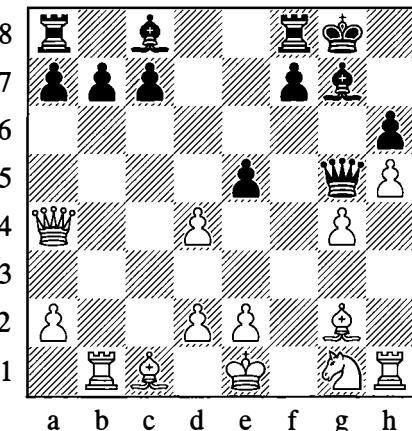
### 13... $\mathbb{Q}d4?$

Apparently, it was frustrating to play with Black.

Safarli managed to play four moves before sacrificing his pieces: 13... $\mathbb{E}d8$  14. $\mathbb{Q}h3$   $\mathbb{W}e7$  15. $\mathbb{Q}f2$   $\mathbb{Q}h8$  16. $\mathbb{Q}e4$  a6 17. $\mathbb{Q}c2$   $\mathbb{Q}e6$  18. $\mathbb{E}xb7$   $\mathbb{Q}d4$  19.cxd4 and White won.

### 14.cxd4

I won quickly and caught the train.



14... $\mathbb{W}xg4$  15. $\mathbb{Q}f3$   $\mathbb{W}g3\#$  16. $\mathbb{Q}f1$  exd4  
17. $\mathbb{E}b3$   $\mathbb{Q}e6$  18. $\mathbb{E}xb7$   $\mathbb{Q}f6$  19.d3  $\mathbb{Q}h4$   
20. $\mathbb{E}xh4$   $\mathbb{W}xh4$  21. $\mathbb{Q}xh6$   $\mathbb{E}fe8$  22. $\mathbb{W}a5$   $\mathbb{E}ab8$   
23. $\mathbb{E}xb8$   $\mathbb{E}xb8$  24. $\mathbb{W}e5$   $\mathbb{E}b1\#$  25. $\mathbb{Q}g2$

1-0

Without any doubt, 13.g4 is my favourite move. White's g-pawn and king both look bad, but cannot be attacked in an effective way. It brings an old saying to mind: "A weakness is only a weakness if it can be attacked."

## The central theme

When evaluating a position with many imbalances, it's important to try to find out which of them is most important: *the central theme(s)*. This is often where strong players prevail over weaker ones, since experience and intuition give an intuitive answer. And if the answer comes intuitively, there's no need to use the concept of the central theme at all.

Nevertheless, it's also possible to try to figure it out.

It is impossible, and too theoretical, to order the imbalances from one to nine. Here is a rougher list:

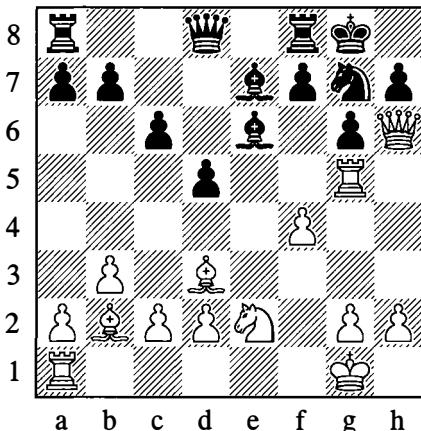
- 1) King safety
- 2) Material
- 3) Development, initiative
- 4) Central control, space, piece placement, control over key squares and pawn structure

However, even though king safety is the most important imbalance, a slightly safer king doesn't have any impact at all if the opponent has a huge lead in material.

What you have to do is check the different imbalances, in order of importance, and ask yourself if it can be enough to win the game. If the answer is yes, there is a great chance that you have found the central theme.

I will again illustrate with a position from the game against Stefan Christensen, with Black to move.

White is trying to attack Black's king, and that attack is clearly a central theme. On the other hand, White's heavy pieces on the kingside will be clumsy if the attack stagnates. It may be enough to win; hence piece placement is another central theme. In the game (page 109), Black managed to neutralize White's attack.



After the tournament in Vladimir, I appreciated the concept of critical positions. However, I have also heard that the secret of the Soviet Chess School can be captured by the phrase: "*If you need to do something, do it!*" It is a truism, but useful if it's interpreted like this: look for the central theme and try to do whatever you can to make the impact of that imbalance as big as possible.

If the opponent's pawn structure is clearly better, but you have some possibilities to create an attack on the king, you should not care much about the pawns but make all possible efforts to attack the king.

Playing according to the central theme sometimes requires immediate, dynamic play, and other times slow, static play. Some of the imbalances are possible to categorize as either dynamic or static, like development, initiative and material, but most are not. To have a better king is usually a temporary advantage, but it was a permanent (static) advantage in the game Timmerman – Andersson from the first chapter. You have to use your reasoning ability when you decide which tempo to strive for.

The take-home message is to lean back and ask what's most important. Many players play in too complicated a fashion and forget about simple things such as development and piece placement.

## The Auxiliary Questions

The list of six auxiliary questions below covers the topics of the first three chapters: pawn levers, piece exchanges and critical positions. It's especially useful to ask the questions when it's the opponent's move; with less need for concrete calculations, there is time to make the positional considerations.

I know I am repeating myself, but once again: If a strong move appears intuitively, there is nothing wrong with playing it. To force you to use the auxiliary questions would be too time-consuming and would also be mean to a good old friend: your intuition. But the questions are useful if you can't find a plan, or if you can't choose between several different moves. As you will quickly find out, some questions suit certain kinds of position.

### **1) Is this a critical position?**

The position is critical when you have to take a decision that is difficult and can't be taken back, such as in the case of *pawn levers, piece exchanges and tactics*.

### **2) Are there any pawn levers?**

Pawn levers are often the *foundation of a plan* and decide on which squares to place the pieces. The question should be asked both for yourself and your opponent.

### **3) Which imbalances are there?**

Possible imbalances: king safety, material, development, initiative, central control, space, piece placement, control over key squares and pawn structure. Are there any clear weaknesses to attack, *a weak pawn, a weak square or a weak king*?

### **4) Which pieces do you want to exchange?**

Take both your own and your opponent's pieces into account. *Which is the worst-placed piece?*

### **5) What is most important? Which tempo should you strive for?**

Compare and evaluate the findings from Questions 1 to 3. What seems to be the *central theme* of the position? Is your plan to consolidate, take prophylactic measures against the opponent's plan, or should you play actively before the opponent has achieved coordination? The last strategy should be used if *the imbalance(s) in your favour are of a temporary nature*.

### **6) Which candidate moves should be considered?**

*Which move feels intuitively positionally correct?* Look for candidate moves and make a short blunder check in the end.

In the List of Auxiliary Questions, the positional factors (Questions 2-4) form the strategy (Question 5), which is implemented with the help of universal game theory (Questions 1 and 6).

Candidate moves will be thoroughly examined in the next chapter. However, there is some specific advice I can offer about positional candidate moves.

It's not possible to prove it, but I think that the inner logic of chess makes positionally-intuitive moves work tactically more often than it looks at first sight. Hence, it's worth spending some extra time looking for supporting tactics. It's also a good idea to start by calculating this move, since it has the highest aims. If it works, there is no need to examine other moves carefully, which would save time.

When you play a move, it's not important to know the evaluation of the upcoming position. You only need to know if it's better than the other candidate moves. The evaluations you make when you choose between plans and

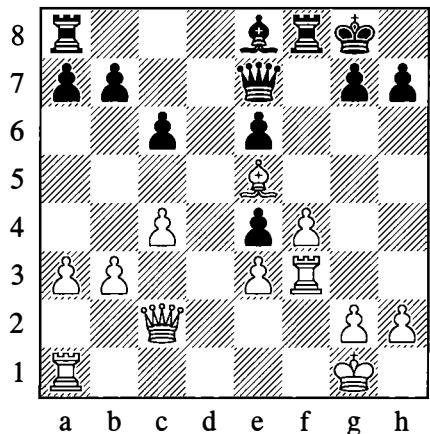
moves are therefore not absolute but only compared against each other. If a move is clearly best, you should play it no matter if it's winning or drawing.

I think that if you have such an attitude, you will after some time get used to taking decisions when comparing moves. It will less and less often happen that you think that two different moves or plans are of equal value, but instead consider the continuation you choose to be the best.

## Exercises

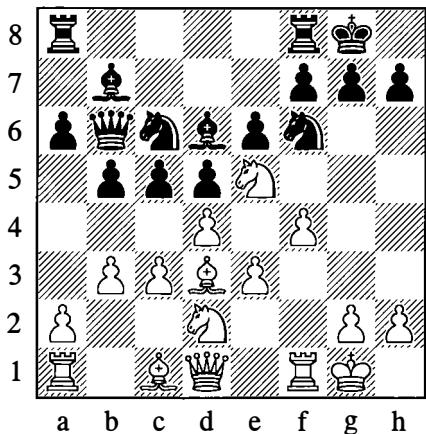
**So – Shirov, Malmö 2011**

1



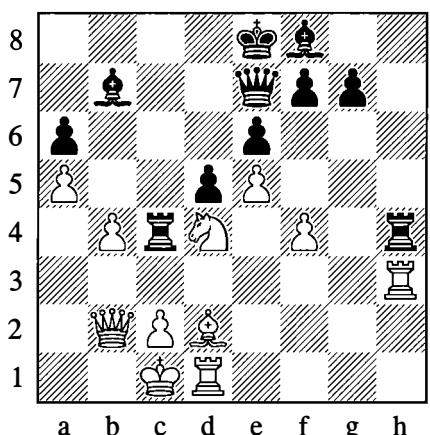
**Smith 2012**

3



**Smith – Lissäng, Göteborg 2006**

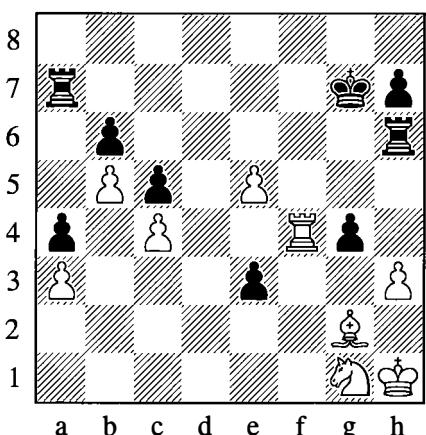
2



A quite normal position, but from here White could win in great attacking style, forcing resignation after only eight moves:  
 $12.g4 \mathbb{Q}ad8 13.g5 \mathbb{Q}d7 14.\mathbb{Q}xh7\# \mathbb{Q}xh7$   
 $15.\mathbb{Q}h5\# \mathbb{Q}g8 16.\mathbb{Q}f3 \mathbb{Q}dxe5 17.\mathbb{Q}h3 f6$   
 $18.fxe5 \mathbb{Q}xe5 19.dxe5$  How can Black's play be improved between moves 12 and 18?

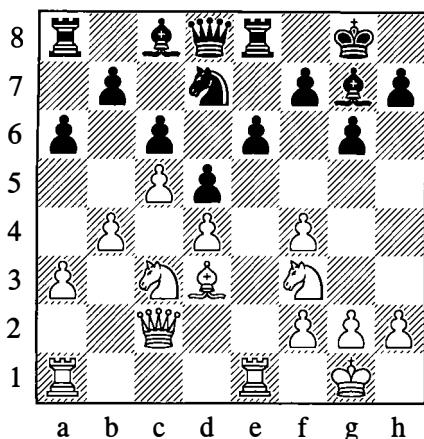
**Cicak – Gajewski, Stockholm 2012**

4



## Frisk – Hoem, Kristiansund 2012

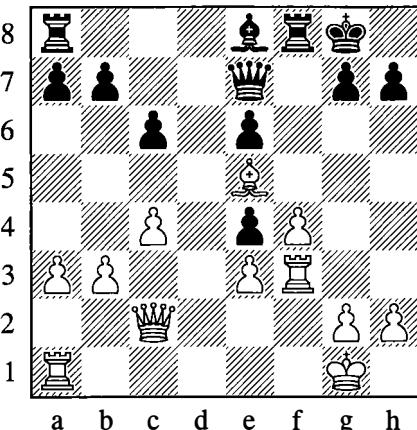
5



## Solutions

## 1. Wesley So – Alexei Shirov

Sigeman &amp; Co, Malmö 2011



White has a clearly superior bishop. It's a long-term advantage, since it's unlikely that Black will manage to exchange them! White is thus happy to keep the position static.

## 21.♗f1!

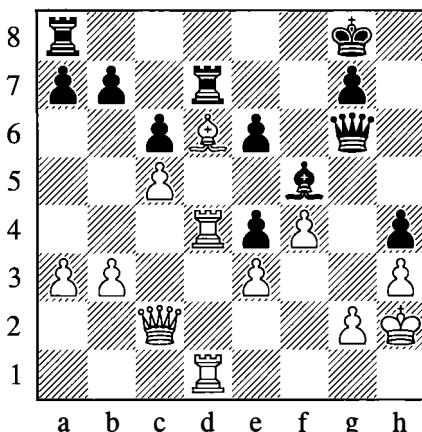
The rook will be useful on the d-file. 21.♖f2 was equally good, while 21.♗g3 doesn't achieve anything.

21.♗xe4? is a clear mistake. After 21...♝g6 22.♗d4 ♜fd8 23.♗b2 ♜d3 Black has some compensation with control over the d-file. It's still better for White, but not as much as in the game.

## 21...♝g6 22.c5! ♜fd8 23.♗d6

So closes the d-file, to be able to double rooks without being disturbed. The position is not so critical anymore, but the rest of the game is worth seeing anyway.

23...♛f7 24.♗ad1 ♛f5 25.♗d4 ♛d7 26.h3 h5 27.♗fd1 ♛g6 28.♗h2 h4?!

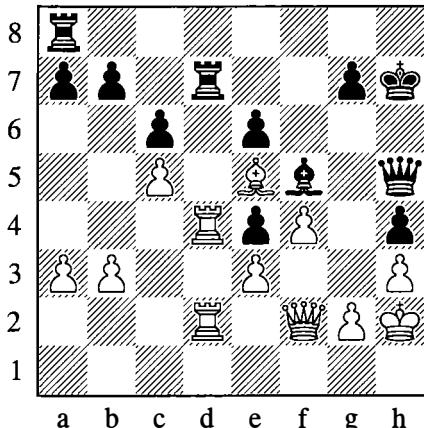


Shirov's decision to fix the pawns on the kingside was critical. It rules out White's pawn lever g2-g4 but at the same time weakens the pawn. I think it was a dubious decision to play 28...h4, since the weak pawn gives Black some problems later in the game. However, Black's position was not good anyway.

## 29.♗f2 ♛h5 30.♗d2 ♛h7?

30...♗ad8 was necessary, to stop White from taking control of the d-file. In that case, White has to advance on the queenside in order to create a third weakness there, according to the principle of many weaknesses. The first two weaknesses are the bad light-squared bishop and the pawn on h4.

**31.♕e5!**



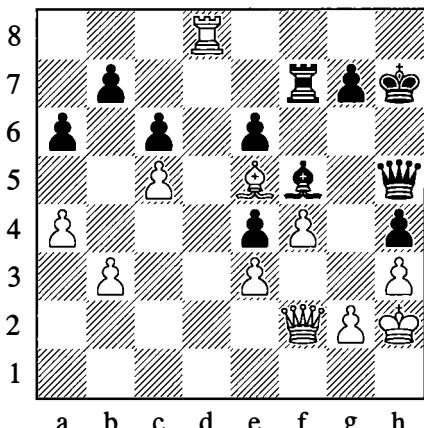
**31...♝f7**

Black can try to block the file with 31...♝d5 but after 32.♗b4 he loses either the b7-pawn or the h4-pawn.

**32.♗d7 ♘af8 33.♗2d6 ♖g8 34.♗xf7 ♘xf7 35.♗d8† ♖h7**

Exchanging rooks with 35...♝f8 36.♗d2 ♘xd8 37.♗xd8† ♖h7 is also hopeless. After 38.♗e7 Black has too many weaknesses: g7, h4 and b7.

**36.a4 a6**



White's easiest winning plan is to advance his king to b6. That may sound remarkable,

but there is no defence for Black. The rook must stay on the seventh rank, the queen must defend h4 and the bishop does nothing. After the king march, White plays ♘b8 and ♘xb7.

**37.♘e1**

With the queen on f2, Black may have tricks such as ...♝xe5. On e1, the queen blocks the king, but White has all the time in the world and follows the principle *Do not Hurry*.

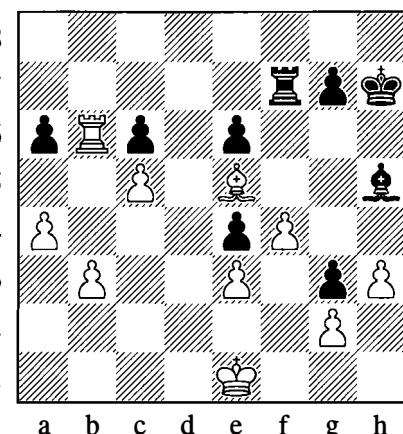
**37...♝g6 38.♗g1 ♖f5 39.♗f2**

Back again.

**39...♝g6 40.♗f1 ♖f5 41.♗e1 ♖e8**

Instead of waiting for ♘b6, Shirov tries to prepare an exchange sacrifice. However, this makes his pieces uncoordinated, and So can win the b7-pawn without the king march.

**42.♗d2 ♖g6 43.♗b8 ♖g3† 44.♗f2 ♖h5 45.♗xb7 ♖f7 46.♗xg3 hxg3 47.♗b6**

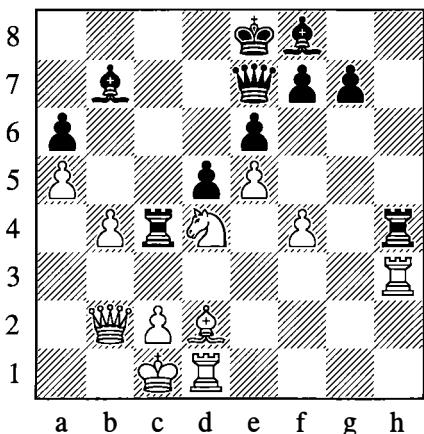


Of course So avoids the exchange of rooks. The decision was easy and therefore not a critical one. The rest is easy.

**47...♗d7 48.♗d6 e5 49.fxe5 ♘f7 50.e6 ♘f2 51.♗xg3 ♘xg2 52.♗f4 g5 53.♗f1 ♘c2 54.♗xg5 ♘xc5 55.h4 ♖g6 56.e7 ♖f5 57.♗b8 ♘e5 58.♗f8† ♖g4 59.♗g2 1–0**

## 2. Axel Smith – Christopher Lissäng

Swedish Junior Championship, Göteborg 2006



Using the auxiliary questions:

- 1) White may try b4-b5 to create a passed pawn, or f4-f5 to attack Black's king. Black can try ...g5 to undermine White's pawn on e5.
- 2) The position is very unbalanced. In the short term, White's king seems safer, but Black's king might be able to hide on g7 later. White has a development advantage and more space, while Black has a small material advantage with the bishop pair.
- 3) White doesn't want to exchange pieces, since his extra space may become a disadvantage, but it would be great to get rid of the strong rook on c4. The rook on d1 is the worst-placed piece in White's position. Black's wishes are, of course, the opposite.
- 4) White's advantageous imbalances are mainly of a temporary nature, so he should act immediately.
- 5) If White decides to go for a pawn lever, the position is critical.

6) White has to do something with the rook on h3. 26.  $\mathbb{E}xh4$ , 26.  $\mathbb{E}dh1$  and 26.  $\mathbb{E}b3$  are candidate moves.

26.  $\mathbb{E}xh4$  seems to help Black to develop.

26.  $\mathbb{E}dh1$  looks better, improving the worst-placed piece.

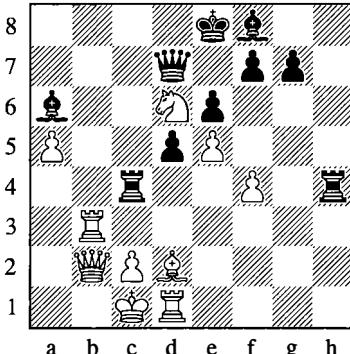
26.  $\mathbb{E}b3$  seems even stronger, because it corresponds to White's main plan: to keep pieces, push b4-b5 and attack Black's king.

### 26. $\mathbb{E}b3!$ $\mathbb{W}d7$

Black can try to sacrifice an exchange with 26...g5? 27.  $\mathbb{Q}f3$   $\mathbb{E}hxf4$ , but I doubt he has full compensation.

### 27. b5 $\mathbb{Q}c5$

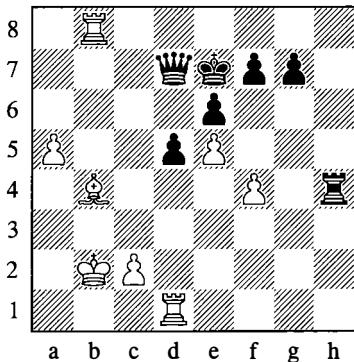
Another interesting line is: 27...axb5 28.  $\mathbb{Q}xb5$   $\mathbb{Q}a6$  29.  $\mathbb{Q}d6\uparrow$



White sacrifices a pawn to enter a position with opposite-coloured bishops. It's generally good for the attacking side, but I am not sure how much better White's position is.

### 28. bxa6! $\mathbb{Q}xa6$

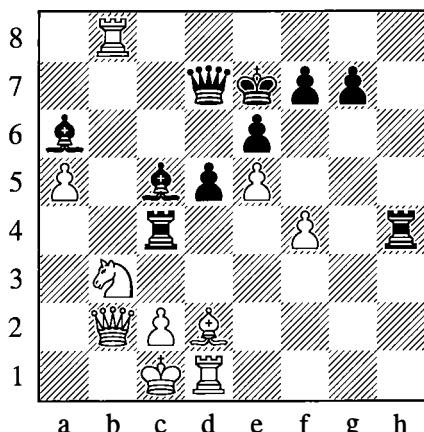
After 28...  $\mathbb{Q}xd4$  29. axb7!  $\mathbb{Q}xb2\uparrow$  30.  $\mathbb{Q}xb2$ , Black has one way to prevent White from getting a new queen: 30...  $\mathbb{E}c8$  31. b8=  $\mathbb{W}$   $\mathbb{E}xb8$  32.  $\mathbb{E}xb8\uparrow$   $\mathbb{Q}e7$  However, White has a deadly check with 33.  $\mathbb{Q}b4\uparrow$ .



**29.  $\mathbb{Q}b8\#$   $\mathbb{Q}e7?$**

29... $\mathbb{Q}c8$  is the only try but after 30. $\mathbb{Q}b5!$ , a5-a6 is very strong against 30... $\mathbb{Q}f8$ , 30... $\mathbb{Q}e7$  and 30...g6. Against other moves, White follows up with  $\mathbb{Q}d6\#$  or f4-f5, with good attacking chances.

**30.  $\mathbb{Q}b3$**



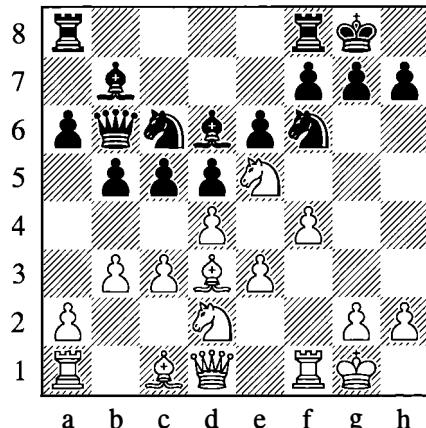
White has full control over the dark squares.

**30...  $\mathbb{Q}a7$  31.  $\mathbb{W}a3\#$**

Black resigned.

### 3. Smith 2012

1.d4 d5 2.  $\mathbb{Q}f3$   $\mathbb{Q}f6$  3.e3 e6 4.  $\mathbb{Q}e2$  c5 5.c3  $\mathbb{Q}d6$  6.0-0 a6 7.  $\mathbb{Q}bd2$  b5 8.  $\mathbb{Q}e5$   $\mathbb{Q}b7$  9.  $\mathbb{Q}d3$   $\mathbb{Q}c6$  10.f4 0-0 11.b3  $\mathbb{W}b6$



**12.  $\mathbb{g}4?$**

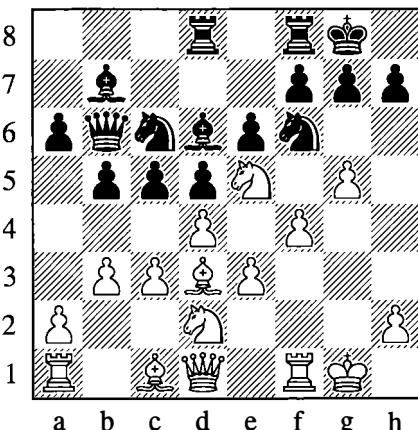
This is premature, as White hasn't even completed his development. To play b2-b3 without  $\mathbb{Q}b2$  looks strange. Black has two ways to refute the concept.

**12...  $\mathbb{E}ad8?$**

Every pawn move weakens at least one square, and b2-b3 has weakened c3, which defends d4. The first move I consider is thus the undermining 12...b4.

However, there is also a tactical solution. After 12...cxsd4! 13.cxd4  $\mathbb{Q}xd4$  14.exd4  $\mathbb{W}xd4\#$  the rook on a1 is lost.

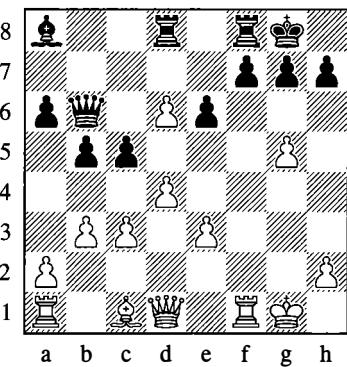
**13.  $g5$**



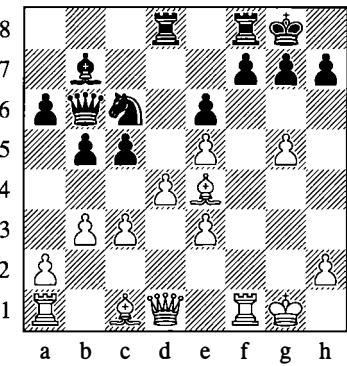
**13...Qd7?**

Don't forget the secret of the Soviet Chess School: If you need to do something, do it! Black has to open the centre, and must consequently play 13...Qe4!. It doesn't matter if it loses a pawn. Furthermore, it's not surprising that Black is much better after both of White's pawn grabs:

- a) 14.Qxe4 dxe4 15.Qxe4 Qxe5 16.fxe5 Qxe4  
17.exd6 Qa8 White's king is very weak.



- b) 14.Qxe4 dxe4 15.Qxe4 Qxe5 16.fxe5

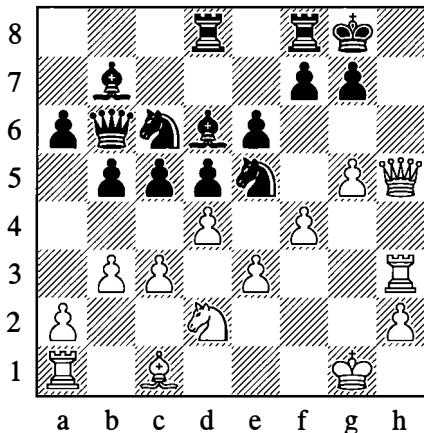


16...Qxd4! with the idea 17.Qxb7 Qc6! and Black has the better pawn structure, better king and better minor piece.

**14.Qxh7†!!**

It's too late to find a defence.

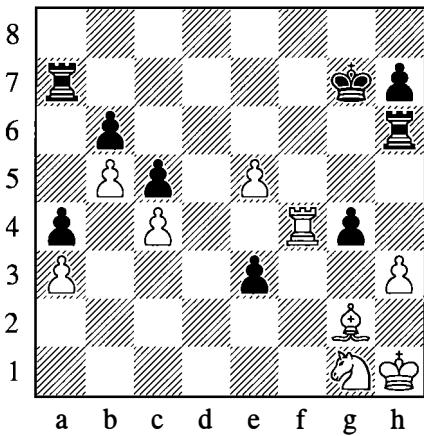
- 14...Qxh7 15.Wh5† Qg8 16.Qf3 Qdxe5  
17.Qh3**

**17...f6 18.fxe5 Qxe5 19.dxe5**

Black must resign, since he can't defend against both g5-g6 and e5xd6.

**4. Slavko Cicak – Grzegorz Gajewski**

Rilton Cup, Stockholm 2nd January 2012



Every piece needs to take more responsibility in the endgame, since there are fewer of them. The knight is therefore not a good endgame piece, since it moves slowly between the wings. The rook is, on the other hand, at its best in the endgame where there are a lot of open files and ranks. With that said, it's easy to understand that Black wants to exchange rooks in this position.

It's also possible to formulate the argument

in a more general way: with two pieces of the same type, the second is sometimes unable to reach its full potential. For that reason, it is often good to exchange what you have two of (with bishops the exception – though, as mentioned previously, a light-squared bishop and a dark-squared one do not really count as two pieces of the same type).

It's easy to get blinded by material. In the last move before the time control, Black erred.

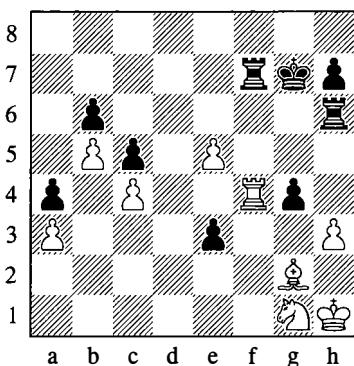
**40...gxh3? 41.Qd5!**

Cikat stopped ...Qf7 and closed the d-file. He won easily by advancing the passed pawn.

41...Qe7 42.Qe4 Qg6 43.Qe2 h2 44.Qxe3 Qf5 45.e6 Qg4 46.Qg3† Qf5 47.Qc3 Qf4 48.Qf3† Qe5 49.Qf2 Qa7 50.Qxa4 Qd6 51.Qe2 Qg7 52.Qxh2 Qxh2† 53.Qxh2 Qc7 54.Qc6 Qd6 55.Qd7 Qc7 56.Qc3 Qg5 57.a4 Qe5 58.Qd5† Qxd5 59.cxd5 c4 60.a5 c3 61.Qc6 c2 62.e7 c1=Q 63.e8=Q Qf4† 64.Qh3 Qf5† 65.Qg3 Qd3† 66.Qf4 Qf1† 67.Qg5 Qc1† 68.Qf5 Qf1† 69.Qe6 Qh3† 70.Qf6 Qf3† 71.Qg7 Qc3† 72.Qg8 bxa5 73.Qe7† Qb6 74.d6 Qg3† 75.Qf8 Qf4† 76.Qe8 Qg3 77.Qe6 Qc3 78.d7 Qh8† 79.Qf7 h5 80.Qf6 Qh7† 81.Qf8

1–0

Instead, Gajewski should have tried to exchange rooks immediately with 40...Qf7!.



There are two replies to consider:

a) 41.Qxg4†? Qg6! and Black manages to exchange rooks, or wins back material after: 42.Qe4 Qf2! 43.Qf3 Qxg1† 44.Qxg1 Qxf3

b) 41.Qe4! White shouldn't care about material either. By avoiding the exchange of rooks, he keeps a small advantage.

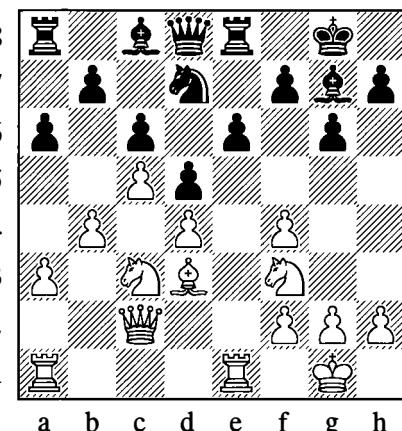
We finish the chapter with an example that shows many ideas working together.

## 5. Ellinor Frisk – Robin Hoem

Kristiansund Club Championship (variation)

14th March 2012

1.d4 Qf6 2.Qf3 d5 3.c4 e6 4.Qc3 Qe7 5.Qf4 0–0 6.a3 a6 7.e3 Qbd7 8.c5 Qh5 9.Qd3 Qxf4 10.exf4 Qf6 11.Qc2 g6 12.0–0 c6 13.b4 Qe8 14.Qfe1 Qg7



White enjoys a clear plus due to the horrible light-squared bishop on c8. The plan is to gain more space on the queenside and open up the position at a suitable moment. Black is, on the other hand, desperately trying to achieve the pawn lever ...e5, freeing both bishops and undermining White's queenside structure. Since White's pawn on f4 does a great job

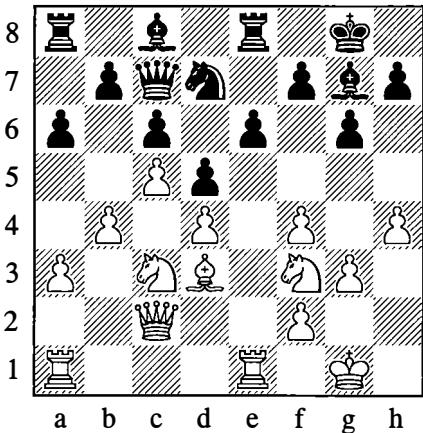
controlling e5, Black must prepare with ...f6. How to take prophylactic measures against this? As noted, every pawn move weakens at least one square. ...f6 will weaken g6, but a bishop sacrifice doesn't seem likely to work. It's therefore logical that White must attack g6 with a pawn.

### 15.h4!

A fantastic prophylactic move! The point is that 15...f6 16.h5 is a disaster for Black.

15.♗e3 is also designed to stop ...e5, but my intuition is against breaking the connection between the rooks, and I also want to use them when pushing the pawns on the queenside or defending against Black's possible ...a5 and/or ...b6. To confirm this reasoning: Black has a tactical solution with 15...♝c7 16.g3 a5 17.b5 ♐xc5! 18.dxc5 d4 to get an acceptable position.

### 15...♝c7 16.g3!



White will soon begin to advance on the queenside, with a pleasant advantage.

16.♗e5 would be a mistake due to 16...f6! 17.♗xd7 ♛xd7 and White has several reasons to be dissatisfied. With less space, Black is generally happy to exchange pieces, but especially the knights since White's knight had more tasks. Both knights fought for the vital e5-square, but White's knight did in addition defend d4. Even worse for White is the loss of a tempo, since Black is ready for ...e5 while White has to defend the pawn on f4. 18.g3 e5 is a strategical failure, so White has to try 18.h5 ♜xf4 19.hxg6 f5 but with d4 hanging and ...e5 coming, Black is on top.

When I saw this position I was halfway through writing this book and felt that I could just skip all the other examples. This one alone is a highway into the book's essence: thinking about pawn levers, weak squares and prophylactic measures. I showed the position at a seminar, and one of the listeners managed to play a similar h4-h5 lever only a few weeks later!

The only problem with the example is that many of my students played 15.h4 to attack the king, which is not really the idea behind the move. So I had better include the rest of the material in this book anyway.

# Chapter 4

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## Calculation

I remember once when I was very satisfied with a variation I calculated during a game. It was long and had a beautiful point at the end. The game went differently, but I showed the variation to my opponent in the post-mortem. He couldn't understand why I had spent so much time on it; after only three moves it was clear that something had gone wrong for him.

He was absolutely right. Calculating well is not the same as calculating far. A player who chooses reasonable candidate moves, calculates them in a reasonable order and knows when to stop, will often find better moves even though he calculates much shorter lines. That is the subject in this chapter – the theoretical side of calculation.

### Chapter overview

The chapter is divided into three sections. It starts with a tough introductory example – a very tactical position from a game of mine, where I spent a lot of time calculating. Later, I gave the same position to Hans Tikkanen as an exercise, to compare how we thought. It turned out that he was much more structured.

The position will be used as an example when discussing various topics later in the chapter. For that reason, I suggest that you spend some time on it.

The second section discusses structured calculation, with the following parts:

- 1) Just looking
- 2) Calculating the most forcing moves
- 3) Setting a goal
- 4) Candidate moves
- 5) Sorting the candidate moves
- 6) Calculating and visualizing
- 7) Comparing
- 8) Falsifying
- 9) Blunder checking

Ideally, those tools only need to be carefully studied once. Even though it will always be possible to improve your skill in calculation, at least you will have a foundation.

At the same time, I am conscious that although this is a way that has worked well for me, it may not suit others. You should therefore feel free to pick what you like, and dismiss the rest.

The normal reaction when seeing a list like the one above is: "That is not the way I calculate!" That's true, and you should not. This is a theoretical chapter, but the idea is that you study the tools, practise them thoroughly, incorporate them into your subconscious, and finally let intuition guide your calculations. If your calculations are running smoothly, it would just be stupid to disturb them. However, when intuition doesn't flow, it is useful to deliberately use some of the tools.

The third and final section discusses visualization and the ability to calculate, again with a few sub-topics:

- 1) Visualizing
- 2) Working memory
- 3) The opponent's moves
- 4) Going forward in the variation
- 5) Focusing on a position
- 6) Ending the variation

The second section can be seen as the railway track and the third section as the locomotive; both are needed to take the passenger to her destination. In this chapter there are also several concrete training tips, which may help to add more fuel to the engine.

### One exercise

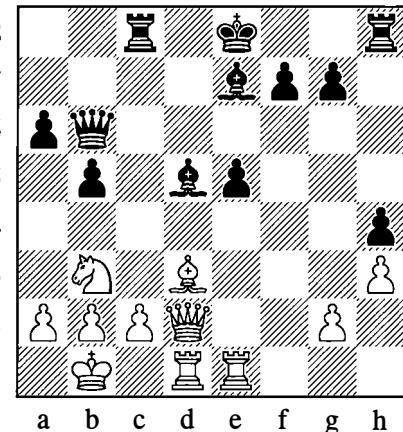
In the diagram position, it's White to play. Use up to 25 minutes to decide which move to play, trying to calculate as well as possible.

**Endnotes<sup>1</sup>** are on page 156.

### Axel Smith – David Bekker Jensen

XtraCon, Borup 13th September 2009

1.e4 c5 2.♘f3 d6 3.d4 cxd4 4.♘xd4 ♘f6  
 5.♗c3 a6 6.♗e3 e5 7.♗b3 ♘e6 8.f3 h5  
 9.♗d2 ♘bd7 10.0–0–0 ♘c8 11.h3 ♗c7  
 12.♗b1 ♘e7 13.♗d3 h4 14.♗he1 b5 15.f4  
 ♘b6 16.♗xb6 ♗xb6 17.♗d5 ♘xd5 18.exd5  
 ♘xd5 19.fxe5 dxе5



On move 17 my opponent played a novelty. Judging by his time management, it wasn't a planned one. My following two moves were obvious captures, and then I reached the diagram position. It was time to calculate!

I will reproduce the thought processes I had when encountering the position, and later the thought processes of GM Hans Tikkanen, when he was given it as a training position. I wrote down my thoughts after the game, while in the case of Tikkanen, I recorded him while he thought and spoke at the same time. Our calculations should definitely not be mistaken for a solution!

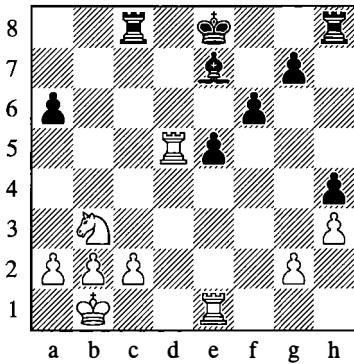
When calculating, the moves are thought of in many different ways, but for simplicity, I have given them with standard annotation.

Since the thoughts jump back and forth, it may be a good idea to use a board and pieces.

**Axel Smith «**

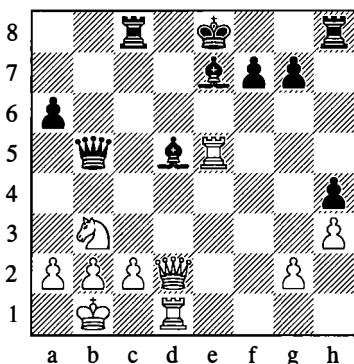
My opening analysis ended in an advantage, and he didn't play the best 17th move. Since then, I have played two obvious moves and so I must have a good position.

I am one pawn down, but can win it back with 20... $\mathbb{Q}xb5\#$ . It seems natural for Black to exchange queens: 20... $\mathbb{W}xb5$  21. $\mathbb{W}xd5$   $\mathbb{W}xd5$  22. $\mathbb{B}xd5$  f6



Black's central pawns and bishop can be strong in the long term, so the position looks unclear.

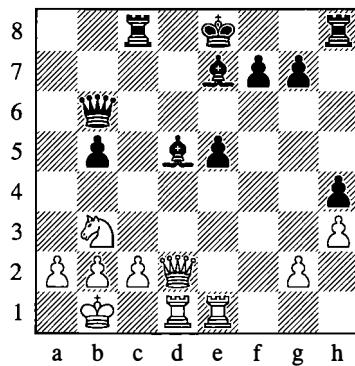
What other possibilities are there in this variation? 21. $\mathbb{B}xe5$ !



I threaten the bishop on d5 three times, so it's not possible to defend it. If I manage to take it, I have a clear extra pawn. 21... $\mathbb{Q}xb3$

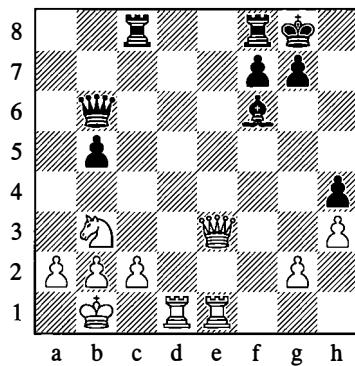
is thus the only critical move. 22. $\mathbb{B}xb5$   $\mathbb{Q}xc2\#$  23. $\mathbb{Q}a1$   $\mathbb{Q}xd1$  and it doesn't look clear. Aha: 23. $\mathbb{W}xc2$   $\mathbb{B}xc2$  24. $\mathbb{B}b8\#$  and I win.

This seems very good for White, so Black can't take with the queen. So: 20...axb5



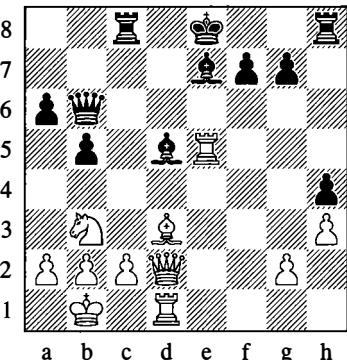
21. $\mathbb{W}xd5$  and Black should probably give back the pawn to be able to castle. 21...0-0<sup>1</sup> 22. $\mathbb{B}xe5$   $\mathbb{B}fd8$  and Black wins with 23... $\mathbb{B}xd1$  mate<sup>2</sup>.

Instead I must play 22. $\mathbb{W}xe5$   $\mathbb{Q}f6$  23. $\mathbb{W}e3$ .

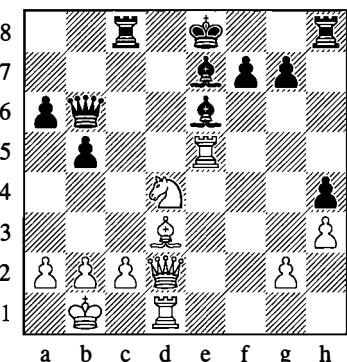


It's time to evaluate the position. White is probably slightly better, but it looks easier for Black to play. It's difficult for me to exchange queens. I would prefer to find something even better, especially since I have made four straight draws from promising positions.

Do I have any other moves? 20. $\mathbb{B}xe5$

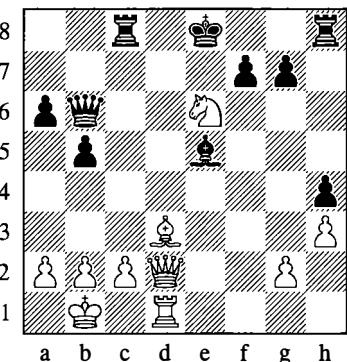


This also recaptures the pawn, while keeping the light-squared bishop. In addition, I stop him from castling. **20...♝xb3 21.axb3** looks very good for White, so Black must play **20...♝e6** to threaten castling. How do I add pressure on the e-file? **21.♞d4!**



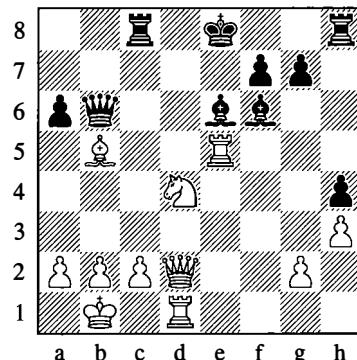
The idea is **21...♝xd4 22.♝xb5†** winning the queen. What can Black play? **21...0-0** **22.♝xe6** is a safe advantage, so maybe **21...♝f6**. It looks wrong to retreat, so I want to play **22.♝xe6**. If **22...fxe6** I have **23.♝xb5† axb5 24.♝d7†**, winning the rook<sup>3</sup>.

**22...♝xe5** seems to be Black's only try.



Let's count the pieces. I am an exchange down. Do I have a discovered attack with the bishop, threatening mate with **♝d7**? **23.♝xb5†**. No: **23...♝xb5** covers d7.

Well. Are there any alternatives? **20.♝xe5 ♝e6 21.♞d4 ♝f6 22.♝xb5†** looks clever, altering the move order.



Black can't take back: **22...axb5 23.♝xe6 ♝xe5 24.♝d7** mate. **23...fxe6 24.♝d7†** also wins. After **23.♝xe6** it's very unlikely that Black has other moves, due to his weak king.

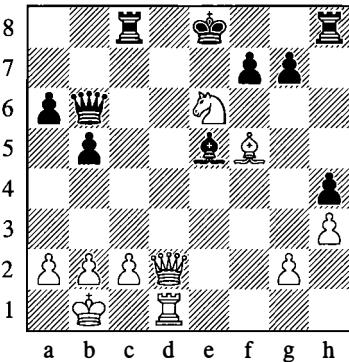
So, does my move order have any disadvantages? Aha, without the knight on e6, Black can answer **22.♝xb5†** with **22...♚f8**. I don't think Black will survive, but at the same time three of my pieces are hanging, I must calculate further.

**20.♝xe5 ♝e6 21.♞d4 ♝f6 22.♝xb5† ♚f8 23.♝b4† ♚g8** and White doesn't have any checks. **23.♝xe6† fxe6** and I need to save both pieces. The rook can't move with a threat, but the bishop can: **24.♝d7** Does Black have something? Whoops: **24...♝xe5 25.♝xc8 ♜xb2** mate!

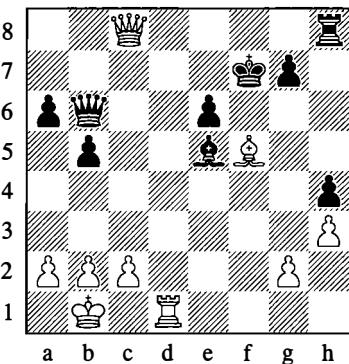
It doesn't seem to work with **22.♝xb5†**. No, I can't see any new ideas.

Are there any alternatives? [...27 minutes have passed.]

Maybe: 20.  $\mathbb{Q}xe5$   $\mathbb{Q}e6$  21.  $\mathbb{Q}d4$   $\mathbb{Q}f6$  22.  $\mathbb{Q}xe6$   $\mathbb{Q}xe5$  23.  $\mathbb{Q}f5$



I threaten  $\mathbb{W}d7$  mate and  $\mathbb{Q}xg7\#$ , winning back the exchange, since the rook on c8 is undefended. 23... $\mathbb{Q}xe6$  24.  $\mathbb{W}d7\#$   $\mathbb{Q}f8$  25.  $\mathbb{W}xc8\#$   $\mathbb{Q}f7$

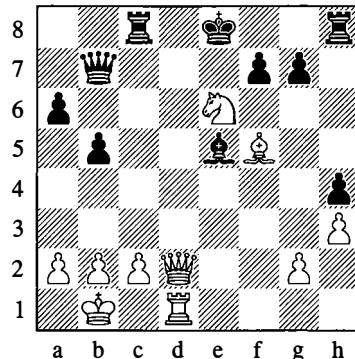


I want to find a mate! 26.  $\mathbb{W}d7\#$   $\mathbb{Q}f6$  and I can't see any checks, while Black threatens back rank mate.

26.  $\mathbb{W}d7\#$   $\mathbb{Q}f6$ , also without a check.

Maybe it's possible to capture the rook with 26.  $\mathbb{W}xh8$ . Black's best move seems to be 26... $\mathbb{Q}xf5$ . Except for his queen, Black just has a bishop. I have at least a rook on d1, thus I'm the exchange up.

23... $\mathbb{W}b7$  is the only square for the queen, defending both c8 and d7<sup>4</sup>.

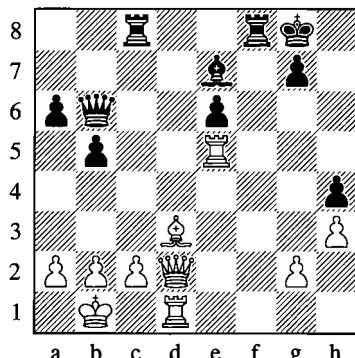


24.  $\mathbb{Q}c5$  with the idea 24... $\mathbb{Q}xc5$  25.  $\mathbb{W}d8$  mate. Good!

Instead, the queen must move: 24... $\mathbb{W}c7$  but then I take the rook: 25.  $\mathbb{Q}xc8$  How is the material balance? I took back my pawn, sacrificed an exchange, and captured a rook. A piece up! 25... $\mathbb{W}xc8$  levels the material, but it should probably lose for Black. He has his king in the centre and the bishop is undefended. There is no need to calculate further. 25...0-0 seems to be the only critical move. Two of my pieces are hanging, but there should be something. Oh, the clock!

It looks more promising than 20.  $\mathbb{Q}xb5\#$ . I want to play 20.  $\mathbb{Q}xe5$ .

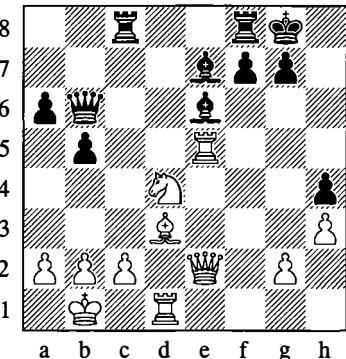
Time to check the variations. What can Black play? 20... $\mathbb{Q}e6$  is forced, but he can answer 21.  $\mathbb{Q}d4$  with 21...0-0 22.  $\mathbb{Q}xe6$   $\mathbb{Q}xe6$ .



Is this much better for me? Black is weak on the light squares, but I don't see a mate. 23.  $\mathbb{W}e2$  threatens the pawn and moves the

queen on the way to h7. 23... $\mathbb{B}f6$  24. $\mathbb{W}h5$  and I don't threaten much. 24. $\mathbb{B}e1$   $\mathbb{B}c6$  and Black defends the pawn. Maybe, it's not so much anyway? Do I have any choices?

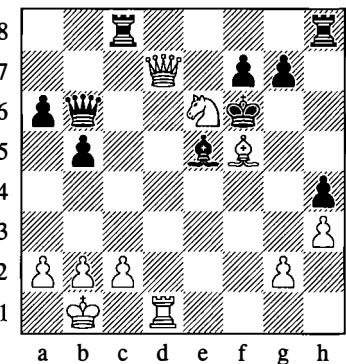
Aha! The move order with 22. $\mathbb{W}e2$  seems clever.



Black can't defend with ... $\mathbb{B}f6$ , since the pawn is still on f7. 22... $\mathbb{B}f6$  looks like the critical move. 23. $\mathbb{Q}xe6$   $\mathbb{Q}xe5$  24. $\mathbb{Q}xf8$ . How is the material balance? I am a piece up. Both e5 and f8 hang. He can't move the bishop with a threat, and the knight threatens to escape. I will end up with an extra piece.

21...0-0 is not so good. If this is Black's best option, 20. $\mathbb{B}xe5$  is definitely better than 20. $\mathbb{Q}xb5$ †.

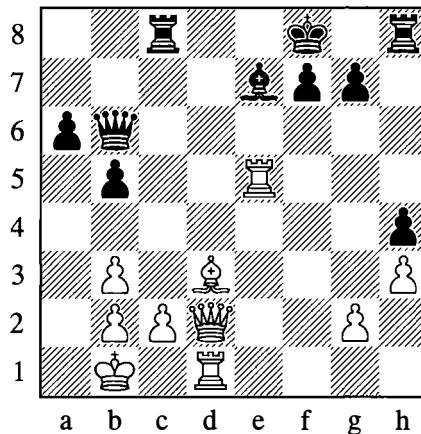
After 20. $\mathbb{B}xe5$   $\mathbb{Q}e6$  21. $\mathbb{Q}d4$   $\mathbb{Q}f6$  22. $\mathbb{Q}xe6$   $\mathbb{Q}xe5$  23. $\mathbb{Q}f5$  there is maybe something other than 23... $\mathbb{B}b7$ . If the rook moves, it must defend the d7-square. The only squares are c8 and d8, but against both I can capture the knight. 23... $\mathbb{Q}e7$  may also be possible. 24. $\mathbb{W}d7$ †  $\mathbb{Q}f6$



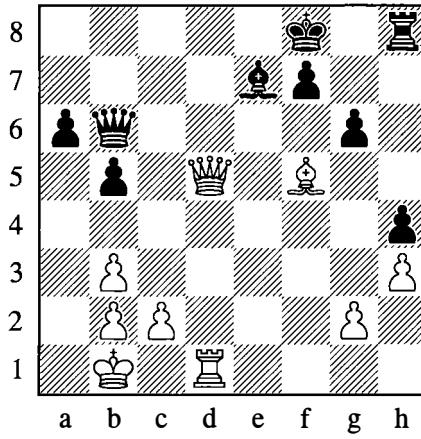
There are no more checks! I am an exchange down, but look at his king! It can't be realistic that it's good for Black.<sup>5</sup>

Everything looks good! I'll play 20. $\mathbb{B}xe5$ .

*I took me 40 minutes, far too much for one move. My opponent played 20... $\mathbb{Q}xb3$  after one minute, and I answered with 21. $a$ x**3** in less than 30 seconds. Three minutes later he played 21... $\mathbb{Q}f8$ .*



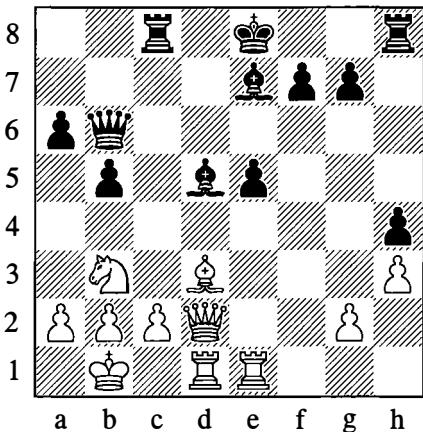
*I had used a lot of time, felt stressed and played 22. $\mathbb{Q}f5$ ?! after a few minutes, considering only 22. $\mathbb{B}de1$  as another candidate move, but rejecting it due to 22... $\mathbb{Q}d6$ . After 22. $\mathbb{Q}f5$ ?! I had calculated 22... $\mathbb{B}d8$  23. $\mathbb{B}d5$   $\mathbb{B}xd5$  24. $\mathbb{W}xd5$  g6*



**25.♕xg6 fxg6 26.♗f1†** with an attack. When we reached the position after 24 moves, I saw that Black could take back on g6 with the queen.

\*\*\*

Hans Tikkanen is the model regarding tactical training in this book, so it will be interesting to see how he calculates. His instruction was the same as yours: 25 minutes to find a move to play in a game rather than a solution.

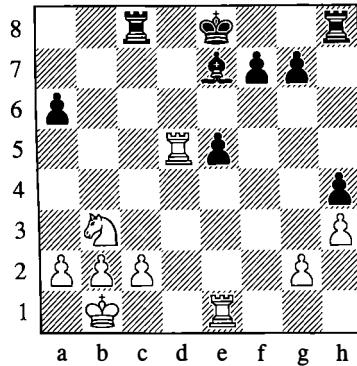


*Hans Tikkanen «*

**20.♗xe5** looks natural, playing against the king and the bishop, but there are also discovered attacks: **20.♕xb5†** or **20.♗f5**. Any other moves? Well... no more moves.

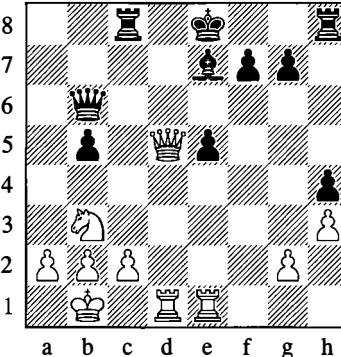
**20.♗xe5 ♕e6** looks natural. I want to find something tactical with **♗xe6**. Possibly **21.♗f5** but it looks unlikely. Maybe **21.♘d4**: he can't take it and it threatens on e6. Looks complicated!

I will start with **20.♕xb5†**. He should probably take with the queen, otherwise he will come under an attack: **20...♗xb5 21.♗xd5 ♗xd5 22.♗xd5** with a threat against e5.



He can defend with the bishop or the pawn: **22...f6** Spontaneously, I think it's a slight advantage, but nothing is clear. The bishop may be strong in the long run. **22...♗f6** just looks worse than **22...f6**, because he wants to advance the pawns eventually.

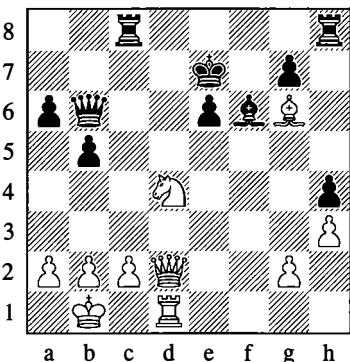
**20.♗xb5† axb5 21.♗xd5**



Black can create a counter-threat against c2, but I can probably let it go if I take on e5. He must defend with **21...f6** but he can't, because I'll play **22.♗d7†**. Thus, **20...axb5** looks bad, as expected. After **20.♗xb5†**, we will reach the endgame after **22...f6**.

Let's check the sharp **20.♗xe5** once again. **20...♗e6** feels forced... yes, it must be. **21.♘d4** What options does he have? He can try to threaten the rook. He can maybe try to defend the bishop, but it feels dubious. Probably he has to threaten the rook: **21...♗f6** There are

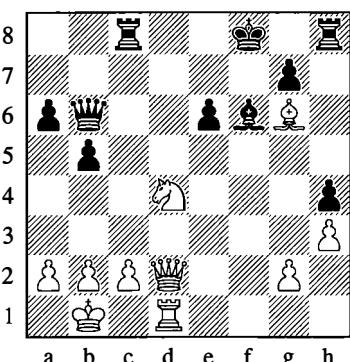
a lot interesting possibilities. **22.♗xe6† fxe6**  
**23.♕g6† ♕e7**



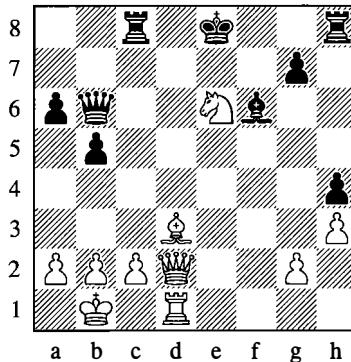
**24.♔f5†** and he can't take due to **♛d7-f7** with mate. **24...♚f8** This must be a promising attack, but do I have anything? No, I don't see anything clear. Is there anything better than **24.♔f5†**. I also have **24.♛b4†**. He must put the queen in between on c5 and everything is blocked.

**20.♗xe5 ♕e6** **21.♕d4 ♕f6** **22.♗xe6† fxe6** **23.♕g6† ♕e7** **24.♗xe6** is also interesting: **24...♛xe6** **25.♛b4†** with mate. Consequently, he must defend d7, but then I must have a good position with a quiet move. I already have a pawn for the exchange and a promising attack.<sup>7</sup>

**20.♗xe5 ♕e6** **21.♕d4 ♕f6** **22.♗xe6† fxe6**  
**23.♕g6† ♕f8**



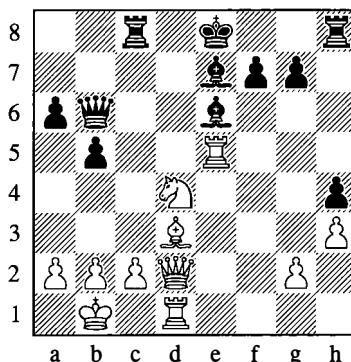
This is maybe not so clear. If **24.♛b4†** he has **24...♚g8**. Maybe it's also compensation after **23...♚f8** but I don't really like it. So maybe it's wrong to check with the bishop? Instead, the direct **23.♗xe6** might be better.



**23...♛xe6** **24.♕e1 ♕e5** If there is nothing immediate, it's bad for me. **25.♛g5** He seems to be forced to play **25...♜c5**. I win with **26.♕g6† ♕f8** **27.♛d8†** or **26...♚d7** **27.♕f5**.

Thus, **22.♗xe6† fxe6** **23.♗xe6** gives me a good position! Maybe. Well, yes, with very good compensation.

**20.♗xe5 ♕e6** **21.♕d4**

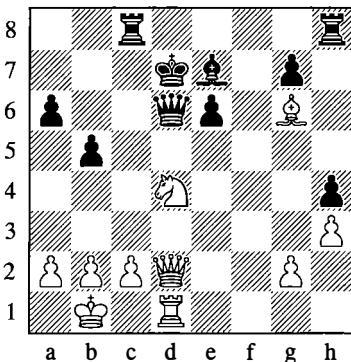


Does Black have any other moves? I think I threaten **♗xe6** followed by **♕xb5†**. It's difficult to see something else. Maybe **21...♛d6**, but it's probably too bad. After **22.♗xe6† fxe6** **23.♕g6†** does he dare to go to the d-file? It would be very remarkable, but maybe. If he

plays 23... $\mathbb{Q}f8$  instead, I should also have something. I can't see anything... remarkable.

Well, if 23... $\mathbb{Q}f8$  I could also play quietly: 24. $\mathbb{W}e2$  or something like this, it must be good.

Okay: 23... $\mathbb{Q}d7$



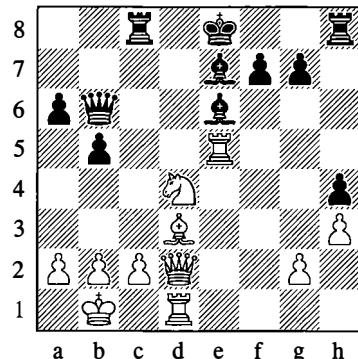
I win the queen with 24. $\mathbb{Q}xb5 axb5$  25. $\mathbb{W}e2$  and if 24... $\mathbb{W}xd2$  25. $\mathbb{E}xd2\#$  I win a pawn. Is it enough?

Maybe 24. $\mathbb{Q}f5$  instead. No...yes...no, it doesn't work: 24... $\mathbb{exf5}$  No, wait. After 24... $\mathbb{exf5}$  I can move the queen with a pin, winning his queen. It will be a promising attack.

24. $\mathbb{Q}f5 \mathbb{W}xd2$  25. $\mathbb{E}xd2\#$   $\mathbb{Q}c7$  26. $\mathbb{Q}xe7$  – is my knight caught? No, the rook is still there and stops 26... $\mathbb{Q}d7$ . Instead he has to play: 26... $\mathbb{E}hd8$  It looks very shaky for him: 27. $\mathbb{E}xd8$  and he must take with the rook to keep the knight closed in. But 27... $\mathbb{E}xd8$  threatens back rank mate! 28. $\mathbb{Q}c1\#$   $\mathbb{Q}d6$  and I lose.

Maybe I have to play 24. $\mathbb{Q}xb5$  all the same? 24... $\mathbb{W}xd2$  25. $\mathbb{E}xd2\#$  He doesn't have a good move; it's a fork on a7! That was better! I am a pawn up and have the better pawn structure. I am satisfied with that.

20. $\mathbb{E}xe5 \mathbb{Q}e6$  21. $\mathbb{Q}d4$



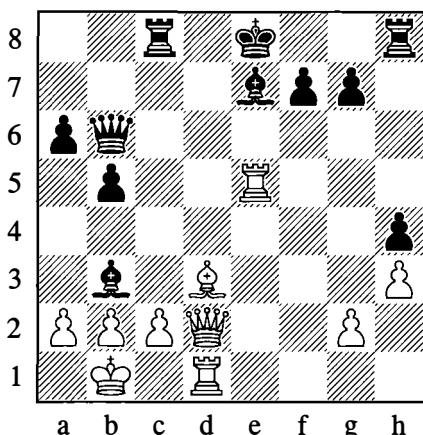
What moves does he have here? A threat: 21... $\mathbb{W}c7$  No, I can take twice on e6, if nothing else. Not interesting.

If 21... $\mathbb{E}h6$  I can play: 22. $\mathbb{Q}xe6 fxe6$  23. $\mathbb{Q}xb5\#$  Must be good.

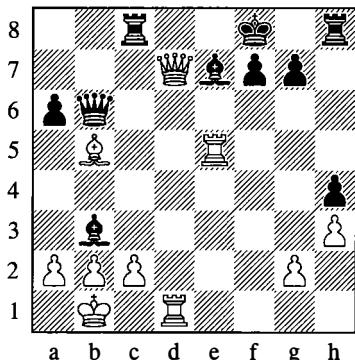
21... $\mathbb{Q}f6$  and yes, I play: 22. $\mathbb{Q}xe6\#$  23. $\mathbb{Q}xe6$  Looks good.

20. $\mathbb{E}xe5 \mathbb{Q}xb3$  can't be good for him. I don't play 21. $\mathbb{Q}xb5\#$   $\mathbb{Q}f8$ , but instead the easy 21. $axb3$ .

Tikkanen played 20. $\mathbb{E}xe5$  after 16 minutes. He is faced with 20... $\mathbb{Q}xb3$ .



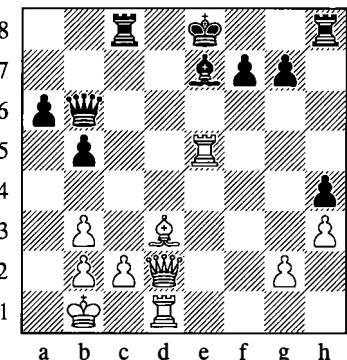
Okay. 21. $\mathbb{Q}xb5\#$   $\mathbb{Q}f8$  is not entirely clear, but not unthinkable. 22. $\mathbb{W}d7$



**22... $\mathbb{Q}xc2\#$**  maybe. **23. $\mathbb{Q}a1$**  He must defend the rook in some way. Can I take on c2 instead? No, it's not a legal move. **23. $\mathbb{Q}a1$**  and maybe **23... $\mathbb{W}d8$** , but it's mate, exchanges followed by  $\mathbb{E}e8$  mate. **23... $\mathbb{W}c7$**  can also be captured, and if **23... $\mathbb{W}b8$** , I take on e7.

So **23... $\mathbb{E}e8$** . What now? **24. $\mathbb{E}xe7$**  looks very promising.<sup>10</sup>

**21. $\mathbb{Q}xb5\#$   $\mathbb{Q}f8$  22. $\mathbb{W}d7$   $\mathbb{Q}e6$**  I cannot find anything for the moment. No, nothing seems to work. I might play a bit more quietly with **21.axb3**.

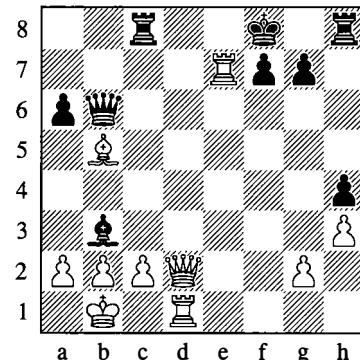


How can he defend against the pressure on e7? If he has to move the king, he will never escape. He can defend with many pieces, but I can also attack with a lot of pieces. Probably he should move the king as fast as possible. Then, he also avoids  $\mathbb{Q}xb5\#$  tricks. **21... $\mathbb{Q}f8$**  and I have **22. $\mathbb{Q}f5$** . He can threaten to castle: **22... $\mathbb{E}c7$**  I give mate: **23. $\mathbb{W}d8\#$   $\mathbb{Q}xd8$**

**24. $\mathbb{E}xd8\#$**  Instead, **22... $\mathbb{Q}d8$** . Of course! It was a fiasco.

What should I do after **21... $\mathbb{Q}f8$** ? I can't attack him there. Maybe **22. $\mathbb{W}e2$**  with the idea of  $\mathbb{E}h5$ . **22... $\mathbb{Q}f6$**  is not so clear. At least not as clear as I wish.

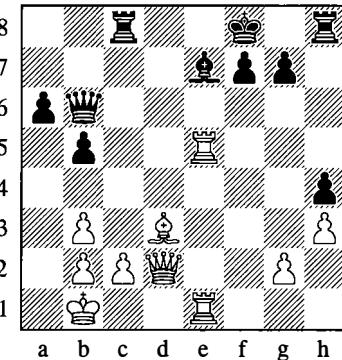
Okay, let's try to sacrifice on e7: **21. $\mathbb{Q}xb5\#$   $\mathbb{Q}f8$  22. $\mathbb{E}xe7$**



**22... $\mathbb{Q}xe7$**  What moves are there here? **23. $\mathbb{W}d7\#$**  must be good.

**21. $\mathbb{Q}xb5\#$   $\mathbb{Q}f8$  22. $\mathbb{E}xe7$   $\mathbb{Q}xc2\#$** , the king moves, **23... $\mathbb{Q}xd1$** . Doesn't look good for White.

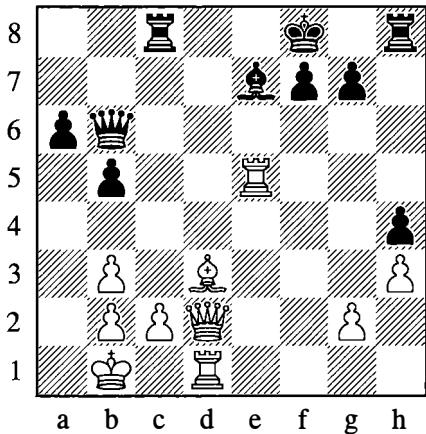
Maybe something quiet? **21.axb3  $\mathbb{Q}f8$  22. $\mathbb{E}de1$**  may be possible.



If **22... $\mathbb{Q}f6$**  I have **23. $\mathbb{W}b4\#$** . He has to put the bishop on the other diagonal: **22... $\mathbb{Q}d6$**  It may be possible to try **23. $\mathbb{W}c3$   $\mathbb{E}xc3$  24. $\mathbb{E}e8$**  mate, but I am not sure what it gives after

**23... $\mathbb{W}b8$ .** No, it doesn't work for me. So I move the rook: **23. $\mathbb{E}d5$**  This is good enough, I am better here.

After six minutes, Tikkannen plays **21.axb3** and encounters **21... $\mathbb{Q}f8$** .



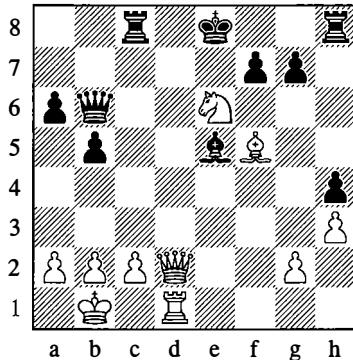
**21... $\mathbb{Q}f8$ ,** as expected. I had problems seeing anything else. There are no double threats against the undefended rook on c8. **22. $\mathbb{E}f1$**   $\mathbb{Q}f6$  should not be anything; it will be dangerous on the diagonal. It must be good to force him to the wrong diagonal, so yes, I play the planned **22. $\mathbb{E}de1$ .**

This time, Tikkannen's move only took one minute. Both he and I became satisfied with a pleasant position and chose our moves relatively fast. Tikkannen's move gives a slight advantage. But there is a better 22nd move!

### Solution

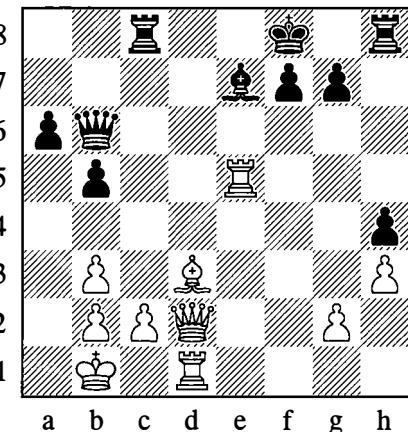
Most of the important points have already been mentioned. After **20. $\mathbb{Q}xb5\#$**  Black has only one way to an acceptable position: **20...axb5 21. $\mathbb{W}xd5$  f6**

Instead, **20. $\mathbb{E}xe5!$**  is better, with the key variation: **20... $\mathbb{E}e6$  21. $\mathbb{Q}d4!$   $\mathbb{Q}f6$  22. $\mathbb{Q}xe6!$   $\mathbb{Q}xe5$  23. $\mathbb{Q}f5!$**

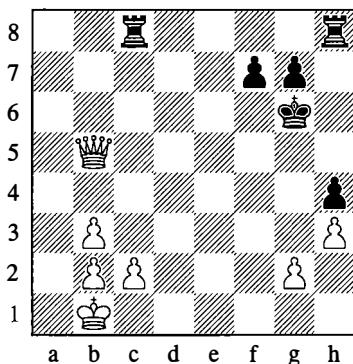


Black is lost in this position. The best defence is instead **21... $\mathbb{E}h6$** , but even so White is much better.

After the game continuation **20... $\mathbb{Q}xb3$  21.axb3  $\mathbb{Q}f8$**  White has a win that was never considered:



**22. $\mathbb{Q}xb5$  axb5 23. $\mathbb{E}xe7$   $\mathbb{Q}xe7$  24. $\mathbb{W}d7\#$   $\mathbb{Q}f6$  25. $\mathbb{E}d6\#$   $\mathbb{W}xd6$  26. $\mathbb{W}xd6\#$   $\mathbb{Q}g5$  27. $\mathbb{W}e5\#$   $\mathbb{Q}g6$  28. $\mathbb{W}xb5$**



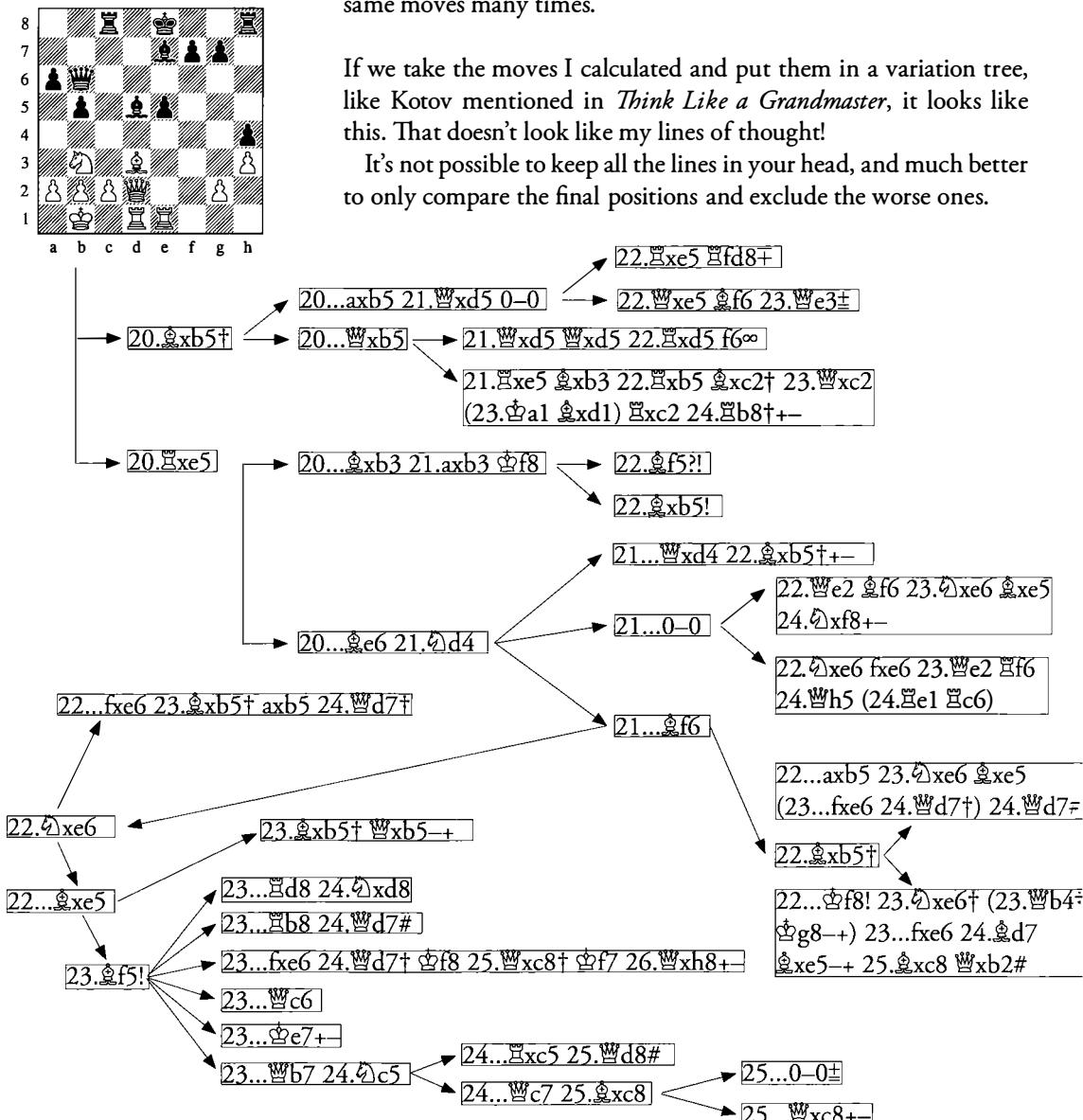
Black can't defend against the advance of the pawns on the queenside.

I used double the amount of time compared to Tikkanen – 40 minutes. That was far too much, and somewhat deservedly, I later blundered in time trouble and lost.

Tikkanen paused several times to look for candidate moves. While I saw 93 unique moves in 40 minutes, he saw 79 moves in 16 minutes – many more moves per minute. Generally, he calculates faster than me, but I became unnecessarily slow by checking the same moves many times.

If we take the moves I calculated and put them in a variation tree, like Kotov mentioned in *Think Like a Grandmaster*, it looks like this. That doesn't look like my lines of thought!

It's not possible to keep all the lines in your head, and much better to only compare the final positions and exclude the worse ones.



## Structured calculation

There is no universal calculation model to follow through thick and thin. However, there are some tools that are useful to learn. As I wrote in the introduction, I believe that many thinking techniques can be internalized if you use them extensively for a period of time. That is the idea behind this chapter.

It makes sense to make this presentation in some sort of chronological order, but it is not a strict one. Using everything would be cumbersome, so I think it's best to focus on one part at a time.

With those many warnings issued, it's time to start sketching the process of calculation.

### 1) Just looking

You are probably already looking for interesting moves and ideas before it's your turn. When the opponent has moved, the first question is: Why did he play this move? If he threatens something, you normally have to defend, even though creating a counter-threat is a nice way of doing so. But if he doesn't threaten anything, you can continue to just look for a short time.

Many years ago I had a friend who enthusiastically said that he had discovered the secret to playing well. He said that moves simply came to him when he looked at the board.

I didn't give much for his insight, and rather saw it as a sign of his usual laziness, chatting as much as thinking. Many years later I appreciate what he said. Moves are automatically popping up when looking at the position. I have not yet met a chess player who has managed to stop moves popping into his head, and it only would be harmful if we did stop them.

The importance of the initial thoughts should not be underestimated. In some way the moves that just 'pop up' are random, but at

the same time they are probably some of the most forcing moves. They give a feeling for the position, what you should strive for, and probably hints about how much time needs to be spent.

Only then is it time to start being a bit more structured.

### 2) Calculating the most forcing moves

If you have a clearly forcing move, it's a good idea to simply start by calculating it. The move is usually the one that aims highest, and if it works, you don't need to calculate other moves as carefully. If it doesn't work, you've got less to keep in mind.

Also, the most forcing move seldom takes much time to calculate. And while doing this, you might discover tactical possibilities that are useful to be aware of when you list the candidate moves.

In the initial example, I started by calculating the discovered check  $20. \mathbb{Q}xb5\text{!}$ . That was good, but when I noticed that it took some time to finish the calculations, I should have paused to look for other candidate moves.

### 3) Setting a goal

Before asking "how?" you must have the answer to "what?" – it's difficult to search without knowing what to look for. After having taken a quick look at the position, you often have a feeling of the approximate evaluation. Your intuitive goal is to get a position which is at least as good as that. However, sometimes it's necessary to actively set a goal.

There are three different types of goals.

#### a) The goal is based on an absolute evaluation

When I encountered the position in the introductory example, I knew that my opening analysis ended in a slight advantage and that I had made two good moves since then.

Hence my goal was to find an advantageous position. For me, this kind of reasoning is very common. By analysing the opening at home, I get a feeling for the evaluation, which becomes my goal during the game.

However, the goal can also include practical factors, like getting a good position without risk. A computer or a perfectionist would not approve, but, as Vassilios Kotronias mentioned in *Grandmaster Battle Manual*, perfectionism is something that only fits in an ideal world, a utopia. With the clock constantly ticking, the chess board is definitely not utopia.

Occasionally, the position seems to be screaming for a tactical win, which sets the goal to "win". Other times, the goal has to be restricted to "survive", for example when the opponent has a tremendous attack.

### b) The goal is based on something to achieve

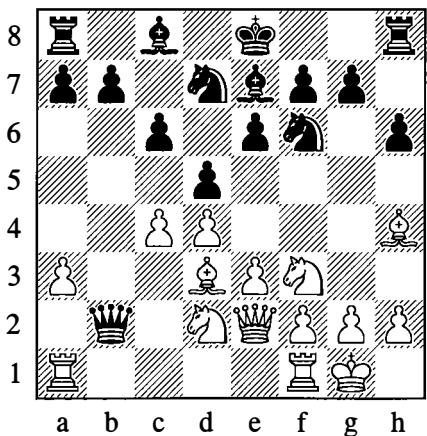
Three examples are: taking control of an open file, castling before the opponent gives a check, or carrying out a pawn lever.

### c) The goal is based on a particular position

Most often, the goal is only to reach a position that is better than another particular position. The following position is one example.

#### Michael Schulz – Axel Smith

Oberliga Nord Ost (var), Berlin 2008



Black has snatched a pawn but White has better bishops, better development and will in addition win more tempo(s) due to the exposed position of Black's queen. It's possible to play the safe 11... $\mathbb{W}b6$ , with a position that is difficult to evaluate. White probably has full compensation.

My goal was to keep the queen on b2 to disrupt White's development. 11...0–0 seemed to be a natural move, but I had to make sure that the queen doesn't get trapped. This kind of goal is relative. It's not based on an absolute evaluation, only to get a slightly better position compared to 11... $\mathbb{W}b6$ .

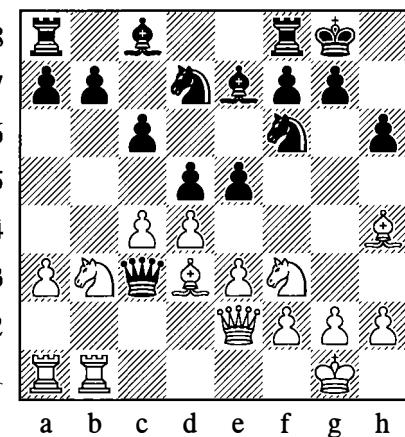
#### 11...0–0? 12. $\mathbb{B}fb1$

White stops ... $\mathbb{W}b6$ . 12.c5 fulfils the same task, but the queen escapes after 12... $\mathbb{W}c3$ .

#### 12... $\mathbb{W}c3$ 13. $\mathbb{Q}b3!$

With the rook on b1, it's also possible to stop ... $\mathbb{W}a5$ . White threatens  $\mathbb{Q}a1-a2-c2$  or  $\mathbb{Q}fd2$  followed by  $\mathbb{Q}c1$ .

#### 13...e5



The plan is ...e5–e4. Black can save the queen with 13...b5 but can't be satisfied with that, giving back the pawn.

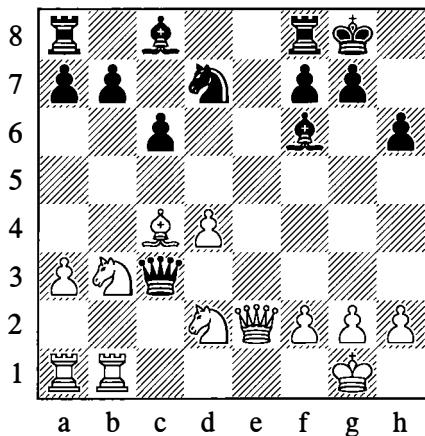
14. $\mathbb{Q}xf6!$   $\mathbb{Q}xf6$  15. $\mathbb{Q}fd2!$   $dxc4$

15...e4 16.Qxe4! dxe4 17.Qxe4 wins the queen.

### 16.Qxc4 exd4

To play ...d4-d3 and ...W e5.

### 17.exd4



To save the queen, Black has to give up a piece with:

### 17...Qxd4 18.Qe4 Qxf2†

Black's goal was to reach a position that's better than the immediate retreat. It was not possible, hence 11...W b6 was the best move.

The first type of goal (based on an absolute evaluation) is used when you know or have a strong feeling of the evaluation of the position. One example can be found below, in the paragraph about “falsifying”. The second type of goal (based on something to achieve) is used when there is something concrete to achieve at the board. Most often neither of these goals is possible, which leads to the relative goal.

When Tikkannen started to calculate in the introductory example, he did not have anything to start from since he hadn't played the first 19 moves. He started by calculating 20.Qxb5† and evaluated it as slightly better. After that, his goal became to find a way to an even better

position. This is a common method: to start by calculating a simple variation and then trying to find something better.

The goal is important. If you set too ambitious a goal, for example to find a win from a worse position, you start to reject variation after variation. When there is none left, you still don't know which move to play, since you didn't check if any of them were decent. If you, on the other hand, set too moderate a goal, you are at risk of overlooking the best move.

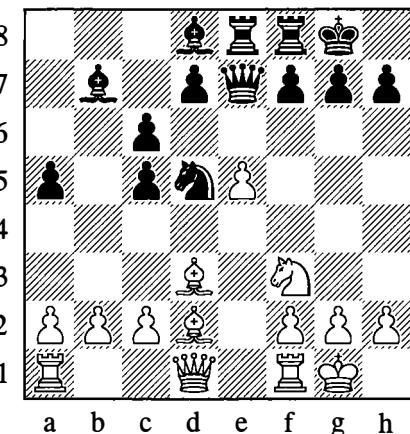
If intuition suggests there may be a better move, it's time to change the goal.

In the introductory example, my goal was to find a way to an advantage. When I thought I had, with 20.Qxb5†, I changed to a relative goal: to find a way to a bigger advantage.

### 4) Candidate moves

The following exercise may not be the toughest. Spend a maximum of ten minutes on it.

**Smith 1st April 2012**



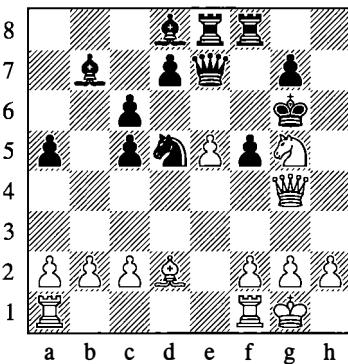
The date of composition, April Fools' Day, gives a hint that it's not as simple as it looks.

It's natural to start by calculating 16.Qxh7† Qxh7 17.Qg5†. Black has three options:

a) 17... $\mathbb{Q}g8$  18. $\mathbb{W}h5$  wins for White.

b) 17... $\mathbb{W}xg5$  18. $\mathbb{Q}xg5$   $\mathbb{Q}xg5$  doesn't look entirely clear, but Black has so many weak pawns (a5, c5, d7) that the queen is happy in this position. In addition Black has no coordination between his pieces.

c) 17... $\mathbb{Q}g6$  18. $\mathbb{W}g4$  f5



Suddenly, it's difficult to find a good follow-up. 19. $\mathbb{W}h3$   $\mathbb{B}h8$  does not work when Black's rooks are connected. Or 19.exf6  $\mathbb{Q}xf6$  20. $\mathbb{W}g3$   $\mathbb{W}e5!$  21. $\mathbb{Q}f4$   $\mathbb{Q}h5$  and Black wins.

White has improvements along the way, e.g. 18.h4 f5 with compensation.

It's correct to start by calculating 16. $\mathbb{Q}xh7\#$ , but when noticing that the lines are quite complicated, it's time to look for candidate moves. The mistake of continuing to calculate the bishop sacrifice without looking for candidate moves is actually quite common.

#### 16.c4!

Kicking back the active knight. Wherever it goes, White gets a better version of the bishop sacrifice.

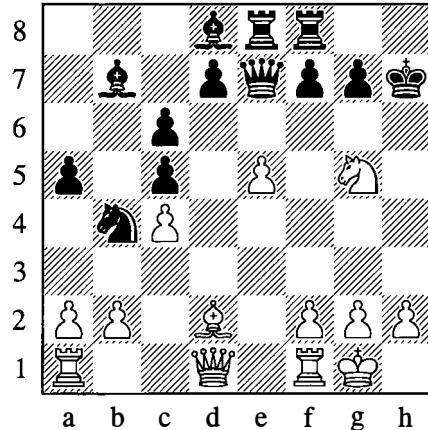
#### 16... $\mathbb{Q}b4$

16... $\mathbb{Q}a6$  17. $\mathbb{W}c2$  wins the h7-pawn.

#### 17. $\mathbb{Q}xh7\#!$

This also works against the other knight moves.

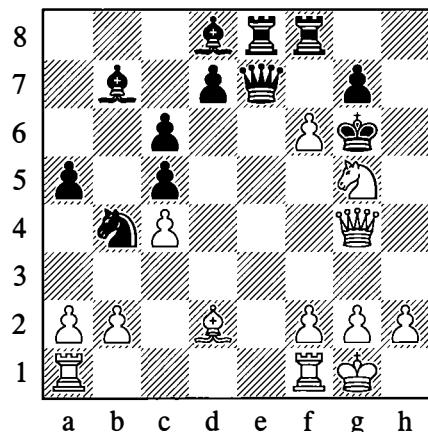
17... $\mathbb{Q}xh7$  18. $\mathbb{Q}g5\#$



18... $\mathbb{Q}g6$

18... $\mathbb{W}xg5$  19. $\mathbb{Q}xg5$   $\mathbb{Q}xg5$  is still very good for White. The most exact line is 20.a3  $\mathbb{Q}a6$  and either 21.f4 or 21. $\mathbb{W}h5\#$   $\mathbb{Q}h6$  22.f4.

#### 19. $\mathbb{W}g4$ f5 20.exf6



When Black can't take back with the knight on f6, there is no defence.

a) 20... $\mathbb{Q}xf6$  21. $\mathbb{Q}c3\#$  looks mating.

b) 20... $\mathbb{B}xf6$  21. $\mathbb{B}fe1$  wins the queen on the next move with a discovered attack.

c) 20...gxsf6 21. $\mathbb{Q}e6\#$   $\mathbb{Q}f7$  22. $\mathbb{W}g7\#$   $\mathbb{Q}xe6$

23.  $\mathbb{Q}fe1\uparrow$  wins the queen with an ongoing attack.

The point of this exercise is to check how much time is spent calculating the complicated variations after 16.  $\mathbb{Q}xh7\uparrow$  before finding 16.  $c4!$ .

It's time to discuss candidate moves.

To a great extent, candidate moves come naturally, without conscious effort. However, in unfamiliar or messy positions, it's important to look for them. With this in mind, it's not so surprising that Tikkannen was careful to look for candidate moves in the introductory example – the position was completely new to him.

*Training tips:* For a limited period of time, carefully look for candidate moves in every position in your games. In this way, you obtain a good habit that can be used later. You will also get a better feeling for in which kinds of position you deliberately need to look for candidate moves.

## 5) Sorting the candidate moves

Sorting the candidate moves is, for many, the most difficult phase. Which one should be calculated first? Sometimes it's necessary to look for a little while at all of them, to be able to sort them properly. However, this should not take up a lot of time.

When sorting the candidate moves, there are two rules of thumb:

- Start with the move that has the highest aims

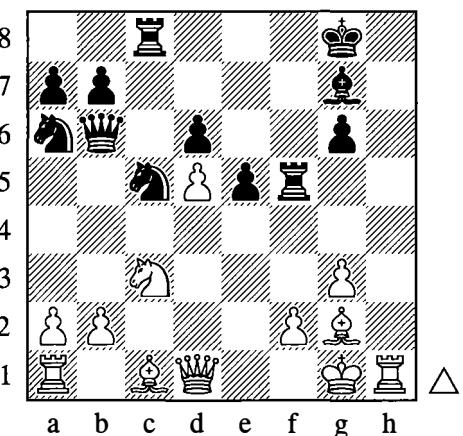
This is more or less the same as the principle to calculate the most forcing moves first: if it

works, there is no need to spend time on the other moves.

That said, when short on time, without the possibility to spend the desired amount of time, it's better to start with a move that *probably* works.

### Axel Smith – Victor Nithander

Manhem GM, Göteborg 21st August 2011



Black is threatening 19...  $\mathbb{Q}xf2$  or to increase the pressure with 19...  $\mathbb{Q}cf8$ . White's candidate moves include 19.  $\mathbb{Q}e3$  (leaving the b2-pawn undefended), 19.  $\mathbb{Q}h3$  (allowing 19...  $\mathbb{Q}xf2$ ) and 19.  $\mathbb{Q}e2$  (defending everything). Which should be calculated first and which is best?

The move with the highest aims is 19.  $\mathbb{Q}h3$ , which tries to win an exchange. It should thus be calculated first.

#### 19. $\mathbb{Q}h3!$ $\mathbb{Q}xf2$

Otherwise, Black is simply lost.

#### 20. $\mathbb{Q}e3!$

With both rooks hanging, Black will try to get at least a minor piece for one of them.

#### 20... $\mathbb{Q}cf8$

20...  $\mathbb{Q}ff8$  21.  $\mathbb{Q}e6\uparrow$  and Black has to give up the queen or a whole rook.

### 21. ♜a4

White wins a rook on the next move. Instead 21. ♜xf2? ♕xf2 22. ♜xf2 ♜e4† 23. ♜f3 ♕f2† 24. ♜xe4 ♜c5 mate would still have been bad. However, it was also possible to play 21. ♜e6† ♕f2† 23. ♜c2! and Black collapses.

After calculating 19. ♜h3, there is no need to examine the other moves.

In the introductory example, Tikkannen started to look for candidate moves. The first move he calculated was **20. ♜xb5†**, the most forcing move and the only one that may win on the spot.

Clearly, it is a good principle to start with the move that has the highest aims.

b) In a calm position, start with the most logical move

On the American TV show *60 Minutes*, Magnus Carlsen said that he almost always knows which move he will play after less than 10 seconds. Such intuition is not for mere mortals, but even we have quite a good feeling for which move is positionally correct.

Actually, the most logical move works tactically surprisingly often, even when it doesn't look like it, as I suggested earlier. Our intuition, practised in every single game, has created a decent feeling for seeing the move the position calls for. Therefore, it's worth spending some extra effort on that move to look for supporting tactics.

There is another reason for starting by calculating the positionally correct move. Psychological science has found that there is a human bias to choose the option examined first, even if the conclusion doesn't say that it is best! In theory, it should be possible to avoid such a bias, but I am not sure how it is in practice.

### 6) Calculating and visualizing

After having sorted the candidate moves, it's time to calculate. The subject is covered in the next section.

In every line you calculate, you reach a point when it's time to evaluate the position. As established above, you mainly need to check if the position fulfils the goal you have set. To do this, you probably have to compare it with another position.

### 7) Comparing

Humans don't evaluate positions with decimal numbers, as engines do. We make verbal or even unspoken evaluations. However, during a game, you don't even need to do that! You only need to decide whether the position is good enough to comply with your goal.

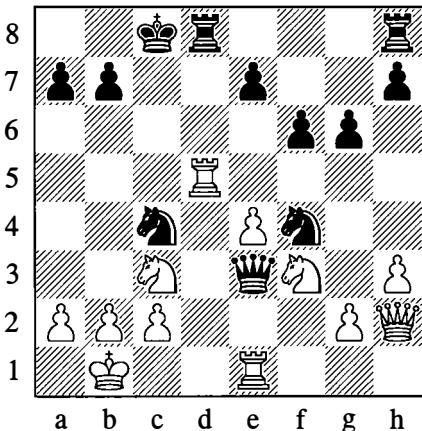
When I calculated **20. ♜xe5** in the introductory example, it didn't matter if I thought that I was slightly or clearly better. The only thing I needed to know was if I liked the resulting position better than the position that I concluded with after **20. ♜xb5†**.

If the resulting position complies with the goal, you can either be satisfied and make the move, or raise the goal and continue to calculate. Intuition will probably hint if there is something better or not.

In the following example, Black starts with some strong moves but has a difficult choice a few moves later. The two possible continuations are both good and difficult to choose between.

## Jens Ove Fries Nielsen – Daan Brandenburg

Schackstudion GM, Lund 15th April 2011



The material is equal, but White's queen is out of play on h2. Black should be able to find something promising.

**22...♝xd5! 23.♝xd5**

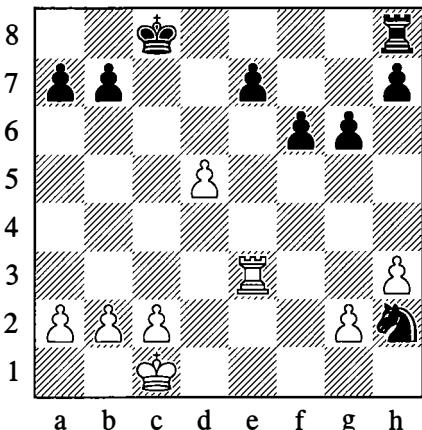
23.♜xe3 ♛xc3† 24.bxc3 ♜d1#

Black now has a difficult choice: 23...♛c5 or 23...♜xd5.

a) 23...♛c5 This keeps the exchange. However, the black king is open and White has a strong knight on d5. Black should be clearly better, but there is some counterplay.

b) 23...♜xd5 24.exd5 ♛d2†! 25.♝c1 ♛xf3†!

26.♜xe3 ♛xh2



**27.♞e1!**

The knight won't get out. Instead, the game continued 27.♞xe7 ♛f1 and Black won easily with his extra knight.

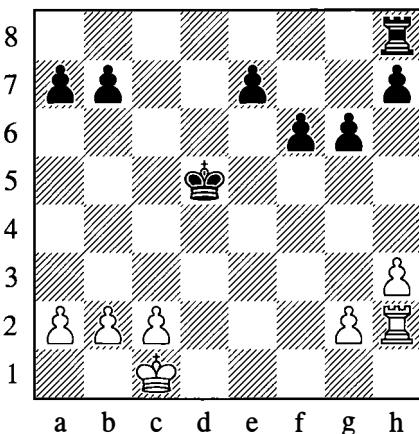
**27...♝d7**

27...♝d8 is also interesting.

**28.♜h1 ♛d6 29.♜xh2**

29.c4 ♛c8 30.b3 b5 just loses another pawn.

**29...♛xd5**



An extra pawn in a rook ending is no guarantee of a win, but in this position Black has four against two on the kingside. White can't defend if Black simply advances the pawns.

I would guess that both 23...♛c5 and 23...♜xd5 are objectively winning. What you have to do is not evaluate both positions objectively, but instead compare the positions with each other. When you make such a comparison, you also take into account practical considerations. There is much less risk of a blunder in the rook endgame, so I would no doubt choose 23...♜xd5.

A feeling for the final verdict often appears during the calculations. Sometimes, it's quite

clear that it won't fulfil the goal. Then it's better to leave the move for the moment, and continue with another. The ability to calculate far is very important, but so is the ability to avoid calculating far when it isn't required.

## 8) Falsifying

After some time, you have a feeling for which move is best. Of course, this is not enough to play it, since it's nothing more than a hypothesis. Actually, you have not reached much further than Carlsen would after 10 seconds!

It is time to try "proving" that the hypothesis is correct. This is done by falsifying other reasonable hypotheses. "Isn't that move better?" "Is the chosen move really working?"

The calculations become a bit deeper, by continuing where they stopped earlier and trying unlikely possibilities. Between 1938 and 1946, Adriaan de Groot made experimental studies of chess players' thought processes. In *Thought and choice in chess* (1948), he stated that the main difference between weak and strong players was that the latter used a lot of the time, on average 50%, trying to prove that their chosen move was best.

As you could see in the transcription of Hans Tikkannen's thoughts from the beginning of the chapter, he went backwards in his lines and asked: "Does Black have other moves?" That is a way of trying to falsify his conclusion.

To falsify is not the same thing as using the Process of Elimination. That method works extremely well when solving exercises, since there is always a solution.

In a game, it's different. If the goal is "to find a winning move" and all but one move has been excluded, it's very foolhardy to play the remaining move. The move might win, but the chance that the goal was too ambitious is not negligible either! The move might actually

lose, while other moves draw. It's better to set a less ambitious goal and continue calculating.

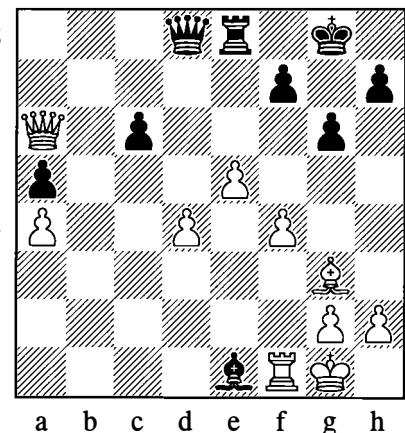
Thus, solving too many exercises can actually have a bad impact on your game. The solution is, of course, to shut your eyes to the hint that there is a solution to the exercise. Try to think of the position as if it is from a game.

During games, the Process of Elimination is mainly used when defending. However, it can't be used alone. Moves that don't fulfil the goal are eliminated, but the last move standing must also be checked.

The following game exemplifies the process of falsifying, and is also a good illustration of how to set a goal.

### Axel Smith – Martin Bruedigan

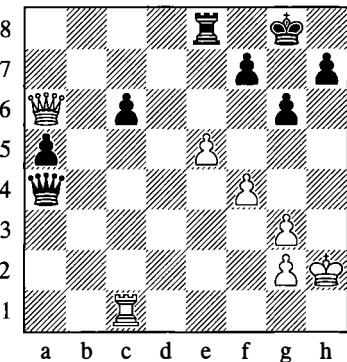
Czech Open, Pardubice 26th July 2011



Black is a pawn down, but he can take it back with check after 28... $\mathbb{W}xd4\ddagger$ . After doing so, it even seems that Black can win the pawn on a4. Therefore, it's a reasonable goal for Black to reach a position with an extra pawn.

I don't know what lines my opponent calculated, but I have taken the liberty of writing down a plausible thought process for Black:

“28... $\mathbb{Q}xg3$  29.hxg3  $\mathbb{W}xd4\uparrow$  30. $\mathbb{Q}h2$   $\mathbb{W}xa4$  31. $\mathbb{E}c1$ !

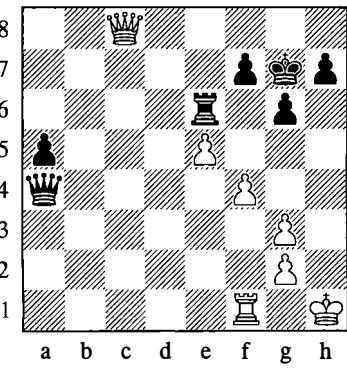


White threatens to take back the pawn and if I want to defend, I have to place my rook on e6. I can't see my next move, so it seems that White has adequate compensation.

What if I take on d4 first? 28... $\mathbb{W}xd4\uparrow$  29. $\mathbb{Q}h1$   $\mathbb{Q}xg3$  30.hxg3  $\mathbb{W}xa4$  31. $\mathbb{E}c1$  The only difference is that White's king is on h1. This gives some additional motifs with a check on the first rank or with a threat against the undefended pawn on g3. Comparing those positions, it's better to take on d4 first.

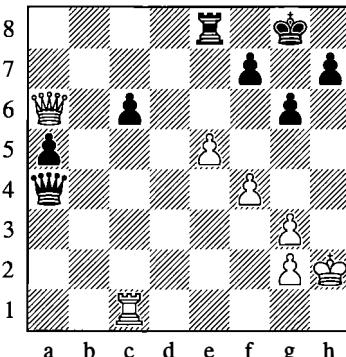
*[Black has preliminarily decided that 28... $\mathbb{W}xd4\uparrow$  is the better move and starts to try to falsify his hypothesis.]*

Let's check if there is anything wrong with 28... $\mathbb{W}xd4\uparrow$ . Aha, White has a zwischenzug: 30. $\mathbb{W}xc6!$   $\mathbb{E}e6$  31. $\mathbb{W}c8\uparrow$   $\mathbb{Q}g7$  32.hxg3  $\mathbb{W}xa4$



The pawns are just equal. I can't see any improvements along the way. Anyway, I have to check the alternatives.

Let's go back to: 28... $\mathbb{Q}xg3$  29.hxg3  $\mathbb{W}xd4\uparrow$  30. $\mathbb{Q}h2$   $\mathbb{W}xa4$  31. $\mathbb{E}c1$



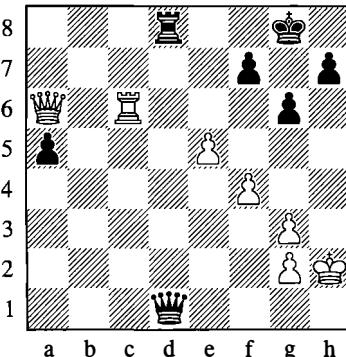
31... $\mathbb{E}e6$  is the only move that defends the pawn but after 32. $\mathbb{W}c8\uparrow$   $\mathbb{Q}g7$  33. $\mathbb{E}b1$ , I can't see a good defence against 34. $\mathbb{E}b8$ , since 33... $\mathbb{g}5$  looks shaky.

Apparently, my intuitive evaluation of the position wasn't correct. I can't keep the extra pawn.

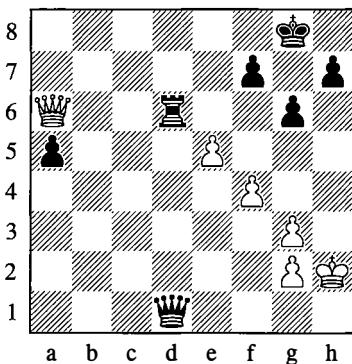
Let's look for a safe way to equality. With this goal, I want to exchange queens. Is it possible? I check both moves again.

I can't still find any improvements in the line: 28... $\mathbb{W}xd4\uparrow$  29. $\mathbb{Q}h1$   $\mathbb{Q}xg3$  30. $\mathbb{W}xc6$ !

I don't have to defend the pawn after: 28... $\mathbb{Q}xg3$  29.hxg3  $\mathbb{W}xd4\uparrow$  30. $\mathbb{Q}h2$   $\mathbb{W}xa4$  31. $\mathbb{E}c1$ ! Maybe I can play: 31... $\mathbb{E}d8$  32. $\mathbb{W}xc6$   $\mathbb{W}d1$



I threaten ... $\mathbb{W}h5\#$  followed by ... $\mathbb{B}d1\#$ . White has to play 33. $\mathbb{E}d6$ . Let's see if he can take with the queen after 33... $\mathbb{E}xd6$ .



34. $\mathbb{W}xd6$   $\mathbb{W}xd6$  35.exd6  $\mathbb{Q}f8$  stops White's pawn. Black must be winning with the outside passed pawn. White has to play 34.exd6  $\mathbb{W}h5\#$  35. $\mathbb{Q}g1$   $\mathbb{W}d1\#$  with a draw.

I'll go for 28... $\mathbb{A}xg3$ ."

And this is what Black played in the game – he should have drawn, but a later slip cost him.

Black started by quickly calculating one line. After that, he set a reasonable goal to get a position with an extra pawn, and a hypothesis that 28... $\mathbb{W}xd4\#$  was the move to play. He started to falsify the hypothesis and realized that it didn't work. He eliminated 28... $\mathbb{W}xd4\#$  but didn't find any other lines that gave an extra pawn.

After that he had to set a new goal – to reach an equal position. He also needed to check the variations again, since he had not looked for equality in the lines he had calculated.

The subconscious intuition easily excludes positions without really asking our conscious mind! A position with a doubled pawn may be rejected, but without considering whether the doubled pawn really is a weakness. In such situations, the intuition much be questioned

by asking: Should I really avoid this move due to the doubled pawn?

Intuition is a strong ally, but at times you have to confer with it!

## 9) Blunder checking

In the introductory example, Tikkanen finished with a blunder check. There are few greater feelings of relief than when the blunder check discovers a huge blunder, and you get a chance to choose another move.

A blunder check consists of the simple questions:

- a) What did my opponent threaten with his last move?
- b) What function does my piece have now, and consequently will give up when it moves?
- c) Does my opponent have any simple tactics?

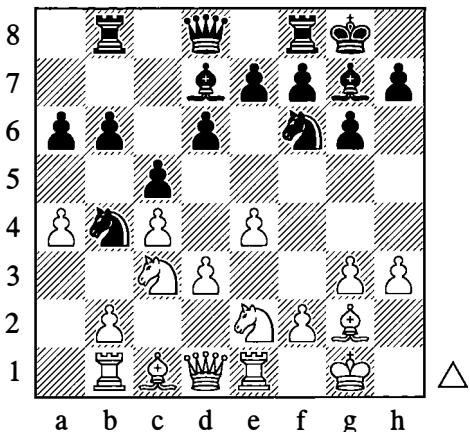
The first question is usually answered immediately when the opponent makes his move, but sometimes deep calculation may blind us to simple things.

Generally, it's too time consuming to calculate variations twice. Blunder checks do that, in some sense. Hence it's better to make small blunder checks in the beginning of every tactical variation. It saves time by eliminating blunders before the whole line is calculated.

*Training tips:* For a limited period, be very careful by doing a blunder check before you execute a move. In this way, you obtain a good habit that can be used later. You also get a better feeling for in which kinds of position you need to do a blunder check.

## Timmie Nygaard – Vegard Simensen

Norwegian Youth Championship, Fagernes 2010



*Is 13.d4 a good move?*

### 13.d4?

A pawn lever in the centre is often positionally good, but since White hasn't yet completed development, he should be careful.

The most common combinational theme is undefended pawns or pieces. 13.d4 leaves the c4-pawn undefended! Question b) above would have told White to make a blunder check.

### 13...cx d4 14.Qxd4

If White recaptures with the queen, there is a fork on c2.

### 14...Wc8!

Simensen found a double threat, winning a pawn.

At the start, 13.Qe3 was better.

### Summary

The theoretical way to calculate is as follows: After having looked for interesting moves and ideas, you quickly calculate the most forcing moves. In that way, you get acquainted with the

position and sees if there is an immediate win. However, before you start calculating seriously, you need a goal. What are you searching for? The goal is often based on a comparison with a particular position – you want to find a move that leads to a better position.

After having set the goal, you look for candidate moves and sort them. The move that aims highest should be listed first – it's the move to start calculating. From each line, you get a position and check if it fulfils your goal. The evaluation of the position doesn't have to be absolute, you only have to compare it with the other positions you can reach.

When you have made a preliminary decision in favour of a move, it's time to falsify it. Isn't there really anything that can be better? Lastly, it's time to make a blunder check before you execute the move.

As mentioned above, you will not always use this method in practice, but it's useful to work with all of these parts, to use them subconsciously and take them out when you need.

### Visualization

#### 1) Visualizing

The most difficult part of calculation is to visualize the position, especially many moves ahead. To be able to do this, the position must be kept in your head. However, many players complain that they can't see the complete board in their head. I would say that it would be remarkable if they could! I can't even manage to focus on all the squares at the same time when I look at a real board. So why should it be possible without the board?

The size of the part that can be seen in your head can't be measured in centimetres or squares. It's not only a geometrical figure that is visualized, but also a concept, whose size is

better measured in units. The pawn structure around the king may be one unit, for example. The pieces that aren't actually seen in your head are stored in your memory.

For the same reason, it's very difficult to play Fischer Random blindfold. In such games, the pieces are arranged in a way you don't recognize, and thus you have problems merging them into larger units.

Since the board in your head isn't graphical, different players see it in different ways. For some, it's vague, for some two dimensional and for others three dimensional. I do not doubt that some creative players even have a four dimensional board in their heads!

We humans are able to visualize a mental map in our head, which we can use to recreate where we have walked. Nils Grandelius has jokingly said that he replaced his map with a mental chessboard. He lost his sense of direction, but became able to calculate far ahead!

Well, even if the substitution never happened, the point is that strong players have developed a complete mental overview of an empty board. They know every square's colour and coordinates, and thus find it easier to see the range of the pieces, such as bishop's diagonals. This clearly facilitates calculation.

Many strong players think "Knight c5" and suddenly see the knight on c5. Thus, the piece doesn't move, but just appears on the new square.

Even strong players can, on the other hand, mix up the coordinates by involuntarily turning the board upside down. The h3-square is replaced with the a6-square, and so on. This actually doesn't harm calculation, since the squares keep the same colours and relative position.

The analogy of the coordinates system as a foreign language is also quite good. Without

being able to speak the language, all arguments must be translated before they can be presented. The coordinates system gives chess players a common language needed both to visualize and to discuss with other players.

*Training tips:* There are a lot of exercises that can improve your mental board and help with learning the coordinates system by heart.

- a) Play on a board without coordinates and analyse by saying the squares instead of pointing at the board.
- b) Read from a list of random squares and say the colour of the square.
- c) The previous exercise reversed: point at a square and say the coordinates.

## 2) Working memory

Working memory is an important part of visualization – memorizing the placement of the pieces. Psychological experiments have shown that it's only possible to keep about seven things there, with an individual difference of plus or minus two. But the chessboard consists of 32 pieces and 64 squares.

Fortunately, the pieces are not stored one by one, but in larger units or chunks. The more experience a player has, the larger units he builds. Pawns on h7, g6, f7, a king on g7 and a rook on f8 is a well-known structure, which is stored as a single unit. An enemy bishop on b2 might also be included, if it checks the king.

### *Other parts of the memory*

When calculating, much of the capacity is busy with thinking and making abstract assessments. If the working memory can't handle all the pieces that move in the calculated variation, they have to be transferred to other parts of the memory. That happens automatically, which explains why many players in the post-

mortem can repeat most of the variations they calculated during the game.

But the working memory works more quickly and smoothly. When I played a 15-board blindfold simul, it consequently took some time to retrieve the position every time I switched between the games.

I am not sure if the correct terminology is the intermediate-term memory (ITM) or the episodic part of long-term memory (LTM), but that's not important.

To remember where the pieces are placed is, on the other hand, important. You don't need to actively memorize their squares, only be able to look for them when they are needed. For example, if you want to play ... $\mathbb{Q}h7$ , but are afraid of a check on the b1-h7 diagonal, you look for White's light-squared bishop and queen, to see whether they can give such a check. Another example is when Tikkannen calculated in the introductory example. He asked himself: "Is the knight caught?" Then he looked around and answered: "No, the rook is still there and stops 26... $\mathbb{Q}d7$ ."

Emotions facilitate the storing of memories. For me, chess games are very personal and filled with emotions, which may be why I remembered almost all the lines I calculated in the introductory example when I saw the position again, two years later.

It's also about experience. Other parts of my memory are less practised. I am writing this in Hamar in southern Norway, and I can't for the moment recall the colours of the walls in the apartment where I have lived for the last year. When I came home from an apartment we considered buying, I was asked if there was a window in the kitchen and if there was a dishwasher. I couldn't answer either question! What I should have done was not to remember the dishwasher as an object but, of course, to remember its function – to replace me in doing the dishes.

## Focus

The working memory's most important component is *The Central Executive* (Baddley & Hitch, 1974). It focuses the attention on the task that should be performed, and nothing else. Psychological experiments have shown that the ability to block other visual and auditory information correlates very strongly with the results at many cognitive tasks. This does, of course, include chess.

Focus is thus a key to being able to calculate well.

The working memory is not only used to memorize the position of the pieces while calculating, but also when you compare positions, or when you reuse tactical motifs you have seen. To train the working memory is thus really helpful for your skill in calculation.

Many people complain about their memory and blame increasing age. No doubt, this is part of the explanation but I think that attitude and training are even more important. Everyone can practise their memory!

*Training tips:* Memorize the positions when solving exercises. Look at the diagram, try to remember, put it away and set up the position on the board. Doing this also helps the ability to group the pieces into units, which is important for visualization.

There are also many other ways to practise your memory. For example, going to the supermarket without a shopping list, or refraining from writing down reference numbers and phone numbers.

### 3) The opponent's moves

If the opponent has several moves, which is the best one to start calculating? Use the same principle as for your own candidate moves! Start with the most forcing or most ambitious

move. If it works, it can refute the whole idea, making it meaningless to calculate the opponent's other moves.

However, if you are quite sure that none of his moves will fully satisfy him, you can start with the weakest moves. They can quickly be refuted and put aside, improving the order in your head.

In the introductory example, after **20.♗xe5 ♕e6 21.♘d4**, Tikkanen started by calculating **21...♕e6**, since his intuition suggested that move was best. He calculated Black's other moves only at the end.

#### 4) Going forward in the variation

When you make a move in your calculated variation, I think it makes a lot of sense to think of it verbally: "Bishop e6", "Knight d4". Since only a part of the board is seen in your head at a time, the rest of the pieces are kept in working memory. That doesn't only consist of *The Central Executive*, but also *The Visuospatial Sketchpad* and *The Phonological Loop* (Baddley & Hitch). The capacity of each of them is limited, so it's easier to remember if both are used – so you 'see' the move *and* hear it in your head.

Personally, the second time I make the same move, I often replace the coordinates by thinking "take" or "check" or "there", depending on which type of move it is.

Sometimes, when a move isn't working, you need to go backwards in the variation. If it's only one move, it's possible to do it in your head. Otherwise, my experience is that it's best to start from the beginning. To take back several moves risks messing things up, while it doesn't take many extra seconds to plough through the whole variation. In the introductory example, Tikkanen also started from the beginning when he needed to go back some moves.

There are also a few other habits that make it easier to calculate. As mentioned in the paragraph about visualizing, the position isn't stored in working memory as a meaningless piece of information, but from the function of the pieces. After each move, it's therefore important to look for the new function of the piece: which squares does it control? This is especially important to do with forced moves. For voluntary moves, the function is seen more or less automatically – if there is a reason behind the move!

One common mistake is to 'move' pieces which have previously been captured. In some way it's possible to say that they have moved involuntarily – off the board! Again, the same trick can be used, to think about which squares they don't control anymore.

So, constantly updating the pieces' function is the key. It makes it much easier to keep the correct position in your head, when looking at another part of the board for a moment.

I also think that it's good to update the material balance after each move. Often, chess is no harder than taking more pieces than your opponent! Young players learn to count the pieces on the board, not the ones off the board, since some of them may be in the opponent's hands. When calculating, it's on the other hand much easier to count the pieces that are captured. A possible line of thought from one of the lines in the introductory example is "pawn down, equal material, piece up, exchange down, piece up".

In pawn endings, some books recommend counting the tempos. My experience is that much can be overlooked along the way with such a method. It's much safer to execute every move in the variation in your head.

The most common question asked of chess players is: "How many moves ahead can you

calculate?" No question is more irrelevant – it does not get more difficult with the number of moves, but with the number of moved pieces. Besides, it's seldom necessary to calculate more than a few moves ahead. The introductory example is one of the positions I have spent most time calculating during a game. Even there, the main point ( $23.\mathbb{Q}f5$ ) is no more than seven half moves ahead.

## 5) Focusing on a position

In *Improve Your Chess Now*, Jonathan Tisdall recommends a method called the Stepping Stone Method. The method is to pause at a critical position in a calculated line. During the pause, you look at piece after piece to get a clear view of the position. However, most often only a few pieces move in a calculated variation, which makes it easier to look at the board. Most pieces stay on their initial squares! Only a few players, such as Alexei Shirov and Vassily Ivanchuk, have the amazing habit of looking out of the window or up at the ceiling, but not even they do it regularly.

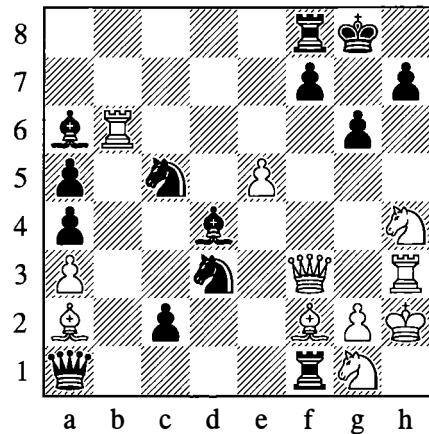
In long and complicated variations, I also find it too time consuming to use the Stepping Stone Method. It may be a matter of taste, but for me it's better to be careful every time a piece moves.

Nevertheless, even if it was possible to calculate the variation, it may be difficult to assess the resulting position. A weak square is much easier to see on a real board than on a mental board. That is because the position doesn't automatically show up; you need to 'ask for' the pieces and squares to see them. If you know what to look for, like a weak square, it's no longer difficult to see if there are any.

Often, the preceding moves point out the important positional factors.

In the following exercise, it's necessary to calculate many moves ahead.

## Bo Lindberg 2006



Calculate to the end, and don't forget to update the function of the pieces when they move or get captured. If you need a hint, then see below.

**HINT:** White has a forced checkmate. If you are close to finding the solution, start by sacrificing the queen and don't forget that  $3...gxsf5$  blocks the f-file!

Black is three pawns up and has a huge attack against f2 or g1. At the same time he has few defending pieces, so White's best chance seems to be to go for a direct attack. After  $1.\mathbb{Q}xf7\#$   $\mathbb{Q}xf7$   $2.\mathbb{B}b8\#$   $\mathbb{Q}g7$   $3.\mathbb{Q}f5\#$   $\mathbb{Q}xf5$  there is no follow-up.

### 1. $\mathbb{Q}xf7\#!!$

The following variation is actually not so difficult: Black has in most cases only one legal move and White has seldom more than one check. The challenge is therefore to see the position at the end of the variation.

$1...\mathbb{Q}xf7$   $2.\mathbb{B}b8\#$   $\mathbb{Q}g7$   $3.\mathbb{Q}f5\#$   $gxsf5$   
 $3...\mathbb{Q}xf5$   $4.\mathbb{Q}g8\#$

### 4. $\mathbb{Q}g3\#$ $\mathbb{Q}h6$ 5. $\mathbb{B}b6\#$

5.  $\mathbb{Q}h3\#$  is a draw. In a game, White therefore

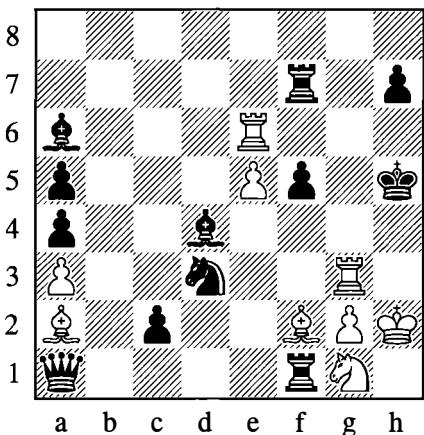
would not need to see any further than this, since there are no other possible moves in the starting position.

### 5... $\mathbb{Q}e6$

5... $\mathbb{Q}h5$  6. $\mathbb{Q}xf7\#$  leads to mate on the next move. It's clever to play 5... $\mathbb{Q}e6$  first, since White's rook will obstruct the bishop.

### 6. $\mathbb{E}xe6\#$ $\mathbb{Q}h5$

There is no check on f7.



### 7. $\mathbb{Q}h3\#$ $\mathbb{Q}g5$

7... $\mathbb{Q}g4$  8. $\mathbb{Q}h4\#$   $\mathbb{Q}g5$  9. $\mathbb{Q}f3\#$

### 8. $\mathbb{Q}f3\#$ $\mathbb{Q}f4$ 9. $\mathbb{Q}h4\#$

I think the most difficult part of this exercise is to see that there is a black pawn on f5, which takes away a square from the king. When Black played 3...gx5, it's easy to think that the pawn doesn't mean anything. It may therefore fall out of our memory. I think it's easier to remember the pawn's existence if it's noticed that the pawn blocks the f-file for the rook on f7. That's also important to prevent Black from capturing the knight on f3.

Black can sacrifice the bishop on c8 on the second move, which means that the exercise is mate in 10 moves.

## 6) Ending the variation

When the goal is fulfilled, it's time to stop the calculations. However, to know if the goal is fulfilled requires an evaluation of the position. It is difficult to evaluate a position when there are still tactical possibilities. Therefore, if possible, it's better to continue the calculations as long as there are tactics. The first chess computers were very bad in this regard; they could stop their calculations in the middle of a queen exchange!

As in so many cases, it requires good intuition to understand when the position is tactical, but there are also a few general principles. There are some signs for tactical possibilities: immediate threats, uncoordinated or undefended pieces. The threats don't have to be capturing a piece, but can also be taking control over an open file or something similar. The relevant question is: If you or your opponent gets an extra move, could either of you do something dangerous? If not, it's usually safe to conclude that the position isn't tactical any longer.

In positions without tactical possibilities, it's less important and also much more difficult to calculate, since the variation tree increases much faster without forced moves.

Once I received some advice to end all calculated variations with a move of my opponent. In that way, I would avoid overlooking tactical combinations. I think it was very bad advice. When considering a move of your own, you only have to calculate one move, but when considering a move of the opponent, you usually have to calculate 2-4 different moves. The variation tree thus increases much more with a move of the opponent. Hence, it's better to end the variations with a move of your own and only make a short blunder check.

In the introductory example, it's necessary to see 23. $\mathbb{Q}f5$  before planning the exchange

sacrifice. After 20... $\mathbb{Q}xb3$ , there is no need to see any further before evaluating the position, and I would even say that it would be a mistake! Since Black doesn't have any tactical possibilities, it's possible to conclude that 20. $\mathbb{Q}xe5$  is better than 20. $\mathbb{Q}xb5\uparrow$ , without seeing the tactical solution 20... $\mathbb{Q}xb3$  21.axb3  $\mathbb{Q}f8$  22. $\mathbb{Q}xb5!$ . To save time, it's important to not calculate too far.

### **Summary**

I believe all the tools that you have examined in this chapter make it easier to calculate well. To continue with the analogy from the beginning of the chapter where the tools built up the railway track and calculation and visualization was the locomotive: A straighter and well-structured railway track not only makes the distance shorter, but also allows a stronger locomotive. With structured calculation, you no longer operate with steam locomotives, but with a high-speed train.

Below is a sketched instruction manual for the railway to calculation.

#### **1) Just looking**

Simply by looking at the position, moves pop up in your head. In that way, you get acquainted with the position, notice tactical motifs and get a hint on how much you have to calculate.

#### **2) Calculating the most forcing moves**

The reason to quickly calculate the most forcing moves is mainly to get rid of them. If they work, you don't have to calculate other moves. If they don't work, you can forget about them. However, only a small amount of time should be spent with these calculations.

#### **3) Setting a goal**

The goal is seldom to find a winning or drawing move, but only to reach a better position than your goal. In the example Schulz – Smith, you knew that the retreat 11... $\mathbb{W}b6$  was possible, and thus set the goal to find something better.

#### **4) Candidate moves**

Candidate moves often come naturally, but in an unfamiliar position you need to consciously look for them.

#### **5) Sorting the candidate moves**

The move that aims highest, tactically or positionally, should be calculated first. The reason is the second topic above: if it works, you don't need to spend so much time on the other candidate moves.

#### **6) Calculation and visualization**

When you calculate, you only visualize a part of the position at a time, exactly like when you look at a visible board. The remaining pieces are kept in the working memory. There are some tips that make it easier to remember:

- a) Stay focused!
- b) Say the moves in your head when you calculate – this activates other parts of the memory
- c) Think of the function of the pieces whenever they move to a new square
- d) Keep track of the material balance when something is captured

You also use your working memory to remember the candidate moves, different lines and evaluations. An effective working memory is thus by far the most important quality you need to calculate well.

Ideally, you want to calculate as long as

there are tactical possibilities and evaluate the position when it's of a positional nature, but that's difficult since chess is so full of tactics. A good rule of thumb, though, is to stop calculating when one of the players has many moves which seem to be of about the same strength.

## 7) Comparing

From each line, you get a position and check if it fulfils your goal. The evaluation of the position doesn't have to be absolute, you only have to compare it with the other positions you can reach.

## 8) Falsifying

The Process of Elimination can be used extensively when solving exercises, but seldom in a game.

When you have decided in favour of a move you should try to falsify it. This means that you try to check if the move really is the best. According to Adrian De Groot, strong players use on average 50% of their time *after* they have preliminarily decided on a move!

## 9) Blunder check

The last thing to do is a short blunder check, to avoid making big tactical oversights.

This is a theoretical model. In a real game, there is neither time nor any need to go through all the steps. Instead, the different tools should be studied and practised, and then picked up when you think you need them.

In the chapter, there were also a lot of training tips. Here are the most important:

*Habits during games:* For a limited period of time, be careful to look for candidate moves in every position in your games. Do the same for blunder checking.

*Visualization:* Use a board without coordinates when analysing and playing.

*Working memory:* One way of practising your working memory is to memorize the positions when setting up exercises. However, working memory can also be practised in many ways in everyday life.

## Endnotes

1 I should also have calculated **21...f6**.

2 I didn't see **23.Qf3** defending the rook.

3 **23.Qxb5†? Qf8!** doesn't work well, but there is **23.Qg6†**.

4 I didn't see **23...Qc6**, also defending both c8 and d7.

5 I was right that it doesn't work, but there was only a narrow way to win for White. I was a bit lucky that my intuition showed the right way.

6 Tikkanen missed that **22...Qf7** opens up for the rook on h8, defending the other rook.

7 Correct, this is completely won.

8 Tikkanen overlooked that Black can castle, with a reasonable position.

9 White has **28.Qh5**, which defends d1 and gives the knight the escape square g6. **28.Qd3** also works, with the same idea.

10 Or **24.Qxe8** mate!

## PART II

# A TRAINING PROGRAM

The first part of this book was about ‘thinking chess’ and examined methods that only have to be studied once. Well, only once at least in theory. In practice, you will notice that even if you look carefully for candidate moves in one tournament, it’s possible to forget about them in the next.

The focus of the second part of this book is on everyday training; what you need to do continuously to improve.

First things first – you have to enjoy your chess training. I have always enjoyed every part of chess, and thus have never needed to worry about my motivation. However, the Swedish chess instructor Robert Danielsson has formulated four golden principles for all chess training, based on the acronym MONA: Motivation, Variation, Level Adaptation and Active Learning. (Yes, I know that doesn’t spell MONA – the acronym comes from the Swedish language).

A varied and level-adapted program motivates, since the training becomes more enjoyable. We are all different, and it’s impossible that the same methods will suit everyone. Hence, I encourage you to pick what you enjoy from the following four chapters.

The first step is to look for a training partner. It is not only necessary when analysing games you have played and important when analysing openings, but it also broadens the way you think. Furthermore, two players tend to inspire and push each other in the right direction.

Your ambitions and opportunities to spend time on chess will vary over time. The following chapters are written for everyone, from the player who “only” wants to pump up his rating a little bit, to the player who will do everything she can to become as strong as possible.

In some ways, both players can do the same things, only with different intensity. While the first player solves tactical exercises for fifteen minutes, four days a week, the second may do so for two hours a day. Nevertheless, there are some training methods that should be given priority.

## Mummies

In Lund we have an expression for a player who never improves: a mummy. It is not said in a negative sense; the mummy enjoys chess. The romanticizing of the expression has even gone so far that The Mummy (SK Mumien) is the name of a chess club! Many mummies actually see themselves as quite ambitious players. This could be a typical chess diary of a mummy:

**Monday:** Playing blitz for two hours on the internet.

**Tuesday:** Watching live games from a super-tournament for the whole evening, while checking the games with an engine.

**Wednesday:** Warming up with some blitz games, before watching a DVD.

**Thursday:** Planning to prepare for the weekend’s game by reading a chess book, but running out of time after reading chess news on the internet.

**Friday:** Reading a book about great players from the past. Looking at the diagrams, but concentrating mostly on the great stories in the text. The book is read in bed, thirty minutes before falling asleep.

**Saturday:** Losing a tight game in the league, and afterwards claiming that a single mistake decided the game. Checking the game quickly with an engine.

**Sunday:** No chess; impossible to be motivated after such an unfair loss!

Our mummy spends a lot of time on chess, but he won't improve much. Many of his training methods do not follow the fourth capital from MONA: Active Learning.

The key to learning a foreign language is to try to speak it. Without any doubt, it's also good to listen, but it's when sentences are first formulated that improvement really starts.

It is the same in chess, and *active learning* is my hobbyhorse as a coach. This means questioning statements in books (maybe I should have mentioned that earlier!), forming your own opinions, and using training methods that activate your brain.

With only some small changes, our mummy can come alive!

### **Limit the number of blitz games to a maximum of five per day**

Blitz can be a good form of training if you are fully concentrated, but it is often played just as a routine. In addition, in internet blitz a lot of time is wasted, not only waiting to start games, but also playing uninteresting positions, for example when it's high time for one of the players to resign.

I also recommend using some minutes after each blitz game to check the openings and think if there is something that you don't understand.

### **Watching live games without an analysis engine**

An engine often has the effect of putting your brain into hibernation. It's better to predict the players' next moves on your own. (By the way, I have never understood why it's so interesting to follow things *live*, often just waiting for the outcome, but then I have never owned a TV.)

### **Watching DVDs with exercises**

Sadly, my brain can't reach the same level of effort when I passively take in information, as when I have a task to solve or a question to answer. That's why this book contains exercises in every chapter.

In addition, the speed in DVDs are for the average viewer, and that can't be effective for everyone.

### **Accepting mistakes**

Our mummy player doesn't seem to have good self-knowledge, since he persuades himself that he lost the game only due to one mistake. To be open and accept all our mistakes is a very important characteristic for an ambitious chess player!

### **Focusing on the chess**

I don't consider historic knowledge to be important. However, I know there are other schools of thought, and I have even heard one of the most acknowledged FIDE trainers say that it's impossible to become strong in chess without knowing the World Champions in chronological order!

When I played against Lajos Portisch in Sigeman & Co in 2008, I knew only a few of his games – the games from the first rounds of the tournament. Furthermore, I don't think I have ever seen a complete game by Bobby Fischer. Of course, I would be happy to know more, but my point should be clear enough: the moves are important, not the names.

My advice to our mummy player would therefore be to read everything in the chess books and magazines, not only the gossip. Of course, I don't argue against reading chess news, but I see it more as entertainment and inspiration rather than serious training.

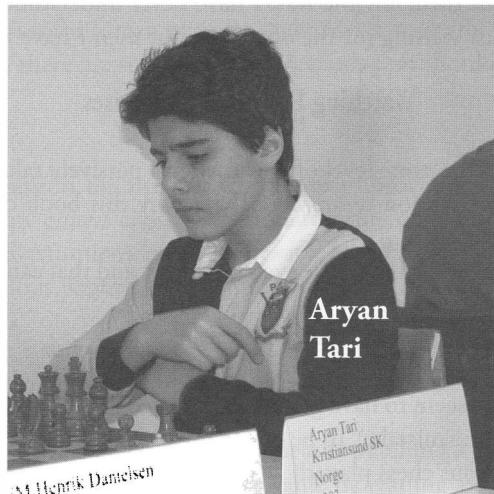
### Being fresh when practising chess

You should strive for *quality* in your chess training. If you happen to be tired when it's time to study chess, or dead as in the case of the mummy, I think it's better to postpone the session.

That was a lot of advice, but none of it should be that hard to follow. I also think it's a good idea to structure the time you spend on chess, at least a little bit. If a few hours are set aside for chess, with your mobile phone off and the internet unplugged, it's much easier to stay focused. Not only because the surroundings are less distracting, but also because you have a clear purpose.

The same advice can be used for other areas. When I became disappointed with my focus while writing this book, I threw away my mobile phone, and forbade myself to check news on the internet. Almost a year later, it's still impossible to call me, but the book is finished.

## A Training Program



Club: Kristiansund SK

Born: 1999

IM: 2013

*Tari learned to play chess when he was five, while watching his older brother playing with his father. He finished 5th at the World Youth Championship in 2010 and 4th in 2011. In 2012 I started coaching him. In the Norwegian Open Championship in 2013, Tari made his first GM norm, aged just 13.*

When I started coaching Aryan Tari in 2012, one of his main questions was what he should do during his everyday training. He was already doing the most important thing – playing tournament games against strong opponents. Tari played over 200 games per year, but at home his training was not so structured.

I think there are five important training methods. Four of them will have a chapter of their own.

### **The List of Mistakes** – how to analyse your games

Your games are the secret to finding your weak points and tell you what you need to improve. For that reason, the most important training method is to analyse your games – without the help of a computer.

Aryan Tari started to annotate his games extensively, and we also created a “List of Mistakes” for him. In such a list, every mistake is documented and categorized. I think many common mistakes can be avoided in future simply by noticing them; if you learn that you often overvalue passed pawns, you will be careful before doing the same thing in the next game.

Tari noticed that he allowed many combinations, even though he seldom overlooked combinations of his own. In the next tournament, he deliberately spent more time looking for his opponent’s combinations.

### **The Woodpecker Method**

Probably most of your games are decided by tactics. At least that’s the case for me. Yet only a limited number of players solve tactical exercises regularly. I think the reason is that it doesn’t feel as rewarding as other forms of training, since it’s not possible to verbalize what has been learned! That’s unfortunately a very human characteristic.

In this chapter, I will explain what the tactical model Hans Tikkanen did when he went through a carefully planned training program in the spring of 2010. He started by examining all the tactical motifs carefully, to learn them by heart. When he was satisfied, he started to solve relatively simple tactical exercises from a tactics book. When he had finished the book, he started all over again. Tikkanen’s idea was that repeating the same exercises was the key to improving his tactical skill. His results confirmed his theory: in the following summer, he made three GM norms in seven weeks, improved 100 Elo points and became a Grandmaster.

The first part of the chapter discusses how to solve exercises; it should be as similar to a game as possible. The tactical motifs are presented in the second section.

I recommend that everyone follows The Woodpecker’s Method, but it can be done with very different levels of ambition. Aryan Tari spent a lot of time with a Tactics Trainer on the web. The main advantage with that is all of the time is spent thinking, while under time pressure. There is no need to set up the pieces and no time to think about other things.

Practising chess is almost always a pleasant activity, but sometimes it’s tough to motivate ourselves to give maximum effort. Then it’s very easy to start playing blitz... To enjoy it is always important, but my experience is that humans have a clever psychological mechanism: if you put all of your efforts into something, you will begin to appreciate it after only a few days.

It is therefore worthwhile to continue solving exercises for a second day even if the first felt

tough. If you believe in what you do, the results will surely come. The player who complains about his poor memory doesn't really try to remember, and thus he confirms his complaints. The same stigmatizing effect involves age. Age doesn't make it impossible to improve in chess. It may make it a bit more difficult, but that's just a challenge!

## Openings

Some players don't like to study openings. Great – there are a lot of other things to do! Others spend all of their chess time on openings. That's too much, but I think that studying openings can be a useful training method, if done in the right way. The key is once again to have an active approach and question statements in the opening books. The same can be said when analysing – the engine is necessary but should never replace human evaluations.

I really believe in creating “opening files” where the openings are explained in your own words. It makes it much easier to analyse the lines, find novelties and keep the repertoire in order. Nils Grandelius, the chapter's model player, works according to this structure and achieves excellent results in the opening.

Nevertheless, openings should mainly be studied only when you think you have spent enough time on the two linchpins: analysing your games and solving exercises.

To create opening files requires structured work and makes it less suitable for younger players. Aryan Tari was 12 years old when I started coaching him, and in the beginning he received finished opening files from me. However, he soon was given the task of creating a file on his own.

The day after he scored his first GM norm, he told me that he had started to work on openings with another chess player from Oslo. That made me almost as happy as the norm; it's hard to overstate the importance of a training partner.

## Endgames

The best way to practise endgames is to decline draw offers, play long games and analyse the endgames afterwards. In this chapter, the subject is only theoretical endings. There are between a dozen and a hundred endgames that are, depending on your level of ambition, useful to know by heart. A motivating method to study the endgames is to challenge a friend to a competition where you test each other's knowledge.

As I see it, it's enough to carefully study those endgames once and later review them just once a year or something like that.

Four of these theoretical endings are covered in this chapter, as examples of how to work on endings. These four were chosen because they are quite common but still difficult. At the end of the chapter, I have listed one hundred endgames and attached asterisks to them to signify “necessary for everyone” down to “only for the most ambitious”.

It is an end in itself to vary the training methods. What's mentioned above is enough for me, but without a doubt, there are a lot of other training methods that also work well. One is playing correspondence games without an analysis engine, another is reading chess books. I think it's important that we challenge ourselves whatever we do, but I think it's even more important that we do what we enjoy. However, since we are all different, it's impossible to write a chapter about the final training method: enjoying chess.

# Goals

Many players like to have a general goal for their chess improvement. I think it's more useful to have a goal that focuses on the biggest part of the time you spend on chess – your everyday training.

I guess you are ambitious, if you have read this far. If so, there are some rules of thumb regarding goals:

## Process-based

A goal of reaching a certain number of points in the next tournament or a specific rating doesn't tell you what to do. It can actually be fulfilled only with some more luck! It's better to set a process-based goal. One example is solving a number of exercises per day, another is learning a few endgames by heart.

## Short-sighted

Naturally, it's important that a goal is time-limited. However, I don't think it's a good idea to set a goal to learn three new openings before an important tournament three months from now. It's easy to end up beginning to study them only when you are already in 'time trouble'. Instead, it's better to start with a goal of learning one opening in the first month.

I also think it's a good idea to set new goals every month, since it also gives a natural occasion to evaluate the previous goals.

## Measurable

It should be possible to evaluate your progress and check whether the goals have been fulfilled.

In my training program for the spring of 2012, my goals were formulated as below:

- 1) Analyse and annotate all games from the last tournament
- 2) 45 minutes tactical training, at least six days a week
- 3) Analyse all openings on my to-do list
- 4) Be able to focus completely for five minutes
- 5) Achieve a time of 7:30 minutes on the running track

All of these goals were easy to measure and evaluate. If I wanted, I could have written down what I did each day in a training diary to check how the training was progressing.

In addition, and at least as important, is that they were realistic. In the end, I achieved four of them. If you are wondering, I never managed to focus for five minutes without thinking of something else.

The goals above covered four of the remaining five chapters in the book: analysing played games, tactics, openings and attitude. The final goal was physical. Being fit makes it easier to concentrate when playing long games, but for me it had a more important benefit: it allowed

me to stay reasonably focused during a whole training session. I didn't exercise much, but it was enough to 'clean out' my brain before the daily chess hours.

Sometimes I regret that I need detailed goals for an everyday training program to be disciplined while working on chess. It is as if I don't really appreciate it. However, I enjoy every part of the program, and I think it has more to do with my personal characteristics.

I would love to play one game only for entertainment, without any ambition, but so far, I haven't succeeded. Maybe that's a good future goal for me!

One issue is that the flow of information is so high today; it's easy to get distracted. So I need rules against TV, Facebook and online newspapers. For sure, it means I miss a lot of interesting things, but it's not possible to do everything. Chess players create their own world, and luckily it's a pleasant world.

Or, paraphrasing Hans Ree and Henry James Byron: Prophylactic measures are necessary to avoid life getting too short to waste on something beautiful, such as chess.

### A final word

Never forget that your motivation to become better must come from yourself! I've had the privilege of spending many hours a day working on chess, but for players with a full-time job, it may be possible only to use parts of everything that's proposed here.

Fortunately, it's not hard to be disciplined with a hobby such as chess, since almost everything is enjoyable.

Earlier, I compared chess with a language. To continue with this analogy, tactics may be the words, openings the grammar, endgames the spelling, and analysing your games the feedback to your writing.

A language teacher will increase the students' level dramatically if she gets them to start reading books. It's the same with chess – the work needs to be done on your own.

During my first years as a chess teacher, I always prepared my lectures carefully and handed out pamphlets. However, I didn't manage to get my students to work on their own. The aim of these chapters is to show the methods I wished they'd used.

# Chapter 5

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## The List of Mistakes

### How to analyse your games

When you analyse a game, you practise your ability to calculate and you learn openings, middlegames and maybe endgames as well. Even more importantly, you learn how to find relevant ideas and details in a position and thus you practise decision-making, the process of selecting a move. That is, basically, everything you need when you sit down at the board!

And if it's your own game, you are additionally noticing what kinds of mistake you usually make.

To get the most out of an analysis session, it's good to collect the findings in a "List of Mistakes". I started doing that even before I had an Elo rating, and it has been the most important training form for me ever since.

### Chapter overview

This chapter covers the whole process, from analysing a game and annotating it, to creating the List of Mistakes and drawing conclusions.

In the first section, I show a game and explain how I analysed and annotated it. The second section contains a lot of mistakes that I have made, showing how it's possible to draw conclusions from them with the help of the List of Mistakes. There are six parts, with different types of mistakes. The first four are purely positional themes, but the last two are more related to my style of play. My personal list is:

- a) Preferring quantity over quality
- b) Overestimating the ideal pawn centre
- c) Exchanging heavy pieces
- d) Overestimating the passed d-pawn
- e) Bailing out in the critical moments
- f) Getting cautious in winning positions

After that, it's time for the List of Mistakes, where every mistake in the chapter gets a note. The main categories in the list are Openings, Tactics, Positional, Thinking Model and Attitude, but all of them are also divided into a number of subcategories.

There is a challenge at the end of the chapter: four positions from one player, all of them with the same kind of mistake. Your task is to find a connection between the mistakes.

### Analysing games

It's difficult to analyse a game on your own, since you need someone to discuss it with. Ideally you have a trainer or another player who is at least as strong as you are, but that is a bonus. Any training partner is better than not having one.

Sadly, it's not possible to find other ambitious chess players all over the world. In 2011, I moved to Kristiansund, a small town in Norway. Some months later I started to idealize past days in Lund when I could meet some friends to analyse a single game and suddenly notice that a whole day had passed. We had no other commitments and could just continue, day after day. What more could I ask for?

That image of my life in Lund is not really the complete truth, but during some periods it was like that. In Norway, I was instead analysing over Skype, focusing mostly on the critical moments of the game – not the same thing at all.

### Accepting mistakes

I have been very angry with myself after some games. In March 2007, my club in Lund played an important team match. It was a nice day when the sun finally seemed to chase winter away, and team spirit was great even though we had a long train journey. I was confident after some good tournaments and worried more about my teammates than my own game. I was White against the Dragon, could it be any easier?

Early in the game, I played a nonchalant move and was soon mated. I ran to my hotel room, took an ice-cold shower and drank some alcohol. It's the only time I have tried to silence my conscience in that way, but it didn't help; I couldn't forgive myself. When I came back home, I decided to shut the curtains in my flat to keep the sunshine away until I was sure that I would never again make the same kind of mistake. For the same period, I didn't allow myself to shave.

A month later, I pulled open the curtains, but guess what: I continued to make mistakes.

When I see a young player cry after a loss, my first thought is that he has the potential to become dedicated. It's good to be competitive as a chess player, and not unsound to feel bad after a game. However, it definitely is wrong if it happens all the time.

It might have helped my chess to forbid myself to enjoy the sunshine – the following month was very productive – but I did harm myself when I set the goal of never making the same mistake again.

It is important to understand that we will continue to make mistake after mistake. A flawless game might one day be possible, but a flawless tournament is a fantasy. If we don't accept this, we will not be objective when we analyse our mistakes and we might even become afraid of losing.

Players who get angry when they lose instead of when they play badly are usually bad at accepting that they make mistakes. Instead, they are finding creative excuses, and it's common that they convince themselves that they only made one mistake in a lost game. In that way, they can explain the loss without confessing that they made several bad moves.

I have seen many players conclude that their first mistake was the only one, and since it happened early in the game, they think that they have to study openings. Those players turn a blind eye to the fact that they also have to practise other parts of their chess ability.

Self-knowledge is an end in itself; I can't stress enough the importance of being objective. However, it's rarely an effective strategy to tell a person that he lacks self-knowledge. Instead, the List of Mistakes will hopefully open their eyes.

Jesper Hall's advice is also clever; to make notes on the scoresheet immediately after the game. The notes can pinpoint both critical moments and positions where we think we erred. If we have those notes before we analyse the game, it's less likely that we will change our story.

It's common that players who don't accept their mistakes think highly of themselves. That often makes analysis sessions unproductive. Either one player wants to show his strength by finding better moves than his friend, or the player who played the game doesn't want to admit that he made a number of mistakes. It's important to accept that *everyone* makes a lot of mistakes.

I am happy when I find a new mistake, since I think that it will make me a better player.

There was one good thing about my attitude that sunny day in 2007: I blamed my effort, not the result. In the end, my team actually won  $4\frac{1}{2}$ - $3\frac{1}{2}$  and my loss thus became unimportant. What I couldn't forgive myself was the nonchalance, stemming from laziness, which let my teammates down.

The result depends on many factors, not least how your opponent plays. It's possible to play horribly and still win, and it's possible to play to the best of your ability and still lose. Without doubt, it's more important to draw conclusions from the first game.

It is the same thing with the final result in a tournament: the performance rating or the number of points are misleading ways of evaluating your performance.

### *Analysing without the help of a computer*

After my loss, I managed to avoid the temptation to check the "truth" with an analysis engine. I think that's harmful, since it's almost impossible to ignore the computer's evaluations. At the upcoming analysis session, with a coach or a training partner, it's no longer normal intuition that is honed, but your intuition after a look at the computer's evaluation. That intuition is not as important, since it's not the one that's used at the board.

Once again, I think the secret is to accept that everyone makes a lot of mistakes. If that's accepted, it's easier to avoid ruining the analysis session by checking the game with an engine.

I advise my students to avoid checking their games with the computer. The games will not run away; there will be time to check them with a computer after they have been humanly analysed. However, few listen to my advice.

Sometimes I forbid them to check the games with the computer. It has a clear effect: they are silent when we go through the games, trying to avoid revealing what they have done.

With this in mind, I guess the readers might act in the same way, and first use a computer anyway. If you do, it's important to be curious. Why does the engine propose that move? Why could that move be played now, but not in the last position? Is that evaluation really true?

Check the lines, and work with them. Never be satisfied with the engine's move if you don't understand it.

So, keep in mind to:

- ▲ Accept that you will always make mistakes
- ▲ Be objective when you search for those mistakes
- ▲ Evaluate your effort, not the result
- ▲ Avoid checking your games first with an analysis engine, or if you do, work actively with it

### Annotating the game in ChessBase

After having analysed the game, the next step is annotating it in ChessBase, with a lot of text comments. (For those who want to learn more about ChessBase and analysing with an engine, I refer to Chapter 7, *Openings*.) The annotations should not only contain the analysis, but also the subjective thoughts you had during the game. In that way, the reasons behind the bad moves are highlighted, and it will be much easier to return to the game and understand the mistakes we made.

It's worthwhile to strive for high quality in the annotations, almost as if they will be published. (I have, by the way, also used my annotations as a way to practise foreign languages.)

It's only when the annotation part is finished, that it's time for the engine to check the analysis. However, it's still important to try to understand why it disagrees every time it does.

I'll start with one meta-example, where I annotate the game and at the same time comment upon the analysis session and annotations. Those comments are italicized.

After the Rilton Cup in 2011/12, I stayed an extra week in Sweden to take time to go through my games. This one, I analysed with Nils Grandelius. Before we started, I already had an idea where the critical moments were, and we focused mostly on those.

There is nothing spectacular about the game, but it shows some important ideas regarding analysing and annotating.

### Bartosz Socko – Axel Smith

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Rilton Cup, Stockholm 2nd January 2012

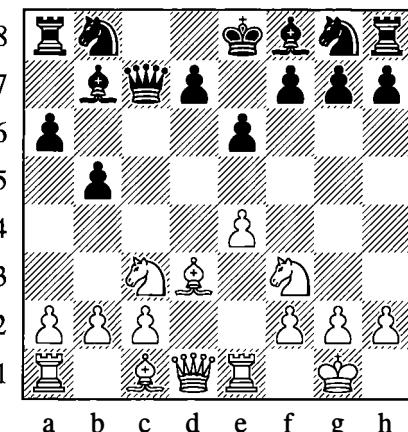
**1.e4 c5 2.♘f3 e6 3.d4 cxd4 4.♘xd4 a6**

The Sicilian Kan. Black often falls behind in development, but the pawn structure with e6 and a6 is very solid, and White doesn't have any easy pawn levers. Socko is a well-known theoretician, and my choice to play the Kan was to a great extent based on the fact that I hadn't played it in the games published in TWIC.

**5.♘c3 b5 6.♗d3 ♜b6**

Black's queen is best placed on c7, but first she chases White's knight away from its central position. 7.♘b3 and 7.♗e3 are interesting options, but I expected the game move, since Socko had played it before.

**7.♘f3 ♜c7 8.0–0 ♜b7 9.♗e1**



**9...♝e7**

This is well-known theory.

*When analysing the game, I wondered why no one plays the natural 9...♝f6. I did not manage to find an answer before I checked the games in the database and compared with similar lines. It's important to check the opening phase carefully, since future opponents will use the game in their preparations.*

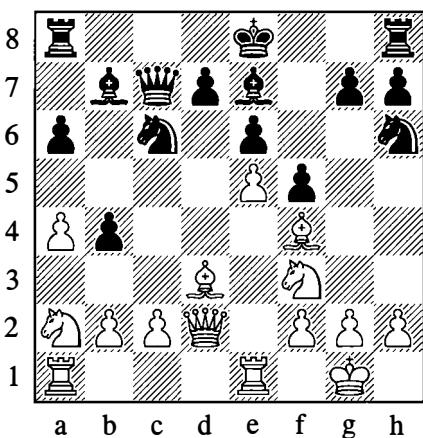
After 9...♝f6 White plays 10.e5 ♐d5 11.♗xd5 ♕xd5. Black doesn't want to allow White to exchange two minor pieces, which happens after ♜e4. To avoid ♐xd5, Black can start with 9...b4, but it seems like an unnecessary provocation to make another pawn move.

**10.e5 f5 11.a4 b4 12.♗a2**

A new move, leaving my preparations. The advantage with 12.♗a2 is that White can develop with ♘d2 and ♖ad1 without moving the knight again. The disadvantage is that the knight is passive. 12.♗b1 was played in a game by one of my students. With the knight on b1, it's possible to manoeuvre it via d2 to c4.

**12...♞c6 13.♗f4 ♗h6**

This is a standard move in the line, so I didn't have to consider it for long. If White captures, Black gets play against g2 with a rook on g8 and bishop on b7.

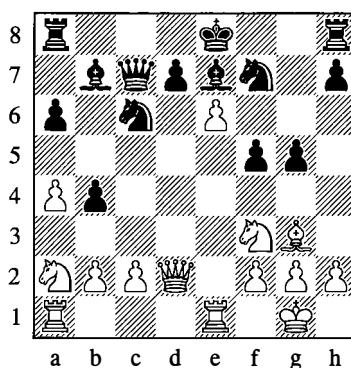
**14.♘d2****14...0–0**

The most natural move is 14...♝f7, preparing to open the g-file with the pawn sacrifice ...g5. However, I thought 15.♗xf5 exf5 16.e6 ♐d6 17.♗ad1 was very good for White. Grandelius and I found no reason to question that.

*When I checked the analysis with Houdini, I wanted to know if 15...g5 was a threat. There is a better way to find that out than making a waiting move like ♖ab1: Ctrl+Alt+0 enters a "null-move". The answer: it was a threat.*

*If my coach would have analysed the game with an engine, he would have noticed that it prefers 14...♝f7, but such a conclusion makes little sense on its own. People usually have reasons to play as they do. As I had. And since I am my own coach, I can check the calculations with Houdini.*

Houdini proposed a tactical solution that saves Black: 14...♝f7 15.♗xf5 g5! The idea shows itself after: 16.♗g3 exf5 17.e6

**17...f4!**

The position becomes crazy after 18.exf7† ♔xf7 19.♗xe7† ♔xe7, but seems okay for Black.

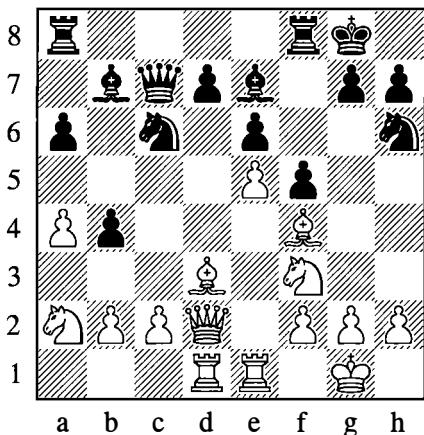
There is no reason for 14...0–0 to be criticized. 14...♝f7 15.♗xf5 is highly unclear and I knew that 14...0–0 was a standard pawn sacrifice.

*Nevertheless, it's important to check the variation; it's just as important to analyse our thoughts as the game itself.*

### 15.♕ad1

I knew that 15.♕xh6 gxh6 16.♗xh6 gives Black full compensation, since I had seen similar positions.

*To understand the position, we tried some logical continuations, but always liked Black's position. I did not type in those variations when I annotated the game, but simply wrote that White seems to lack a good plan.*



### 15...♝h8?

My idea behind this move was to be prepared to get counterplay on the g-file if White captures on h6, but Grandelius immediately questioned it. Since ♘xh6 always seems to give Black nice compensation, I can play something more useful. Not only is ...♝h8 wasting a tempo, it also displaces the king before a possible endgame.

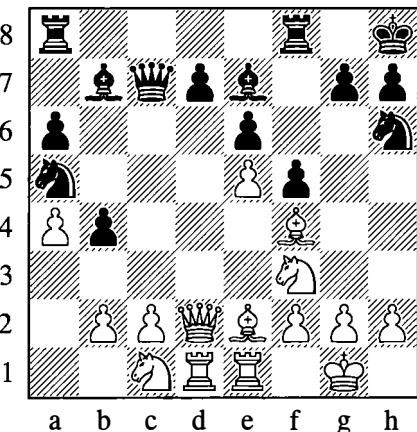
15...♝f7 16.♕xf5! is now really good for White, but 15...♝ad8 can be played here. It seems like the best move.

### 16.♕c1 ♘a5

Preparing ...♝xf3 and ...♝c4. The engine told

me that 16...♝f7 17.♕xf5 g5! was interesting, once again.

### 17.♖e2



### 17...♝ad8

During the game, I also calculated 17...♝c6 and 17...♝d5, but rejected them without concrete reasons. They seemed less harmonious.

*Grandelius agreed with that, so we only spent a few minutes checking those moves.*

Since there didn't seem to be anything special, it's better to play the most natural move. For 17...♝ad8, I used seven minutes. With no increment and the time control at move 40, I had one hour left against Socko's 29 minutes.

With hindsight, I think I should have considered 17...♝fd8, because the other rook can be useful on the queenside.

### 18.♗g5 ♘xg5?!

18...♝c4 19.♕xc4 ♘xg5 was a move order that the engine noted. It makes 20.♗xb4 less attractive due to 20...♝xf3.

*It's only a small mistake, but it's important to be strict with ourselves. Every single mistake should be attached with a ?? or ? or ?! – it makes it much easier to create the List of Mistakes in the end.*

**19.♘xg5**

During the game I thought I had played normal moves and therefore was okay. When analysing, we had our doubts since I had played the dubious ...♞h8. White is better.

**19...♞c4**

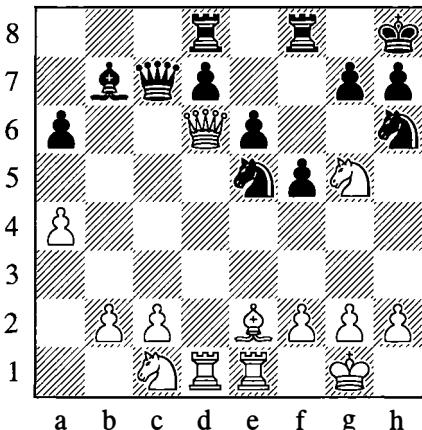
I thought for quite a long time, 18 minutes, but could on the other hand play the following five moves á tempo.

After 19...♞c6 20.♗d6 I can't see how Black could break White's dark-squared control.

19...♝xe5 is possible, but I didn't like it since I continue playing with both knights on the edges.

**20.♗xb4**

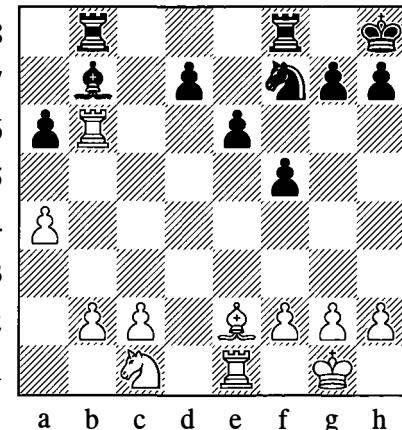
20.♗xc4 is a possibility, but it doesn't seem better than the game.

**20...♞xe5 21.♗d6****21...♗xd6**

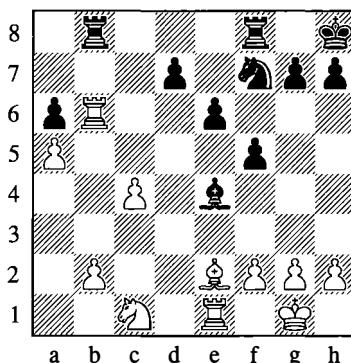
Now, when writing these lines, I understand that 21...♝c8 is best according to the engine. I missed it three times! – when I played, when I analysed the game, and when I checked the annotations with an engine. However, I don't think that 21...♝c8 really is better; White holds about the same advantage.

**22.♗xd6 ♞hf7**

Finally, the knight becomes useful.

**23.♗xf7† ♞xf7 24.♗b6 ♜b8****25.b3?**

Black needs some moves to improve his pieces, and the a6-pawn is hanging. This position seems critical, so we spent some time to consider other moves. 25.♗xa6 ♜xa6 26.♗xa6 ♜xb2 is quite equal, but 25.a5! is very good for White. The pawn on a6 won't run away and, as the rook is defended, 25...♝e4 can be met with 26.c4!.



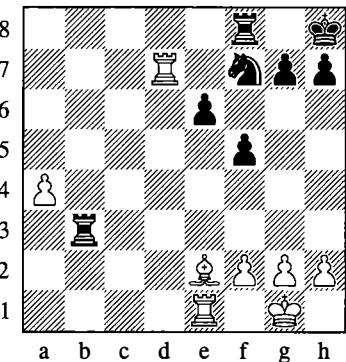
*We are mostly interested in our own mistakes, but to get an objective view of what's happening in the game, the opponent's bad moves should also have question marks attached.*

**25...♝e4**

I felt that 25...a5 created a weakness, and Grandelius agreed.

**26.♝xb8?!**

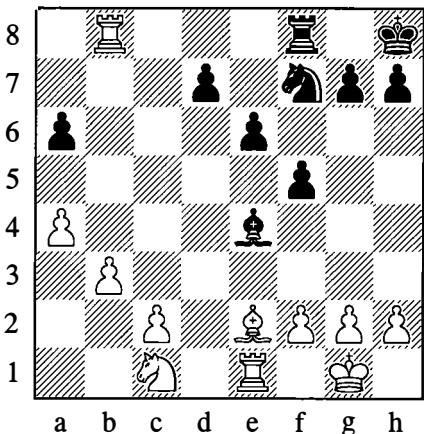
26.♝xa6! ♜xc2 27.♝a7 ♜xb3 28.♝xb3 ♜xb3  
29.♝xd7



The engine indicates that White is clearly better.

*However, you should not accept the engine's evaluation without understanding it. During the game, I actually thought that I could activate my pieces and have good drawing chances. However, when I tried to find concrete lines, everything seemed bad for Black. One reason is my king in the corner, a real shame!*

*So then I agreed with the engine's evaluation and attached a "?" to 26.♝xb8.*

**26...♜xb8 27.♝d3**

I expected 27.♝xa6 ♜xc2 28.♝b5 ♜b7. Black's main priority is to get the king to e7 with a reasonable position, but it's not completely clear if White can find something in the meantime.

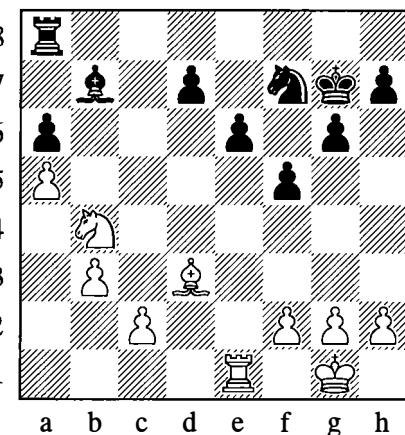
**27...♞b7!**

We have an ending where White has the possibility to get an outside passed pawn, while Black will try to make his central control felt. Hence, it's an easy positional decision to keep as many pieces as possible.

**28.♛a2 g6?!**

28...g5! looks better. I played quite quickly, to avoid time trouble, and ...g5 didn't even enter my mind as an option! Actually, I think it's an excusable mistake to play too fast, since time trouble usually leads to more serious mistakes.

*This mistake would not be noticed if the game was only analysed with Houdini, since the engine doesn't assess it as a better move. I am not sure.*

**29.a5 ♔g7 30.♝b4 ♜a8**

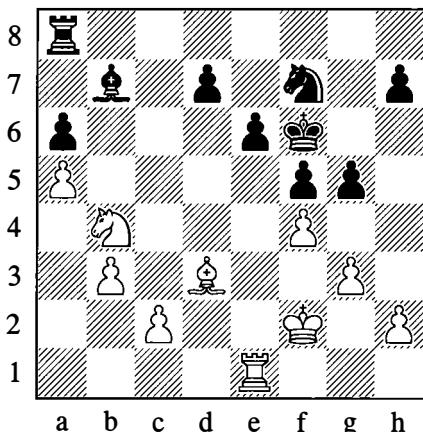
It seems passive with the bishop on b7 and rook on a8, but White can't improve his position. The knight is standing in the way

of the b-pawn and the rook doesn't have any open files. Black may manoeuvre his knight to c5, thus overprotecting a6 and freeing all his pieces.

### 31.f4 ♖f6 32.♖f2 g5

It took me seven of my remaining eighteen minutes to play 32...g5 – far too slow!

### 33.g3



### 33...gxsf4?

This move is a mistake, even though it doesn't markedly change the evaluation of the position, which is still equal. It is a questionable decision to open the g-file when my rook is tied to the a-pawn, but I couldn't see how White could make use of the file. However, since f4xg5 is never dangerous, there is no reason to take on f4. The mistake can be explained by laziness – I didn't want to check if f4xg5 could be dangerous every move.

Instead, I have some different options.

- a) 33...e5 looks nice, but White has 34.♗c4! with ♖d5 next, and an advantage.
- b) 33...♘d6 is good enough.
- c) 33...g4!? is Grandelius's favourite move, who said "The pawn must get closer to promotion!"

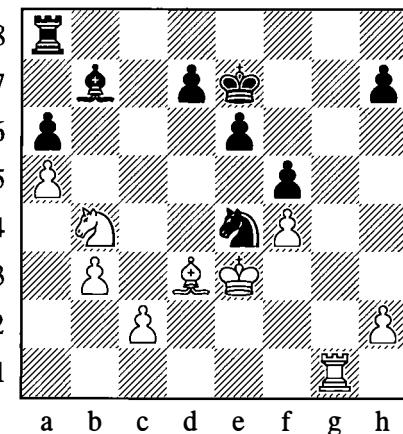
However, the most important reason for 33...g4 is that the h-file is much more interesting for Black than the g-file, since White's rook can't use the entry square h1. Then ...♘d6-e4-c5 combined with ...h5-h4 gives Black a pleasant position. Having heard Grandelius explain all this, I didn't have any objections.

### 34.gxf4 ♘d6 35.♗e3 ♘e4 36.♗d1 ♖e7?!

*It's important that we think about the reason behind the mistakes we make, so we know how to avoid them in the future. The only reason I didn't play 36...♘c5 was that I was short of time – another thing to write on the List of Mistakes.*

### 37.♗g1

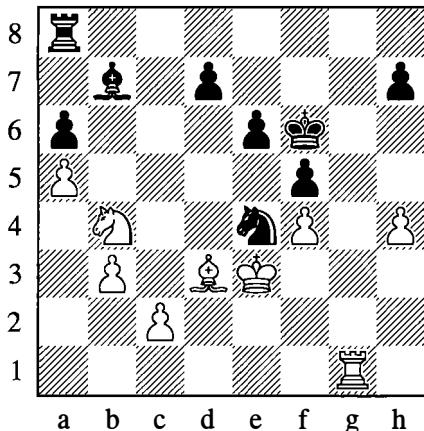
Some problems have arisen after my stupid king move. Since it's clear that I had a bad position after move 40, we spent a lot of time trying to find improvements.



### 37...♖f6

After the time control, I thought I should have played 37...♖f7 38.h4 ♘f6 39.♗e2 and met h4-h5 with ...♘g8, but seeing it in peace and quiet, it seems too passive. However, the engine showed that Black can play more actively with 39...h6 40.h5 ♗c8! since 41.♗g6 ♗c5 gives adequate counterplay.

### 38.h4!



Black has played without any plan, and White has managed to make use of the g-file. The simple idea is  $h4-h5-h6$  followed by  $\mathbb{E}g7$ . It's not possible to stop the pawn on  $h4$  or on  $h5$ , since  $38...h5$   $39.\mathbb{E}e2$  loses a pawn and  $38...h6$   $39.h5$  weakens the  $g6$ -square. In the game I used my remaining five minutes, but only found one way to stop the rook's invasion.

### **38... $\mathbb{Q}f7?$**

Black needs to find something better! What is the toughest defence? The only pawn lever is ... $e5$ , so let's investigate how that can be carried out.

$38...Qc5$  releases the rook and after  $39.h5$   $\mathbb{E}e8$   $40.h6$   $e5$   $41.\mathbb{E}g7$   $exf4\uparrow$   $42.Qf2$   $\mathbb{E}e3$ , Black gets enough counterplay. A single passed pawn on  $h6$  isn't that dangerous.

Not surprisingly,  $38...Qf7$  deserves a huge question mark. A cowardly move is seldom correct in the critical moments.

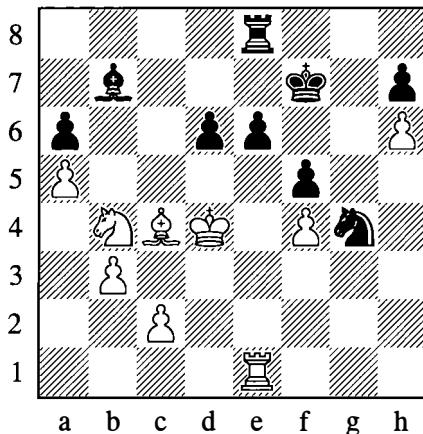
### **39.Qe2 Qf6 40.h5 Qg8**

It's not pleasant to play a passive move like this, but it was already too late. From now on, my knight can only dream of reaching  $c5$ .

### **41.Qd4 d6**

I have to stop White's king. My next moves are also practically forced.

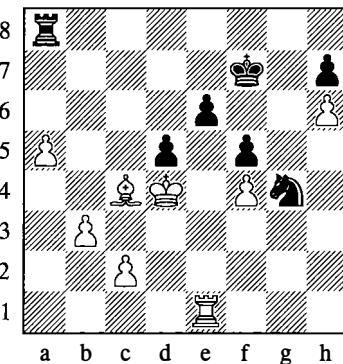
**42.Qc4 Qf6 43.h6 Qg4 44.Qe1 Qe8**  
 $44...Qc8$   $45.Qd5!$  is better for White.



White has an important choice between capturing on  $a6$  with the knight and the bishop – clearly a critical position to analyse thoroughly.

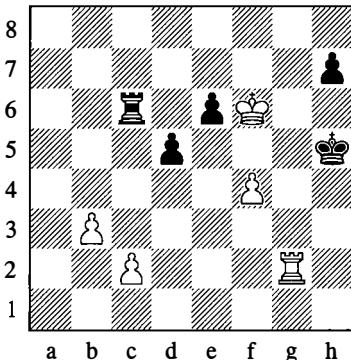
### **45.Qxa6**

After  $45.Qxa6$   $Qxa6$   $46.Qxa6$   $Ea8$   $47.Qc4$   $d5$ :



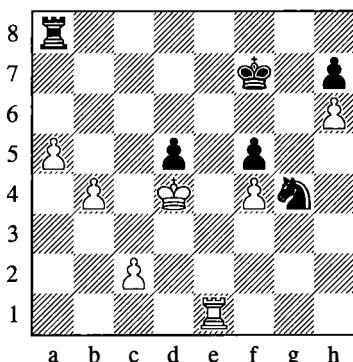
There are three main moves to consider:

- a)  $48.Qd3$  with an indisputable advantage for White, but he wants more.
- b)  $48.Qe2$   $Ea5$   $49.Qxg4$   $fxg4$   $50.Qg1$   $Qg6$   $51.Qxg4\uparrow$   $Qxh6$   $52.Qe5$   $Ea6$   $53.Qf6$   $Qh5$   $54.Qg2$   $Ec6$



I calculated this line during the game, and thought it was a draw. Probably there are a lot of improvements along the way, but it should not be winning for White.

c) 48.♗xd5! exd5 49.b4



During the analysis session, we thought that White was winning. The engine is a bit more optimistic about my drawing chances, but it still seems very good for White.

**45...e5† 46.fxe5**

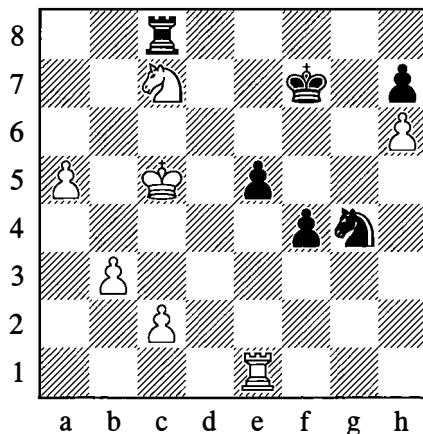
I wondered why White was helping me to get a couple of passed pawns, but I don't have a good answer. After the more positional 46.♗c4, the pawn race should be good for White.

**46...dxe5† 47.♗c5?!**

In my view, the next moves are forced. Luckily, they are enough to hold the position.

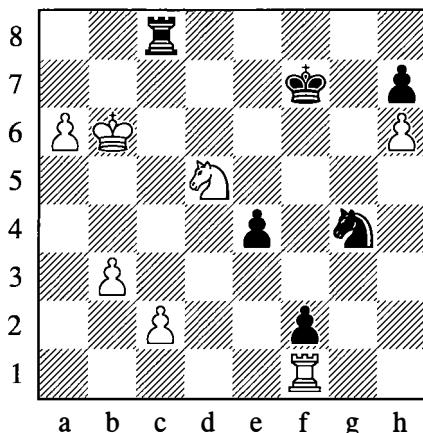
47.♗c4 was a move that the engine found. The point is to keep the c5-square free for the knight: 47...♗xa6† 48.♗xa6 e4 49.♗c5! with an advantage for White.

**47...♗xa6 48.♗xa6 f4 49.♗c7 ♜c8**



Winning a tempo.

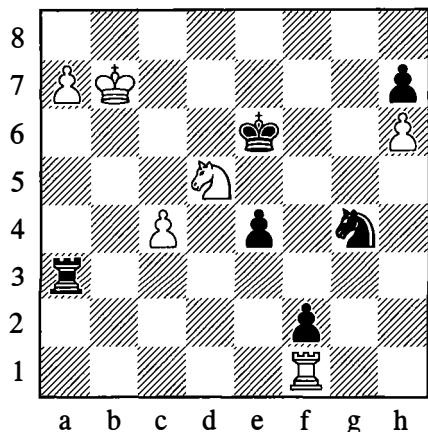
**50.♗b6 f3 51.a6 f2 52.♗f1 e4 53.♗d5**



**53...♗e6!**

53...♗xc2 54.a7 looks dangerous with two connected passed pawns, so when I saw an alternative that also wins a pawn, the choice was easy.

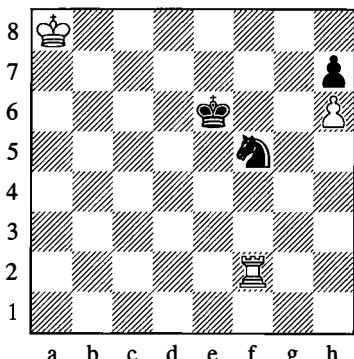
**54.c4 ♜b8† 55.♗c7 ♜xb3 56.a7 ♜a3 57.♗b7**



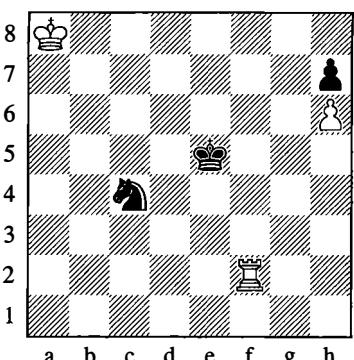
The last critical moment in the game.

57... $\mathbb{Q}e5$

The first line I calculated was: 57...e3? 58. $\mathbb{Q}xe3$   $\mathbb{Q}xe3$  59. $\mathbb{Q}xf2$   $\mathbb{Q}xc4$  60.a8= $\mathbb{W}$   $\mathbb{Q}d6\#$  61. $\mathbb{Q}b8$   $\mathbb{Q}xa8\#$  62. $\mathbb{Q}xa8$   $\mathbb{Q}f5$



This is a draw, but then, instead of 58. $\mathbb{Q}xe3$ , I saw 58.a8= $\mathbb{W}$ !  $\mathbb{Q}xa8$  59. $\mathbb{Q}xa8$  e2 60. $\mathbb{Q}f4\#$ , winning the pawn. White also wins after: 59... $\mathbb{Q}e5$  60. $\mathbb{Q}xe3$   $\mathbb{Q}xe3$  61. $\mathbb{Q}xf2$   $\mathbb{Q}xc4$

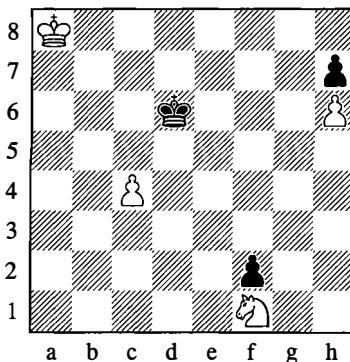


62. $\mathbb{Q}f7$   $\mathbb{Q}d6$  63. $\mathbb{Q}xh7$   $\mathbb{Q}f5$  64. $\mathbb{Q}h8$   $\mathbb{Q}f6$  65. $\mathbb{Q}f8\#$   $\mathbb{Q}g6$  66. $\mathbb{Q}xf5$

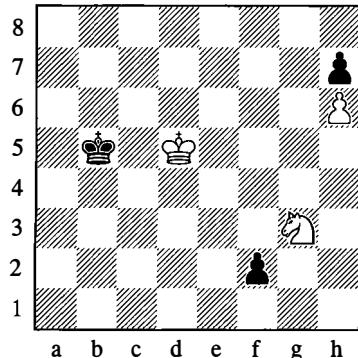
Houdini evaluates 57...e3 as a draw, but as already pointed out; we should make moves until we understand why. Being curious is one of the most important characteristics when analysing.

It turns out that after 57...e3 58.a8= $\mathbb{W}$   $\mathbb{Q}xa8$  59. $\mathbb{Q}xa8$  Houdini's idea was:

59... $\mathbb{Q}h2$  60. $\mathbb{Q}xe3$   $\mathbb{Q}xf1$  61. $\mathbb{Q}xf1$   $\mathbb{Q}d6$

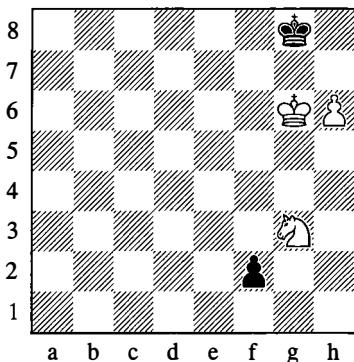


But when entering those moves, it suddenly changes its evaluation to +3.6! But remember – be curious! I continued to check the line. 62. $\mathbb{Q}b7$   $\mathbb{Q}c5$  63. $\mathbb{Q}g3$   $\mathbb{Q}xc4$  64. $\mathbb{Q}c6$   $\mathbb{Q}b4\#$  65. $\mathbb{Q}d5$   $\mathbb{Q}b5$



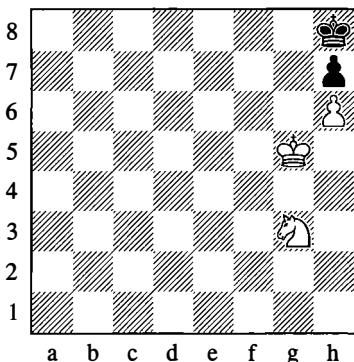
Now there are two lines, depending on whether the white king heads for the h- or f-pawn: a) 66. $\mathbb{Q}e6$  and b) 66. $\mathbb{Q}d4$ .

a) 66.♔e6 ♔c6 67.♔f7 ♔d7 68.♔g7 ♔e7  
 69.♔f1 ♔e8 70.♔xh7 ♔f7 71.♔g3 ♔g8=  
 72.♔g6 ♔g8=



White cannot make progress as he is not in time to force checkmate if the knight allows the f-pawn to queen.

b) 66.♔d4 ♔c6 67.♔e3 ♔d6 68.♔xf2 ♔e6  
 69.♔f3 ♔f7 70.♔g4 ♔g8 71.♔g5 ♔h8=



This is the position that Houdini is so wildly keen on, but it's a known draw (of course, if you install tablebases with your engine, then Houdini will know this too).

**58.a8=♕ ♕xa8 59.♕xa8 ♔d4 60.♔f6!**

Forcing the draw before it gets dangerous.

60... ♔xf6 61.♔xf2 ♔g4 62.♔c2 ♔c5 63.♔g2  
 ♔xh6 64.♔g7 ♔xc4 65.♔xh7 ♔f5 66.♔h5  
 ♔d4 67.♔e5 ♔d3 68.♔xe4 ♔xe4

½–½

To summarize the analysis of a game:

- 1) Focus mostly on the moments that you felt were critical during the game, and the decisions you had to take there.
- 2) Discuss the positional decisions, and analyse until you have an opinion of which move is best.
- 3) Annotate the game in ChessBase with a lot of words. Also type in the relevant variations that you calculated; your thoughts are just as important as the game itself.
- 4) Attach every mistake with ?? or ? or ?! and be hard on yourself! Think about the reason behind the mistakes.
- 5) Check the lines with an engine. Be curious and check the lines until you understand the moves and evaluation.
- 6) Analyse the opening phase carefully – it's important to avoid preparation in future games.

The seventh and last checkpoint is to write down bad moves in the List of Mistakes. The idea is to see which kinds of mistakes you make too often. Before I show one of those lists, I will give several examples of what I have learned when arranging my mistakes in this way.

For me it's normal to use 30-120 minutes to analyse the game, 15-30 minutes to annotate it, 10-20 minutes to check it with an engine and 5 minutes to update the List of Mistakes.

### Learning from mistakes

The following examples show important lessons I have learned when using the List of Mistakes, but also give a lot of concrete advice about how to use the list.

## Preferring quantity over quality

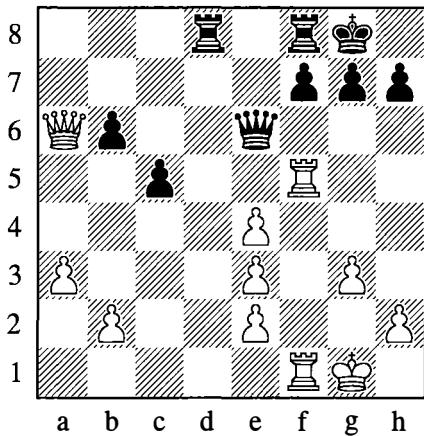
As stated in the second chapter, it is a static advantage to have three pieces against a queen, two pieces against a rook or two rooks against a queen. The static advantage is often preserved even when the weaker side gets one or two pawns, and it's therefore natural to conclude that quantity (more pieces) should be preferred over quality (higher valued pieces).

In the following game, I thought that it is always like that.

### Gustav Hedén – Axel Smith

Swedish Junior Championship, Göteborg 2005

1.c4 c5 2.♘c3 ♘f6 3.g3 d5 4.cxd5 ♘xd5  
 5.♗g2 ♘b4 6.♗f3 ♘c6 7.d3 e5 8.0–0 ♙e7  
 9.♗e3 ♘e6 10.♗e4 b6 11.a3 ♘d5 12.♗eg5  
 ♘xe3 13.fxe3 ♙xg5 14.♗xg5 ♘d7 15.♗a4  
 ♘c8 16.♗xe6 ♘xe6 17.♗xc6† ♘xc6 18.♗xa7  
 0–0 19.♗a6 ♘h6 20.♗b3 e4 21.dxe4 ♘cd8  
 22.♗af1 ♘e6 23.♗f5



White is two pawns up, but they are tripled on an open file.

23...♗d2??

23...♗b3 is one of many acceptable moves that give Black enough compensation.

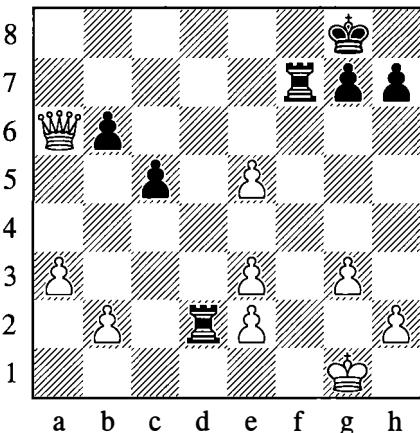
24.♗xf7!

I had seen this, but since I got two rooks for the queen, I wasn't worried.

24...♗xf7

24...♗xf7 25.♗a8† mates.

25.♗xf7 ♘xf7 26.e5



It was not until we reached this position that I understood that White is just winning. White threatens the b6-pawn and Black can't defend it with 26...♗xb2 since White's e-pawn decides after 27.e6 ♘f8 28.e7 ♘e8 29.♗c4† ♘h8 30.♗f7. When the b6-pawn drops off, Black will also have difficulties defending the c5-pawn.

26...♗e7 27.♗xb6 ♘f7 28.♗xc5 ♘xb2  
 29.♗c4† ♘e8 30.♗g8† ♘d7 31.♗d5† ♘e8  
 32.e6 ♘b8 33.a4 ♘f8 34.a5 ♘g8 35.a6  
 ♘h8 36.♗c5 ♘xe6 37.a7 ♘g8 38.♗d5 ♘ee8  
 39.e4 ♘g8 40.e5 ♘d8 41.♗b7 ♘g8 42.e6  
 ♘a8 43.e7 ♘fe8 44.♗d5† ♘h8 45.♗f7  
 ♘g8 46.♗g2 ♘ge8 47.h4 ♘g8 48.g4 ♘ge8  
 49.♗g3 ♘ac8 50.♗f4 ♘a8 51.♗e5 ♘ac8  
 52.♗d6 ♘a8 53.♗xe8† ♘xe8 54.♗d7 ♘g8  
 55.e8=♕ h5 56.♗xh5#

The mistake I made in this game was that I assumed the rooks were strong. I didn't ask

myself the important question – how can they start working? And even more importantly, as learned in Chapter 2, can the opponent create dynamic (pawn) play?

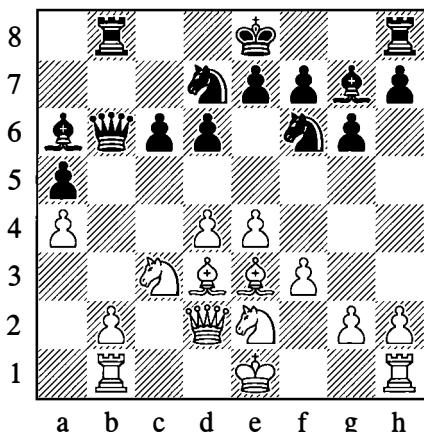
The more is not always the merrier. When we reached the position after 26.e5, I quickly realized that I had a bad position, but by then it was too late.

In the next game, I continued to misjudge the position even after the exchanging operation.

### Axel Smith – Sebastian Nilsson

LASK Open, Lund 2005

1.e4 d6 2.d4  $\mathbb{Q}f6$  3. $\mathbb{Q}c3$  g6 4.f3 c6 5. $\mathbb{Q}e3$  b5 6. $\mathbb{W}d2$   $\mathbb{Q}bd7$  7.a4 b4 8. $\mathbb{Q}a2$  a5 9.c3 bxc3 10. $\mathbb{Q}xc3$   $\mathbb{E}b8$  11. $\mathbb{Q}d3$   $\mathbb{W}b6$  12. $\mathbb{E}b1$   $\mathbb{Q}a6$  13. $\mathbb{Q}ge2$   $\mathbb{Q}g7$



The position is quite equal, but I thought I had found an interesting combination to play for the advantage.

#### 14.e5!?

Trying to open up the position before Black castles.

#### 14... $\mathbb{Q}xd3$

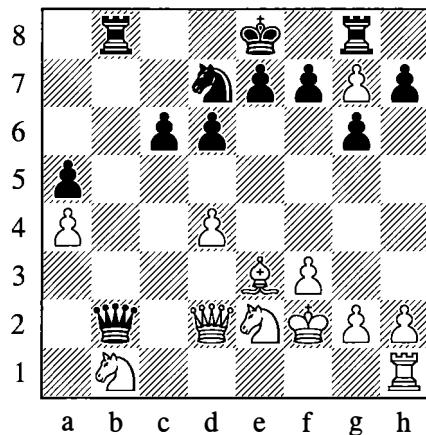
After 14... $\mathbb{Q}d5$  15. $\mathbb{Q}xd5$  cxd5 16. $\mathbb{Q}xa6$

$\mathbb{W}xa6$  17.exd6  $\mathbb{W}xd6$  18. $\mathbb{W}xa5$  Black has some compensation for the pawn but White is better, as after 17...exd6 18.b3! White stops ... $\mathbb{E}b3$  and can attack the weak pawns or play for an outside passed pawn in the endgame.

#### 15.exf6!

Zwischenzug.

15... $\mathbb{Q}xb1$  16. $\mathbb{fxg7}$   $\mathbb{E}g8$  17. $\mathbb{Q}xb1$   $\mathbb{W}xb2$  18. $\mathbb{Q}f2$



White will get a bishop and knight for a rook and two pawns. Probably it's about equal, but during the game I was convinced I was winning! My forthcoming play was based on the belief that I just had to avoid blundering. The moves don't deserve many comments, so I'll just show how it continued.

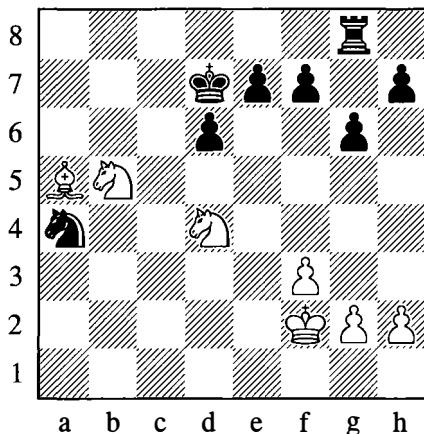
18... $\mathbb{W}xd2$  19. $\mathbb{Q}xd2$   $\mathbb{Q}b6$  20. $\mathbb{Q}bc3$

The setup with  $\mathbb{Q}c3$  and  $\mathbb{Q}d2$  isn't impressive – both pieces are inactive.

20... $\mathbb{E}xg7$  21. $\mathbb{E}b1$   $\mathbb{Q}d7$  22.d5?!  $\mathbb{E}gg8$  23.dxc6†  $\mathbb{Q}xc6$  24. $\mathbb{Q}d4†$   $\mathbb{Q}d7$  25. $\mathbb{E}b5$ ?  $\mathbb{Q}c4$ !

The first thing White should avoid is exchanging rooks, which is not possible anymore.

26. $\mathbb{Q}e1$   $\mathbb{E}xb5$  27. $\mathbb{Q}cxb5$   $\mathbb{Q}b2$  28. $\mathbb{Q}xa5$   $\mathbb{Q}xa4$



White is helpless against the advance of Black's central pawns.

29.♕d2 ♜b8 30.♕c3 ♜b2 31.♕xa4 ♜xd2†  
 32.♕e2 ♜a2 33.♕ac3 ♜a5 34.♕e3 d5  
 35.g4 e5 36.♕d1 ♜e6 37.g5 ♜f5 38.h4  
 ♜a4 39.♕g3† ♜e6 40.h5 gxh5 41.♕xh5  
 ♜f5 42.♕f6 d4† 43.♕e2 h6 44.♕f2 ♜a2†  
 45.♕e1 hxg5 46.♕g4 ♜a5 47.♕e4 ♜f4  
 48.♕gf6 ♜xf3 49.♕xg5† ♜e3 50.♕xf7  
 ♜a1#

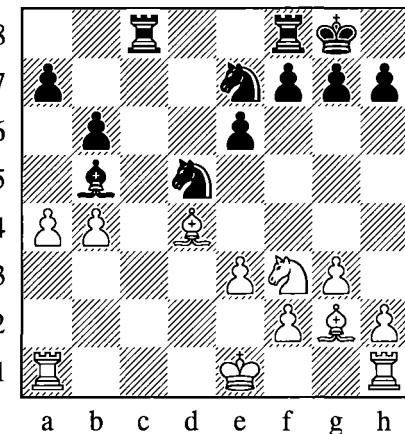
My performance in these two games was not impressive, but I could easily have dismissed them as just unrelated accidents, if it had not been for the List of Mistakes! There were two months between the games, but when I added the mistakes into the list, I realized the similarity. Apparently, I overvalued positions where I had more pieces than my opponent.

For me, this insight was like seeing an apple falling from the tree. As a junior, I had often played 1.e4 e5 with 2.♕f3, 3.♕c4, 4.♕g5, followed by taking on f7. I learned that this was wrong, but I still liked having the rook instead of two minor pieces. At that level – 1300 – it may actually be better. Here is an example of how I could play.

### Sina Attaran – Axel Smith

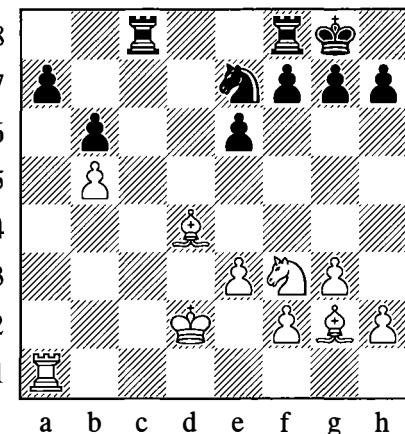
Skåne Junior Championship, Lund 2000

1.d4 ♜f6 2.c4 e6 3.♕c3 ♜b4 4.♗c2 c5 5.a3  
 ♜xc3† 6.♗xc3 cxd4 7.♗xd4 d5 8.cxd5 ♜xd5  
 9.♗xd5 ♜xd5 10.g3 0–0 11.♗g2 ♜c6 12.b4  
 ♜d7 13.♗b2 ♜ac8 14.e3 ♜ce7 15.♗d4 b6  
 16.♗f3 ♜b5 17.a4



Black is better after 17...♜c4, since White has problems with his development and the pawns on the queenside. Instead, I went for an exchanging operation.

17...♜xb4? 18.axb5 ♜c2† 19.♗d2 ♜xa1  
 20.♗xa1



Counting material, it's equal, but I was happy with Black since the rook was my favourite piece. However, the position is almost lost for Black. White controls the c6-square and the a7-pawn is a definite weakness.

20... $\mathbb{R}c7$  21. $\mathbb{Q}e5$  f6 22. $\mathbb{Q}c6$   $\mathbb{Q}xc6$  23. $\mathbb{Q}xc6$  e5 24. $\mathbb{Q}c3$   $\mathbb{E}d8\#$  25. $\mathbb{Q}e2$  f5 26.h3  $\mathbb{Q}f7$  27. $\mathbb{E}g1$  e4 28.f3 exf3# 29. $\mathbb{Q}xf3$  g5 30.h4 h6 31.hxg5 hxg5 32. $\mathbb{E}a1$   $\mathbb{Q}g6$  33. $\mathbb{E}c1$   $\mathbb{E}h7$  34.g4 fxg4# 35. $\mathbb{Q}xg4$   $\mathbb{E}h4\#$  36. $\mathbb{Q}g3$   $\mathbb{Q}h5$  37. $\mathbb{Q}f3\#$  g4 38. $\mathbb{Q}g2$

1–0

I was 14 years old when the game was played and didn't understand why I had lost. A local trainer, Hans Frisk, taught me that you should have not just one, but even two pawns to enter that material constellation. I was stunned and even though I accepted what he said, I couldn't really understand it. To get that understanding represented *good chess* to me.

Five years later, my eagerness to play *good chess* had made me believe that two pieces were always better than one. It was many years later that I actually learned Hans Frisk's motto was: "Quality over quantity".

The solution to avoiding future mistakes is not going back to the  $\mathbb{Q}c4$ ,  $\mathbb{Q}g5$  and  $\mathbb{Q}xf7$ -strategy. It's much easier than that.

The initial evaluation is often good, but at the same time routine. I made the instructive mistake of not questioning it. What I needed was to carefully consider whether the pieces were able to cooperate against a target or not, and whether the side with the single piece had some dynamic (pawn) play.

My thesis with the List of Mistakes is that gaining such knowledge about one's weak sides is a huge step towards avoiding them. If I am conscious about the fact that I overvalue two pieces against a rook, or two rooks against a queen, I should be able to adjust for that.

## Overestimating the ideal pawn centre

For the moment, I find about five mistakes per game, and probably I made even more earlier. With 1750 games, I have thus made over 10,000 mistakes. To my students I often say that the player with the greatest number of mistakes wins! However, that's not enough – they also have to be recorded and analysed. Below are two similar positional mistakes, both from Cappelle la Grande 2008.

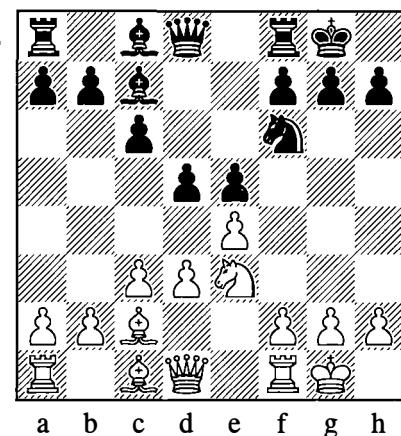
**Josef Gheng – Axel Smith**

Cappelle la Grande 18th February 2008

1.e4 e5 2. $\mathbb{Q}f3$   $\mathbb{Q}c6$  3. $\mathbb{Q}b5$   $\mathbb{Q}f6$  4.d3  $\mathbb{Q}c5$  5.0–0  $\mathbb{Q}d4!$  6. $\mathbb{Q}xd4$   $\mathbb{Q}xd4$

The reason White can claim a small advantage in many 1.e4 e5 positions is the knight on c6. It can run into d4-d5 or  $\mathbb{Q}xc6$  and also stops Black from playing ...c6. Without the knight, Black suddenly has an easy and natural plan to occupy the centre with ...c6 followed by ...d5.

7.c3  $\mathbb{Q}b6$  8. $\mathbb{Q}d2$  c6 9. $\mathbb{Q}a4$  0–0 10. $\mathbb{Q}c4$   $\mathbb{Q}c7$  11. $\mathbb{Q}c2$  d5 12. $\mathbb{Q}e3$



12.... $\mathbb{Q}e6?!$

Too stereotyped. With hindsight, I prefer 12...d4. Normally, it's not a good idea to release

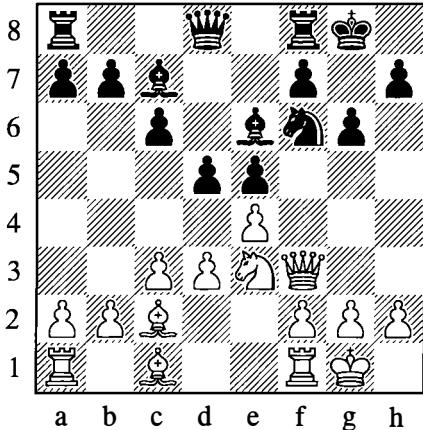
the tension in the centre, but it threatens the knight. If White exchanges, he opens up the diagonal for Black's dark-squared bishop. For example:

- 13.cxd4 exd4 with a nice kingside initiative along the b8-h2 diagonal.
13. $\mathbb{Q}f5$   $\mathbb{Q}xf5$  14.exf5  $\mathbb{W}d6$  when Black has some pressure against White's queenside and can follow up with natural moves like ... $\mathbb{E}fe8$ , ... $\mathbb{E}ad8$  and ... $\mathbb{Q}d5$ .
13. $\mathbb{Q}c4$   $\mathbb{Q}g4!$  14.f3  $\mathbb{Q}e6$  is annoying for White, since f2-f3 is weakening. The knight on c4 will be kicked back with ...b5 and would have been happy to have the f3-square at its disposal.

These variations are not so clear, and it's possible to argue for other moves. During the game I might even have rejected 12...d4. What then was my mistake? That I didn't even consider it! I was so satisfied to have built up the ideal centre, that I couldn't imagine it being destroyed. Instead, my plan was to play ...f5 to make my centre even bigger.

### 13. $\mathbb{W}f3$ g6!?

My idea behind this move was not only to stop  $\mathbb{Q}f5$ , but also to be able to play ... $\mathbb{Q}h5$  followed by ...f5. It's a consistent follow-up, but not a good one.

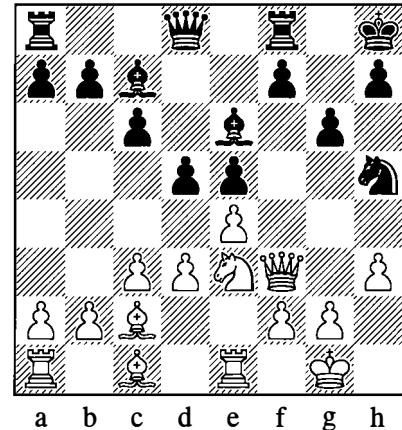


### 14. $\mathbb{E}e1$ $\mathbb{Q}h8$

Waiting for h2-h3.

### 15.h3 $\mathbb{Q}h5!?$

15...dxe4 was the last route to equality.



### 16.exd5! cxd5 17. $\mathbb{Q}b3$

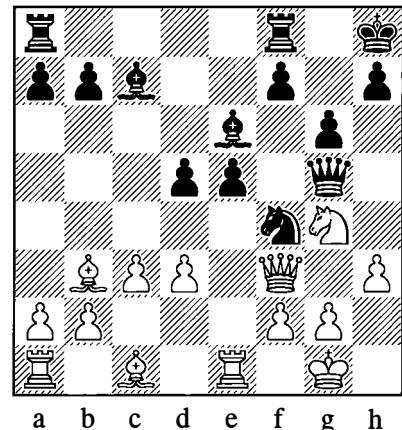
Suddenly the 'ideal' centre becomes weak.

### 17... $\mathbb{Q}f4$

After 17...d4 18. $\mathbb{Q}g4!$  I have to play the ugly ...f6 to defend the e5-pawn.

### 18. $\mathbb{Q}g4$ $\mathbb{W}g5$

There is no other move.



If my opponent had played 19.c4! he would have succeeded in destroying my centre,

leaving me with a lot of weak squares. Instead he played:

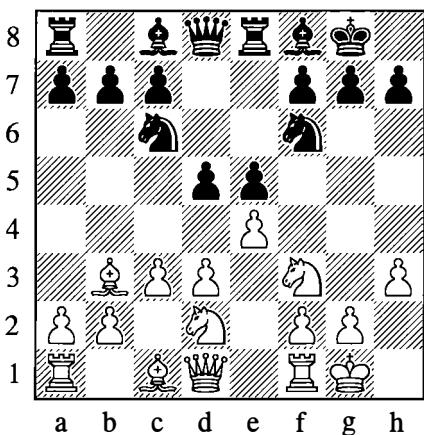
**19.  $\mathbb{Q}xe5??$**

The rest of the game is another story and ended in a draw in 36 moves.

### Roza Lallemand – Axel Smith

Cappelle la Grande 19th February 2008

1.e4 e5 2.  $\mathbb{Q}f3$   $\mathbb{Q}c6$  3.  $\mathbb{Q}c4$   $\mathbb{Q}f6$  4. d3  $\mathbb{Q}e7$  5. c3 0–0 6.  $\mathbb{Q}b3$  d5 7.  $\mathbb{Q}bd2!$   $\mathbb{Q}e8$  8.0–0  $\mathbb{Q}f8$  9. h3



Compared to the position in the previous game, there is an extra pair of knights, which favours White. The knight on c6 is easily tamed by the pawn on c3, and stops Black from defending the centre with ...c7-c6.

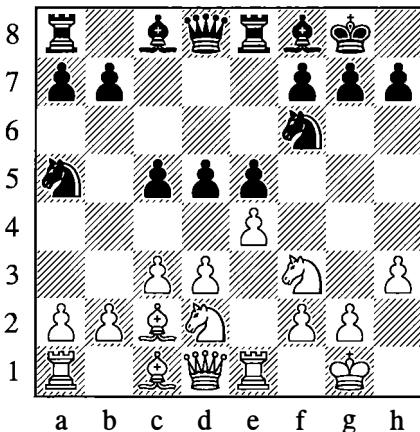
White's setup is similar to the King's Indian Attack, but her bishop on b3 is much more active. Hence, it seems to be a good idea to exchange bishops. However, 9...dxe4 10.dxe4  $\mathbb{Q}e6$  11.  $\mathbb{W}e2$   $\mathbb{Q}xb3$  12.axb3 improves White's structure and in an endgame with dark-squared bishops, White may profit from the fact that the pawn on e5 is blocked on a dark square.

In the previous game I was too ambitious, trying to enhance my centre by playing ...f5. In this game, I cleared a path for my c-pawn with 9... $\mathbb{Q}a5$ , which was, not so surprisingly,

again too ambitious.

I think that optimal play from Black's side requires a lot of patience, just waiting with a move like 9...h6. My ultimate conclusion is, however, that the problems started already when I played 6...d5. Lallemand simply defended the centre with 7.  $\mathbb{Q}bd2!$  and with knights on f6 and c6, I have no natural pawn levers to strive for, as ...dxe4 still leaves the knight on c6 misplaced. Nowadays, I think it's easier to play the position after 6...d6 than the one after 6...d5.

**9...  $\mathbb{Q}a5$  10.  $\mathbb{Q}a4$  c6 11.  $\mathbb{Q}c2$  c5 12.  $\mathbb{Q}el?$ !**



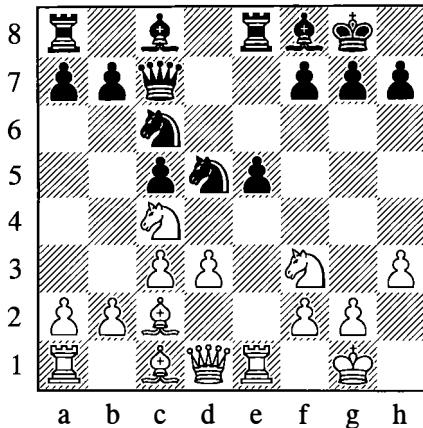
**12...  $\mathbb{Q}c6?$**

In the position after 12...d4,  $\mathbb{Q}el$  is a superfluous move. The position is fine for Black, since it's possible to recapture on d4 with the c-pawn, keeping the pawn on e5. Therefore, it would have been more exact to play 12.exd5. I did not make use of that mistake, since I still valued the ideal pawn centre too highly.

**13.exd5  $\mathbb{Q}xd5$  14.  $\mathbb{Q}c4$**

I started realizing that I had played too ambitiously and had a tough time trying to consolidate. 14...f6 is best, but I didn't want to weaken the light squares around the king.

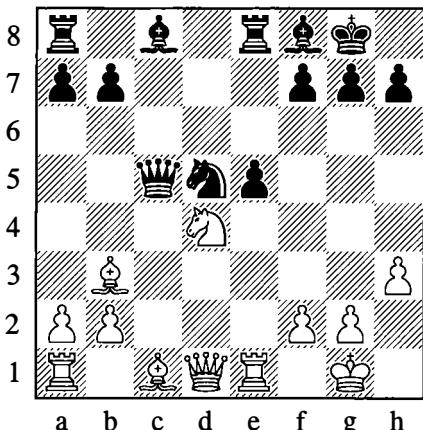
**14... $\mathbb{W}c7$**



**15.d4!**

I have spent so many tempos to push ...c5 that I haven't even managed to develop the light-squared bishop! White uses the fact that my rooks aren't connected to carry out a pawn lever in the centre.

**15...cxd4 16.cxd4  $\mathbb{Q}xd4$  17. $\mathbb{Q}xd4$   $\mathbb{W}xc4$   
18. $\mathbb{A}b3$   $\mathbb{W}c5$**



Now 19. $\mathbb{A}g5!$  would have taken away d8 from Black's rook, making the exchanging operation 19... $\mathbb{A}xh3$  20. $\mathbb{Q}f3$   $\mathbb{A}e6$  impossible due to 21. $\mathbb{A}xe5$  and the knight on d5 is lost. 19... $\mathbb{A}d7$  20. $\mathbb{Q}f3$  also loses back the pawn, so Black has to play something passive. With  $\mathbb{A}c1$

coming next, White has an obvious advantage.

Instead in the game, I managed to draw after 79 moves.

In the List of Mistakes I summarized the mistakes in the two games as follows: "I value the ideal centre too highly and continue to push pawns instead of stabilizing the centre."

The ideal centre is strong in many positions, but I assumed that it was *always* good.

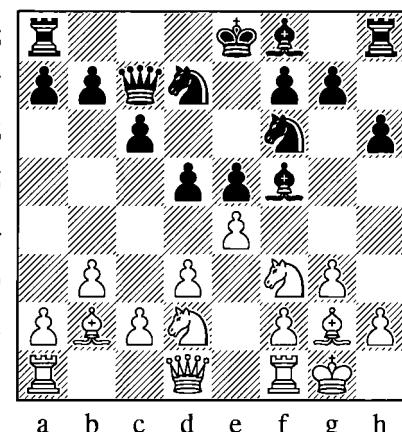
According to the idea of the List of Mistakes, I would now consciously think about my habit of misjudging those kinds of positions during the next few tournaments. Later, my intuition would automatically warn against the misjudgements.

Two months later I had a similar position.

### Karen Movsziszian – Axel Smith

Copenhagen Chess Challenge, Copenhagen  
18th April 2008

**1. $\mathbb{Q}f3$  d5 2.g3  $\mathbb{Q}f6$  3. $\mathbb{Q}g5$   $\mathbb{Q}f5$  4.d3 c6 5.0–0 h6 6.b3!  $\mathbb{Q}bd7$  7. $\mathbb{Q}b2$   $\mathbb{W}c7$  8. $\mathbb{Q}bd2$  e5 9.e4**



I have occupied the centre against White's King's Indian Attack. It's time to decide whether to give up the centre or keep it.

9...dxe4!

Instead 9... $\mathbb{Q}h7$  10.exd5 cxd5 11. $\mathbb{Q}xe5$   $\mathbb{Q}xe5$  12. $\mathbb{Q}xe5$   $\mathbb{W}xe5$  13. $\mathbb{R}e1$  loses. While 9... $\mathbb{Q}g4$  10.exd5 cxd5 11. $\mathbb{R}e1$  is dangerous, and so is 9... $\mathbb{Q}e6$  10.d4! as the king is still two moves from castling.

Apparently, I had learned from my previous mistakes.

## 10.dxe4 ♕e6

The bishop would have been out of play on h7. After the game move, White should probably go for getting the bishop pair with  $\mathbb{W}e2$  and  $\mathbb{Q}c4$ . The question is whether this is enough for an advantage. If Black manages to exchange the dark-squared bishop, he should be completely okay, but White will prevent this. I think Black wants to keep the queens on because Black's is a natural defender of the e5-pawn.

On the queenside I think White should answer ...a7-a5 with a2-a4. In such positions White has normally played c2-c3 to cover the d4-square, but there is no need for this move in the game since Black's knights are a long way from d4. This makes a huge difference – the b3-pawn isn't weak after a2-a4 and the bishop on b2 is active, while at the same time hiding from exchanges. All in all, I think White holds a small advantage. Even so, 9...dxe4 is clearly the best move.

11.  $\mathbb{Q}h4$   $\mathbb{Q}c5$  12.  $\mathbb{Q}f5$  0-0 13.  $\mathbb{W}f3$   $\mathbb{Q}fe8$   
 14.  $\mathbb{Q}fe1$  a5 15. a3  $\mathbb{Q}ad8$  16.  $\mathbb{Q}f1$  g6 17.  $\mathbb{Q}e3$   
 $\mathbb{Q}d4$  18.  $\mathbb{Q}ab1$   $\mathbb{Q}xb2$

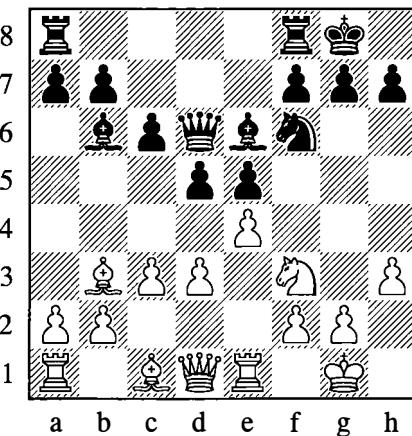
1/2-1/2

However, there is unfortunately no guarantee that you won't make similar mistakes again. Two years later, in the same tournament in Cappelle, I realized that I still had to learn.

Carl Strugnell - Axel Smith

## Cappelle la Grande 15th February 2010

1.e4 e5 2.♘f3 ♘c6 3.♗b5 ♗f6 4.d3 ♛c5  
 5.0-0 ♖d4 6.♗xd4 ♛xd4 7.c3 ♛b6 8.♘d2  
 c6 9.♗a4 0-0 10.♗b3 d5 11.h3 ♛e6 12.♖e1  
 ♖d6 13.♗f3



This position is quite similar to the two previous ones, and still I wanted to keep the ideal centre in the first place. 13...d7 14.g5 didn't appeal to me and since I saw no other way to defend e5 I went for the dry 13...dxe4, with equality. An improvement compared to my play two years earlier, but it was even better to maintain the tension.

13...♝fe8!

I didn't even see this move, since it never crossed my mind that it's possible to recapture on d5 with something other than the pawn! With the rook on e8, Black has a good answer to all White's critical tries.

- a) 14.  $\mathbb{Q}g5$   $\mathbb{Q}d7!$  without 15.  $\mathbb{Q}g5$  being possible.
  - b) 14.  $\mathbb{Q}g5$   $\mathbb{Q}d7!$  when there is no knight blocking the bishop.
  - c) 14.  $\text{exd5}$   $\mathbb{Q}xd5$  with pressure on the d-file.
  - d) White's best is probably 14.  $\mathbb{W}e2$ , but it doesn't threaten the pawn.

It was quite disappointing when I found out that I had made a similar mistake yet again.

The game ended with:

13...dxe4 14.dxe4  $\mathbb{W}xd1$  15. $\mathbb{Q}xd1$   $\mathbb{Q}d7$   
 16. $\mathbb{Q}g5$   $\mathbb{Q}c4$  17.b3  $\mathbb{Q}a6$  18. $\mathbb{Q}e2$   $\mathbb{Q}xe2$   
 19. $\mathbb{B}xe2$  f6 20. $\mathbb{Q}f3$   $\mathbb{B}fd8$  21. $\mathbb{Q}a3$   $\mathbb{Q}c5$   
 22. $\mathbb{Q}xc5$   $\mathbb{Q}xc5$  23. $\mathbb{Q}c1$  b5 24. $\mathbb{Q}f1$   $\mathbb{Q}f7$   
 25. $\mathbb{B}d2$   $\mathbb{B}xd2$  26. $\mathbb{Q}xd2$  a5 27. $\mathbb{Q}e2$  h5 28.a4  
 $\mathbb{Q}e6$  29.axb5 cxb5 30. $\mathbb{Q}a1$   $\mathbb{Q}e7$  31.c4 bxc4  
 32. $\mathbb{Q}xc4$   $\mathbb{Q}b4$  33. $\mathbb{Q}b6$   $\mathbb{B}b8$  34. $\mathbb{Q}d5$   $\mathbb{Q}d6$   
 35. $\mathbb{B}xa5$   $\mathbb{B}xb3$  36. $\mathbb{Q}e3$  g6 37. $\mathbb{Q}a6$   $\mathbb{B}b4$  38.f3  
 ½-½

I have always performed far below normal at Cappelle la Grande, probably because it's a nice tournament where you spend several hours per day in the tournament restaurant. I need all available time to prepare.

I showed this game to make the picture realistic; the List of Mistakes is useful but not a panacea. But it would have helped if I had reviewed the old lists, not for the sake of the memories (they are all sad!) but to remind myself of my weaknesses.

### Exchanging heavy pieces

I include about 30 games – three tournaments and some league games – in each List of Mistakes. For people who don't play so often, it makes sense to have fewer games in each list. The following three games were played with just one month in between them. In all of them, I had problems with exchanging heavy pieces.

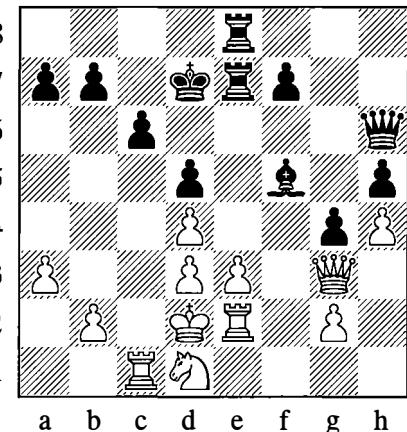
### Sinisa Drazic – Axel Smith

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Skanderborg GM, 20th October 2010

1.d4  $\mathbb{Q}f6$  2. $\mathbb{Q}c3$  d5 3. $\mathbb{Q}g5$  h6 4. $\mathbb{Q}xf6$  exf6  
 5.e3 c6 6. $\mathbb{Q}d3$  f5 7.h3 h5 8. $\mathbb{Q}f3$  g6 9. $\mathbb{Q}ge2$

9. $\mathbb{Q}d7$  10. $\mathbb{W}g3$   $\mathbb{Q}f6$  11.f3  $\mathbb{Q}d6$  12. $\mathbb{W}h4$   $\mathbb{Q}d7$   
 13.0-0-0  $\mathbb{W}e7$  14. $\mathbb{Q}b1$  0-0-0 15. $\mathbb{B}de1$   
 $\mathbb{B}de8$  16. $\mathbb{Q}d1$  g5 17. $\mathbb{W}f2$   $\mathbb{Q}e4$  18.fxe4 fxe4  
 19. $\mathbb{Q}g3$  exd3 20.cxd3  $\mathbb{W}e6$  21. $\mathbb{B}hf1$   $\mathbb{Q}xg3$   
 22. $\mathbb{W}xg3$   $\mathbb{W}g6$  23. $\mathbb{Q}c2$   $\mathbb{Q}f5$  24. $\mathbb{Q}f2$   $\mathbb{B}e7$   
 25. $\mathbb{B}e2$   $\mathbb{B}he8$  26. $\mathbb{Q}d2$   $\mathbb{Q}d7$  27. $\mathbb{B}fe1$   $\mathbb{B}e6$   
 28.a3  $\mathbb{B}6e7$  29.h4 g4 30. $\mathbb{B}c1$   $\mathbb{W}h6$  31. $\mathbb{Q}d1$



The knight is better than the bishop in this position, since Black has many pawns fixed on white squares. The pressure along the e-file won't win the e3-pawn, but at the moment it ties White to the defence of it. If White had his hands free, he would use one of the two semi-open files. Either he would double on the c-file followed by b4-b5, or he might penetrate on f6. Another plan for White is to carry out the pawn lever e3-e4, which takes space and creates tension in the centre. However, with the queens on the board, this will hardly be possible. Hence, Black should keep the queens.

### 31...Wd6??

I was afraid of tricks with  $\mathbb{Q}c3xd5$  followed by  $\mathbb{W}c7\#$  and avoided them in the easiest way. The worries were not ungrounded, since 31... $\mathbb{W}g6$  32. $\mathbb{Q}c3$   $\mathbb{Q}xd3$  33. $\mathbb{Q}xd5!$  really is better for White. However, I should have searched for a positionally sound way to avoid this. The best prophylaxis is 31... $\mathbb{W}g6$  32. $\mathbb{Q}c3$   $\mathbb{B}c8!$

**32.♗xd6† ♕xd6**

With 33.g3 White would have a safe advantage. Later on, Black will probably have to play ...f5 to stop e3-e4, which shuts in the bishop. Then, White can slowly prepare for a break on the queenside with b4-b5.

Instead White played 33.♕c3 and the game was drawn in 54 moves.

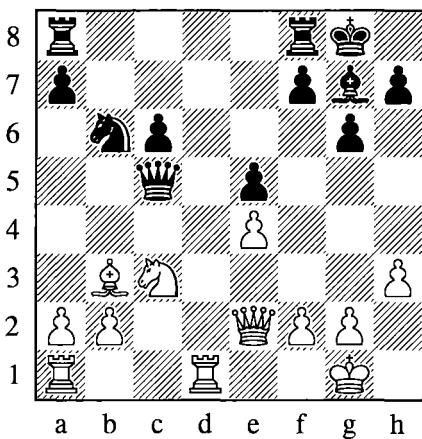
Never make a positionally dubious move only because it's the simplest solution against the opponent's threats! In the next example, the question is again which heavy pieces to exchange, if any.

**Axel Smith – Vladimir Fedoseev**


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Vasylyshyn Memorial, Lviv 27th November 2010

1.d4 d5 2.c4 c6 3.e3 ♘f6 4.♘c3 g6 5.♘f3 ♘g7 6.♘e2 0–0 7.0–0 dxc4 8.♘xc4 ♘g4 9.h3 ♘xf3 10.♗xf3 ♘bd7 11.♗d1 e5 12.d5 ♘b6 13.dxc6 bxc6 14.e4 ♘b4 15.♗e2 ♘b6 16.♘b3 ♘fd7 17.♘e3 ♘c5 18.♘xc5 ♘xc5



I am enjoying my better pawn structure with some pressure against the isolated pawn on c6. To make the most out of such a position, the minor pieces should be exchanged but the heavy ones kept on the board. I am not so sure if this principle is valid for the queen and

the bishop on the same colour as the isolated pawn, but otherwise it's almost as simple as it sounds. Anyway, I managed to ignore the rule.

**19.♗d3? ♘ad8 20.♗f3**

I have to clear the e2-square for the knight, since 20.♗ad1 ♘d4! gives Black sufficient counterplay.

**20...♘e7**

20...♗d4 is met by 21.♗e2, and White takes control of the d-file.

**21.♗ad1**

I didn't achieve anything more than exchanging both rooks and agreeing to a draw.

**21...♗f6 22.♗f1 ♘g7 23.♗xd8**

½–½

Instead, 19.♗ac1! was self-evident, because it immediately makes use of the c-file and gives White pleasant pressure against the isolated pawn.

So why did I make this mistake? I thought I had some possibilities to control the open file completely if I doubled my rooks. I didn't bother calculating the (few) variations until the end and just played a natural-looking move.

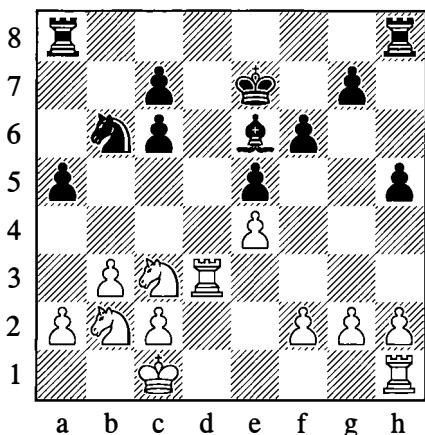
Instead, I should have taken a step back to see the whole board, not only the open file. Then I would have realized that I wanted to keep the heavy pieces, and probably seen that 19.♗d3? exchanges some of them.

The following example is in one way the opposite, but in another way, still the same. When you see the moves, you will know exactly what I mean.

### Axel Smith – Daniel Semcesen

Vasylshyn Memorial, Lviv, 1st December 2010

- 1.e4 e5 2.Qf3 Qc6 3.Qc4 Qe7 4.d4 d6
- 5.dxe5 dxe5 6.Wxd8† Qxd8 7.Qc3 Qe6
- 8.Qb5 f6 9.Qxc6† bxc6 10.Qe3 Qe7
- 11.0–0–0 Qc8 12.Qc5 Qb6 13.Qe1 Qd7
- 14.Qa3 a5 15.Qd3 Qb6 16.b3 Qf7 17.Qb2
- h5 18.Qd3 Qe7 19.Qxe7 Qxe7



White has the better pawn structure and Black lacks play for his bishop, since the pawn structure on the kingside is symmetrical. If Black is kind enough to exchange a pawn on b3 and thus allow White to recapture with the c-pawn, White can use the rooks on the c-file to attack the weak pawn. Otherwise, it's difficult to use the rooks on that file.

To exchange both rooks would be in White's favour since it's a much greater risk that the bishop ends up alone, controlling only half of the squares on the board. However, Black wants to exchange one pair of rooks to reduce White's influence on the d-file. Having said all this, it's not difficult to find the best move:

20.Qhd1!

Black is stopped from exchanging one pair of rooks without exchanging the other one.

In the game, I played 20.Qca4?! and allowed Black to exchange one of the rooks after 20...Qhd8. Once again I saw only the open file, but not its connection with the rest of the game. Since I couldn't stop Black from playing ...Qd8, I didn't really consider Qhd1.

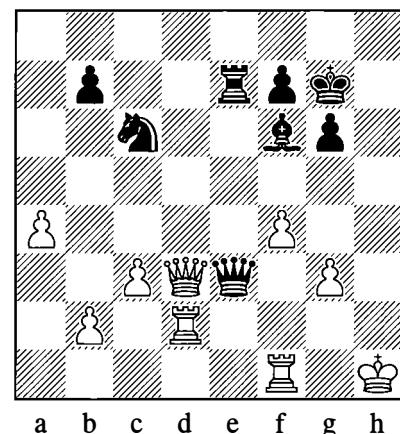
The game eventually ended in a draw after 67 moves.

The game below was played five months earlier, but I have included it since it sums up this kind of mistake very well.

### Jan Slettebo – Axel Smith

Mragel Open, Lund 5th May 2010

- 1.e4 c5 2.Qf3 Qc6 3.d4 cxd4 4.Qxd4 g6
- 5.Qc3 Qg7 6.Qe3 Qf6 7.Qc4 0–0 8.Qb3 a5
- 9.0–0 a4 10.Qxa4 Qxe4 11.Qb5 d5 12.Qb6
- Wd7 13.f3 Qe5 14.Qc7 Qxa4 15.Qxa4 Wxa4
- 16.Qxd5 Qf6 17.Qxe7† Qh8 18.Qxc8
- Qxc8 19.Qd4 Qc6 20.c3 Qb5 21.a4 Wf5
- 22.Qxf6 Qxf6 23.Qe2 h5 24.f4 h4 25.Qb5
- Qd7 26.Qad1 Qc7 27.Qd5 Qe8 28.Qc4
- Qb6† 29.Qh1 Qe7 30.Qd2 Qg7 31.g4 hxg3
- 32.hxg3 Qe3 33.Qd3



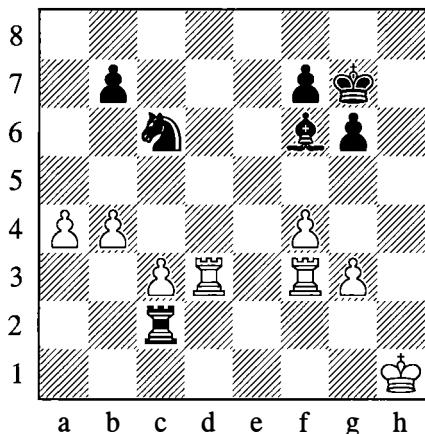
Black has two minor pieces for the rook, but White has two extra pawns which are both on the same wing, giving a clear-cut plan in

the endgame. Since Black's pieces haven't any clear targets, the endgame will favour White slightly. Hence, it's best for Black to retreat with the queen.

### 33... $\mathbb{Q}xd3$ ?

With the queens on the board, Black can try to attack White's king, while stopping the advance of the queenside pawns. I was in time trouble, but I understood that the exchange of queens was positionally wrong. However, when I saw an idea that might end up winning a pawn, I couldn't resist.

34. $\mathbb{Q}xd3$   $\mathbb{Q}e2$  35.b3  $\mathbb{Q}b2$  36.b4  $\mathbb{Q}c2$  37. $\mathbb{Q}ff3$



Believe it or not, this simple move was what I had overlooked. The endgame is, as pointed out, slightly better for White and I was slowly outplayed by my first trainer, until he (as so often!) went wrong in time trouble and then lost on time.

37...g5 38. $\mathbb{Q}g1$   $\mathbb{Q}xf4$  39. $\mathbb{Q}xf4$   $\mathbb{Q}a2$  40.a5  
 $\mathbb{Q}g6$  41. $\mathbb{Q}f2$   $\mathbb{Q}a3$  42. $\mathbb{Q}f3$   $\mathbb{Q}f5$  43. $\mathbb{Q}g2$   
 $\mathbb{Q}a2\uparrow$  44. $\mathbb{Q}g3$   $\mathbb{Q}c2$  45. $\mathbb{Q}fe3$   $\mathbb{Q}e7$  46. $\mathbb{Q}d7$   
 $\mathbb{Q}g6$  47. $\mathbb{Q}xb7$   $\mathbb{Q}f5\uparrow$  48. $\mathbb{Q}f3$   $\mathbb{Q}xe3$  49. $\mathbb{Q}xe3$   
 $\mathbb{Q}xc3\uparrow$  50. $\mathbb{Q}e4$   $\mathbb{Q}a3$  51.b5  $\mathbb{Q}xa5$  52.b6  
 $\mathbb{Q}a4\uparrow$  53. $\mathbb{Q}d5$   $\mathbb{Q}xf4$  54. $\mathbb{Q}a7$   $\mathbb{Q}b4$  55.b7  $\mathbb{Q}d4$   
56. $\mathbb{Q}a6\uparrow$  f6 57. $\mathbb{Q}c6$   $\mathbb{Q}e5$  58. $\mathbb{Q}b6$   
0-1

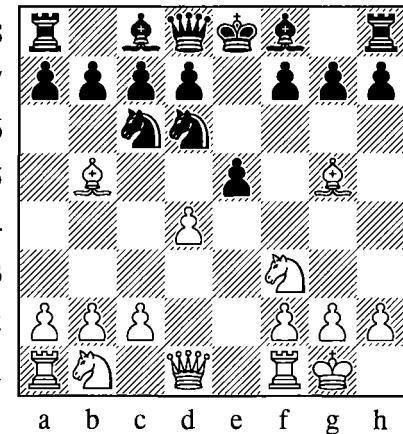
In all of these examples, I only saw a part of the picture; a dangerous knight sacrifice, an open file or an attack against a pawn. All of my moves would have been good if they had been working, or necessary if there was nothing else. However, since they were all anti-positional, I really had to know what I was doing before I decided to play such moves. I did not. What I didn't keep in mind was: Think about the positional considerations before deciding upon the candidate moves.

In the next List of Mistakes there was nothing in the column for piece exchanges. That was satisfying! In the following game, I had to make another critical decision regarding the exchange of heavy pieces.

### Rune Djurhuus – Axel Smith

Norwegian Championship, Oslo 5th July 2011

1.e4 e5 2. $\mathbb{Q}f3$   $\mathbb{Q}c6$  3. $\mathbb{Q}b5$   $\mathbb{Q}f6$  4.0–0  $\mathbb{Q}xe4$   
5.d4  $\mathbb{Q}d6$  6. $\mathbb{Q}g5$



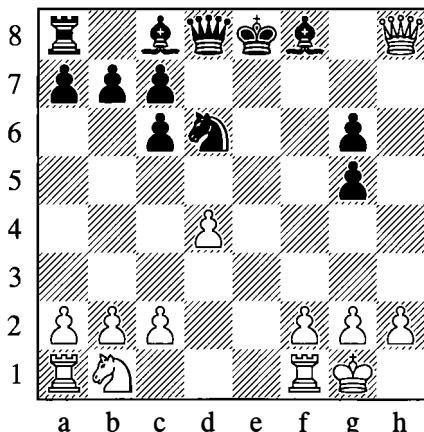
Djurhuus had never played this sideline against the Berlin before, but if there was anything I could expect, it was that he would play something new. The best method against surprises is to play a surprise back, thus avoiding the direct preparation. 6...f6 and

6... $\mathbb{Q}e7$  are of equal value, and since I had played the latter before, I chose the former.

6...f6 7. $\mathbb{Q}xc6$

7.dxe5 is the critical move.

7...dxc6 8. $\mathbb{Q}xe5!$ ? fxe5 9. $\mathbb{W}h5\#$  g6 10. $\mathbb{Q}xg6$   
hxg6 11. $\mathbb{W}xh8$



11... $\mathbb{W}e7!$

Black also has an advantage after 11... $\mathbb{W}f7$  followed by 12... $\mathbb{W}f6$ , as Ivan Cheparinov played against Svetlin Mladenov in 2004, but the game move is even better. With two pieces for a rook, the principled decision is to keep the queens on. The reason is that Black wants to attack the opponent's king or other targets in his position, which is easier with the queens on the board. After 11... $\mathbb{W}e7!$  White is unable to stop Black from castling long.

Positional considerations first, candidate moves second!

12. $\mathbb{Q}d2$   $\mathbb{Q}e6$  13. $\mathbb{B}fe1$  0-0-0 14. $\mathbb{Q}f3?$   
 $\mathbb{Q}f7$  15. $\mathbb{W}h7$   $\mathbb{W}f6$  16.h4 g4 17. $\mathbb{Q}g5$   $\mathbb{Q}xg5$   
18.hxg5  $\mathbb{W}f7$  19. $\mathbb{W}xf7$   $\mathbb{Q}xf7$

We exchanged queens only eight moves later, but it's not the same position anymore. By now, I have a strong bishop pair, pressing against the queenside pawns. Black is clearly better; I won in 59 moves.

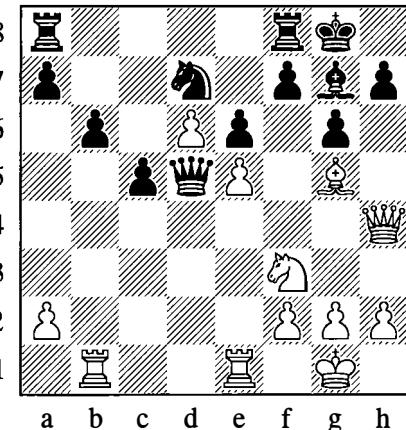
The game against Djurhuus was played half a year after I had concluded that I had problems with the exchange of heavy pieces. I no longer consciously thought about it during the game, but I had apparently managed to make it part of my intuition.

### Overestimating the passed d-pawn

Axel Smith – Berge Østenstad

Norwegian Championship, Oslo 9th July 2011

1.d4  $\mathbb{Q}f6$  2. $\mathbb{Q}f3$  g6 3.c4  $\mathbb{Q}g7$  4. $\mathbb{Q}c3$  d5  
5.cxd5  $\mathbb{Q}xd5$  6.e4  $\mathbb{Q}xc3$  7.bxc3 c5 8. $\mathbb{B}b1$   
0-0 9. $\mathbb{Q}e2$  b6 10.0-0  $\mathbb{Q}b7$  11.d5  $\mathbb{Q}xc3$   
12. $\mathbb{Q}c4$   $\mathbb{Q}g7$  13. $\mathbb{W}d3$   $\mathbb{W}c8$  14.e5  $\mathbb{Q}a6$  15. $\mathbb{Q}g5$   
 $\mathbb{Q}xc4$  16. $\mathbb{W}xc4$  e6 17.d6  $\mathbb{Q}d7$  18. $\mathbb{B}fe1$   $\mathbb{W}c6$   
19. $\mathbb{W}h4$   $\mathbb{W}d5$



Early in the game, I gained a protected passed pawn on d6 as compensation for a sacrificed pawn. Its major strength is that it divides Black's position into two halves that don't cooperate. My plan is thus to play for an attack with  $\mathbb{Q}h6$  and  $\mathbb{Q}g5$ .

20. $\mathbb{Q}h6?$

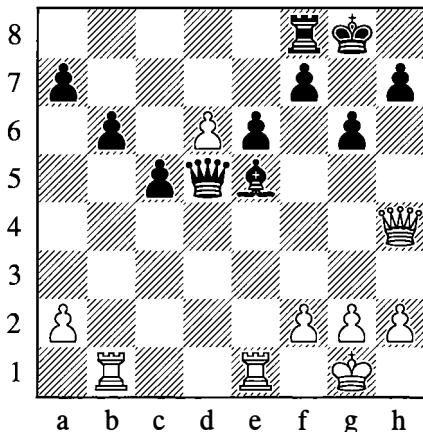
The best option was 20. $\mathbb{B}bd1$   $\mathbb{W}xa2$  21. $\mathbb{Q}h6$  with a dangerous attack. However, I didn't want to sacrifice another pawn without

winning a tempo – the rook is not that useful on d1. Hence, I went for  $\mathbb{A}h6$  immediately.

**20... $\mathbb{Q}xe5!$**

20...f6 21. $\mathbb{A}xg7$   $\mathbb{Q}xg7$  22. $\mathbb{W}a4$   $\mathbb{Q}xe5$  23. $\mathbb{Q}xe5$  fxe5 24. $\mathbb{B}bd1$   $\mathbb{W}b7$  25. $\mathbb{B}xe5$  was one variation I calculated and evaluated as clearly better for White. It's not true, and a first sign of the kind of evaluation mistake I made.

**21. $\mathbb{Q}xe5$   $\mathbb{Q}xe5$  22. $\mathbb{W}xf8$   $\mathbb{B}xf8$**



**23. $\mathbb{B}bd1?!$**

White has equality with 23.d7:

a) 23... $\mathbb{B}d4$  24. $\mathbb{W}e7$  Black has difficulties attacking the d-pawn. ... $\mathbb{W}a8$ -b8-c7 followed by ... $\mathbb{B}d8$  is too slow – White plays his rook to f3.

b) 23...f6 Stopping  $\mathbb{W}e7$ . 24. $\mathbb{W}a4$   $\mathbb{B}d8$  25. $\mathbb{W}xa7$   $\mathbb{B}xd7$  26. $\mathbb{W}xb6$  The a-pawn gives enough counterplay.

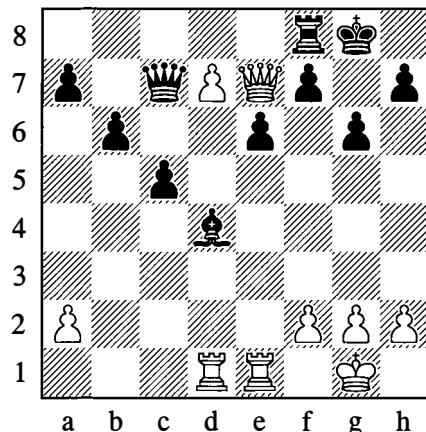
**23... $\mathbb{B}d4$  24. $\mathbb{W}e7$**

I had seen this position when going for 20. $\mathbb{A}h6$ . Staticaly, Black is clearly better, since White lacks open files for the rooks, but I thought the passed d-pawn was dangerous enough. I didn't see how Black could capture it.

**24... $\mathbb{W}c6$**

Threatening ... $\mathbb{B}e8$ .

**25.d7?  $\mathbb{W}c7$**

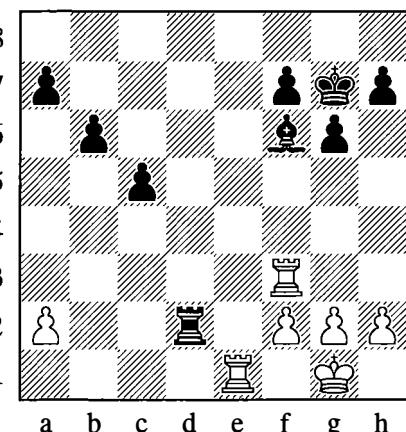


It was in this position that I realized ... $\mathbb{B}d8$  will come next move, because  $\mathbb{W}e8\#$  isn't dangerous for Black. I managed to win a pawn back, but without many saving chances.

**26. $\mathbb{B}d3$   $\mathbb{B}d8$  27. $\mathbb{B}f3$   $\mathbb{B}xd7$  28. $\mathbb{W}e8\#$   $\mathbb{Q}g7$   
29. $\mathbb{B}xe6$   $\mathbb{B}d8$**

Black can't play: 29...fxe6 30. $\mathbb{W}f8\#$

**30. $\mathbb{W}e7$   $\mathbb{W}xe7$  31. $\mathbb{B}xe7$   $\mathbb{Q}f6!$  32. $\mathbb{B}e1$   $\mathbb{B}d2$**



Black advances his passed pawns, and I have no counterplay at all. I think it's lost.

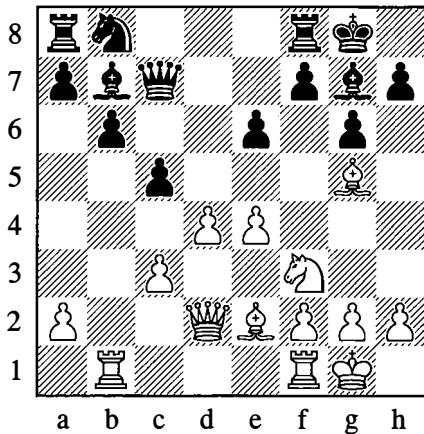
33.a3 c4 34.g4 h6 35.Bc1 b5 36.Bg2 a5  
 37.Bb1 Bb2 38.Bd1 Bb3 39.Bxb3 cxb3  
 40.Bd5 b4 41.a4 b2 42.Bd1 Bg5 43.Bb1  
 Bc1 44.Bf3 f5 45.Be2 Bf6 46.Bd3 Be5  
 47.Bc4 Be4 48.h3 f4 49.h4 h5 50.Bb3  
 Bd3 51.f3 Bd4 52.Ba2 Be3  
**0-1**

Seeing this game alone, it's not possible to understand why I played 20.Bh6. The mistake can be attributed to miscalculation, or overvaluing pawns (I didn't want to sacrifice the pawn on a2) or underestimating my attack on the king. It was only after the next game that I could clearly see the reason behind the mistake.

### Axel Smith – Viecheslav Zakhartsov

Czech Open, Pardubice 24th July 2011

1.d4 Bf6 2.c4 g6 3.Bc3 d5 4.cxd5 Bxd5 5.e4  
 Bxc3 6.bxc3 Bg7 7.Bf3 c5 8.Bb1 0-0 9.Be2  
 b6 10.0-0 e6 11.Bg5 Bc7 12.Bd2 Bb7



In this position, Black's ...e6 has allowed White to take control of the d8-square with Bg5. I have several promising continuations to choose between.

**13.d5**

I preferred playing with the passed d-pawn.

13.e5 is interesting, with the idea to attack with Bh6, Bf4-h4 and Bg5 – similar to the game against Østenstad. Even better seems 13.Bf4! since Black doesn't have a good square for the queen. There might follow 13...Bd7 14.Be3, with an advantage for White.

**13...exd5 14.exd5 Bd6!**

The queen is not the best blockading piece, but it works for the moment.

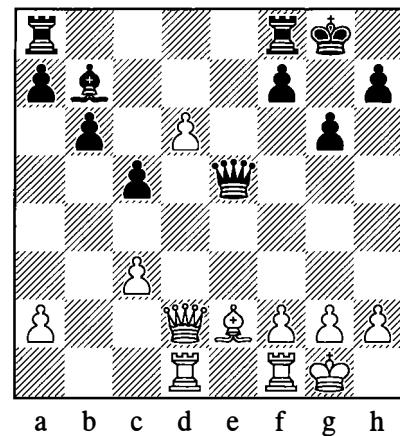
**15.Bbd1**

15.c4 is one option. I didn't want to restrict my bishop, but maybe I should play slowly with a4-a5, trying to create a weakness on b6.

**15...Bd7 16.Bf4**

Breaking the blockade.

**16...Bxe5 17.Qxe5 Qxe5 18.Qxe5 Bxe5  
 19.d6**



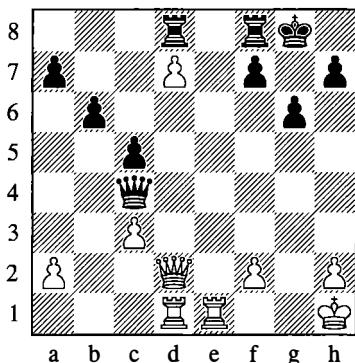
I was very happy with my position. If I exchange the bishops and push d6-d7, Black's pieces will be paralysed. I can then push the pawns on the kingside, and use the rooks in my decisive attack. Well, that was the plan. To start with, it's not easy to exchange bishops.

**19...Bd8 20.Bfe1 Bf5!**

During the game, I didn't understand 20... $\mathbb{W}f5$  at all, but it's simply designed to stop  $\mathbb{Q}c4$ .

### 21.h3

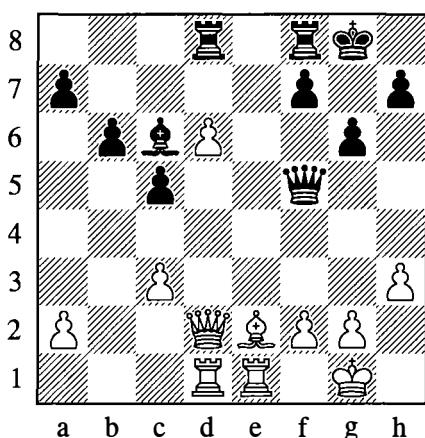
21. $\mathbb{Q}c4$   $\mathbb{Q}xg2$  22. $\mathbb{Q}xg2$   $\mathbb{W}g4\#$  23. $\mathbb{Q}h1$   $\mathbb{W}xc4$   
24.d7



This is the kind of position I should strive for, but preferably not being a pawn down. I still think White has adequate compensation but I wanted more.

### 21... $\mathbb{Q}c6$

We'll soon see that there is more poison in ... $\mathbb{Q}c6$  than just stopping d6-d7.

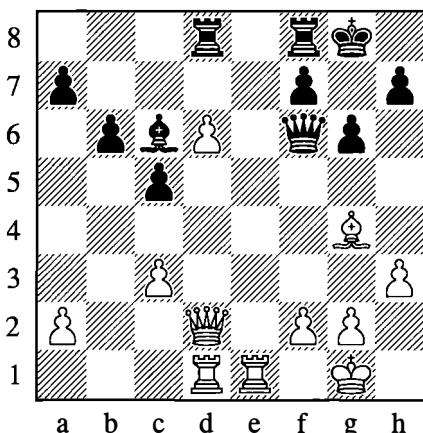


### 22. $\mathbb{Q}g4??$

After 22. $\mathbb{Q}c4$   $\mathbb{Q}a4\#$ ! 23. $\mathbb{Q}b3$   $\mathbb{Q}xb3$  24.axb3  $\mathbb{Q}d7$  the bishops are exchanged, but the pawn

is still on d6. Black has some more space for his rooks, but he is still slightly worse since both pairs of rooks are on the board. Instead, Black should play 22. $\mathbb{Q}c4$   $\mathbb{Q}d7$ , after which he is fine.

### 22... $\mathbb{Q}f6$



Suddenly, I realized that I couldn't stop ... $\mathbb{Q}a4$ , winning the d6-pawn.

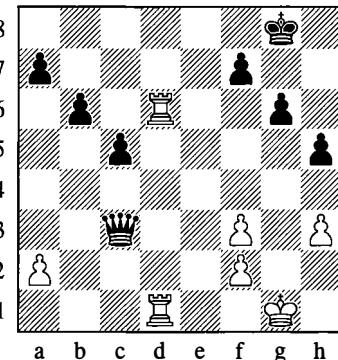
### 23. $\mathbb{Q}d3$

The best try might be 23. $\mathbb{B}e3$   $\mathbb{Q}a4$  24. $\mathbb{B}f3!$   $\mathbb{W}e5$  25. $\mathbb{B}e3$   $\mathbb{W}f4$  26. $\mathbb{B}d3$   $\mathbb{W}xd2$  27. $\mathbb{B}1xd2$   $\mathbb{B}fe8$ , but without the queens, d6 is more weak than strong. Black can start by centralizing his king.

### 23...h5 24. $\mathbb{Q}f3$ $\mathbb{Q}xf3$ 25. $\mathbb{W}xf3$ !

Sacrificing a pawn is the best option.

25.gxf3  $\mathbb{B}d7$  is horrible for White, with the logical continuation 26. $\mathbb{B}e2$   $\mathbb{B}fd8$  27. $\mathbb{B}ed2$   $\mathbb{B}xd6$  28. $\mathbb{W}xd6$   $\mathbb{B}xd6$  29. $\mathbb{B}xd6$   $\mathbb{W}xc3$ .

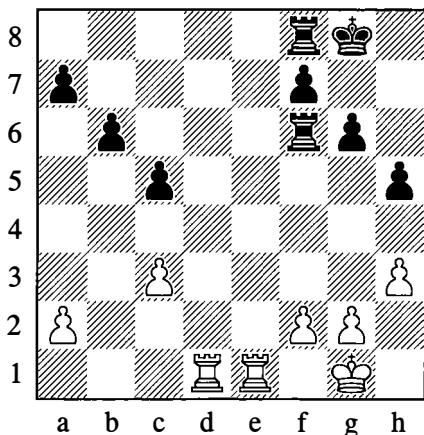


The queen is at its best when there are weak pawns to chase. And here there are many of them! In addition, White's king is open while the rooks aren't cooperating against a common target. Black wins.

In the game against Hedén earlier in the chapter, I misevaluated the same kind of position, but I had apparently learned from the following conclusion in the List of Mistakes.

The rest of the game isn't important for the theme of overvaluing the passed d-pawn, but since it's interesting, I'll make a few comments about it anyway.

**25... $\mathbb{E}xd6$  26. $\mathbb{W}xf6$   $\mathbb{E}xf6$**



At first glance it looks like White has some compensation with two open files. Houdini also only gives a moderate advantage for Black with -0.35, but after having analysed it, I concluded that White's activity is temporary. Black defends the queenside pawns with ...a5 and plans to exchange one pair of rooks. This can be done in several ways, for example ...Ef8-c8-c6-e6. I think White is lost.

**27. $\mathbb{E}e7$  a5 28.f3**

I place my king on f2 to cover the e3-square.

Houdini wants to play:

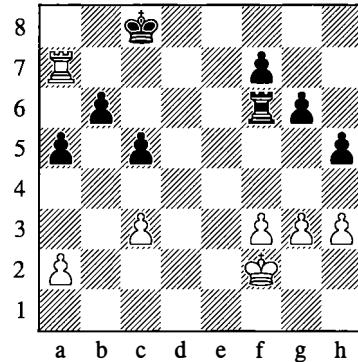
**28. $\mathbb{E}dd7$**

I will give one illustrative variation, to show the winning method.

**28... $\mathbb{E}b8$**

The idea is  $\mathbb{Q}f8$  followed by ... $\mathbb{E}e8$ . White can't avoid the exchange of rooks.

29.f3  $\mathbb{Q}f8$  30. $\mathbb{Q}f2$   $\mathbb{E}e8$  31. $\mathbb{E}xe8\#$   $\mathbb{Q}xe8$  32. $\mathbb{E}b7$   $\mathbb{Q}d8$  33.g3  $\mathbb{Q}c8$  34. $\mathbb{E}a7$



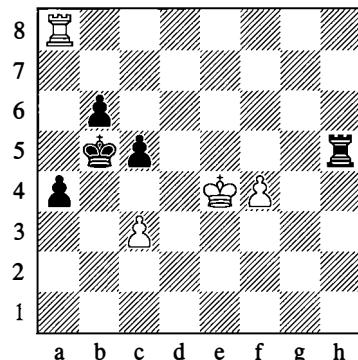
**34... $\mathbb{E}d6$**

Let the pawn race begin!

**35. $\mathbb{E}xf7$**

After 35. $\mathbb{Q}e3$   $\mathbb{E}d7$  Black's king can start to advance.

35... $\mathbb{E}d2\#$  36. $\mathbb{Q}e3$   $\mathbb{E}xa2$  37. $\mathbb{E}g7$  a4 38. $\mathbb{E}xg6$   $\mathbb{E}b2$  39. $\mathbb{E}g8\#$   $\mathbb{Q}b7$  40. $\mathbb{E}g7\#$   $\mathbb{Q}a6$  41. $\mathbb{E}g8$   $\mathbb{Q}b5$  42. $\mathbb{E}a8$   $\mathbb{E}c2$  43. $\mathbb{Q}d3$   $\mathbb{E}g2$  44.g4  $\mathbb{E}g3$  45. $\mathbb{Q}e4$   $\mathbb{E}xh3$  46.gxh5  $\mathbb{E}xh5$  47.f4

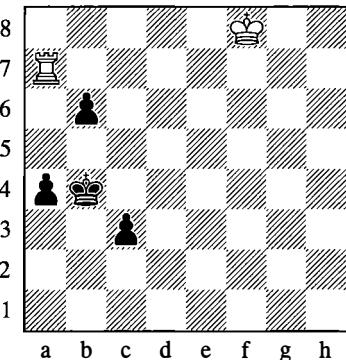


**47... $\mathbb{E}h4!!$**

Paralysing White. To advance the pawn, he needs to play 48. $\mathbb{Q}e5$ , but then comes 48... $\mathbb{E}h3$ , winning the c3-pawn.

48.♕a7 ♕h8 49.f5 ♕h4†! 50.♔e5 ♕c4 51.f6 ♕xc3 52.f7 ♕f3 53.♔e6 c4 54.♔e7 c3 55.f8=♕ ♕xf8 56.♔xf8 ♕b4

Black wins.

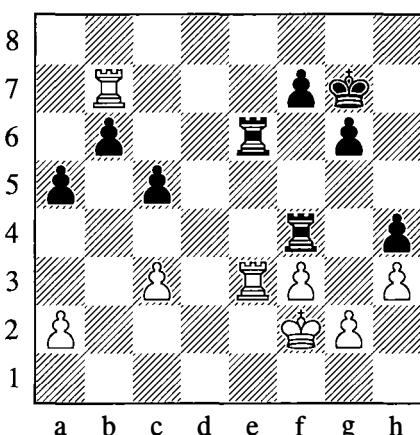


Starting from 28.♖dd7, the variation was 56 half moves long, which is too much even for Houdini. That's why it has problems evaluating the position! A human simply notices that White must capture three pawns on the kingside, while Black only has to capture two on the queenside. Thus, Black should win the pawn races. Such reasoning is not waterproof, but in this particular position it works better than Houdini's approach.

28...♜c8 29.♗f2 ♗f8 30.♝b7 h4

Fixing my pawns.

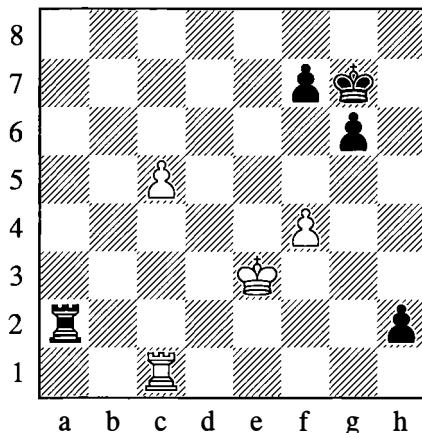
31.♖dd7 ♜e8 32.♖d2 ♗g7 33.♖dd7 ♜ee6  
34.♖d3 ♜f4 35.♖e3



35...♜xe3?!

35...♜d6 wins even more easily. 36.♜e2 ♜a4 37.♜b2 ♜a3 and White is tied up.

36.♗xe3 ♜a4 37.♗xb6 ♜xa2 38.♗c6 ♜xg2  
39.♗xc5 ♜g3 40.♗xa5 ♜xh3 41.♗a1 ♜h2  
42.♗c1 h3 43.f4 ♜a2 44.c4 h2 45.c5



45...♜g2 46.♗h1 ♜f6 47.♗e4 ♜e7 48.f5 g5  
49.♗e5 f6† 50.♗e4 g4 51.c6 ♜d6 52.♗f4  
g3 53.c7 ♜xc7 54.♗c1† ♜d6 55.♗d1† ♜e7  
56.♗e1† ♜f8 57.♗h1 ♜g1

0–1

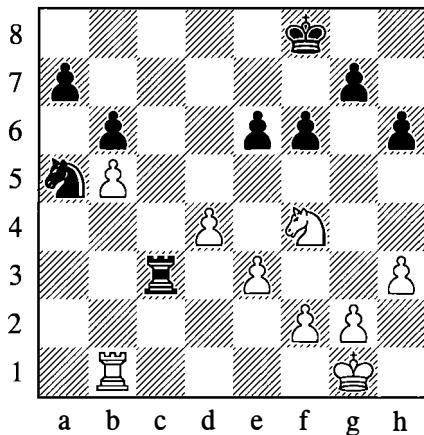
During tournaments, I need all the energy I have to prepare and play, so with the opening as an exception, I don't analyse my games. Hence, I hadn't yet understood the connection between the games above, where I misjudged the d-pawn. Later in the same tournament, I didn't even make an evaluation, but just relied on intuition.

**Fabian Müller – Axel Smith**

Czech Open, Pardubice 29th July 2011

1.d4 ♜f6 2.c4 e6 3.♗f3 d5 4.♗c3 ♜b4 5.♗g5  
h6 6.♗xf6 ♜xf6 7.e3 0–0 8.♗b3 c5 9.a3  
♗xc3† 10.bxc3 dxc4 11.♗xc4 ♜c6 12.♗e2  
cxd4 13.cxd4 b6 14.0–0 ♜b7 15.♗ac1 ♜fc8

16.♘a4 ♘d8 17.♕a6 ♘xa6 18.♘xa6 ♕c7  
 19.♗c4 ♖a5 20.♗xc7 ♘xc7 21.♖e5 ♕c8  
 22.h3 ♘b7 23.♗d3 ♘d5 24.a4 ♘b3 25.♘a6  
 ♕c7 26.♗b5 ♖f8 27.♗b1 ♘xb5 28.axb5 ♖f6  
 29.♗d3 ♕c3 30.♗f4



The number of pawns is equal, but the b5-pawn is weak and Black's rook has penetrated into White's camp. Firstly, I have to defend the e6-pawn, and then I want to surround the pawn on b5. What is the best square for the king?

**30...♔f7?!**

Of course this wasn't anything I wanted to play, since the king should be centralized in the endgame. However, I avoided 30...♔e7 because of 31.d5?! and I can't capture due to a knight fork. After 31...e5 32.♘e6 g6 33.e4, I was unhappy about White's protected passed pawn. However, after: 33...♘c4 34.f3 (34.♗a1 ♘a3! is an important point.) 34...♘d6 I undermine it with ...f5, creating a second weakness. The knight is perfectly placed on d6, since ♗a1 is always met by ...♘xb5, defending a7. Black is better.

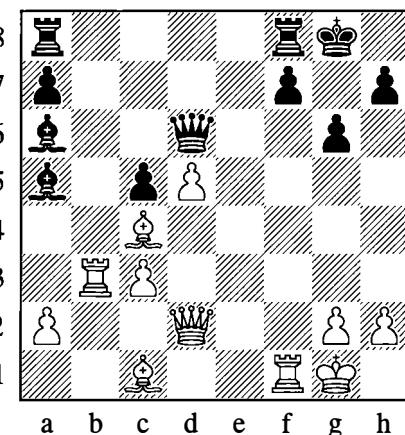
I was so afraid of White's passed d-pawn that I could not imagine that the position could be good for me. The rest of the game is not important (0–1 in 55 moves).

That summer's List of Mistakes ended in August. Just one month later I had a chance to test whether I had learned something. Now I was conscious that I often overvalued passed d-pawns. In the following diagram position, I took a lot of time to make my move.

### Axel Smith – Emil Sutovsky

European Club Cup, Roganška Slatina  
 29th September 2011

1.d4 ♘f6 2.c4 g6 3.♘c3 d5 4.cxd5 ♘xd5  
 5.e4 ♘xc3 6.bxc3 ♘g7 7.♗f3 c5 8.♗b1  
 0–0 9.♗e2 ♘c6 10.d5 ♘e5 11.♗xe5 ♘xe5  
 12.♗d2 e6 13.f4 ♘c7 14.0–0 exd5 15.exd5  
 ♘a5 16.f5 ♘xf5 17.♗xb7 ♘d6 18.♗c4 ♘c8  
 19.♗b3 ♘a6



**20.♗d3!**

Some months earlier I would certainly have gone for 20.♗xa6 ♘xa6 21.d6, but now I was more open-minded and realized that this pawn might just become weak. After 21...c4 Black holds an advantage. 22.♗b1 (22.♗a3 ♘b5 and Black threatens 23...♗b6† 24.♗h1 ♘c5, winning the rook.) 22...♗ad8 23.d7 ♘c6 24.♗d1 f6 Black plays 25...♗f7 next, winning the pawn.

**20...♘xc4 21.♗xc4 ♘b6?!**

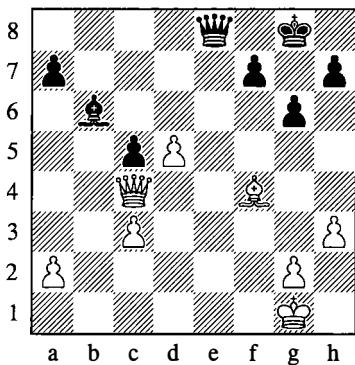
21.. $\mathbb{Q}fd8$  is a better option. White can go for 22. $\mathbb{Q}b7$ , but does best to defend the pawn with 22. $\mathbb{Q}d1$ . This is not the rook that belongs on the d-file, but there is plenty of time to regroup later.

22. $\mathbb{Q}f4 \mathbb{W}d7$  23. $\mathbb{Q}bb1 \mathbb{Q}fe8$

$\frac{1}{2}-\frac{1}{2}$

I agreed to a draw, but definitely hold an advantage.

Sutovsky analysed the following line: 24. $\mathbb{Q}be1$   $\mathbb{Q}xe1$  25. $\mathbb{Q}xe1$   $\mathbb{Q}e8$  26. $\mathbb{Q}xe8\#$   $\mathbb{W}xe8$  27.h3!



White secures the king and plans a4-a5, winning the c5-pawn. If White manages to avoid the exchange of queens, then this position offers good winning chances.

Who am I to question that? Anyway, I should have continued. In my List of Mistakes, this game rendered only one comment: accepting the draw offer.

When I chose between 20. $\mathbb{W}d3$  and 20. $\mathbb{Q}xa6$ , I clearly remembered the conclusion from the List of Mistakes, and managed to choose the right move.

### Bailing out in the critical moments

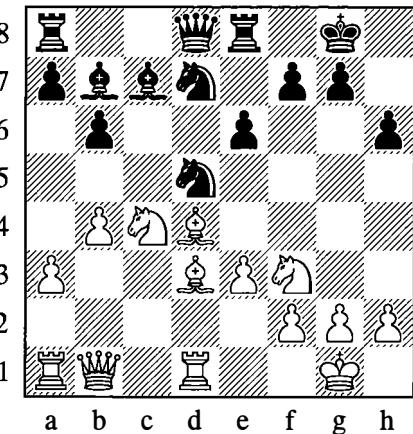
So far, all the examples have been positional mistakes. They are the easiest to correct, but it's also possible to learn from miscalculations or other kinds of mistake.

The critical moments are the most important positions to analyse. In those positions, you usually know what you want to achieve and even which move feels best, but now and then it's not possible to support the feeling tactically. In such situations, the positionally correct move actually works surprisingly often, even though the supporting tactics might be hard to find. During the autumn of 2011, I was not digging deeply enough to find them. The first game of the chapter, against Bartosz Socko, is one example where I had a lazy approach. Here is another.

### Axel Smith – Zahar Efimenko

European Club Cup, Roganška Slatina 26th September 2011

1.d4  $\mathbb{Q}f6$  2.c4 e6 3. $\mathbb{Q}f3$  b6 4.a3  $\mathbb{Q}a6$  5.e3 d5 6. $\mathbb{Q}bd2$  c5 7.dxc5  $\mathbb{Q}xc5$  8.b4  $\mathbb{Q}e7$  9. $\mathbb{Q}b2$  0-0 10. $\mathbb{Q}d3$   $\mathbb{Q}bd7$  11.0-0  $\mathbb{Q}b7$  12. $\mathbb{W}b1$  h6 13. $\mathbb{Q}d4$   $\mathbb{Q}d6$  14.cxd5  $\mathbb{Q}xd5$  15. $\mathbb{Q}c4$   $\mathbb{Q}c7$  16. $\mathbb{Q}d1$   $\mathbb{Q}e8$



The position looks messy, but it's clear that White's pieces are better placed. The battery on the b1-h7 diagonal has forced Black to create the weakness ...h6 and the queen is now ready to increase the pressure on the a1-h8 diagonal. Black's queen, on the other hand, is on the

same line as White's rook. The general feeling is that White should be able to get an advantage.

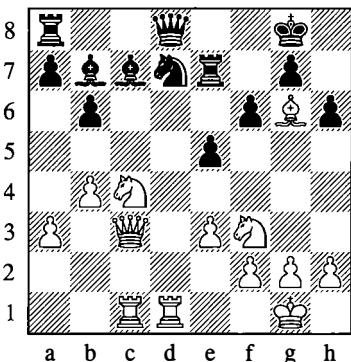
### 17. $\mathbb{Q}ce5?$

This is a type of move that is really forbidden to play. White just exchanges his good pieces and leaves Black with a small initiative. The big problem is that I knew it was wrong, but played it anyway!

17.  $\mathbb{W}b2!$  puts pressure on g7, forcing Black to react.

a) 17...  $\mathbb{Q}5f6$  18.  $\mathbb{Q}fe5$  This is better than on the last move, since Black doesn't have ...  $\mathbb{W}g5$  anymore and since the d-file opens up against Black's queen.

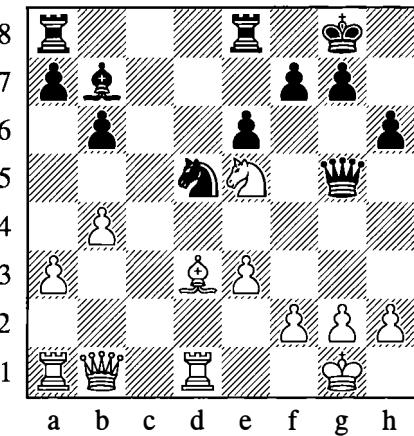
b) I was afraid of 17...  $f6$  when ...  $e6-e5-e4$  is a threat, threatening first the bishop and then forking. I didn't look deeper, but of course I should have! It's not difficult to see that White can easily fix this small problem. Firstly, 18.  $\mathbb{Q}g6$  wins a tempo. After 18...  $\mathbb{E}e7$ , then 19.  $\mathbb{W}e2$  is good enough for an advantage, but it's also possible to play more straightforwardly with 19.  $\mathbb{Q}ac1$ . If 19...  $e5?$  then 20.  $\mathbb{Q}c3$   $\mathbb{Q}xc3$  21.  $\mathbb{W}xc3$ .



With  $\mathbb{W}b3$  coming in the near future, Black is in trouble.

17...  $\mathbb{Q}xe5$  18.  $\mathbb{Q}xe5$   $\mathbb{Q}xe5$  19.  $\mathbb{Q}xe5$   $\mathbb{W}g5?$

19...  $\mathbb{W}c7!$  gives the same type of advantage as in the game, while defending f7 and thus avoiding  $\mathbb{Q}h7\#$ .



### 20. $\mathbb{Q}f3?$

20.  $\mathbb{W}b2?$  is even worse; Black wins after 20...  $\mathbb{Q}c3!$ .

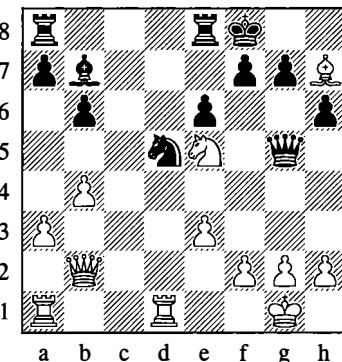
My feeling was that:

20.  $\mathbb{Q}h7\#!$

was both necessary and good, but I couldn't see through the cloud of variations. Again I made the 'forbidden' decision to bail out and chose the passive option.

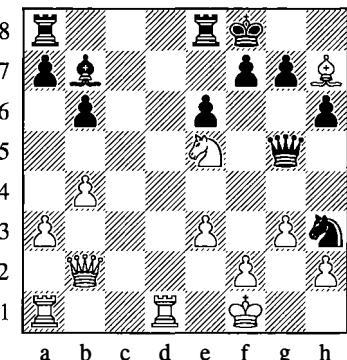
20...  $\mathbb{Q}f8$  21.  $\mathbb{W}b2$

Black has a discovered attack against g2, but nothing that concretely works.



For example:

21...  $\mathbb{Q}f4?$  22.  $g3!$   $\mathbb{Q}h3\#$  23.  $\mathbb{Q}f1$



Black has no follow-up on his attack while White can continue with either f4 or  $\mathbb{E}d7$ .

21... $\mathbb{Q}c3$  is better. After 22.f4  $\mathbb{Q}xd1$  23. $\mathbb{E}xd1$ , White threatens  $\mathbb{E}d7$ . Black does best to enter the endgame with 23... $\mathbb{W}xg2\uparrow$  24. $\mathbb{W}xg2$   $\mathbb{Q}xg2$  25. $\mathbb{Q}xg2$  g6, but White gets good compensation for the exchange with a later  $\mathbb{Q}xg6$  followed by  $\mathbb{E}d7$ . The knight on e5 is very strong.

## 20... $\mathbb{W}f6$ 21. $\mathbb{W}b3$ $\mathbb{E}ac8$ 22. $\mathbb{E}dc1$

Black has some advantage with the better bishop and control over c3, but it's not clear how big it is. In the game Efimenko allowed an exchanging manoeuvre.

22... $\mathbb{Q}c3\text{?!}$  23. $\mathbb{Q}d4!$  e5 24. $\mathbb{E}xc3$  exd4 25. $\mathbb{E}xc8$   $\mathbb{E}xc8$  26.exd4  $\mathbb{W}xd4$  27. $\mathbb{E}e1$   $\mathbb{W}d5$  28. $\mathbb{W}xd5$   $\mathbb{Q}xd5$  29.f3

The resulting position should definitely be well within the drawing margin. However, it can't be said to be completely equal since Black has control over the most important file – the one that is furthest away from the kings. With my mood of playing uncritically, it was apparently possible to lose...

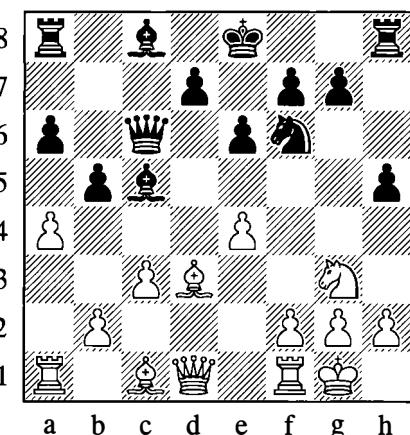
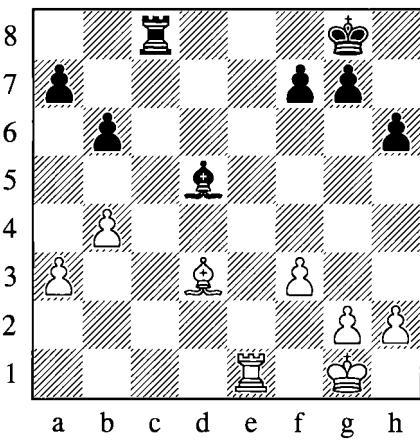
29.. $\mathbb{Q}f8$  30. $\mathbb{Q}b5$  g5 31. $\mathbb{Q}f2$   $\mathbb{Q}e6$  32.g3  $\mathbb{Q}e7$  33.h4  $\mathbb{W}xh4$  34. $\mathbb{W}xh4$   $\mathbb{Q}f6$  35. $\mathbb{E}e3$   $\mathbb{E}c2\uparrow$  36. $\mathbb{E}e2$   $\mathbb{E}c1$  37. $\mathbb{E}d2$   $\mathbb{Q}e5$  38. $\mathbb{E}d7$   $\mathbb{Q}c4$  39. $\mathbb{Q}e8$  f5 40. $\mathbb{E}d7$   $\mathbb{E}c2\uparrow$  41. $\mathbb{Q}g1$   $\mathbb{Q}f4$  42. $\mathbb{E}xa7$   $\mathbb{Q}xf3$  43. $\mathbb{Q}c6\uparrow$   $\mathbb{Q}f4$  44. $\mathbb{E}g7$   $\mathbb{Q}e2$  45. $\mathbb{E}g2$   $\mathbb{E}c1\uparrow$  46. $\mathbb{Q}h2$   $\mathbb{Q}g4$  47.b5  $\mathbb{E}a1$  48. $\mathbb{E}g3$   $\mathbb{E}a2\uparrow$  49. $\mathbb{Q}g2$   $\mathbb{Q}e2$  50. $\mathbb{Q}h3$  h5 51. $\mathbb{E}b3$   $\mathbb{Q}e5$  52. $\mathbb{E}e3\uparrow$   $\mathbb{Q}d4$  53. $\mathbb{E}b3$  f4 54. $\mathbb{Q}h2$   $\mathbb{Q}f1$  55. $\mathbb{E}f3$   $\mathbb{Q}xg2$  56. $\mathbb{E}xf4\uparrow$   $\mathbb{Q}e4\uparrow$  57. $\mathbb{Q}g1$   $\mathbb{E}xa3$  58. $\mathbb{E}f6$   $\mathbb{Q}c5$  59. $\mathbb{E}f4$   $\mathbb{Q}f3$  60. $\mathbb{E}f5\uparrow$   $\mathbb{Q}b4$  61. $\mathbb{E}g5$   $\mathbb{Q}g4$  62. $\mathbb{Q}g2$   $\mathbb{E}h3$  63. $\mathbb{E}xh5$   $\mathbb{Q}xh5$  64. $\mathbb{Q}xh3$   $\mathbb{Q}xb5$   
0–1

I didn't even try to get the best moves working! In the following game, I did try, but not hard enough.

## Peter Flermoen – Axel Smith

Harstad Open, 9th October 2011

1.e4 c5 2. $\mathbb{Q}f3$  e6 3.d4 cxd4 4. $\mathbb{Q}xd4$  a6 5. $\mathbb{Q}c3$  b5 6. $\mathbb{Q}d3$   $\mathbb{W}b6$  7. $\mathbb{Q}ce2$   $\mathbb{Q}c5\text{?!}$  8.c3  $\mathbb{Q}c6$  9.0–0!  $\mathbb{Q}f6$  10. $\mathbb{Q}xc6$   $\mathbb{W}xc6$  11. $\mathbb{Q}g3\text{?!}$  h5! 12.a4

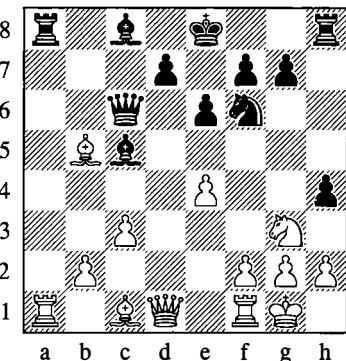


In a Sicilian Kan, I have just launched my h-pawn towards my opponent's king. Even though it seems strange, I think h2-h4 is White's best reply. It weakens the king, but on the other hand – where should Black place his king?

After 12.a4, I wanted to play 12...h4 myself, to stop White from getting his pawn to that square. To be able doing this, I have to calculate some tactical lines starting with 13.axb5 axb5 14.♗xb5. Does it work for Black?

**12...♝b7?**

The advance did indeed work:  
12...h4! 13.axb5 axb5 14.♗xb5



**14...hxg3!!**

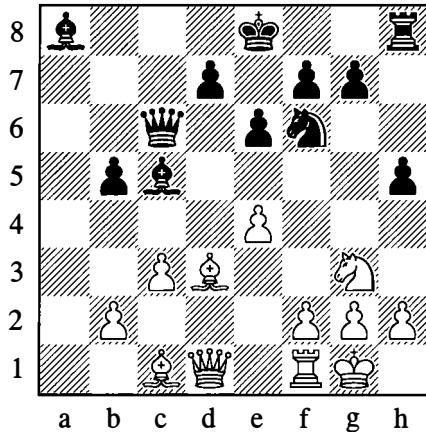
I overlooked this move because I didn't try hard enough to look for a solution.

**15.♝xc6 gxg2† 16.♛h1 ♜xa1**

Black is clearly better. If White saves the bishop with 17.♝b5, Black wins immediately with 17...♜xc1 18.♝xc1 ♜xe4 19.♝f4 ♜d6.

**14...♝b7** is also good enough. After 15.♝xa8 ♜xa8 16.♛e2 h3, a pawn is hardly the most important thing in the position.

**13.axb5 axb5 14.♝xa8† ♜xa8**



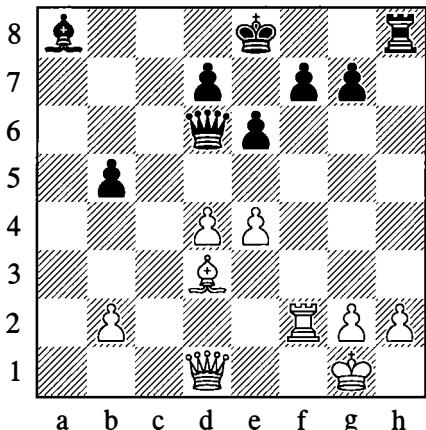
**15.♝g5?**

15.h4! is still best, but after 15...♝g4 Black has a slight advantage anyway. It's interesting to note that h2-h4 creates a strong outpost for Black's knight, but only because White's d-pawn has been exchanged! The reason is that White's f-pawn has to cover the squares on the g-file, since the h-pawn has advanced, and also cover on the e-file, since the d-pawn is exchanged. It can't cover both g4 and e5, and Black can thus have his knight on one of those squares.

**15...h4!**

Everything is forced for the next few moves.

**16.♝xf6 hxg3 17.♛d4 ♜xd4 18.cxd4 gxf2†  
19.♝xf2 ♜d6**



The double threat against h2 and d4 wins a pawn, with a clearly better position.

```

20.h3 ♜xd4 21.♗f3 0–0 22.♕xb5 ♜xe4
23.♗c3 ♜xc3 24.bxc3 d5 25.♗b2 ♜b8
26.♗b4 ♜f8 27.♔a6 ♜xb4 28.cxb4 ♜e7
29.g4 f6 30.♗f2 d4 31.♗g3 g5 32.♗c4 ♜c2
33.♗f2 e5 34.♗e2 ♜d6 35.♗d2 ♜e4
0–1

```

It was quite complicated, and ended well for me anyway, but it was nevertheless a mistake to allow him to defend with 15.h4. At other times, it's much more obvious that the position demands an active move, like in the following game.

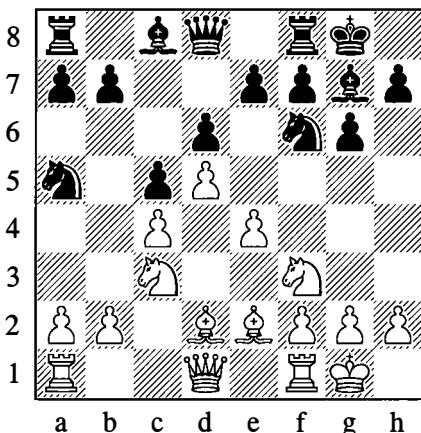
### Axel Smith – Gary Quillan

Malta Open, Bugibba 25th November 2011

```

1.♘f3 ♘f6 2.c4 g6 3.♘c3 ♜g7 4.d4 0–0 5.e4
d6 6.♗e2 c5 7.0–0 ♘c6 8.d5 ♘a5 9.♗d2

```



I think it's theoretically better for Black to play 7...cxd4 and transpose to a Maroczy position in the Accelerated Dragon. The position with the knight on a5 can be compared to the Yugoslav variation in the King's Indian. There, Black plays concretely to get the knight doing something meaningful, but this is not

possible in the game. Black can try to attack the pawn on c4 with ...a6, ...♗b8 and ...b5, but White has no problems defending it. If Black plays ...e6xd5, White should avoid cxd5, because then Black can give some life to the knight with ...c4.

In the long term, White wants to attack on the kingside with f4-f5. If the knight is still out of play this should be more or less strategically winning.

Let's move on quickly to the position 15 moves later.

```

9...a6 10.♗c2 e6 11.b3 exd5 12.exd5 ♜f5?!
13.♗d3 ♘g4 14.♗e1

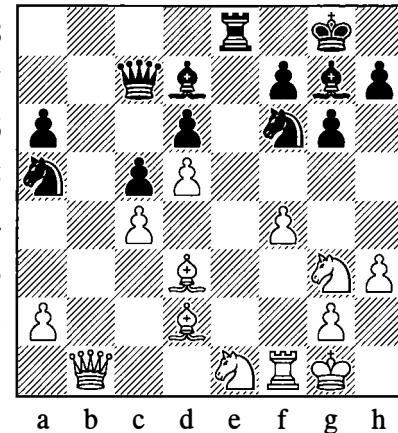
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Black's bishop manoeuvre only helped White to free his f-pawn.

```

14...b5 15.h3 ♘d7 16.♗b1 ♘b8 17.♗e2
♗e8 18.♗g3 ♜b6 19.♗c1 ♜c7 20.f4 bxc4
21.bxc4 ♘xb1 22.♗xb1

```



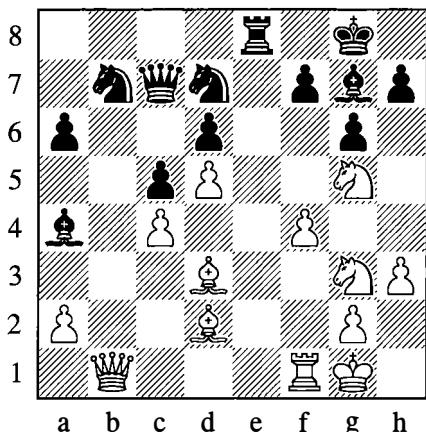
22...♘a4

22...♗b8? 23.♗xa5 loses for Black.

23.♗f3 ♘d7? 24.♗g5?

24.♗c1! actually picks up one of the pieces on the a-file!

24...♗b7



This is the position I really want to show. Black's knight has just recently left a5, but it is still not doing much, while White is ready to play f4-f5 next. This is exactly what White is aiming for, and he should be strategically winning. However, it all starts to go wrong.

### 25.h4?

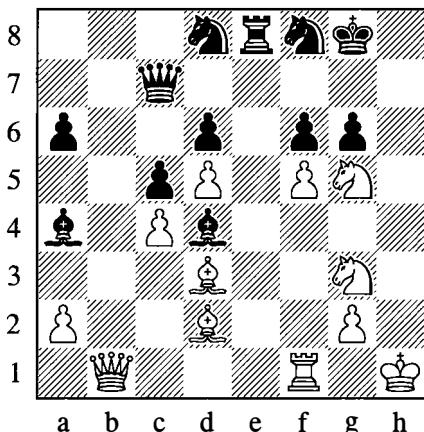
It may be a good idea to weaken g6 further, but it's too kind to give Black extra time to defend.

25.f5! surrenders the e5-square, but sometimes you have to give something to get something. What I get is much more important – it's the black king. The first threat is fxg6 followed by either ♜xf7, ♜xh7 or ♜xg6. Black can try to defend with 25...♜e5, but then 26.♜h5! is a killer. After 26...♜xd3 27.♜xg7 ♜xg7 28.fxg6, I don't think it's necessary to continue the line any further.

### 25...♜d8 26.h5 ♜f8 27.hxg6?

Still 27.f5 was the most logical and direct move, with a more or less winning position.

### 27...hxg6 28.f5 ♜d4† 29.♚h1 f6



### 30.♜h3?

Another 'safe' move, but now it's too much. The position calls for an active move, so I should have considered the piece sacrifice 30.fxg6! fxg5 31.♜xg5. It looks very messy to me, but the computer points out that it's actually winning. White attacks with ♜f5-h6 and ♜c1-f4.

### 30...g5

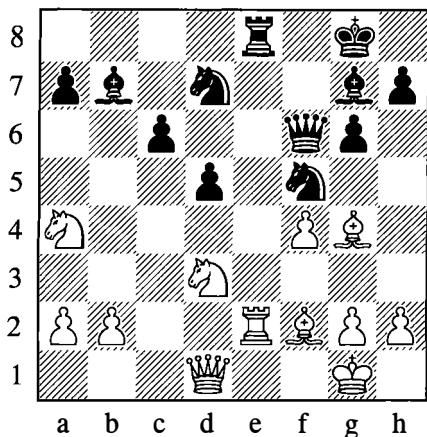
White remains with a passive light-squared bishop and I later lost the bishop and the game (0–1 in 93 moves).

With hindsight, the active moves could have been played almost by intuition. In contrast, in the next game the best move can't be played without seeing a concrete idea.

**Jon Ludvig Hammer – Axel Smith**

Norwegian League, Oslo 14th January 2012

1.d4 ♜f6 2.c4 g6 3.f3 ♜c6 4.d5 ♜e5 5.e4 d6 6.♗c3 ♜g7 7.f4 ♜ed7 8.♗h3 0–0 9.♗e2 ♜c5 10.♗f2 e6 11.0–0 exd5 12.cxd5 c6 13.dxc6 bxc6 14.♗f3 ♜e7 15.♗e1 ♜d8 16.♗e3 d5 17.e5 ♜fd7 18.♗c1 ♜e6 19.♗a4 ♜b7 20.♗d3 f6 21.♗b3 ♜db8 22.exf6 ♜xf6 23.♗g4 ♜d4 24.♗d1 ♜f5 25.♗f2 ♜f8 26.♗c2 ♜fe8 27.♗xe8† ♜xe8 28.♗e2



Black's situation looks positionally bad. The hanging pawn pair isn't dynamic at all and the bishop on b7 is passive. There is also a concrete problem: after 28... $\mathbb{B}a8$  29. $\mathbb{W}xe2$  White threatens both 30. $\mathbb{Q}xa7$  and 30. $\mathbb{W}e8\#$  31. $\mathbb{Q}ac5$ , trapping the bishop. 28... $\mathbb{B}a8$  keeps the material, but gives White the open file for free. What would you choose if you were Black in this position?

### 28... $\mathbb{B}a8$ ?

No, no, no! How can I play such a move? The game continuation 29. $\mathbb{W}e1$  is very promising for White, and 29. $\mathbb{Q}ac5!$  would have been even better. In the game White won in 57 moves.

28... $\mathbb{B}xe2$  is a must. After 29. $\mathbb{W}xe2$ , I should have looked for a dynamic solution until I found one. The solution is 29... $\mathbb{W}f7!$  30. $\mathbb{Q}xa7$   $\mathbb{B}a6$ .

Black plans ... $\mathbb{Q}f6$  with a double threat. After 31. $\mathbb{Q}f2$   $\mathbb{Q}d4$ , Black has ... $\mathbb{Q}xd3$  followed by ... $\mathbb{W}xf4$ , if nothing else.

The conclusion from these four games can be summarized with the secret of the Soviet Chess School: if you need to do something, do it!

Ask what the position demands, and try to get an appropriate move to work.

### Getting cautious in winning positions

The problem of not trying to play the best move is even more apparent in winning positions, where it's easy to become nonchalant. Nothing is more irritating than unnecessarily giving away a half-point. The remedy is to try to play the best moves all the way till the end in every game – even when you have a lot of extra material. There is nothing wrong with being rational and choosing a safe option, but in many cases the reason is really nothing but pure laziness. In most winning positions a final calculation has to be made anyway. The earlier, the easier.

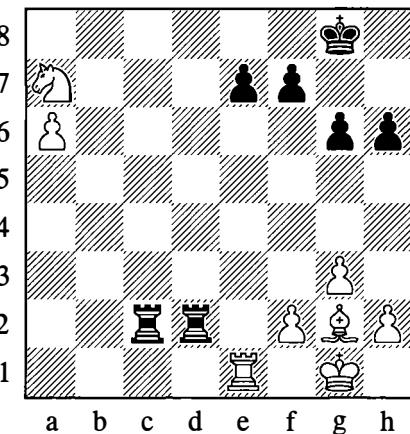
Here is one tragic example.

### Axel Smith – Anders Olsen

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Kristiansund 23rd September 2011

1.d4  $\mathbb{Q}f6$  2.c4  $\mathbb{g}6$  3. $\mathbb{Q}c3$   $\mathbb{B}g7$  4.g3 d5 5.cxd5  $\mathbb{Q}xd5$  6. $\mathbb{Q}g2$   $\mathbb{Q}b6$  7. $\mathbb{Q}f3$  0–0 8.0–0  $\mathbb{Q}c6$  9.d5  $\mathbb{Q}b4$  10.e4 c6 11.a3  $\mathbb{Q}a6$  12.dxc6 bxc6 13. $\mathbb{Q}c2$   $\mathbb{B}b7$  14. $\mathbb{Q}d1$   $\mathbb{B}c8$  15. $\mathbb{Q}f4$  c5 16. $\mathbb{Q}d5$   $\mathbb{Q}xd5$  17.exd5  $\mathbb{Q}c7$  18. $\mathbb{Q}xc5$   $\mathbb{Q}xd5$  19. $\mathbb{Q}xd5$   $\mathbb{Q}xd5$  20. $\mathbb{Q}xd5$   $\mathbb{B}c2$  21. $\mathbb{Q}d1$   $\mathbb{B}xb2$  22.a4 h6 23. $\mathbb{Q}e5$   $\mathbb{B}xe5$  24. $\mathbb{Q}xe5$   $\mathbb{B}xe5$  25. $\mathbb{Q}xe5$   $\mathbb{B}fd8$  26. $\mathbb{Q}e1$   $\mathbb{B}ac8$  27. $\mathbb{Q}c6$   $\mathbb{B}e8$  28. $\mathbb{Q}xa7$   $\mathbb{B}c2$  29.a5  $\mathbb{B}d8$  30.a6  $\mathbb{B}dd2$

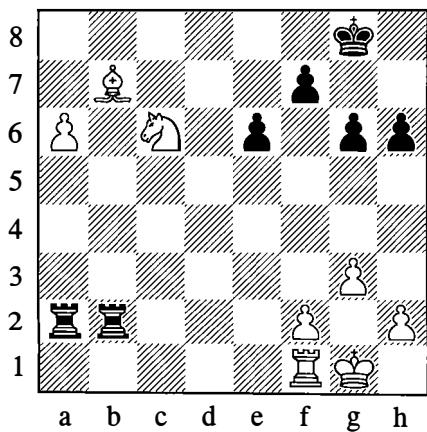


**31.♕f1??**

The most straightforward move is 31.♕b5. I saw that the pawn promoted straightforwardly and that I could defend easily on the second rank. But somehow I managed to convince myself that the game move was also winning easily, while being much safer. This is forbidden thinking! After 31.♕b5 there could follow 31...♝xf2 32.♔b7 ♘xh2 33.a7. White will soon have two extra pieces.

**31...♝a2**

White is still winning, but not as clearly as last move.

**32.♔b7 ♘db2 33.♕c6 e6****34.g4!!?**

Ulf Andersson's favourite move in many advantageous endgames. It takes some space and fixes a weakness on h6.

**34...♝g7 35.♕g2?**

Once again the solution is to leave the fear at the threshold: 35.♗d1 ♘xf2 36.♕b4 White wins.

**35...♚f6**

White is still winning, but it's not a good sign to have missed two such chances. Later in the game, I ran short of time and allowed

a perpetual. However, I think that my biggest mistakes were the ones above, even though they didn't change the evaluation of the position.

36.h4 e5 37.♗g3 ♘b3† 38.♔g2 ♘bb2 39.g5† hxg5 40.hxg5† ♕f5 41.♔d8 ♕f4 42.♔xf7 e4 43.♗g1 ♘d2 44.♗e1 ♘xf2 45.♗xe4† ♘g3 46.♗e3† ♕f4 47.♗b3 ♘fd2 48.♗b1 ♘d7 49.♗f1† ♘g3 50.♔e5 ♘dd2 51.♗b1 ♘db2 52.♗d1 ♘d2 53.♗e1 ♘g2† 54.♗h1 ♘h2† 55.♗g1 ♘hg2† 56.♗xg2 ♘xg2† 57.♗h1 ♘h2† 58.♗g1 ♘g2† 59.♗f1 ♘f2† 60.♗g1  
½-½

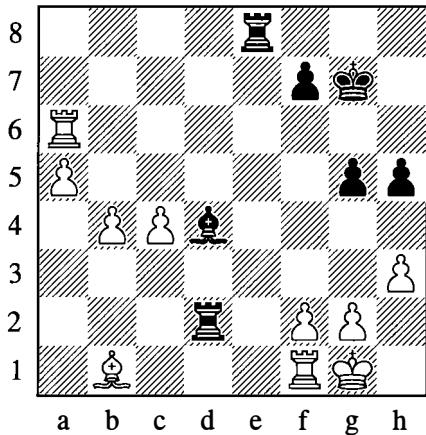
It was easy for me to understand that I made some big mistakes in this game, since I didn't win. What is even more important, to avoid dropping unnecessary draws in the future, is criticizing the mistakes in the games that were won anyway.

**Axel Smith – Tamas Erdelyi**

Malta Open, Bugibba 26th November 2011

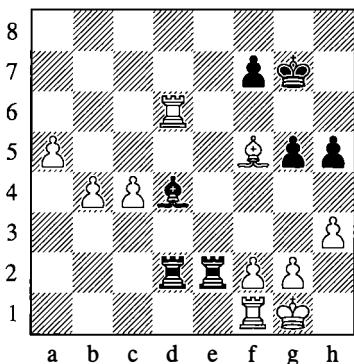
1.e4 c5 2.♘f3 e6 3.d4 cxd4 4.♘xd4 a6 5.♗d3 ♖c5 6.♘b3 ♖e7 7.♗g4 g6 8.♗e2 d6 9.0-0 ♔d7 10.♘a3 ♔e5 11.♘c4 ♔xc4 12.♘xc4 ♖c7 13.a4 ♖d7 14.a5 ♖c8 15.♗d3 h5 16.♘d2 ♖f6 17.♘c4 ♖c6 18.♘b6 ♖d8 19.c4 0-0 20.♗f4 ♖g4 21.b4 ♖f6 22.♗ac1 ♖e7 23.h3 ♔e5 24.♗b1 ♖e8 25.♗d2 ♖c6 26.♗fd1 ♔h7 27.♗e3 g5 28.♗d5 exd5 29.exd5† ♖h6 30.dxc6 bxc6 31.♗b6 ♖de8 32.♗xd6 ♖xd6 33.♗xd6 ♗g7 34.♗d4 ♖d8 35.♗xe5 ♖xe5 36.♗xc6 ♖d2 37.♗xa6 ♖d4 38.♗f1 ♖e8

Having three passed pawns extra is nice, but Black has some attack with the opposite-coloured bishops. It's time to take the bull by the horns and calculate the win to the end.

**39.♗d6!?**

This is a good move, but only with the correct continuation, which I hadn't seen. There was another win with 39.♗f5!.

- a) The reason to move the bishop is to avoid Black from capturing it after: 39...♝xf2 40.♝xf2 41.♔h2 42.g4!
- b) After 39...♝ee2 40.♗d6! Black has to exchange one pair of rooks if he takes the exchange.

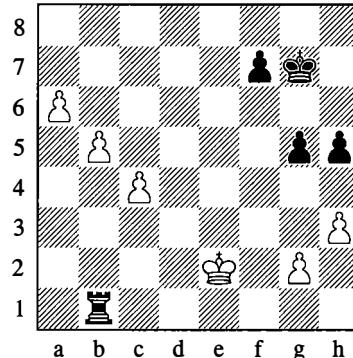


That's fatal for him: 40...♝xf2† 41.♝xf2 42.♝xd2 43.a6 and the pawns queen.

Instead 40...♝xf2 is a better try. 41.♝xf2 42.♝f1 43.♗d6 43.♝xf2 White is slower than in the line after 40...♝xf2†, but still wins.

**39...♝xf2† 40.♝xf2 42.♝xd2****41.♗b2?**

I should really have played the most forcing line: 41.b5! 42.♗e1† 43.♗f1 44.♗xf1 45.♗d1† 44.♗e2 45.a6



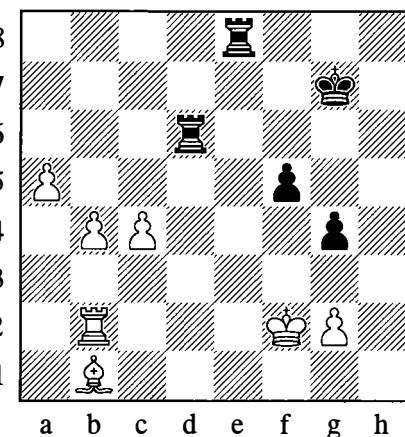
Having reached this position, it's not difficult to calculate the rest: 45...♝a1 46.c5 47.♗f6 47.b6 48.a6 49.♗d3 50.♗b2 51.c6 51.c7 Black is one tempo short.

**41...g4 42.hxg4 hxg4**

Suddenly ...g3 is a threat.

**43.♗f2 f5**

43...♝f6† is quite tricky, but probably wins for White.

**44.♗g3?**

Another prophylactic move, which this time changes the evaluation to a draw. 44.♗e2 or

the direct 44.b5 was better. I had better avoid saying what I really think about myself for playing the move I did. I was afraid of ...f4 and still thought I could avoid strenuous calculation. Sigh.

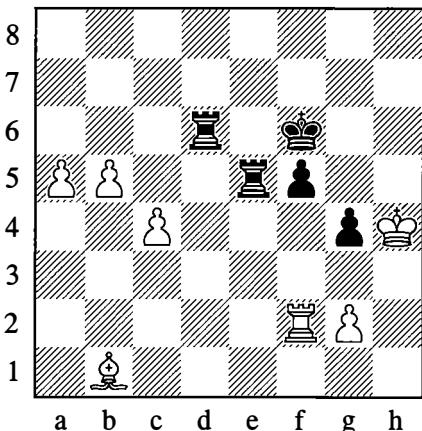
#### 44... $\mathbb{Q}f6$ 45. $\mathbb{Q}f2$

To be able to play  $\mathbb{Q}xf5$  when necessary.

#### 45... $\mathbb{Q}e3\#$ 46. $\mathbb{Q}h4$

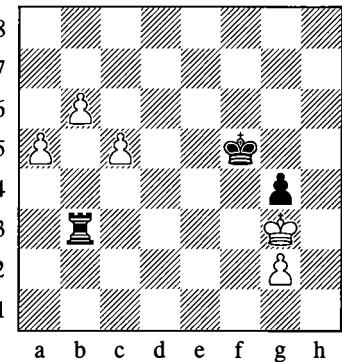
A friend noticed that I managed to play nine moves without pushing any of the queenside pawns!

#### 46... $\mathbb{Q}e5$ 47.b5



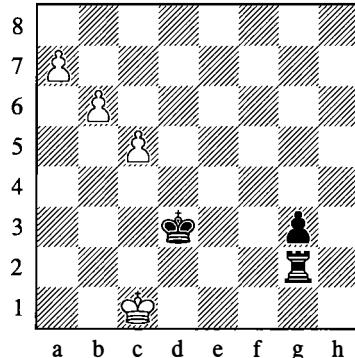
#### 47... $\mathbb{Q}d4?$

After 47... $\mathbb{Q}d1$  there is no longer any win. 48. $\mathbb{Q}xf5\#$   $\mathbb{Q}xf5$  49. $\mathbb{Q}xf5$   $\mathbb{Q}xf5$  50.b6  $\mathbb{Q}f4$  51. $\mathbb{Q}h5$   $\mathbb{Q}f5$  leads to a repetition and: 48. $\mathbb{Q}c2$   $\mathbb{Q}h1\#$  49. $\mathbb{Q}g3$   $\mathbb{Q}g5$  50. $\mathbb{Q}xf5\#$   $\mathbb{Q}xf5$  51. $\mathbb{Q}xf5$   $\mathbb{Q}xf5$  52.b6  $\mathbb{Q}b1$  53.c5  $\mathbb{Q}b3\#$



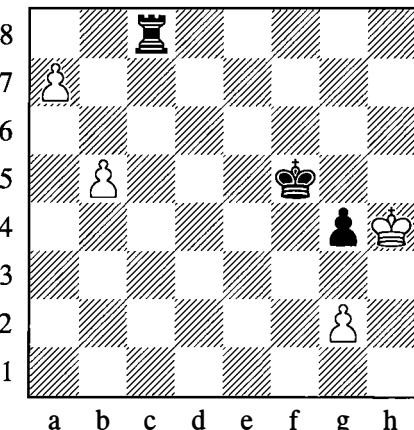
54. $\mathbb{Q}h4$   $\mathbb{Q}f4$  55.a6  $\mathbb{Q}b1$  56. $\mathbb{Q}h5$   $\mathbb{Q}f5$  does the same.

During the game I was actually planning 54. $\mathbb{Q}f2?$   $\mathbb{Q}e4$  55.a6 g3# 56. $\mathbb{Q}e2$   $\mathbb{Q}b2\#$  57. $\mathbb{Q}d1$   $\mathbb{Q}d3$  58. $\mathbb{Q}c1$   $\mathbb{Q}xg2$  59.a7



I didn't realize that 59... $\mathbb{Q}c2\#$  60. $\mathbb{Q}b1$  g2 61.a8= $\mathbb{Q}$  g1= $\mathbb{Q}\#$  would have made me regret not pushing the pawns one move earlier. This would have been the logical end of the game, because I really think I deserved to be severely punished for my lazy moves.

#### 48.a6 $\mathbb{Q}xc4$ 49. $\mathbb{Q}xf5\#$ $\mathbb{Q}xf5$ 50. $\mathbb{Q}xf5$ $\mathbb{Q}xf5$ 51.a7 $\mathbb{Q}c8$



#### 52. $\mathbb{Q}g3!$

52.b6  $\mathbb{Q}f4$  53. $\mathbb{Q}h5$   $\mathbb{Q}f5$  draws.

#### 52... $\mathbb{Q}c3\#$ 53. $\mathbb{Q}f2$

1-0

I have always tried to have the energy to calculate when needed, but those two games showed the opposite. Two weeks later, I was eager to push myself again. The critical position arises after 20 moves, but I'll give the whole game.

### Axel Smith – Neil Farrell

London Chess Classic Open, 6th December 2011

**1.♘f3 ♘f6 2.c4 c5 3.♘c3**

The point with this move order is to avoid the hedgehog – 3.g3 allows 3...b6.

**3...e6**

3...b6 is now met by 4.e4 d6 5.d4 cxd4 6.♘xd4 ♘b7, which is a favourable version for White, since he isn't committed to g2-g3 yet.

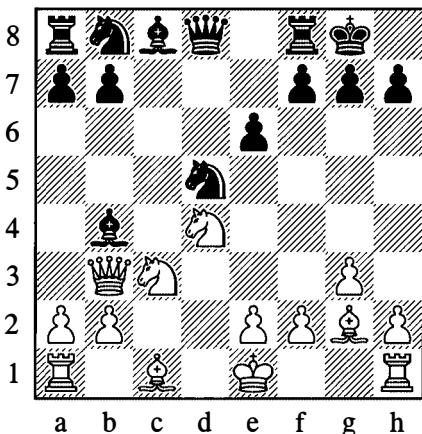
**4.d4**

Black can still answer g2-g3 with ...b6.

**4...cxd4 5.♘xd4 ♘b4**

The game has transposed to a Nimzo-Indian. For the next couple of moves, the game follows Carlsen – Kramnik, which was played at the same time, just 20 metres away in the London Classic.

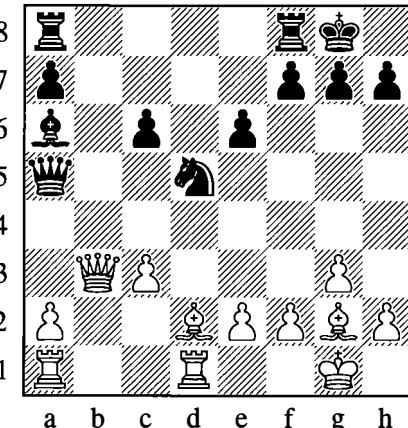
**6.g3 0–0 7.♗g2 d5 8.cxd5 ♘xd5 9.♗b3**



**9...♗a5**

9...♗b6 was Kramnik's choice.

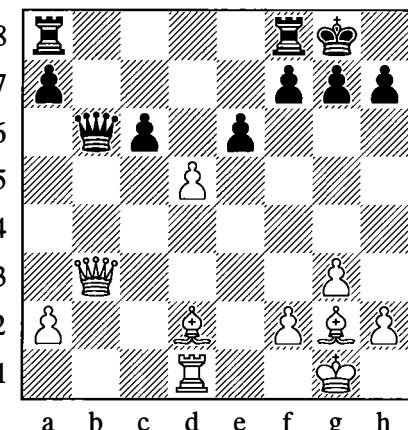
**10.♗d2 ♘c6 11.♗xc6 bxc6 12.0–0 ♘xc3  
13.bxc3 ♘a6 14.♗fd1**



**14....♗xe2?!**

14...♗c5 is the theoretical move, as played in Kramnik – Anand, Bonn 2008.

**15.c4 ♘xd1 16.♗xd1 ♘b6 17.cxd5**



After ...cxd5, Black will get a rook and two pawns for the two bishops. Normally I would favour the two bishops, but they have no clear task yet. The rooks are best when there are as few pieces as possible on the board, so Black should be happy with the exchange of queens.

I am curious to know why no one playing Black has opted for 17... $\mathbb{W}xb3$  before recapturing with the c-pawn.

**17...cxd5?!** 18. $\mathbb{W}f3!$

Now I will play for an attack on the king.

**18... $\mathbb{E}ad8?$**

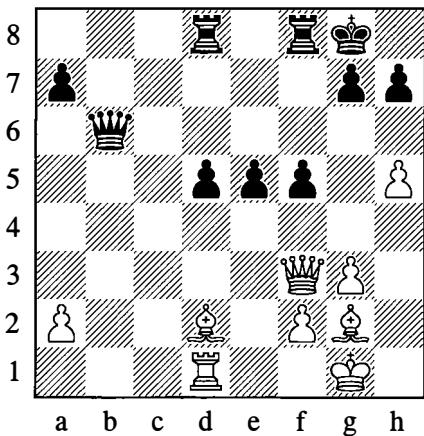
Advancing the central pawns isn't a good strategy – it weakens both the pawns and the central squares. Black should instead have opted for penetrating with the rooks on the queenside.

**19.h4?!**

To create a weakness in Black's camp.

**19...e5 20.h5 f5**

White's position is in general promising. At first it looks as if  $\mathbb{Q}g5$  followed by  $\mathbb{E}xd5$  simply wins a pawn, but Black has created a trap: after ... $\mathbb{W}b1\uparrow$  followed by ...e4, White can't defend the rook. As this is clearly a critical moment, I spent a lot of time to find the best move. Is it possible to capture the pawn anyway?



**21. $\mathbb{Q}g5!$**

Yes, it actually works.

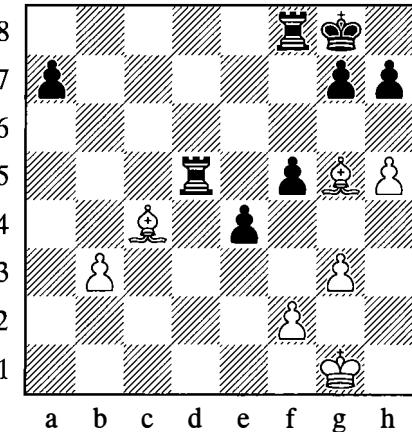
**21... $\mathbb{E}d7$**

21...e4 22. $\mathbb{E}xd8$  threatens the queen and wins immediately.

**22. $\mathbb{E}xd5 \mathbb{W}b1\uparrow$**

After 22...e4, White can play 23. $\mathbb{W}d1$ .

**23. $\mathbb{Q}f1$  e4 24. $\mathbb{W}b3!$   $\mathbb{W}xb3$  25.axb3  $\mathbb{E}xd5$  26. $\mathbb{Q}c4$**

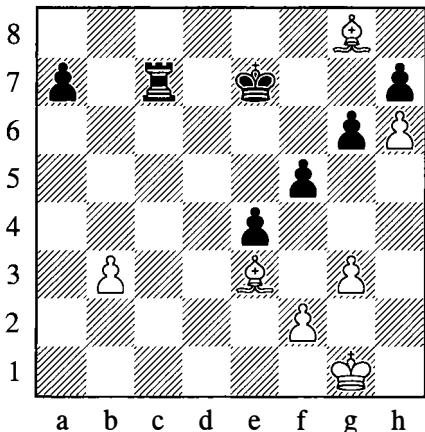


This is the point. Black's rooks are unable to defend each other. The rest of the game is not flawless at all, but it's interesting to note that I continued playing in the most direct way.

**26... $\mathbb{E}c8$  27. $\mathbb{E}xd5\uparrow$   $\mathbb{Q}f8$  28. $\mathbb{Q}e3$   $\mathbb{E}c7$  29. $\mathbb{Q}e6$**

To get a nasty pawn on h6. However, the undermining g3-g4 was better.

**29...g6 30.h6  $\mathbb{Q}e7$  31. $\mathbb{Q}g8$**

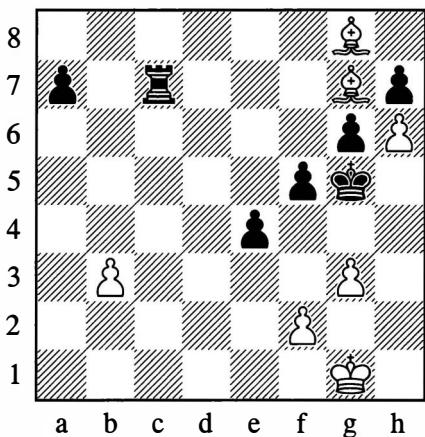


Even though the bishop would not be lost on h7, I am not threatening to take the pawn, since it would be trapped for the rest of the game.

### 31...♝f6 32.♗d4† ♘g5?

32...♝e7 was the only move. I still can't take on h7.

### 33.♗g7



### 33...♝g4

The bishop isn't trapped anymore since 33...♝b7 34.♗xh7 ♜b8 35.♗g8 ♜xg8 36.h7 promotes.

### 34.♗xh7 e3 35.fxe3 ♘f3 36.♗xg6 f4 37.gxf4 1-0

In this game, I managed to continue playing the hardest moves when I got an advantage. However, it's easy to fall back into a lazier approach, so I will continue to remind myself by looking at my old Lists of Mistakes. Let's move on to one of those.



## The List of Mistakes

### Conclusions

- The List of Mistakes categorizes mistakes in groups, and pinpoints common mistakes.
- The idea is that gaining the knowledge of common mistakes is a huge step towards avoiding them.
- During the next tournament(s), you have to think consciously about the new knowledge, but later it will hopefully become subconscious – part of your intuition.
- It's important to look for every mistake; don't forget games that you have won.
- Every List of Mistakes can contain 30 games or less, depending on how often you play.
- It's a good idea to review old Lists of Mistakes from time to time.
- Positional mistakes are the easiest to correct.

### Creating a List of Mistakes

The first thing I do is write down all the mistakes in a text document. Take the game from the beginning of the chapter as an example:

*Bartosz Socko – Axel Smith*

- 15... $\hat{Q}h8?$  – unnecessary prophylaxis. I don't need the move since I always get good compensation if he takes the pawn on h6.  
 18... $\hat{Q}xg5?!$  – inexact move order. 18... $\hat{Q}c4$  avoids  $\hat{W}xb4$ .  
 28...g6?! – it was better moving the g-pawn two steps to gain some space.  
 33...gxf4?! – I open a file for his rook. Instead, after 33...g4, I could have played for opening the h-file in the long run.  
 36... $\hat{Q}e7?!$  – I was in time trouble and played a meaningless move.  
 38... $\hat{Q}f7?$  – I should not accept playing such a passive move in a critical position!

When I have written down the mistakes, it's time to create the List of Mistakes. The list below shows the games in this chapter. Since I have chosen which games to include, some categories are empty, but believe me, usually I make every kind of mistake!

If you find it interesting, you can cover the column with the number of mistakes, copy the list and add every mistake that you find in this chapter. If you do, I am sure that our categorization will differ, but that does no harm as long as both are logical.

Which categories should be used in the List of Mistakes? It depends on the mistakes! Sometimes I'll start with a blank page and add a category for every new kind of mistake, and sometimes I'll use an old scheme. There isn't any right or wrong way – the categories can be set in any way that suits your mistakes. In my case the category "misjudging" has to be split, into "Overestimating pawn centre" and "Overestimating the passed d-pawn". Other possible subcategories are king safety, initiative, importance of pawn structure, bad bishops, central control and passed pawns.

I have pointed out all the mistakes that change the verdict of the position, from won to drawn or from drawn to lost, as big ones.

**LIST OF MISTAKES (23 games)**

<b>Category</b>	<b>Type of mistake</b>	<b>number of mistakes (big in brackets)</b>
<b>Opening</b>	Quality of opening analysis	—
	Understanding	—
	Preparation, remembering	—
<b>Tactics</b>	Big blunder	—
	Miscalculation	1
	Missing candidates	1
	Blunder check	—
<b>Positional</b>	Not calculating deep enough	1
	Wrong plan	—
	Pawn levers	3
	Piece exchanges	4
	Piece placement	—
	Misevaluation	—
	Overestimating pawn centre	4
	Overestimating passed d–pawn	3 (1)
	Missing prophylactic moves	1 (1)
<b>Thinking model</b>	Unnecessary prophylaxis	1
	Not assessing the position	3 (1)
	Playing without a follow-up	—
	Not setting clear aims	—
	Not getting the logical move to work	7 (2)
<b>Attitude</b>	Overly cautious	4 (2)
	Bad concentration, nonchalance	—
	Time trouble	2
	Playing too fast (in critical moments)	—
	Not objective (due to bad/good trend)	—
	Afraid of losing	1

Much is already won when the list is finished. All the mistakes have been examined again, giving important repetition. However, you should not be satisfied with that – the idea is also to see which mistakes you make too often. Hence, I write a few lines when it's time to sum up.

- I overvalue two rooks against a queen (plus pawns) and two minor pieces against a rook (plus pawns). To avoid doing this, I should not trust my intuition alone, but make a conscious assessment of the position, seeing whether the pieces are able to cooperate against a target or not.
- I overestimate the ideal pawn centre, and don't even consider moves that give it up. With the knowledge of this weakness, I will hopefully avoid it in the future.
- I make many mistakes when exchanging heavy pieces, since I think too concretely. I have to make positional considerations before I look for candidate moves.

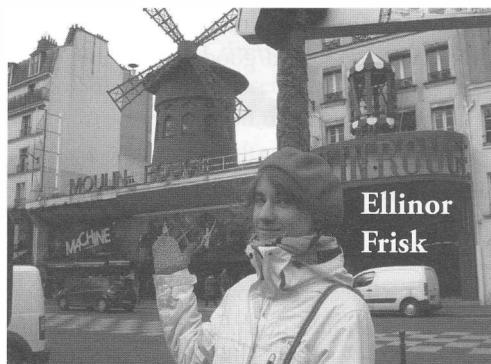
- I overestimate the passed d-pawn. Also in this case, the knowledge should be enough to avoid doing so again.
- In winning positions, I am often too cautious, not going for the most direct win.
- In the critical moments, I become lazy and often choose a quite passive move. I must give my full effort and try to get the most logical move to work! If I avoid a variation, I must have a reason.
- I have some problems with time trouble, but not much. As usual, I should continue trying to play even faster.

The positional mistakes are easy to categorize. A few times, I have also tried splitting the tactical mistakes into details, such as backward moves, presuming that a threatened piece has to move, not considering pawn moves in front of the king, missing unusual moves, missing sacrifices, etc. However, I have seldom managed to get any useful information by doing so.

Personally, I think the psychological mistakes are the most interesting. One time I found that I assessed my position too pessimistically after I realized that I had made a mistake. Another time I found that I became slightly desperate in bad positions. These kinds of mistake are the easiest to correct.

That can't be said about the last two conclusions in my summary above. They are even a contradiction. If I try to calculate every critical variation, I will not play faster than before. It's important to find a balance, and to feel when there is a critical position where thorough calculation is required. By gaining more experience, and pointing out where I have problems, I will hopefully improve even with that.

When I make a new List of Mistakes, I copy the old conclusions and check whether the same mistakes are made or not. Hopefully, most of them have disappeared.



Club: Lunds ASK  
Born: 1986

*Frisk has been a member of Lunds ASK since 1994, and was the club's president from 2008-10. She has represented Sweden in the European Team Championship and in the Olympiad. Frisk made two WIM norms in 2012.*

## Helping others

The first thing I do when I am coaching a student is to create a List of Mistakes. Some typical mistakes are usually highlighted already after a few games, but the main point is to help the student to get started.

Later on, the student can analyse the games with a friend, annotate them and add them to their List of Mistakes. The games and the list are sent by mail to the coach. His task is to comment on the positional thoughts in the annotations and making some conclusions from the mistakes – of course without using an analysis engine.

One advantage with such an approach is that the coach's time is spent effectively.

When I got together with Ellinor, my future wife, in 2008, we didn't do any chess together at all. I thought our relationship was more important than a nerdy hobby. She got her motivation back two years later, when she was selected for the Swedish women's team in the Olympiad. At the same time, I had grown up and no longer had any need to appear normal. We both enjoyed chess, so why not?

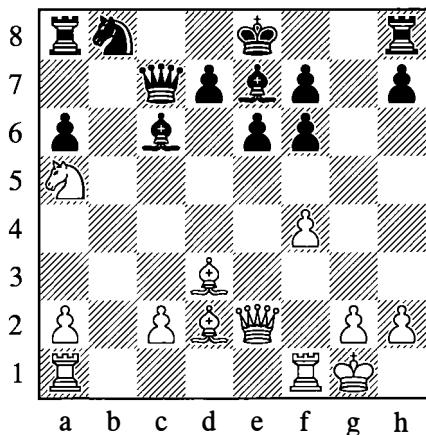
The first step was creating a List of Mistakes for her. We found a lot of things: she was too cautious with advancing the flank pawns, a bit reckless with her king's safety, automatically thought that a bishop was stronger than a knight, underestimated the importance of development and never saw the possibility to fianchetto the bishops.

After every tournament, she checked if she had managed to avoid those mistakes. During the next 16 months, she made steady progress and increased her Elo from 2113 to 2218; another example that you don't have to be a junior to improve.

In 2012, she became employed, had to decline a spot for the next Olympiad and lost her motivation. The lesson is clear: never get a job.

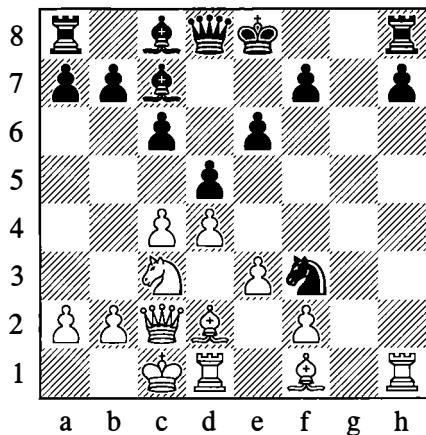
Below are four positions from her games and the moves she played. All of them are the same kind of mistake. Your task is to find out what she needed to learn for future games.

**Frisk – Vasquez, Khanty-Mansiysk 2010**



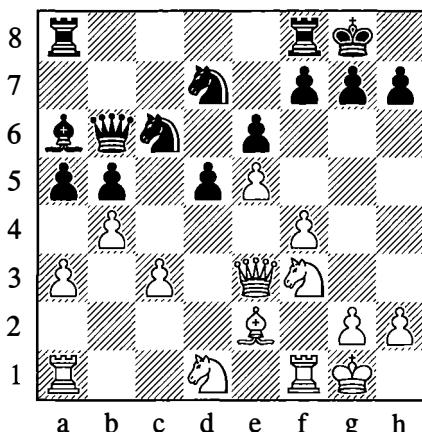
Frisk played 17... $\mathbb{N}xc6$ .

**Foisor – Frisk, Cappelle la Grande 2011**



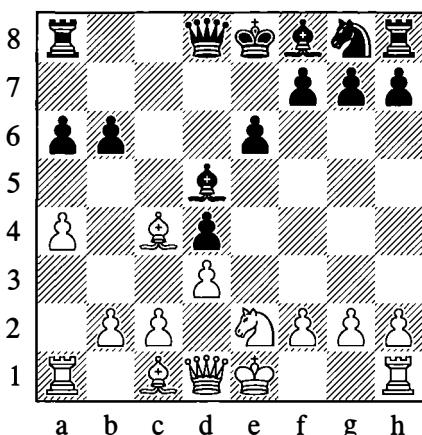
Frisk played 15... $\mathbb{N}xd2$ .

## Luther – Frisk, Bugibba 2011



Frisk played 16... $\mathbb{W}xe3\#$ .

## Frisk – Kwapinski, Stockholm 2011



Frisk played 11. $\mathbb{Q}xd5$ .

## Solutions

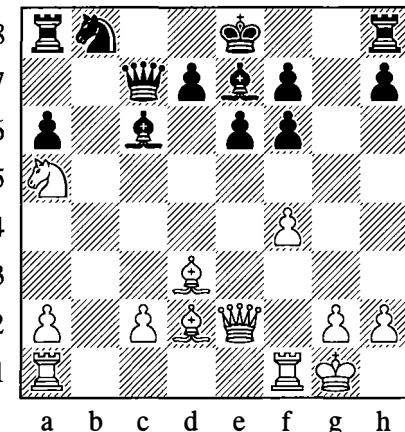
Before concluding about Frisk's recurring mistake, let's examine the four positions.

## Ellinor Frisk – Rami Vasquez

Khanty-Mansiysk Olympiad 1st October 2010

1.e4 c5 2. $\mathbb{Q}f3$  e6 3.d4 cxd4 4. $\mathbb{Q}xd4$  a6  
5. $\mathbb{Q}c3$   $\mathbb{W}b6$  6. $\mathbb{Q}b3$   $\mathbb{W}c7$  7. $\mathbb{Q}d3$  b5 8.0-0

$\mathbb{Q}f6$  9.f4 b4 10.e5 bxc3 11.exf6 gxf6 12.bxc3  
 $\mathbb{Q}b7$  13. $\mathbb{W}e2$   $\mathbb{Q}e7$  14. $\mathbb{Q}e3$   $\mathbb{W}xc3$  15. $\mathbb{Q}d2$   $\mathbb{W}c7$   
16. $\mathbb{Q}a5$   $\mathbb{Q}c6$



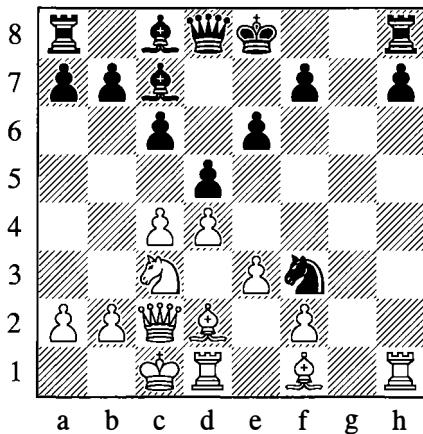
White is a pawn down, but doesn't have such bad prospects since she has a moderate lead in development and Black's king is stuck in the centre. Frisk was happy to win the bishop pair with 17. $\mathbb{Q}xc6$ , but this helped Black to develop the knight. She was afraid of ... $\mathbb{Q}a4$ , but that move just runs into  $\mathbb{W}e4$ . Of the many possible moves, I like 17. $\mathbb{Q}ab1$  best. It is a move that White is likely to need at some point, and it also leaves the question to Black about what to do.

The rest of the game is not relevant, so I shall omit it (0–1, 40 moves).

## Christina-Adela Foisor – Ellinor Frisk

Cappelle la Grande 28th February 2011

1.c4 c6 2. $\mathbb{Q}c3$  d5 3.e3  $\mathbb{Q}f6$  4. $\mathbb{Q}f3$  e6 5. $\mathbb{W}c2$   
 $\mathbb{Q}d6$  6.d4  $\mathbb{Q}bd7$  7.g4  $\mathbb{Q}xg4$  8. $\mathbb{E}g1$   $\mathbb{Q}xh2$   
9. $\mathbb{Q}xh2$   $\mathbb{Q}xh2$  10. $\mathbb{E}xg7$   $\mathbb{Q}f8$  11. $\mathbb{E}g2$   $\mathbb{Q}c7$   
12. $\mathbb{Q}d2$   $\mathbb{Q}g6$  13.0-0-0  $\mathbb{Q}h4$  14. $\mathbb{E}g1$   $\mathbb{Q}f3$   
15. $\mathbb{E}h1$



Against White's 7.g4 in the Semi-Slav, Black has grabbed the pawn but fallen behind in development. The dream is to castle long before the position opens up, but first she needs to take care of the h7-pawn.

### 15... $\mathbb{Q}xd2?$

I agree that Black wants to exchange on d2, since the knight may be vulnerable on f3 if White pushes e3-e4. However, there is no reason to take immediately, since the bishop isn't going anywhere. After the most logical move, 15...h5, White has to spend a tempo on  $\mathbb{Q}b1$  or  $\mathbb{Q}e2$  to force Black to take.

That said, there is actually one argument for taking on d2 – if White takes back with the queen, Black doesn't have to move the h-pawn at all. But since I think White wants to take with the rook anyway, this argument isn't important.

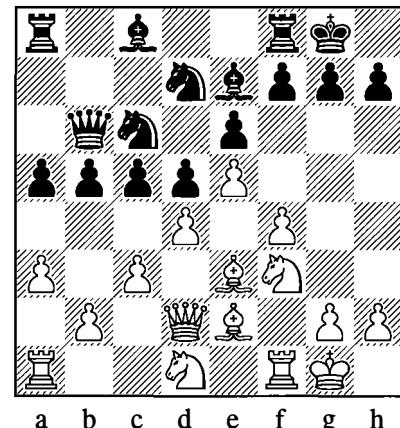
### 16. $\mathbb{R}xd2$ h5 17.f4 $\mathbb{Q}d7$ 18. $\mathbb{R}dh2$ h4 19. $\mathbb{W}f2$

White managed to use Black's inaccuracy with 15... $\mathbb{Q}xd2$  to win back the pawn immediately. Black will manage to castle and keep the bishop pair, but the one on d7 is very cramped. I think White's position is easier to play. White won in 80 moves.

### Thomas Luther – Ellinor Frisk

Malta Open, Bugibba 26th November 2011

1.e4 e6 2.d4 d5 3. $\mathbb{Q}c3$   $\mathbb{Q}f6$  4.e5  $\mathbb{Q}fd7$  5.f4 c5 6. $\mathbb{Q}f3$   $\mathbb{Q}c6$  7. $\mathbb{Q}e3$   $\mathbb{Q}e7$  8. $\mathbb{W}d2$  0-0 9. $\mathbb{Q}e2$  a6 10.0-0 b5 11.a3  $\mathbb{W}b6$  12. $\mathbb{Q}d1$  a5 13.c3



I will make a few comments about this game a few moves earlier than the position I showed a few pages ago.

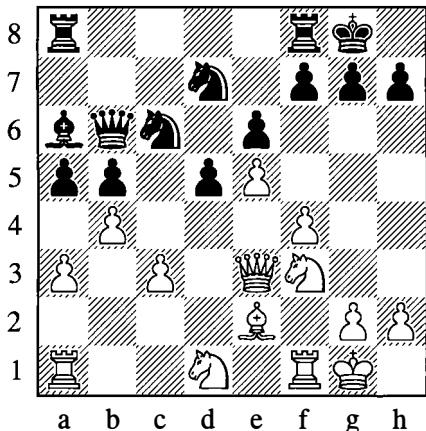
In a French Steinitz, Black has pushed the pawns on the queenside. White's plan is to create a kingside attack after the pawn lever f4-f5, but this is difficult to achieve. Most times, Black can just capture the pawn. For Black, ...b4 and ... $\mathbb{Q}a6$  are the positional moves, but since the rook on a8 is hanging, she should not play 13...b4 at once.

### 13... $\mathbb{Q}a6$ ?

The right plan, but it would have been better to be careful and start with ... $\mathbb{Q}b7$  and ...b4 before playing ... $\mathbb{Q}a6$ . In the game, Luther manages to stop ...b4.

### 14.dxc5 $\mathbb{Q}xc5$ 15.b4 $\mathbb{Q}xe3\#$ 16. $\mathbb{W}xe3$

With the bishop on b7, Black would have had ...axb4 followed by ... $\mathbb{Q}xb4$  or ...d4. When that wasn't working, Frisk exchanged queens without much thought.



### 16... $\mathbb{W}xe3\#?$ !

This helps White to develop the knight, connect the rooks and play  $\mathbb{W}fb1$  next. Instead, an exchange on b6 would have helped Black improve the knight. So there was no argument in favour of exchanging the queens.

Instead, Black could have considered several other candidate moves: ... $\mathbb{E}ac8$ , ... $\mathbb{E}fc8$  and ...f6.

### 17. $\mathbb{Q}xe3 \mathbb{E}fc8?$ 18.a4!

Black was worse already before the last mistake, but now she also has huge problems with the b5-pawn, since ...bxa4 is met with b4-b5. White won in 36 moves.

## Ellinor Frisk – Leszek Kwapinski

Rilton Cup, Stockholm 27th December 2011

Frisk was confused after the game. She knew that her opponent had made an inaccuracy in the opening and although she thought she had played the most logical moves, she didn't get any advantage. What did she do wrong? Here are the ten moves that preceded the diagram position.

### 1.e4 c5 2. $\mathbb{Q}c3 \mathbb{Q}c6$ 3. $\mathbb{Q}b5$

We might consider this a form of Accelerated Rossolimo. The point is to take on c6 and

follow up with f2-f4, after which White's flexible pawn structure will secure a pleasant position.

### 3... $\mathbb{Q}d4$

There is also a disadvantage to  $\mathbb{Q}f3$  not having been played!

### 4. $\mathbb{Q}c4$ e6 5. $\mathbb{Q}ge2$ a6

Black correctly inserts the moves with the a-pawns, since it takes away the b5-square from White's pieces.

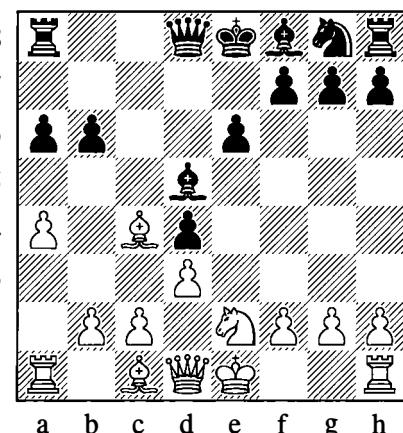
### 6.a4 b6!?

6... $\mathbb{Q}f6$  is the most common move, developing and at the same time stopping  $\mathbb{Q}xd4$ .

### 7. $\mathbb{Q}xd4$

This is a very logical move. After ...cxsd4 Black doesn't want to play for ...d5 and ...exd5, which is otherwise a normal pawn lever.

### 7...cxsd4 8. $\mathbb{Q}e2$ $\mathbb{Q}b7$ 9.d3 d5 10.exd5 $\mathbb{Q}xd5$



We have reached the diagram position. Black seems to be threatening both ... $\mathbb{Q}xg2$  and ... $\mathbb{Q}xc4$ , but White has several ways to react.

### 11. $\mathbb{Q}xd5?!$

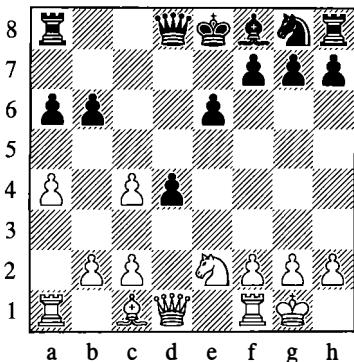
This was played without much reflection – the intuition to avoid doubled pawns was never questioned by Frisk. Actually  $\mathbb{Q}xd5$  just helps Black to develop, while ... $\mathbb{Q}xc4$  isn't a threat at all since it weakens the d4-pawn. In addition, the new pawn on c4 would be easily defended.

11. $\mathbb{Q}xd4?$   $\mathbb{Q}xg2$  12. $\mathbb{B}gl$   $\mathbb{Q}b7$  is anti-positional for White, because she can't castle short anymore.

11.0–0! is better.

a) Black can't just develop since 11... $\mathbb{Q}f6$  12. $\mathbb{Q}xd4!$   $\mathbb{Q}xg2$  13. $\mathbb{Q}xe6$  loses a pawn.

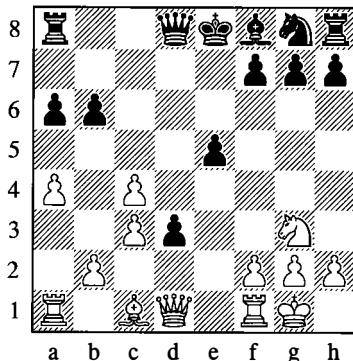
b) 11... $\mathbb{Q}xc4$  12.dxc4



Now there are two options to consider:

b1) 12... $\mathbb{Q}c5$  White has ideas with  $\mathbb{Q}f4-e5$ , simply doubling on the d-file, opening up with c2-c3 or kicking the bishop with b2-b4. Most exact is 13.a5!, which creates a square on a4 for the knight after c2-c3 next.

b2) 12...e5?! looks dangerous, as Black is several tempos behind in development. 13.c3 d3 (13...dxc3 14. $\mathbb{Q}xc3$  gives White an initiative.) 14. $\mathbb{Q}g3$



The pawn on d3 will be rounded up with  $\mathbb{Q}f1-e1-e3$ .

c) 11... $\mathbb{Q}b7!$  is actually the best move, even though it looks provocative to move the bishop again. It's an argument against 11.0–0, however castling is still the best move. When Black's bishop has retreated, White should try to open the position with 12.c3, with some initiative.

### 11... $\mathbb{Q}xd5$ 12.0–0

Black could have continued with a normal developing move such as 12... $\mathbb{Q}f6$ . White can try 13.c3, but Black is fine.

Instead the game continued 12... $\mathbb{Q}d6$  13.c4 dxc3 14. $\mathbb{Q}xc3$  and White won in 31 moves.

What is the connection between these four mistakes? Frisk exchanged pieces voluntarily, losing tempos!

In the first game it helped her opponent develop the knight, in the second it allowed the rook to the h-file, in the third it connected the rooks, and in the last example it developed the queen.

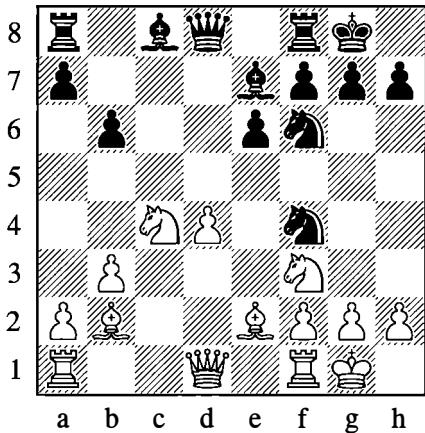
In the List of Mistakes, we concluded that she had to be more careful about the elements of time and development when exchanging pieces. The player who exchanges often loses a tempo!

In the next tournament, she kept this in mind.

**Vegard Simensen – Ellinor Frisk**

Aalesund 11th February 2012

1.d4 d5 2.♘f3 ♘f6 3.c4 e6 4.e3 c5 5.b3 ♘c6  
 6.♗b2 cxd4 7.exd4 ♖e7 8.♗bd2 0–0 9.♗d3  
 b6 10.cxd5 ♘b4 11.♗e2 ♘bx d5 12.0–0 ♘f4  
 13.♘c4



White has an isolated pawn and the bishop on b2 is passive, while Black has good squares for all her pieces. Should Black exchange minor pieces on e2? In a previous example, against Foisor, Frisk immediately captured the bishop even though it couldn't escape. This time, she managed to stay calm.

13...♗b7! 14.♗d2 ♘xe2†

Frisk won a tempo.

15.♗xe2 ♜c8

Black eventually won in 57 moves.

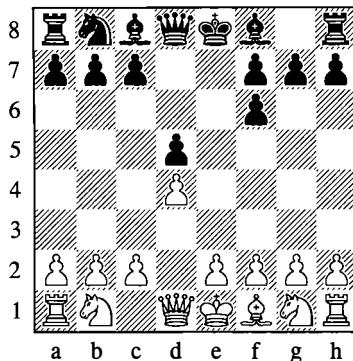
**Ellinor Frisk – Håvard Ramstad**

Aalesund 12th February 2012

1.d4 d5 2.♘c3 ♘f6 3.♗g5 ♖f5

Now by far the most common move is 4.♗xf6 and after 4...exf6, it's similar to the Trompowsky position starting with 1.d4 ♘f5

2.♗g5 d5 3.♗xf6 exf6.



In this position, White has two main plans. The first is to exchange the e-pawn for Black's d-pawn with e2-e4, then exchange all the pieces to get a winning pawn endgame. This is the same strategy as in the Exchange Ruy Lopez, except with the healthy majority on the queenside. However, a lot can happen before all the pieces are exchanged.

Most often White instead plays for a strategy based on the pawn lever c2-c4. After ...dxc4, White has two pawns in the centre, while Black has none. The pawn duo secures some space, which makes it easy to play with the knights. Quite often it's possible to exchange one of the knights for one of Black's bishops.

Going back to the game, after 4.♗xf6 exf6, White doesn't have the possibility to push c2-c4, since the knight is already on c3. Hence, Black only needs to stop e2-e4, or secure adequate counterplay if White manages to play it. I think this is possible, so I do not approve of White's position after 4.♗xf6 exf6.

Instead, Frisk played:

4.f3

Her idea was to push e2-e4 before she takes on f6. 4...♗bd7 5.♗xd5! is also a point.

4...h6?

This is not a good move, losing a tempo, but it gave full credit to her strategy to wait with the exchange.

**5.♗xf6 gxf6 6.e4 dxe4 7.fxe4 ♗g6 8.♘f3**

White won in 41 moves.

As I said in the beginning of the chapter, it's difficult to see a computer evaluation without letting it have a great influence upon your intuition. That's why I have waited until now to reveal a secret: none of Frisk's moves in the diagram positions above are mistakes according to the computer!

Nevertheless, the moves were dubious, and the fact that the engines don't understand that shows the advantage of analysing with a human and writing down verbal annotations. With the computer alone, Frisk's mistakes would not have been found.

## Conclusion

### Schedule for the List of Mistakes

- 1) Analyse your games with a friend; avoid using an analysis engine
- 2) Annotate the game in ChessBase, and highlight your mistakes
- 3) Check the analysis with an engine, and update the annotations
- 4) Write down the mistakes in a text file
- 5) Collect all the mistakes in a List of Mistakes, where they are sorted into various categories
- 6) Make conclusions about typical mistakes, and how they should be avoided in the future

When I wrote this chapter, I was living in Kristiansund, Norway and was missing the days when I could analyse games with friends in Lund all day long. That was one of the reasons I moved back to Sweden, but today there are other things I miss. The sea and the mountains in Norway have been replaced with a pond and an 85-metre-high refuse dump in Sweden.

I am happy that at least the chessboard is the same wherever I travel.

I hope these examples have shown how to work with the List of Mistakes. The first and most important thing is to analyse the games with someone who doesn't express his opinion only in decimal numbers. And then annotate the game thoroughly.

The List of Mistakes presented in this chapter contains dozens of categories. The ambition doesn't need to be that high – it can be a simple list scribbled down on a piece of paper. What is necessary is starting to reflect about the mistakes. Some are difficult to avoid, others will disappear as soon as they are spotted!

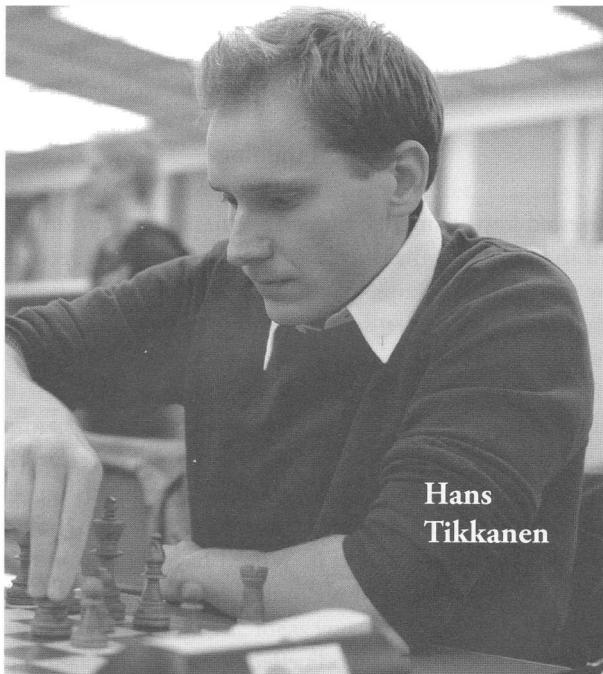
It's not possible to avoid every mistake, but I am sure that it will hone your intuition to work with the List of Mistakes.



# Chapter 6

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## The Woodpecker Method



Hans  
Tikkainen

Club: Lunds ASK  
Born: 1985  
GM: 2010

*Tikkainen became a member of Lunds ASK at the age of 14, and moved to Lund when he was 19. At that time, he had lost his motivation for chess, and instead tried both Go and half-hearted studies at university. However, with the new environment he soon regained his old passion for chess. In the spring of 2010, he created The Woodpecker Method and only months later he made three GM norms in seven weeks. Tikkainen won the Swedish Championship in 2011, 2012 and 2013.*

*Chess is 99% tactics* – Richard Teichmann

Like so many maxims, there is some truth in Teichmann's quote. Despite this, practising calculation is quite a small part of most players' chess training. The reason, I believe, is that it's difficult to define exactly what you have learned. That desire for tangible results is very human ("Today I memorized 30 moves of Grünfeld theory") but even so there is nothing more valuable at the board than being able to calculate well.

## Chapter overview

This chapter begins with a discussion about tactical training, with Hans Tikkanen as the model player. Tikkanen improved a lot when he started to work systematically and he also inspired a Danish friend to even greater improvements. The general advice is to make the training similar to a game situation. One way of achieving that is using a chess clock.

The second section deals with tactical motifs. It facilitates calculation to know their features by heart. One of the motifs has not been named before: the lifeline.

The chapter contains 51 exercises of varying degrees of difficulty. Most of them (12+6+12+6) are presented before each tactical motif, but the last section also holds 15 challenging exercises.

## Tactical training

Hans Tikkanen is interested in studying the human brain, its structure and function. His training program was designed to fit the way that humans learn to intuitively recognize patterns.

Tikkanen started by solving quite simple tactical exercises. When he finished, after about 1000 exercises, he took a short break, and then started all over again on the same exercises. And when he finished for a second time, he started a third time, and so on.

Tikkanen's results were convincing – his three GM norms the following summer gained him more than 100 Elo points. I have therefore named the training program after him: The Woodpecker Method. This comes from the meaning of 'Tikkanen' in its original language, Finnish.

However, as Tikkanen is a somewhat mysterious and modest person, he doesn't want to explain the underlying theories or exactly how he did it. What I have written in this chapter is therefore my interpretation, but as I have followed him closely, it's hopefully close enough!

There is another sunny story about this method's effectiveness – the Danish player Andreas Skytte Hagen, who also plays for Lunds ASK. Since 2006 he has been a serious chess player: playing, analysing openings, reading books and solving exercises. However, his progress was modest until he met Tikkanen at a tournament. Suddenly, Hagen increased from 2290, in March 2011, to 2454, four months later.

It turned out that both Tikkanen and Hagen had read the same book: Geoff Colvin's *Talent is overrated* (2010). Colvin proposes a tough training program with repeated exercises. Feedback should be given after each training session, which means using a timekeeping and points system. In that way, progress can be seen from day to day.

The difference between Tikkanen and Hagen was how they interpreted the word *repeated*. Tikkanen understood it correctly – *exactly* the same exercises should be solved several times. When Hagen started doing so, he was hugely successful!

Tikkanen worked for six to ten hours a day. For people with normal non-chess jobs, it would take many months to work through 1000 exercises. Therefore, I recommend that amateurs cut it down to “only” a few hundred. However, I think it’s important to have at least a few long sessions for the brain to get really into it.

When you see the exercises for the second time, you will remember some of the moves. That is both because your repertoire of standard moves has increased and because you remember the last time you tried to solve the exercise. A typical line of thought: “I spent twenty minutes on the train with this one. When I found the solution, the train had passed my destination. I should have seen the move earlier!”

But remembering the first move is not the same as the solution! You should calculate the variations until the end as if you haven’t seen the position before. That is important – the brain must understand the underlying tactics and be trained to calculate the variations to the end. Being able to quickly screen the position for possible defences is important to improve speed of calculation.

The tactics books Tikkanen and Hagen used were not the secret. Hagen says he uses any random book, and Tikkanen has even used quite bad ones. I repeated his training program, not with the same diligence, but still with clear results. The solutions at the end of the book I used are completely scribbled over with my corrections – many of the exercises were wrong and even unsolvable. For that reason, I will not recommend a specific book – any will work! But, you may ask, isn’t it better with instructive and carefully chosen exercises? I don’t think it makes much difference. It’s a bit like running intervals. If there is something wrong with your running style, you need instructions, but after that you simply need to do a lot of hard work.

However, I do prefer books where the solutions are given with extensive annotations. It’s disturbing if various logical defences are not covered or if there is no mention of promising tries that don’t quite work.

One chapter in *Move First, Think Later* is named “Trust your chess module”. Willy Hendriks argues that you subconsciously arrange the ideas you learn when you solve tactical exercises; you improve your pattern recognition ability without noticing it. This is in line with the discussion about verbal overshadowing from the introduction. Hendriks quotes GM Leonid Gofshtein from Amatzia Avni’s *The Grandmaster’s Mind*: “I used to play with my head, now I play more with my hand.” This captures the point quite well: Don’t try verbalizing what you have learned, let your automatic chess module take care of it. You have to trust that mechanism; it’s the teacher of your intuition.

A lot of calculation is about two things: speed and pattern recognition. But I hope I made it clear in Chapter 4 that some structure doesn’t hurt as well.

## Tactical motifs

Tikkanen started by carefully examining the tactical motifs – the subject of the next section. The exercises were sorted by motif in the first books he used. Much is gained if you automatically know the possible defences against a pin, to take one example. However, during a game there are no hints that tell if there is a special motif available. So the next natural step is to mix the motifs.

How much time should you spend practising the motifs? The best and only answer I can give is – until you feel that you know them well enough.

### Tactical exercises

When it comes to solving tactical exercises, you should remember that you are not only practising your tactical ability, but also concentration, time management and decision making.

After having set up the pieces and looked at the position for some minutes, it's possible to take a coffee break and continue much later on. During a game, it's not. And since the training situation should be made similar to a game, I think there are a few useful principles:

#### **Always choose a move**

You don't have to solve every exercise, but if you don't find the solution, you still have to choose a move to play; just as in a game. Furthermore, the exercises must be solved in order, without moving back and forth between them.

#### **Take responsibility for the move**

Often, the tactical motif is spotted quickly, especially if you have seen the position before. But as written above, that is not the same thing as the solution. You should check the variations like in a game. And try to avoid the Process of Elimination, which unfortunately works quite well when you know there is a solution.

You have no reason to blame yourself if you don't find the correct move, but you are to blame if you found it but didn't bother to check the variations.

#### **Use a chess clock**

Give yourself a limited amount of time. This is important; it prevents you just enjoying yourself instead of focusing!

The normal way is to solve as many exercises as you can manage in a fixed time. Another way, which has additional educational gains, is to decide upon a fixed time for a number of exercises. If you solve the first exercise quite fast, you get more time for the next, and vice versa. Thus, you have to take responsibility for how much time to spend on each exercise. If you don't find the solution in one of them, at some point you have to choose a reasonable move to save time for the following exercises.

When the time runs out, you must have chosen a move in all of the exercises. Otherwise, you lose on time and should give yourself zero points in all of them!

#### **Award yourself points**

Points, ratings and records are rewarding, and motivate you to push yourself to the maximum. Tikkanen and Hagen tried solving the exercises faster every time they repeated them. Hagen had

a daily one-hour session and gave himself one point for each exercise he solved, and deducted five points when he failed. And he didn't allow himself to move on to a new section of exercises until he had scored highly enough!

In fact I like a modified points system better:

- The first mistake is not having any points deductions – you have to avoid any tendency to become a perfectionist.
- If you don't find the solution, you should only get two points deducted.
- However, if you fail because of carelessness, missing a possible defence or not calculating the variations to the end, you should get a five points deduction.

However, I think it makes even more sense to avoid spending too much energy calculating the points! When I used the Woodpecker Method for the second time, I had four daily one-hour sessions with a short break in-between, and simply tried to solve as many exercises as possible in each session.

In a way, the points system was a bluff, since the main component to success was to be “lucky” and get simple exercises. However, the points system was enough to trick my brain into believing it had to use every second wisely during the session.

The conclusion is that you should make up your own points system. Anything that can make you work harder has value.

### **Exercises, not studies**

The calculations you have to make during a game are often quite simple and seldom study-like. It should not be harder when practising. In addition, it's tempting to start thinking about something else if the exercise is too difficult.

### **No chatting**

It's very nice to solve exercises with friends, but there is a risk that focus will be lost. When one exercise is finished, I want to start on the next one, without listening to an explanation of why one of us didn't find the solution.

By now, it's time to make a summary of The Woodpecker Method.

- 1) Study all the tactical motifs, and solve thematic exercises, until you feel that you know them well enough.
- 2) Choose a number of tactical exercises, from 100-200 for the normal amateur, to 1000 for the serious professional. Solve them intensively and compete with yourself, by recording the time and awarding points.
- 3) Take a break for at least a day but not more than a couple of weeks.
- 4) Use the same set of tactical exercises and try to solve them faster. Tikkanen used fifty percent less time for the second round.

5) Continue until you think you are fast enough. Tikkannen stopped when he managed to solve all the exercises in less than a day, but that meant a whole day!

6) If the program has whetted your appetite, choose a new set of exercises.

Humans are creatures of habit, and need to enjoy what they are doing. Hence it's important to create good habits. The brain usually puts up some resistance against solving exercises, as it would against any demanding activity, but after a few days of persistence, it may already become an addiction!

### **Other forms of tactical training**

Working with the Woodpecker method is like running in a hamster wheel, so other forms of tactical training are not really necessary. But for some, varying is an end in itself.

Playing blindfold is good practice for visualization. On the other hand, I believe less in going through games blindfold. When you play, you make half of the moves yourself and thus give both your own and your opponent's moves meaning. It makes it easier to visualize and remember. When playing through games, the same meaning becomes a bit artificial; you only need to remember vaguely where the pieces are placed.

If blindfold sounds difficult, it is possible to start with a more moderate goal. Jesper Hall recommends not moving the pieces when analysing games with friends.

For many months, I started every day with 45 minutes on chess.com, one of the Tactical Trainers that's available on the net. These programs comply with most of the requirements above: you have to choose a move, there is a clock with a limited time, you have to find all the moves to the end, your performance is measured with a rating, no exercise is impossible, and the website doesn't chat with you.

But is a two-dimensional screen really similar to a real game? No, but on the other hand it saves a lot of time not having to set up the pieces. It's the same as solving directly from the diagrams in a book. If you don't experience problems, then go ahead.

However, there is one big difference to the Woodpecker's Method: the same exercises are not solved again. And remember that Hagen improved only when he started doing that.

Hagen also thinks that the exercises on chess.com are too difficult. He likes the idea of a database with tactical exercises, though. Today's players already have an advantage over the pre-computer generation, but it will be nothing compared to the day a big tactical database appears. The database will automatically analyse your solutions and give you new exercises on the themes where you are weak. When children have grown up with such a database, they will become tactical monsters. At least this is what Hagen thinks.

### **Tactical motifs**

One good book that covers tactical motifs in detail is *Understanding Chess Tactics* (2007) by Martin Weteschnik. It was one of the first books that Tikkannen read.

It's possible to play a smothered mate without knowing it in advance, and no gain in itself to knowing the name. However, there are reasons to study the tactical motifs. It is simply easier to calculate variations involving a pin, when you already know the standard possible defences.

There are many ways to categorize the tactical motifs. I think that most ways will work equally well, but I have chosen the one that strikes me as most logical. The first division is between threats, double threats and other motifs.

Before presenting each of the tactical motifs, I have included a block of exercises. You have to work to earn something! I also make it a bit harder by making sure there isn't a clear-cut solution in every exercise, thus making it impossible to use the Process of Elimination.

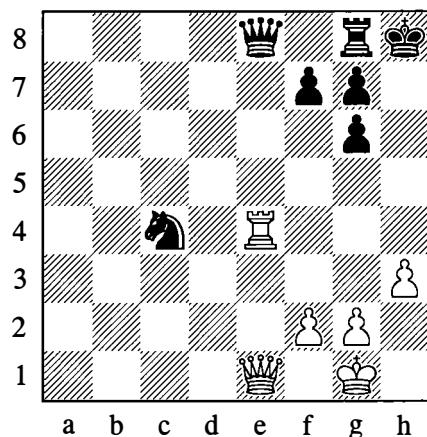
I have also proposed a time limit for the exercises. It's set for a player with Elo of about 2300, with the idea that it should be quite stressful! So feel free to adjust as appropriate to your own level.

The tactical motifs only need to be carefully studied once. However, it's worthwhile to occasionally think about them when solving exercises, or examining tactical mistakes from your games.

### Threats

A *threat* is dangerous if the target is undefended or of a higher value than the attacker. Not only pieces, but also squares may be possible targets. However, undefended pieces are by far the most common cause of tactical combinations, so keep an extra eye on them!

### Smith 2012



White threatens the queen on e8 – obviously it's higher valued than the rook. He also threatens the undefended knight on c4 and the h4-square, giving mate.

1...  $\mathbb{Q}d8=$

The queen and the king were the most important threats to defend against; there is no way to defend against all three threats.

There are five ways of defending against a threat:

- Capturing the attacker
- Moving the threatened piece
- Defending the threatened piece or square
- Putting a piece in between
- Making a stronger counter-threat

Possible defences are the main theme in the following five examples. The first is a classical game.

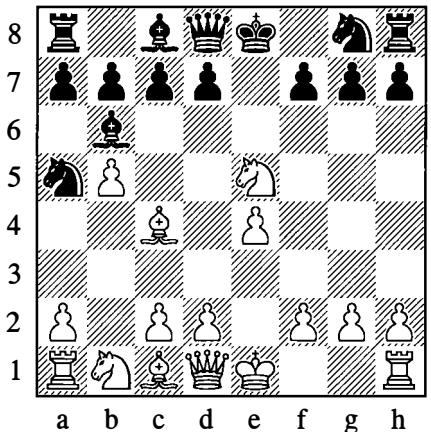
### Wilhelm Steinitz – Serafino Dubois

London (2) 1862

1.e4 e5 2. $\mathbb{Q}f3$   $\mathbb{Q}c6$  3. $\mathbb{Q}c4$   $\mathbb{Q}c5$  4.b4  $\mathbb{Q}b6$ ?

A pretty good way of countering the Evans Gambit. Declining the gambit like this actually means that Black gambits a pawn himself.

### 5.b5 ♜a5 6.♗xe5



White threatens the f7-pawn, but he has a lot of loose pieces: the rook on a1, the pawn on f2, the bishop on c4 and the knight on e5. What is Black's best move?

There are a lot of concrete variations to calculate, like:

- 6...♝xf2† 7.♝xf2 ♜f6† 8.♝f3 ♜xe5 9.♝xf7†
- 6...♜f6 7.♝xf7† ♜f8 8.d4 d6 9.♝xg8 dxe5
- 6...♝d4 7.♝xf7 ♜f6 8.♝e2 ♜xa1 9.♝xh8
- 6...♝xc4 7.♝xc4 ♜xf2† 8.♝xf2 ♜f6† 9.♝f3
- ♜d4† 10.♝e3 ♜xa1 11.♝c3

But before doing that, it's clever to look for candidate moves.

### 6...♝h6!!

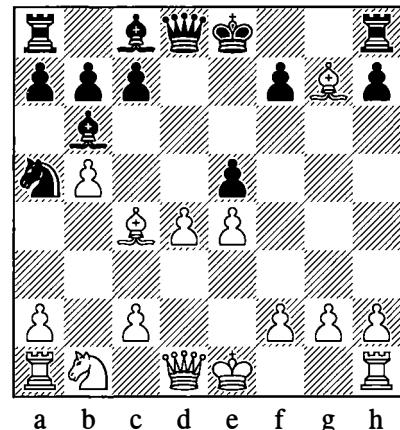
It may seem logical to start calculating a candidate move other than the game move, since the others seem more direct. However, you will notice that it's not easy to find something good. So I think it's easier to examine 6...♝h6!! if you have already looked for candidate moves before starting to calculate.

Defending f7 with the knight is Black's best move. White has no satisfactory defence against the triple threat: ...♝d4, ...d7-d6 and ...♜f6.

### 7.d4

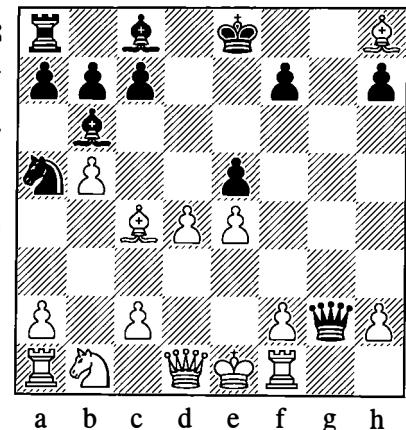
7.♝e2 ♜d4 8.♝c4! was played by Jonny Hector against Andreas Skytte Hagen in January 2012. The engine prefers Black slightly but on the other hand, Hector always wins with the Evans Gambit.

### 7...d6 8.♝xh6 dxe5 9.♝xg7



White is a pawn up and Black doesn't have time to capture on c4 since the rook on h8 is hanging. There is a simple move available, but instead Dubois played in the old romantic style.

### 9...♜g5? 10.♝xh8 ♜g2 11.♝f1



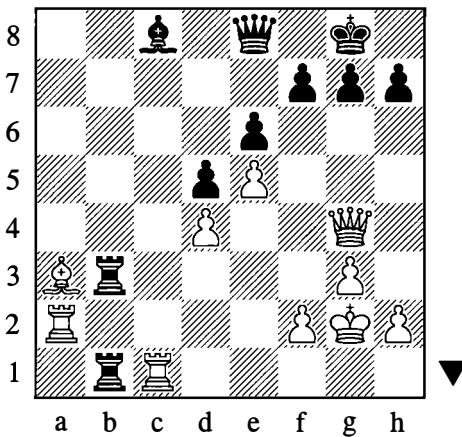
White is better, but the game ended in a draw.

The game above was played in the second game of a match. Two games later, Dubois improved with 9... $\mathbb{E}g8$  10. $\mathbb{Q}xf7\#$   $\mathbb{Q}xf7$  and won the game. After 11. $\mathbb{Q}xe5$   $\mathbb{Q}c4$  12. $\mathbb{W}h5\#$   $\mathbb{Q}f8$  13. $\mathbb{W}f3\#$   $\mathbb{Q}e8$ , White's attack is starting to fizzle out. In his fourth game with Black, Dubois strangely reverted to 9... $\mathbb{W}g5?$  and lost. Steinitz won the match  $5\frac{1}{2}$ - $3\frac{1}{2}$  and, according to some sources, this was what encouraged Steinitz to go for a career as chess player.

A move like 6...  $\mathfrak{Q}h6!!$  is very easy to overlook unless you consciously look for candidate moves. At the same time, it's not a difficult move, since it simply defends against the threat.

It is usually quite easy to calculate a simple series of exchanges. However, it can be tricky when there are possibilities for desperado sacrifices.

Smith 2012



26...♝xa3!

Black removes the defender of White's c1-rook, but it seems White can defend with a desperado sacrifice.

27.  $\mathbb{Q}xc8$

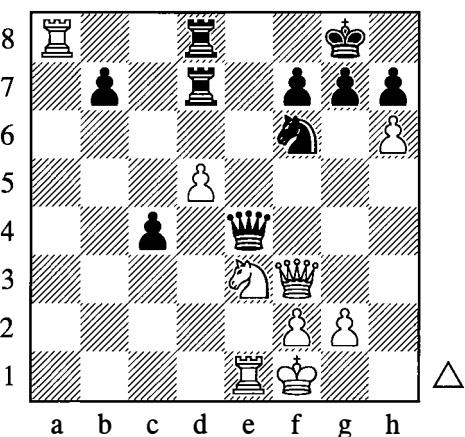
However, Black gets the last word with another desperado.

27... $\mathbb{Q}xg3\#!$  28.hxg3  $\mathbb{W}xc8$

Black has a healthy extra pawn.

Generally, the number of attackers needs to be higher than the number of defenders, but it's not always so simple to see which pieces are attacking a square.

Smith 2012



The position originally comes from the game Jonny Hector – Tiger Hillarp, Malmö 2010, but I have changed a few things.

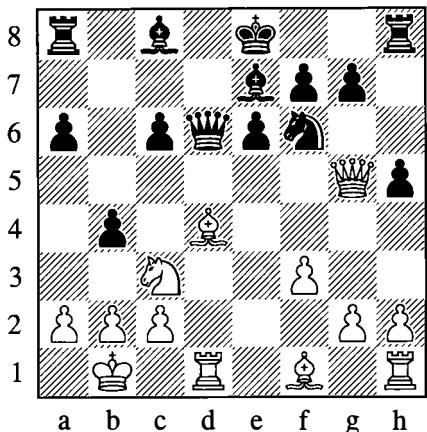
28.  $\mathbb{Q}g4!$   $\mathbb{W}xg4$

Instead 28... $\mathbb{W}xf3$  29. $\mathbb{Q}xf6\uparrow$  is similar to the mainline. Or 28... $\mathbb{W}xe1\uparrow$  29. $\mathbb{Q}xe1$   $\mathbb{R}xa8$  30. $\mathbb{Q}xf6\uparrow$  and Black loses one of his rooks.

29.  $\mathbb{W}xg4$   $\mathfrak{Q}xg4$  30.  $\mathbb{H}e8\#$

The rook is defended by the other rook by X-Ray.

It's nice to defend against a threat with a counter-threat. Quite often, that's not even considered!

**Smith 2010**

White to move. He is a pawn down and the knight on c3 is threatened. Does he have to move it?

**15.  $\mathbb{W}xg7!$** 

Instead of moving the threatened piece on c3, White captures a pawn with a counter-threat. Instead 15.  $\mathbb{Q}xf6$   $\mathbb{B}xf6$  doesn't lead anywhere.

**15...  $\mathbb{B}g8$** 

15...  $\mathbb{B}h7$  is met in the same way.

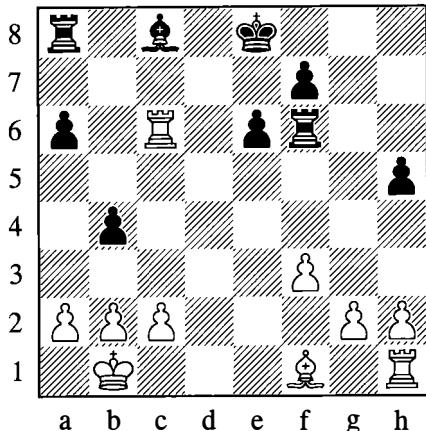
**16.  $\mathbb{Q}e4!$** 

A new counter-threat. 16.  $\mathbb{Q}xf6$   $\mathbb{B}xg7$  17.  $\mathbb{B}xd6$   $\mathbb{Q}xf6$  18.  $\mathbb{Q}e4$   $\mathbb{Q}e7$  19.  $\mathbb{B}xc6$  also gives White an extra pawn, but leaves Black with the bishop pair and good compensation.

With the game move, White wins a pawn without allowing much compensation.

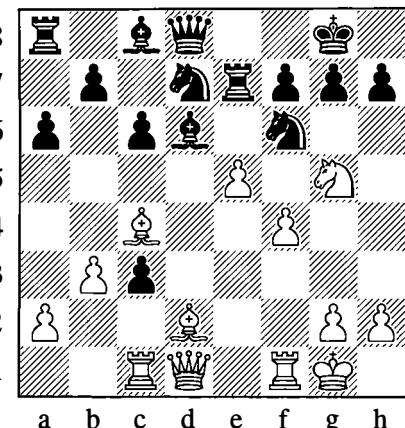
**16...  $\mathbb{B}xg7$  17.  $\mathbb{Q}xd6\#$   $\mathbb{Q}xd6$** 

17...  $\mathbb{Q}f8$  18.  $\mathbb{Q}xc8$   $\mathbb{B}xc8$  19.  $\mathbb{Q}xa6$  is no better.

**18.  $\mathbb{Q}xf6$   $\mathbb{B}g6$  19.  $\mathbb{B}xd6$   $\mathbb{B}xf6$  20.  $\mathbb{B}xc6$** 

White is a healthy pawn up.

In this case, White's second counter-threat saved the knight on c3 without spending a tempo. In other cases, the counter-threat might create an escape square for the king, avoiding mate. The aesthetic effect is even greater when not recapturing a piece, like in my favourite exercise.

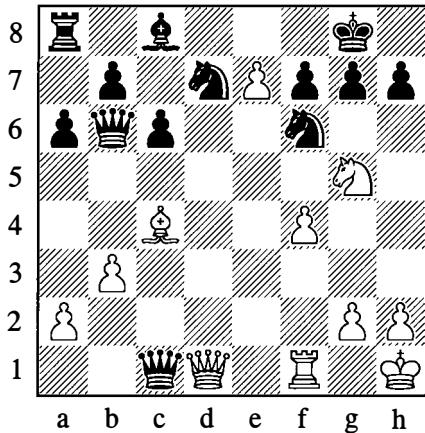
**Smith 2009**

White is currently a piece and a pawn down, but there are many pieces hanging.

**16.  $\mathbb{exd6}$   $\mathbb{cxd2}$  17.  $\mathbb{dxe7}$** 

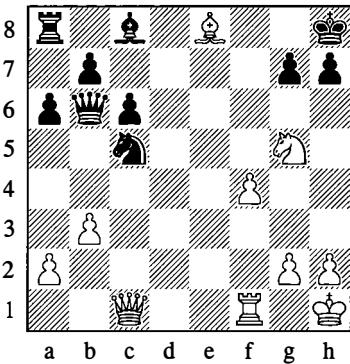
If Black takes back, he is an exchange down. Instead, he moves the threatened queen with check.

17... $\mathbb{W}b6\#$  18. $\mathbb{Q}h1$   $dxc1=\mathbb{W}$



19. $\mathbb{W}h5!!$

White can also win back the sacrificed piece with: 19. $\mathbb{W}xc1$   $\mathbb{Q}c5$  20. $\mathbb{Q}xf7\#$   $\mathbb{Q}h8$  21. $e8=\mathbb{W}\#$   $\mathbb{Q}xe8$  22. $\mathbb{Q}xe8$



White threatens to attack the black king with either  $\mathbb{Q}g5-f7$  or  $\mathbb{W}c2xh7$ . After 22... $\mathbb{Q}f5$  23. $\mathbb{W}c4!$   $h6$  24. $\mathbb{W}f7!$  Black can't defend against  $\mathbb{W}f8$ . This wins for White, but is not as clear-cut as 19. $\mathbb{W}h5!!$ .

After 19. $\mathbb{W}h5!!$  the knight on f6 is overloaded. There is only one way to defend f7.

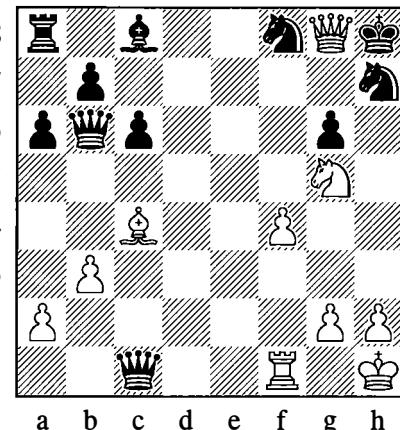
19... $\mathbb{g}6$  20. $\mathbb{W}xh7\#$

The queen hasn't finished just yet.

20... $\mathbb{Q}xh7$  21. $e8=\mathbb{W}\#$

The queen immediately rises from the dead.

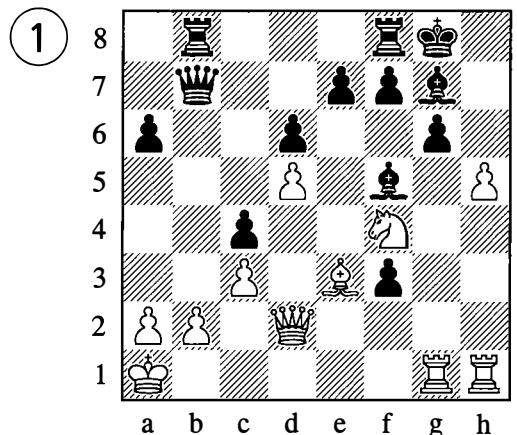
21... $\mathbb{Q}df8$  22. $\mathbb{W}xf7\#$   $\mathbb{Q}h8$  23. $\mathbb{W}g8\#$



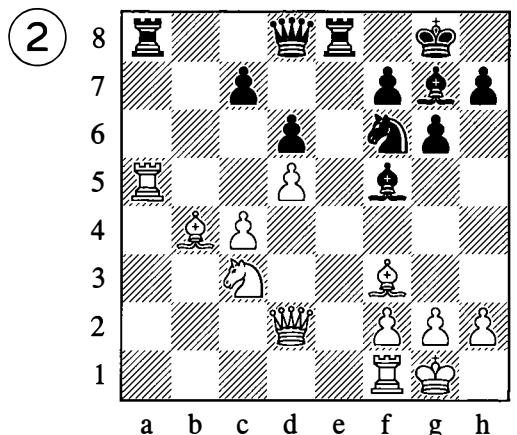
This example actually turned up when analysing an opening. For three years, I have dreamed of playing it, but haven't been close yet. Any volunteers for the Black side?

The following exercises are examples of five different motifs that belong to 'the threat'. Give yourself 30 minutes for each of the pages (six exercises).

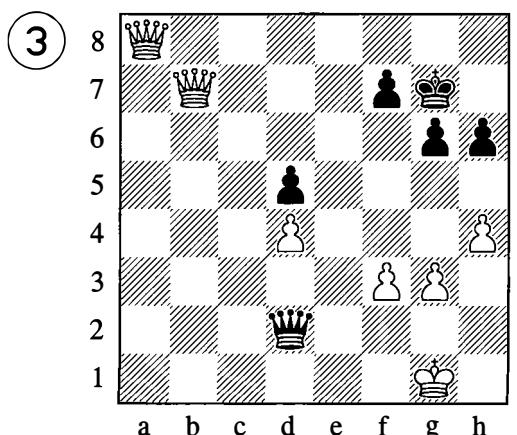
Nilsson – Ernst, Västerås 2011



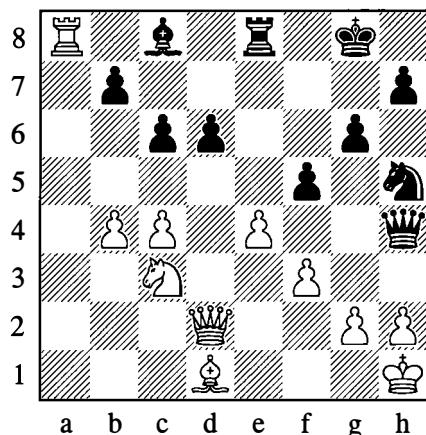
Smith – Berg, Göteborg 2011



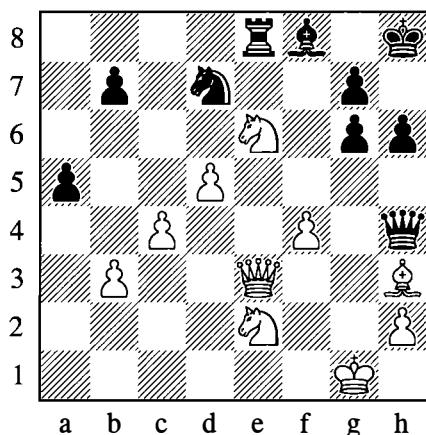
Lafuente – Grandelius, Khanty-Mansiysk 2010



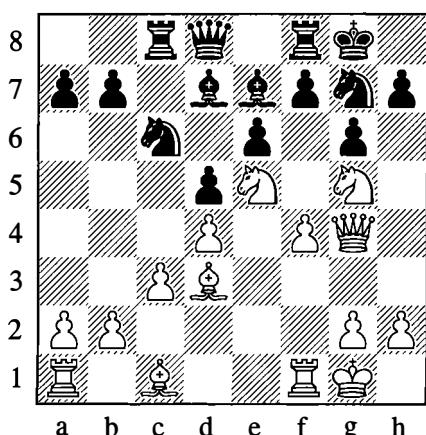
Smith – Shimanov, Stockholm 2010



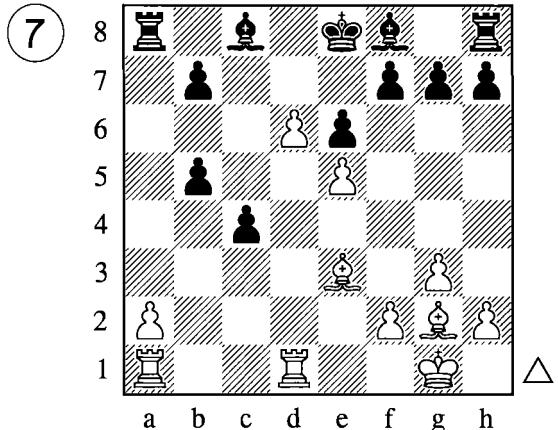
Arjun – Leer-Salvesen, Stockholm 2011



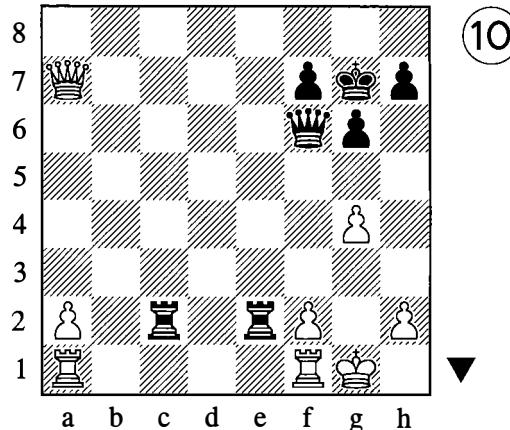
Ottosson – Holmgren, Lund 2010



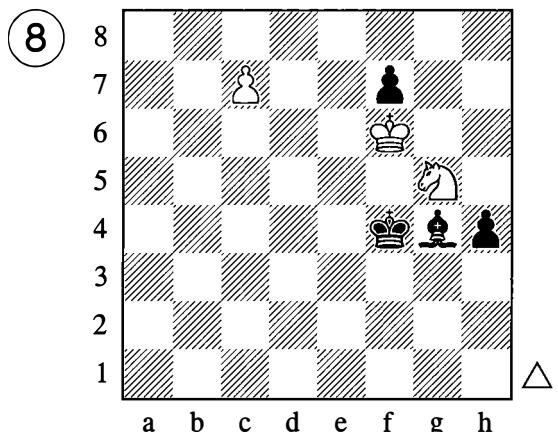
Smith – Szumniak, Lund 2011



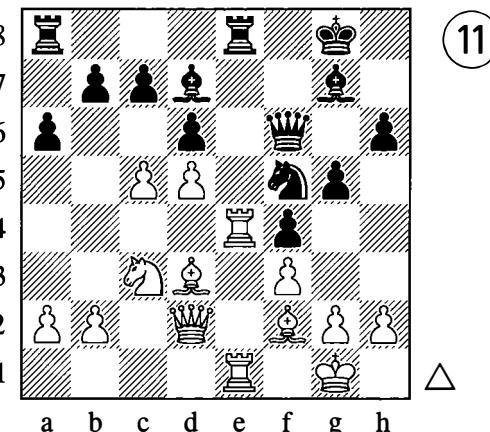
Smith – Ahlander, Laholm 2010



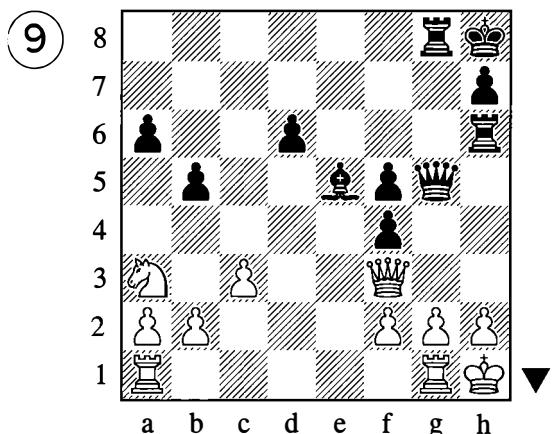
Kockum – Jonsson, Västerås 2011



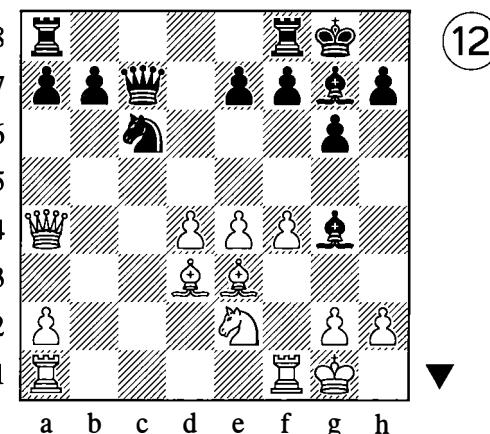
Ahlander – Holst, Laholm 2010



Berczes – Smith, Stockholm 2007



Prohaszka – Valsecchi, Herceg Novi 2008



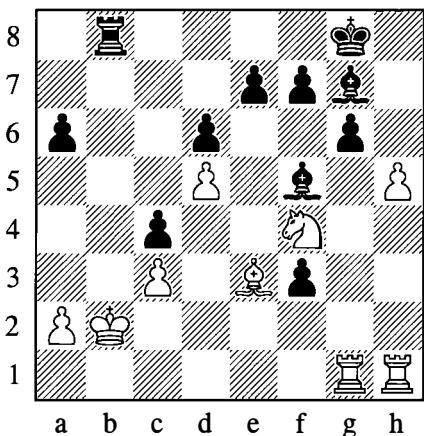
## 1) Shutting in

### 1. Sebastian Nilsson – Thomas Ernst

Swedish Team Championship, Västerås  
13th March 2011

Black to move. White has sacrificed two pawns to attack along the h-file, but Black is first.

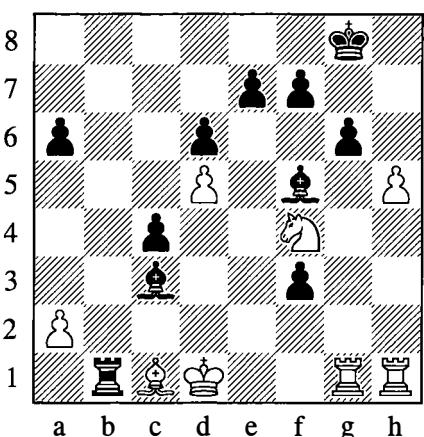
23... $\mathbb{W}xb2\#$ ! 24. $\mathbb{W}xb2$   $\mathbb{E}xb2$  25. $\mathbb{Q}xb2$   $\mathbb{E}b8\#$



26. $\mathbb{Q}c1$

26. $\mathbb{Q}a3$   $\mathbb{Q}xc3$  and Black has several threats, among them 27... $\mathbb{E}b5$  followed by mate, or 27... $\mathbb{Q}b4\#$  followed by 28. $\mathbb{Q}b2$   $\mathbb{Q}d2\#$  or 28. $\mathbb{Q}a4$   $\mathbb{Q}c2$  mate.

26... $\mathbb{Q}xc3$  27. $\mathbb{Q}d1$   $\mathbb{E}b1\#$  28. $\mathbb{Q}c1$



White's king and most of his pieces are practically stalemated, but it's not easy to see how Black should finish the game. There are several ways to win, but the key is to use the c-pawn.

The most straightforward line is 28... $\mathbb{Q}b2$  29. $\mathbb{Q}d2$   $\mathbb{Q}d4$ , which threatens 30... $c3\#$  31. $\mathbb{Q}d1$   $\mathbb{E}xc1\#$  32. $\mathbb{Q}xc1$   $\mathbb{Q}e3\#$  33. $\mathbb{Q}d1$   $c2\#$  34. $\mathbb{Q}e1$   $c1=\mathbb{W}\#$ . White can defend the e3-square with 30. $\mathbb{E}e1$  but is then defenceless after 30... $c3\#$  31. $\mathbb{Q}d1$   $\mathbb{Q}c5!$  when Black simply plans ... $\mathbb{Q}a3$ .

In the game, Ernst played 28... $\mathbb{Q}e5$ , which should also winning, but Nilsson miraculously managed to save a draw.

### 2. Axel Smith – Emanuel Berg

SS Manhem GM, Göteborg 15th August 2011

The position from the exercise is reached after 18. $\mathbb{E}a1xa5$ . In the game, I instead played 18. $\mathbb{Q}xa5$  but after 18... $\mathbb{Q}d7!$  I am more or less tactically lost. For example: 19. $\mathbb{Q}b4$   $\mathbb{E}xa1$  20. $\mathbb{E}xa1$   $\mathbb{W}b8!$  21. $\mathbb{Q}a5$   $\mathbb{Q}c5$  22. $\mathbb{Q}d1$   $\mathbb{W}b2!$  deflecting the queen.

18. $\mathbb{E}xa5$   $c5!$

Black wins. White can't save his bishop after 19. $dxc6$   $\mathbb{E}xa5$ , 19. $\mathbb{E}xa8$   $\mathbb{W}xa8$  or 19. $\mathbb{E}fa1$   $\mathbb{E}b8$ . In the first example, the king was shut in, even if it managed to escape in the end. In the next example, Black is a queen down, but there is also another form of shutting in.

### 3. Pablo Lafuente – Nils Grandelius

Khanty-Mansiysk Olympiad 28th September 2010

It's clear that Black is striving for a perpetual. The key is to see that  $\mathbb{Q}h3$  must be met with ... $\mathbb{W}f5\#$ .

63... $\mathbb{W}d1\#$  64. $\mathbb{Q}h2$   $\mathbb{W}c2\#$

The king can't escape. Actually, this was overlooked by the players and the rest of the Swedish team!

White's king was not completely shut in, but enough to save a draw.

## 2) Magnet

### 4. Axel Smith – Aleksandr Shimanov

Rilton Cup, Stockholm 31st December 2010

**24... ♜g3† 25. ♜g1 ♜xh2†!**

This is the magnet, attracting White's king.

**26. ♜xh2 ♜f1† 27. ♜g1 ♜xd2**

Black won a pawn.

Magnets often work together with knight forks.

## 3) Removing the Defender

There are many ways to remove the defender: capturing, deflecting or blocking. The following example contains some of them.

### 5. Bharat Arjun – Bjarte Leer-Salvesen

Rilton Cup, Stockholm 30th December 2011

White is an exchange down but has a strong knight on e6. However, he is also missing his dark-squared bishop, with most of the pawns on light squares. With just a normal move, Black's advantage would be beyond doubt, but it's also possible to decide the game at once.

**31... ♜c5! 32. ♜2d4 ♜f8!**

There is no defence against ... ♜xe6 followed by ... ♜f6 and ... ♜xd4. So Black will capture the knight on e6, which was needed as a defender of the pinned knight on d4.

### 6. Simon Ottosson – Peter Holmgren

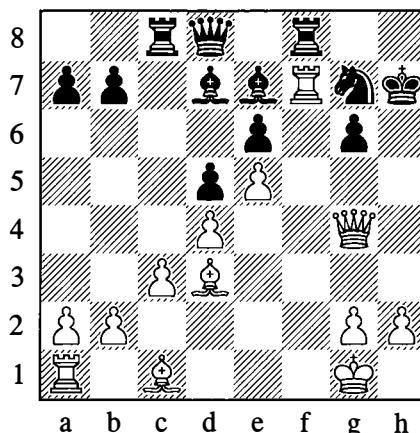
Swedish Championship, Lund 4th July 2010

**15. ♜xh7! ♜xe5**

15... ♜xh7 16. ♜xf7! ♜xf7 17. ♜xg6† ♜g8  
18. ♜h7† ♜f8 19. ♜h8#

**16. ♜xe5! ♜xh7 17. ♜xf7!**

The only move, removing the defender of the g6-pawn.



**17... ♜xf7 18. ♜xg6† ♜g8 19. ♜h7† ♜f8  
20. ♜h8 mate**

In the game, Black instead played 17... ♜g5, but was soon mated after: 18. ♜h5†! ♜g8 19. ♜xg7†! ♜xg7 20. ♜xg6† ♜h8 21. ♜h7#

White's strategy was simple: to remove the pawns that defended Black's king by simply sacrificing against them.

### 7. Axel Smith – Jedrzej Szumniak

Blindfold simul, Lund 19th November 2011

**20. ♜xb7!**

Deflecting Black's bishop from the defence of the d7-square.

20... $\mathbb{Q}xb7$  21.d7†  $\mathbb{Q}e7$  22. $\mathbb{Q}c5†$   $\mathbb{Q}d8$   
 23. $\mathbb{Q}b6†$   $\mathbb{Q}e7$  24.d8=mate†

White wins the exchange.

## 8. Anton Frisk Kockum – Mikael Jonsson

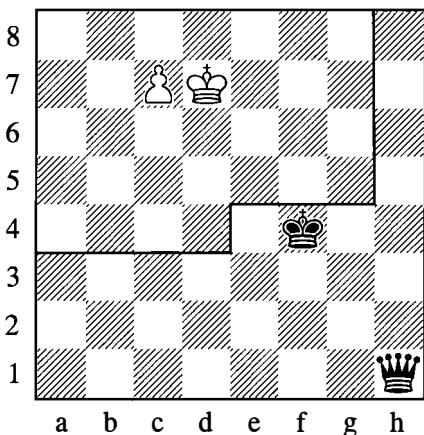
Swedish Team Championship, Västerås  
 13th March 2011

The strength of the bishop is clearly seen: at the same time as it hinders White from promoting, it also stops  $\mathbb{Q}g5-h3$ . White is in zugzwang, but my relative Kockum found a narrow escape.

50. $\mathbb{Q}xf7$  h3 51. $\mathbb{Q}g5!$

Threatening the pawn and also  $\mathbb{Q}e6$ , shutting out the bishop.

51...h2 52. $\mathbb{Q}e6†$   $\mathbb{Q}xe6!$  53. $\mathbb{Q}xe6$  h1=mate  
 54. $\mathbb{Q}d7!$

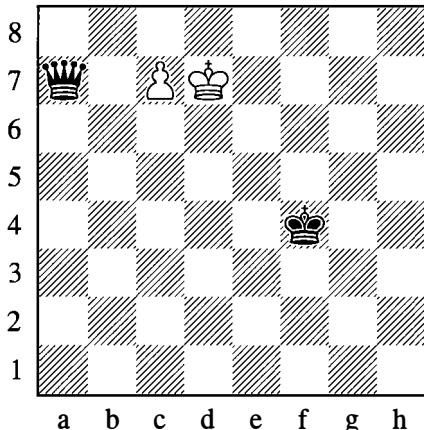


With the white king on d7, Black wins if his king stands within the line a4-d4-e5-g5-g8. Jonsson's king is just outside.

54... $\mathbb{W}h3†$  55. $\mathbb{Q}d8$   $\mathbb{W}d3†$  56. $\mathbb{Q}c8$

On the way to a8.

56... $\mathbb{W}b5$  57. $\mathbb{Q}d8$   $\mathbb{W}b6$  58. $\mathbb{Q}d7$   $\mathbb{W}a7$



59. $\mathbb{Q}c6!$

In the game, Kockum blundered with 59. $\mathbb{Q}d8?$   $\mathbb{Q}e5!$  and resigned due to 60.c8=mate  $\mathbb{Q}d6$  with unavoidable mate. Actually, we are not such close relatives, even though we have passion for chess in common: Kockum is my father's father's mother's mother's mother's mother's father's mother's son's son's daughter's daughter's son's son's son.

The following moves would be a logical finish to the game.

59... $\mathbb{W}a8†$  60. $\mathbb{Q}d7$   $\mathbb{W}d5†$  61. $\mathbb{Q}c8$   $\mathbb{Q}e5$   
 62. $\mathbb{Q}b8$   $\mathbb{W}b5†$  63. $\mathbb{Q}a7$   $\mathbb{W}c6$  64. $\mathbb{Q}b8$   $\mathbb{W}b6†$   
 65. $\mathbb{Q}a8$   $\mathbb{W}xc7$

With stalemate.

In this final example of removing the defender, White stopped Black's bishop from controlling c8 by blocking the diagonal with the knight.

## 4) Opening files, ranks or diagonals

### 9. Csaba Berczes – Axel Smith

Rilton Cup, Stockholm 3rd January 2007

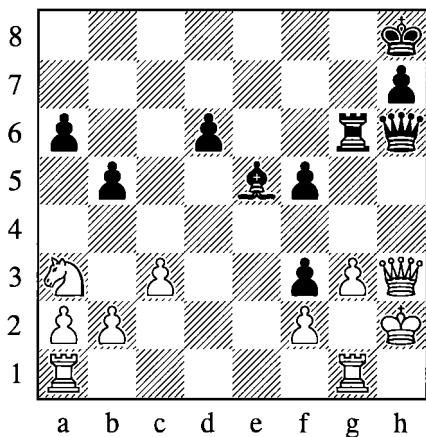
Black to move. In the game I played 27... $\mathbb{W}h4$ . The move was awarded an exclamation mark in the annotations in *Tidskrift för Schack*, and

I won after 102 moves. However, there was something much better: a forced mate!

**27... $\mathbb{B}xh2\#$  28. $\mathbb{Q}xh2$   $\mathbb{W}h6\#$  29. $\mathbb{W}h3 f3\#$**

The pawn move opens up the bishop and forces White to play g2-g3.

**30.g3  $\mathbb{B}g6!$**



The white queen is no longer defended by a pawn on g2. There is no defence against mate in two. (30... $\mathbb{W}h3\#$  31. $\mathbb{Q}xh3$   $\mathbb{B}g6$  32. $\mathbb{Q}h4$   $\mathbb{Q}f6\#$  33. $\mathbb{Q}h5$   $\mathbb{Q}g7$  also mates.)

## 10. Axel Smith – Björn Ahlander

Deltalift Open, Laholm 14th May 2010

**30... $\mathbb{W}f4!$**

White can't defend both f2 and g4 with the queen. I duly resigned, since I wasn't willing to be mated.

**31.h3  $\mathbb{W}g3\#$ !**

Opening the second rank.

**32.fxg3  $\mathbb{B}g2\#$  33. $\mathbb{Q}h1$   $\mathbb{B}h2\#$  34. $\mathbb{Q}g1$   $\mathbb{B}cg2\#$**

The pawn formation in front of one of the kings was destroyed in these two previous examples. In the following game, the theme is instead clearing a square.

## 11. Björn Ahlander – Conny Holst

Deltalift Open, Laholm 14th May 2010

**20.c6!**

The point is to clear the d5-square for the knight.

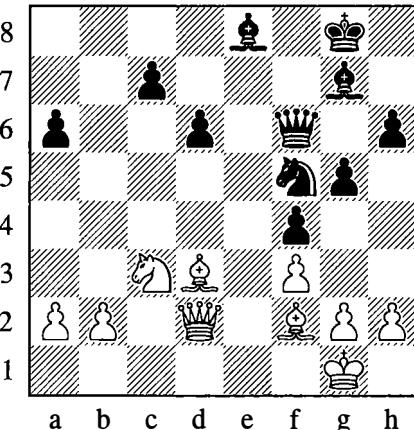
**20... $\mathbb{B}xc6$**

After 20... $\mathbb{B}xe4$  White recaptures – with either pawn or knight – with a double threat.

**21.dxc6  $\mathbb{Q}xc6$  22. $\mathbb{B}xe8\#$**

22. $\mathbb{Q}d5$  was played in the game. It allowed Black to sacrifice the exchange with 22... $\mathbb{Q}xd5$  but even so Ahlander won without any problems.

**22... $\mathbb{B}xe8$  23. $\mathbb{B}xe8\#$   $\mathbb{Q}xe8$**



**24. $\mathbb{Q}d5$   $\mathbb{W}f7$  25. $\mathbb{Q}xf5$   $\mathbb{W}xf5$  26. $\mathbb{Q}e7\#$**

Winning the queen.

## 5) Gain of Tempo

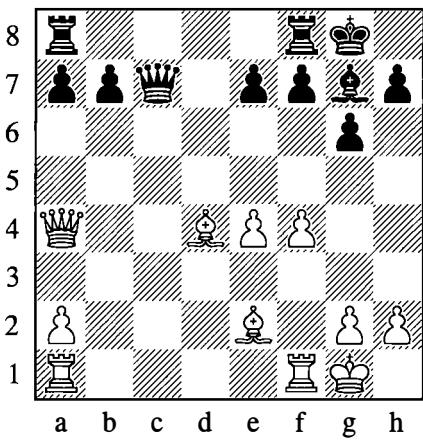
In the previous example, White cleared the d5-square with gain of tempo and followed up with threats on every move. There are also other ways to gain a tempo.

## 12. Peter Prohaszka – Alessio Valsecchi

European Youth Championship, Herceg Novi  
17th September 2008

Four years later, I realized that the pgn-file in *ChessBase Magazine* is wrong –  $\mathbb{Q}ab1$  and ... $\mathbb{Q}ac8$  had been played earlier in the game. However, it doesn't make the solution less beautiful.

**15... $\mathbb{Q}xe2!$  16. $\mathbb{Q}xe2$   $\mathbb{Q}xd4!$  17. $\mathbb{Q}xd4$**



**17... $\mathbb{Q}c6!$**

The idea is to take in-between on d4, when White exchanges: 18. $\mathbb{Q}xc6$   $\mathbb{Q}xd4\#$  The check wins the necessary tempo. 18. $\mathbb{Q}b5$  is met by 18... $\mathbb{Q}xd4\#$  19. $\mathbb{Q}xd4$   $\mathbb{Q}xb5$ .

Instead, White can move the queen and continue to defend the bishop. However, both possibilities lead to devastating pins:

a) 18. $\mathbb{Q}b4$   $\mathbb{Q}xe4$  when the bishop on e2 is en prise.

b) 18. $\mathbb{Q}d1$   $\mathbb{Q}fd8$  19.e5  $\mathbb{Q}e4$  White can win back the pawn with 20. $\mathbb{Q}f3$   $\mathbb{Q}xd4\#$  21. $\mathbb{Q}xd4$   $\mathbb{Q}xd4$  22. $\mathbb{Q}xb7$ . Black is only slightly better. One possibility is 22... $\mathbb{Q}b8$  23. $\mathbb{Q}ab1$  g5 and White will get a weak pawn on either f4 or g5. Intermediate checks are the most usual gain of tempo, since the opponent must react.

### Double threat

Against a threat, there were five ways to defend. With a double threat, only two of these ways work – capturing the attacking piece or making a stronger counter-threat. However, there are also two additional defences:

a) Moving one of the pieces and putting it in-between the attacker and the second target. It only works if the interrupting piece moves to a defended square and is worth less than the attacker.

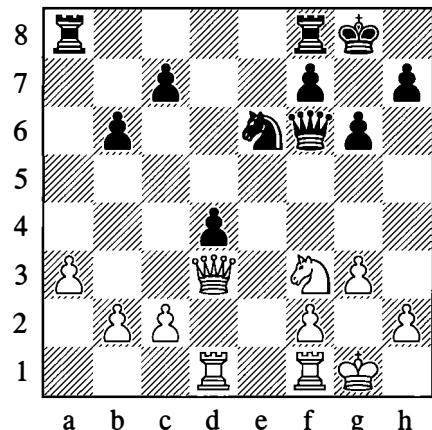
b) Moving one of the pieces while defending the second. It works if the second target is worth less than the attacker.

Against double threats, there is a specific type of counter-threat that's often overlooked. I'll give a few exercises on the theme before I reveal what it is. When you have solved the first, the others get easier.

Give yourself 30 minutes for the six exercises.

Smith 2012

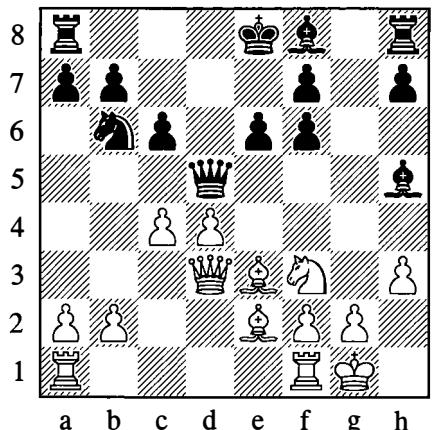
(13)



Frisk – Nadar, Pardubice 2010



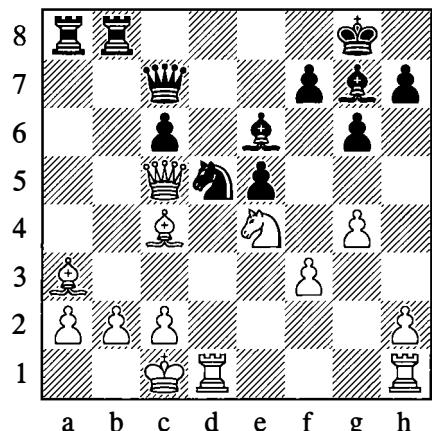
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Smith 2012



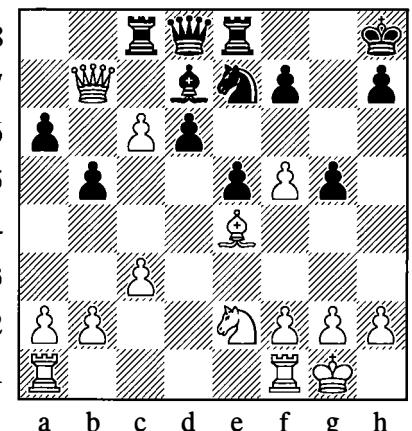
(14)



Smith – Stocek, Pardubice 2011



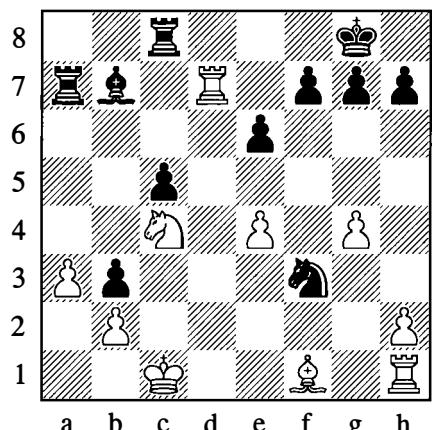
(17)



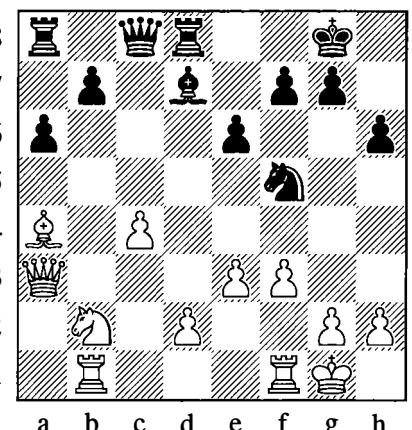
Smith 2012



(15)



(18)



a b c d e f g h



## Solutions

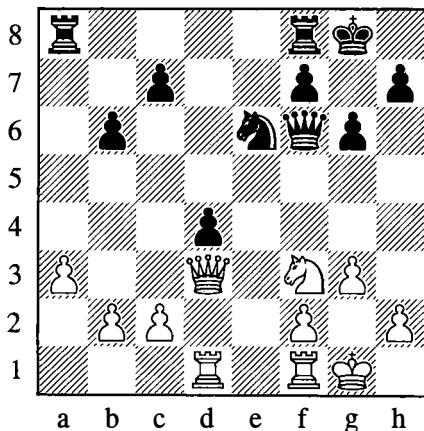
By now, you might have noticed the motif. It doesn't have an English name, so I will call it *the lifeline*.

The lifeline works according to the following scheme:

- 1) The opponent threatens two pieces, either directly with a fork or indirectly with a pin.
- 2) The higher-valued threatened piece offers an exchange against an undefended piece of the opponent.
- 3) When the opponent exchanges, the second threatened piece recaptures and is pulled to safety.

A real lifeline works in the same way, as a last resource to save people from danger.

### 13. Smith 2012



**20.  $\mathbb{Q}xd4!$   $\mathbb{R}fd8$  21.  $\mathbb{W}f3$**

A lifeline, which breaks the pin, offers the exchange of queens and saves the knight. In the end, White can enjoy his extra pawn.

### 14. Ellinor Frisk – Nadar Denesh

Czech Open (var), Pardubice 30th July 2010

**22.  $\mathbb{Q}xd5$**

22.  $\mathbb{Q}xd5$   $\mathbb{R}xa3!$  23.  $bxa3$   $\mathbb{Q}f8$  gives some counterplay.

**22...  $\mathbb{Q}xd5$  23.  $\mathbb{E}xd5$   $\mathbb{E}b5$**

A strong skewer?

**24.  $\mathbb{W}d6!$**

No, White pulls the rook to safety and remains a piece up.

### 15. Axel Smith – Jiri Stocek

Czech Open (var), Pardubice 28th July 2010

He is a pawn up but has some problems with the pin on the seventh rank. Is it possible to solve it tactically?

**30...  $\mathbb{E}ca8$**

Black threatens to move the bishop.

**31.  $\mathbb{Q}b6$**

Threatening the a8-rook. If it moves, the pin has come back.

**31...  $\mathbb{Q}xe4!$**

The lifeline! By offering the exchange of rooks, the attacked rook on a8 is pulled out of the threat. Black is clearly better.

### 16. Sam Kassani – Johan Henriksson

Rilton Cup, Stockholm 1st January 2012

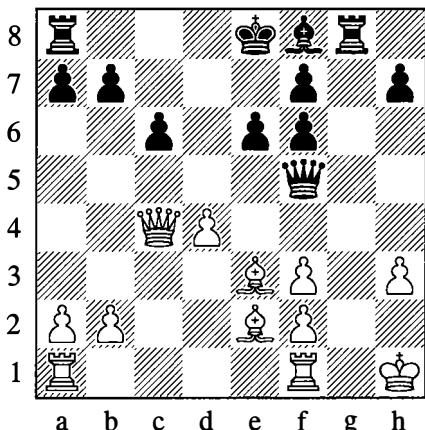
**12...  $\mathbb{Q}xc4!$  13.  $\mathbb{W}xc4$   $\mathbb{Q}xf3$**

The point is to pull the bishop out of the threat after 14.  $\mathbb{W}xd5$   $\mathbb{Q}xd5$ . White's best option is to play on a pawn down. In the game, he instead tried the critical variation:

**14.gxf3 ♜g8† 15.♔h1**

15.♔h2 is met by 15...♜d6†.

**15...♛f5!**



There is no defence against Black's attack.

**16.♔h2 ♜d6† 17.f4 ♜xf4† 18.♕xf4 ♜xf4†**

**19.♔h1 ♜e4†**

White resigned, since mate is unstoppable:  
20.f3 ♜h4

### 17. Smith 2012

Black wants to take back his pawn on c6, but the one on a6 is also hanging. After 18...♝xc6 19.♛xa6, White is simply a pawn up, just as he is after 18...♜xf5 19.♛xf5 ♜xf5 20.♛xa6.

**18...♝xc6! 19.♛xc6 ♜xc6**

19...♝xc6 20.♛xf7 is another way to lose a pawn.

**20.f6 ♜c8!**

The lifeline saves Black's knight. However, White still has a critical try.

**21.♛a7 ♜c7**

Next move, the knight can safely jump away.

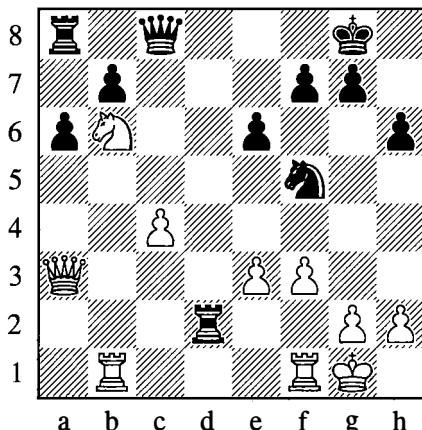
### 18. Smith 2012

Will this be a strategic fight between White's central pawns and Black's queenside pawns?

**42...♜xa4! 43.♝xa4 ♜xd2!**

No! Black takes a pawn, but is there any defence against the fork on b6?

**44.♝b6**



**44...♛f8!**

A well-known motif by now. The queen on a3 is undefended and Black gains time to save his rook on a8, either by moving or by recapturing on f8.

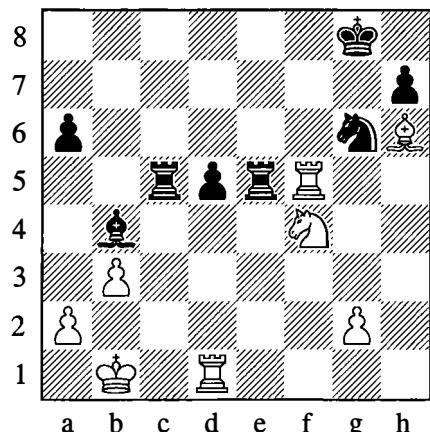
It's always worth looking for a lifeline! It's actually a common theme, when defending against double threats.

### Exercises

The following exercises are examples of three motifs that belong to the double threat. Give yourself 30 minutes for each of the pages (six exercises).

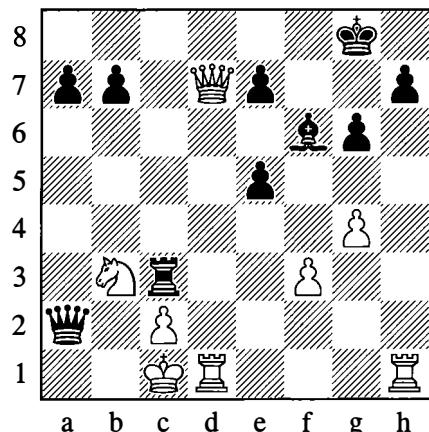
Smith – Rudolph, Lund 2011

19



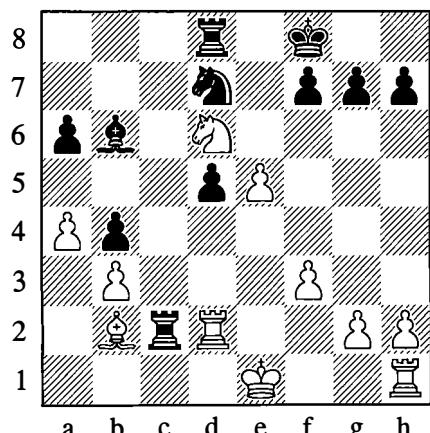
Tolnai

22



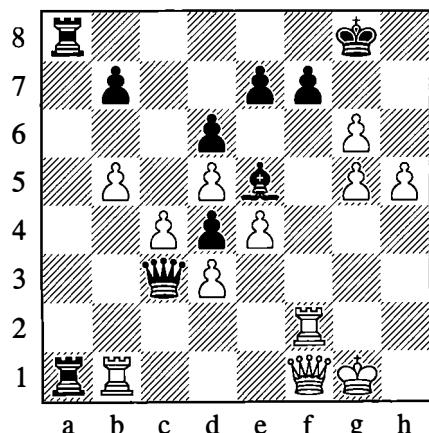
Berg – Smith, Stockholm 2010

20



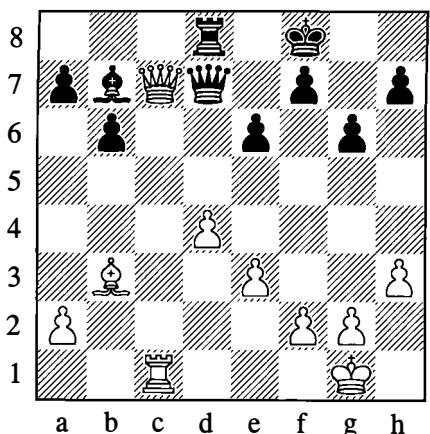
Smith 2012

23



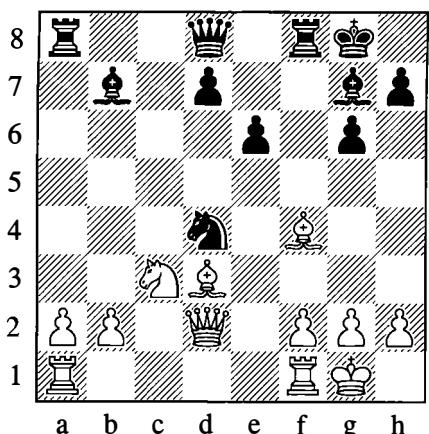
Gajewski – Smith, Stockholm 2012

21



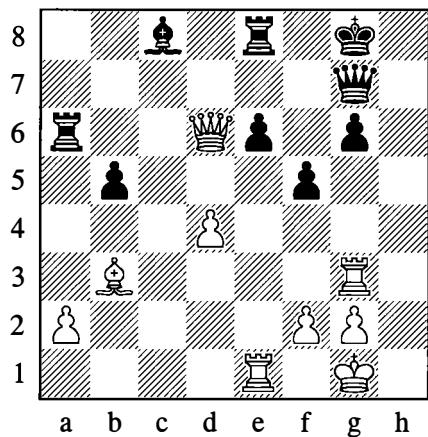
Grandelius 2011

24



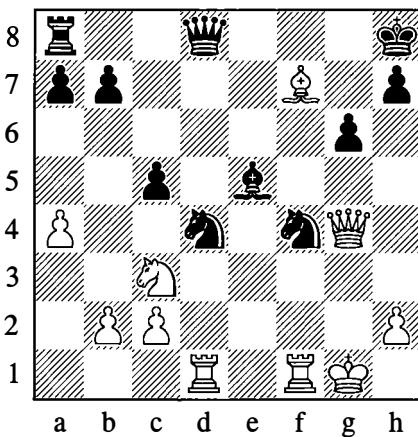
Hermansson – Malesevic, Västerås 2011

25



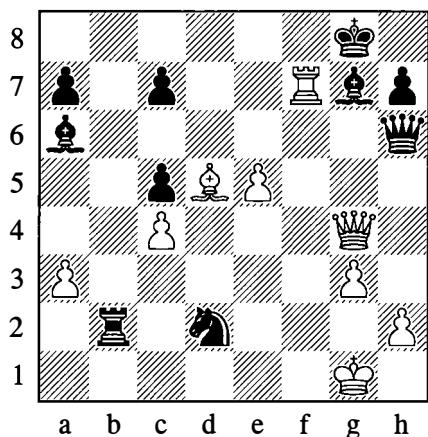
Lie – Grandelius, Wijk aan Zee 2010

28

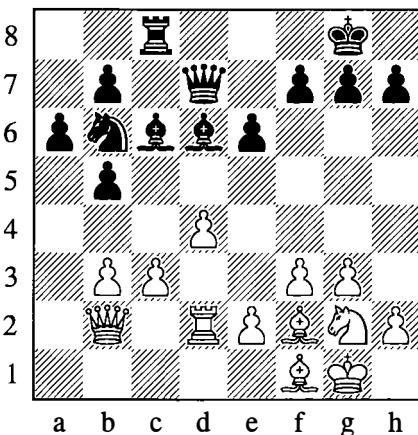


Petrosian – Grandelius, Sarajevo 2010

26

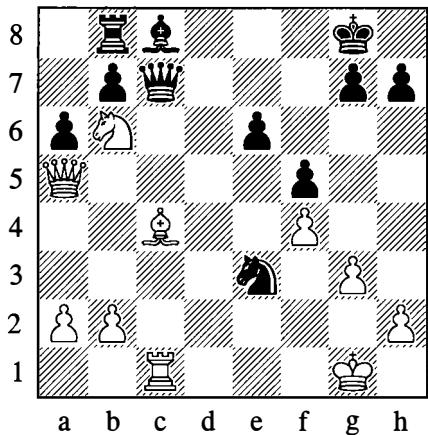


Tukhaev – Livner, Västerås 2011



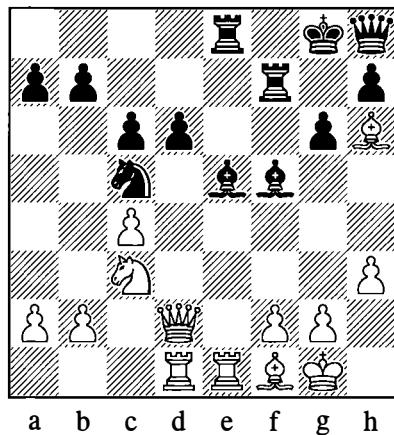
Smith 2012

27



Smith – Meszaros, Odense 2011

30



## 1) Fork

Undefended pieces are the most common target for tactical combinations, especially in the case of double threats.

### 19. Axel Smith – Justus Rudolph

Blindfold simul, Lund 19th November 2011

**31.♕xg6!**

White removes the defender of the rook on e5. I overlooked this move in a blindfold simul.

**31...♗xf5 32.♕e7†**

White wins a piece.

We saw a good old-fashioned knight fork. The next example gets a bit more complicated.

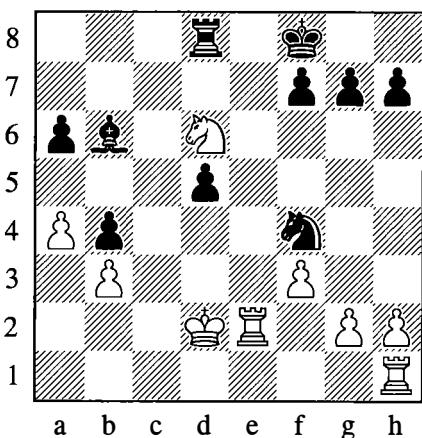
### 20. Emanuel Berg – Axel Smith

Rilton Cup, Stockholm 30th December 2010

**27...♗xb2! 28.♗xb2 ♜xe5**

The threats are ...♝d3† and ...♝xd6. However, White can move the rook with gain of tempo.

**29.♗e2 ♜d3† 30.♗d2 ♜f4**



A new double threat! Black will end up with an extra pawn.

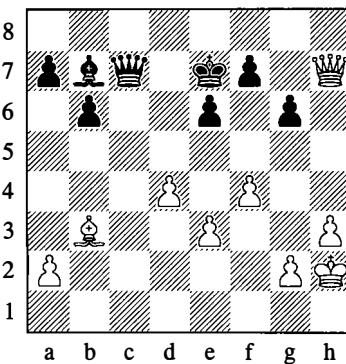
In this example, the double threat was not against two pieces, but against one piece and one square. That's a common kind of fork.

### 21. Grzegorz Gajewski – Axel Smith

Rilton Cup, Stockholm 1st January 2012

**24.♗xe6!**

24.♗e5?! is a double threat with either ♜h8†xh7 or ♜c7 coming, but after 24...♜e6 25.♗xc8† ♜xc8 26.♗h8† ♜e7 27.♗xh7 ♜c1† 28.♗h2 ♜c7†! 29.f4, Black has good drawing chances.



During the game, I wanted to reach this position. Black's pawn majority is relatively bigger (200% compared to White's 167%), his bishop is better and White has difficulties advancing his pawns without weakening his king.

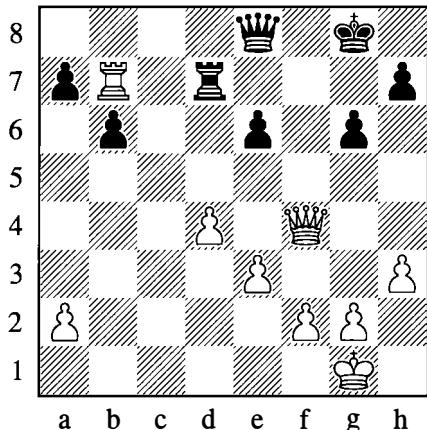
24.♗a4 tries to overload the black queen, but after 24...♜c8, White only has a slight advantage.

**24...fxe6 25.♗f4† ♜g8**

Or 25...♜f7 26.♗xf7† ♜xf7 27.♗c7†. The rook ending must be winning for White with the active rook on b7.

**26.♕c7**

A multiple fork against b7, d7 and f7.

**26...♛e8 27.♕xb7 ♕d7**

I think White's best option is to go for a queen ending – in general they are not so drawish. With the queens on the board, the weak position of Black's king has a greater impact than in a rook ending. Gajewski thought differently.

**28.♛b8**

He won quite easily, but after no less than two pawn promotions each!

There are many other kinds of double threats, as the final example shows.

**22. Tolnai****23.♛e8†**

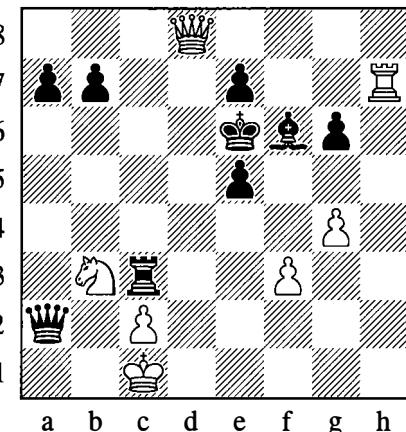
The start of a long forcing variation that ends with a skewer.

**23...♚g7 24.♕xh7†! ♚xh7 25.♕h1† ♚g7****26.♕h8† ♚f7 27.♕h7† ♜e6 28.♕g8† ♜d6**

28...♜d7 29.♝c5† wins the queen with a discovered attack.

**29.♛d8† ♜e6**

29...♝c6 30.♛c8† picks up the rook. After the text move, White has managed to get the queen to the d-file without loss of tempo.

**30.♝c5†!**

Suddenly, Black is forced to take.

**30...♜xc5 31.♛g8†**

Winning the queen.

To me, this is a sort of double threat, even though the black queen is hidden behind the king.

**2) Discovered Attack****23. Smith 2012**

The position is based on the game Danielsen – Bejtovic, Copenhagen 2008, but I have changed a few things to make it more level.

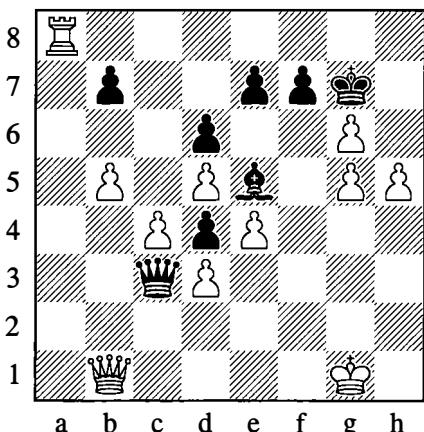
White to move. He is a piece down, but Black's king is open.

**31.♜a2!**

31.♜fb2 defends against ...♜xb1 followed by ...♜a1 and threatens ♜xf7, but Black has the strong 31...♜f8! defending f7, since the rook on a1 doesn't need any protection. White has to start worrying about his king's safety.

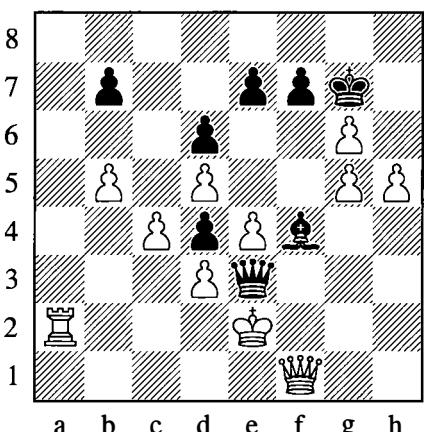
White can insert 31.gxf7† ♜f8 before 32.♗fb2, but that is much worse, since White doesn't threaten to capture on f7 with the queen. After 32...♝xb1! 33.♛xb1 (33.♝xb1 ♜c2 wins) 33...♝xf7, Black is much better.

**31...♝xb1 32.♝xa8† ♜g7 33.♛xb1**



White is an exchange up, but the game is not over. Black can play for a perpetual.

**33...♛d2! 34.♝f1 ♜g3 35.♜a2 ♛f4† 36.♝g2 ♛g4 37.♚f1 ♛f4† 38.♝f2 ♛g3† 39.♝e2 ♛e3† 40.♝d1 ♛c1† 41.♝e2 ♛e3†**



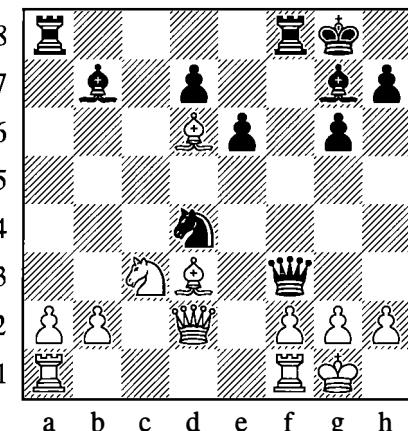
With a draw. As it turned out, 31.♜a2! was White's only way to equalize!

The discovered attack threatened mate. In such situations, the piece should usually make the strongest possible threat. Instead, 31.♝c2 would have threatened Black's queen, but Black can play 31...♝xb1, pinning the white queen.

In the following three examples, the discovered attack isn't there from the start, but has to be created.

#### 24. Grandelius 2011

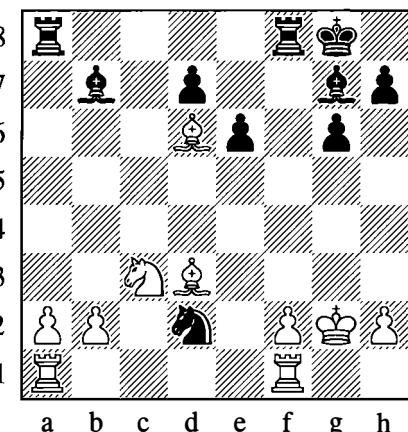
**17...♛f6! 18.♝d6 ♛f3!**



**19.gxf3**

White can give up two pieces for a rook with 19.♝e4 ♛xe4 20.♞xe4 ♛xe4 21.♜xf8 ♛xf8, but Black has a clear advantage.

**19...♞xf3† 20.♝g2 ♞xd2†**



White loses the exchange, since the king doesn't have a good square. Moves to the third rank allow 21... $\mathbb{E}f3\#$  while 21.f3  $\mathbb{Q}xf1$  22. $\mathbb{Q}xf8$   $\mathbb{Q}e3\#$  23. $\mathbb{Q}f2$   $\mathbb{Q}d4$  is decisive with a new discovered check, and 21. $\mathbb{Q}g1$   $\mathbb{Q}f3\#$  wins due to 22. $\mathbb{Q}h1$   $\mathbb{Q}g5\#$  when White must play f2-f3 and sacrifice the exchange.

## 25. Emil Hermansson – Nedeljko Malesevic

Swedish Team Championship, Västerås  
12th March 2011

### 33. $\mathbb{E}xe6$

White ignores the threat against his queen, setting up a discovered attack after 33... $\mathbb{E}xd6$  34. $\mathbb{E}xe8\#$  when after 34... $\mathbb{Q}h7$  35. $\mathbb{E}h3\#$  White wins.

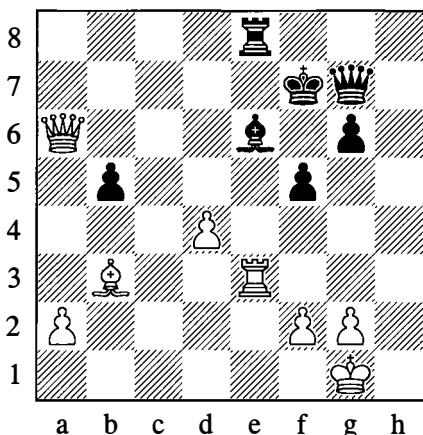
### 33... $\mathbb{E}xe6$

Black's bishop on c8 is overloaded; it can't defend the rook on a6 and capture on e6 at the same time.

### 34. $\mathbb{W}xa6$

White has won a pawn and has threats against b5, e6 and g6.

### 34... $\mathbb{Q}f7$ 35. $\mathbb{E}e3\#$



### 35... $\mathbb{Q}xb3$

Black can defend with 35... $\mathbb{W}f6$  but after 36. $\mathbb{W}c6$  White follows up with 37. $\mathbb{W}d7\#$ , winning the bishop.

### 36. $\mathbb{W}a7\#$

White wins an exchange and the game.

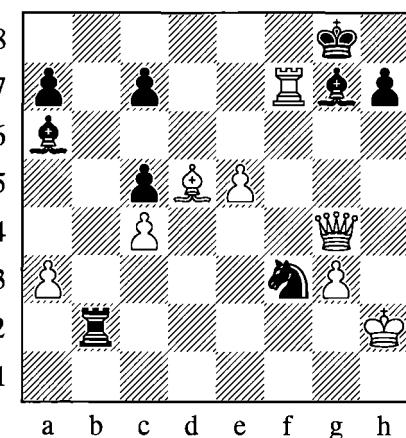
## 26. Davit Gevorgi Petrosian – Nils Grandelius

Bosna Open, Sarajevo 11th May 2010

### 27... $\mathbb{W}xh2\#$ !

White resigned, since he is mated in two moves.

### 28. $\mathbb{Q}xh2$ $\mathbb{Q}f3\#$



### 29. $\mathbb{Q}h1$ $\mathbb{E}h2\#$

Discovered attack, double check and mate.

After this Arabic mate, Grandelius finished the tournament with two draws and became a Grandmaster!

### 3) Pin

#### 27. Adam Tukhaev – Anders Livner

Swedish Team Championship, Västerås  
12th March 2011

In the game, Black played 25... $\mathbb{W}c6$ , but there was something much better.

The bishop on c4 and the knight on b6 are pinned, since White's rook and queen are undefended. However, both the bishop and the knight are adequately defended and it seems difficult to threaten them.

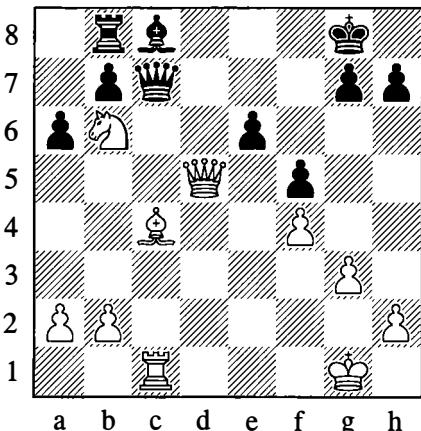
The first thing to check regarding pins is if the pinned piece can move. In this position, White threatens the discovered attack 26. $\mathbb{Q}xe6\#$ . Black's best move defends against the check and at the same time uses the pin.

**25... $\mathbb{Q}d5!$**

White can't capture on d5 with the bishop or the knight. White has one move to try.

**26. $\mathbb{W}xd5$**

The queen sacrifice looks clever, setting up the discovered attack once again.



**26... $\mathbb{W}xb6\#$**

Black gets the last word with an intermediate check, and takes the queen next move.

White's pinned pieces were, as expected, not so safe. In the next game, the key is to avoid entering the pin.

#### 28. Kjetil Lie – Nils Grandelius

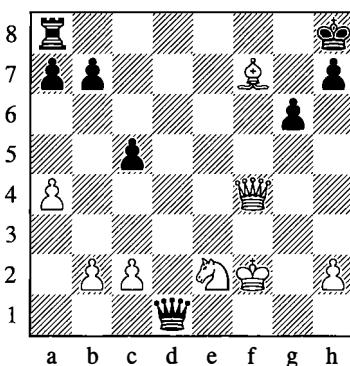
Corus C, Wijk aan Zee (var), 26th January 2010

Black threatens ...h7-h5 followed by a knight fork. How should White defend?

**23. $\mathbb{Q}h1!$**

The position is unclear.

At first it seems interesting to try: 23. $\mathbb{R}xf4$ ?  $\mathbb{Q}xf4$  24. $\mathbb{W}xf4$   $\mathbb{Q}e2\#$  25. $\mathbb{Q}xe2!$   $\mathbb{W}xd1\#$  26. $\mathbb{Q}f2$



26... $\mathbb{E}f8$  can be answered with 27. $\mathbb{W}f6\#$  but Black can turn the move order around and start with 26... $\mathbb{Q}g7!$ . There is no defence against the pin ... $\mathbb{E}f8$ .

If the king is the target behind a pinned piece, then the pinned piece can only move on the same file, rank or diagonal as the pinning piece. But in other cases, the pin is a very shaky motif which may transform into a discovered attack! The first thing to check is if the pinned piece can move with a counter-threat.

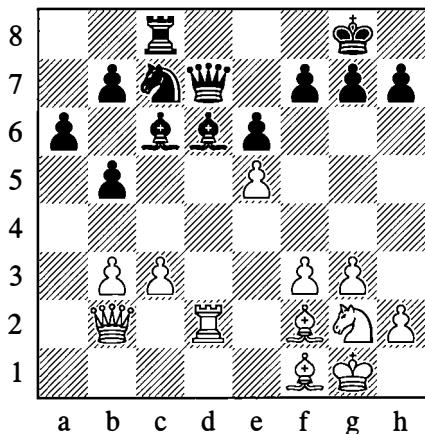
## 29. Smith 2012

8... $\mathbb{Q}xc3$  9. $\mathbb{W}xa3$   $\mathbb{Q}b1$  10. $\mathbb{W}b2$   $\mathbb{Q}xd2$  11. $\mathbb{W}xd2$ 1. $d5?$ 

White opens the d-file for his rook, with the plan to win a piece due to the pin on Black's bishop on d6.

1... $\mathbb{Q}xd5$  2. $e4$ 

2.c4  $\mathbb{Q}f6$  3.c5  $\mathbb{Q}e5!$  doesn't work. The pinned piece moves with a counter-threat.

2... $\mathbb{Q}c7$  3.e53... $\mathbb{Q}a3!$ 

It happens again! However, this time it's worth calculating further, to check if the bishop is stuck on a3 or not.

4. $\mathbb{W}c2$   $\mathbb{W}e8$ 

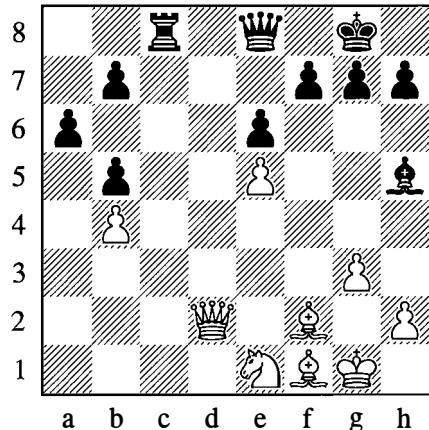
The queen has to leave the e7-square free for the bishop.

5.b4  $\mathbb{Q}xf3$ 

White wants to threaten the bishop without allowing ... $\mathbb{Q}c1$ , but it's not possible in one move. If White is too slow, Black is ready to play ... $\mathbb{Q}d5$  and attack c3. White's best try is as follows:

6. $\mathbb{Q}e1$   $\mathbb{Q}h5$  7. $\mathbb{W}b1$   $\mathbb{Q}d5$  8. $\mathbb{W}a1$ 

White is ready to counter 8... $\mathbb{Q}xc3$  with 9. $\mathbb{Q}xd5$ .



There is little doubt that Black is on top with a rook and three pawns against two minor pieces. White's pieces aren't close to coordinating against a target.

So the tactical try didn't work this time. Instead, 1.e4 is White's best move, with a positional advantage.

It's important to note that pinned pieces are quite useless defenders. Normally, you first see that the piece defends a square or another piece, and only later notice that it really doesn't, since it's pinned. Ideally, the defence should not be seen at all. But I am not sure if it's possible to reach that level, even after a great deal of practice.

## 30. Axel Smith – Michal Meszaros

Fyn Open Championship, Odense 3rd June 2011

24. $\mathbb{W}xd6!$ 

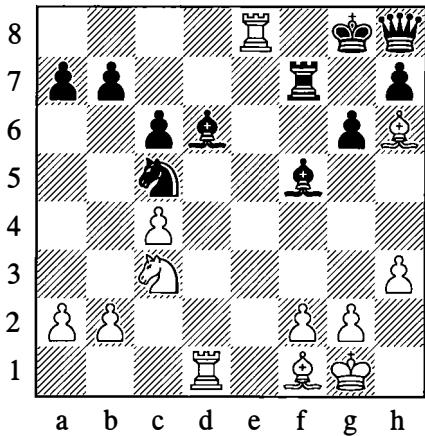
This pawn seemed so well defended! The game was played on Grandelius's 18th birthday, so I dedicated the queen sacrifice to him.

24... $\mathbb{Q}xd6$ 

In the game, my opponent played 24... $\mathbb{Q}e4$ .

I had a winning position after 25.♕d8 ♜fe7  
 26.♔xe4 ♜xe4 27.♗xe4 ♜h2† 28.♔xh2 ♜xe4  
 29.♕c7. Even better was 25.♗xe4! ♜xe4  
 26.♕e6! when Black can barely move.

### 25.♗xe8†



Black can place either the bishop or the rook in between.

a) 25...♝f8 26.♔xf8 ♔f7 27.♔xd6 ♜xe8  
 28.♔xc5 White has rook and two minor pieces for the queen.

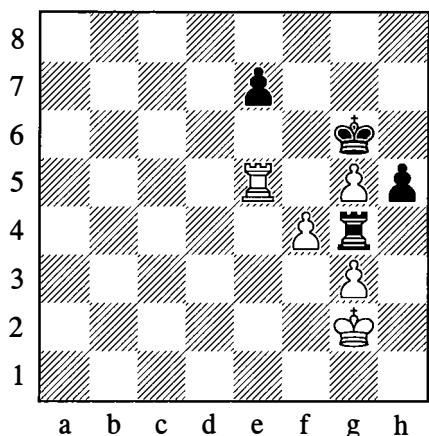
b) 25...♜f8 26.♔xf8 ♜xf8 27.♜xf8† ♔xf8  
 28.♜d8† ♔g7 29.♜xh8 ♔xh8 White has an extra pawn in the endgame.

### Other motifs

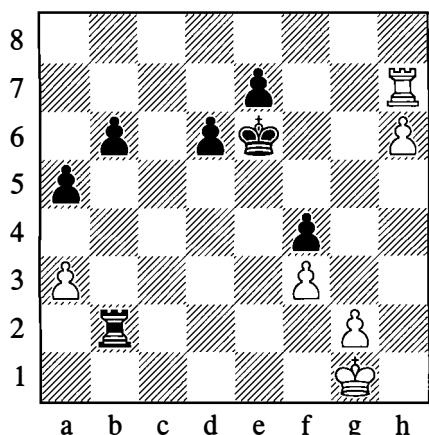
Finally, there are three unusual motifs that don't fit under the categories of threats or double threats. Give yourself 30 minutes for the six exercises.

**Smith – Hansson**, Lund 2008

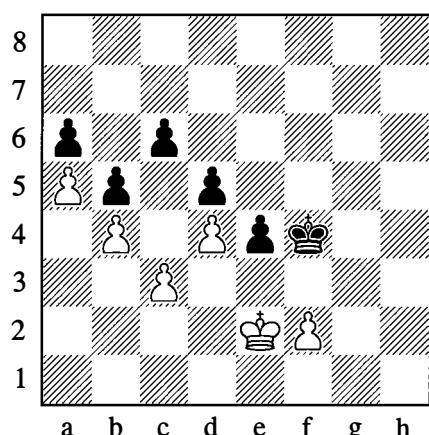
(31)

**Lyngsjö – Frost**, Lund 2010

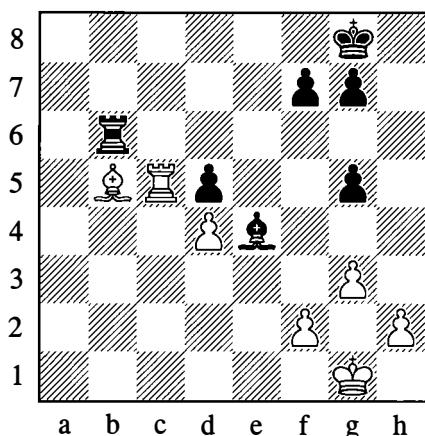
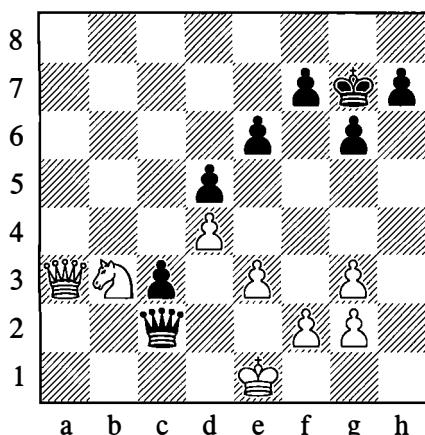
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**Pürckhauer – Smith**, Schwarzacher 2007

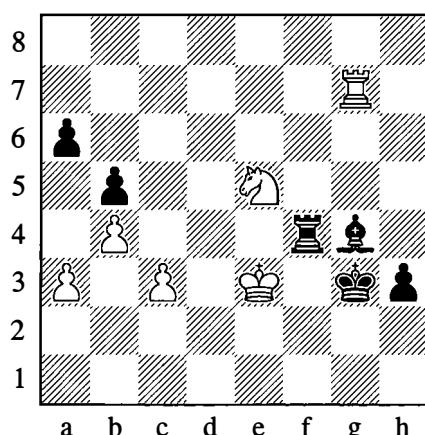
(33)

**Smith – Wahlström**, Laholm 2010

(34)

**Hedlund – Smith**, Lund 2007**Mossong – Semcesen**, Porto Carras 2011

(35)



(36)

**1) Stalemate****31. Axel Smith – Håkan Hansson**

LASK Open, Lund 20th October 2008

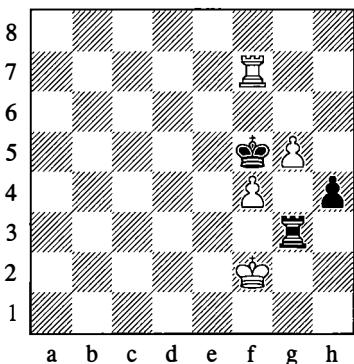
This exercise is also a good example of why it's good to set goals.

**38...h4!**

In the game, Black played 38... $\mathbb{Q}f7??$  but after 39. $\mathbb{Q}f3$  he was clearly lost. The easiest win for White is  $\mathbb{E}e5-e1-h1-h4$ . Since the game move isn't much better than resigning, he should have spent all his efforts to find something better.

**39. $\mathbb{Q}h3$** 

39. $\mathbb{E}xe7$   $\mathbb{E}xg3\#$  (39...hxg3 also draws. White has no way to advance the pawns without losing one of them.) 40. $\mathbb{Q}f2$   $\mathbb{Q}f5$  41. $\mathbb{E}f7\#$



Black draws with his active king. The easiest way is 41... $\mathbb{Q}e4$  42. $\mathbb{E}f6$   $\mathbb{E}g4$  followed by ...h4-h3-h2.

**39... $\mathbb{E}xg3\#$  40. $\mathbb{Q}xh4$   $\mathbb{E}g1!$  41. $\mathbb{E}xe7$** 

After 41. $f5\#$   $\mathbb{Q}f7$  White can play on, but it is still a theoretical draw.

**41... $\mathbb{E}g4\#$ ! 42. $\mathbb{Q}xg4$** 

Black's idea – stalemate.

**2) Pawn promotion****32. Håkan Lyngsjö – Niklas Frost**

Swedish Championship, Lund 6th July 2010

**35. $\mathbb{E}xe7\#$ !**

The rook moves with gain of tempo.

**35... $\mathbb{Q}xe7$  36.h7**

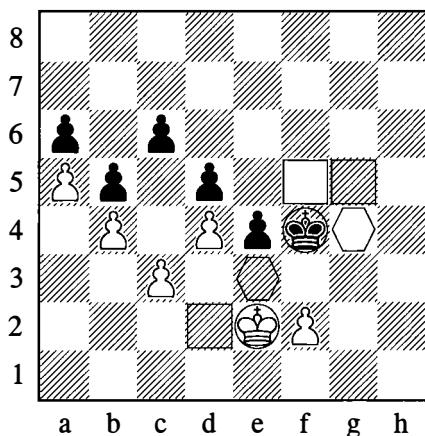
Black can't stop the pawn from promoting.

**3) Zugzwang**

The first example involves the idea of corresponding squares, in its purest form (the same shape = corresponding square).

**33. Sören Pürckhauer – Axel Smith**

Schwarzacher Open (var), 20th August 2007



To keep Black's king out, White must be able to answer ... $\mathbb{Q}f4$  with  $\mathbb{Q}e2$ , and ... $\mathbb{Q}g4$  with  $\mathbb{Q}e3$ . White can reach these squares (e2 and e3) from d2. Black, on the other hand, have two connected squares – f5 and g5.

When Black enters a square, White must also enter a square, etc. All Black has to do, to put White in zugzwang, is to go from f5 to g5 or vice versa.

**77...♝f5 78.♝d2 ♝g5**

Black wins after either 79.♝e3 ♝g4 or 79.♝e2 ♝f4, since ...e3 comes soon.

When I analyse a game with a friend, sometimes we reach a point where we can't avoid smiling – I enjoy all of chess but some positions are more beautiful than others.

For me, beauty in chess is when something unfamiliar works; moves that I normally wouldn't even consider, or positions that I automatically evaluate as unplayable. I like when intuition barks up the wrong tree.

This is actually just further proof of how much impact “the chess module” has. I am proud when I occasionally spot a mistake in the module.

Zugzwang is a theme that's often surprising if there are a few pieces on the board.

**34. Axel Smith – Lennart Wahlström**

Deltalift Open, Laholm 13th May 2010

There is something better than 34...♝b8 35.f4, when I managed to hold a draw.

**34...g4!**

This is a good positional move, and it also puts White in zugzwang.

a) 35.♝f1 ♞xb5! 36.♞xb5 ♜d3† is the reason White's king can't move.

b) 35.♝f1 ♜b1 36.♝c3 gives Black the option to play ...♝b1-d1xd4.

c) 35.h4 is not a move White wants to play. After 35...f5! Black continues with ...♝h7, ...♝b8 and ...g7-g5 to open the h-file for the rook. The attack will be decisive.

d) 35.h3 f5! leads to a similar attack.

It's even more counterintuitive and beautiful if a zugzwang position arises with the queens on the board.

**35. Carl Hedlund – Axel Smith**

Skåne Championship, Lund 27th January 2007

**32...h5!**

Believe it or not, but White is in zugzwang! The queen must stay on a3 to stop ...♝b1† followed by ...c3-c2 and the knight must stay on b3 to stop ...♝d2† followed by ...c3-c2.

32...♝b1† 33.♞c1? ♜b2 is a nice idea, but 33.♝e2 defends.

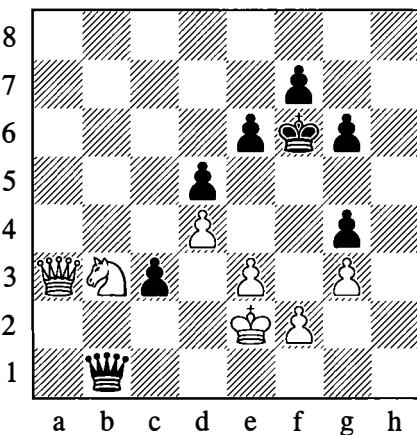
**33.g4**

33.f3 is the best try, but after 33...♝xg2 34.♝d6, Black can start with the ice-cold 34...g5! before picking up pawns. I am not sure it wins, but at least it's close.

The game move sacrifices a pawn to lose the move, but I could have continued with the same strategy of playing for zugzwang.

**33...hxg4**

Instead I played 33...h4, after which White should have been able to draw.

**34.g3 ♜b1† 35.♝e2 ♜f6**

White is in zugzwang again! This time he loses immediately.

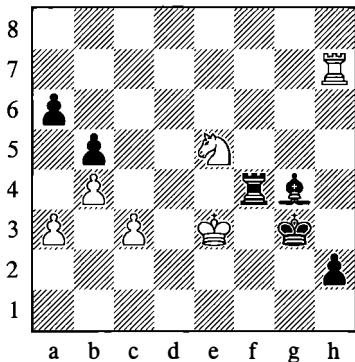
### 36. Hubert Mossong – Daniel Semcesen

European Team Championship, Porto Carras 8th  
November 2011

**53...a5!!**

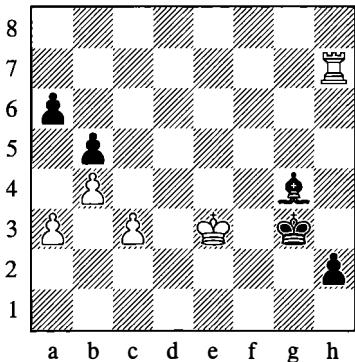
White is in zugzwang!

Instead Semcesen played 53...h2 and after 54.♗h7, the position is surprisingly only a draw.



a) The game continued 54...♗f1 55.♕xg4 h1=♕ 56.♗xh1 ♗xh1 57.♗e5 and White didn't have any problems holding a draw.

b) 54...♗h3 55.♗g7† is also not good enough for Black. The king has no good square, so Black has to try 55...♗g4 56.♕xg4 ♗xg4 57.♗h7.

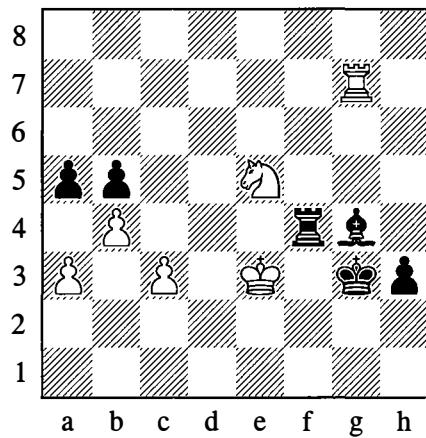


Now there are a couple of tries:

b1) The direct 57...♗h3 58.♗g7† ♕h4 looks like a good start, but 59.♗f4! h1=♕ 60.♗h7# isn't a good finish.

b2) 57...♗g2 threatens ...♗h3. After 58.♗xh2†! ♕xh2 59.c4! White will either manage to exchange all Black's pawns, or leave him with only one or two rook pawns and a wrong-coloured bishop.

Let's go back to the position after 53...a5 and analyse all White's moves, to check whether he is in zugzwang.



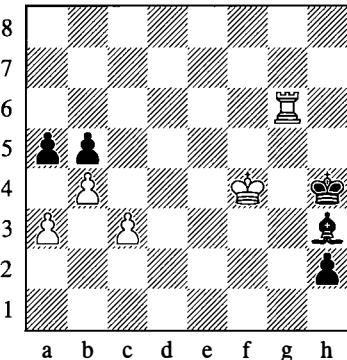
There are quite a few moves to consider:

a) If White moves the king, there follows 54.♔d2 h2 55.♗h7 ♗h3 56.♗g7† and Black's king suddenly has an escape square on f2, promoting next move.

b) Knight moves allow a check on f3, followed by ...h3-h2.

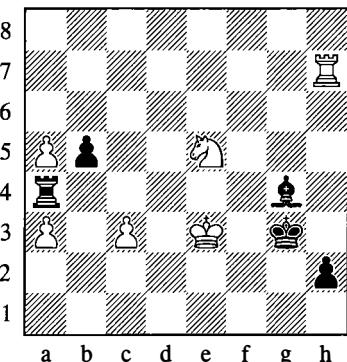
c) After 54.♗g5 h2, the rook can't reach the h-file.

d) 54.♗g6 h2 55.♗h6 ♗h3 56.♗g6† ♗g4 57.♕xg4 ♗xg4 58.♗h6 ♗h3 59.♗g6† ♕h4 60.♗f4



This is similar to the variation above where Black was mated, except with one huge difference – White's rook is too close to Black's king. 60... $\mathbb{Q}h5!$  threatens the rook, followed by 61... $h1=\mathbb{W}$  winning.

e) 54.bxa5 h2 55. $\mathbb{Q}h7$   $\mathbb{Q}a4$



56.a6!  $\mathbb{Q}f5!$

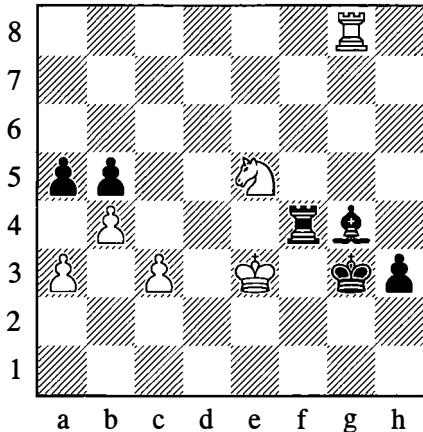
In the diagram position, Black threatened ... $\mathbb{Q}g2$  but now it's suddenly too slow: 56... $\mathbb{Q}g2$  57. $\mathbb{Q}xg4$   $\mathbb{Q}xg4$  58.a7  $\mathbb{Q}a4$  59. $\mathbb{Q}g7\#$   $\mathbb{Q}h3$  60. $\mathbb{Q}h7\#$  and Black can't play 60... $\mathbb{Q}h4$  since White queens first.

57. $\mathbb{Q}g7\#$   $\mathbb{Q}h3$

The rook was forced to check, since Black also threatened ... $\mathbb{Q}e4\#$ . Finally, the pawn promotes.

White's last remaining square for the rook also has a disadvantage:

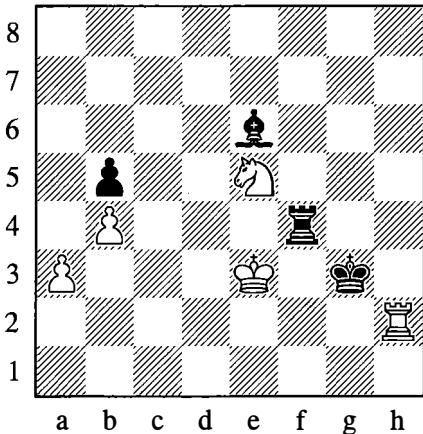
54. $\mathbb{Q}g8$



54...axb4 55.cxb4 h2 56. $\mathbb{Q}h8$   $\mathbb{Q}e6!$

This is possible only with the rook on the eighth rank. Black defends the g8-square, which stops White's rook from giving a check. The threat is ... $\mathbb{Q}f1$  followed by ... $h1=\mathbb{W}$ . White has one last try.

57. $\mathbb{Q}xh2$



57... $\mathbb{Q}f5!$

Black sets up a double threat.

58. $\mathbb{Q}h6$   $\mathbb{Q}xe5\#$  59. $\mathbb{Q}d4$   $\mathbb{Q}e1$  60. $\mathbb{Q}c5$   $\mathbb{Q}d7!$

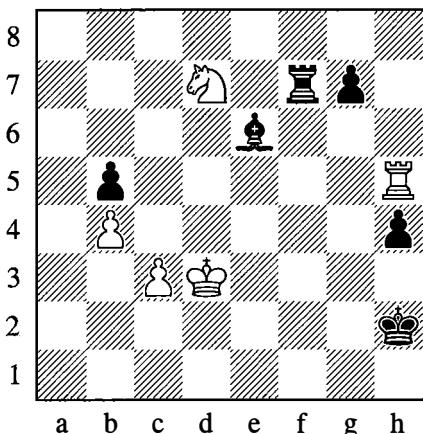
60... $\mathbb{Q}c4$  61.a4  $\mathbb{Q}e5\#$  62. $\mathbb{Q}d4$   $\mathbb{Q}d5\#$  63. $\mathbb{Q}c3$   $\mathbb{Q}d3\#$  64. $\mathbb{Q}c2$  bxa4 65. $\mathbb{Q}c6$   $\mathbb{Q}d4$  66. $\mathbb{Q}c3$  a3 67. $\mathbb{Q}xd4$  a2 68. $\mathbb{Q}xc4$  a1= $\mathbb{W}$  69. $\mathbb{Q}c5$  is a tablebase draw with rook and pawn against queen.

I thought the position was easily winning after 60... $\mathbb{Q}d7!$  since White can't exchange the last pawn, but the Norwegian IM Geir Sune Tallaksen Østmoë had his doubts and analysed further. After long analysis, I am finally convinced Black will win eventually. I shall omit the analysis as it is not relevant to my main point.

To figure out all the hidden tactics in this multiple zugzwang position gave me a lot of joy, and it doesn't concern me that the position is not a simple win at the end. What a fantastic game chess is!

Tallaksen Østmoë became inspired when he saw this game and created a beautiful study. His creation is even better – reciprocal zugzwang – but anyhow it's something special that such a position really appeared in a game.

### Tallaksen 2013

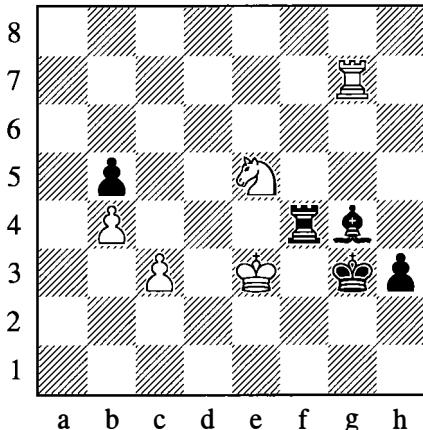


*White to play and draw.*

1.  $\mathbb{Q}e5 \mathbb{R}f4$  2.  $\mathbb{Q}e3 \mathbb{Q}g3$  3.  $\mathbb{Q}g5\# \mathbb{Q}g4$  4.  $\mathbb{Q}g6!!$

4.  $\mathbb{Q}xg7?$  h3 loses since White is not yet ready for  $\mathbb{Q}h7$  and must move the rook to a worse rank (see note to move 6).

4...h3 5.  $\mathbb{Q}xg7$

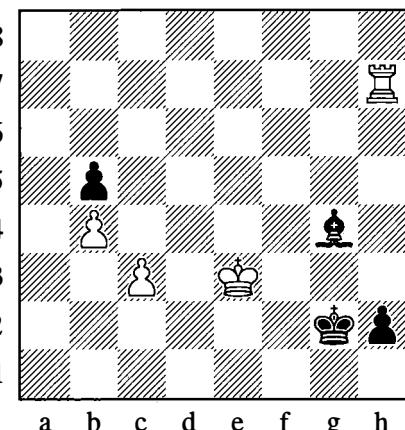


Reciprocal zugzwang, with a draw after for example:

5...h2 6.  $\mathbb{Q}h7 \mathbb{Q}h3$

In the related position from the 4.  $\mathbb{Q}xg7?$  variation, the pawn would be on h3 and Black would win with ... $\mathbb{Q}f5$ . But in the present position 6... $\mathbb{Q}f5$  is just a draw after 7.  $\mathbb{Q}xg4 \mathbb{Q}xg4$  8.  $\mathbb{Q}xh2$  – the benefits of “wasting” a move with 4.  $\mathbb{Q}g6!!$ .

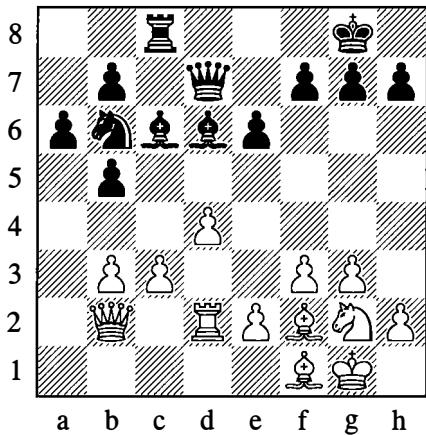
7.  $\mathbb{Q}g7\# \mathbb{Q}g4$  8.  $\mathbb{Q}h7 \mathbb{Q}f5$  9.  $\mathbb{Q}g7\# \mathbb{Q}g4$   
10.  $\mathbb{Q}xg4 \mathbb{Q}xg4$  11.  $\mathbb{Q}h7 \mathbb{Q}h3$  12.  $\mathbb{Q}g7\# \mathbb{Q}g4$   
13.  $\mathbb{Q}h7 \mathbb{Q}g2$



14.  $\mathbb{Q}xh2\# \mathbb{Q}xh2$  15. c4 bxc4 16.  $\mathbb{Q}d4 \mathbb{Q}e6$   
17. b5=

## Summary of Tactical Motifs

Congratulations if you have read this far! One of the previous examples (Exercise 29 on page 243) illustrates why it's useful to know the tactical motifs by heart.



When I have used this exercise in training sessions, a vast majority of the students have “solved” it with 1.d5, only to discover that their pin was transformed into a nasty discovered attack. However, that's often the case if the two distant pieces can move in the same direction.

That's easier to see if you are well acquainted with the tactical motifs.

## Threats

- 1) Shutting in
- 2) Magnet
- 3) Removing the defender
- 4) Opening files, ranks or diagonals
- 5) Gain of tempo

## Other motifs

- 1) Pawn promotion
- 2) Stalemate
- 3) Zugzwang

## Double threats

- 1) Fork
- 2) Discovered attack
- 3) Pin

## Defences

- 1) Counter-threat
- 2) Lifeline

## A final example

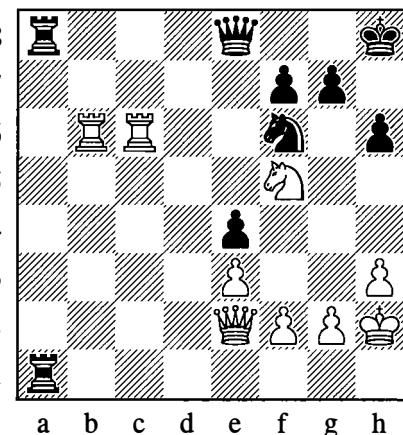
As the name reveals, there are usually many tactical motifs involved in a *combination*. This has also been the case in most of the examples above. However, we have seen nothing like the following game. The first moves may not be so difficult, but there will follow a few beautiful and surprising moves later in the line.

The solution includes more than half of the tactical motifs. Many of them several times, but I will only mention each once.

White is to move. To practise decision making, don't use more than 20 minutes.

**Gunnar Berg Hanssen – Harald Borchgrevink**

Norwegian League, Oslo 2008

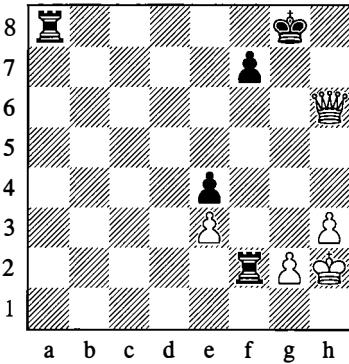


First, I will list some of the inferior lines:

a) 35.♕xg7?? ♜e5† 36.g3 ♘a2! loses for White after 37.♖c2 ♘xc2 38.♘xc2 ♕xg7.

b) 35.♕xh6? ♘1a2! 36.♖c2 ♘xc2 37.♘xc2 ♘d7 also loses material.

c) 35.♗b2 is a good move, which prepares a sacrifice on f6 and stops the check on e5. 35...♘1a2 36.♗d4 ♗d7 37.♗d6 ♘xf5 38.♗xf6 gxf6 39.♗xf6 ♗xf6 40.♗xf6† ♘g8 41.♗xh6 ♘xf2



White has good winning chances. However, there is a much better line:

**35.♗xf6!**

This wins, but only due to a fantastic move later.

**35...♜e5†**

35...gxf6 36.♗h5 ♗f8 37.♕xh6 wins.

**Tactical motif:** Opening files (forcing Black to play ...gxf6).

**Tactical motif:** Discovered attack (next move).

**36.g3 ♘a2**

**Tactical motif:** Counter-threat.

After 36...♗xf6 37.♗xf6 ♘a2, it's not possible for White to move the queen and defend f2,

but 38.♗xa2 ♘xa2 39.♗xf7 secures an extra piece.

**37.♗xh6†**

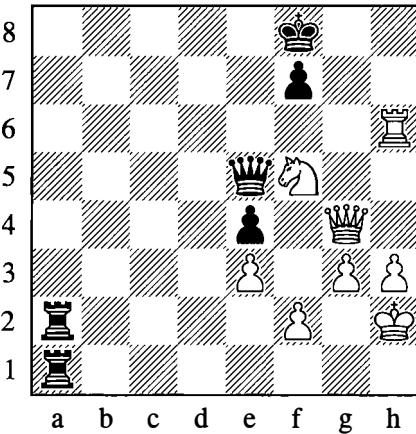
**Tactical motif:** Gain of tempo (not moving the threatened queen).

**37...gxh6**

37...♗g8 38.♕e7†! diverts the queen from the defence of b8. After 38...♗f8 39.♗c6 White threatens 40.♗h8# and 39...gxh6 40.♗xa2! wins a piece.

**Tactical motif:** Shutting in.

**38.♗xh6† ♘g8 39.♗g4† ♘f8**



Black is an exchange up and threatens mate in one. 40.♗g2 is met by 40...♗xf2†, mating. White has only one good way to defend f2.

**40.♗f4!!**

This doesn't even threaten Black's queen! On the other hand, 41.♗h8† ♗xh8 42.♗b8# is a strong threat.

**Tactical motif:** Removing the defender.

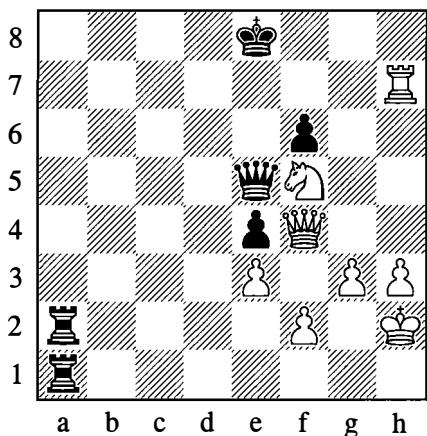
**40...f6**

Black creates an escape square for the king.

40...♗b1 defends b8, but 41.♗c6 sets up both 42.♗c8† and 42.♗h6† as deadly threats.

**41.  $\mathbb{Q}h8\# \mathbb{Q}f7$  42.  $\mathbb{Q}h7\# \mathbb{Q}e8$**

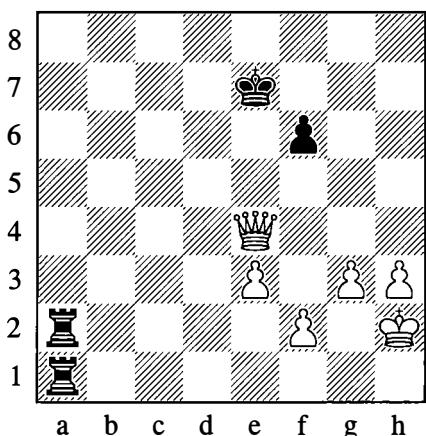
Moving out of the queen checks.



**43.  $\mathbb{Q}e7\#$**

**Tactical motif:** Fork.

**43...  $\mathbb{W}xe7$  44.  $\mathbb{Q}xe7 \mathbb{Q}xe7$  45.  $\mathbb{W}xe4\#$**



This time, there is no doubt that White will win with the queen against two rooks.

A position is seldom so rich – almost all of the tactical motifs at once! There is little doubt that knowing the tactical motifs helps to see themes faster.

The next step, when following The Woodpecker

Method, is to find a puzzle book with quite simple exercises, and solve them over and over again.

### Tactical exercises

The final part of this chapter consists of fifteen complicated exercises. They are some of my favourites, so handle them with care! The exercises will highlight many of the techniques that were discussed in Chapter 4, about calculation.

It must be said that some of the exercises are quite difficult, but they are not impossible.

Give yourself a maximum of 45 minutes for each batch of three exercises 37-39, 40-42, 43-45, 46-48 and 49-51 – so 5 sessions, each no longer than 45 minutes. (This time limit is still designed for a player with a rating of about 2300, so feel free to change it if necessary.)

Remember the rules from the beginning of the chapter:

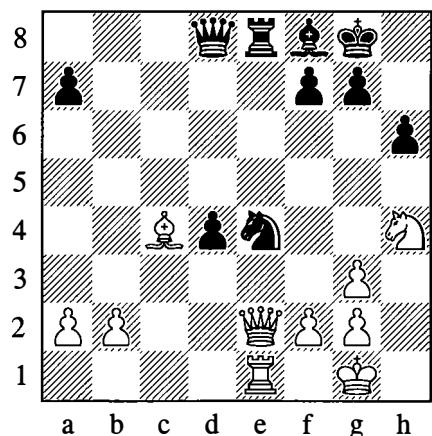
- 1) You have to solve them in order.
- 2) You have to choose a move even if you don't think you have found the solution. (If you remember what I wrote in the beginning of the chapter, some of them might not even have a solution!)
- 3) You have to decide on a move in all the exercises before your 'flag' has fallen. Otherwise, you lose on time.

The third block (numbers 43-45) has pawn endings as a theme. They are ideal when practising the skill of accurately calculating long lines. There is a rumour that the Swedish Grandmaster Tiger Hillarp spent a year on the Faroe Islands, only examining pawn endgames – this is too appealing to check if it's true!

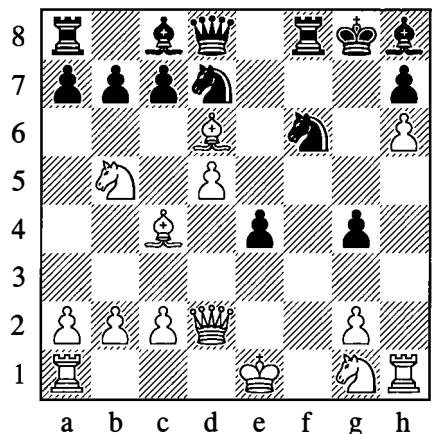
Good luck!

Brynell – Pilgaard, Denmark 2010

(37)

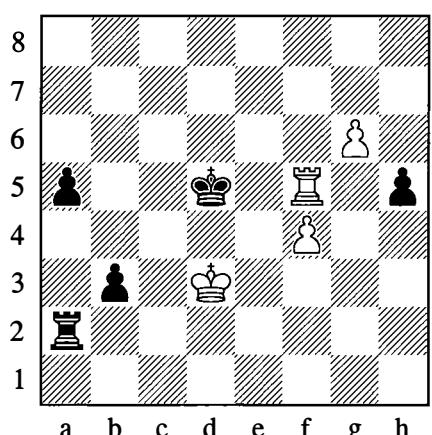


Smith – Glud, Malmö 2002



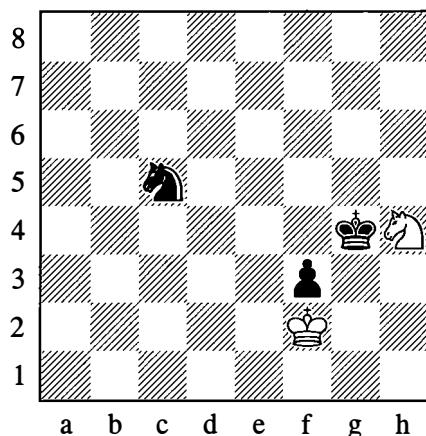
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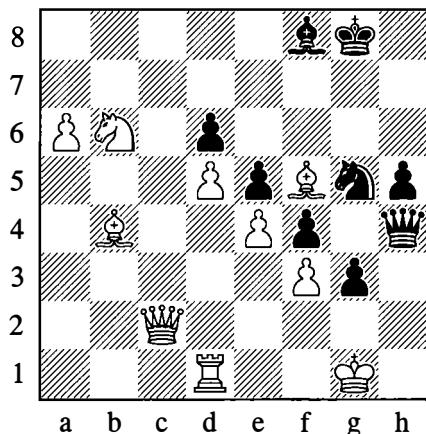


O’Sullivan – Walsh, Leinster 1952

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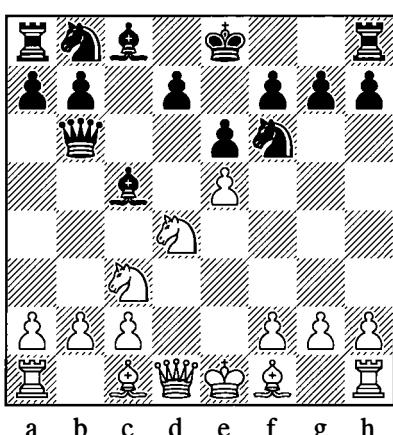


Pelletier – Hagen, Legica 2013

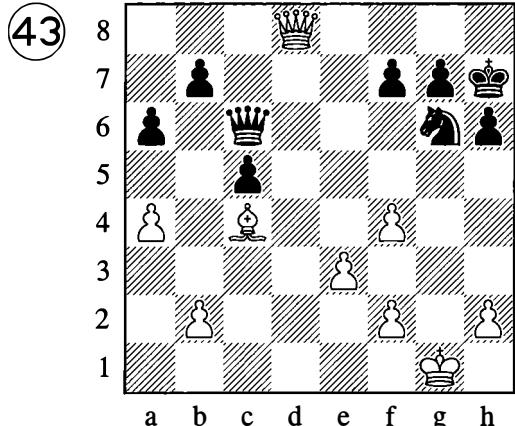


Rolf Martens/Gunnar Hjort 2005

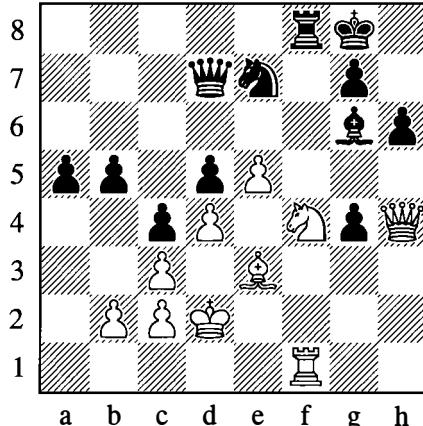
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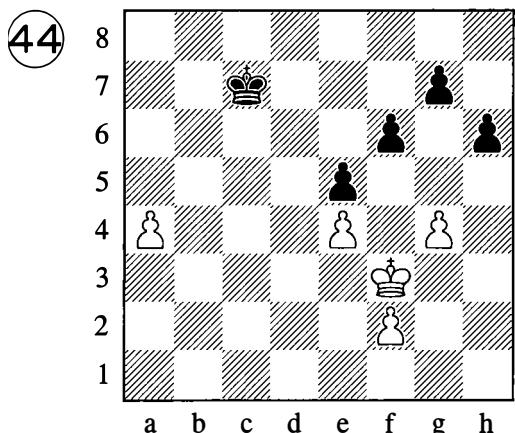
Grabarczyk – Grandelius, Copenhagen 2009



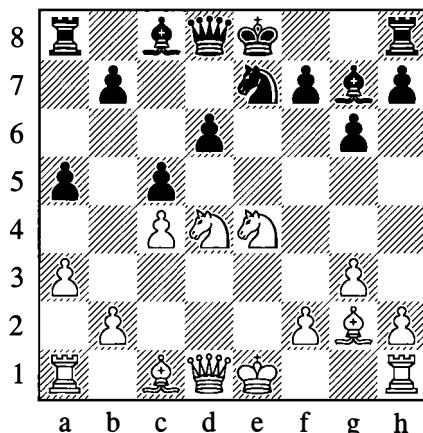
Kvisvik – Coates, Blackpool 2012



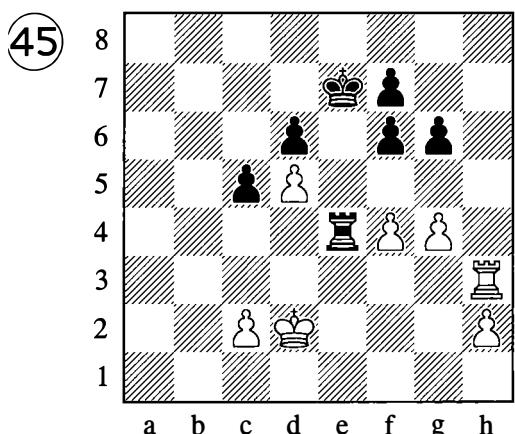
Mörling – Gottfries, Lund 2010



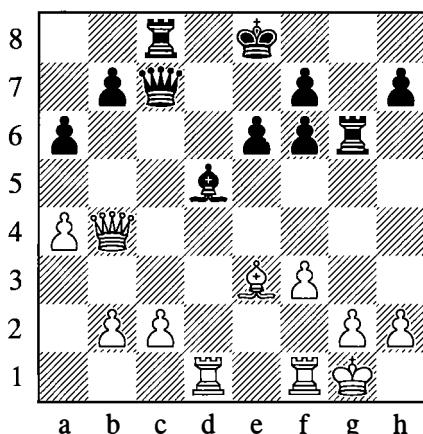
Radovanovic – Smith, Pardubice 2011



Smith – Laurent, Cappelle la Grande 2011

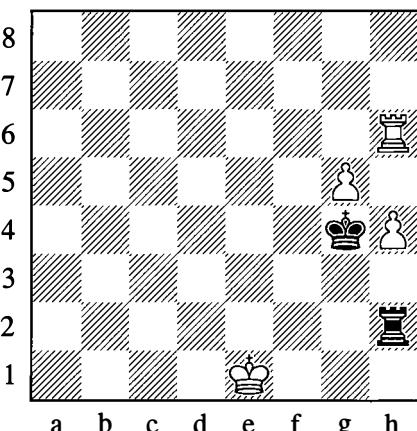


Tari – Thorstensen, Oslo 2012



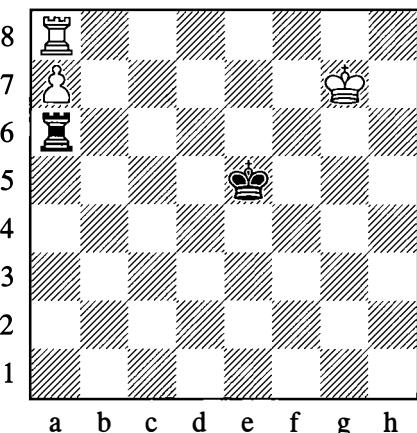
## Giri – Smith, Reykjavik 2013

49



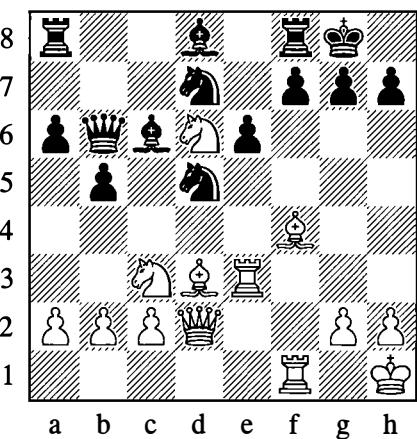
Moor – Braun, Deizisau 2013

50



Mårdell – Eklund, Lund 2010

51



## Solutions

## 37. Stellan Brynell – Kim Pilgaard

Danish Team Championship, Copenhagen 2010

Black is threatening 25... $\mathbb{Q}d6$ , winning a piece. White can't move the rook due to 25... $\mathbb{Q}xg3$ , so he should defend the rook or move the queen from the discovered attack or move the bishop. Plausible candidate moves are 25. $\mathbb{W}d1$ , 25. $\mathbb{W}f3$ , 25. $\mathbb{Q}d3$ , 25. $\mathbb{Q}b3$  and 25. $\mathbb{Q}f3$ . When looking for candidate moves, hopefully the idea of attacking Black's king with 25. $\mathbb{Q}xf7\#$  also enters your mind. Since it's the most forcing option, it's the move to start calculating.

25. $\mathbb{Q}xf7\#$ !

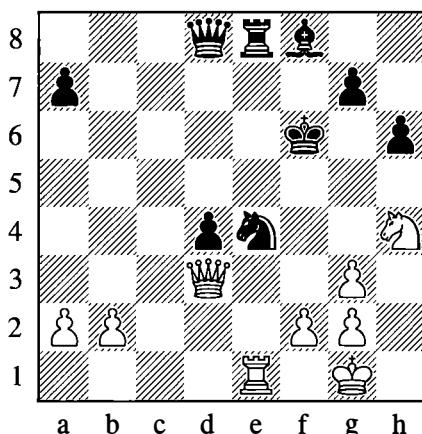
25. $\mathbb{Q}f3$  was played in the game.

25... $\mathbb{Q}xf7$  26. $\mathbb{W}c4\#$ 

This is White's idea, which stops Black's king from going back to g8.

26... $\mathbb{Q}f6$ 

Black's king is in danger but how to continue the attack? A check with the queen on the f-file seems devastating. Both 27. $\mathbb{W}b3$  and 27. $\mathbb{W}d3$  threaten such a check, but the latter seems better since it also threatens the knight.

27. $\mathbb{W}d3$ !

**27...g5**

27... $\mathbb{W}a8$  28. $\mathbb{W}f3\#$  picks up the knight and 27... $\mathbb{W}d5$  28. $\mathbb{W}f3\#$   $\mathbb{Q}g5$  is probably mating. Actually White has to play rather precisely: 29. $\mathbb{W}f4\#$   $\mathbb{Q}h5$  30. $g4\#$   $\mathbb{Q}xh4$  31. $\mathbb{Q}h2!$  Mate with g2-g3 is unavoidable.

**28. $\mathbb{Q}xe4!$**

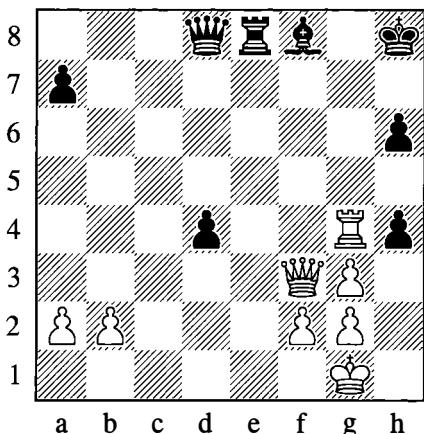
28. $\mathbb{W}f3\#$   $\mathbb{Q}g7$  29. $\mathbb{Q}f5\#$   $\mathbb{Q}h8$  30. $\mathbb{Q}xe4$  leaves White one pawn up, but after 30... $\mathbb{Q}xe4$  31. $\mathbb{W}xe4$  d3, Black has counterplay with the passed pawn.

**28...gxh4**

28... $\mathbb{Q}xe4$  29. $\mathbb{W}xe4$  gxh4 30. $\mathbb{W}xh4\#$  wins the queen.

After the text move, it looks like Black's king will escape, but before ending the variation, it's good to try the forcing moves.

**29. $\mathbb{W}f3\#$   $\mathbb{Q}g7$  30. $\mathbb{Q}g4\#$   $\mathbb{Q}h8$**



No more checks, but is it possible to create a threat?

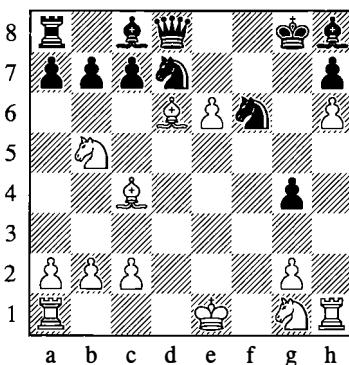
**31. $\mathbb{W}f7$**

The only move, but a good one. Black has no way to defend against the mate on g8 without allowing mate on g7.

### 38. Axel Smith – Jakob Vang Glud

Limhamn's International Junior, Malmö 2002

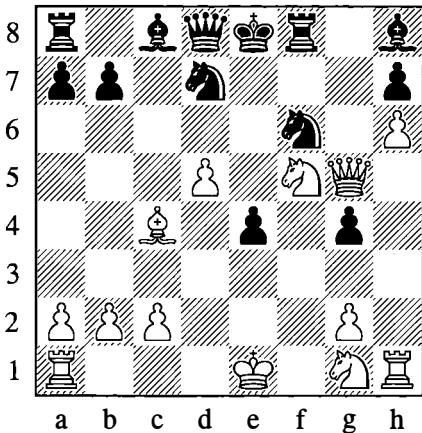
15...e3? 16. $\mathbb{W}xe3$   $\mathbb{E}e8$  was played in the game and at first it looks strong, since 17. $\mathbb{Q}e7$   $\mathbb{W}xe7$  18.d6#  $\mathbb{W}f7$  19. $\mathbb{Q}xf7\#$   $\mathbb{Q}xf7$  gives Black two pieces for a rook. Black won the game, but only because I overlooked 17. $\mathbb{W}e6\#$ !!  $\mathbb{E}xe6$  18.dxe6.



The threat is e6-e7# which mates and promotes the pawn! Black can't rescue both the king and the queen. The combination is easy to overlook unless you also search for your opponent's combinations.

Instead, Black's best is to take the piece and allow a perpetual.

**15...cxd6! 16. $\mathbb{W}g5\#$   $\mathbb{Q}f7$  17. $\mathbb{Q}xd6\#$   $\mathbb{Q}e8$**



**19. ♖d6†**

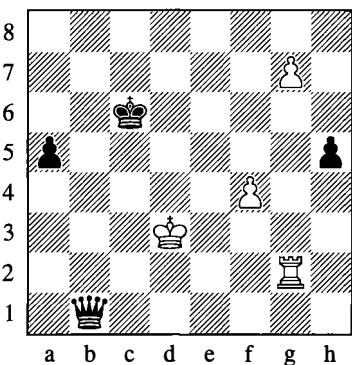
White has to be satisfied with a draw since 19. ♖g7† ♜xg7 20. hxg7 ♜a5† is good for Black.

**39. Unknown**

Since Black only has three legal moves, he can use the Method of Elimination.

a) 1... ♖e6? walks into a check on g8: 2. ♖g5 ♖f2 3. g7 b2 4. g8=♕†

b) 1... ♖c6? allows a check on c2: 2. g7 ♖g2 3. ♖g5! b2 4. ♖xg2! b1=♕†



Now White answers a check with a check: 5. ♖c2†

Both lines are winning for White. The third move must also be examined for a short time before it's executed, but when no forced win appears, it's not necessary to evaluate the upcoming position.

**1... ♖d6!**

The game may end in a draw in many possible ways.

**40. O'Sullivan – Walsh**

Leinster 1952

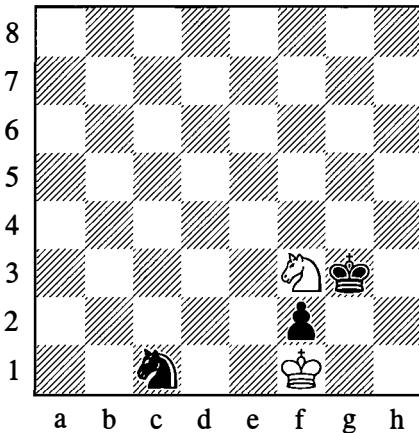
This is an exercise where it's actually clever to use the Method of Elimination. If Black's pawn drops off in all variations but one, then this variation can be chosen without calculating to the end.

**1... ♖d3†!**

After a while, it's possible to eliminate 1... ♖e4† 2. ♖e3 f2 when you find 3. ♖f3! ♖g3 (3... ♖h3 4. ♖d2! draws) 4. ♖e2 ♖c3† 5. ♖f1! ♖xf3 with stalemate.

**2. ♖e3 f2 3. ♖f3! ♖g3 4. ♖e2**

4. ♖d2 ♖c5! wins for Black, since White can't stop ... ♖g2. The variation runs 5. ♖e2 ♖g2 6. ♖f1 ♖e6 7. ♖e3† ♖g1 8. ♖f3 ♖d4† 9. ♖e4 ♖c2, deflecting the knight.

**4... ♖c1†! 5. ♖f1****5... ♖b3!**

The key move. White is in zugzwang.

**6. ♖e2**

6. ♖h2 ♖d2† 7. ♖e2 ♖g2 leads to a new zugzwang, which is more obvious this time.

**6... ♖d4†! 7. ♖xd4 ♖g2**

The pawn promotes.

There are only five pieces in the starting position, but it's nevertheless very difficult. The exercise comes from one of the books that Tikkannen used, and I solved it every second month. I still had problems the fifth time!

#### 41. Yannick Pelletier – Andreas Skytte Hagen

Legica 11th May 2013

**43... $\mathbb{Q}xf3\#$  44. $\mathbb{Q}f1\#$**

This could be explained by “The threat is stronger than its execution” – Black saves ... $\mathbb{Q}h1\#$  until later. However, I don't think much of that principle.

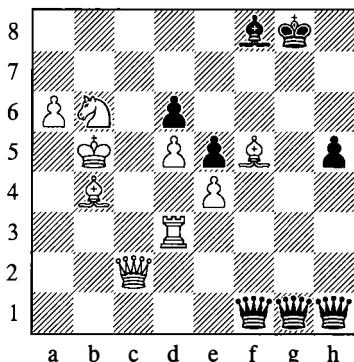
**44... $\mathbb{Q}h1\#$**

This was played in the game.

**45. $\mathbb{Q}e2\#$  46. $\mathbb{Q}d4\#$  47. $\mathbb{Q}xd4$  f3# 48. $\mathbb{Q}d3?$**

47. $\mathbb{Q}d2!$  was both necessary and strong; ...f1= $\mathbb{Q}$  won't come with check anymore. 47...f2 48. $\mathbb{Q}c8$  f1= $\mathbb{Q}$  It doesn't help to under-promote – there are only a few checks. 49. $\mathbb{Q}e6\#$  and White mates.

**47...f2 48. $\mathbb{Q}c4$  f1= $\mathbb{Q}\#$  49. $\mathbb{Q}d3$  g2 50. $\mathbb{Q}b5$  g1= $\mathbb{Q}$**



And Black won. Those who say that chess is not an art have not seen this position! Skytte Hagen mentioned that none of the players could avoid laughing when he got his third queen.

**45. $\mathbb{Q}xd4$  f3!**

To avoid mate, White has to give up his queen or allow Black to promote. And then he has to give up more.

#### 42. Rolf Martens/Gunnar Hjort 2005

**1.e4 c5 2. $\mathbb{Q}f3$  e6 3.d4 cxd4 4. $\mathbb{Q}xd4$   $\mathbb{Q}f6$  5. $\mathbb{Q}c3$   $\mathbb{Q}b6$  6.e5  $\mathbb{Q}c5$**

The position arose from the Gaw-Paw variation, which seems to be mostly played in southern Sweden.

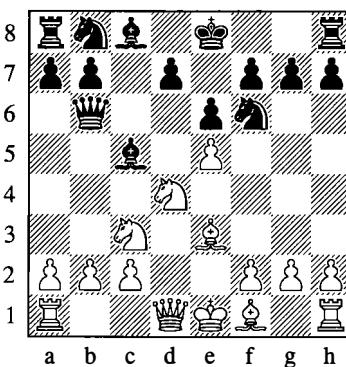
7. $\mathbb{Q}a4$   $\mathbb{Q}a5\#$  doesn't look good for White.

7. $\mathbb{Q}ce2$  is passive.

7. $\mathbb{Q}cb5$   $\mathbb{Q}c6!$  is unclear.

7.exf6  $\mathbb{Q}xd4$  8. $\mathbb{Q}e4$  gxf6 9.c3 is also unclear. Black should play either 9...f5 or 9...d5.

7. $\mathbb{Q}e3$  is more natural, defending the knight and renewing the threat on f6.

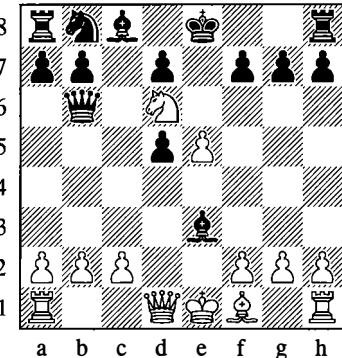


Black has three choices.

a) 7... $\mathbb{Q}xb2$  8. $\mathbb{Q}a4$   $\mathbb{Q}b4\#$  9. $\mathbb{Q}e2!$   $\mathbb{Q}a3$  10.c4, when White wins with  $\mathbb{Q}b5$  or  $\mathbb{Q}c1$  coming next move.

b) 7... $\mathbb{Q}g4$  8. $\mathbb{Q}xg4$   $\mathbb{Q}xb2$  9. $\mathbb{Q}d2$   $\mathbb{Q}xa1$  10. $\mathbb{Q}xg7$   $\mathbb{Q}f8$  11. $\mathbb{Q}b3$   $\mathbb{Q}xe3\#$  12.fxe3  $\mathbb{Q}b2$  13. $\mathbb{Q}e4$  also wins for White.

c) 7... $\mathbb{Q}d5$  8. $\mathbb{Q}xd5$  exd5 9. $\mathbb{Q}b5$   $\mathbb{Q}xe3$  10. $\mathbb{Q}d6\#$



White has very good compensation for the pawn.

So 7.. $\mathbb{Q}e3$  looks promising, but there is an even better move.

### 7. $\mathbb{Q}db5!$

Intuition can easily exclude such a move automatically, since it loses a pawn close to the king with check. Such intuition has to be questioned. At least, you should not be satisfied without formulating the statement: 'I can't play 7. $\mathbb{Q}db5!$  since I lose a pawn with check'. By thinking like that, you give yourself time to question if it's true.

### 7... $\mathbb{Q}xf2\#$

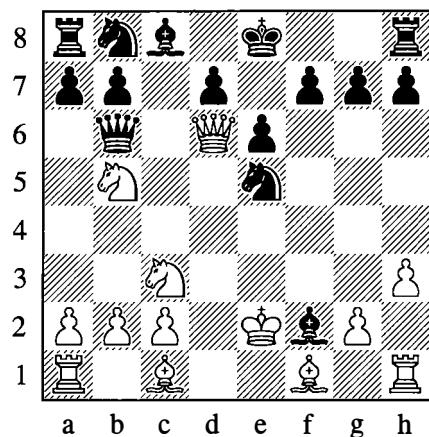
Black also has 7... $\mathbb{Q}d5$  but after 8. $\mathbb{Q}e4$  the position is simply better for White compared to the 7.. $\mathbb{Q}e3$  line.

He also has 7...a6, but if this is best then 7. $\mathbb{Q}db5$  seems like a good move! White's most promising move is 8. $\mathbb{W}f3!$  with a clear advantage after either 8... $\mathbb{Q}d5$  9. $\mathbb{Q}xd5$  exd5 10. $\mathbb{Q}c3$  or 8...axb5 9.exf6.

### 8. $\mathbb{Q}e2$ $\mathbb{Q}g4$ 9.h3!! $\mathbb{Q}xe5$

9... $\mathbb{Q}h6$  10. $\mathbb{Q}d6\#$   $\mathbb{Q}e7$  11. $\mathbb{Q}g5\#$  f6 12.exf6+  $\mathbb{Q}xf6$  13. $\mathbb{Q}xh6$  loses for Black.

### 10. $\mathbb{W}d6!$



White has two strong threats:  $\mathbb{Q}c7\#$  and  $\mathbb{W}xe5$ . Black is unable to cope with both of them.

A move like 7. $\mathbb{Q}db5$  is very easy to overlook unless you confer with your subconscious intuition, which could easily reject such a move automatically.

### 43. Miroslaw Grabarczyk – Nils Grandelius

Scandinavian Open, Copenhagen 25th April 2009

This is a position where it's necessary to calculate many moves ahead.

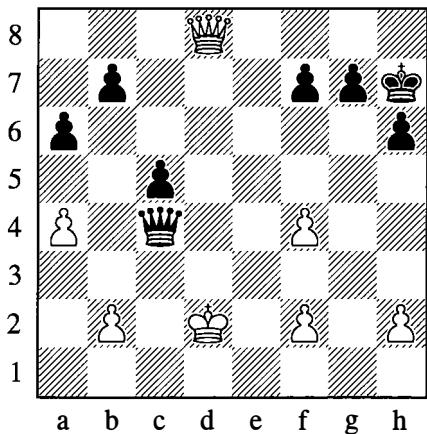
### 26... $\mathbb{Q}xf4!$

After a move like 26... $\mathbb{Q}h8$  there is no doubt that White is at least slightly better. After the text move, the game was surprisingly agreed drawn. I don't think both players had calculated everything to the end.

### 27.exf4 $\mathbb{W}g6\#$

Black will win the bishop on c4. However, White has one critical try.

### 28. $\mathbb{Q}f1$ $\mathbb{W}b1\#$ 29. $\mathbb{Q}e2$ $\mathbb{W}e4\#$ 30. $\mathbb{Q}d2$ $\mathbb{W}xc4$



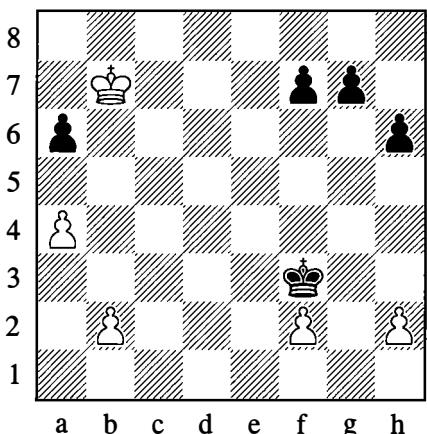
**31.♕d3†! ♕xd3† 32.♕xd3**

Time to calculate the pawn race!

**32...♔g6 33.♔c4 ♔f5**

The only important thing is who queens first. Thus 33...b6?? would be a terrible blunder, losing a decisive tempo.

**34.♔xc5 ♔xf4 35.♔b6 ♔f3 36.♔xb7**



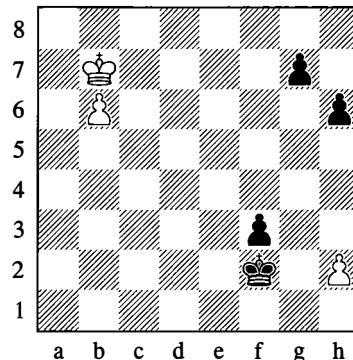
Black can decide whether White has to capture the a-pawn on a6 or a5.

**36...♔xf2!**

36...a5? is a mistake – it's better to force White's king to a6 so ...f1=♕ will come with check.

**37.♔xa6**

37.b4 f5 38.b5? gives away White's queenside pawn without getting anything back. After 38...axb5 39.axb5 f4 40.b6 f3:



41.♔c8! ♔g1 42.b7 f2 43.b8=♕ f1=♕ 44.♕a7† ♔xh2 45.♕xg7 The queen ending is a theoretical draw, but there is no reason to enter it. It was important to move the king to c8; with the king on a8 or c6, Black would win by checking on g2, and with the king on a7 and c7, White doesn't have ♕a7xg7.

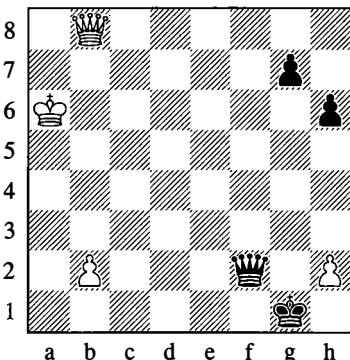
**37...f5**

It's White's turn to choose which pawn to promote. It's seems that it's faster to go with the a-pawn, since it would also stop Black from promoting with check. However, the queen must go to b8 anyway, to defend the pawn on h2. Thus both options are equal in terms of tempos.

The difference is the pawn that is left. I would prefer to leave the a-pawn, since it has advanced furthest.

**38.b4!**

It's also a draw after 38.a5 f4 39.♔b6!. The best square, avoiding ...f1=♕ and a later ...b5†. After the plausible line: 39...f3 40.a6 ♔g1 41.a7 f2 42.a8=♕ f1=♕ 43.♕b8 ♕f2† 44.♔a6

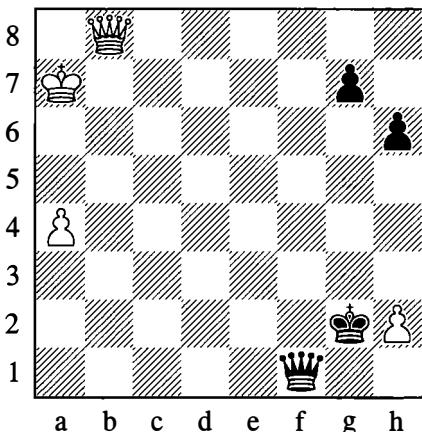


Black has two alternatives.

- a) 44...g5! 45.Qg3† Qxg3 46.hxg3 h5 and both players get another queen with a draw.
- b) 44...Qxh2? 45.Qxh2† Qxh2 46.b4 almost wins for White.

There is a study-like draw after: 46...g5 47.b5 g4 48.b6 g3 49.b7 h5 50.b8=Q h4 51.Qb5 h3 52.Qc4 Qh1 53.Qxg3 h2 White's king is one square too far away.

**38...f4 39.b5 f3 40.b6 ♕g2 41.b7 f2  
42.b8=Q f1=Q† 43.Qa7**



Now, it's White who has the better side of a draw. The variation is very long, but since only a few pieces move, it should be possible to calculate it all the way.

#### 44. Joakim Mörling – Nils-Olof Gottfries

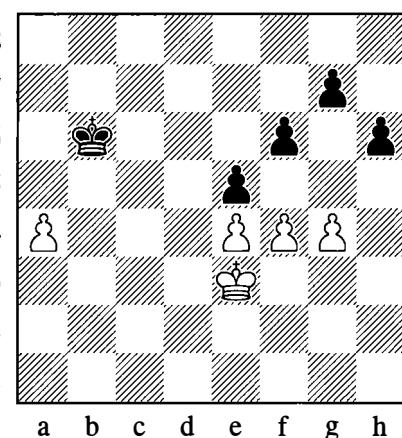
Mragel Open, Lund 18th April 2010

When I first saw this position, I thought that White was winning with his distant passed pawn on the a-file. After looking more closely, it becomes clearer that it's not so easy for White to open an entry route on the kingside. In fact, with precise play, Black is winning!

**48.Qe3**

48.Qg3 Qb6 was played in the game, but White gets nowhere after 49.Qh4 g6 or 49.f4 g5!.

**48...Qb6 49.f4**

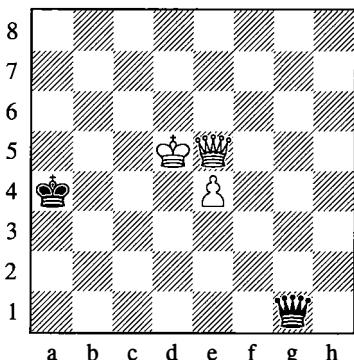


**49...Qa5!**

The only move that wins.

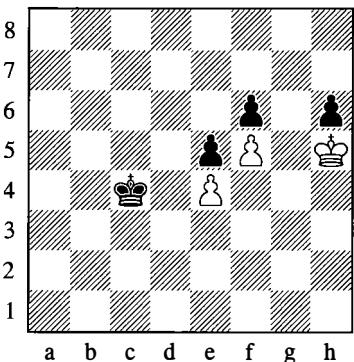
a) 49...exf4†?! 50.Qxf4 g6 51.e5! allows White to exchange all the pawns.

b) 49...g5? 50.fxg5 fxg5 51.Qd3 would be a textbook example, showing the strength of the distant passed pawn. With 51...Qa5 52.Qc4 Qxa4 53.Qd5 h5, Black also manages to get a new queen: 54.gxh5 g4 55.h6 g3 56.h7 g2 57.h8=Q g1=Q 58.Qxe5



The ending is theoretically winning for White. In such endings, with the defending king far away from the pawn, only rook and knight pawns give drawing chances.

c) It's also bad to play: 49...g6? 50.f5! gxf5 51.gxf5 ♖a5 52.♖f3 ♖xa4 53.♖g4 ♖b4 54.♖h5 ♖c4



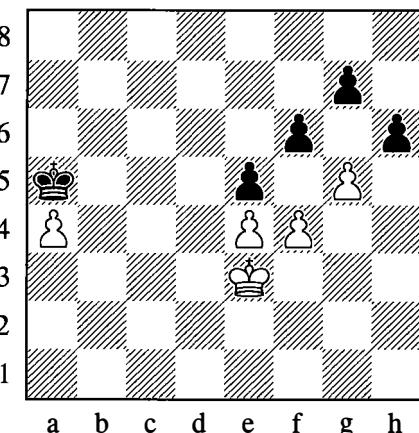
White plays 55.♗g6!. The pawn doesn't matter, but the tempo does. With 55...h5! Black tries to deflect White's king. 56.♗xf6 (After 56.♗xh5 both players promote.) 56...h4 57.♗xe5 h3 58.f6 h2 59.f7 h1=♕ 60.f8=♕ Again, with a theoretically won position.

## 50.g5!

We should also check the other tries:

a) 50.f5 ♖xa4 is not difficult to calculate: 51.♗f3 ♖b4 52.♗g3 ♖c4 53.♗h4 ♖d4 54.♗h5 ♖xe4 55.♗g6 ♖f4 56.♗xg7 ♖g5! Black wins with the e-pawn.

b) White could try the “distant-passed-pawn-strategy” with 50.fxe5 fxe5 51.♗d3. However, without Black's kingside pawns being blocked, this is another story. He plays 51...g6! 52.♗c4 h5!. The h-pawn must advance before White has time for ♖d5xe5-f4. Black wins after 53.gxh5 gxh5 54.♗d3 ♖xa4.



## 50...hxg5!

Once again there are other moves to check:

a) 50...♖xa4 is again leading to the same queen ending, but this time with Black having the pawn: 51.gxf6 gxf6 52.f5 ♖b4 53.♗f3 ♖c4 54.♗g4 ♖d4 55.♗h5 ♖xe4 56.♗g6 h5! 57.♗xf6 h4 58.♗g6 h3 59.f6 h2 60.f7 h1=♕ 61.f8=♕ Black is winning, but the text move wins much more easily.

b) 50...h5? is only a draw: 51.gxf6 gxf6 52.f5 ♖xa4 53.♗f3 ♖b4 54.♗g3 ♖c4 55.♗d4 56.♗xh5 ♖xe4 57.♗g6 ♖d4 58.♗xf6 e4 Both players get new queens.

c) 50...exf4†? 51.♗xf4 hxg5† 52.♗f5 ♖xa4 53.e5! fxe5 54.♗xe5! The board will be empty in a few moves.

## 51.fxg5 fxg5 52.♗f3 ♖xa4 53.♗g4 ♖b4 54.♗f5!

Once again, the only chance is to choose

the shortest route; the thematic answer is the same.

**54...g4!** **55.♗xg4 ♗c4** **56.♗g5 ♗d3** **57.♗f5 ♗d4**

Black wins. The starting diagram is a fantastic position to practise the calculations of long variations.

#### 45. Axel Smith – Julian Laurent

Cappelle la Grande (var), 5th March 2011

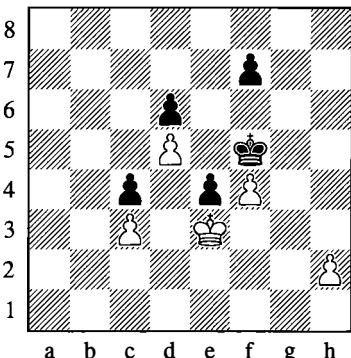
**35.♗e3**

The only move that doesn't lose a pawn. Intuitively, the pawn ending seems promising for White with his more active king, but it's difficult to calculate all the way to the end.

**35...♗xe3**

White has two answers to 35...f5.

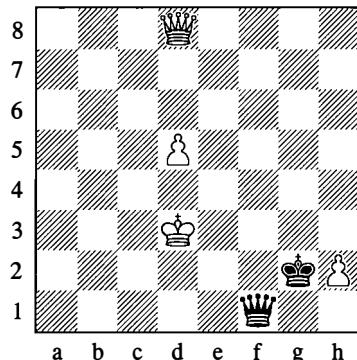
- a) **36.gxf5 gxf5** **37.♗d3 c4†!** **38.♗d2 ♗f6!**  
**39.♗xe4 fxe4** **40.♗e3 ♗f5** **41.c3**



It seems that Black is in zugzwang, but there is a saving line with: **41...♗g4!** **42.♗xe4 f5†!** **43.♗e3 ♗h3** **44.♗d4 ♗xh2** **45.♗xc4 ♗g3** **46.♗d4 ♗xf4** **47.c4 ♗g3** **48.c5 dxc5†** **49.♗xc5 f4** And both sides promote.

It's worse for Black to deviate with **44...♗g4** since White gets a queen ending with two extra pawns after **45.♗xc4 ♗xf4** **46.♗d3 ♗f3** **47.c4**

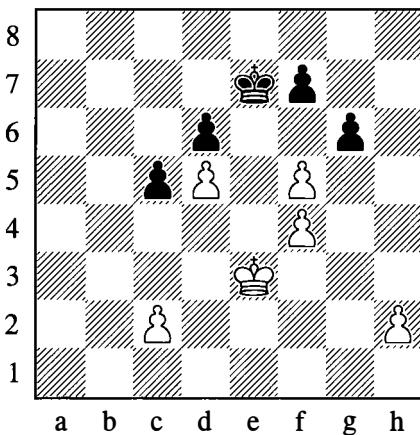
**f4** **48.c5 ♗g2** **49.cxd6 f3** **50.d7 f2** **51.d8=♕**  
**f1=♕†.**



White is winning, even though the queen is badly placed on d8.

- b) **36.♗xe4†! fxe4** **37.g5 f5** **38.gxf6† ♗xf6**  
**39.♗e3 ♗f5** **40.c4** The zugzwang decides.

**36.♗xe3 f5** **37.gxf5**



**37...♗f6!**

**37...gxf5** is also a possibility. White can't advance with the h-pawn, but instead wins by playing the king to c6: **38.♗d3 ♗f6** **39.♗c4 ♗g6** **40.♗b5 ♗h5** **41.♗c6 ♗g4** **42.♗xd6 ♗xf4** **43.♗xc5 ♗e3** **44.d6 f4** **45.d7 f3** **46.d8=♕** Black is a tempo short.

**38.fxg6 ♗xg6**

**39.h3!**

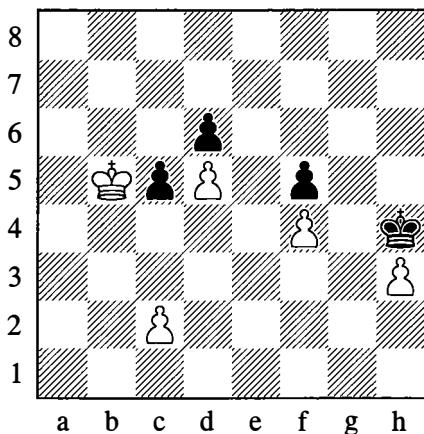
The key move. 39.♕e4 f5† only draws.

**39...f5**

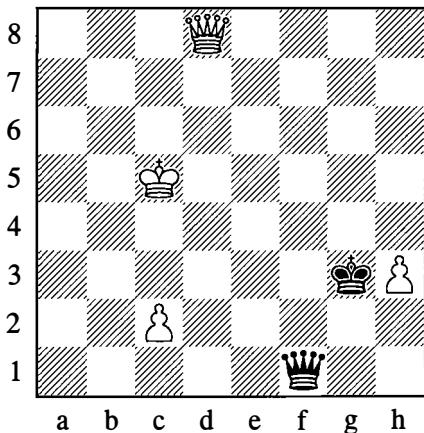
39...f5 40.♕f3 f6 41.♕e3 c4 42.c3 ♕g6  
43.♕e4 forces ...f6-f5 in a worse version than the mainline.

**40.♕d3 ♕h5 41.♕c4**

With the pawn on h3, Black has to go via h4 to pick up the f4-pawn.

**41...♕h4 42.♕b5****43...♕g3!**

The king doesn't have to go via h3 though!

**43.♕c6 ♕xf4 44.♕xd6 ♕g3 45.♕xc5 f4  
46.d6 f3 47.d7 f2 48.d8=♕ f1=♕****49.♕d3†!**

White wins.

The line is quite straightforward all the way and not impossible to calculate, since only a few pieces move.

**46. Brede Kvisvik – David Coates**

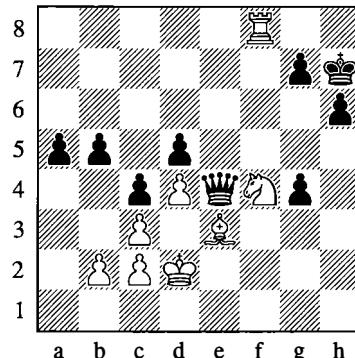
Blackpool 9th March 2012

This is not an exact position from the game – the pawn on b2 was really on a3.

Black is two pawns up, but White has a strong resource.

**31.♕xe7!**

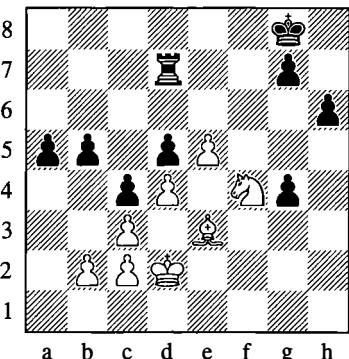
White can get the same position but with the pawn on e6. 31.e6? ♕d6 32.♕xe7 ♕xe7 33.♕xg6 ♕xe6! The problem is that the pawn is lost. 34.♖xf8† ♕h7 White has a lot of pieces against the queen, but they don't cooperate against a weakness. 35.♕f4 (35.♕e5 g3 doesn't change anything.) 35...♕e4



White has to sacrifice a piece for the g-pawn, with a lost position.

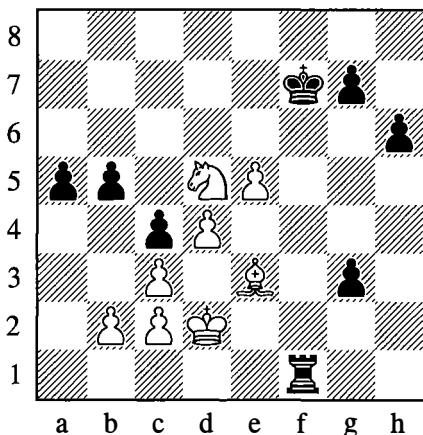
**31...♕xe7 32.♕xg6 ♕xf1**

32...♕f7! is actually a better way to reach two pieces against the rook, since Black has 33.♖xf7 ♕xf7 34.♕f4 ♕d7! which keeps the d-pawn.



Normally, a passed pawn and two minor pieces work very well together, but in this position White's bishop is too passive. Black can push the passed pawns on the kingside, and be better. Nevertheless 31... $\mathbb{W}xe7$  was White's best chance.

**33.  $\mathfrak{Q}xe7\#$   $\mathfrak{Q}f7$  34.  $\mathfrak{Q}xd5$  g3**

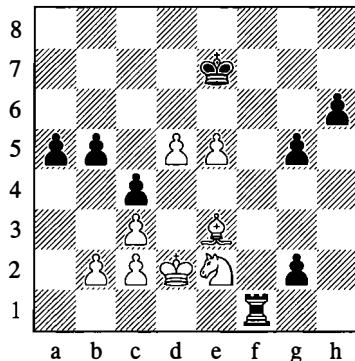


The rook enjoys this type of position, with passed pawns and open play. However, White also has two dangerous passed pawns. This is a critical moment – White has to decide whether to play actively with 35.  $\mathfrak{Q}c7$  or to defend with 35.  $\mathfrak{Q}f4$ .

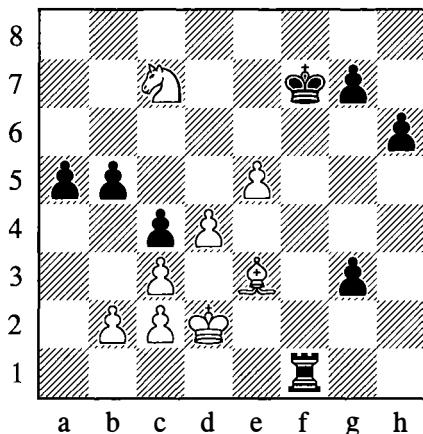
**35.  $\mathfrak{Q}c7!$**

White correctly understands that passive defence never works.

35.  $\mathfrak{Q}f4?$  g5 36.  $\mathfrak{Q}e2$  (36.  $\mathfrak{Q}g2?$   $\mathfrak{Q}e6$  With the white pawns safely blocked, Black will have all the time in the world to push his own pawns. ... $\mathfrak{B}f5$  followed by ...h5 is a good start.) 36...g2 37. d5  $\mathfrak{Q}e7$



38.  $\mathfrak{Q}c5\#$  (38. e6  $\mathfrak{B}f5!$  was Black's idea with the previous move. White loses a pawn, since 39.  $\mathfrak{Q}c5\#$   $\mathfrak{Q}e8$  40. d6 drops the bishop to 40... $\mathfrak{B}xc5$ .) 38... $\mathfrak{Q}e8$  39.  $\mathfrak{Q}g1$  h5 Black is winning.

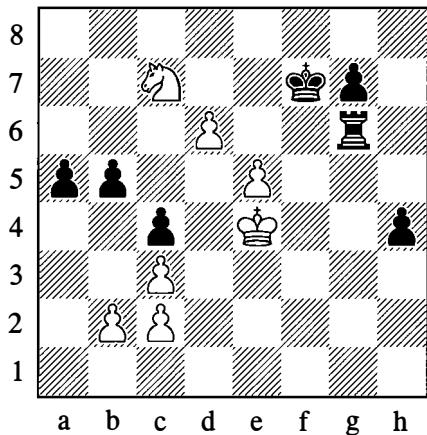


Now a pawn race will start. Take it as another exercise!

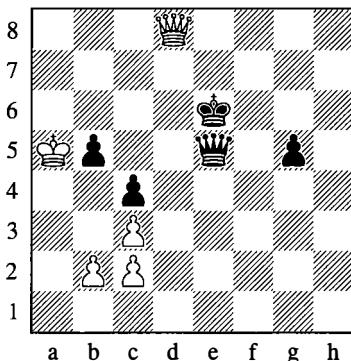
**35...g2 36. d5 g1=  $\mathbb{W}$  37.  $\mathfrak{Q}xg1$   $\mathfrak{B}xg1$  38. d6  $\mathfrak{B}g6$**

To stop e5-e6.

**39.  $\mathfrak{Q}e3$  h5 40.  $\mathfrak{Q}e4$  h4**

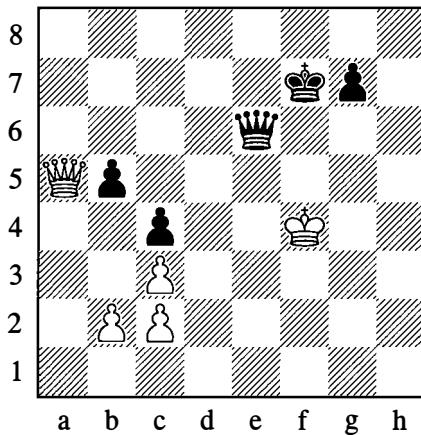
**41.♔f5**

41.♔d5?! actually also works, but not quite as well. Black will promote with check: 41...h3 42.e6† ♜xe6 43.♕xe6 h2 44.d7 h1=♕† However, he can't stop White from promoting anyway. The forced line continues with 45.♔c5 ♜xe6 46.d8=♕ ♕h5† 47.♔b6 ♕e5 48.♔xa5 g5.



White's king is worse placed on the queenside than it would be on the kingside. It can try to capture some pawns, but it's more important to stop Black's passed pawn. Black is slightly better.

41...h3 42.e6† ♜xe6 43.♕xe6 h2 44.d7 h1=♕ 45.d8=♕ ♕h3† 46.♔f4 ♕xe6  
47.♕xa5



Black has a passed pawn, but with White's king in front of it, it should be a draw.

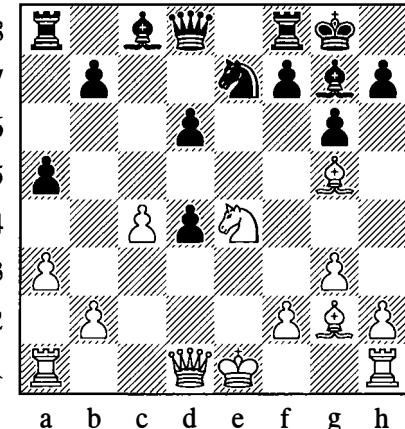
**47. Jovica Radovanovic – Axel Smith**

Czech Open, Pardubice (var), 25th July 2011

It's time for a blunder check! 11...♗xd4?? allows: 12.♕xd4! cxd4 13.♘f6† ♔f8 14.♗h6#

**11...cxd4 12.♗g5**

It seems that Black can't defend the dark squares, but in fact everything is all right.

**12...0–0**

White has three options:

a) 13.♕f6† ♜h8! and Black is better, since White can't take the pawn: 14.♗xd4? ♔g8 and Black wins the knight on f6.

b) 13.♕f6 intuitively looks good for White, but Black can keep his extra pawn with 13...♗b6!. The tactical justification is 14.♕xe7? ♕e8 15.♕g5 f5 and Black wins back the piece with a clear advantage.

c) 13.0–0 is White's best move, with unclear play.

### 48. Aryan Tari – Trond Thorstensen

Norwegian League, Oslo 3rd November 2012

**20.♗xd5! exd5 21.♕b6!**

Clearing the e-file with tempo.

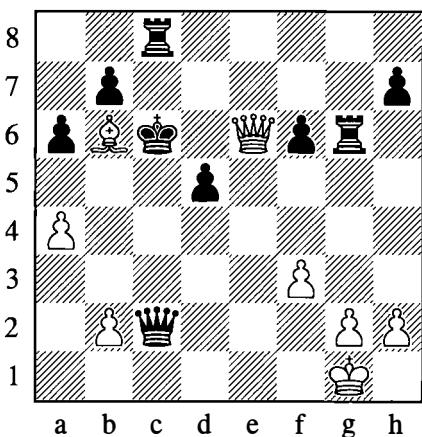
**21...♛xc2**

The black queen avoids blocking the king's escape square on c6, and in addition Black threatens mate.

**22.♗e1† ♜d7 23.♛e7† ♜c6 24.♗e6†!**

The move White must have seen when he sacrificed the exchange, and the move Black overlooked when he allowed the sacrifice.

**24...fxe6 25.♛xe6#**

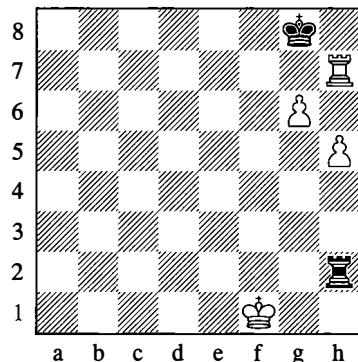


A classic mating picture.

### 49. Anish Giri – Axel Smith

Reykjavik Open (var), 20th February 2013

The first variation to calculate: is 48...♜f6 49.g6 ♜f6 50.h5 ♜g7 51.♗h7† ♜g8 52.♗f1



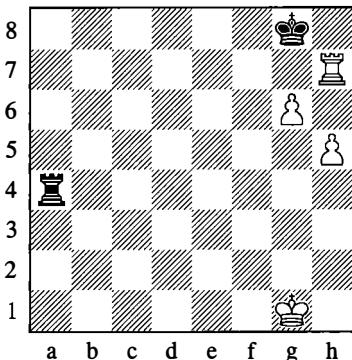
I knew this position from a game in the European Club Cup in Roganska Slatina 2011, although in that game it was White to play. The game ended in a draw since White was in zugzwang. He wants to play ♗a7, h5-h6 and ♗a8 mate, but there is no move order that works:

a) 53.h6 ♘h5 54.♗f2 ♘g5 55.♗g7† ♜h8 56.♗f3 ♘f5† 57.♗g4 ♘g5†! shows why, if the rook has to go to g7, White can't play h5-h6 – it's stalemate.

b) 53.♗g1 ♗a2 releases White's rook from the defence of the h-pawn but 54.♗b7 ♗a5! 55.h6 ♗g5† shows why White's king has to avoid g1.

Geir Sune Tallaksen Østmo told me that this was already known in the 1940s, when Kasparian showed that it's a draw. However, it's Black's move and he is also in zugzwang!

52...♗a2 53.♗b7 ♘h2 54.♗b5 ♘g7 55.♗g1 ♘h4 56.♗b7† ♘g8 57.♗h7 ♘a4



58.♔f2!

Still avoiding the g-file due to the same check as earlier.

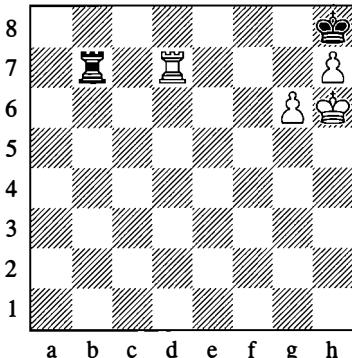
58...♜a5 59.♔f3 ♜b5 60.♔g4

Via another move order, I reached this position against Giri. He threatens ♜a7, and starting to check did not help.

60...♝b4† 61.♔g5 ♜b5† 62.♔h6

The king has found a safe square. The game ended:

62...♝b8 63.♝d7 ♜a8 64.♝d5 ♜b8 65.♔g5  
♜a8 66.h6 ♜b8 67.h7† ♔g7 68.♝d7† ♔h8  
69.♔h6 ♜b7



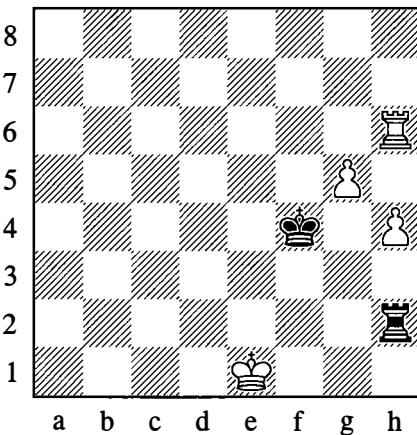
Even though White has more losing moves than winning moves, he didn't make any mistake...

70.g7#

The question is: where in this variation can Black lose a tempo?

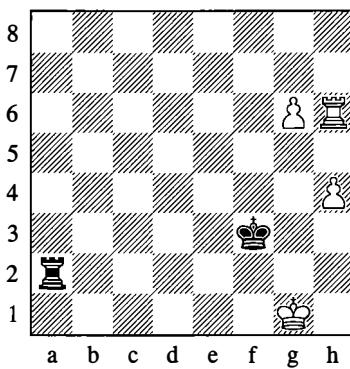
48...♔f4!!

And the answer is: on the first move! From f4, Black's king is ready to move both to f5 and to attack White's king.



49.♔d1

49.g6 ♔e3 is a classical drawing method.  
50.♔f1 ♔f3 51.♔g1 ♜a2



52.h5 (52.g7 ♜g2† picks up the pawn)  
52...♜a1† 53.♔h2 ♜a2† 54.♔h3 ♜a1 55.♔h4  
♔f4= White's king can't escape.

49...♔f5 50.g6

50.♔c1 ♜g2 doesn't change anything – it will still be White's move in the position with reciprocal zugzwang.

50...♔f6 51.h5 ♔g7 52.♔h7† ♔g8 53.♔e1  
♜g2 54.♔f1

White can't move the rook when Black's rook is standing on g2: 54.♜a7 ♜g5!

**54... $\mathbb{E}h2$** 

The zugzwang position, with White to move. It is a draw.

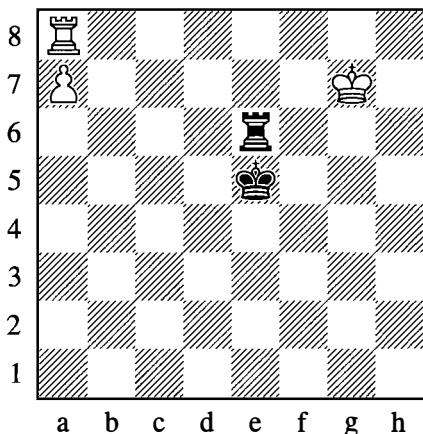
**50. Oliver Moor – Peter Braun**

Neckar Open, Deizisau 3rd April 2013

Peter Braun usually eats an apple every day at 11.00am but not on the day he played this game. He resigned after thinking for one minute. Well, lack of an apple is not a great excuse, but since Braun accepts that mistakes are a part of being a chess player, he happily sent me the position.

**51... $\mathbb{E}e6$** 

The only move that doesn't lose immediately.



White has three tries.

a) 52. $\mathbb{E}f8 \mathbb{E}e7\uparrow$  53. $\mathbb{E}f7 \mathbb{E}e8$  Black's king is first to the a-pawn.

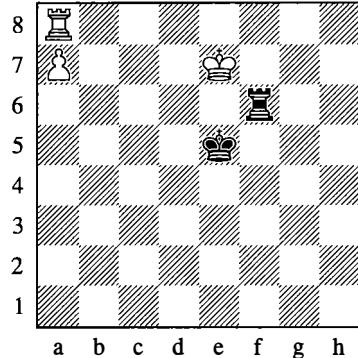
b) 52. $\mathbb{Q}f7$

This is a better try.

52... $\mathbb{E}f6\uparrow$  53. $\mathbb{Q}e7$

Or 53. $\mathbb{Q}g8$  and Black has to check White's king back to the seventh rank: 53... $\mathbb{E}g7\uparrow$

54. $\mathbb{Q}h7 \mathbb{E}e6$  with a draw.

**53... $\mathbb{E}a6!$** 

White's king hinders the rook from checking. 53... $\mathbb{E}h6$  is not working due to, among other moves, 54. $\mathbb{E}e8$  and White moves the king with check.

54. $\mathbb{Q}d7 \mathbb{Q}d5$  55. $\mathbb{Q}c7 \mathbb{Q}c5$  56. $\mathbb{Q}b7$

56. $\mathbb{E}c8$  is a nice idea, but Black defends the rook after 56... $\mathbb{E}xa7\uparrow$  57. $\mathbb{Q}b8\uparrow \mathbb{Q}b6$ .

56... $\mathbb{E}b6\uparrow$

The last precise move, and the draw is clear.

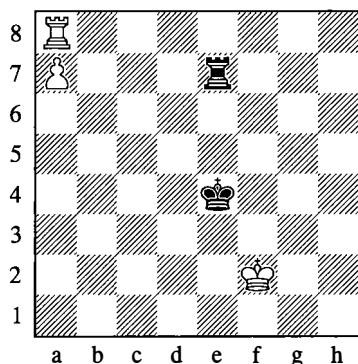
56... $\mathbb{Q}b5$  57. $\mathbb{E}h8$  loses.

c) White can try to create confusion with:

52. $\mathbb{Q}h7 \mathbb{E}e7\uparrow$  53. $\mathbb{Q}g6$

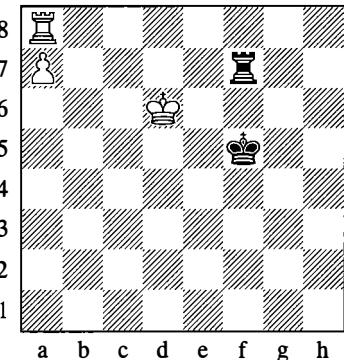
53. $\mathbb{Q}h8 \mathbb{E}e6$  54. $\mathbb{Q}g8 \mathbb{Q}e5$  55. $\mathbb{Q}f8 \mathbb{Q}f6$  draws.

53... $\mathbb{Q}e6$  54. $\mathbb{Q}h5 \mathbb{Q}e5$  55. $\mathbb{Q}g5 \mathbb{E}g7\uparrow$  56. $\mathbb{Q}h4 \mathbb{E}e7$  57. $\mathbb{Q}g3 \mathbb{Q}e4$  58. $\mathbb{Q}f2$

**58... $\mathbb{E}f7\uparrow!$** 

Black should keep the rook as far away as possible from the a-pawn.

59.♔e2 ♔f5! 60.♔d3 ♔f4 61.♔d4 ♔f5  
62.♔d5 ♕d7† 63.♔c5 ♕f7 64.♔d6



Imagine this position with the white king on c6 and Black's pieces on e5 and e7. It would be lost. In the diagram, Black saves himself.  
64...♔f6 65.♔c6 ♔f5=

Black opens a line for a check along the sixth rank before White has managed to defend the a-pawn.

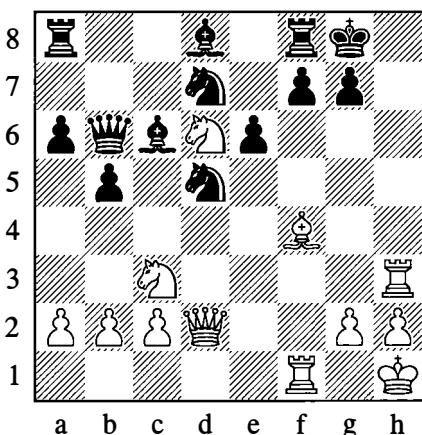
## 51. Jimmy Mårdell – Joel Eklund

Swedish Championship, Lund 5th July 2010

### 21.♗xh7†!

White attacks with six pieces and there are barely any defenders. Nevertheless, it's only by a small margin that the sacrifice works.

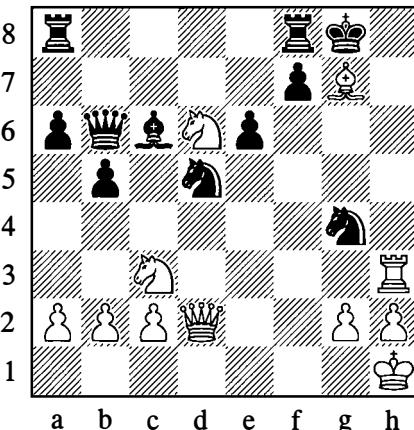
21...♗xh7 22.♕h3† ♔g8



### 23.♕h6!

The only move. White threatens ♕xg7 followed by ♕d2-h6-h8.

23...♗f6 24.♕xf6! ♔7xf6 25.♕xg7! ♔g4



### 26.♕f6!

A pleasing finish. With ♕g5 and ♕h8 threatened, the only way to avoid mate is to resign. Eklund allowed mate as a nice gesture.

26...♔f2† 27.♕xf2 ♕xf2 28.♕h8 mate

There were a lot of fun sacrifices in this example: the dark-squared bishop sacrificed itself three times, the rook and the light-squared bishop once each. It was not quite 99% tactics, but I am sure that Richard Teichmann would have been satisfied anyway.

## The Woodpecker Method

Start by carefully studying the tactical motifs (from this book or another source). Solve simple exercises sorted into themes, and arrange it as a competition: use a chess clock, a points system, and remember that you don't have to find the solution to every exercise.

When you feel that you know the tactical motifs well enough, move on to 200-1000 tactical exercises where they are mixed. Solve

them intensively, and take a break when you have finished.

Start all over again, and try to solve them faster. However, don't search in your memory for the solution; try to solve them as if you have never seen them before.

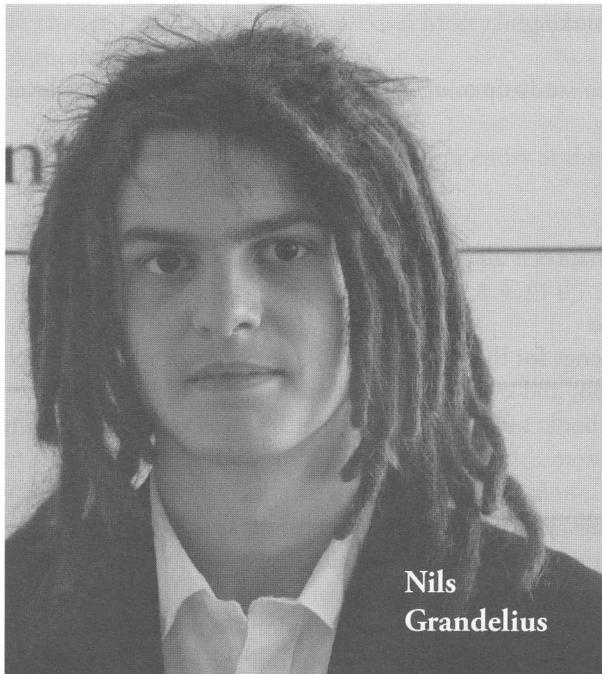
And then repeat the procedure again and again, in the same way as the woodpecker pecks at a tree.

Tack-tack-tack-tack – pause – tack-tack-tack-tack – pause – tack-tack-tack-tack – pause – tack-tack-tack-tack.

# Chapter 7

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## Openings



Nils  
Grandelius

Club: Lunds ASK  
Born: 1993  
GM: 2010

*When Grandelius started to play for Lunds ASK in 2008, he was already the most publicized talent in Sweden. He became the youngest IM in the country later the same year and the youngest GM two years later. Grandelius won the European Youth Championship for players under 18 in 2011, and finished fourth in the World Junior Championship in 2012.*

There is a common opinion that most chess players spend too much time studying openings. In one way I agree. Opening studies can never replace solving exercises or analysing your own games, and anyone who creates a List of Mistakes will probably get a hint that the opening is not the phase where most games are decided.

Still, studying openings is much more purposeful than many other training methods, if done in the right way.

I think there are two reasons many players spend a lot of time studying openings. The choice of openings provides a sort of identity in the chess world; I talk about “my openings” but never about “my endgames”. We sometimes identify a chess player as, for example, “The French Player”. With the opening so closely attached to who we are, it’s natural that we want to know it well, and this phenomenon also makes it harder to switch to new openings.

The second reason is the easiness of getting started. A training partner is necessary to analyse games we have played, and full focus is required when solving combinations. To learn openings, it’s enough to turn on a DVD, or pick up a book and start reading. A board and pieces aren’t needed. Neither is thinking!

This is not the way to study openings! It must be done with the same level of active work as all serious chess training.

## Chapter overview

The subject of this chapter is all parts of opening preparations, in the following order:

### **1) Level of ambition**

Openings are a challenge for the chess player, but they can be a rewarding challenge. I have listed five levels of ambition, and even the first is quite ambitious. The content in the chapter is the most difficult in the book, but I hope I have managed to explain it in an understandable way.

### **2) Databases**

To work with openings, you need several different databases.

### **3) Opening files**

After having chosen an opening and found a good book, it’s time to type in the lines in an “opening file” in ChessBase. This is the foundation for future analysis, and makes it easier to check the lines against other sources.

### **4) Analysing**

I mention four important principles when analysing with an engine. The idea behind all of them is to make the analysis as human as possible.

### **5) Incorporating the analysis**

When the analysis is saved in the opening file, it’s easy to lose sight of what’s happening. For that reason, there are three principles that will ensure the opening file is easy to survey.

## 6) Your move

It's time for an exercise – a specific opening position where your task is to analyse and create an opening file.

## 7) Remembering

Having finished with the analysis, it's time to discuss the preparations, where remembering variations is an important part.

## 8) Preparing

The topics in this section are: getting as much information as possible, deciding what to play and rehearsing the lines. Finally, there is an example of Nils Grandelius's preparations.

Briefly, 1-3 concerns the opening files, 4-6 the analysis and 7-8 the preparations.

When I was thirteen I wrote down my complete repertoire in Microsoft Excel, in some sort of opening tree. How life changed when I found ChessBase! Most chess players have chosen that program, and it feels natural to refer to it.

To avoid making this chapter into a technical manual, I have added two references:

When there is a sign with [A], instructions are found in the appendix at the end of the book on page 367.

The chapter is not about openings, it is about studying them. At the same time, it's good to have an example. That will be the Anti-Slav line starting with: 1.  $\mathbb{Q}f3$  d5 2. g3  $\mathbb{Q}f6$  3.  $\mathbb{Q}g2$  c6 4. c4  $\mathbb{d}xc4$

## Levels of ambition

In his book *Profession: Chessplayer* Vladimir Tukmakov argues that it's most important to learn standard positions by playing through illustrative games. He is not alone, but the approach I propose in this chapter is based heavily on concrete analysis and thus is fundamentally different. With my approach, you can still learn typical middlegame positions in a satisfying way.

There is a similar clash of approaches between learning just one opening very well or playing many different openings. I advocate the latter. It makes it possible to choose an opening based on the opponent's strength, time management and style of play. At the same time, the opponent can barely prepare at all.

However, my most important argument for playing many openings is that it's a good way to learn about all kinds of positions.

I know there are disadvantages with my approach. One, which I don't consider too serious, is that you get very dependent on preparations. If you play many different lines, you have to refresh your memory before every game. In rapid tournaments, that's often not possible.

In the 2012 Swedish Championship, I played different openings in all nine games and managed to stay undefeated and shared first to fourth place. The tiebreak was decided by rapid games,

where there was no time for real preparations. I had opening catastrophes in the two first games and didn't stand a chance.

Another disadvantage is of course that you need to continue working, to keep all the openings under control.

It's a common trait among humans to believe that there will be a lot of free time in the future. The near future is filled with obligatory things, but later, there will be more freedom. When we reach "later", things have changed...

If we want to play several openings, and do it well, we have to find that time *now*.

This chapter will be useful even for players who have less time or less interest in working on their openings. The analysis can still be made in the same way, the preparations are similar and I think it will be useful for everyone to work with "opening files", even if they are small ones.

Below, I list five possible levels of opening ambitions.

- 1) Creating some "opening files" in ChessBase. The first moves in your previous games are saved in the files, to know how to play if an opponent repeats what you have played earlier.
- 2) Trying to get a repertoire that covers most of the openings you play, and checking the common moves among top players in the Reference database.
- 3) Doing some analysis of your own, to have some ideas that will surprise opponents. It's especially important to deviate from the games you have in the TWIC-database.
- 4) Checking the opening files against new books, to catch out players who follow these books. Looking for novelties everywhere, to surprise any opponent.
- 5) Trying to build comprehensive opening files so that you seldom need to analyse during a tournament.

There is nothing wrong with having even lower ambitions than the first level, but for the purpose of this chapter, it's best to start there. I think very few 2400-players reach level two or three, and reaching the final step might just be a dream for most. For example, it's regularly possible to read about Super-GMs who, fifteen minutes before the round, find out that their line is unplayable.

Still, I believe it's helpful to have defined those levels.

Nils Grandelius and I started to train together when he was twelve. I was seven years older, but he was already higher rated. Two years later, in April 2008, I gave him the task of creating a small opening file for the Berlin with 4.d3 ♖c5 5.♖xc6, a variation where understanding is much more important than concrete analysis. Before he showed me the opening file, he played it against me and got an advantage!

At that time he was still a child and didn't really work on chess on his own. I know my memories are rose-tinted, but just two years later I think he had reached the final level on the list above.

Since then, he has built one of the most feared opening repertoires in Sweden.

The good news is that Grandelius is still following all of the principles in this chapter.

## Opening files

In addition to a database with your own games, and one to search for games of opponents, it's good to have a working database, a database with top-level games and, of course, opening databases. I have written about them in the appendix at the end of the chapter.

An opening file is like a small opening book. A justified question is therefore: isn't it just easier to use a real book? The logistical problem of travelling to tournaments with a backpack filled with opening books is solvable, but the most important reason to save openings in a database is the possibility to personalize it. You can promote lines you are planning to play, it's possible to analyse new moves and to add personal remarks.

The following steps summarize the process of creating an opening file. My analysis of the illustrative line, the Anti-Slav variation starting with **1. ♕f3 d5 2. g3 ♔f6 3. ♘g2 c6 4. c4 dxc4**, mostly stems from January 2010, when I was the second for Grandelius in Wijk aan Zee.

### 1) Choose a good opening

Dubious lines may work from time to time, but in the long run it's best for your chess development to play what the grandmasters play. I guess no one has heard of a junior soccer team playing 4-2-4. It may very well give good results in beginner's soccer, when they haven't the skill to use the midfield to build up the play, but somehow it's against the spirit of the game.

To start with ♕f3, g2-g3, ♘g2 and 0-0 looks quite harmless, which it really is if White continues with d2-d3 in King's Indian fashion. It's more active, and better, to follow up with c2-c4 and d2-d4, with the idea of transposing into a Catalan structure.

So why not start with 1.d4 and meet the Queen's Gambit with the Catalan? There are three reasons to start by fianchettoing and castling, then only afterwards pushing d2-d4.

#### 1) It avoids ...♗b4(†)

This bishop move is played in many lines of the Catalan, the Bogo-Indian and not least in the Nimzo-Indian.

#### 2) It avoids an early ...dxc4

This is also a common theme for Black in the Slav, Open Catalan, Queen's Gambit Accepted and also the Grünfeld.

#### 3) It avoids an early ...cxd4

In many openings Black "threatens" ...cxd4 and forces White to push d4-d5. This happens in the Benko Gambit and in all the Benoni lines.

That was a lot of openings avoided! The Tarrasch is still available in its pure form, likewise the Closed Catalan. Against the King's Indian and Dutch, White can choose whether he wants to transpose to normal lines or play some 'Anti-System'.

Basically, White plays a 'Grünfeld Indian Attack', which is best seen in the line **1.Ґf3 d5 2.g3 c5 3.Ґg2 Ґc6 4.d4**. The extra tempo gives White a nice position, and unprepared opponents often find themselves unpleasantly surprised by 4.d4.

Of course, Black also gets some extra possibilities, mainly the Symmetrical English, with the Hedgehog or other setups. What is most usual, though, is that Black plays some sort of Anti-Catalan (**1.Ґf3 d5 2.g3 Ґf6 3.Ґg2 e6 4.c4 dxc4**) or Anti-Slav (**1.Ґf3 d5 2.g3 Ґf6 3.Ґg2 c6 4.c4 dxc4**). The last line is the example in this chapter.

Teimour Radjabov is one top grandmaster who has used the move order starting with 1.Ґf3 and 2.g3. It's definitively a serious try.

## 2) Finding a book or a DVD

It is possible but rather impractical to reinvent the wheel – so a good book is an excellent first source to learn from. When I studied the Anti-Slav in Mostar, from August to September 2008, I only knew a few books mentioning the move order. A few years later a magnificent work by Mihail Marin appeared.

The book you choose should teach the most important positional ideas. The main characteristic for the Anti-Slav variation is the fianchettoed bishop. There are many reasons why it's so strong:

- ▲ It defends the king. White always castles short in the Anti-Slav.
- ▲ It controls a long diagonal. White would love to exchange his c- and d-pawns for Black's c- and d-pawns to open up the diagonal.
- ▲ It's difficult to threaten the bishop with a knight. In the Anti-Slav, White often gets the bishop pair. Many endgames are thus good for White, since the bishop pair shows its full strength there.

There are also some downsides with fianchettoed bishops:

- ▲ If the bishop is exchanged, the king becomes weak. In the Anti-Slav, Black plays an early ...c6, and will thus probably not castle long. Therefore, White doesn't have to be afraid of an attack on his king.
- ▲ A pawn must be moved to develop the bishop to g2. I think this is the main disadvantage. 1.e4 is also a pawn move that opens up the bishop, but in addition it controls the centre; 2.g3 does not.
- ▲ The bishop also loses control over the c4-square, which allows Black to try 4...dxc4.

In the long run, the bishop has great influence over the centre from its fianchettoed position, but in the first moves, Black gets some extra possibilities.

Emil Hermansson, Nils Grandelius's first trainer, emphasized that it's important to understand the logic behind the first moves. Before studying the sharp variations of the Sicilian Najdorf, one has to know why Black plays moves like 2...d6 and 5...a6.

To follow his advice, I will give some annotations of the first four moves.

### **1.♘f3**

White develops the knight, prepares to castle short and stops Black from playing 1...e5.

### **1...d5**

Black occupies the centre with a pawn, in the only possible way.

### **2.g3**

White chooses to play with a fianchettoed bishop, with the pluses and minuses that were discussed above.

### **2...♘f6**

Again, the most logical move, developing the knight to its most active square.

### **3.♗g2 c6**

This is a mysterious move. It doesn't develop a piece, occupy the centre or prepare castling. Black's thought processes can be summarized in the following five steps:

1) I don't want to fianchetto my king's bishop, so I have to move the e-pawn to develop it. (What a boring player!)

2) For the moment I can't play 3...e5. I don't want to prepare it with 3...♘c6 since White answers with 4.d4. In d4-openings, the knight doesn't want to block the c-pawn, neither for White nor for Black. (There are a lot of exceptions, but in general this is a reasonable thought.)

3) I can't see any other good moves preparing ...e5, so later I have to play ...e6. (That's right.)

4) I don't want to leave the bishop on c8 – it seems too passive! (A matter of taste, but there doesn't seem to be anything wrong with this player's taste.)

5) Both f5 and g4 seem to be reasonable squares for the bishop, but can I really weaken b7 so early? I am afraid that White will quickly play moves like c2-c4, ♜b3 and ♜c3. (A fine sense of danger – White really would do this.)

6) Let's start with 3...c6. It defends the d-pawn. If White castles and I develop the bishop next move, he is one tempo slower if he tries the same queenside pressure. (Nice reasoning – this is a player who knows why he plays his first moves!)

### **4.c4**

The logic behind this move is exactly the same as behind 3...c6. White wants to stop Black from developing the c8-bishop by being ready to attack b7.

### **4...dxс4**

Black is consistent and holds true to his three maxims: No fianchettoed bishop; Do not play ...e6 before the light-squared bishop has developed; Avoid ...♗g4 or ...♗f5 when White has direct pressure against b7.

4...dxс4 takes a pawn and tries to punish White's play. Black will try to hold on to the pawn, since if White recaptures it without making any concessions, he will have a pleasant position with two centre pawns against one.

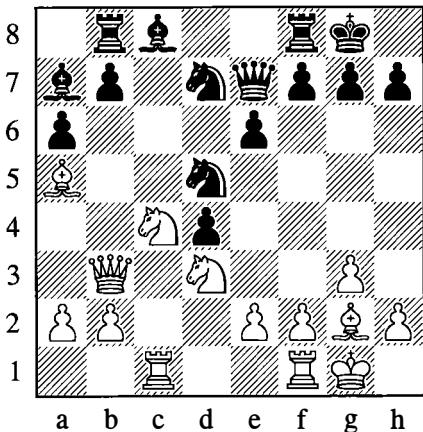
### **3) Inputting the chosen lines**

After you have read the opening book and decided which lines suit you best, it's time to input the moves, evaluations and the valuable

text comments into a game in ChessBase. It's better to write more text than less; text comments make it much easier to remember. Here is one example from the highest possible level.

### Viswanathan Anand – Veselin Topalov

World Championship, Sofia 25th April 2010



In the first game, Anand forgot his preparation and lost. In this second game he was eager to repair the damage. In the diagram position he has sacrificed a pawn, but his better-placed pieces provide compensation. 15.♕ce5 was played in Gulko – Shulman, US Championship 2008, but Anand's team had prepared a novelty.

#### 15.♕a3!?

Voluntarily accepting doubled pawns! Anand won the game, but he had mixed up his preparation.

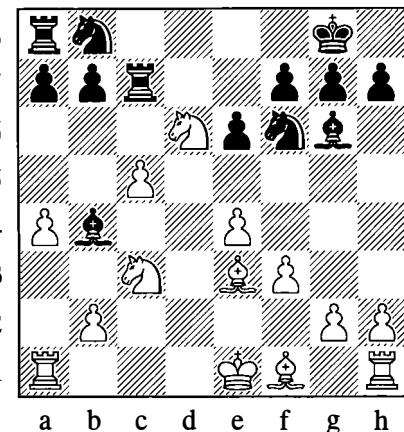
15.♖fd1 ♕e8 16.♕a3 was the actual preparation. Not only is ♖fd1 a useful move, but it also makes more sense to play ♕a3, exchanging Black's queen and accepting doubled pawns, with the black rook on e8, since White will have ♔d6 with a threat to the rook.

If it had been pointed out in the opening file that White plays ♕a3 when Black's rook is on e8, since he has ♔d6 with tempo, I am sure Anand would have remembered it, probably even many decades later.

It's a bit extreme to explain every move with text annotations, and too obvious comments don't fill a purpose. However, in the case of move orders, it's often crucial. Here is an example where it would be difficult to remember the move order without understanding it.

#### Example

1.d4 d5 2.c4 c6 3.♘f3 ♘f6 4.♘c3 dxc4 5.a4 ♕f5 6.♗e5 e6 7.f3 ♕b4 8.♗xc4! c5 9.dxc5 ♘xd1† 10.♗xd1 0–0 11.e4 ♕g6 12.♗d6 ♘d8 13.♗e1 ♘d7 14.♗e3 ♘c7



White is temporarily a pawn up, but Black will probably manage to win it back. White's idea is to open up the queenside, since Black's bishop on g6 is completely out of play. Instead of 13.♗e1, everyone goes to c2, but I think the king is safer on f2.

White's first task is to complete development with ♕e2 and ♘f2, but in which order? The analysis engines indicate that 15.♕e2 is best. It would be easy to be satisfied with that, but it would be hard to remember in a game, which might be played several months later.

It's difficult for humans to remember plain moves, but easy to remember verbal concepts. To add a text comment after 15.♕e2, we need to understand why it's better.

It turns out that 15.♔f2 can be met with 15...♝xc5?! 16.♗xc5 ♜xc5† with check. Black also has 15...♝bd7?!. With 15.♕e2 played, White would have 15...♝bd7?! 16.♝xb7 ♜xc3 17.bxc3 ♜xb7 18.c6, but with the king on f2, there is 18...♝b2†. Again, a check disturbs the king on f2.

### 15.♕e2!

In the opening file, the following text can now safely be added: "White wants to develop with ♕e2 and ♔f2, but the latter can be met with 15...♝xc5?! or 15...♝bd7?!. 16.♝xb7 ♜xc3 17.bxc3 ♜xb7 18.c6 ♜b2†."

I recommend setting the most important move as the mainline when there is a branch. By doing so, the final position becomes some sort of verdict.

It's also good to use exclamation and question marks when possible. They are another type of comment that makes it easier to remember. It might also be helpful to use coloured squares and arrows to represent plans and weak squares, but be aware that those can't be seen if the analysis is printed [A].

But, you may ask, in this book's introduction I said many verbal explanations are wrong. Shouldn't the text comments be removed, to avoid the phenomenon of verbal overshadowing?

The difference is the aim. In the opening file, the aim is to remember concrete moves. Verbal explanations work well for that purpose. The middlegame skills you learn when analysing should, on the other hand, not be summarized in a few sentences; their essence is better captured by your intuition.

### 4) Checking the file against played games

You should save the openings in your games in the opening file. If possible, you will find a way to deviate, thus avoiding future opponents' preparations. Your games will also make memorization much easier, since they represent episodes and not just facts. For most people, episodes are saved in the right hemisphere, and activating those memories allows you to use the brain's full capacity.

It's also good to see what grandmasters are playing, by checking the Reference-database [A]. Theory may have developed since your opening book was published. Cite the relevant games by Super-GMs.

### 5) Analysing

Sometimes the variation in the opening book is clear cut, with an indisputable advantage if you are White, or dead certain equal play if you are playing for equality with Black. Then there is no need to find new moves. But this is not the case in most lines, especially not with White. Actually, that is not surprising, since the game of chess has a rather wide drawing margin.

Often, when authors of opening books can't find any advantage, they give a novelty, attach an ? and write that the idea remains to be tested, or that practical examples are needed. I do like the idea of surprising my opponent with a new move, but it loses some impact when published for thousands of readers!

It's terrible to follow such a book-line when the opponent is self-confidently blitzing out moves. You know that he has a prepared move somewhere, but you don't know where. In addition, you may not be certain of the quality of the book's analysis.

It's much better to prepare a new move of your

own! If two moves are of equal value, it's better to choose the one that isn't mentioned in the book. Ideas of your own give a competitive advantage over the board, at least on the clock.

To deviate from opening books is a most common reason to analyse. A new top game in TWIC that seems to develop the theory is another reason, or when a future opponent has played a move that's not mentioned in the opening file. However, there doesn't have to be a specific reason to start analysing! The next part of the chapter covers the craft of analysis.

## 6) Comparing with other sources

Many players follow specific opening books. To check those books and prepare novelties against them gives an enormous advantage in tournament games. The bad news is that theory continues to develop, and new opening books appear. A serious player needs to keep up to date.

It's also good to check the opening file against new TWIC-games in the Reference-database from time to time. How often depends on the opening; in fashionable lines, one tournament can completely alter the existing theory, but in others, not much has happened during the last century.

### An opening file

When I thought I understood the concept of the Anti-Slav, I made an opening file. There was no book on this line, so the main source, except my analysis, was grandmaster games. In the following months I updated the file when a relevant new top-level game appeared or when I had played a game. Below is what the opening file looked like. Since I share my opening files with friends, I have always tried to write so that others could understand my files.

### Anti-Slav 4...dxc4 5.0–0

#### 1.♘f3 d5 2.g3 ♘f6 3.♗g2 c6

A useful semi-waiting move. Black wants to develop the bishop to g4, but 3...♝g4 4.c4 c6 5.cxd5 cxd5 6.♕e5 gives White some initiative on the queenside. Hence, Black waits until White has spent a tempo on 0–0 before he plays ...♝g4.

#### 4.c4!

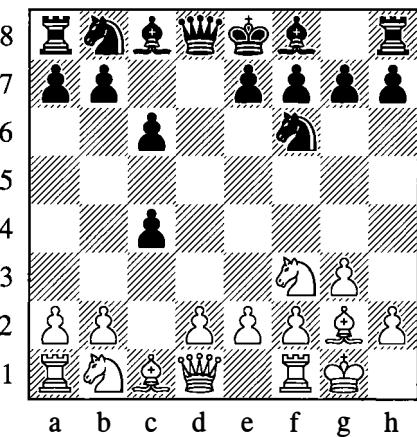
Not participating in Black's plans.

#### 4...dxc4

The most consistent and critical move. Other moves transpose to other lines.

#### 5.0–0

5.♘a3 b5 is fine for Black, so White starts with a useful move to see how Black plays. 5.0–0 is the main move according to the Reference-database, but *Openings for Black according to Karpov* doesn't mention it. That's good! If White manages to pick up the c4-pawn, he will have a healthy advantage with an extra centre pawn.



Black has several options.

#### a) 5...b5?! 6.a4

White's main point with the semi-waiting

5.0–0 is that 5...b5 should be premature, but it's not so clear!

### 6... $\mathbb{Q}b7$ 7.b3 cxb3

After 7...b4 8.bxc4 the engine claims that it's equal, but to me it looks good for White with the centre pawns and all the pieces still on the board.

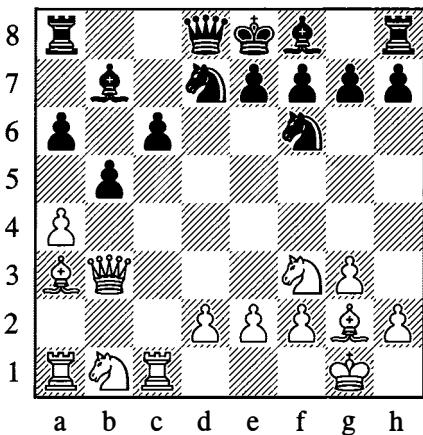
### 8. $\mathbb{W}xb3$ a6

Only one strong player has played this position, so there's not much outside help available.

### 9. $\mathbb{Q}a3$

White wants to exchange dark-squared bishops and stop Black castling.

### 9... $\mathbb{Q}bd7$ 10. $\mathbb{E}c1$



Preferred by the engine. White threatens, among others,  $\mathbb{Q}d4$  and  $\mathbb{Q}g5$  followed by  $\mathbb{Q}xc6$ .

#### b) 5...e6 6.a4?

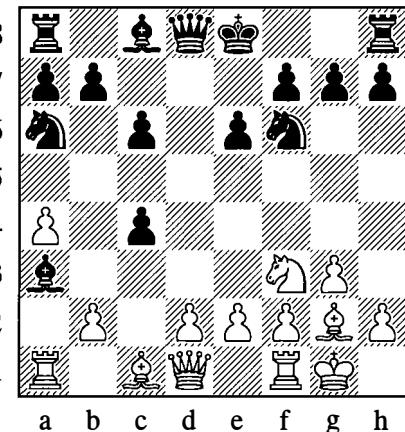
To play  $\mathbb{Q}a3xc4$  next.

6. $\mathbb{W}c2$ ? was played in Smith – Henrik Olsson, Mragel Open 2009. I don't like  $\mathbb{W}c2$ , since I want to take back on b3 with the queen without losing a tempo.

### 6... $\mathbb{Q}a6$

Or 6... $\mathbb{Q}bd7$  7. $\mathbb{Q}a3!N$   $\mathbb{Q}xa3$  8. $\mathbb{E}xa3$  a5. To keep the pawn, Black needs to stop a4-a5 in order to place the knight on b6. 9. $\mathbb{W}c2$   $\mathbb{Q}b6$  10.b3! $\bar{=}$  with  $\mathbb{E}xb3$ ,  $\mathbb{Q}a3$  and  $\mathbb{E}fb1$  coming.

### 7. $\mathbb{Q}a3$ $\mathbb{Q}xa3$



### 8. $\mathbb{E}x a3$

$\mathbb{E}c3$  is the next move. 8.bxa3 is also played, as in Hillarp – Dreev, Denmark 2009. Hillarp said he liked his move.

### 8... $\mathbb{Q}b4$

White doesn't get the pawn back. I am scared!

### 9.a5!

9. $\mathbb{E}c3$ ? b5! is not what I want.

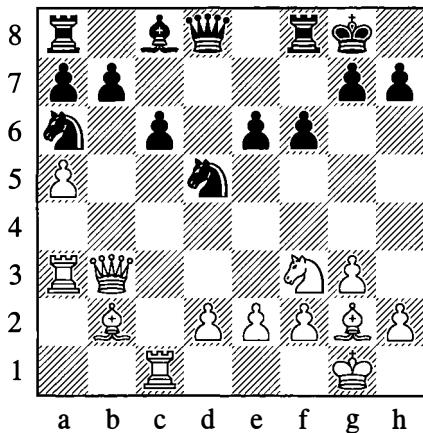
### 9...0-0 10.b3 cxb3 11. $\mathbb{W}xb3$ $\bar{=}$

The bishop pair and Black's passive bishop should give enough compensation.

### 11... $\mathbb{Q}a6$

11... $\mathbb{W}e7$  12. $\mathbb{E}a4$  c5 13. $\mathbb{Q}a3$  To take on b4 with the rook! 13... $\mathbb{Q}fd5$  14.e4 b5! 15.axb6  $\mathbb{Q}xb6$  16. $\mathbb{E}xb4$  $\bar{=}$  Winning the pawn back, with a nice pawn centre.

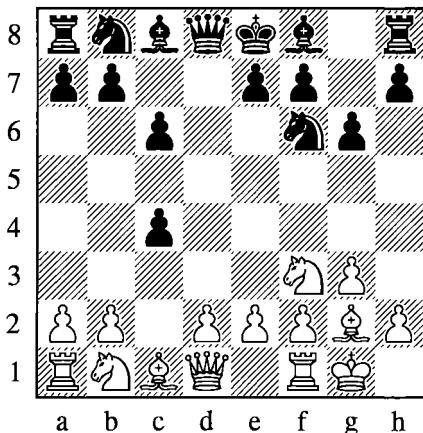
### 12. $\mathbb{Q}b2$ $\mathbb{Q}d5$ 13. $\mathbb{E}c1$ f6



**14.♘a4±**

This seems to be a standard move. White will advance in the centre, and meet a possible ...c5 with d2-d4.

**c) 5...g6**



**6.♘a3 ♜d5 7.♗c2 b5**

7...♝e6 8.♝c3± A standard move. ...♝e4 is impossible and White is threatening ♘d4 or ♘e5.

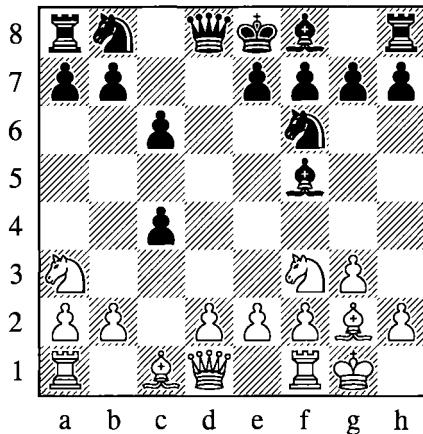
**8.b3! cxb3 9.axb3†**

Black's queen is exposed.

**d) 5...♜d5 6.♘c3**

This looks dubious for Black.

**e) 5...♝f5 6.♘a3**



**e1) 6...b5 7.b3! cxb3 8.♝xb3**

A position where I am not sure how to continue. 8.axb3!? is also possible.

**8...e6 9.d3**

Planning ♘e5. Black has no good answer! All moves that stop ♘e5, allow ♘d4.

**9...♝bd7 10.♘d4±**

**e2) 6...♝d5 7.b3 cxb3 8.♘g5**

♝xb3 comes next. This looks better than normal – with the f5-bishop somewhat loose and b7 undefended.

**e3) 6...e6 7.♘xc4**

Simply good for White, Smith – Øystein Hole, Norwegian League 2009.

**e4) 6...e5? 7.♘xc4**

7.♘xe5? ♜xa3 8.bxa3 ♜d4† is Black's idea.

**7...e4 8.♘fe5 ♜c5**

8...♝bd7 9.d4± White tries to open up before Black has castled. ♜f4 and ♜b3 are normal moves.

**9.d4!N ♜xd4**

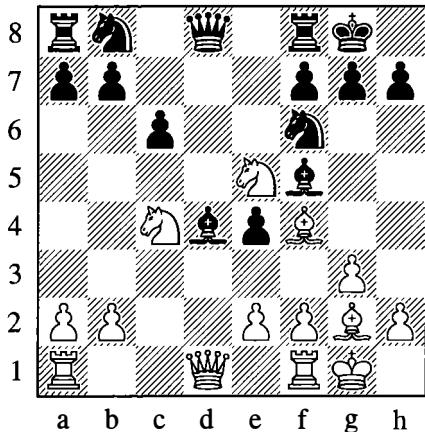
9...exd3 10.♘xd3† or 9...♜xd4? 10.♜xd4 ♜xd4 11.♘d6† ♜f8 12.♘exf7!+–.

**10.♕f4**

Threatening ♜xf7 followed by ♜d6† and ♜xd4.

**10...0–0**

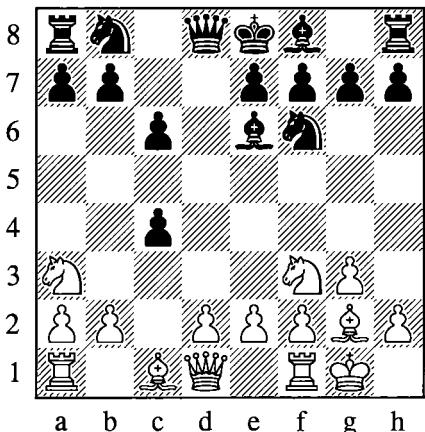
10...♜xe5 11.♕xe5∞



11.♕xf7! ♜xf7 12.♗d6 c5 13.♗xf5±

f) 5...♝e6?! 6.♗a3

White plans ♜g5 or b2-b3.



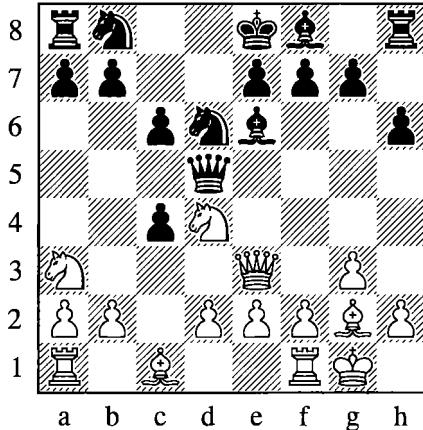
fl) 6...h6 7.♘c2 ♜d5

7...g6 8.♗xc4 ♜g7 9.b4!± Grandelius – Daniil Dubov, Olomouc 2009.

8.♘c3!

Threatening ♜d4.

8...♝e4 9.♘e3 ♜d6 10.♗d4±



f2) 6...♝d5

This was Smith – Kåre Kristensen, Copenhagen Chess Challenge 2010.

7.♘c2N b5 8.b3

Very good compensation.

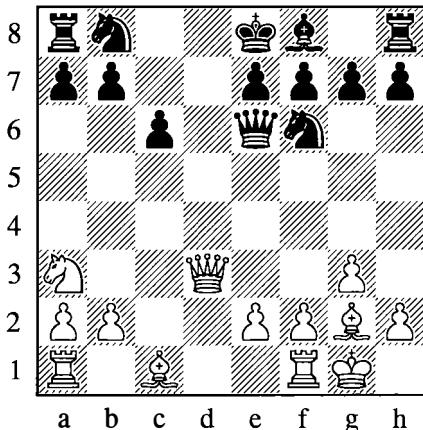
f3) 6...♝d5 7.d3

Logical, when White saved a tempo by not playing ♜c2.

7...cx d3 8.♗g5 ♜d7 9.♗xe6 ♜xe6

9...dxe2 10.♘xe2 ♜xe6 11.♘xe6 fx e6± looks good.

10.♘xd3



White has good compensation, for example:

**10...Qa6 11.Qd1 Qb4 12.Wc4!±**

If Black exchanges,  $\mathbb{Q}a5$  will be very annoying.

**g) 5...Qbd7**

Played in most top games, planning to defend the pawn with ... $\mathbb{Q}b6$ .

**6.Qa3**

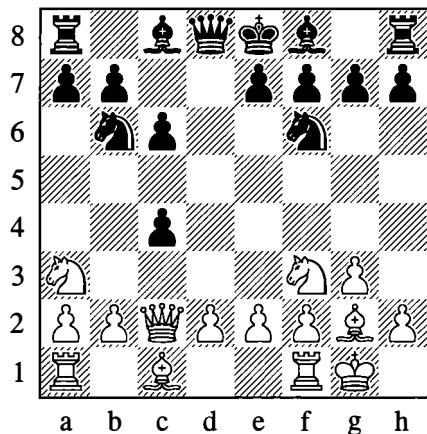
6. $\mathbb{W}c2$   $\mathbb{Q}b6$  7.a4 a5 8.Qa3 is the mainline. The reason to choose 6.Qa3 is not that it's better in any way, just that it's probably less studied by the opponent.

**6...Qb6**

6...b5 7.Qd4+–

**7.Wc2**

Black has two main moves, both equally important.



**g1) 7...Wd5!**

The idea is to play ... $\mathbb{Q}f5$  on the next move. White has to create a threat.

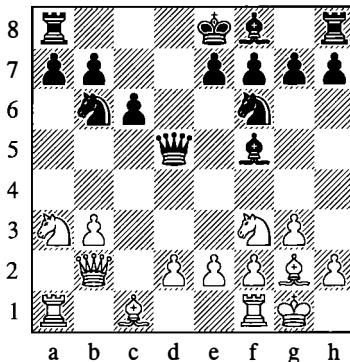
**8.b3**

8.Qe1 is more logical in the variation with 6. $\mathbb{W}c2$ , where a2-a4 and ...a5 are included, since White often continues with d2-d3,

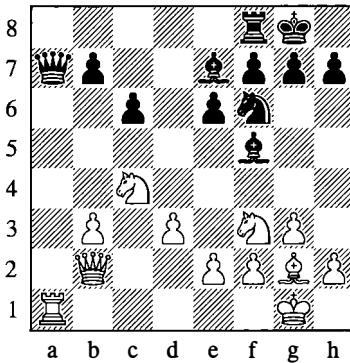
planning to create pressure on the b-file with  $\mathbb{W}b3$ .

**8...cxb3**

8... $\mathbb{Q}f5$  9. $\mathbb{W}b2$  (9.bxc4  $\mathbb{W}xf3!=$ ) 9...cxb3 10.axb3



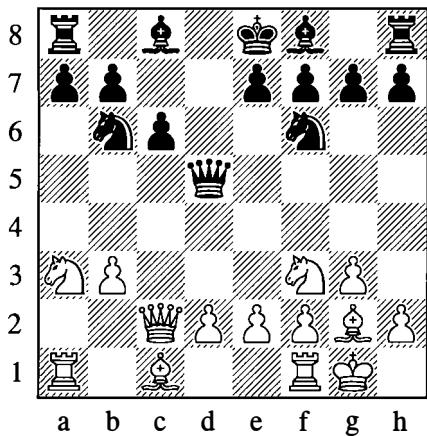
White's plan is d2-d3 followed by e2-e4. Black probably needs to retreat with the queen to d8. 10...e6 11.d3  $\mathbb{W}d8$  12.Qc4  $\mathbb{Q}e7$  13.Qe3 Threatening  $\mathbb{Q}xa7$ , which there is no satisfactory defence against! (13.e4 is also possible, with good compensation.) 13...0-0 14.Qxa7  $\mathbb{Q}xa7$  15.Qxb6  $\mathbb{W}a8$  16.Qxa7  $\mathbb{W}xa7$  17.Qa1



Black looks quite okay.

**9.axb3**

White simply plans  $\mathbb{Q}c4$  and  $b3xc4$  with a strong centre.



9...Bg6!?

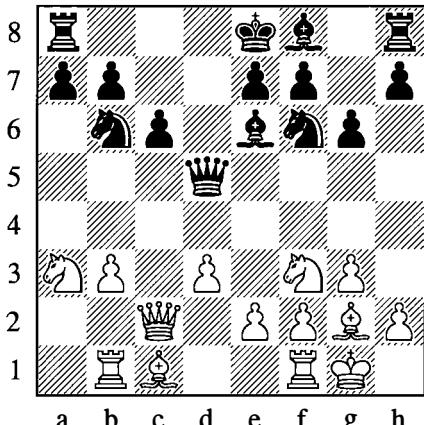
Winning a tempo, but the bishop is clumsy on e6.

9...g6 10.Qc4 is also possible. If Black takes, White plays b3xc4, d2-d4 and e2-e4, Levan Pantsulaia – Wang Yue, Yerevan 2006.

10.Bb1 g6

10...0–0–0? looks horrible.

### 11.d3



White plans Qc4, Bb2 and Qg5. I am a bit sceptical about this concept, but the engine likes it moderately.

11...Bg7

11...Ed8? This stops e2-e4, but leaves a7 undefended and delays castling. 12.Qc4 Bg7 Grandelius – Stefan Kuipers, Wijk aan Zee C 2010. White should have played 13.Ba1 with a pleasant advantage.

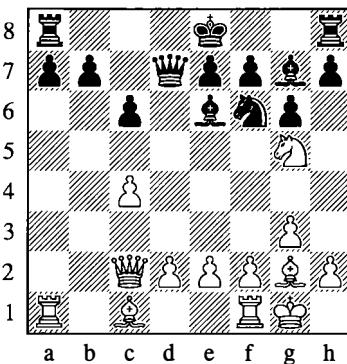
12.Qc4 0–0

White should have nice compensation, even though it's not so clear how to continue.

g2) 7...Qe6 8.Qg5 Bg4

Never played (January 2010), but logical since it's the main move without a2-a4 and ...a5 included.

8...Wd7 is another move, and prepares ...Qf5. 9.b3! cxb3 10.axb3 g6 (10...Bg4!? Marin – Dreev, Reggio Emilia 2008/9: 11.Qc4N Qxc4 12.Wxc4 e6 13.Bb2 White's position seems preferable with Ba5 and Bfa1 next.) 11.Qc4 Qxc4 12.bxc4 Bg7



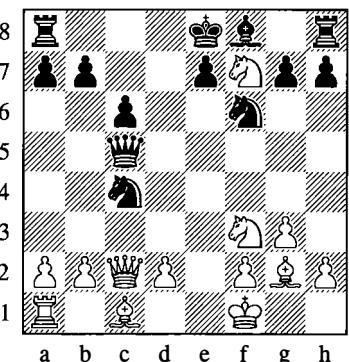
13.Ba3N White has enough compensation, but probably not more. The rook can move along the third rank, and later White may play Ba3 and/or Qxe6.

8...Wd4?! 9.Qxe6 fxe6 The light-squared bishop gives nice compensation. The best way for White to get his pieces out seems to be 10.Bb1 followed by b3.

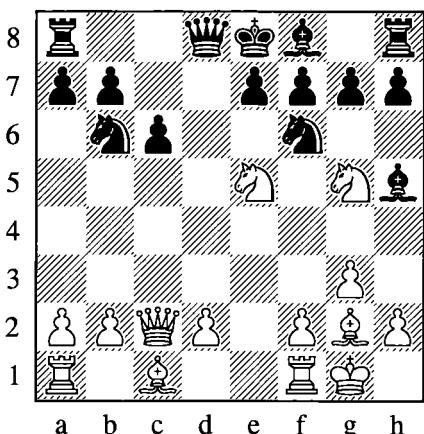
9.Qxc4 Bxe2 10.Qe5

**10...♝h5**

10...♝xf1? is not so good. 11.♝xf1 ♜d4 12.♛gxf7 White threatens ♜f3 followed by ♜xh8. 12...♝c4 13.♜f3 ♜c5 Setting up a discovered attack.



14.♔g1! ♜xf7 15.d4 White's attack is almost winning, according to the engine.



In Radjabov – Smeets, Wijk aan Zee 2009, this position was reached with a2-a4 and ...a5 included. That game is a better version for White, since b6 is an additional weakness. Radjabov played 12.b4, like in the other games that reached that position. However, playing 6.♝c2 ♜b6 7.a4 gives Black other possibilities. Instead, I have to find something else, like 11.♜e1.

So this was my opening file in early 2010,

excluding the analysis of the main tabiya after 11.♜e1, which is found later in the chapter.

Later, I read Marin's book and found some improvements there. When they were clearly better, or when I already had "my" move in the TWIC-database, I changed to Marin's line. If the moves were of equal value, I didn't choose Marin's move, since a new move gives more surprise value.

**Summary**

It's good to save the repertoire in opening files. It makes it easier to get an overview over the repertoire and to analyse critical positions. The first step is to choose a good opening and a good book. Especially, you should examine the first moves very carefully!

Type the lines that you plan to play into ChessBase. This might be enough even for an ambitious player.

The next step is to search for fresh, relevant games, and if possible, also check new opening books. Analyse the critical positions – it's always good to have ideas of your own to surprise your opponents.

**Structure of the databases**

If all the analysis is saved in one single game file, it's almost impossible to get an overview. It's better to divide your analysis in a lot of different databases and games, and have one database per opening, like in Figure 1. I have given them flags mainly because I like colours.

In the database, every game represents one opening variation. Related variations are placed beside each other, and empty games and headers are used to get an easy overview, like in Figure 2 [A].

Title	Games
Catalan	53
Berlin	43
1.e4 sidelines	43
1.d4 sidelines	41
Grunfeld White	32
Sveshnikov	32
Accelerated Dragon	29
French White	29
Scandinavian	28
Sozin	28
Petroff	26
Meran	23
King's Indian	22
Dragon	21
Kan	20
Ragozin	19
Bogo Indian	18
Botvinnik	18

Figure 1

To be able to survey the opening file easily, I think 200 to 500 half moves is ideal. If a game gets too big, it is better split in two [A].

### Analysing

The following section will discuss how to analyse with an engine. To illustrate, I'll give examples from the critical position in the Anti-Slav. The examples are all put together in the end of the section, creating the complete opening file.

The first step is setting a goal, normally to get an advantage with White or equality with Black. However, other factors can also be included, like getting positions with a lot of play or getting sterile positions. It depends on what type of opponent the opening is prepared for.

If it isn't possible to find an advantage with White, which is often the case, you have to change the goal. It might be either to get a

Text	Games	Players	Tournaments	Annotator	Sources	Teams	Openings	1
Nu...	White	Black				VCS	ECO	
1	OVERVIEW	d5 + c6				VCS	A12	
2	4...dxc4 5.0-0					rCS	A11	
3	4...dxc4 5.0-0 ♕bd7	6.♕a3				rCS	A11	
4	4...dxc4 5.0-0 ♕bd7	6.♘c2 ♘b6 8.a4 a5				rCS	A11	
5	4...g5	b3 or ♘e1				rCS	A12	
7								
8	g4	with ...cxd5				rCS	A11	
9	g4	with ...exd5				rCS	A11	
10	g4	others				VCS	A11	
11	g4	White plays d4				VCS	A11	
12								A00
13	OVERVIEW	g's Indian, Hedgehog				vCs	A30	
14	Hedgehog	g7: b3				rCS	A30	
16	Hedgehog	g7				VCS	A30	

Figure 2

position you like, although unclear or equal, or to force the opponent to find a lot of difficult moves before he reaches equality. If the line is many moves away from existing theory, there is a great probability that he won't find the best moves over the board. And if he steers his way through the minefield, he will at least be far behind on the clock.

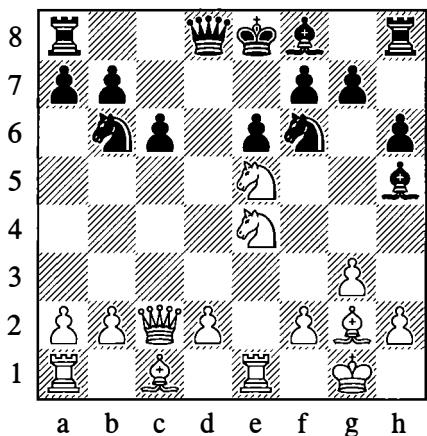
I really believe in the latter approach, which might be called "One-Game-Preparations". If I have played a novelty and the game has been published in the TWIC-database, it's often time to change. The secret is always finding new variations.

The main line of the Anti-Slav is an example of a One-Game-Preparation.

### Analysis of the critical position – first example

1. ♘f3 d5 2.g3 ♘f6 3.♗g2 c6 4.c4! dxc4 5.0-0-0 ♘bd7 6.♘a3 ♘b6 7.♘c2 ♘e6 8.♗g5 ♘g4

9.  $\mathbb{Q}xc4$   $\mathbb{Q}xe2$  10.  $\mathbb{Q}e5$   $\mathbb{Q}h5$  11.  $\mathbb{B}e1$  h6  
 12.  $\mathbb{Q}e4$  e6



13.  $\mathbb{Q}xc6$

13.  $\mathbb{Q}xf6\#$  gxf6 14.  $\mathbb{Q}xc6\#$  gives a perpetual. It is a good idea to save this variation, since one day this position might be reached in a final round when a draw is enough for first place.

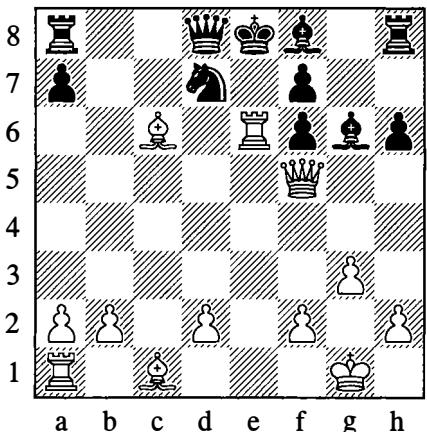
13.  $\mathbb{Q}c5$  is equal according to the engine, but it doesn't seem to be in the spirit of the position.

Instead, I have chosen to go for another line that only gives a perpetual, but where Black needs to find a lot of difficult moves along the way. I only give the mainline.

13...  $bxc6$  14.  $\mathbb{Q}xf6\#$  gxf6

14...  $\mathbb{W}xf6?$  wins for White.

15.  $\mathbb{Q}xc6\#$   $\mathbb{Q}d7$  16.  $\mathbb{W}f5!$   $\mathbb{Q}g6$  17.  $\mathbb{B}xe6\#$



17....  $\mathbb{B}e7$

17...fxe6? 18.  $\mathbb{W}xg6\#$   $\mathbb{Q}e7$  19. b3! gives White fantastic compensation for the rook. The position will be analysed later in the chapter.

18.  $\mathbb{W}xf6$   $\mathbb{B}g8$  19.  $\mathbb{B}e1$   $\mathbb{Q}f8$  20.  $\mathbb{W}f4$   $\mathbb{B}c8$   
 21.  $\mathbb{W}xh6\#$   $\mathbb{B}g7$

For the last nine moves, Black's alternatives were much weaker. In many cases they were even plain lost. Since 11.  $\mathbb{B}e1$  is a novelty, it seems very improbable that Black would find all these moves over the board. A draw is probably okay against such a player! If there is a desperate need for a win, it's possible to play on with 22. d4 – White is slightly worse.

13.  $\mathbb{Q}xc6$  only leads to a draw. I am convinced that it's a good practical decision to play it, but when I have played it once, I have to find another line.

The technical part of the analysis is not exciting: it's good to have a strong engine, a powerful processor and a fast hard drive. The capacity is also increased by closing other programs on the computer and not letting the engine show too many moves in ChessBase [A]. The effect of the latter is marginal, but I prefer showing three moves.

What's interesting in the process is not the computer's role, but instead the creative part. To leave the computer thinking might work to find a good move, but that's not the point. The point is to work actively.

The Woodpecker Method (Chapter 6) is partly based on the human's ability to recognize patterns we have seen before. We don't remember the tactics consciously, but they appear automatically when we see a similar position.

If you work actively on an opening with an engine, you will see common tactical tricks

and standard moves, many more than if you only read a book. All the moves will not make it into the opening file, but your intuition will definitely improve.

Pattern recognition is one of the main advantages given by analysing openings; you improve your understanding for the middlegame positions. But this is lost if a friend or a coach prepares the openings for you. However, analysing openings gets even better with a training partner. Having two people makes it possible to discuss ideas and assessments, and helps to develop positional understanding.

So analysing openings is definitely a rewarding training method, if done in an active way.

### Analyse like in a game

Start by analysing the move that seems strongest or most natural. In that way, you avoid spending unnecessary time analysing options that will be rejected anyway. However, there is still a need to look for candidate moves, if not every move.

In a way, there is actually not much difference between analysing with a computer and thinking during a game. But it's easier, since there's no need to spend much time on the calculations.

There are four important pieces of advice that will strengthen the similarities.

### Analyse normal moves

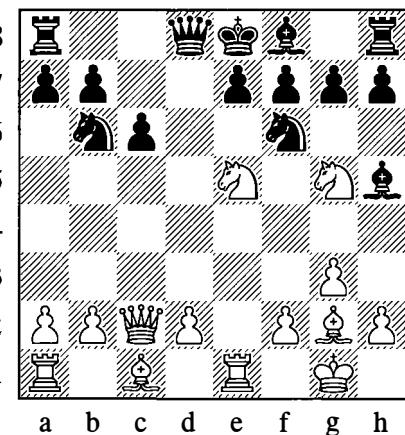
To start with, it's of course necessary to see the critical lines to know if the opening variation is worth working on. However, a human opponent in a game will most likely play human moves. Hence, it's important to have analysed those and not just the engine's first choice. (But most often, they coincide.)

When considering your own moves, it

might be good to choose the best ones, but when analysing the opponent's possibilities, it's better to ask: "What do I think he will play in this position?" Let's see the position after 11... $\mathbb{E}e1$  in the Anti-Slav.

### Analysis of the critical position – second example

1.  $\mathbb{Q}f3$  d5 2. g3  $\mathbb{Q}f6$  3.  $\mathbb{Q}g2$  c6 4. c4! dx $c$  5. 0–0  $\mathbb{Q}bd7$  6.  $\mathbb{Q}a3$   $\mathbb{Q}b6$  7.  $\mathbb{W}c2$   $\mathbb{Q}e6$  8.  $\mathbb{Q}g5$   $\mathbb{Q}g4$  9.  $\mathbb{Q}xc4$   $\mathbb{Q}xe2$  10.  $\mathbb{Q}e5$   $\mathbb{Q}h5$  11.  $\mathbb{Q}e1$



Black is a pawn up, but several moves behind in development. Which are his most natural moves? I would say there are three possibilities: 11...e6, developing the bishop, 11...h6, forcing the active knight back, or 11... $\mathbb{Q}bd5$ , blocking the diagonal of White's fianchettoed bishop.

The engine adds other moves. It suggests 11... $\mathbb{Q}bd7$  and 11... $\mathbb{W}c7$ . However, it's dangerous to only look at the engine. By doing so, 11...e6 would be completely overlooked! It's by far the most natural move and the one that should be analysed first, but it's not among the engine's first 15 moves.

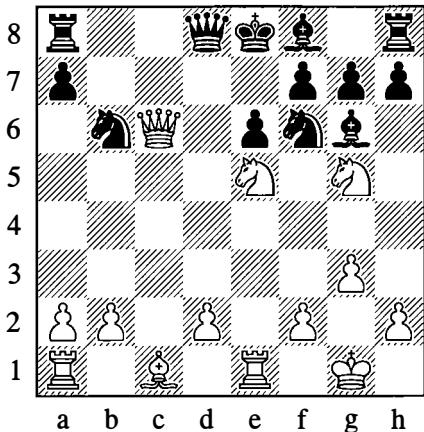
**11...e6 12.  $\mathbb{Q}f3!$**

Immediately given by the computer as winning.

**12...Bg6**

12...Bxf3 13.Qxf7!+– is the main point.

**13.Qxc6†! bxc6 14.Qxc6†**



**14...Qbd7**

After 14...Qfd7, 15.Qxg6 Wxg5 is not that good for White, but there is: 14...Qfd7 15.Qgxf7! Bxf7 16.Qxf7 Bxf7 17.Wxe6#

**15.Qxg6 hxg6 16.Qxf7! Qxf7 17.Wxe6#**

If the position after 11.Qe1 is reached against an unprepared opponent, I think 11...e6 is quite probable. It would be a pity to miss the forced win!

### ***Make your own evaluations***

When a position appears over the board, it doesn't matter if the engine indicates +0.27 if you don't understand why. The computer can't help you to find the continuation during the game! Hence, you must in person make the evaluations at the end of the lines. If this evaluation differs from the engine's, you have to find out why. Not only humans, but also engines can misevaluate positions.

The moves you consider logical are tested against the engine's moves. And tested again. And again. At the end, there might still be some confusion, but the feeling is probably

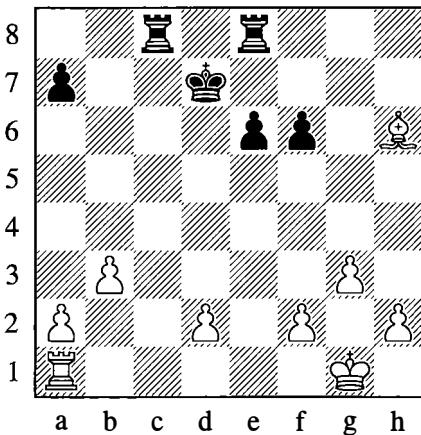
that your positional understanding has been improved. Or in some rare moments of happiness – that your evaluation was superior to the engine's.

When I am not sure how to assess a position, I write my questions in the opening file and use the first chance to ask another player.

I will now show two examples where it's important to make your own evaluation.

### ***Analysis of the critical position – third example***

1.Qf3 d5 2.g3 Qf6 3.Qg2 c6 4.c4! dxc4 5.0-0 Qbd7 6.Qa3 Qb6 7.Wc2 Qe6 8.Qg5 Qg4 9.Qxc4 Qxe2 10.Qe5 Qh5 11.Qe1 h6 12.Qe4 e6 13.Qxc6 bxc6 14.Qxf6† gxsf6 15.Qxc6† Qd7 16.Wf5! Qg6□ 17.Qxe6† fxe6 18.Wxg6† Qe7 19.b3! We8 20.Qa3† Qd8 21.Wxe8† Qxe8 22.Qxf8 Qc8□ 23.Qxd7† Qxd7 24.Qg7 Qhe8 25.Qxh6



It is time to assess the position, but not with an engine. Instead, the question to ask is: "What do I think about this position? Is it something I want to play in a game?"

White is an exchange down but has three extra pawns. Normally, this is very good, but there are some things to worry about. White's extra

pawns are not the best – three pawn islands and only one passed pawn. Black controls the only open file and if he manages to exchange rooks, he may attack the queenside pawns. I still believe it's an advantage, but I first want to check if it's possible to keep my rook.

### 25... $\mathbb{E}c2$

This ties the white rook to a1 and prepares to double.

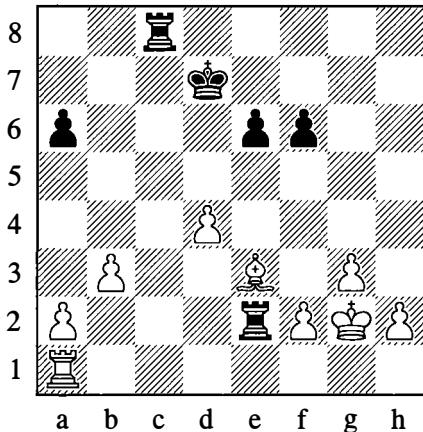
### 26. $\mathbb{Q}e3$ $\mathbb{E}ec8$ 27. $\mathbb{Q}g2$ a6

27... $\mathbb{E}c1$  28. $\mathbb{E}xc1$   $\mathbb{E}xc1$  29. $\mathbb{Q}xa7$  must be very good for White, even if he loses his pawns on the queenside. Without the pawn on the a-file, Black will never able to get counterplay.

### 28.d4

Stopping ... $\mathbb{E}c1$ .

### 28... $\mathbb{E}e2$



### 29.h4

It seems that White can't save the queenside pawns. It's better to try to be quick with the h-pawn.

### 29... $\mathbb{E}cc2$

Threatening to take on e3.

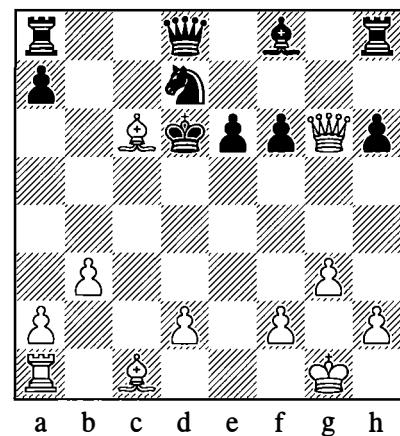
### 30. $\mathbb{Q}f3$ $\mathbb{E}xa2$ 31. $\mathbb{E}h1!$

The a-pawn will soon become passed, but Black has to stay passive to stop the h-pawn. With a rook on the board, I believe in White!

I am not sure that my reasoning is the best, but it's mine and what I need to be convinced of to play the position after 25. $\mathbb{Q}xh6$  with White.

### A analysis of the critical position – fourth example

1. $\mathbb{Q}f3$  d5 2.g3  $\mathbb{Q}f6$  3. $\mathbb{Q}g2$  c6 4.c4! dxc4  
5.0-0  $\mathbb{Q}bd7$  6. $\mathbb{Q}a3$   $\mathbb{Q}b6$  7. $\mathbb{W}c2$   $\mathbb{Q}e6$  8. $\mathbb{Q}g5$   
 $\mathbb{Q}g4$  9. $\mathbb{Q}xc4$   $\mathbb{Q}xe2$  10. $\mathbb{Q}e5$   $\mathbb{Q}h5$  11. $\mathbb{E}e1$  h6  
12. $\mathbb{Q}e4$  e6 13. $\mathbb{Q}xc6$  bxc6 14. $\mathbb{Q}xf6\uparrow$  gxf6  
15. $\mathbb{Q}xc6\uparrow$   $\mathbb{Q}d7$  16. $\mathbb{W}f5!$   $\mathbb{Q}g6\Box$  17. $\mathbb{E}xe6\uparrow$   
 $\mathbb{Q}xe6$  18. $\mathbb{W}xg6\uparrow$   $\mathbb{Q}e7$  19.b3!  $\mathbb{Q}d6$



There are two options to analyse: 20. $\mathbb{Q}g2$  and 20. $\mathbb{Q}xa8$ . Which of them should be preferred?

#### a) 20. $\mathbb{Q}g2$

This is the engine's favourite move. White saves the bishop and threatens  $\mathbb{Q}a3\uparrow$ .

#### 20... $\mathbb{Q}e5$ 21. $\mathbb{W}e4$ $\mathbb{E}c8$ 22.d4 $\mathbb{Q}e7$

22... $\mathbb{Q}f7$  23.d5! wins for White. The idea is to attack d7 with the queen, either by  $\mathbb{W}xd5$ ,  $\mathbb{W}f5$ ,  $\mathbb{W}a4$  or  $\mathbb{W}xe6$ . 23... $\mathbb{Q}c7$  is best according to the engine. 24.dxe6  $\mathbb{W}d1\uparrow$  25. $\mathbb{Q}f1$   $\mathbb{Q}e5$   
26. $\mathbb{Q}b2$   $\mathbb{W}d6$  27. $\mathbb{Q}g2$

pawns are not the best – three pawn islands and only one passed pawn. Black controls the only open file and if he manages to exchange rooks, he may attack the queenside pawns. I still believe it's an advantage, but I first want to check if it's possible to keep my rook.

### 25... $\mathbb{E}c2$

This ties the white rook to a1 and prepares to double.

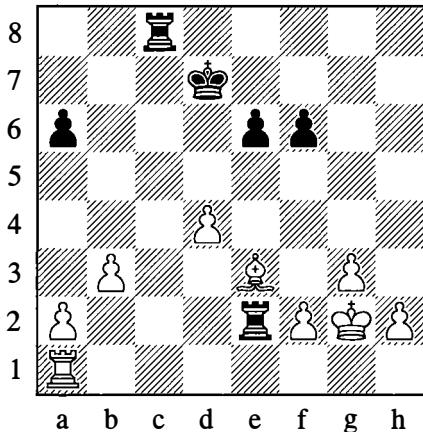
### 26. $\mathbb{Q}e3$ $\mathbb{E}ec8$ 27. $\mathbb{Q}g2$ a6

27... $\mathbb{E}c1$  28. $\mathbb{E}xc1$   $\mathbb{E}xc1$  29. $\mathbb{Q}xa7$  must be very good for White, even if he loses his pawns on the queenside. Without the pawn on the a-file, Black will never able to get counterplay.

### 28.d4

Stopping ... $\mathbb{E}c1$ .

### 28... $\mathbb{E}e2$



### 29.h4

It seems that White can't save the queenside pawns. It's better to try to be quick with the h-pawn.

### 29... $\mathbb{E}cc2$

Threatening to take on e3.

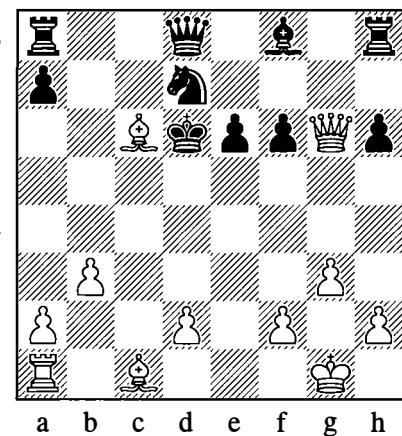
### 30. $\mathbb{Q}f3$ $\mathbb{E}xa2$ 31. $\mathbb{E}h1!$

The a-pawn will soon become passed, but Black has to stay passive to stop the h-pawn. With a rook on the board, I believe in White!

I am not sure that my reasoning is the best, but it's mine and what I need to be convinced of to play the position after 25. $\mathbb{Q}xh6$  with White.

### A analysis of the critical position – fourth example

1. $\mathbb{Q}f3$  d5 2.g3  $\mathbb{Q}f6$  3. $\mathbb{Q}g2$  c6 4.c4!  $dxc4$   
5.0-0  $\mathbb{Q}bd7$  6. $\mathbb{Q}a3$   $\mathbb{Q}b6$  7. $\mathbb{W}c2$   $\mathbb{Q}e6$  8. $\mathbb{Q}g5$   $\mathbb{Q}g4$  9. $\mathbb{Q}xc4$   $\mathbb{Q}xe2$  10. $\mathbb{Q}e5$   $\mathbb{Q}h5$  11. $\mathbb{E}e1$  h6  
12. $\mathbb{Q}e4$  e6 13. $\mathbb{Q}xc6$   $bxc6$  14. $\mathbb{Q}xf6\uparrow$   $gxf6$   
15. $\mathbb{Q}xc6\uparrow$   $\mathbb{Q}d7$  16. $\mathbb{W}f5!$   $\mathbb{Q}g6\Box$  17. $\mathbb{E}xe6\uparrow$   $fxe6$  18. $\mathbb{W}xg6\uparrow$   $\mathbb{Q}e7$  19.b3!  $\mathbb{Q}d6$



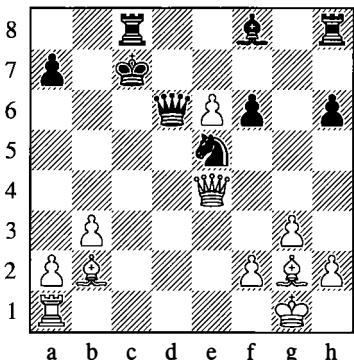
There are two options to analyse: 20. $\mathbb{Q}g2$  and 20. $\mathbb{Q}xa8$ . Which of them should be preferred?

#### a) 20. $\mathbb{Q}g2$

This is the engine's favourite move. White saves the bishop and threatens  $\mathbb{Q}a3\uparrow$ .

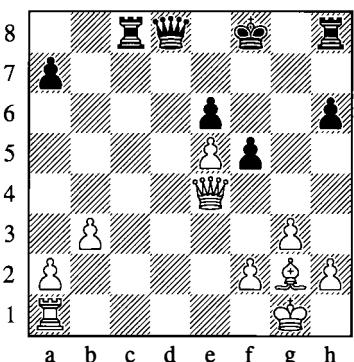
#### 20... $\mathbb{Q}e5$ 21. $\mathbb{W}e4$ $\mathbb{E}c8$ 22.d4 $\mathbb{Q}e7$

22... $\mathbb{Q}f7$  23.d5! wins for White. The idea is to attack d7 with the queen, either by  $\mathbb{W}xd5$ ,  $\mathbb{W}f5$ ,  $\mathbb{W}a4$  or  $\mathbb{W}xe6$ . 23... $\mathbb{Q}c7$  is best according to the engine. 24.dxe6  $\mathbb{W}d1\uparrow$  25. $\mathbb{Q}f1$   $\mathbb{Q}e5$  26. $\mathbb{Q}b2$   $\mathbb{W}d6$  27. $\mathbb{Q}g2$



White should be winning, with the engine showing +2. I think it's possible to find the rest of the moves over the board, so I'll stop here.

**23.♕a3† ♜e8 24.♕xf8 ♜xf8 25.dxe5 f5**



According to the engine, White is slightly better. I am not certain of that evaluation – Black seems to have a lot of potential if he manages to regroup and use both rooks. I can't see any clear way to attack the king, or to use either of the two extra pawns. It's difficult to analyse further.

If I choose 20.♕g2, I get a position I don't really like, where I have to continue playing on my own. Let's try 20.♕xa8.

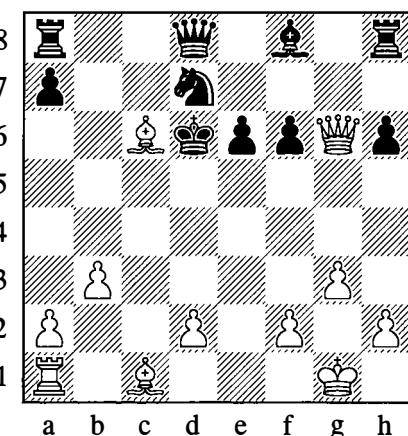
Before continuing with that move, I want to mention the most important method of analysing.

### The x-technique

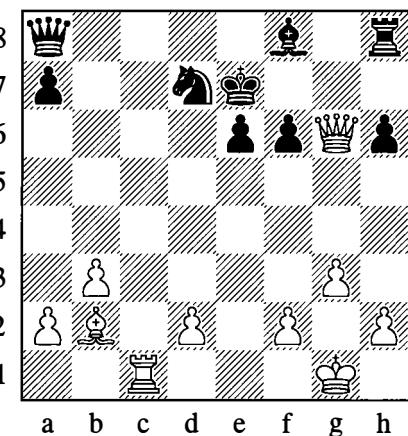
When an analysis engine is running in ChessBase, it's possible to press "x" to give the move to the opponent. The idea is to check whether there is a threat in the position; knowing that makes it much easier to assess the position.

Quite often, it happens that there is a threat, but you don't understand why it wasn't possible already one move earlier. In that case, it's a good idea to go back and check that line. Type in a null-move for one of the players and try executing the threat [A]. The method is explained in detail below.

To me, there is no doubt that the x-technique is the most useful analysing method.

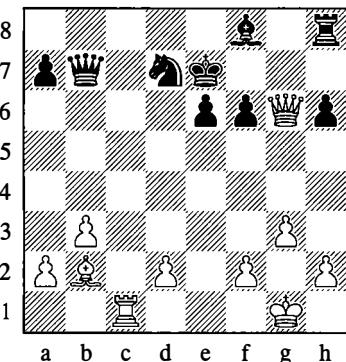


**20.♕xa8 ♜xa8 21.♕b2 ♜e7 22.♕c1**



White is a piece down, but Black has problems developing his pieces. Black should stop  $\mathbb{B}c7$  with either 22... $\mathbb{W}b7$  or 22... $\mathbb{W}b8$ .

### b1) 22... $\mathbb{W}b7$

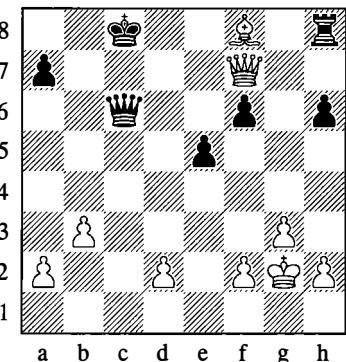


The engine gives many moves for White, all with some initiative. When I saw that one of the first was 23.h3, I became curious. Why is that a good move?

### 23.h3

I played the move and pressed “x”. The engine claimed that White should play 24. $\mathbb{B}c3$  with +0.80. So why not play  $\mathbb{B}c3$  one move earlier? I went back, tried it and saw that 23... $e5$  was Black’s best reply. So what happens after 23.h3! – 24. $\mathbb{B}c3$   $e5$ ? To see that, you have to enter a null-move (Ctrl+Alt+0).

After going back and forth a few times, it’s possible to see why h2-h3 helps. The main difference arises after: 23. $\mathbb{B}c3$   $e5$  24. $\mathbb{B}a3\uparrow$   $\mathbb{Q}d8$  25. $\mathbb{B}d3$   $\mathbb{W}c6$  26. $\mathbb{B}xd7\uparrow$   $\mathbb{Q}xd7$  27. $\mathbb{W}f7\uparrow$   $\mathbb{Q}c8$  28. $\mathbb{B}xf8$   $\mathbb{W}c1\uparrow$  29. $\mathbb{B}g2$   $\mathbb{W}c6\uparrow$



With h2-h3 played, White would have a safe square for the king on h2. Without h2-h3, there either follows a queen exchange after 30. $\mathbb{Q}h3$  or counterplay after 30.f3 e4.

In the end, I wrote down a brief conclusion in the opening file. For example: “Gives the king an escape square much later. White threatens  $\mathbb{B}c3-d3$  now.”

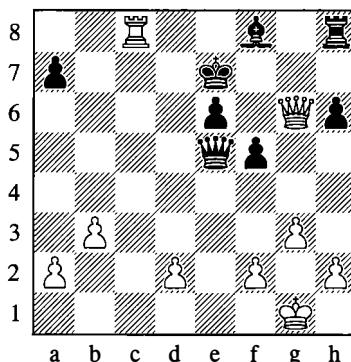
### b2) 22... $\mathbb{W}b8$ 23. $\mathbb{B}c6$

Threatening  $\mathbb{W}e4$ , winning (I pressed x to learn that).

### 23... $\mathbb{Q}e5$ 24. $\mathbb{B}xe5$ $\mathbb{W}xe5$ 25. $\mathbb{B}c8$

Threatening mate in two.

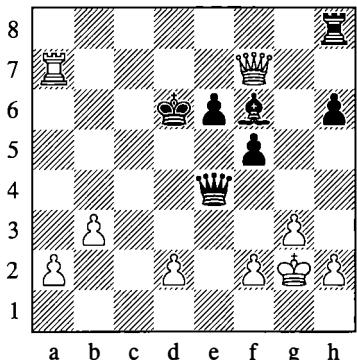
### 25...f5



### 26.d3!

I understood that this move is good to stop ... $\mathbb{W}e1-e4$ , but I wanted to know exactly what the threat was. I used the same technique as above, pressing x, to see what White is threatening – 27. $\mathbb{B}e8\uparrow$   $\mathbb{Q}d6$  28. $\mathbb{W}f7$ . Then I tried that line on the 26th move, and saw his defence – 27... $\mathbb{B}g7$ . So I checked it one move later.

It turned out that 26. $\mathbb{B}e8\uparrow$   $\mathbb{Q}d6$  27. $\mathbb{W}f7$   $\mathbb{B}g7$  28. $\mathbb{B}e7$   $\mathbb{Q}f6$ ! was the main difference. Black covers h4 and plans 29. $\mathbb{B}xa7$   $\mathbb{W}e1\uparrow$  30. $\mathbb{B}g2$   $\mathbb{W}e4\uparrow$ .



It's a perpetual.

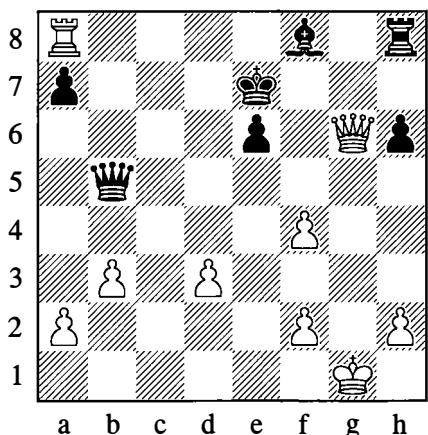
In the opening file, I didn't write any more than: "Stopping a check with ... $\mathbb{Q}e1-e4$  later."

The x-technique is very useful – analysing is a never-ending puzzle to understand the tactical points that the computer sees in a nanosecond.

**26...f4**

Indicated by the engine as the only move.

**27.gxf4!  $\mathbb{W}b5$  28. $\mathbb{R}a8$**



This position leads to the next section. Is it time to stop or should you analyse a few moves deeper?

### **Stopping when the branches get too big**

The aim with calculation is to find a way through the tactics, then assess the position only when it's of a positional nature. Analysis has the same aim. The engine is used when there are tactical possibilities. When the position has calmed down, it's possible to make a human assessment. Unfortunately there are often new tactics appearing all the time. For that reason, it's difficult to know when to stop.

When the difference between the best and second best moves is high, it makes sense to continue. However, if several of the opponent's moves are of about equal strength, it's an indication that it's time to stop. Not only does it become much more difficult to analyse further, but it also becomes hard to remember the analysis for use in a later game. Without that, the analysis loses some of its meaning.

In the position above, it's time to stop and make an evaluation, since Black has a few moves of about the same strength. The engine gives White a winning advantage. As I can't see how Black could try to develop his bishop and rook, I see no reason to question that. However, I also notice that the engine gives f4-f5 as White's next move.

In most cases, I think it's good to end the analysis with a move of your own. When the opponent has made a move, you only need to analyse one move to extend the variation one ply. That is not the case after one of your moves.

In summary, the four principles when analysing are:

- ▲ Analyse normal moves
- ▲ Make your own evaluations
- ▲ Use the x-technique
- ▲ Stop when the branches get too big

## Incorporating the analysis in the opening file

Analysing is done directly in the opening file, but it's a creative process and doesn't allow much structure. When finished, the opening file will therefore be quite messy, sometimes without text comments and evaluations. It has to be cleaned up. Having too many moves will ruin the overview and doesn't make anything easy to remember. There are three easy principles to follow when polishing the opening file.

### Annotating all important points with text

After an analysis session, you have the important points in your head. Some of them may be forgotten already the next day, and many more after a few months. And even if they are still in your unconscious knowledge, it's better to write them down. In that way, you are reminded of them when you prepare for a game and look through the opening file.

The game Anand – Topalov shown in the beginning of the chapter is a good example of the value of text comments.

It's also helpful to use exclamation and question marks – such meaningful information is what the memory likes.

### Removing irrelevant variations

Quite often, the analysis stretches too far to be relevant in a practical game. Then it has to be cut down. To make the opening file clearer, it's also good to remove analysed moves that you decided against playing. For such unsuccessful tries, I leave only a short note that explains why they were rejected. If the alternative lines are too good to be thrown away completely and may be worth a further look later on, they can be saved in another file.

In the last example, two moves were analysed – 20.♕xa8 and 20.♕g2. I didn't like the latter and see no point in leaving all the analysis in

my file. I only leave: "20.♕g2 ♔e5 21.♗e4 ♕c8 22.d4 ♔e7 23.♔a3† ♔e8 24.♗xf8 ♕xf8 25.dxе5 f5 I don't like this position."

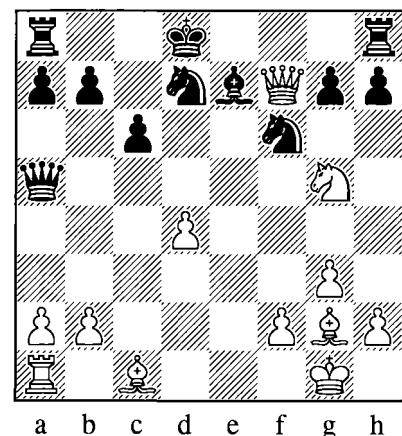
### Ending every line with an evaluation

If a prepared position is reached in a game, it helps a lot to know the evaluation – if it's winning, a small advantage or even worse. If you know that a position is winning, it's easier to set high goals when calculating and to reject moves that don't fulfil those aims.

As mentioned in the chapter about tactics, I do not recommend using the Process of Elimination when calculating in normal positions, but in a sense, it can be used in positions immediately after your preparation. Here is one example.

### Analysis of the critical position – fifth example

1.♘f3 d5 2.g3 ♘f6 3.♗g2 c6 4.c4! dxс4  
5.0-0 ♘bd7 6.♘a3 ♘b6 7.♗c2 ♘e6 8.♗g5  
♗g4 9.♘xc4 ♘xe2 10.♘e5 ♘h5 11.♗e1  
♘bd7 12.d4 e6 13.♘exf7? ♘xf7 14.♗b3  
♗a5 15.♗xe6†! ♘xe6 16.♗xe6† ♘e8  
17.♗f7† ♘d8



18.♘e6†? ♘c8 19.♗xe7 allows 19...♗e1† and 18.♘e6†? ♘c8 19.♗f4 g5! shows why the knight should stay on g5. So the right move is:

**18...♝f4!+-**

The idea behind this move is to defend e1 before playing 19.♕e6† ♜c8 20.♗xe7. The move is immediately given by the computer as winning.

Let's pretend that the annotation above is what you have written in your opening file. How should you react if the opponent plays:

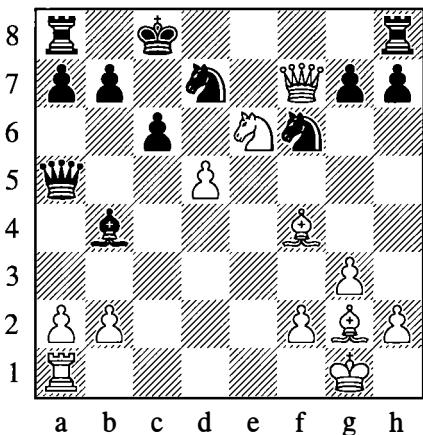
**18...♝b4**

I should, first of all, have blamed myself for not checking this natural defence, but hopefully I should quickly put aside such irrelevant thoughts and think about the next move.

It's much easier to find the correct line with the knowledge that White is winning. White is a rook down, so there must be something brutal! It's thus reasonable to avoid considering a calm move like 19.a3. The bishop is trapped, but it's not possible to capture it on the next move. My intuition tells me that this is not "a winning move".

**19.♕e6†!**

19.d5 gives the same result.

**19...♜c8 20.d5**

The attack is not so fast, but Black is unable to free himself.

**20...c5**

20...♝xd5 21.♝d1! is White's point. Black cannot defend against ♜xd5 followed by ♜c1, since 21...♝f6 22.♝h3 wins, as does 21...♝f6 22.♝xd5 ♜xd5 23.♝c5.

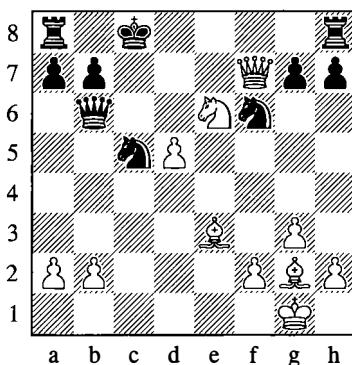
**21.♝c1**

White threatens a2-a3 followed by axb4 and ♜xc5, and the rook. The immediate 21.a3 would allow 21...♝d2.

In a game, it would be difficult to be certain of the evaluation of this position. However, since the opening file says there should be a winning line, it's easier to go for it.

White is winning.

- a) 21...b6 22.♝e7 with ♜d6 next.
- b) 21...♝xa2 22.♝xc5! ♜xc5 23.♝xc5† ♜xc5 24.♝c7#
- c) 21...♝d2 22.♝xc5†! ♜xc5 23.♝xd2 ♜b6 (23...♜xd2 24.♝c7#) 24.♝e3



Black is helpless.

The three principles when cleaning up the analysis are:

All important points are annotated with text  
Irrelevant variations are removed  
Every line ends with an evaluation

## Summary

Start by setting a goal. It may be getting an advantage or forcing the opponent to find some difficult moves. Analyse the position like in a normal game.

- 1) Look for *human* candidate moves and start by analysing the one that seems strongest.
- 2) Use the x-technique to see threats for both sides.
- 3) Stop when there are too many moves of about the same value.
- 4) End with a move of your own and make a human evaluation.
- 5) However, mark it with an *Informant* symbol ( $\pm$  or  $\pm$  and so on) in most cases, but comment upon all important points with text.
- 6) The goal is to make the opening file as easy to survey as possible. For that reason, remove irrelevant variations. They impair readability.

Finally – Ta-da!

Here is the final opening file for the critical position of the Anti-Slav variation. I have added some comments to my original file just to clarify the process of analysis.

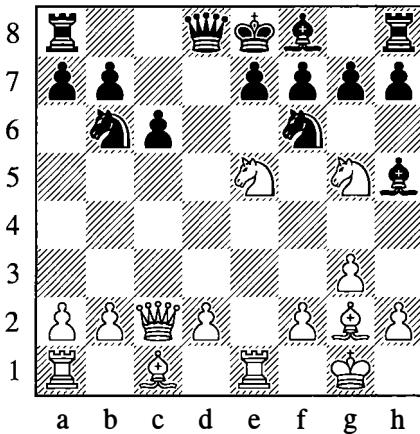
**Anti-Slav 4...dxc4 5.0–0 ♜bd7 6.♗a3 with 10.♗e1**

1.♗f3 d5 2.g3 ♜f6 3.♗g2 c6 4.c4! dxc4 5.0–0 ♜bd7 6.♗a3 ♜b6 7.♘c2 ♜e6 8.♗g5 ♜g4 9.♗xc4

9.f3 is recommended by Mihail Marin.

**9...♜xe2 10.♗e5 ♜h5 11.♗e1**

The engine's first choice and a logical developing move. White threatens 12.♗b3 with +1 (the x-technique). If Black answers with 12...e6, White wins with 13.♗xf7 – thanks to the rook on e1.



a) 11...e6

The most natural move.

**12.♗f3!**

White sacrifices on f7 and wins.

**12...♜g6**

12...♜xf3 13.♗exf7+–

**13.♗xc6†! bxc6 14.♗xc6† ♜fd7**

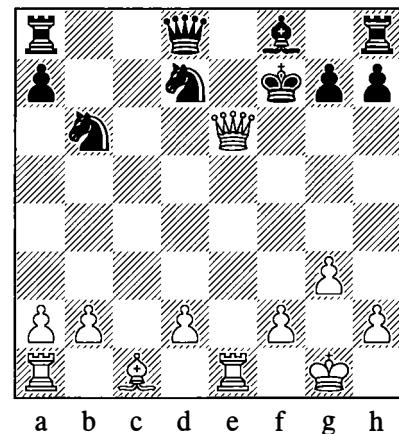
14...♜bd7 15.♗xg6 hxg6 16.♗xf7 ♜xf7

17.♗xe6#

**15.♗gxf7**

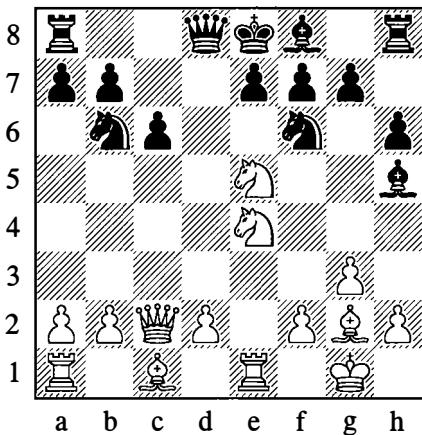
Not: 15.♗xg6? ♜xg5!

**15...♜xf7 16.♗xf7 ♜xf7 17.♗xe6#**



**b) 11...h6**

The engine's first choice, but with a clear disadvantage: the bishop loses its retreat square on g6.

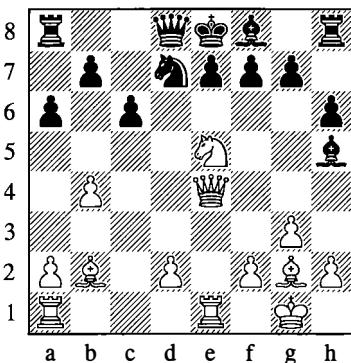
**12.♘e4****12...e6**

White has to continue with active moves. The engine gives ♘xf6 and ♘xc6, transposing to each other.

Only after having finished the analysis of 12...e6, is it time to go back and check Black's deviations. I see two natural alternatives.

**12...♗c7** Seems strange to walk into ♘f4.  
**13.d4±**

**12...♘xe4** 13.♗xe4 Threatening g4. 13...♗d7  
14.b4 The idea is b4-b5. 14...a6 15.♗b2↑



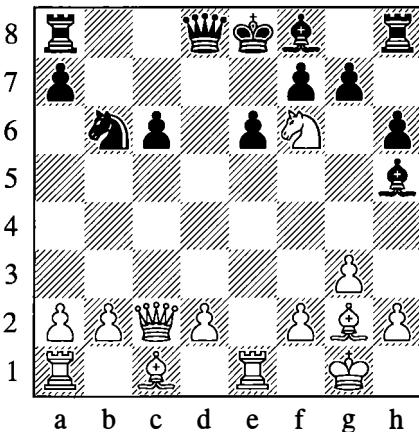
Black is three moves from castling.

**13.♘xc6**

This move order seems slightly more accurate since Black is punished harder if he recaptures on f6 with the queen.

13.♘xf6† gxf6 14.♗xc6† gives a perpetual.

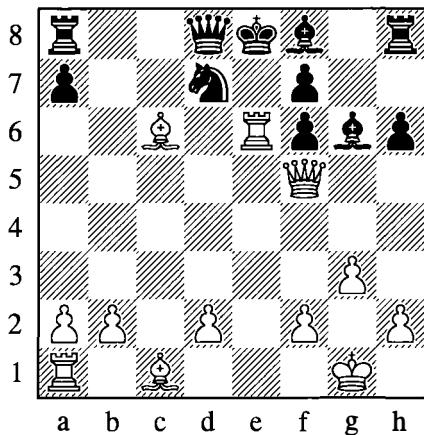
13.♘c5 is equal according to the engine, but it doesn't seem to be in the spirit of the position.

**13...bxc6 14.♘xf6†****14...gxf6**

14...♗xf6 15.♗xc6† ♗d8 16.♗xa8 ♗xa8  
Black has two pieces for a rook, but a weak king. The engine claims +0.9. Since only one move gives an advantage, it makes sense to analyse further. 17.♗d3†! ♗c7 18.♗a6! The pawn at a7 falls. Can't Black defend with 18...♗c5? No, 19.d4 is +4 which feels reassuring.

From this point, it's easy to follow the engine's line, since there are many "only-moves".

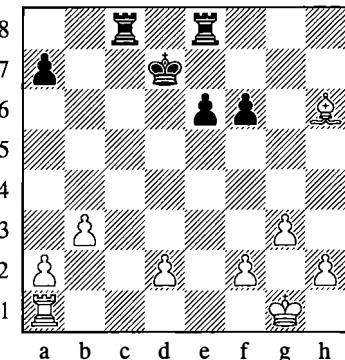
**15.♗xc6† ♗d7 16.♗f5! ♗g6□ 17.♗xe6**



**17... $\mathbb{Q}e7$**

17... $\mathbb{W}xe6$  18. $\mathbb{W}xg6\uparrow$   $\mathbb{Q}e7$  19.b3! White is a rook down, but the engine indicates some advantage. (It might be okay to stop here, but I felt that the next few moves may be quite critical.)

19... $\mathbb{W}e8$  20. $\mathbb{Q}a3\uparrow$   $\mathbb{Q}d8$  21. $\mathbb{W}xe8\uparrow$   $\mathbb{Q}xe8$  22. $\mathbb{Q}xf8$   $\mathbb{Q}c8\Box$  23. $\mathbb{Q}xd7\uparrow$   $\mathbb{Q}xd7$  24. $\mathbb{Q}g7$   $\mathbb{Q}he8$  25. $\mathbb{Q}xh6$



(The position from the third example, where I concluded that I liked White.)

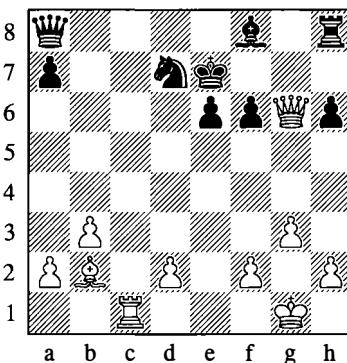
**19... $\mathbb{Q}d6$**

(The position from the fourth example.)

20. $\mathbb{Q}xa8$

20. $\mathbb{Q}g2\uparrow!$   $\mathbb{Q}e5\Box$  21. $\mathbb{W}e4$   $\mathbb{Q}c8\Box$  22.d4  $\mathbb{Q}e7$  23. $\mathbb{Q}a3\uparrow$   $\mathbb{Q}f7$  24. $\mathbb{Q}xf8$   $\mathbb{Q}xf8$  25.dxe5 f5 I don't like this position.

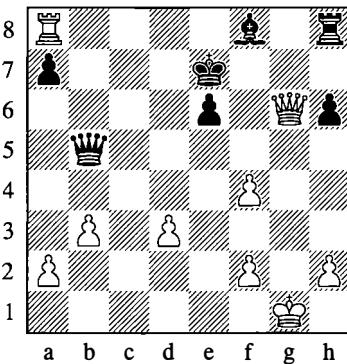
20... $\mathbb{W}xa8$  21. $\mathbb{Q}b2$   $\mathbb{Q}e7$  22. $\mathbb{Q}c1$



Threatening  $\mathbb{Q}c7$ . Now there are two moves:

a) 22... $\mathbb{W}b7$  The engine gives many moves for White, all with some initiative. 23.h3↑ Giving the king an escape square much later. White threatens  $\mathbb{Q}c3-d3$  now.

b) 22... $\mathbb{W}b8$  23. $\mathbb{Q}c6$   $\mathbb{Q}e5$  24. $\mathbb{Q}xe5$   $\mathbb{W}xe5$  25. $\mathbb{Q}c8$  Threatening mate in two. 25...f5 26.d3! Stopping a check with ... $\mathbb{W}e1-e4$  later. 26...f4 $\Box$  27.gxf4!  $\mathbb{W}b5$  28. $\mathbb{Q}a8$

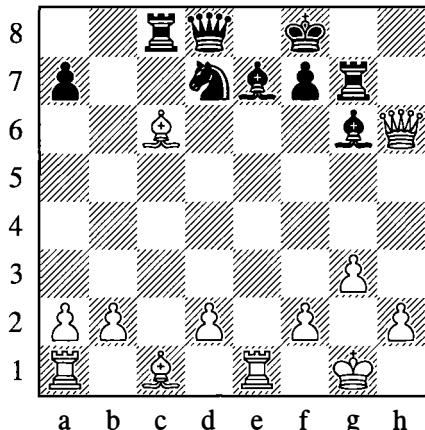


The threat is f4-f5. I can't see how Black can escape, since 28... $\mathbb{W}f5?$  is met by: 29. $\mathbb{W}e8\uparrow$   $\mathbb{Q}f6$  30. $\mathbb{W}xf8\uparrow!$   $\mathbb{Q}xf8$  31. $\mathbb{Q}xf8\uparrow$   $\mathbb{Q}g6$  32. $\mathbb{Q}xf5+$ –

**18. $\mathbb{W}xf6$   $\mathbb{Q}g8\Box$  19. $\mathbb{Q}e1$**

Doubling on the e-file is not realistic, but for sure I should check  $\mathbb{Q}e1$  and  $\mathbb{Q}e3$  to see whether it makes any difference.

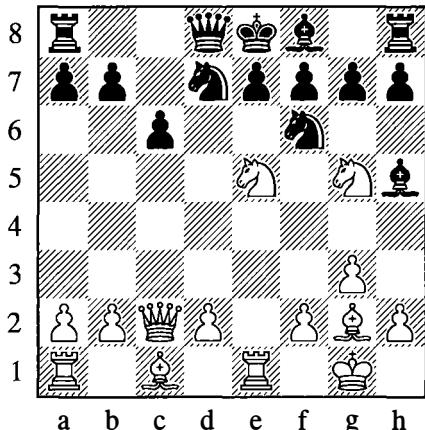
19... $\mathbb{Q}f8\Box$  20. $\mathbb{W}f4$   $\mathbb{Q}c8\Box$  21. $\mathbb{W}xh6\uparrow$   $\mathbb{Q}g7$



White's best is to take perpetual. Since 11. $\mathbb{Q}e1$  is a novelty, it doesn't seem probable that Black would find all these moves over the board. If he does, a draw is okay. It's also possible to play 22.d4 with a slightly worse position.

### c) 11... $\mathbb{Q}bd7$

The last serious option. It prepares ...e6.



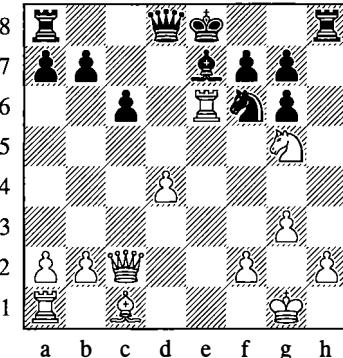
### 12.d4 e6 13. $\mathbb{Q}exf7$ ??

One of the top options of the engine, but not the very top choice; still, it should be tested for sure.

(I later noticed that if the engine was left on longer, it would have chosen 13. $\mathbb{Q}exf7$  as its top choice. Anyway, it's much more helpful for

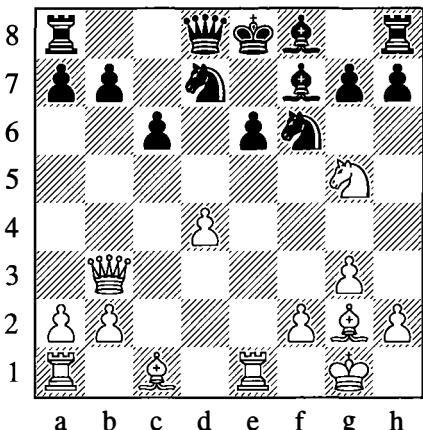
your chess development to analyse your own ideas.)

13. $\mathbb{Q}f3$  is preferred by the engine. 13... $\mathbb{Q}xe5$  14. $\mathbb{Q}xh5$   $\mathbb{Q}g6$  15. $\mathbb{Q}xg6$   $hxg6$  16. $\mathbb{Q}xe6\#$   $\mathbb{Q}e7$



The engine gives some advantage for White, but it often misevaluates positions with isolated pawns. I can't see why it should be different in this position.

### 13... $\mathbb{Q}xf7$ 14. $\mathbb{W}b3$



Black is much worse compared to the line starting with 6. $\mathbb{W}c2$   $\mathbb{Q}b6$  7.a4 a5 8. $\mathbb{Q}a3$   $\mathbb{Q}e6$ . With a pawn on a5, Black would have been able to develop the dark-squared bishop to a safe square with ... $\mathbb{Q}b4$ , closing the b-file, winning a tempo on the rook and killing White's play.

**14... $\mathbb{Q}e7$**

Other possible moves are:

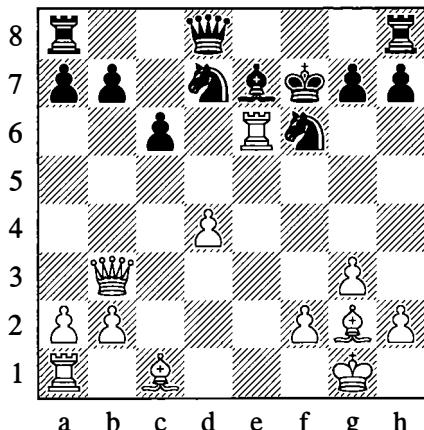
14... $\mathbb{W}a5$  15. $\mathbb{B}xe6\#$   $\mathbb{Q}xe6$  16. $\mathbb{W}xe6\#$   $\mathbb{Q}e7$  17. $\mathbb{W}f7\#$   $\mathbb{Q}d8$  18. $\mathbb{Q}f4!+$ – The idea behind this move is to defend e1 before playing 19. $\mathbb{Q}e6\#$   $\mathbb{Q}c8$  20. $\mathbb{W}xe7$ . (The position from the fifth example, where it was useful to know that White was winning.)

14... $\mathbb{W}e7?$  15. $\mathbb{W}xb7\pm$  White has a few pawns and an on-going initiative.

14... $\mathbb{Q}d5$  15. $\mathbb{Q}xd5\#$ – White wins with the most natural developing moves. (I see no reason to leave those moves in the file. It will just waste time and energy when preparing.)

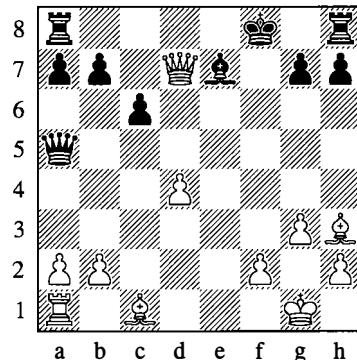
14... $\mathbb{W}b6$  15. $\mathbb{B}xe6\#$   $\mathbb{Q}xe6$  16. $\mathbb{W}xe6\#$   $\mathbb{Q}e7$  17. $\mathbb{W}f7\#$   $\mathbb{Q}d8$  18. $\mathbb{Q}e6\#$   $\mathbb{Q}c8$  19. $\mathbb{W}xe7$   $\mathbb{B}e8$  20. $\mathbb{W}f7\pm$  This looks fantastic for White. The engine only gives +0.65, but I disagree, and don't think it's necessary to look deeper.

**15. $\mathbb{Q}xf7$   $\mathbb{Q}xf7$  16. $\mathbb{B}xe6$**



**16... $\mathbb{Q}d5$**

16... $\mathbb{W}b6$  17. $\mathbb{B}xf6\#$   $\mathbb{Q}xf6\#$  18. $\mathbb{W}f3\#$   $\mathbb{Q}g6\#$  19. $\mathbb{Q}h3\#$   $\mathbb{W}a5\#$  20. $\mathbb{W}e4\#$   $\mathbb{Q}f7\#$  21. $\mathbb{W}e6\#$   $\mathbb{Q}f8\#$  22. $\mathbb{W}xd7$

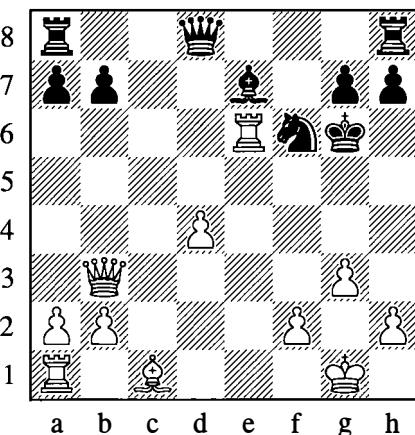


This looks very good for White. +0.4 according to the engine. (In this line, I have apparently avoided verbal comments, but simply noted that it's mostly "only moves".)

**17. $\mathbb{Q}xd5$   $\mathbb{Cxd5}$  18. $\mathbb{W}xd5$   $\mathbb{Q}f6\#$  19. $\mathbb{W}b3$   $\mathbb{Q}g6\#$**

Equal according to the engine. Looks easier to play with White.

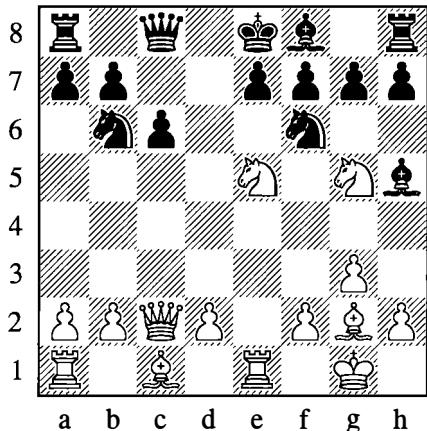
19... $\mathbb{Q}f8$  20. $\mathbb{Q}f4$   $\mathbb{W}d7$  21. $\mathbb{Q}ae1$  Nice long-term compensation with Black's rook on h8, and possibly more than that.



**20. $\mathbb{h}4\#$**

20. $\mathbb{W}d3\#$   $\mathbb{Q}f7$  21. $\mathbb{W}b3=$  gives a repetition, and can be tested once.

**d) 11... $\mathbb{W}c8$**



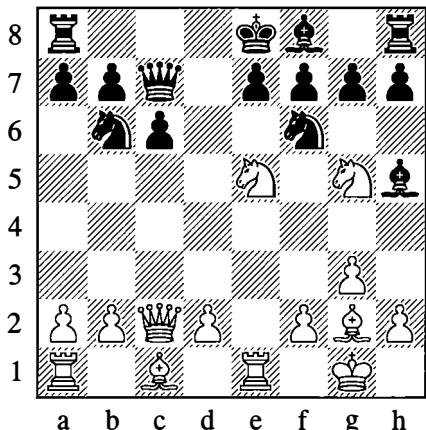
Defending the e6-square and walking away from the fork on f7. Black plans to develop with ...e6 next move.

(A quite logical move which is not given by the engine.)

### 12. $\mathbb{W}b3!$ e6 13. $\mathbb{Q}h3! \pm$

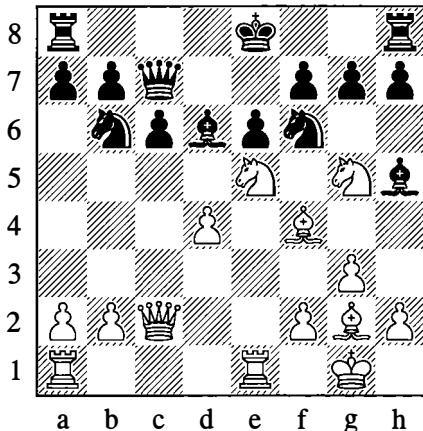
Threatening to capture on f7. There is no defence!

#### e) 11... $\mathbb{W}c7$



The idea is to avoid  $\mathbb{Q}xf7$  with a fork. Black can develop with ...e6 next move.

### 12. d4 e6 13. $\mathbb{Q}f4$ $\mathbb{Q}d6$



### 14. $\mathbb{Q}exf7!$

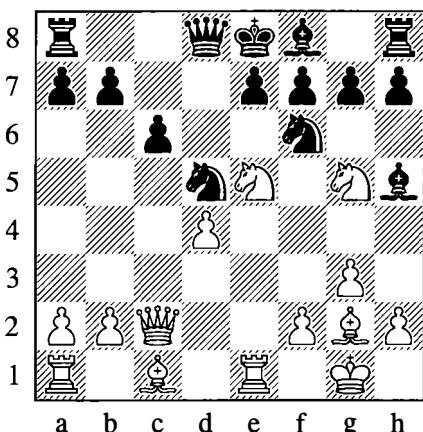
White wins.

### 14... $\mathbb{Q}xf4$

14...  $\mathbb{Q}xf7$  15.  $\mathbb{Q}xe6+ -$

### 15. $\mathbb{Q}xe6+ -$

### f) 11... $\mathbb{Q}bd5$ 12. d4



$\mathbb{Q}f3$  is still strong against ...e6, so Black has problems developing.

The opening file can be downloaded (in ChessBase format) at [www.qualitychess.co.uk/ebooks/PumpUpYourRatingOpening.pgn](http://www.qualitychess.co.uk/ebooks/PumpUpYourRatingOpening.pgn)

## Your move!

When I am teaching a student how to work with openings, I'll give him the exercise of creating a small opening file, and give him feedback afterwards. It's difficult to do the same here, but making you, the reader, do some work will do no harm anyway!

I will give the first 13 moves in a variation of the Taimanov. Your task is to analyse the position from White's point of view and create an opening file.

### 1.e4 c5

Controlling the centre, but it doesn't prepare to develop either of the bishops.

### 2.♘f3 e6

Black's most common move is 2...d6, which stabilizes a knight on f6.

### 3.d4 cxd4 4.♗xd4

White gets a strong knight in the centre. At the same time he exchanges one of his centre pawns for a wing pawn (a d-pawn for a c-pawn). In the long run Black's dream may be to play ...e5 and ...d5.

### 4...♝c6 5.♞c3

5.c4 is playable, but Black gets the possibility of putting pressure on the centre with ...♝f6 and ...♝b4 – one of the ideas of 2...e6.

### 5...♝c7

Before developing the knight to f6, Black stops ♘xc6 followed by e4-e5.

### 6.♝e3 a6

Black wants to avoid 6...♝f6 7.f4, with e4-e5 coming next, so he plays a useful waiting move. It starts to look like a lot of slow moves from Black, but the e6-Sicilians are very solid and allow slow development. It's time for White to choose a setup.

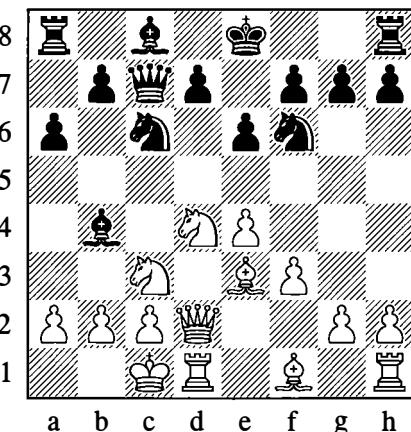
### 7.♔d2

If White decides to castle long, then d2 is the most natural square for the queen, where she isn't obstructing any other pieces.

### 7...♝f6

Finally!

### 8.0–0–0 ♜b4 9.f3



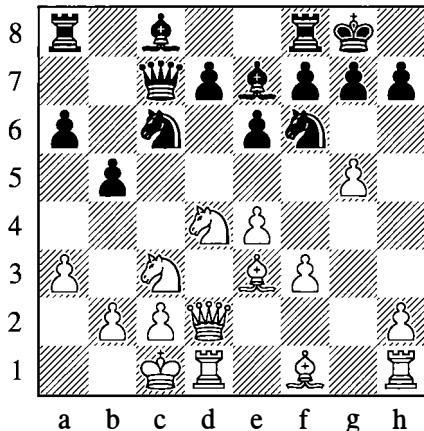
### 9...0–0

9...d5 is a logical follow-up to Black's last move. However, it's too early to open up the centre. White gets good compensation for a pawn with the simple 10.a3!.

### 10.a3

If Black transforms the opening into an endgame with ...♝e5, ...♝xc3 and ...♛xc3, then g2-g4 would be a slight weakness. For that reason, White starts by chasing Black's bishop before he continues with g2-g4-g5. Another reason to push the bishop back is that it allows f3-f4 as a reply to ...♝e5 without weakening e4 too much – the knight on c3 is no longer pinned. The pawn move has its disadvantages as well – mainly that Black can play ...b5-b4 to attack the king.

### 10...♝e7 11.g4 b5 12.g5



**12...♞h5**

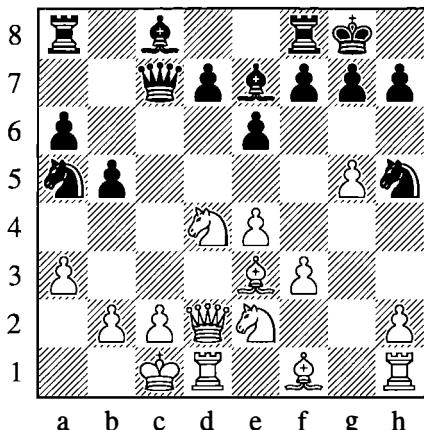
12...♞e8 is recommended in *The Safest Sicilian* by Aleksander Delchev. When Black places his knight on h5, he stops h4-h5, but the knight is also more exposed.

**13.♘ce2**

A logical reply. White wants to play ♘g3 followed by hxg3.

**13...♝a5!?**

13...b4 is the most logical move. Both sides have dangerous play, but I prefer White.



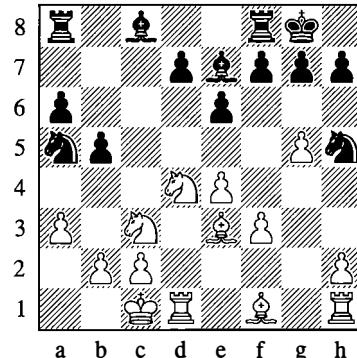
The idea of the knight move is to push White's knight with ...e5 and follow up with a knight fork on b3. Black also threatens ...♞c4. White to move – let's analyse!

### Some sort of solution

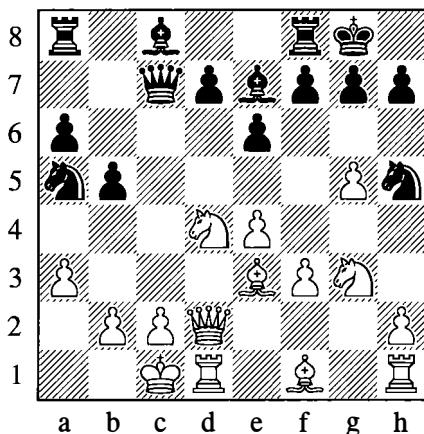
Below is the final opening file from my analysis back in January 2010. I have again added explanatory comments in brackets.

**14.♗g3!**

14.♗c3?! ♛xc3 15.♗xc3



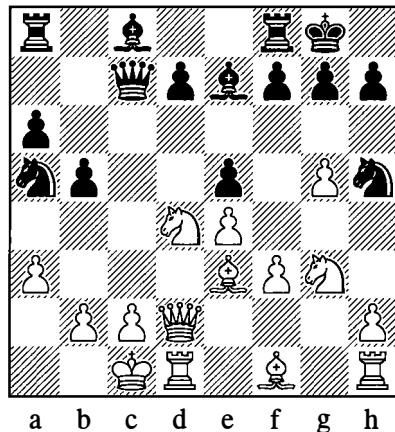
Quite equal, but pushing g4-g5 and then exchanging queens doesn't seem to fit together. In such positions, I'm afraid that Black will play ...f6 to open the f-file. He will then control the squares that the g-pawn has left behind: f3 and f4.



**14...e5**

14...♗xg3 15.hxg3 and White plays ♛h2 with a winning attack.

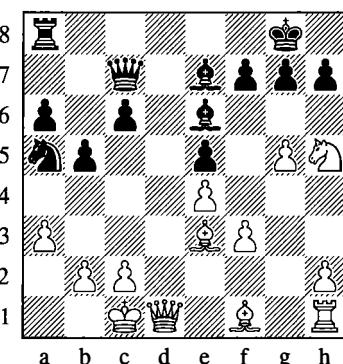
14...g6 15.♕xh5 gxh5 16.♔b1± White has avoided Black's threats. I don't see Black's compensation for the doubled pawns.



**15.♔b1!!**

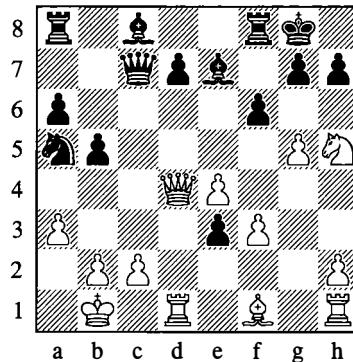
The alternatives are less inspired but still fun:

a) 15.♕c6!? A typical computer move. (Before finding the piece sacrifice, I planned to play like this and analysed it for quite some time. Afterwards, I see no point in saving everything I have analysed. I only noted the conclusions in the opening file.) 15...dxc6 16.♕xh5 ♕d8 17.♕e1 ♕xd1† 18.♕xd1 ♕e6



White is certainly not better and risks being worse – Black is quite safe on the kingside.

b) 15.♕xh5 exd4 16.♔b1 dxe3 17.♕d4 f6□



White can win the a8-rook, but I would not recommend it.

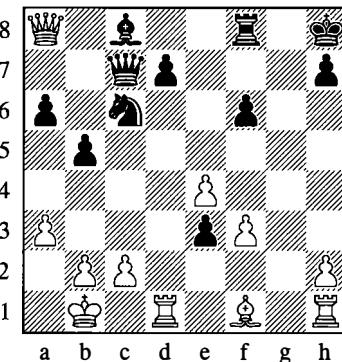
18.gxf6 ♕xf6!

18...gxf6 19.♕xe3±

19.♕xf6† gxf6!

Black needs the rook on f8, as will be clear later.

20.♕d5† ♔h8 21.♕xa8 ♕c6

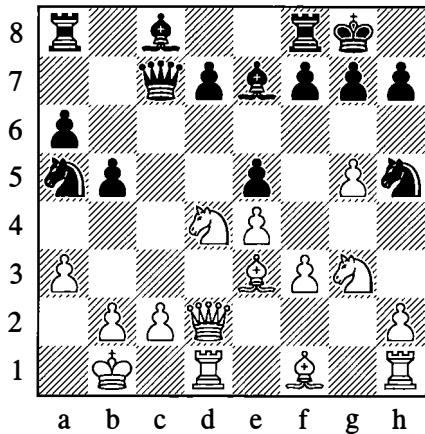


Black threatens ...♕d8 followed by ...♔b7. There is no defence!

(One of the engine's weakest points is that it doesn't understand the concept of trapped pieces. However, this line is sufficiently straightforward for the computer.)

22.a4 ♕d8 23.axb5 ♔b7 24.♕xd8† ♕xd8 25.bxa6 ♔c8†

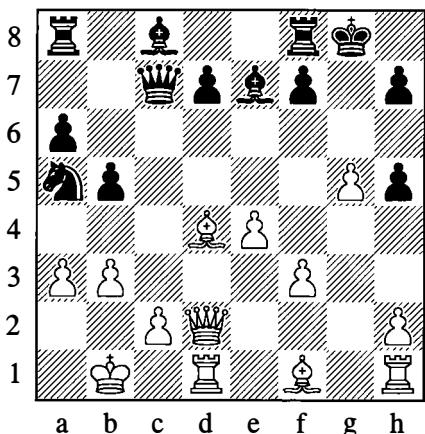
(This position was reached five months later in Talla – Doric, Switzerland June 6th 2010, where White managed to draw in the end.)



**15...exd4 16.Qxd4 g6**

16...Qxg3 17.hxg3+— According to the engine, Black has to move the queen and sacrifice the knight on a5.

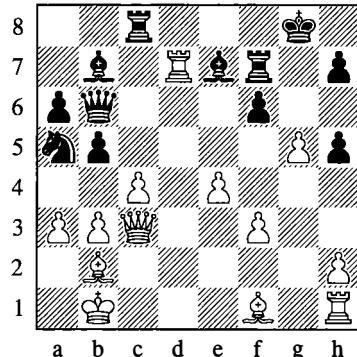
**17.Qxh5 gxh5 18.b3**



White only has a pawn for the piece, but has a strong plan of  $\mathbb{Q}b2$  followed by  $\mathbb{W}d4$ . If Black is forced to play ...f6, the g-file will become dangerous.

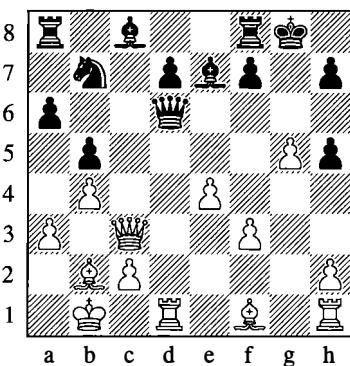
**18...b4!**

After 18... $\mathbb{Q}b7$  19. $\mathbb{Q}b2$   $\mathbb{Q}ac8$ , Black is in time to stop  $\mathbb{W}d4$ . 20.c4! It's impossible to stop both  $\mathbb{W}c3$  and  $\mathbb{W}d4$ . 20... $\mathbb{W}b6$  21. $\mathbb{W}c3$  f6 22. $\mathbb{Q}xd7$   $\mathbb{Q}f7$



23. $\mathbb{Q}xe7$   $\mathbb{Q}xe7$  24.gxf6  $\mathbb{Q}f7$  25. $\mathbb{Q}h3+—$  Rook down, but winning. e4-e5-e6 is one idea. The next moves can be found over the board.

18... $\mathbb{Q}b7$  frees the queen. 19. $\mathbb{Q}b2$   $\mathbb{W}c5$  20.b4  $\mathbb{W}d6$  21. $\mathbb{W}c3+—$



White wins the queen with a discovered attack. (I could have entered the next two moves, but the idea of the comment is to force myself to look for the discovered attack when preparing. The brain is activated, and it's easier to remember.)

After 18... $\mathbb{Q}c6$  19. $\mathbb{Q}b2$  Black can't really stop  $\mathbb{W}c3$ . 19...b4 The engine gives many moves for White. The best seems to be: 20. $\mathbb{Q}g1+—$  The idea is g5-g6,  $\mathbb{W}h6$  and  $\mathbb{Q}c4$ . This plan gets stronger when Black is no longer covering c4.

**19.g6! fxg6 20.axb4  $\mathbb{Q}xb3$**

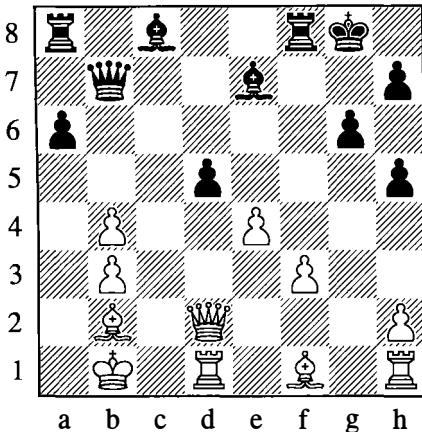
20... $\mathbb{Q}c6$  21. $\mathbb{Q}c4†$  The idea of 19.g6.

21... $\mathbb{E}f7$  22. $\mathbb{Q}b2+-$

### 21.cxb3 d5□

The only move to stop the check on c4.

22. $\mathbb{Q}b2$   $\mathbb{W}b7$



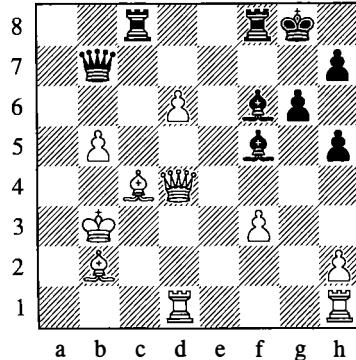
(It would have been reasonable to stop here. You can assume that no prepared Black player will enter the piece sacrifice voluntary. The probability that a non-prepared player will find the last nine moves is not so high.

Anyway, I was curious to see what happens. Since Black didn't have many choices in the lines, it didn't take much time to analyse. I think my choice of move is quite practical – I rejected the engine's two preferred moves since I don't like the resulting positions. Since I will not play them, I haven't kept all the lines I analysed.)

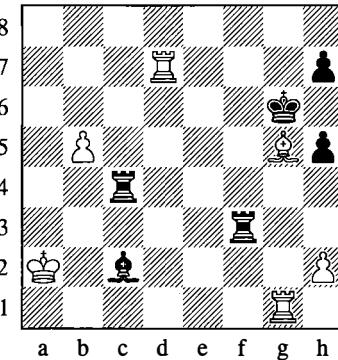
#### a) 23.exd5

Black can never blockade the pawn with ... $\mathbb{Q}d6$  since he needs to have the resource ... $\mathbb{Q}f6$ . However, the engine gives a long series of only moves.

23... $\mathbb{Q}f5\#$  24. $\mathbb{Q}a2$  a5 25.b5 a4 26. $\mathbb{Q}c4$  axb3#  
27. $\mathbb{Q}xb3$   $\mathbb{E}ac8$  28. $\mathbb{W}d4$   $\mathbb{Q}f6$  29.d6#



29... $\mathbb{E}f7$  30. $\mathbb{W}xf6$   $\mathbb{Q}c2\#$  31. $\mathbb{Q}a2$   $\mathbb{W}a8\#$   
32. $\mathbb{Q}a3$   $\mathbb{E}xc4$  33.d7  $\mathbb{E}xf6$  34.d8=math> \mathbb{W}\# 35. $\mathbb{E}xd8\#$   $\mathbb{Q}g7$  36. $\mathbb{E}d7\#$   $\mathbb{Q}h6$  37. $\mathbb{Q}c1\#$  g5  
38. $\mathbb{E}g1$   $\mathbb{E}xf3$  39. $\mathbb{E}xg5\#$   $\mathbb{Q}g6$



Finally, White has several options of equal value. Intuitively, I don't like the position. The b-pawn may be dangerous, but White's king is open and Black can also try to get counterplay with ... $\mathbb{E}g4$  and ... $\mathbb{H}xg4$ .

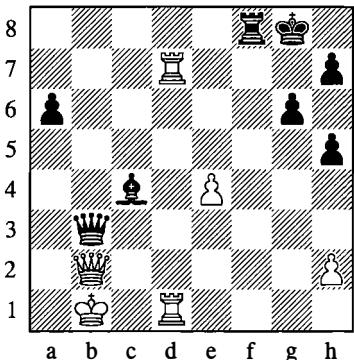
#### 40. $\mathbb{Q}h4\#$

Forcing the exchange of rooks.

40... $\mathbb{E}g4$  41. $\mathbb{E}d6\#$   $\mathbb{Q}g7$  42. $\mathbb{E}xf4\#$   $\mathbb{H}xg4$   
43.b6  $\mathbb{Q}e4$  44. $\mathbb{E}d4$   $\mathbb{E}e3$

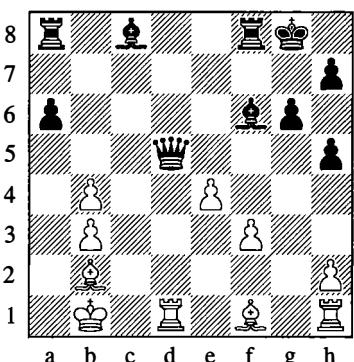
Probably a draw.

b) 23. $\mathbb{W}h6$   $\mathbb{Q}f6$  24. $\mathbb{Q}xf6$   $\mathbb{E}xf6$  25. $\mathbb{Q}c4$   $\mathbb{Q}e6$   
26. $\mathbb{E}xd5$   $\mathbb{W}xb4$  27. $\mathbb{E}d7$   $\mathbb{Q}f7$  28. $\mathbb{E}hd1$   $\mathbb{E}f8$   
29.f4  $\mathbb{E}xf4$  30. $\mathbb{W}xf4$   $\mathbb{Q}xc4$  31. $\mathbb{W}d2$   $\mathbb{W}xb3\#$   
32. $\mathbb{W}b2$

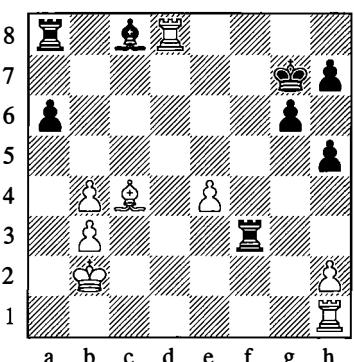


Given by the engine as better for White. Queens and rooks will be exchanged, but I doubt there are any winning chances.

c) 23.  $\mathbb{W}d4!$   $\mathbb{Q}f6$  24.  $\mathbb{W}xd5\uparrow$   $\mathbb{W}xd5$



25.  $\mathbb{W}xd5!$   $\mathbb{Q}xb2$  26.  $\mathbb{Q}xb2$   $\mathbb{W}xf3$  27.  $\mathbb{W}d8\uparrow$   
 $\mathbb{Q}g7$  28.  $\mathbb{Q}c4\uparrow$



Black has coordination problems.

Overall, I think the secret is not being satisfied with a move like 14.  $\mathbb{W}c3$ . White did not play the knight to e2 to exchange queens, but to challenge the knight on h5.

The engine doesn't take long to point out that 15.  $\mathbb{Q}xh5$  is bad. I instead concentrated on 15.  $\mathbb{Q}c6$  for some time before I tested sacrificing the piece. I sacrificed simply because I was curious to know the knight's answer to my question! Quite soon, it was clear that White had interesting compensation.

One of my students left his engine running in the position after 14...e5 while he went skiing. The piece sacrifice was proposed when he came back. It seems that the engine starts to understand something when it has reached depth 23. However, it's not possible to go skiing between every move!

Computers are rapidly getting better, and I guess the engine will soon spot the solution without needing much time. Even so, I must again emphasize that the working process is at least as important as the resulting moves.

I analysed the variation above at Wijk aan Zee in January 2010. Over three years later I still have not had the chance to play the sacrifice. The position after 14...e5 has been reached five times over the board without anyone playing 15.  $\mathbb{Q}b1!!$ . I later learned it had been played in 2009 in a correspondence game Florea – Chiricuta. In the sharpest lines, it pays to keep an eye on the games of the top correspondence players.

### Remembering

It is tiresome to hear many chess players complaining about their weak memories. There is nothing strange about forgetting your preparation one time or another. Everyone does. I rather think it's impressive that many remember dozens and dozens of moves, while barely trying!

When learning a language, it's said that a word has to be rehearsed between 50 and 100 times to be learned by heart. Before school exams, students check if they know the words time after time.

When studying openings, the lines are usually rehearsed just a few times. Often, it's even done in a passive way. With such an attitude, it's not surprising if your memory works worse than it used to before exams.

Passive and active memory are two different things – recognizing something and recalling it. In chess games, the two memories are combined. The next moves need not be remembered until the position is on the board, but by then you have no further hints.

You practise the passive memory when you click through the opening. Instead, I think it's important to recall the moves while preparing. This is done most easily with the Training-function in ChessBase [A]. Also remember to see the board from the same side as in the upcoming game.

Personally, I like to print out my opening files and study them on a real board.

We remember things from each of the five senses, and it's thus much easier to remember a phenomenon that includes several of them. Chess moves seldom have a specific taste or smell, so those options fall away. Nevertheless, the view of the board can be combined with the sense of moving the piece, and even speaking it out loud or quietly in your head. If a computer is used, I strongly recommend making the moves with the mouse. There is a greater risk of forgetting if you are lazy and just use the right-arrow on the keyboard – if you do that, then it is the computer that is remembering the moves; you are just pressing buttons.

The human memory is much better at storing verbal concepts than pure facts, so it's

important to think *why* the moves are played. Repetition may be the mother of all knowledge, but only if it's done in the right way. Chess players often rehearse opening moves while preparing for games, but the process can be made much more systematic than that.

Let's say that a new opening is analysed, and an opening file is created. The first repetition takes place already when the file is cleaned up afterwards. According to memory scientists, repetitions should then be made after one day, one week, one month and six months.

Most of those repetitions come naturally when preparing for games at tournaments, but I think it would be time well-invested to use some hours to play through the opening files one day and one week after they are created.

Before a tournament, it may be useful to think about the choice of openings. If some special openings are planned, it's good to use one day to rehearse them. It also gives the mind some time to adapt to the style of play.

Most chess players can be proud of their memory, even if they complain about it. But rehearsing in a more structured way would get even better results.

Having a specialized memory is probably quite usual when a lot of time is spent on an activity, and there are some remarkable examples. One evening, a bridge player in Australia noticed that he had exactly the same cards as in a competition two years earlier. He concluded that the organizers had used the same pairing key as back then. He could not only tell all his upcoming cards, but also all the cards of his partners for the rest of the evening!

The story ended surprisingly: he was disqualified and thus punished for his strong memory.

## Preparing

### Getting as much information as possible

In principle, it is good to get as much information as possible about your opponent and the opening you will play against him, while he gets as little information as possible. However, this advice can be interpreted in more or less strict ways.

I am an addict regarding preparation. In rapid tournaments, with only short pauses between the rounds, I prepare in advance for all the top players with both colours. That is nothing compared to what I do in the Swedish League. There it's possible to rotate the team setup, which sometimes gives seven possible opponents. While most players feel that it's too much to prepare for everyone, I see my chance.

I start by checking the games in my main database, which I call Gigabase, but nowadays there are sometimes additional games at <http://ratings.fide.com>. I also have another secret method to find games: the ICC. Many people play under their real names, and it's possible to search for a player (tell `findname name Axel Smith`) and his relevant games (search `Smith A11`). It can be very useful!

Before one of the games in the Swedish League, I found a hole in an opponent's repertoire after seeing his ICC games. I used a few days to study a new opening before that game and was quite optimistic. Sadly, I was paired against one of the other possible opponents.

Anyway, my preparations gave satisfying results. That season I was on average 30 minutes up on the clock after the opening. However, I must also mention what many friends tell me: that I focus too much on opening preparation. One time, when I was at an airport on the way to a round-robin rapid tournament, I suddenly found the starting list of 32 players. I immediately started preparing with both colours against all the players, but it took more time than expected and I was 45 minutes late for the flight.

In that case I will admit I focused too much on my preparations, but in general I don't think it's a problem for me. It's important, though, to feel that the preparations aren't taking energy away from the game.

By the way, the flight was miraculously waiting for me, and I earned back the minutes lost during the opening phases in the games in the tournament!

### Deciding which opening to play

By having more than one opening in your repertoire, it's possible to make a targeted preparation. It's even easier if the opponent consistently plays the same openings.

Start by picking the most recent games with the relevant colour [A]. Sometimes that means one year and sometimes the last 15 games; that is only a preference. Instead of checking all games one by one, it's easier to create an "opening book" in ChessBase [A].

The relevant question is of course which openings the opponent seems to play well and which he seems to play less well. Do you know how to play against his favourite lines?

Personally, I don't want to spend energy during a tournament analysing opening lines, so if he plays something I am unfamiliar with, I'd rather go for another opening.

However, there are also a lot of other things to consider when choosing what to play:

- ▲ If you play a higher-rated opponent, and neither of you has any clear weak points in your repertoire, it's good to play an opening with a lot of theory. That increases the chance that the game will be decided in the opening phase, or that there is not much play left when the opening phase is over.
- ▲ With the same reasoning, it's better to choose openings with more positional decisions against lower-rated opponents. The idea is that playing strength will have a greater influence.
- ▲ Choose openings with few theoretical moves against time trouble addicts, so they start to spend their time early in the game.
- ▲ Opponents with an active playing style might dislike solid openings, and vice versa. Of course, such considerations must be weighed against the risk of choosing something that doesn't suit you!
- ▲ It may also be helpful to check the opponent's games with reversed colours. Does he play the opening you have planned to play against him? It also shows what type of positions he has experience with. It's good to find what he enjoys least.

One last piece of advice is very important – imagine the opponent's situation. What information does he have? It's important to know which of your own games have been published in TWIC, especially when you get surprised. In such situations, it's generally good to deviate as early as possible.

With all information in hand, the opening choice usually makes itself. Personally, I try to decide which opening to play the evening before the game. It gives something interesting to think about when trying to sleep... but also reduces stress and gives a feeling of how much time the preparations will take.

### Rehearsing the lines

Finally, I check all of my opponent's games (I have not played Victor Korchnoi yet, who has 5000 games) and make a list of the openings I have to rehearse. I prefer to save the list in a game in ChessBase, since it makes it easy to retrieve the preparations for the next game against the same opponent.

If the opponent has played something that isn't mentioned in the book or in the opening file, it has to be analysed. This should be done before rehearsing lines, since the final evaluation of the analysis may change the opening choice. If there is nothing to analyse, it's time to start going through the opening files and rehearsing the moves. Actively – not in bed! I prefer doing this only on the morning before the game, so my memory keeps the variations fresher in my mind.

Start with the most probable opening; something may happen that makes it impossible to rehearse every line. However, starting with the most probable opening may also give a chance to check that opening file for a second time.

Personally, I usually spend about three hours to rehearse 3000 half-moves. My memory is easily disturbed, so I try to avoid thinking of other things after the end of my preparations until the opening phase is over.

Some players think that it's bad to play fast in the opening, since it reveals what's prepared. However, a friend of mine does the opposite: he plays fast when he is out of book, to trick the opponent into thinking it is still preparation.

There are already two ways to interpret slow play (prepared or not prepared) and fast play (prepared or not prepared). So I think it's better not to bother trying time-management tricks in the opening – just play the prepared moves as quickly as possible and save the valuable seconds for later in the game!

Below is a checklist for preparing for a game. The time schedule works when the tournament has one game per day, starting in the afternoon, as in most serious tournaments.

1) Create the opening files.	Long before the tournament
2) Download the latest TWIC-games and update the Gigabase.	The day before the tournament
3) Search for relevant games of the opponent (Gigabase, fide.com, ICC).	
4) Make an opening book with his latest games with the relevant colour; maybe 15 games or a full year. Check what openings he plays and think if you would like meeting them.	When the pairings are published
5) Check your own games and think what he is probably preparing against you.	
6) Decide which opening to play.	
7) Check more (maybe all) of his games to see whether there are relevant games. Write down a list of lines to prepare and analyse.	The evening before the game
8) Analyse, if needed. The final evaluation of the analysis may change the choice of opening.	
9) Rehearse the opening files, starting with the most important opening.	The morning before the game

### One example of preparations

Below is a summarized excerpt from Nils Grandelius's preparations against the Serbian GM Milos Perunovic (rated 2578). The game was played in the last round of the Bosna Open in May 2011.

*The games from 2010 and the beginning of 2011 (30 games) show that he plays at least four different Sicilian variations. It seems impractical to prepare against all of those, so 1.e4 is excluded. Against 1.d4 he plays some Benko and Nimzo, but mostly different lines in the Slav. Black is very solid in some of them. Since I need to win for a prize, it seems better to play something else. Against 1.c4  $\mathbb{Q}f6$  2. $\mathbb{Q}c3$  he seems to play 2...c5 with the plan of entering a Hedgehog. It's also very solid. He hasn't*

met any g3-tries in his recent games. Adding the games from 2008 and 2009 doesn't give anything either. When checking all his games, he seems to go into an Anti-Catalan, which I gladly play.

I prefer to start with 1.c4  $\mathbb{Q}f6$  2.Qf3 c6 3.g3 rather than 1.Qf3 Qf6 2.g3, since the latter allows 1...d5. Black can then play systems with ... $\mathbb{Q}f5$  or ... $\mathbb{Q}g4$  without being forced to play ...c6. The only possible disadvantage with 1.c4 is 1...e5, but he has never played that move.

With White, Perunovic plays only 1.e4, so he may not have much experience in the English lines with g2-g3.

What shall I prepare? Let's check his recent games again.

a) Symmetrical English. I will play a move order that avoids the Hedgehog. It might transpose to the Nimzo-Indian, but that's fine. I believe in my analysis there. I have never used that move order before, so he can't prepare against it!

b) Anti-Catalan. Checking all his games, he has never played against the line I have in my repertoire. Also, I haven't showed it in TWIC. I will check the opening file.

c) He has played a lot of Slavs in recent tournaments. Maybe I will check the Anti-Slav line briefly. I have three games in TWIC. The game from 2009 is not important. In the mainline, I began by losing with 7.Qa3 (January 2010) and continued by winning with 7.a4 (October 2010). I will go for the move I lost with! Hopefully he will guess the other way around.

Let's see what happened in the game.

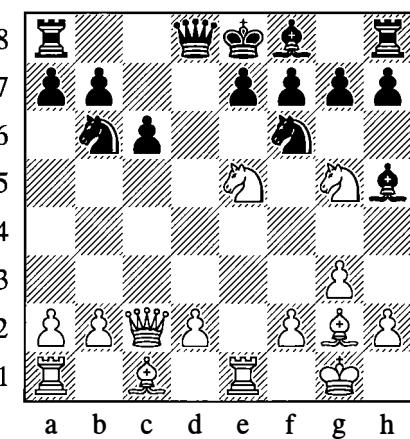
## Nils Grandelius – Milos Perunovic

Bosna Open, Sarajevo 12th May 2011

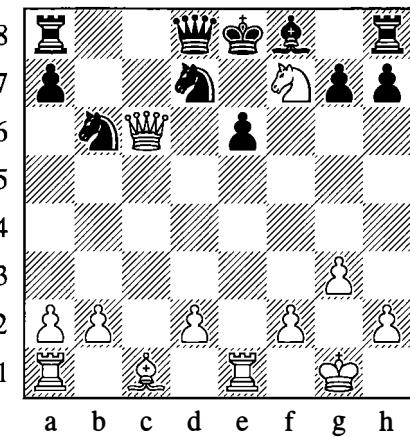
1.c4  $\mathbb{Q}f6$  2.Qf3 c6 3.g3 d5 4.Qg2 dxс4

The Anti-Slav, one of the expected openings. After having examined the position throughout this chapter, I don't think the following moves need many comments.

5.0-0  $\mathbb{Q}bd7$  6.Wc2  $\mathbb{Q}b6$  7.Qa3  $\mathbb{Q}e6$  8.Qg5  $\mathbb{Q}g4$  9.Qxc4  $\mathbb{Q}xe2$  10.Qe5  $\mathbb{Q}h5$  11.Qe1



12...e6? 12.Qf3!  $\mathbb{Q}g6$  13.Qxc6† bxс6  
14.Wxc6†  $\mathbb{Q}fd7$  15.Qexf7  $\mathbb{Q}xf7$  16.Qxf7



**16...wf6**

One move from checkmate, Perunovic deviates from the opening file.

**17.Qxh8 e5 18.We4 g6 19.d4 Wxh8 20.dxe5**

White has three pawns and a rook for two knights. Even more importantly, e5-e6 and an attack against Black's king will be completely crushing. The rest doesn't need many comments either.

**20...Qe7 21.Qh6 Qc8 22.e6 Qc5 23.We2 Qf6 24.Qad1 Qe7 25.b4 Qca4 26.Qd7† Qxd7 27.exd7† Qxd7 28.We6†**

Black resigned, as it's a forced mate.

Grandelius's game was the first where 11.Qe1 was played. At the time of writing, it has been repeated ten times. Black has played the most natural move, 11...e6, in five of the eleven games. White has scored 9/11.

**Summary**

Searching for the opponent's games and rehearsing variations are the most concrete parts of opening preparation. However, the opening files will ideally have been well rehearsed before travelling to a tournament, if possible at regular intervals. Nevertheless, the whole process starts with the choice of opening, continues with the creation of an opening file and the analysis of critical positions. There are four principles to consider when analysing and three when incorporating the analysis in the opening file.

The four principles for analysis:

- ▲ Analyse normal moves
- ▲ Make your own evaluations
- ▲ Use the x-technique
- ▲ Stop when the branches get too big

The three principles when incorporating the analysis:

- ▲ All important points are annotated with text
- ▲ Irrelevant variations are removed
- ▲ Every line ends with an evaluation

Studying openings in an active way is definitely a rewarding training method: not only will you surprise your opponents with moves of your own, but you will also learn a lot of standard moves and thus improve your middlegame understanding.

# Chapter 8

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## Theoretical Endgames

The best way to practise endgames is to decline draw offers, play long games and analyse them thoroughly without the help of a computer. However, with today's shorter time controls, it's also important to know some theoretical endgames by heart. There is simply not enough time to find the solutions over the board.

The purpose of this chapter is to discuss how to study those theoretical endgames, while at the same time showing four of them as examples.

In the autumn of 2007, I made a list of 100 endgames I thought were useful to learn. After that, I challenged a friend to a competition. We had one month to study the 100 endgames before we tested each other. At the competition, we had to play any ending the opponent had chosen from the list of 100 in a rapid game. After five challenges each, we crowned a winner.

Since then, we have repeated the competition every year. In between competitions, I barely look at theoretical endgames; once a year or even less is enough to keep them fresh in my mind.

At the same time, I made a bet with my friend about which of us would become an IM first. The loser had to eat a straw hat and play a league game wearing a skirt. However, since I cheated by quitting university, I never felt it was fair to demand that he honoured the bet.

The list of useful theoretical endgames is found in the appendix on page 370. Most of them are well covered in various endgame manuals, but I have also created a database where they can be downloaded – see the appendix for a link.

The endgames I have chosen for this chapter are all quite difficult, but also very valuable to know in a practical game.

The endgames I have chosen are all queen or rook endings.

- 1) Queen and Pawn versus Queen.
- 2) Queen versus Rook.
- 3) "Go to the short side" – a Rook ending in-between Philidor's and Lucena's positions.
- 4) Another Rook ending with one Pawn, this time with the defending king cut off by one or several files.

Theoretical endgames are hard work, which is why I think a competition is such a good idea. It's easier to become motivated to study if you know for sure that you will have to play the endgames,

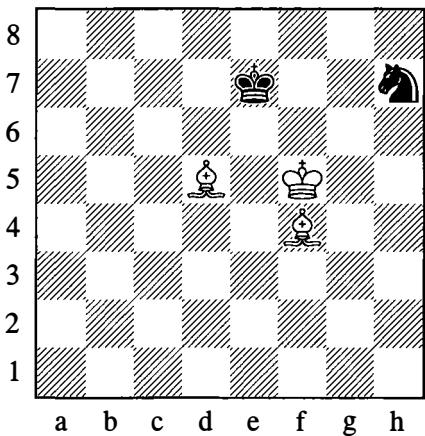
compared to if you wonder whether they will ever appear in your games. Many players know how to checkmate with bishop and knight, but few have played it over the board. I have, but I had the lonely king...

A natural question arises: Is knowledge of theoretical endgames really useful?

David Janowski once said: "I detest the endgame. A well-played game should be practically decided in the middlegame." The statement is of course nonsense, but even if it was true, it happens from time to time that we find ourselves in a position we could have studied. Less than a year after I made the list, I reached the following position:

### Axel Smith – Adam Brzezinski

LASK Open, Lund 6th October 2008



Two bishops against a knight – one of the theoretical endgames on my list.

I had learned that it's best to defend with the king on b6 or c7 and the knight on b7. White is able to break down such a setup and force Black's king out into the middle, but it's very difficult to stop him from then setting it up in another corner. From one of those corner

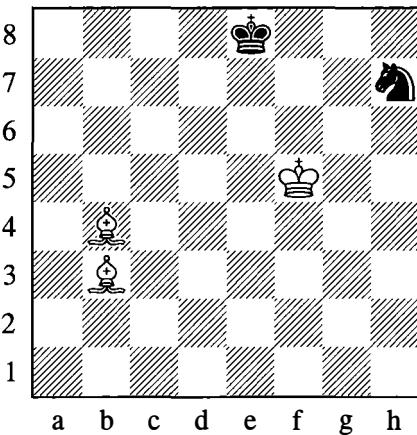
positions, it should take slightly less than 50 moves to capture the knight with perfect play.

Both my friend and I chose this position for our competitions, and neither of us managed to win. Nevertheless, I was optimistic during the game, especially when my opponent offered a draw. By doing this, he showed that he thought it was an easy draw. Actually, the diagram position is mate in 28 moves!

**100.♗d2 ♗f8**

100...♔d6 101.♗g8 wins the knight.

**101.♗b4† ♔e8 102.♗c6† ♔f7 103.♗a4! ♗h7 104.♗b3†! ♔e8**



**105.♗d1!**

White threatens ♗h5† followed by ♗g6 or ♗g6, picking up the knight. Black's king must move to the corner.

**105...♗f7 106.♗h5†**

106.♗c3 was four moves faster, since it stops Black from reaching h6.

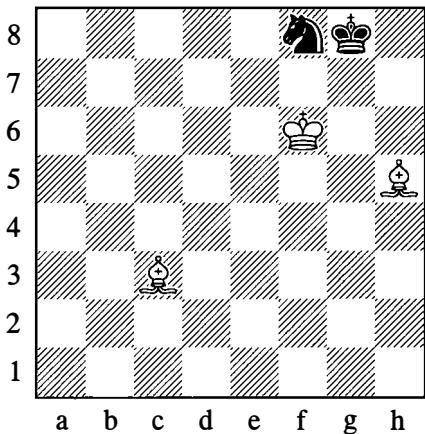
**106...♗g7 107.♗c3† ♗g8**

107...♗h6 was the best defence.

**108.♗g6!**

Chasing the knight.

**108...♗f8† 109.♗f6**



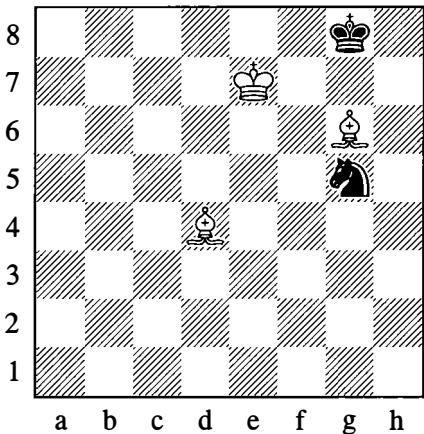
**109... ♘h7†**

After 109... ♘d7† 110. ♘e7, the knight loses contact with the king and is easily caught. For example: 110... ♘c5 111. ♘g4 ♘e4 112. ♘e5 ♘c5 113. ♘f5 ♘a6 114. ♘d6

**110. ♘e7 ♘g5 111. ♘g6 ♘e4!**

Capturing the knight would be stalemate.

**112. ♘d4 ♘g5**



**113. ♘f6**

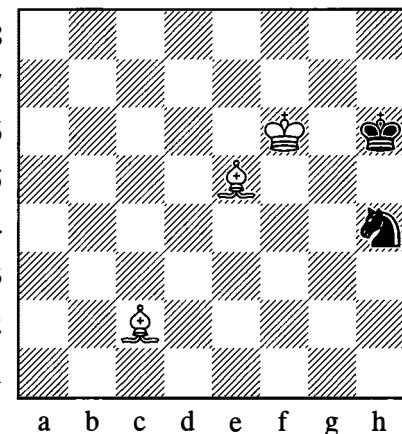
The best way to stop the knight from jumping back and forth is to play the bishop to f4. An illustrative line: 113. ♘f5 ♘e4 114. ♘e5 ♘g5 115. ♘f4 ♘f3 116. ♘f6 ♘f8 117. ♘d7 ♘h4 118. ♘d6† ♘g8 119. ♘g3 ♘f3 120. ♘g6

121. ♘d6 ♘f3 122. ♘e6† ♘h8 123. ♘h6 ♘g5 124. ♘e5#

**113... ♘e4 114. ♘h4 ♘d2 115. ♘c2?**

When I played this move, I hadn't seen his reply at all! The right move is 115. ♘f6, which gives mate in 14 moves. 115. ♘c2? is seven moves slower. In the rest of the game, I didn't waste any more moves.

115... ♘g7 116. ♘g5 ♘f3 117. ♘f4 ♘h4 118. ♘e5† ♘h6 119. ♘f6



**119... ♘f3**

This loses the knight, but 119... ♘g2 120. ♘g6 is even worse, mating next move.

120. ♘f4† ♘h5 121. ♘d1 ♘g4 122. ♘e5 ♘h4 123. ♘xf3 ♘h3 124. ♘f5 ♘h4 125. ♘f4 ♘h3 126. ♘f6 ♘h2 127. ♘d5 ♘g1 128. ♘f3 ♘f1 129. ♘c3 ♘g1 130. ♘g3 ♘f1 131. ♘c4† ♘g1 132. ♘d4† ♘h1 133. ♘d5#

It's rare that training gives such clear results; it was a pleasing win. Actually, my wife got the same ending in March 2013, but her opponent defended correctly and held the draw.

In the first of the four endgames, I also use an example from one of my own games. By doing so, I hope I have made it clear that these endgames do not appear only in books!

## Queen and pawn versus queen

Studying queen-and-pawn versus queen is time well spent, since it's common in tournament games and quite simple to learn. Even after having studied it, it's still easy to misplay the ending over the board, but knowing the basic rules makes it much easier.

Queen endings usually involve a lot of checks, but with some pawns on the board, the king is usually able to move across the board to find a hiding place. Even with only a queen and a pawn to hide behind, the winning chances are high.

Pawns on one of the four central files are usually winning. The exception is, of course, if the pawn is lost or if there is an immediate perpetual, but also if the defending king manages to block the pawn from advancing. The best defensive option for the king is to stand in front of the pawn (without getting checkmated!) because then a queen exchange leads to a draw, but it may also be sufficient just to stay close. Pure calculation has to answer the question if it's close enough.

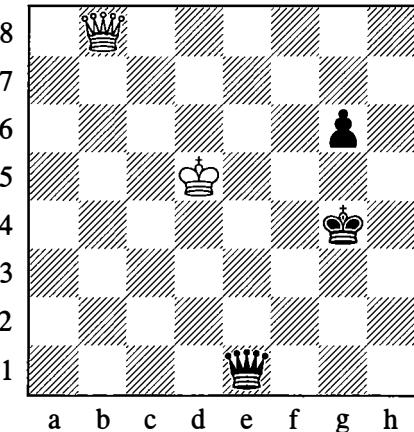
If the pawn can move, it's not difficult to advance it to the seventh rank. After that, the winning method is to stop the checks with a countercheck, forcing the exchange of queens. The placement of the defending king is therefore of decisive importance. It has to be far away, to avoid such counter-checks. There are two rules to know:

- 1) With rook and knight pawns, it's a draw with the defending king in the opposite corner.
- 2) With rook pawns, it's a draw with the defending king behind the pawn.

Other cases win. The following game illustrates the winning tries and how to defend against them.

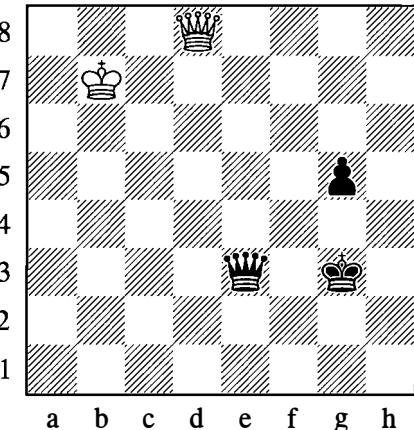
## Axel Smith – Eduard-Andrei Valenu

World Junior Championship, Yerevan 2006



It's not possible for White to block the pawn with his king, so he has to place his king in the opposite corner.

**58.♔c8† ♜h4 59.♕d8† g5 60.♗c6 ♜e4† 61.♗b6 ♜e3† 62.♗b7 ♜g3**



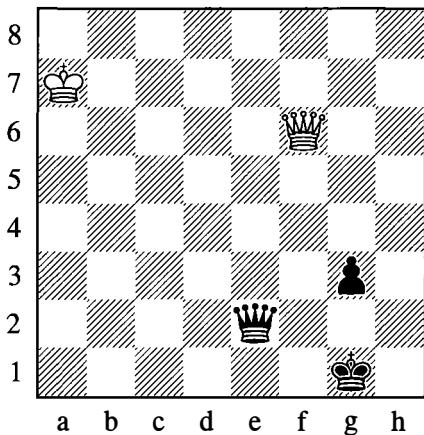
**63.♗a8**

The king has reached its final destination!

It's a hopeless task to try to stop the pawn from advancing. For example 63.♕c7† ♜f4 and already there are no good checks. It's only possible to stop the pawn when it's on the 7th rank, since the attacking king can't break the

pin on the pawn by moving to a 9th rank. Also, the kings are further away from each other, reducing the risks of counter-checks.

63...g4 64.♔d6† ♔g2 65.♔c7 ♔f3† 66.♔a7 g3 67.♔e5 ♔f2 68.♔b2† ♔e2 69.♔f6† ♔g1



70.♔b8?!

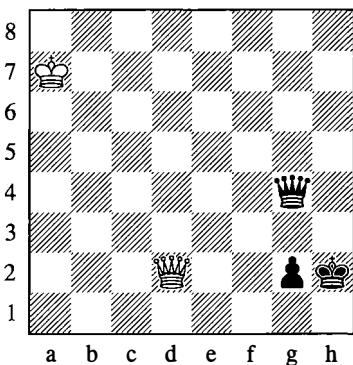
This is a bad square for the king, as will become clear later.

The following moves show how easy it is to advance the pawn to the 7th rank:

70.♔a1† ♔g2 71.♔c3 ♔g4 72.♔d2† ♔h1  
73.♔e1† ♔h2 74.♔d2†

74.♔e5 stops the pawn from advancing, but only for a few moves. 74...♔f3 75.♔c7 ♔g1 76.♔c1† ♔f1 and ...g2 comes next move. As you can see, this is only possible since the king stands two ranks away from the pawn. That's not possible with the pawn on the 7th rank.

74...g2



This is the key position for the whole endgame. Black has two winning methods:

1) To play ...♔h1. White must then either check on the h-file (in this case h6) or pin along the diagonal (d5). If Black can cover both of these squares and follow up with ...♔h1, he wins. The key squares for Black's queen are thus c6, e6 and h5. White should never allow him to reach one of those with check!

2) To play ...♔h3. White has to start checking. In that moment, White's king should *not* be placed on b8, since it allows Black's queen to counter check on g3.

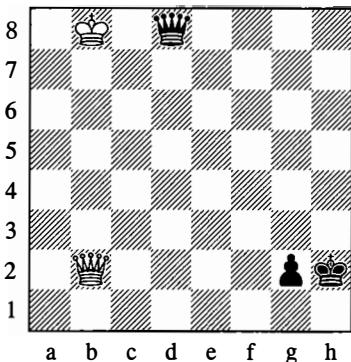
The best square for White's queen is d2 since it covers d5, an ideal square for Black's queen. From d5, it would defend the pawn and at the same time cover the king when it starts advancing across the board, as in the second winning method.

The secret to the endgame is to look for the white queen's squares along the diagonal and on the h-file, and then find the key squares for Black's queen. Let's examine White's different moves:

a) 75.♔f2? From f2, the queen can reach h4 (on the h-file) and f3 (on the diagonal). Both are already covered by Black's queen, so he wins immediately with 75...♔h1. However, f2 is a bad square even in general, since it's a great risk that Black can check his queen to e4.

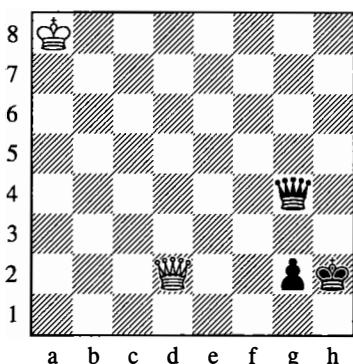
b) 75.♔a2? is not working at all, since the queen can't reach the h-file. Black wins with 75...♔h3 76.♔b3† ♔h4.

c) 75.♔b2? is also not good. The queen can reach b7 and h8, which makes h7 and c8 key squares. The problem is the king also wants to use the b7-square. 75...♔d7† 76.♔b8 ♔d8†



77.♔a7 (77.♔b7 ♔h1!) 77...♕c7† Next move, Black plays the queen to the key square c8 with check and follows up with ...♔h1.

d) 75.♔a8?

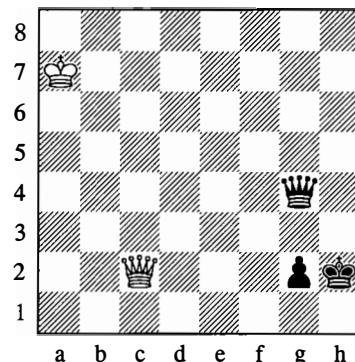


Exercise: How can Black reach one of the key squares with check?

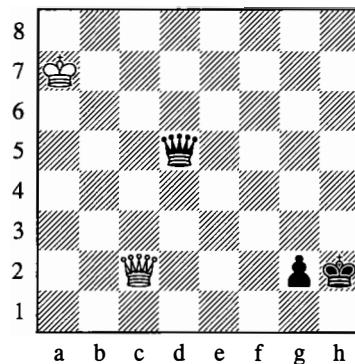
75...♕c8†! 76.♔a7 ♕c7† followed by ...♕c6† and ...♔h1.

e) 75.♕d6† and 75.♕h6† are good enough to draw, but there is no reason to leave d2. When the checks have ended, which they will do, White has to find an exact queen move to hold the draw.

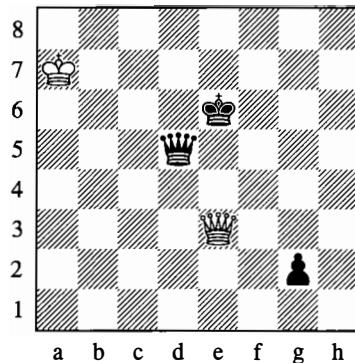
f) 75.♕c2? loses.



Black starts by playing his queen to d5. 75...♕d4† 76.♔b7 (76.♔b8 ♕d5 does not make much of a difference – Black will walk with his king in any case.) 76...♕d5† 77.♔a7



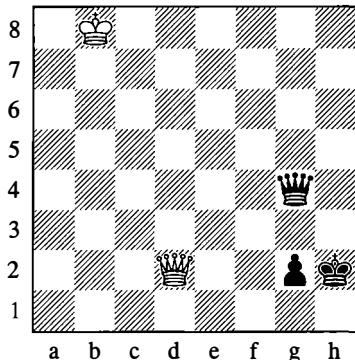
The black king will march across the board, to find a position where counter-checks are unavoidable. 77...♔g3 78.♕g6† ♔f3 79.♕f6† ♔e3 80.♕c3† ♔e4 81.♕e1† ♔f5 82.♕f2† ♔e6 83.♕e3†



83... $\mathbb{Q}f7!$  Black doesn't allow White to check from the h-file. White's checks will end after  
84. $\mathbb{W}f2\# \mathbb{Q}e8$  85. $\mathbb{W}e3\# \mathbb{Q}d8$  86. $\mathbb{W}b6\# \mathbb{Q}d7.$

**g) 75. $\mathbb{Q}b8?$**

This is a bad square for the king, due to the counter-check on g3.



75... $\mathbb{Q}h3$  76. $\mathbb{W}h6\# \mathbb{W}h4$  77. $\mathbb{W}e6\# \mathbb{Q}h2$

No more checks, so the queen is forced to e2. This is a bad square, since ... $\mathbb{Q}g3$  can't be met with a check on the g-file.

78. $\mathbb{W}e2$

Now White's queen can reach h5 (on the h-file), f3 and e4 (on the diagonal). The key squares for Black's queen are thus f5 and d5.

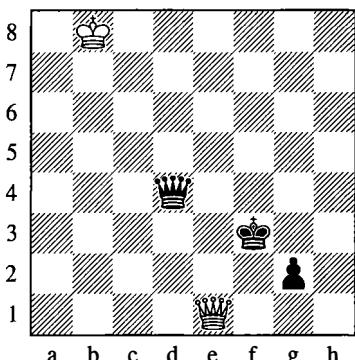
78... $\mathbb{W}d8\#$  79. $\mathbb{Q}a7$

79. $\mathbb{Q}b7?$  allows Black to reach a key square with check: 79... $\mathbb{W}d5\#$  80. $\mathbb{Q}a7 \mathbb{Q}h1$

79... $\mathbb{W}d4\#$  80. $\mathbb{Q}b8 \mathbb{Q}g3!$

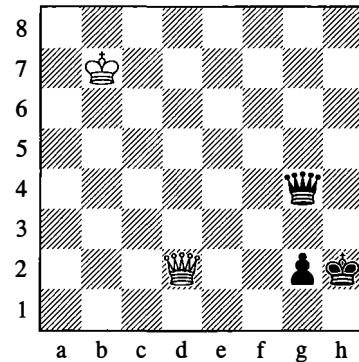
No check on the g-file.

81. $\mathbb{W}e1\# \mathbb{Q}f3$



Black promotes on the next move.

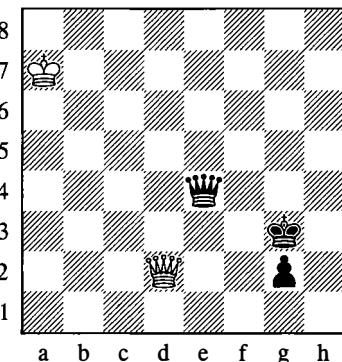
**h) 75. $\mathbb{Q}b7!$**  is the best move. The queen stays on d2 and the king avoids b8.



I'll give three different winning tries for Black:

1) Check the queen to e4 and walk with the king.

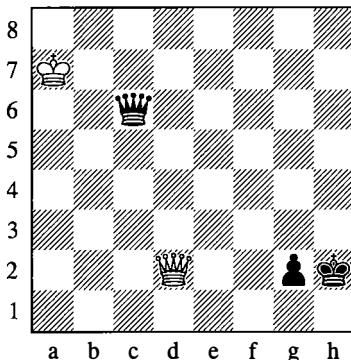
75... $\mathbb{W}g7\#$  76. $\mathbb{Q}a8 \mathbb{W}f8\#$  77. $\mathbb{Q}b7 \mathbb{W}e7\#$   
78. $\mathbb{Q}a8 \mathbb{W}e4\#$  79. $\mathbb{Q}a7 \mathbb{Q}g3$



80. $\mathbb{W}g5\# \mathbb{Q}f3$  81. $\mathbb{W}f6\# \mathbb{Q}g4$  (After 81... $\mathbb{W}f4$ , the king march risks losing the pawn.)  
82. $\mathbb{W}g7\# \mathbb{Q}h5$  83. $\mathbb{W}h8\#$  White manages to hold a draw since he can check from the right side of the king.

2) Play the queen to one of the key squares.

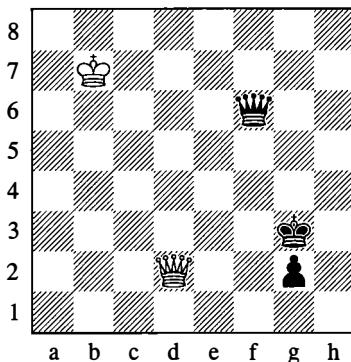
Best seems c6, since it covers the pawn.  
 75... $\mathbb{W}g7\#$  76. $\mathbb{Q}a8$   $\mathbb{W}f8\#$  77. $\mathbb{Q}b7$   $\mathbb{W}e7\#$   
 78. $\mathbb{Q}a8$   $\mathbb{W}e8\#$  79. $\mathbb{Q}b7$   $\mathbb{W}b5\#$  80. $\mathbb{Q}a7\#$   $\mathbb{W}c6$



White has to start checking: 81. $\mathbb{W}f4\#$   $\mathbb{Q}h3$   
 82. $\mathbb{W}f5\#$  Black's queen is not well placed on c6, so Black's king won't be able finding a hiding place.

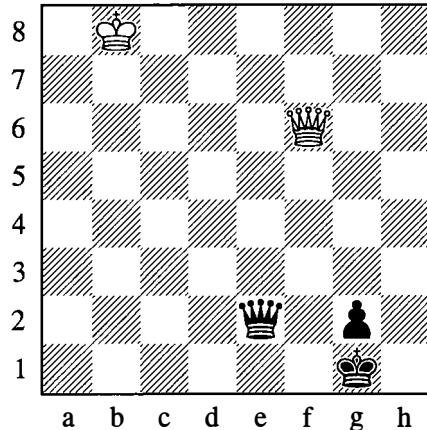
### 3) Place the queen on f6.

When Black's queen is on f6, White must find a few only-moves. They are not so difficult, but if he finds them, Black can start all over again.  
 75... $\mathbb{W}g7\#$  76. $\mathbb{Q}a8$   $\mathbb{W}f6$  Now all queen moves lose! 77. $\mathbb{Q}b7$   $\mathbb{Q}g3$



78. $\mathbb{W}e1\#$   $\mathbb{Q}f3$  79. $\mathbb{W}d1\#$   $\mathbb{Q}f4$  80. $\mathbb{W}d2\#$   $\mathbb{Q}g3$  81. $\mathbb{W}e1\#$  And so on.

It's time to return to the game. With our knowledge of the key position, it's easy to point out the mistakes in the rest of the game.

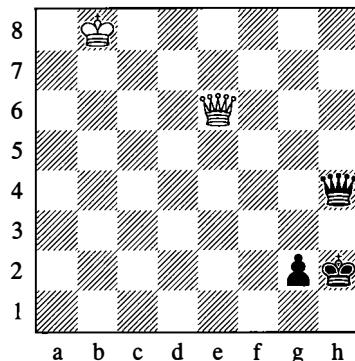


70... $\mathbb{g}2$  71. $\mathbb{W}a1\#?$

As we know by now, the king must leave b8:  
 71. $\mathbb{Q}a8!$

71... $\mathbb{Q}f2$  72. $\mathbb{W}f6\#$   $\mathbb{W}f3$  73. $\mathbb{W}b2\#$   $\mathbb{Q}g3$   
 74. $\mathbb{W}g7\#$   $\mathbb{W}g4$  75. $\mathbb{W}c3\#$   $\mathbb{Q}h2$  76. $\mathbb{W}d2$   $\mathbb{W}g8\#?$

With the queen on d2, the key squares for Black are c6, e6 and h5. It's not possible to reach any of them with check, but 76... $\mathbb{Q}h3!$  wins. 77. $\mathbb{W}h6\#$   $\mathbb{W}h4$  78. $\mathbb{W}e6\#$   $\mathbb{Q}h2$



White doesn't have a check, since the king is on b8. He must play 79. $\mathbb{W}e2$ , but as already mentioned, this is a bad square since the queen lacks a check on the g-file when Black plays ... $\mathbb{Q}g3$ . Black wins with 79... $\mathbb{W}d8\#$  80. $\mathbb{Q}a7\#$   $\mathbb{W}d4\#$  81. $\mathbb{Q}b8$   $\mathbb{Q}g3$  82. $\mathbb{W}e1\#$   $\mathbb{Q}f3$ .

77. $\mathbb{Q}b7$   $\mathbb{W}f7\#$  78. $\mathbb{Q}b8?$

78. $\mathbb{Q}a8!$

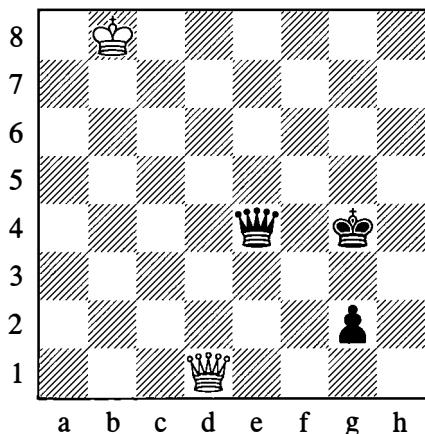
**78... $\mathbb{Q}e8\#?$**

78... $\mathbb{Q}g3$  and 78... $\mathbb{Q}h3$  both win, but the variations are not so simple any more...

**79. $\mathbb{Q}b7 \mathbb{Q}e4\# 80.\mathbb{Q}b8?$**

80. $\mathbb{Q}a7!$  is correct. I hope the principle has started to become clear.

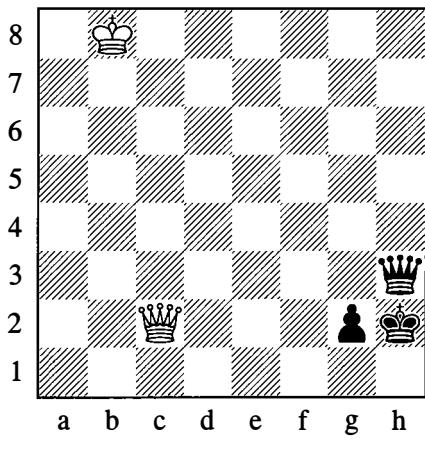
**80... $\mathbb{Q}g3!$  81. $\mathbb{Q}c3\#$   $\mathbb{Q}f4$  82. $\mathbb{Q}d2\#$   $\mathbb{Q}g4$   
83. $\mathbb{Q}d1\#$**



**83... $\mathbb{Q}g5\#?$**

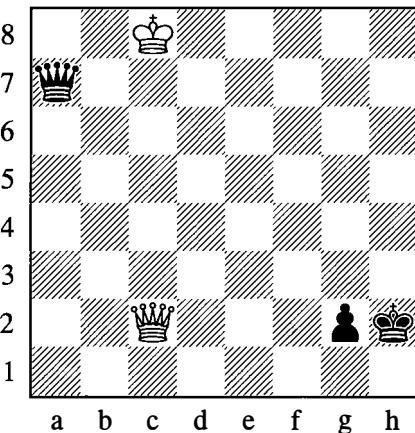
83... $\mathbb{Q}g3\#$  wins immediately: 84. $\mathbb{Q}b3\#$   $\mathbb{Q}h4$  and the checks have petered out.

**84. $\mathbb{Q}d8\#$   $\mathbb{Q}f5$  85. $\mathbb{Q}f8\#$   $\mathbb{Q}g4$  86. $\mathbb{Q}g7\#$   $\mathbb{Q}f3$   
87. $\mathbb{Q}c3\#$   $\mathbb{Q}e3$  88. $\mathbb{Q}c6\#$   $\mathbb{Q}f2$  89. $\mathbb{Q}c2\#$   $\mathbb{Q}g3$   
90. $\mathbb{Q}g6\#$   $\mathbb{Q}h2$  91. $\mathbb{Q}h7\#$   $\mathbb{Q}h3$  92. $\mathbb{Q}c2$**



Black's queen doesn't have any key square that covers c6, e4 and h7, but as pointed out, he can play his queen to d5 and follow up with ... $\mathbb{Q}g3$ .

**92... $\mathbb{Q}h8\#$  93. $\mathbb{Q}b7$   $\mathbb{Q}g7\#$  94. $\mathbb{Q}a8$   $\mathbb{Q}f8\#$   
95. $\mathbb{Q}b7$   $\mathbb{Q}e7\#$  96. $\mathbb{Q}c8\#?$   $\mathbb{Q}a7$**

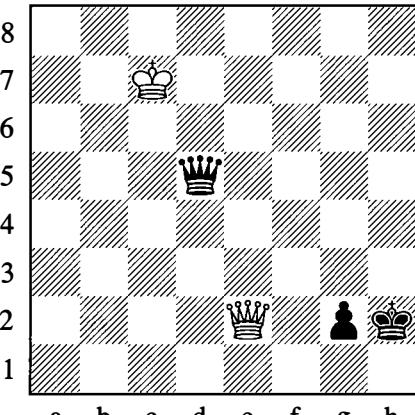


**97. $\mathbb{Q}e2\#?$**

Once again: e2 is a bad square since there are no checks on the g-file after ... $\mathbb{Q}g3$ .

97. $\mathbb{Q}d2!$  is still the best square for the queen. The position is won anyway though, since White's king can't return to a8 or a7 without passing the mined b8-square.

**97... $\mathbb{Q}c5\#$  98. $\mathbb{Q}b8$   $\mathbb{Q}d6\#$  99. $\mathbb{Q}c8$   $\mathbb{Q}c5\#$   
100. $\mathbb{Q}b8$   $\mathbb{Q}b4\#$  101. $\mathbb{Q}a8$   $\mathbb{Q}a4\#$  102. $\mathbb{Q}b7$   
 $\mathbb{Q}b3\#$  103. $\mathbb{Q}c8$   $\mathbb{Q}g8\#$  104. $\mathbb{Q}c7$   $\mathbb{Q}d5$**



d5 is a key square for the black queen, so White has to move his queen.

### 105. $\mathbb{Q}f2$

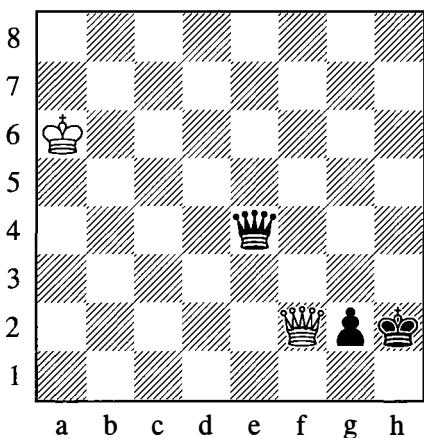
Still too close to the king, but there was nothing better – d2 was covered.

105...  $\mathbb{Q}e5\#$  106.  $\mathbb{Q}c8$   $\mathbb{Q}c3\#$  107.  $\mathbb{Q}b7$   $\mathbb{Q}b4\#$

108.  $\mathbb{Q}a6?$

108.  $\mathbb{Q}a7$  was a better try.

108...  $\mathbb{Q}e4!$



A key square – White must move his queen.

### 109. $\mathbb{Q}b2$

After 109.  $\mathbb{Q}d2$   $\mathbb{Q}e6\#$  Black reaches a key square with check, and wins after 110.  $\mathbb{Q}b7$   $\mathbb{Q}h1\#$ .

109...  $\mathbb{Q}a8\#$  110.  $\mathbb{Q}b5$   $\mathbb{Q}b7\#$

0-1

I know this is a long game to play through, and I can tell you it also took quite some time to play it. It was the 10th round in the World Junior Championship, and I had 3/10 after the loss. My mood was at zero when I walked to the hotel through the traffic in Yerevan, and I didn't care about all the cars that honked at me when I crossed the streets. I was also glad

to know the hotel restaurant had closed, since I felt I didn't deserve any dinner.

The next day I had a bye, and could use the time to study the ending. The next time I get it over the board, I promise I will do better!

## Summary

There are three defensive methods:

**Case 1:** The defending king is close to the pawn

**Case 2:** The defending king is in the opposite corner (this works with rook and knight pawns)

**Case 3:** The defending king is behind the pawn (this works with rook pawns)

The second case is the most interesting. One of the winning methods is to check the queen to a key square, which in our example with a black h-pawn is a square that covers all White's queen moves to the h-file and to the long diagonal. In this case, c6, e6 and h5 are key squares. After that, Black plays ...  $\mathbb{Q}h1\#$ .

The second winning method is marching the king to the other side of the board. To increase the possibility for counter-checks, the black queen is best placed on d5, where it also defends the pawn. To avoid this, White should keep his queen on d2. White should also avoid having the king on b8, since it creates the possibility of a counter-check on g3.

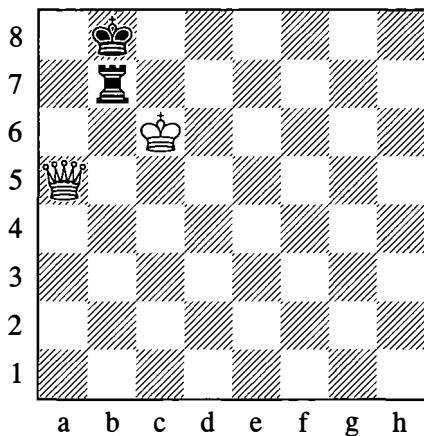
The position is drawn, but difficult to defend over the board.

## Queen versus rook

Queen versus rook is theoretically won, but very difficult to win against best defence. However, it's much easier to play with the queen than the rook – maybe not that surprisingly! In the games I have found, the stronger side won 76% of the games (and blundered the queen once!).

Queen versus rook is quite common, with 70 games in *TWIC* in 2011. David Navara has played it four times, including his famous game against Alexander Moiseenko where he played until it was mate in four and then offered a draw. Navara had unintentionally touched a piece earlier in the game without moving it and had a guilty conscience. For no reason, if you ask me.

It's more practically important to learn how to defend the endgame as toughly as possible, but I will start with the winning method.



This is one of the many (too many) endgame positions that are called Philidor's position. Black to move would be in zugzwang, so White triangulates with his queen to lose a tempo.

**1.  $\mathbb{Q}e5\#$   $\mathbb{Q}a7$  2.  $\mathbb{Q}a1\#$ !  $\mathbb{Q}b8$  3.  $\mathbb{Q}a5$**

The black rook will be lost in a few moves.

**3...  $\mathbb{Q}b1$  4.  $\mathbb{Q}d8\#$   $\mathbb{Q}a7$  5.  $\mathbb{Q}d4\#$   $\mathbb{Q}a8$  6.  $\mathbb{Q}h8\#$   $\mathbb{Q}a7$**

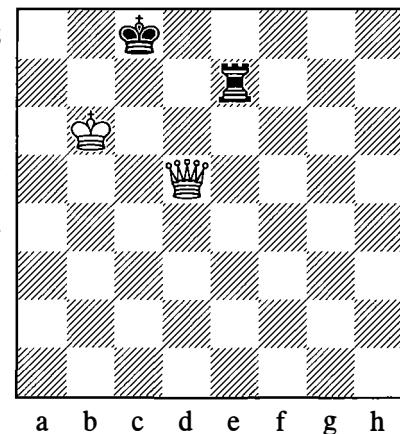
Or 6...  $\mathbb{Q}b8$  7.  $\mathbb{Q}a1\#$

**7.  $\mathbb{Q}h7\#$**

Picking up the rook.

It's easy to force the defending king to the edge

of the board but not to the corner. However, defending with the rook on the second rank is not the best try.



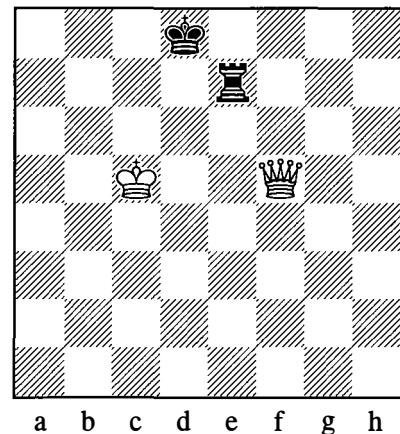
**1.  $\mathbb{Q}f5\#$**

Actually, Black to move would be in zugzwang, but White has no waiting move.

**1...  $\mathbb{Q}d8$  2.  $\mathbb{Q}c5$**

White threatens  $\mathbb{Q}d6$ , which wins immediately.

Black can often try stalemate tricks: 2.  $\mathbb{Q}c6$   $\mathbb{Q}e6\#$ ! This time, White can move his king, but sometimes it abruptly ends the game.

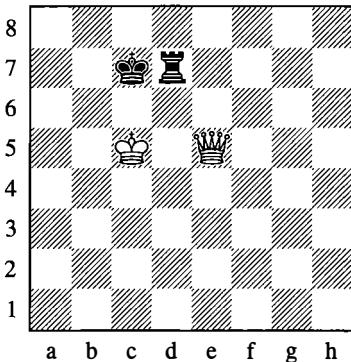


Black has three tries.

**a) 2... $\mathbb{Q}c7$** 

A standard position. White waits, and Black has to move one file closer to the edge.

**3. $\mathbb{W}d5 \mathbb{E}d7$  4. $\mathbb{W}e5\#$**



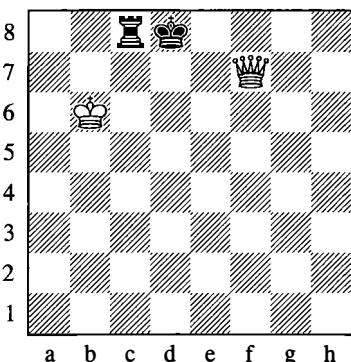
**4... $\mathbb{Q}b7$**

After 4... $\mathbb{Q}d8$  5. $\mathbb{W}b8\#$   $\mathbb{Q}e7$  6. $\mathbb{Q}c6 \mathbb{E}d8$  7. $\mathbb{W}c7\#$   $\mathbb{Q}e8$  8. $\mathbb{W}g7$ , Black is in zugzwang and will lose the rook.

**5. $\mathbb{Q}b5 \mathbb{E}c7$  6. $\mathbb{W}d5\#$**

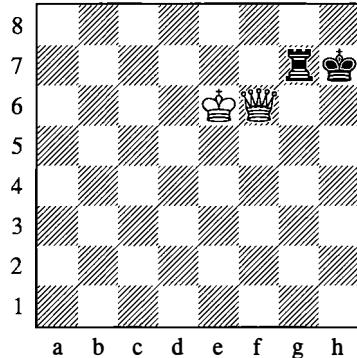
The same check once again.

**6... $\mathbb{Q}c8$  7. $\mathbb{W}a8\#$   $\mathbb{Q}d7$  8. $\mathbb{Q}b6 \mathbb{E}c8$  9. $\mathbb{W}b7\#$   $\mathbb{Q}d8$  10. $\mathbb{W}f7$**



And the same zugzwang.

**b) 2... $\mathbb{Q}e8$  3. $\mathbb{Q}d6 \mathbb{E}g7$  4. $\mathbb{W}e6\#$   $\mathbb{Q}f8$  5. $\mathbb{W}f6\#$   $\mathbb{Q}g8$  6. $\mathbb{Q}e6 \mathbb{Q}h7$**



So far it has been normal moves. In this position, White has a deep manoeuvre.

**7. $\mathbb{W}c3!$**

White threatens  $\mathbb{Q}f6$ , but  $\mathbb{W}c3$  is also a semi-waiting move.

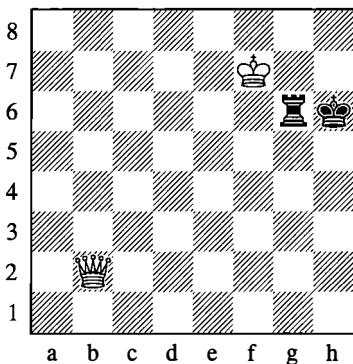
**7... $\mathbb{Q}g6$  8. $\mathbb{W}b2$**

Black is in zugzwang and has to allow  $\mathbb{Q}f6$ .

**8... $\mathbb{Q}h6$**

Or 8... $\mathbb{E}g8$  9. $\mathbb{W}g2\#$   $\mathbb{Q}h7$  10. $\mathbb{W}e4\#$   $\mathbb{Q}g7$  11. $\mathbb{Q}e7$ , when Black loses his rook or gets mated.

**9. $\mathbb{Q}f6 \mathbb{E}g6\#$  10. $\mathbb{Q}f7$**



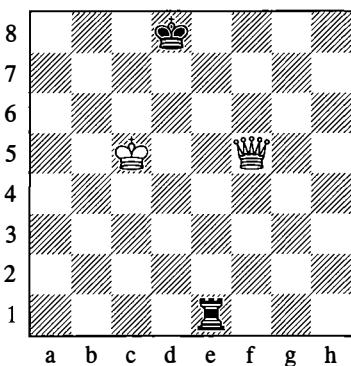
**10... $\mathbb{E}g4$**

The queen is perfectly placed on b2, since 10... $\mathbb{E}g3$  is met with 11. $\mathbb{W}h2\#$ . However, c3 is also a good square, so 7. $\mathbb{W}b2$  followed by 8. $\mathbb{W}c3$  works as well.

**11. $\mathbb{W}e5!$**

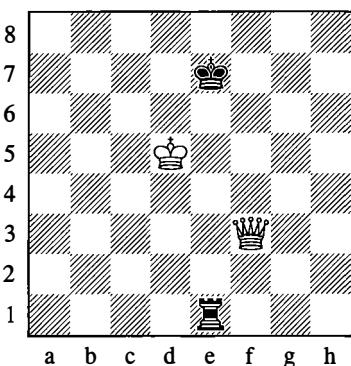
Black isn't allowed to escape and will soon lose his rook.

c) 2... $\mathbb{E}e1$



Not a human defence, but it's not so easy to understand how to win. There is one general guideline – it's good to move the queen to a square that stops Black from checking.

3. $\mathbb{W}d3\#$   $\mathbb{Q}e7$  4. $\mathbb{Q}d5$   $\mathbb{Q}f7$  5. $\mathbb{W}f3\#$   $\mathbb{Q}e7$



6. $\mathbb{W}g4!$

The queen is perfectly placed. It threatens  $\mathbb{W}h4\#$  while it stops ... $\mathbb{R}d1\#$  and ... $\mathbb{R}e6$ .

6... $\mathbb{Q}f7$  7. $\mathbb{W}f4\#$   $\mathbb{Q}e8$  8. $\mathbb{Q}d6$   $\mathbb{R}d1\#$  9. $\mathbb{Q}e6$   $\mathbb{R}e1\#$  10. $\mathbb{Q}f6$

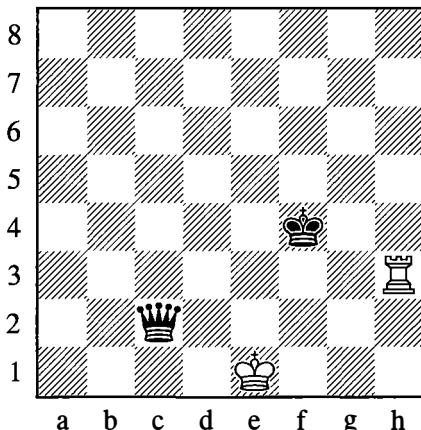
Black loses the rook.

The third rank defence is the best try, and quite difficult to break. The rules are simple: the king should be on either d1 or e1, while the

rook stays on the third rank, on the other side from the opponent's queen. If possible, the rook should stand on one of the two flank files.

### Axel Smith – Emanuel Berg

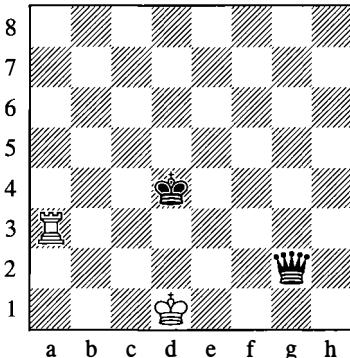
Norwegian League, 2nd November 2012



Black to move. If it was White's turn, he would be in zugzwang, since he can't play  $\mathbb{Q}d1$  and doesn't have any good square on the third rank. The following two lines show how to avoid being placed in zugzwang.

a) 71... $\mathbb{Q}g4$  72. $\mathbb{R}e3$   $\mathbb{Q}f5?$  is a nice try, triangulating with the king. 73. $\mathbb{R}h3?$   $\mathbb{Q}f4$  returns to the starting position, but with White to move. Instead, White should play 73. $\mathbb{R}f3\#$ ! to answer 73... $\mathbb{Q}e4$  with 74. $\mathbb{R}g3$  and then 74... $\mathbb{Q}f4$  with 75. $\mathbb{R}h3$ .

b) 71... $\mathbb{W}b2$  72. $\mathbb{Q}d1$   $\mathbb{W}g2$  73. $\mathbb{R}b3$   $\mathbb{Q}e4$  74. $\mathbb{R}a3$   $\mathbb{Q}d4$



**75.♔e1**

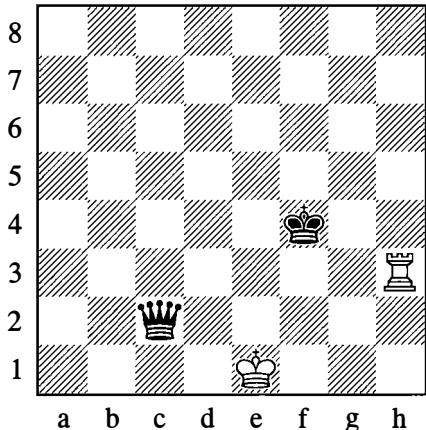
75.♗b3? ♖f2! 76.♗a3 ♔c4 again puts White in zugzwang.

**75...♖c2 76.♗h3!**

White is able to answer 76...♔e4 with 77.♗g3.

Playing the third rank defence means always looking for the zugzwang and then avoiding it!

How should the third rank defence be broken? In the books I have read, there are some quite mysterious moves. Instead I think there is a logical way. It takes a few moves longer, but that does not matter.

**71...♔e4†**

Berg didn't play like this. I'll return to his move later.

**72.♔f2**

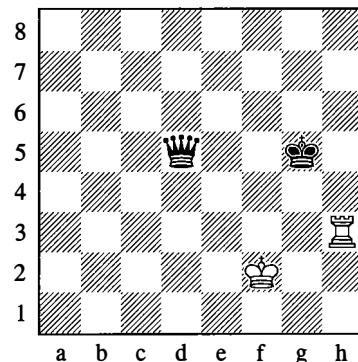
According to the rules for the third rank defence, White wants his king to stay on e1. The problem is that he can't go back to d1 after the next check. 72.♔d1? ♖d5† 73.♔c1 The distance between the king and the rook is too big. 73...♖c6†! White wants to move the king to the second rank to block the next check with the rook, but that is impossible due to ...♖g2†. After 74.♔b1 ♖g6† 75.♔c1 ♖g1† 76.♔d2 ♖g2†, Black picks up the rook.

**72...♖d5!**

The king can't return to the e-file due to ...♖e6†.

**73.♗h4†**

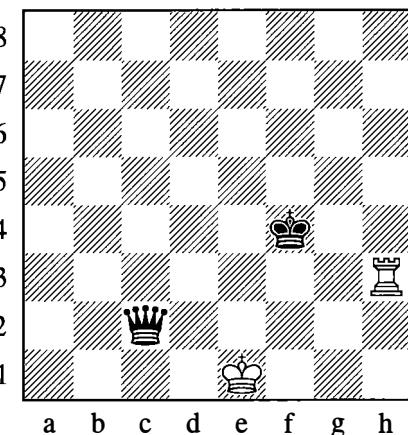
73.♔f1 is met by 73...♖a2!. The rook is lost if it moves, and White's king still can't move back to the centre. After 74.♔g1 ♖e2 we will soon reach Philidor's position.

**73...♔g5 74.♗h3**

74...♖d2† 75.♔f3 ♖d3† 76.♔g2 ♖e2†  
77.♔g3 ♖g4† 78.♔h2

The third rank defence is broken down.

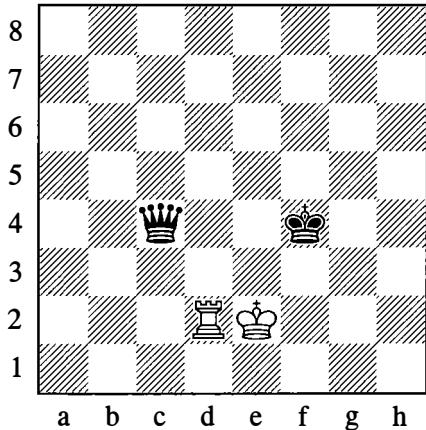
I wrote about this ending only one week before the game against Berg. For a few moves, I managed to hold the third rank defence, but then he found a simple solution.



**71... $\mathbb{W}c8!$  72. $\mathbb{B}d3$**

The only move.

72... $\mathbb{W}c1\#$  73. $\mathbb{Q}e2$   $\mathbb{W}c2\#$  74. $\mathbb{B}d2$   $\mathbb{W}c4\#$



The third rank defence has already broken down.

**75. $\mathbb{Q}f2$   $\mathbb{W}c3$**

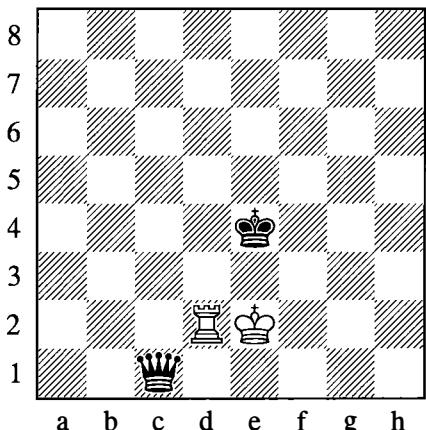
75... $\mathbb{W}e4$  was the fastest way to make progress.

**76. $\mathbb{Q}e2$   $\mathbb{Q}e4$  77. $\mathbb{Q}d1$   $\mathbb{W}b3\#$  78. $\mathbb{Q}e2$   $\mathbb{W}f3\#$**

**79. $\mathbb{Q}e1$   $\mathbb{W}h1\#$**

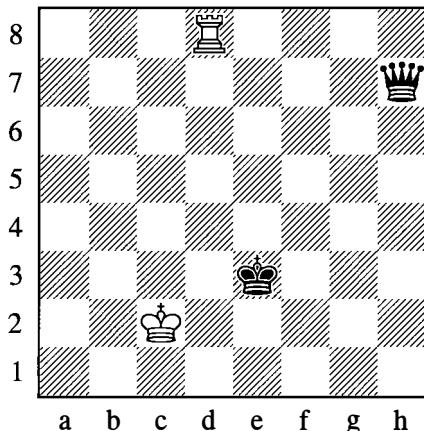
79... $\mathbb{Q}e3?$  80. $\mathbb{B}d3\#!$  is the defender's dream.

**80. $\mathbb{Q}f2$   $\mathbb{W}h2\#$  81. $\mathbb{Q}e1$   $\mathbb{W}g1\#$  82. $\mathbb{Q}e2$   $\mathbb{W}c1\#$**



I have no choice but to send the rook out into the minefield.

**83. $\mathbb{B}d8$   $\mathbb{W}c4\#$  84. $\mathbb{Q}d2$   $\mathbb{W}a2\#$  85. $\mathbb{Q}d1$   $\mathbb{W}a4\#$   
86. $\mathbb{Q}e2$   $\mathbb{W}b5\#$  87. $\mathbb{Q}d1$   $\mathbb{Q}e3!$  88. $\mathbb{Q}c2$   $\mathbb{W}c6\#$   
89. $\mathbb{Q}d1$   $\mathbb{W}h1\#$  90. $\mathbb{Q}c2$   $\mathbb{W}h7\#$**



**91. $\mathbb{Q}b3$**

Or 91. $\mathbb{Q}d1$   $\mathbb{W}b1\#$ .

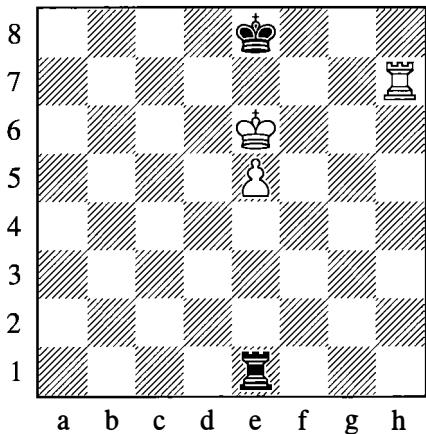
**91... $\mathbb{W}b7\#$  92. $\mathbb{Q}a4$   $\mathbb{W}a6\#$  93. $\mathbb{Q}b3$   $\mathbb{W}b6\#$   
0–1**

I managed to hold out for 28 moves, which is obviously well short of the required 50. However, unlike the game from the World Juniors in the previous section, I am happy with my handling of this endgame. I knew the best way of defending, the third rank defence, but there was nothing to be done when Berg played well enough. I don't want to diminish his efforts, but I think these examples have shown that the endgame is not so difficult to win in a practical game.

### Rook and pawn versus rook

Rook endings are the most common endgames, since the rooks start the game in the corner and are not exchanged easily. The most basic rook endgame is rook and pawn versus rook.

The theory of rook endings starts with the third rank defence (Philidor's position) and Lucena's position. I guess those are very familiar to the reader, otherwise; look them up immediately!



The next step is the diagram position and variations of it. It's Black to move, obviously. He has not managed to put up a third rank defence, but White has not reached a Lucena either. The position is normally called "Go to the short side" but holds much more than that simple principle.

### "Go to the short side"

Aron Nimzowitsch's quote about passed pawns is famous: "The Passed Pawn is a criminal, who should be kept under lock and key. Mild measures, such as police surveillance, are not sufficient." In this position, the strategy is instead tricking the pawn into advancing, and then tripping it up.

The first rule is to move the king to the short side (in the case above to f8) when it's forced to move. The reason is to leave the other side to the rook, where it has greater checking distance.

The second rule is to stay behind the pawn with

the rook. With the rook behind the pawn, on e1 above, White will never be able to play ♖d7 followed by e5-e6.

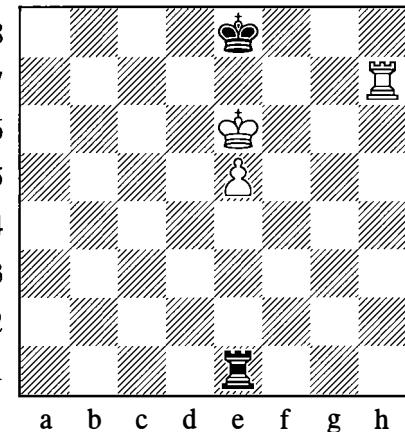
If White checks on h8, forcing the king to g7, then moves the rook to a8 and plays ♖d6, then he is threatening e5-e6. In that position, Black must play ... ♖f7, which is the third rule.

But why must the king move to the short side, if the rook only stays behind the pawn? Because White can force Black to use a more complicated defence, by playing his rook to e8 and advancing the pawn. When White has moved the pawn to the sixth rank, the rook must move to the long side to give checks. This is the fourth rule.

A top game illustrates all the important points. I have attached all "only-moves" with a □-sign.

### Levon Aronian – Magnus Carlsen

Tal Memorial, Moscow 2006



67... ♖f8

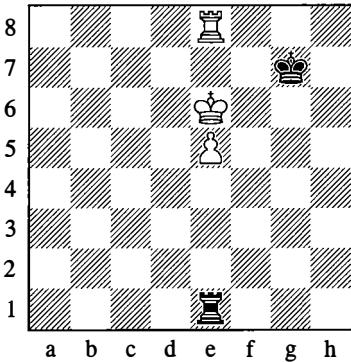
Carlsen moves to the short side.

68. ♖h8† ♖g7 69. ♖d8

There are two other lines that illustrate White's winning tries.

69.♔a8 ♔e2 70.♔d6 ♔f7□ The only move to stop e5-e6, but good enough. 71.♔a7† ♔e8 If he can do so without getting mated, then Black wants to place his king in front of the pawn.

69.♔e8

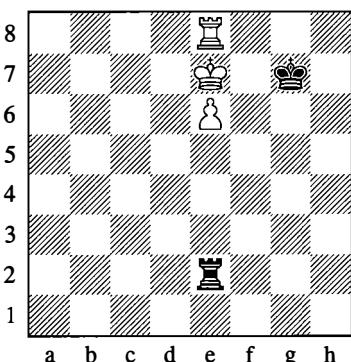


This is the normal way for White to prepare ♔d7 followed by e5-e6.

69...♔e2!

All rook moves except 69...♔xe5† draw, but I like to stay on the e-file. White has to push the pawn, which makes the position more defined when Black finally moves the rook to the long side.

70.♔d7 ♔d2† 71.♔e7 ♔e7 ♔e2 72.e6

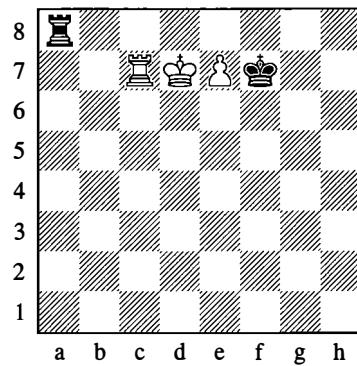


White to move would win with ♔a8 followed by ♔d7, so it's time to defend.

72...♔a2□ 73.♔d8

This transposes to the game – see the position after White's 71st move.

73.♔c8 is actually a less effective way to hide the king. 73...♔a7† 74.♔d6 ♔a6† 75.♔d7 ♔a7† 76.♔c7 ♔a8□ 77.e7 ♔f7

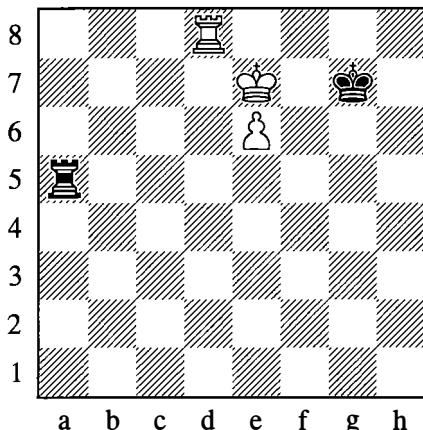


Euwe's last rank defence – an important drawing position.

69...♔a1

White is not threatening anything, since 70.♔d6 is still met by 70...♔f7. I would thus have waited with 69...♔e2, even though it ultimately gives the same position.

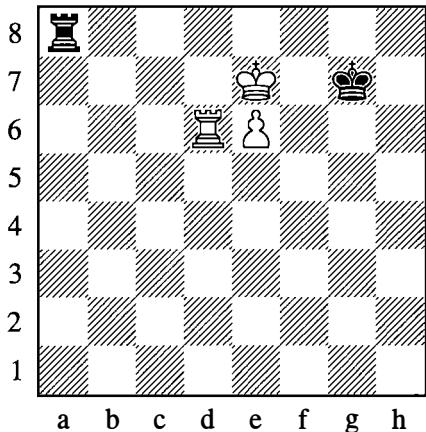
70.♔e7 ♔a5 71.e6



71...♔a7†

Those who don't like the discovered attack coming up, even though it's not dangerous, can play 71...♔a6 72.♔d6 ♔a8□ instead.

72.♔d7 ♔a8 73.♔d6



This is a key position. Black has to leave the rook on a8 to keep enough checking distance. It's *almost* zugzwang, but fortunately Black can play ... $\mathbb{Q}g6-g7-g6$  etc.

73... $\mathbb{R}a7\#?$

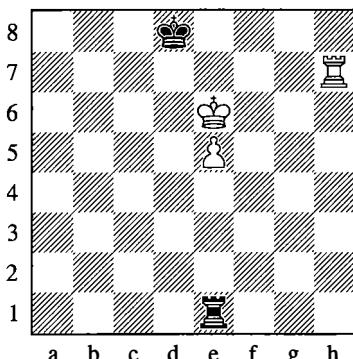
73... $\mathbb{Q}g6\Box$  draws.

74. $\mathbb{Q}e8!$

Carlsen resigned. With the white rook on d6, 74... $\mathbb{Q}f6$  loses to 75.e7#.

74... $\mathbb{R}a8\#$  75. $\mathbb{R}d8$   $\mathbb{R}a6$  76.e7 also does not help.

As a curiosity, going the "wrong" way with 67... $\mathbb{Q}d8$  also draws in this case.



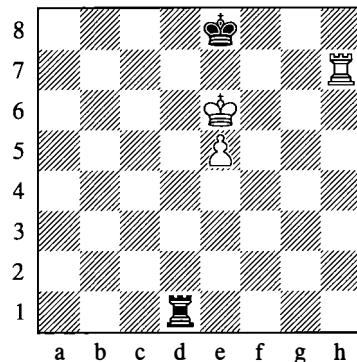
68. $\mathbb{R}h8\#$   $\mathbb{Q}c7$  69. $\mathbb{Q}e8$  (69. $\mathbb{Q}f6$   $\mathbb{Q}d7\Box$  69... $\mathbb{R}h1\Box$  With the rook on the wrong side,

Black can't allow e5-e6. 70. $\mathbb{Q}f8$  (70. $\mathbb{Q}f7$   $\mathbb{R}h7\#$  71. $\mathbb{Q}g6$   $\mathbb{Q}d7$  with a draw.) 70... $\mathbb{R}e1\Box$

The position with the rook on d1 is also interesting. Let's say that Black plays:

67... $\mathbb{R}d1$

And White doesn't make a move. It's lost anyway!



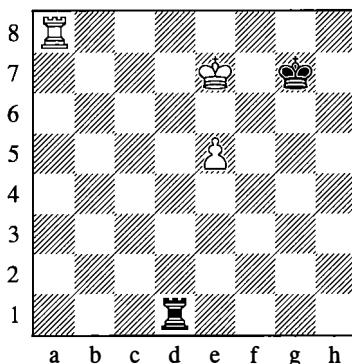
68... $\mathbb{Q}f8$  69. $\mathbb{Q}f7\#!$

This tempo-winning method doesn't work with the black rook on a1, b1, c1, g1 or h1 for two reasons. Firstly, Black has a check on the 6th rank, and secondly, White needs  $\mathbb{Q}d7$  with tempo in one variation.

69... $\mathbb{Q}e8$

After 69... $\mathbb{Q}g8$  then 70. $\mathbb{Q}d7!$  wins the crucial tempo. 70... $\mathbb{R}e1$  71. $\mathbb{Q}f6!$  and White wins.

70. $\mathbb{R}a7$   $\mathbb{Q}f8$  71. $\mathbb{R}a8\#$   $\mathbb{Q}g7$  72. $\mathbb{Q}e7$



White managed to play  $\mathbb{Q}e7$  without leaving the a-file with the rook. When Black's rook

needs to use the b-file, you will see why the checking distance is so important.

72... $\mathbb{E}b1$  73.e6  $\mathbb{E}b7\#$  74. $\mathbb{Q}d6$   $\mathbb{E}b6\#$  75. $\mathbb{Q}d7$   $\mathbb{E}b7\#$  76. $\mathbb{Q}c6$

And the checks have run out. White wins after:

76... $\mathbb{E}e7$  77. $\mathbb{Q}d6$

Aronian – Carlsen showed a very concrete fifth rule – Black should avoid playing ... $\mathbb{E}a7\#$  with White's king on e7 and the rook on d6.

### Summary

**Rule 1:** When forced to choose a side, the king should move to the short side (in the case above to f8).

**Rule 2:** The defending rook should stay behind the pawn.

**Rule 3:** When the pawn is on the sixth rank, the rook has to move to the long side to give checks.

**Rule 4:** If White has the rook on the eighth rank and plays  $\mathbb{Q}d6$ , Black has to stop e5-e6 by ... $\mathbb{Q}f7$ .

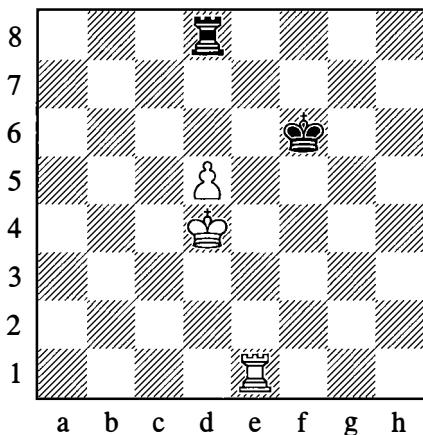
**Rule 5:** Avoid checking in the key position with  $\mathbb{Q}e7$ ,  $\mathbb{E}d6$  and  $\mathbb{A}e6$  versus  $\mathbb{E}a8$  and  $\mathbb{Q}g7/g6$ .

### The defending king is cut off from the side

The reason I have included this endgame is that it's quite simple to learn the rules, and yet experience tells me that many strong players don't know them.

The best defence is keeping the rook in front of the pawn, trying to stop it from advancing. Those are the only positions that will be examined.

However, if the pawn has crossed the middle of the board, it's an easy win.



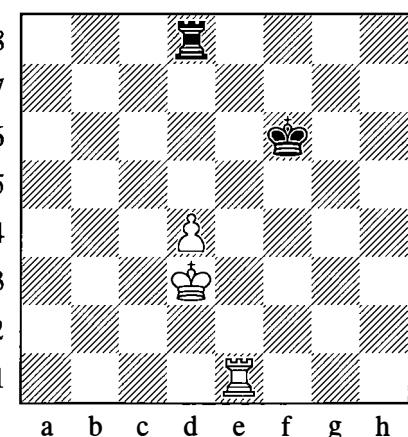
1. $\mathbb{Q}c5$

Black has to start giving checks to stop d5-d6.

1... $\mathbb{E}c8\#$  2. $\mathbb{Q}b6$   $\mathbb{E}d8$  3. $\mathbb{Q}c6$   $\mathbb{E}c8\#$  4. $\mathbb{Q}d7$

White will reach Lucena's position after d5-d6-d7.

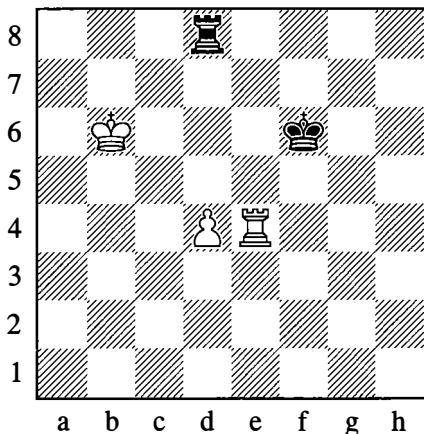
However, with the pawn on the fourth rank, the same method doesn't work.



1. $\mathbb{Q}c4$   $\mathbb{E}c8\#$  2. $\mathbb{Q}b5$   $\mathbb{E}d8$  3. $\mathbb{Q}c5$   $\mathbb{E}c8\#$  4. $\mathbb{Q}b6$   $\mathbb{E}d8\#$

White has to defend the pawn. 5. $\mathbb{E}d1$  is not a good move, since it releases the barrier for Black's king.

5. $\mathbb{E}e4$

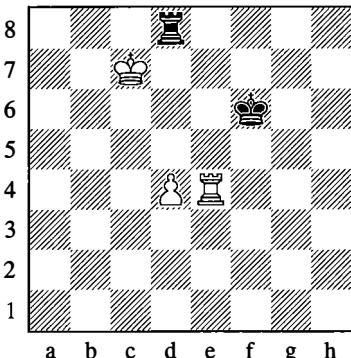


A better try. White threatens  $6.\mathbb{Q}c7$ , winning, but Black is just in time to threaten the rook.

### **5... $\mathbb{Q}f5$ !**

This shows two easy principles regarding the defence. The rook stays on the last rank in front of the pawn and the king stays on the fourth or fifth rank, to be able to threaten the rook.

If it was Black's move in the first diagram position,  $1...\mathbb{Q}f7??$  would lose after  $2.\mathbb{Q}c4 \mathbb{E}c8\uparrow 3.\mathbb{Q}b5 \mathbb{E}d8 4.\mathbb{Q}c5 \mathbb{E}c8\uparrow 5.\mathbb{Q}b6 \mathbb{E}d8 6.\mathbb{Q}e4! \mathbb{Q}f6 7.\mathbb{Q}c7$

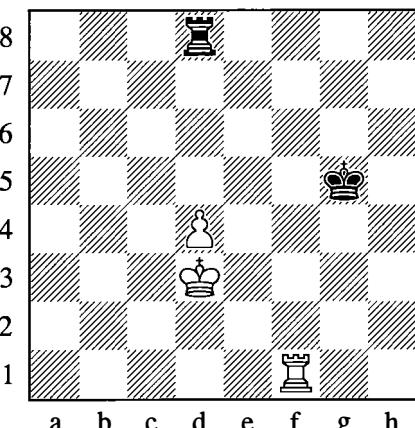


Black is lost after either  $7...\mathbb{E}d5 8.\mathbb{Q}c6 \mathbb{E}d8 9.d5$  or  $7...\mathbb{Q}f5 8.\mathbb{E}e5\uparrow$ .

$1...\mathbb{Q}f5$  is the correct move. If White waits with  $2.\mathbb{E}e3$  the king should return to f6.  $2...\mathbb{Q}f4??$  loses after  $3.\mathbb{E}e5\uparrow$ . It is generally better to cut the king off horizontally, but it's a far less common situation.

However, a move like  $1...\mathbb{E}h8$  is also drawing. After  $2.d5$  Black has  $2...\mathbb{Q}f7 3.\mathbb{Q}d4$ . Now  $3...\mathbb{E}e8!$  is a common defensive method. Anyway, I recommend keeping the rook in front of the pawn!

For the position to be won, the king needs to be cut off by two files.



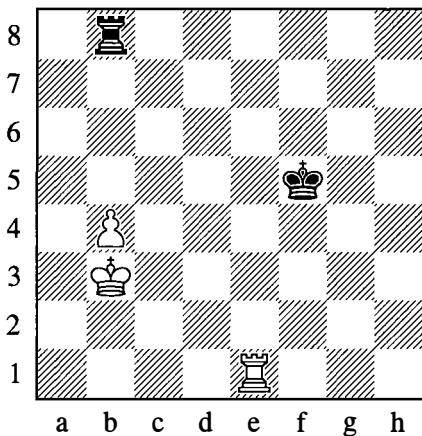
$1.\mathbb{Q}c4 \mathbb{E}c8\uparrow 2.\mathbb{Q}b5 \mathbb{E}d8 3.\mathbb{Q}c5 \mathbb{E}c8\uparrow 4.\mathbb{Q}b6 \mathbb{E}d8 5.\mathbb{E}d1!$

The key move. Black is not in time to reach e7 with his king.

$5...\mathbb{Q}f6 6.\mathbb{Q}c7 \mathbb{E}d5 7.\mathbb{Q}c6 \mathbb{E}d8 8.d5 \mathbb{Q}e7 9.\mathbb{E}e1\uparrow$

Black's rook obstructs the king.

With a centre pawn, as in this case, the attacking king used two files: the c-file and the b-file. That is not possible with a knight pawn. To win such a position, the king must therefore be cut off by three files. White's king can then use the space on the other side of the pawn.

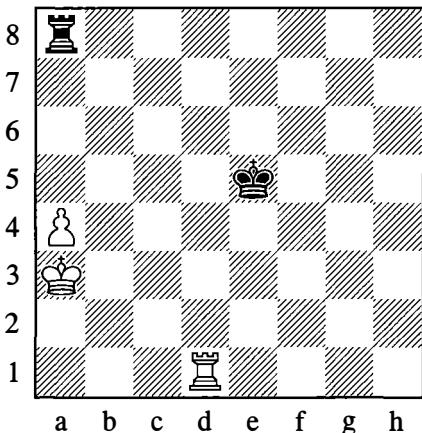


The winning method is exactly as in the previous example.

**1.  $\mathbb{Q}c4 \mathbb{B}c8\#$**  **2.  $\mathbb{Q}d5 \mathbb{B}b8$**  **3.  $\mathbb{Q}c5 \mathbb{B}c8\#$**  **4.  $\mathbb{Q}d6 \mathbb{B}b8$**  **5.  $\mathbb{Q}b1$**

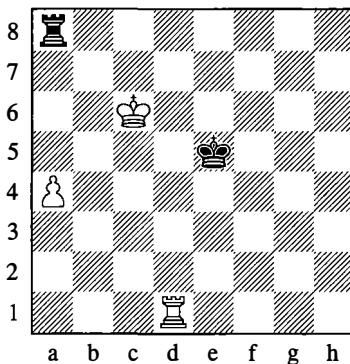
The pawn will soon be pushed.

Even being cut off by three files is not enough with a rook pawn, since it's still a draw if the pawn reaches the seventh rank.

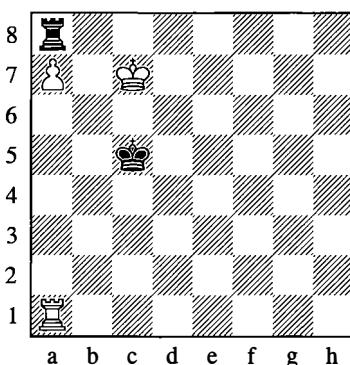


**1.  $\mathbb{Q}b4 \mathbb{B}b8\#$**  **2.  $\mathbb{Q}c5 \mathbb{B}a8$**  **3.  $\mathbb{Q}b5 \mathbb{B}b8\#$**  **4.  $\mathbb{Q}c6 \mathbb{B}c8\#\square$**

4...  $\mathbb{B}a8?$



**5.  $\mathbb{Q}e1\#!$**  Black's king gets misplaced. **5...  $\mathbb{Q}d4$**  **6.  $\mathbb{Q}a1$**  White wins. After **6...  $\mathbb{B}c8\#$**  **7.  $\mathbb{Q}b7 \mathbb{B}c2$**  **8.a5  $\mathbb{Q}c5$**  **9.a6  $\mathbb{B}b2\#$** , Black's king would have loved to be on d6. **10.  $\mathbb{Q}c7 \mathbb{B}h2$**  **11.a7  $\mathbb{B}h7\#$**  **12.  $\mathbb{Q}d8 \mathbb{B}h8\#$**  **13.  $\mathbb{Q}d7 \mathbb{B}a8$**  **14.  $\mathbb{Q}c7+-$**



Again blocking the unfortunate king.

**5.  $\mathbb{Q}b7 \mathbb{B}c2$**  **6. a5  $\mathbb{B}b2\#$**  **7.  $\mathbb{Q}a7 \mathbb{Q}e6\#$**  **8. a6  $\mathbb{Q}e7\#$**

Black is just in time to stop ...  $\mathbb{B}d8$ . White doesn't have anything better than  $\mathbb{Q}a8$  and a6-a7, which reaches a well-known draw.

With four files, though, even the notorious rook pawn wins!

## Summary

The best defence is to place the rook on the last rank in front of the pawn. The king should be able to threaten the rook when it defends the

pawn from the side. With centre pawns, cutting the king off by two files is enough to win, but for a knight pawn, three files are needed and for a rook pawn four files.

### **List of theoretical endgames**

In this chapter, I have proposed a method of studying theoretical endgames. Four of them have been covered here as examples, but of course there are many more.

In the Appendix on page 370 is a list of the 100 most important endgames. Some will never appear in your games, others you will see often. The problem is that it's impossible to know in advance which you will face, and when they will appear.

The reason I started from the very basics when I made the list – for myself – is because I wanted to feel that I already knew some of them...

Good luck with your endgame studies!

# Chapter 9

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## Attitude

*I don't believe in psychology. I believe in good moves.* – Bobby Fischer in 1972

I studied psychology during my few years at university, and was often told that it must be good for my chess. I disagree, but not in the same way as Fischer did with his statement.

I think psychology has a great impact in chess if we take it to mean a kind of ‘street-smartness’ that chess players gain after taking external factors seriously for many years.

Many external factors are connected to chess performance in some way or another. Games are won by good moves, but reasonable time management is required to find the moves. The time management is often a consequence of the concentration level, which in turn depends upon physical and mental preparation. Also, energy lost dealing with noise, draw offers and other disturbing factors influences how easy it is to focus.

### Chapter overview

The subject in this chapter is everything that can be done to win at chess besides playing good moves; how to turn external factors to your advantage. It is divided into six sections.

**An appeal against draws:** It would be beneficial for many players’ chess development to play longer games, but we are only human and therefore afraid of losing. I propose a way of neutralizing that problem.

**Time management:** Few ambitious chess players play too fast; it’s rather the opposite. The focus is therefore on how to play faster. I’ll tell about my struggle to play faster, and discuss different methods of doing so. At the end of the section, questions about the opponent’s time trouble are also raised.

**Playing weaker opponents:** Chess is a practical game, and it’s a good idea to avoid simple positions against weaker players. At the same time, objectivity should not be sacrificed. That is not a contradiction.

**Winning drawish positions:** The maxim is clear: It’s possible to play for a win in almost any position. Four principles will help you to give your opponents chances to go wrong.

**Bad ways of choosing moves:** Our human disadvantages are discussed further, since they can spoil our objectivity in many situations. Being aware of those risks makes it easier to prevent them from influencing our thoughts.

**Concentration:** Finally, I'll conclude with some specific advice regarding goals, sleep, food and other important factors that are important for your concentration during games.

### An appeal against draws

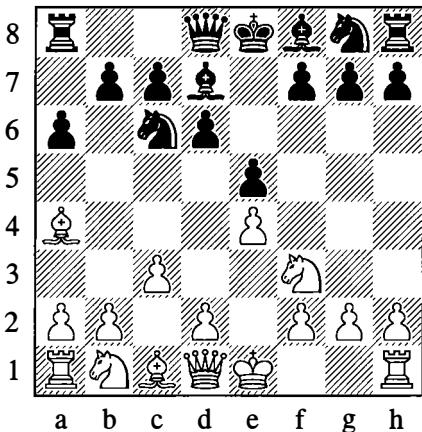
I think it's important to play long games to improve as a chess player. For that reason, avoiding draws is a vital topic. In addition, it's useful to be able to play for a win in the last round in many tournaments.

What follows is my worst ever game, rendered in full.

#### Axel Smith – Shakhriyar Mamedyarov

Synthesia Open, Pardubice 17th July 2008

1.e4 e5 2.♘f3 ♘c6 3.♗b5 a6 4.♗a4 d6 5.c3  
♗d7  
½-½



I am one of the few players who prepares during rapid tournaments. If it's a small

tournament, I prepare against all the players the day before, but in this game, I prepared between the rounds. Mamedyarov played an opening he had used frequently, so what did I prepare here? Certainly not to accept his draw offer!

The game wasn't rated and I was far from getting a prize. When I accepted his draw offer, I missed a valuable experience to play against such a strong opponent.

For years I wondered if this draw was worth anything at all. Today, I finally understand the value of this game – I can use it as an example of what not to do.

Immediately after the game, I was uneasy about it and had a guilty conscience. At the same time I accepted that it was not so easy to resist the temptation to accept the draw offer. I have seen another comical example of this. When I organized the Swedish Championship in 2010, one of the players had a win by default in the first round. He was extremely upset and demanded compensation. Nothing could really calm him down until we finally found a replacement opponent. Then he started playing, but agreed to a draw after eight moves!

So why do many players accept draw offers or offer draws, even in promising positions? Because we are afraid of losing! Obviously, it hurts to lose if we have invested a lot of time, work and ambition in chess. A loss not only means that we get zero points in the game, but it also feels as if we have failed as a person. Of course, we understand that's not really the case, but during a game it's easy to be affected by a lot of feelings, like the fear of losing.

At the right moment, a draw offer can be a useful tool, but you have to start by learning to fight. The best attitude is to accept that

occasional losses are inevitable, but that's easier said than done.

After the game against Mamedyarov, I concluded that it's useful to have a strict rule. It could be as simple as never taking draws! The advantage of such a rule is that you never need to spend any time considering draw offers or thinking about offering a draw yourself. You can use all your energy to find the best moves.

I did follow a no-draw rule for a few years. A few weeks before we became a couple, I played against my wife. No way would she get a draw!

Following the rule has given me a lot of experience, with more than 350 losses, but it has above all taught me a lot about chess.

As you can see from some of the games in this book, I no longer avoid all draws, but today I know that I have the courage to play for a win in every game against any opponent, when I need to.

Some of my students have signed a contract to never take draws. That might take it a bit too far, but I really think it's useful to have rules against accepting draw offers.

### Time management

It's safe to say that many ambitious players play too slowly. I think there are three reasons:

- 1) Players who play fast are often considered unserious and lacking in concentration.
- 2) Being ambitious means, among other things, searching for the very best moves. That can easily lead to time trouble.
- 3) The desire to search for the truth, which is often not possible in other parts of life, is also time-consuming. We can easily give up a lot of other things for chess, but we have difficulties giving up chess to win games!

If you play competitive chess, time management is really an inherent part, not something that

the cat has dragged in. With today's short time controls it's even a very important part of the game! And it's a difficult part: there are a lot of difficult decisions in a very limited time.

Players who play fast are not unserious, they are pragmatic. It's important to accept that such an attitude is necessary, even in chess. The main aim in this section is therefore to talk about how to avoid time trouble.

I used to have a lot of problems with time management. My *List of Mistakes* shows that I played too slowly in one third of my games in the spring of 2008. I decided to check my time management, so during a few tournaments I wrote down the time on the scoresheet after every move. When I analysed the findings, I realized how many mistakes I made due to bad time management. Nine times, I blundered in time trouble. In the same period, I didn't play too fast even once!

Many players write down how much time they use during their games, but very few analyse it. I really recommend doing that. For myself, it gave me enough motivation to change my approach to time management. The first step was to decide to hunt for every second. I have not yet stopped and guess I never will. It's so damned difficult to hold on to the seconds I catch!

A first concrete rule is never to be late for a game. An equally obvious one is to avoid spending time watching other games in the tournament or thinking about things other than chess. It's not easy, but the first step is deciding to try. If I catch myself thinking about something else, I immediately punish myself for having lost valuable seconds. The game is a fight from the first to the last move.

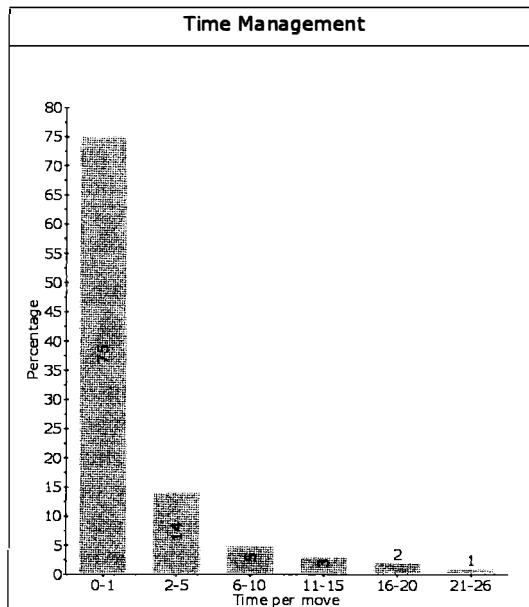
If you know an opening move by heart, you should play it immediately. The same logic is the basis for Leko's rule: *When there is only one possible move, play it immediately*. It may sound

obvious, but too often I have seen players pondering over only-moves.

During the opponent's time, one's thoughts are less concrete and more about general plans. However, if he has a move that is quite probable, it's a good idea to start calculating before he plays it. To be able to make a quick answer not only saves time, but also stops him from using your time to think! For that reason, I often try to play two quick moves following each other in forced sequences.

Three years later, in 2011, I had still not managed to hold on to any seconds, but I had learned to play fast in positions that weren't critical. And that is the most important advice I can offer – try to play fast in positions that aren't critical. It's acceptable to not play the best move in every position.

I analysed my time management once again. This time it looked like this:



### Copenhagen Chess Challenge 2011

(Minutes per move, 9 games)

90 minutes + 30 seconds per move

I made 75% of the moves in less than one minute plus the 30 seconds of increment. That saved time for the critical moments. The first of them usually arises immediately after the opening. For me, the first move I have to play on my own usually comes after a bit more than ten moves. In the tournament mentioned above, I spent on average 15 minutes for that move. I think that's pretty normal.

Even though I played most moves in 1½ minutes or less, I felt that I still had problems with time trouble. For that reason, I decided to check all the positions where I spent at least one sixth of the remaining time and at least six minutes. Was it really necessary to use so much time there?

It happened 35 times during the nine games. Most were critical positions, but after having analysed the positions, I think I used too much time in ten of them. I needed to play even faster.

I tried solving the problem in two ways. Firstly, I started to use a chess clock when I solved exercises. As I wrote in Chapter 6, I think it's a good idea to have a defined amount of time for several exercises. It forces you to take responsibility to choose a reasonable move in time. If you haven't finished all the exercises when the time is over, you lose on time.

Additionally, you can decide to never use more than 20 minutes for an exercise. The idea is learning to avoid perfectionism.

The second way was to formulate the following maxim: **the consequences of the mistakes made in time trouble should be equal to the consequences of the mistakes caused by playing too fast.**

It's a radical maxim, but to me it seems that a balance will give the least number of total mistakes. My argument is that the number

of mistakes and the seriousness of them will increase exponentially when having less time. Hence, the probability of making a serious mistake is higher if one move is made in 90 seconds and another move in grave time trouble, say 30 seconds, than if two moves are made in 60 seconds each.

If this maxim is accepted, it's easier to avoid beating yourself up about a mistake caused by playing too fast. Such mistakes are *necessary* to avoid making several mistakes in time trouble!

Here is one recent example of the approach I advocate.

### Axel Smith – Igor Teplyi

---

Borup GM, 22th September 2012

Igor Teplyi is a Grünfeld player and, as so often before, I tried to find the move order that he would like least.

#### **1.c4**

The idea in the Grünfeld is to undermine the centre. By not occupying it with pawns, I give him nothing to attack!

#### **1...g6**

1... $\mathbb{Q}f6$  is the normal move order. The idea with 1...g6 is later to threaten ...e5 and either play it or force White to return to normal lines with d2-d4.

#### **2.e4!**

The downside to Black's move order; Black can no longer play ... $\mathbb{Q}f6$  followed by ...d5.

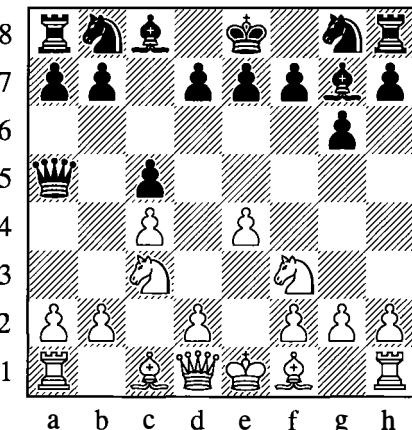
#### **2...c5**

For Grünfeld players, I think it makes sense to play 2...e5 to steer the game away from normal openings. After the game move, it will normally transpose to a Maroczy Bind, which is not part of Teplyi's repertoire.

#### **3. $\mathbb{Q}f3$ $\mathbb{W}a5$**

So this was his idea!

#### **4. $\mathbb{Q}c3$ $\mathbb{Q}g7$**



If I play 5.d4, he has some tries to sharpen the game:

a) 5... $\mathbb{Q}c6$  6. $\mathbb{Q}e3$   $\mathbb{Q}f6$  7. $\mathbb{W}d2$  cxd4 8. $\mathbb{Q}xd4$   $\mathbb{Q}xe4$

b) 5... $\mathbb{Q}f6$  6. $\mathbb{Q}d3$  cxd4 7. $\mathbb{Q}xd4$   $\mathbb{Q}c6$  8. $\mathbb{Q}e3$  and now 8... $\mathbb{Q}g4$  or 8...d6 9.f3  $\mathbb{Q}g4$ .

Are they dangerous? How much time should be spent in this position?

#### **5.d4**

During this tournament, I had a quite odd way of playing faster – I wrote in pencil. Since it's possible to rub out the moves after the game, unlike if they are written in ink, I was hoping I wouldn't take the moves as seriously! It's not the most rational idea I have used, but it worked well at first. I only thought for one minute before playing 5.d4.

If I don't push d2-d4 immediately, Black will manage to stop it and my opening would be a failure. I am sure that my first four moves have been normal, so by pure logic White should be able to defend against the tricks. Following

Leko's rule, the calculations can be made later, during the opponent's thinking time.

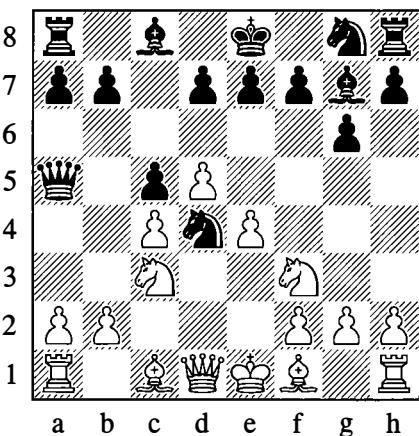
### 5... $\mathbb{Q}c6$

If 5... $\mathbb{Q}f6$  then 6. $\mathbb{Q}d2$  is one option and 6. $\mathbb{Q}d3$  cxd4 7. $\mathbb{Q}xd4$   $\mathbb{Q}c6$  8. $\mathbb{Q}b3$  is another.

### 6.d5!

6. $\mathbb{Q}e3?$   $\mathbb{Q}f6$  7. $\mathbb{Q}d2$  cxd4 8. $\mathbb{Q}xd4$   $\mathbb{Q}xe4$  wins a pawn for Black.

### 6... $\mathbb{Q}d4$



### 7. $\mathbb{Q}d2$

7.d6!? was also interesting, to cramp Black's development. I didn't consider it, probably because I played quite fast. I have accepted that I will miss some interesting possibilities with my approach, but I think the pluses are worth more.

I planned to take on d4 next move. If Black takes back with the pawn he closes the diagonal for the g7-bishop, and if he takes back with the bishop, it might later be attacked. It's therefore logical for Black to exchange on f3.

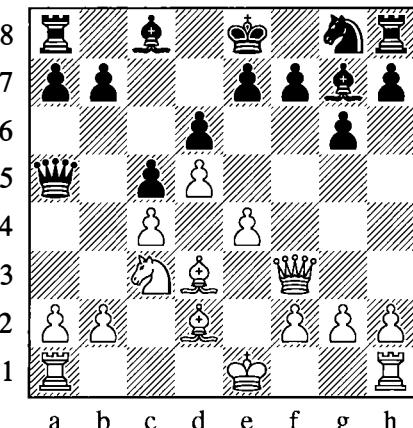
### 7... $\mathbb{Q}xf3\#$ 8. $\mathbb{W}xf3$ d6 9. $\mathbb{Q}d3$

This is a Benoni position where Black has managed to exchange one piece, which is good since he lacks space. On the other hand

he has spent a lot of tempos and will need to make another move with his queen. It's also in White's favour that Black hasn't played ...e6xd5 yet. White can consider taking back with the knight, the c-pawn or the e-pawn.

So far, so good. I have a slight advantage and plenty of time on the clock. Sadly, later in the game I slowed way down and lost in 45 moves after making a blunder in time trouble! So there is still work to do on my time management.

The rest of the game is not so interesting, so I was tempted to omit it, but I shall just give the bare moves as an example of the horrors of time trouble.



9... $\mathbb{Q}f6$  10. $\mathbb{W}e2$  0-0 11.0-0 e6 12. $\mathbb{Q}ad1$   $\mathbb{E}e8$  13. $\mathbb{Q}c2$  a6 14.h3  $\mathbb{W}c7$  15. $\mathbb{Q}f4$  exd5 16. $\mathbb{Q}xd5$   $\mathbb{Q}xd5$  17. $\mathbb{Q}xd5$   $\mathbb{Q}e5$  18. $\mathbb{Q}xe5$  dxе5 19. $\mathbb{Q}a4$   $\mathbb{E}f8$  20. $\mathbb{W}e3$  b6 21.f4 exf4 22. $\mathbb{W}xf4$   $\mathbb{W}xf4$  23. $\mathbb{Q}xf4$   $\mathbb{Q}e6$  24. $\mathbb{Q}d6$   $\mathbb{E}ab8$  25.e5  $\mathbb{Q}fd8$  26. $\mathbb{Q}xd8\#$   $\mathbb{Q}xd8$  27.b3 g5 28. $\mathbb{Q}f2$   $\mathbb{Q}d1\#$  29. $\mathbb{Q}f1$   $\mathbb{Q}xf1\#$  30. $\mathbb{Q}xf1$  f6 31.exf6  $\mathbb{Q}f7$  32. $\mathbb{Q}e2$   $\mathbb{Q}xf6$  33. $\mathbb{Q}e3$   $\mathbb{Q}e5$  34. $\mathbb{Q}e8$   $\mathbb{Q}f5$  35. $\mathbb{Q}h5$   $\mathbb{Q}c2$  36. $\mathbb{Q}e2$  a5 37.g3  $\mathbb{Q}b1$  38. $\mathbb{Q}d2$   $\mathbb{Q}d4$  39.a4  $\mathbb{Q}f5$  40.h4 gxh4 41.gxh4  $\mathbb{Q}e4$  42. $\mathbb{Q}h5$   $\mathbb{Q}f4$  43. $\mathbb{Q}d1$  h6 44.h5  $\mathbb{Q}g4$  45. $\mathbb{Q}xg4$   $\mathbb{Q}xg4$

0-1

At the time of writing I have only reached a 2-to-1 proportion for mistakes in time trouble

compared to mistakes caused by playing too fast, instead of the 1-to-1 my maxim recommends. Anyway, experimenting with my maxim has improved my results.

Since I had a lot of problems with blunders in time trouble, I needed to take strong measures. For others who are rarely in time trouble, it may be enough to remind yourself that the clock is a very important part of competitive chess.

### **Summary – avoiding time trouble**

- ▲ Write down how much time you have used on the scoresheet, and analyse the findings
- ▲ Decide that every second is important
- ▲ Never be late for a game
- ▲ Don't watch other games and try to avoid thinking of other things during a game
- ▲ Don't spend time thinking in opening positions where you know what you will play
- ▲ Follow Leko's rule: when there is only one possible move, play it immediately
- ▲ If the opponent has a very probable move, try to decide on your reply while he is thinking and play it soon after he has played his move
- ▲ Don't spend much time in positions that aren't critical – it's acceptable to not play the best move in every position
- ▲ Use a chess clock when solving exercises
- ▲ Accept that it's okay to make mistakes caused by playing too fast

### **The opponent's time trouble**

It's not unsporting to win due to the opponent's time trouble. I do whatever I can to get his clock ticking. If he is watching another game, I make my move as silently as possible, avoid writing it down and continue to think. If he

only takes a hasty look at the board, he might think that it's still my move.

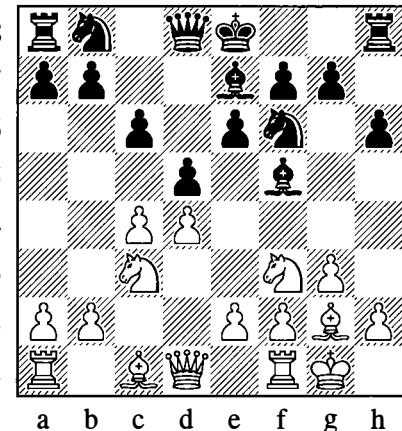
I can understand if this sounds too competitive. Of course, I don't advocate any kind of unsporting behaviour, like slamming the clock or knocking over the pieces. My behaviour is more peaceful, like following the first piece of advice from Swedish Grandmaster Stellan Brynell.

**Brynell's first advice:** If your opponent thinks for a long time, don't leave the board! It may wake him up from the doze. When he is about to move, it may be sensible to stand up, because he may become uncertain and use even more time.

### **Magnus Carlhammar – Axel Smith**

SS Manhem GM, Göteborg 13th August 2011

**1.d4 ♜f6 2.♗f3 d5 3.g3 ♜f5 4.♗g2 h6  
5.0–0 e6 6.c4 c6 7.♗c3 ♜e7**



According to the Riis rule, named after the chess player Jens Riis from Lund, a bishop should not be placed on a square where it threatens a pawn that is defended by two pawns. For that reason, I avoided 7...♝d6 – White's pawn on g3 is defended by two pawns. It's also useful that the bishop avoids coming under threat after a future ♜xe4.

The position is quite simple, but Carlhammar started to think and think. I was fried by the sun and the sweat was pouring, but I concentrated on sitting still to avoid waking him up from his trance. A friend visited the playing hall, but I ignored him. Then my left cheek started to itch, my back hurt and my right hand fell asleep. But I managed to stay still for the time it took Carlhammar to move – 54 minutes.

All the pain was worth it when he lost on time in a dead-equal position. The rest of the game is shown in the next section.

Another time when I was trying to be quiet to avoid disturbing my opponent from wasting his time, there was a live wire that gave me small electric shocks. That time, I couldn't stay quiet long enough.

My message is not to act like I do, just become aware of and accept the practical side of the game.

If you succeed with the strategy of getting your opponent into time trouble, you must then know what to do when he is in time trouble. You should never play “for time” when you have a good position, but if you are worse, then Brynell's second piece of advice is useful.

**Brynell's second advice:** When your opponent is in time trouble, don't play for simple tactics, since these are the easiest to defend against. Play unforcing moves, slowly strengthening your position.

Every serious chess player needs to think about time management. I guess that most of the readers of this book will play too slowly from time to time.

I still occasionally struggle with bad thinking habits. In the above game against

Teplyi, I spent two-thirds of my remaining time on my 21st move. Four moves before the time control at move 40, I made a move that lost the game. Some will never learn! I hope you do.

### Playing weaker opponents

I created some statistics for my games against weaker opponents and tried to draw some conclusions about why I lose points when I do. Generally, I think that it's best to try to play the best move, not considering the opponent's rating. However, it's a good idea to adapt the choice of opening, especially with Black. For example, I would rather go for an unbalanced Sicilian than a symmetrical Open game when I play an opponent I want to beat. I also try to avoid much theory, by playing openings with mainly positional decisions. The idea is that playing strength should have a greater impact than memorizing forcing opening variations.

Time trouble was the main reason in more than a third of the games where I lost points against weaker opponents. They make unexpected moves relatively often, and it's natural to use more time in such cases, which makes it important to intensify the fight against time trouble.

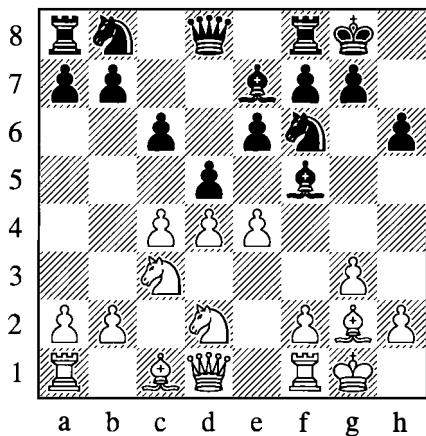
Sometimes it's difficult to find a good way to avoid simplifications. In those situations your mind must be very open! I tried to take that approach in the game against Carlhammar – we saw the opening of this game in a previous section.

### Magnus Carlhammar – Axel Smith

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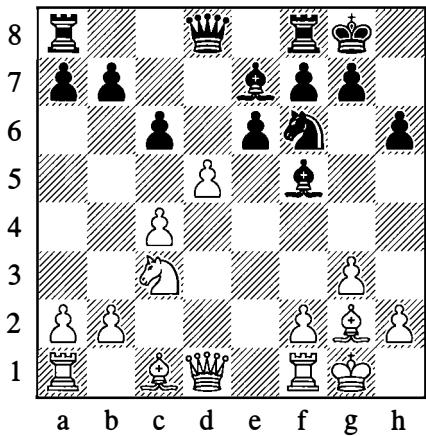
SS Manhem GM, Göteborg 13th August 2011

1.d4  $\mathbb{Q}f6$  2. $\mathbb{Q}f3$  d5 3.g3  $\mathbb{Q}f5$  4. $\mathbb{Q}g2$  h6  
5.0–0 e6 6.c4 c6 7. $\mathbb{Q}c3$   $\mathbb{Q}e7$  8. $\mathbb{Q}d2$  0–0 9.e4



I considered 9... $\mathbb{Q}g6$ , to keep on as many pieces as possible. I was not afraid of 10.e5  $\mathbb{Q}fd7$ , since White releases the pressure against d5 and allows Black to counterattack against the centre. However, I couldn't find a good move after 10. $\mathbb{E}e1!$ . Then it's a completely different story after 10... $\mathbb{Q}bd7$  11.e5  $\mathbb{Q}e8$ , since the knight is badly placed on e8.

**9...dxe4 10. $\mathbb{Q}dxe4$   $\mathbb{Q}bd7$  11. $\mathbb{Q}xf6\#$   $\mathbb{Q}xf6$**   
**12.d5**



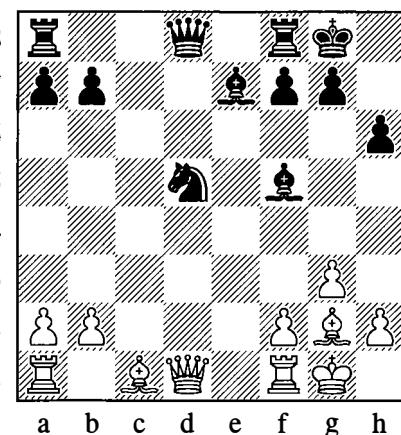
White tries to exchange everything and get a draw. I did not want to cooperate with that plan, but I have to watch out to avoid getting a worse pawn structure. Instead of 12...exd5, can you see an alternative that gives Black equality in a more interesting position?

### 12...exd5?!

I was not dynamic enough to find an alternative.

According to Houdini, Black has easy equality even if he doesn't make any 12th move at all! It would be a bit dull if I listed 20 moves as possible solutions, so I will just propose a few options: 12...cxd5 13.cxd5 e5 unbalancing the pawn structure, or 12... $\mathbb{W}a5$  or 12... $\mathbb{W}c7$ , all with equal chances and some play left. If you managed to find any move, it doesn't matter which, you did better than me!

**13.cxd5 cxd5 14. $\mathbb{Q}xd5$   $\mathbb{Q}xd5$**



**15. $\mathbb{W}xd5?!$**

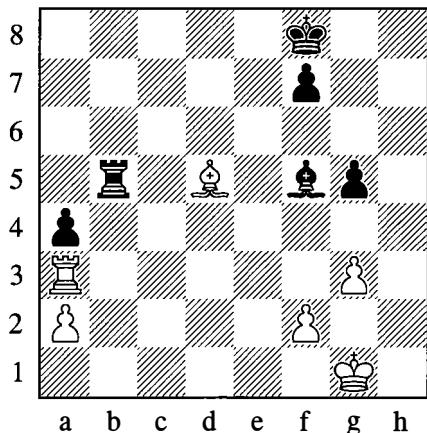
Consistent, continuing to exchange pieces, but I think it's a slight inaccuracy. It's easy for White to find a good position for his queen on f3, but Black has no such natural square.

**15... $\mathbb{W}xd5$  16. $\mathbb{Q}xd5$   $\mathbb{Q}f6$**

The position is equal anyway, but I continued to try.

17. $\mathbb{Q}xb7$   $\mathbb{Q}ab8$  18. $\mathbb{Q}f3$   $\mathbb{Q}fc8$  19. $\mathbb{Q}e1$   $\mathbb{Q}xb2$   
20. $\mathbb{Q}xb2$   $\mathbb{Q}xb2$  21. $\mathbb{Q}e2$   $\mathbb{Q}cc2$  22. $\mathbb{Q}xc2$   $\mathbb{Q}xc2$   
23. $\mathbb{Q}d5$   $\mathbb{Q}f8$  24. $\mathbb{Q}e1$  a5 25. $\mathbb{Q}e3$  a4 26.h4 g5  
27.hxg5 hxg5 28. $\mathbb{Q}c3$   $\mathbb{Q}f5$  29. $\mathbb{Q}a3$   $\mathbb{Q}b5$

It was still completely equal when White lost on time.

**0-1**

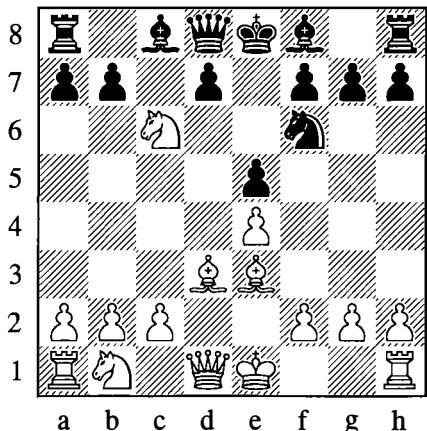
Sometimes there are two moves of about the same strength. Against weaker opponents, it might be a good idea to avoid symmetrical and simplified positions – such decisions often require some extra thought.

**Robert Anderzén – Axel Smith**

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Swedish Team Championship, 14th November 2010

**1.e4 c5 2.♘f3 e6 3.d4 cxd4 4.♘xd4 ♘f6  
5.♗d3 ♘c6 6.♗e3 e5 7.♗xc6**



Both pawn captures have the same value. Which is best from a practical point of view, taking into consideration that you want to win the game?

**7...bxc6?!**

7...dxc6 gives a symmetrical pawn structure, but keeps all the pieces on and would have given me better chances to outplay my opponent. It was an aha-experience when Jesper Hall explained this to me.

**8.c4**

Black has a comfortable position, but the natural pawn lever ...d5 leads to the exchange of two pairs of pawns and possibly also knights and a few heavy pieces. In the game I instead restricted myself to ...d6 to avoid simplifications. Of course there is still every chance to create something, but I didn't handle that well. The final part of the game can be found later in the chapter.

The best advice to avoid getting dull positions against weaker opponents is to be conscious of the risks. However, sometimes it happens anyway but that doesn't have to be the end of the game.

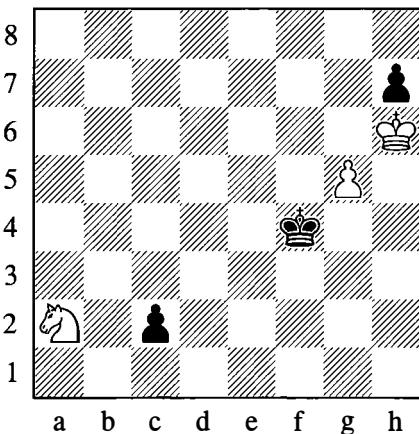
### Winning drawish positions

The most important advice is to try, try again and then try even more. It's possible to win (and lose!) surprisingly many positions. Let's start with a shocking example.

**Jon Ludvig Hammer – Pål Røyset**

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Norwegian League, Oslo 15th January 2012



White has an extra knight, but it has to stay at the queenside to watch Black's passed pawn. The king can't leave the g5-pawn. Hammer made the best of the situation, by behaving confidently and playing:

### 1. $\mathbb{Q}b4!$

I saw Røyset collapse in his chair, and he soon resigned. Hammer immediately showed him:

### 1...c1=Q!

I really felt sorry for Røyset. White can win a pawn, but the position is an easy draw.

### 2. $\mathbb{Q}d5\#$ 3. $\mathbb{Q}f6$ $\mathbb{Q}d3$ 4. $\mathbb{Q}xh7$

4... $\mathbb{Q}e5$  or 4... $\mathbb{Q}f4$  draws.

I have four general principles that I follow in drawish positions that I want to win.

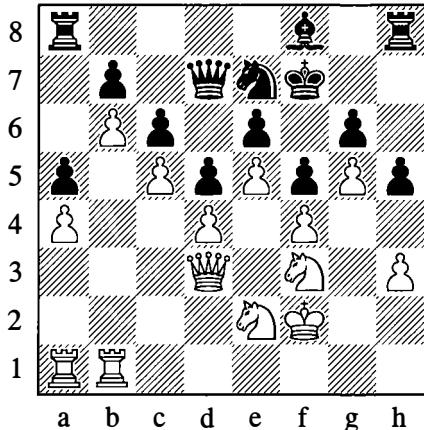
**Principle 1:** It's not unsportsmanlike to win on time.

I am opposed to slamming the clock or using any other similar methods, but I have nothing against winning on time. Chess is a practical game, and if the opponent thinks for too long, there is no need to be ashamed of using the clock as a factor against him.

### Axel Smith – Malte Burwick

Swedish Team Championship, 21th October 2007

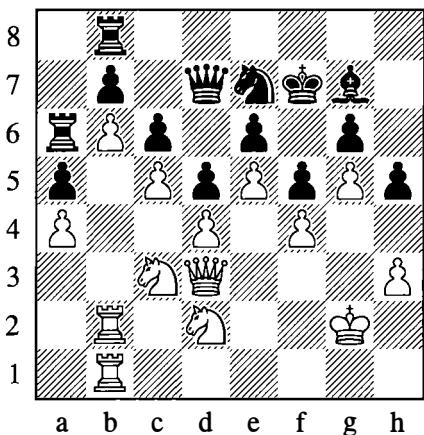
1.e4 g6 2.d4  $\mathbb{Q}g7$  3. $\mathbb{Q}c3$  d6 4.f4 a6 5. $\mathbb{Q}f3$  e6 6. $\mathbb{Q}d3$   $\mathbb{Q}e7$  7. $\mathbb{Q}e3$   $\mathbb{Q}d7$  8. $\mathbb{W}d2$  f5 9. $\mathbb{Q}g1$   $\mathbb{Q}f6$  10.e5  $\mathbb{Q}g4$  11.h3  $\mathbb{Q}xe3$  12. $\mathbb{W}xe3$  d5 13.g4  $\mathbb{Q}h6$  14. $\mathbb{Q}e2$   $\mathbb{Q}d7$  15.b3  $\mathbb{Q}b5$  16.c4  $\mathbb{Q}c6$  17.c5  $\mathbb{Q}b5$  18.g5  $\mathbb{Q}xd3$  19. $\mathbb{W}xd3$   $\mathbb{Q}f8$  20. $\mathbb{Q}f2$   $\mathbb{W}d7$  21.b4 h6 22.a4 h5 23.b5  $\mathbb{Q}f7$  24. $\mathbb{Q}gb1$  a5 25.b6 c6



a b c d e f g h

I will start with an example I am not particularly proud of. The position looks blocked, but White has space and some ideas to sacrifice a knight.  $\mathbb{Q}h4\times g6$  will not work as long as Black keeps a rook on the h-file and the king on f7, and the pawn on a5 is easily defended with both rooks. The only remaining idea for White is  $\mathbb{Q}a3/c3-b5$ . Before executing this move I should double rooks on the a-file.

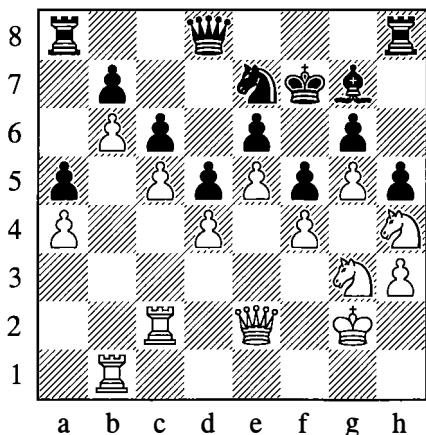
26.  $\mathbb{Q}d2$   $\mathbb{Q}g7$  27.  $\mathbb{Q}b3$   $\mathbb{R}a6$  28.  $\mathbb{Q}c3$   $\mathbb{R}b8$   
 29.  $\mathbb{R}a2$   $\mathbb{Q}f8$  30.  $\mathbb{Q}g3$   $\mathbb{W}d8$  31.  $\mathbb{R}c2$   $\mathbb{R}c8$   
 32.  $\mathbb{R}bc1$   $\mathbb{W}e8$  33.  $\mathbb{Q}g2$   $\mathbb{R}b8$  34.  $\mathbb{Q}b1$   $\mathbb{W}d7$   
 35.  $\mathbb{Q}a3$   $\mathbb{W}e8$  36.  $\mathbb{Q}f3$   $\mathbb{Q}g7$  37.  $\mathbb{R}b1$   $\mathbb{Q}f8$   
 38.  $\mathbb{Q}g2$   $\mathbb{Q}g7$  39.  $\mathbb{W}c3$   $\mathbb{R}ba8$  40.  $\mathbb{Q}d2$   $\mathbb{R}b8$   
 41.  $\mathbb{R}cb2$   $\mathbb{Q}f8$  42.  $\mathbb{W}d3$   $\mathbb{W}d7$  43.  $\mathbb{R}g1$   $\mathbb{Q}g7$   
 44.  $\mathbb{Q}ab1$   $\mathbb{R}d8$  45.  $\mathbb{Q}c3$   $\mathbb{R}b8$  46.  $\mathbb{R}gb1$



a b c d e f g h

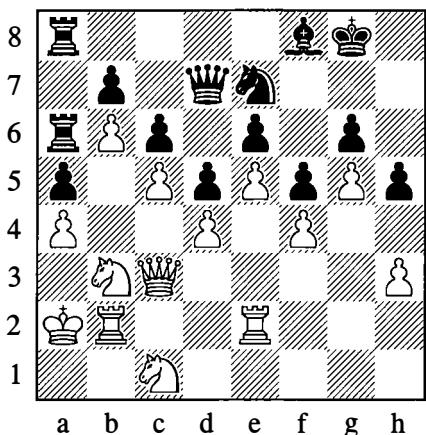
20 moves later I am almost ready for  $\mathbb{Q}b5$ .

- 46... $\mathbb{E}aa8$  47. $\mathbb{W}f3$   $\mathbb{E}h8$  48. $\mathbb{W}d1$   $\mathbb{E}hb8$   
 49. $\mathbb{Q}e2$   $\mathbb{E}a6$  50. $\mathbb{Q}g3$   $\mathbb{E}h8$  51. $\mathbb{W}e2$   $\mathbb{E}aa8$   
 52. $\mathbb{W}e1$   $\mathbb{E}a6$  53. $\mathbb{E}c2$   $\mathbb{E}b8$  54. $\mathbb{Q}f3$   $\mathbb{E}h8$   
 55. $\mathbb{W}e2$   $\mathbb{E}aa8$  56. $\mathbb{Q}h4$   $\mathbb{W}d8$  (=)



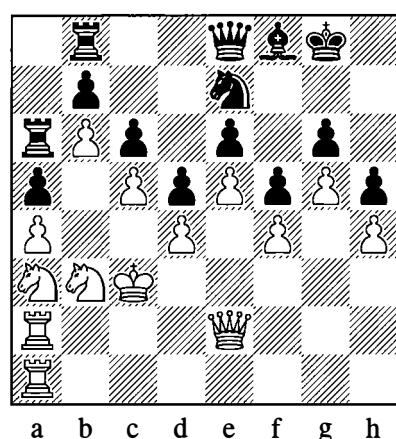
10 moves later the plan seems to have changed. I start to walk my king to the queenside, where it will cover some squares if and when the position opens up.

57. $\mathbb{Q}f1$   $\mathbb{W}d7$  58. $\mathbb{Q}e1$   $\mathbb{W}d8$  59. $\mathbb{Q}d1$   $\mathbb{W}d7$   
 60. $\mathbb{W}d3$   $\mathbb{W}d8$  61. $\mathbb{Q}c1$   $\mathbb{W}d7$  62. $\mathbb{E}b3$   $\mathbb{W}d8$   
 63. $\mathbb{Q}b1$   $\mathbb{W}d7$  64. $\mathbb{W}c3$   $\mathbb{W}e8$  65. $\mathbb{E}bb2$   $\mathbb{W}d7$   
 66. $\mathbb{Q}e2$   $\mathbb{E}hb8$  67. $\mathbb{Q}a2$   $\mathbb{W}e8$  68. $\mathbb{Q}c1$   $\mathbb{E}a6$   
 69. $\mathbb{Q}g2$   $\mathbb{E}f8$  70. $\mathbb{Q}e3$   $\mathbb{W}d7$  71. $\mathbb{Q}e2$   $\mathbb{E}g8$   
 72. $\mathbb{Q}c2$   $\mathbb{W}e8$  73. $\mathbb{Q}a1$   $\mathbb{W}d7$  74. $\mathbb{Q}ab3$   $\mathbb{E}ba8$



After 49 moves it's time to move a pawn! Probably you have already realized that I am mostly waiting until time trouble before playing  $\mathbb{Q}b5$ . This was in the bad old days when we didn't get 30 seconds per move. It's easy to argue that it's unsporting to act like this, and I don't really have a good answer. My only defence is that it was a team competition. The choice between keeping my personal reputation flawless and helping the team is easy, isn't it?

75. $\mathbb{h}4$   $\mathbb{Q}c8$  76. $\mathbb{Q}d3$   $\mathbb{Q}e7$  77. $\mathbb{E}e1$   $\mathbb{W}e8$  78. $\mathbb{E}eb1$   
 $\mathbb{W}d7$  79. $\mathbb{Q}dc1$   $\mathbb{W}e8$  80. $\mathbb{Q}e2$   $\mathbb{W}f7$  81. $\mathbb{W}d3$   
 $\mathbb{W}e8$  82. $\mathbb{Q}c3$   $\mathbb{E}b8$  83. $\mathbb{E}a1$   $\mathbb{W}h7$  84. $\mathbb{Q}b1$   
 $\mathbb{E}aa8$  85. $\mathbb{E}ba2$   $\mathbb{Q}c8$  86. $\mathbb{W}d2$   $\mathbb{E}a6$  87. $\mathbb{Q}c2$   
 $\mathbb{Q}e7$  88. $\mathbb{Q}e2$   $\mathbb{E}ba8$  89. $\mathbb{Q}g3$   $\mathbb{Q}g8$  90. $\mathbb{Q}h1$   
 $\mathbb{W}f7$  91. $\mathbb{Q}f2$   $\mathbb{W}e8$  92. $\mathbb{Q}d3$   $\mathbb{W}d7$  93. $\mathbb{W}c3$   $\mathbb{W}e8$   
 94. $\mathbb{Q}d2$   $\mathbb{Q}f7$  95. $\mathbb{W}b3$   $\mathbb{E}b8$  (=) 96. $\mathbb{Q}b1$   $\mathbb{E}aa8$   
 97. $\mathbb{Q}c3$   $\mathbb{Q}g8$  98. $\mathbb{W}b2$   $\mathbb{W}d7$  99. $\mathbb{Q}c1$   $\mathbb{W}e8$   
 100. $\mathbb{Q}b3$   $\mathbb{Q}f7$  101. $\mathbb{W}c1$   $\mathbb{Q}g8$  102. $\mathbb{W}e1$   $\mathbb{E}a6$   
 103. $\mathbb{Q}b1$   $\mathbb{E}ba8$  104. $\mathbb{Q}a3$   $\mathbb{Q}g7$  105. $\mathbb{W}e2$   $\mathbb{E}b8$   
 106. $\mathbb{W}d2$   $\mathbb{E}ba8$  107. $\mathbb{W}d3$   $\mathbb{E}b8$  108. $\mathbb{Q}b1$   $\mathbb{Q}f7$   
 109. $\mathbb{W}e2$   $\mathbb{Q}g8$  110. $\mathbb{W}h2$   $\mathbb{Q}f7$  111. $\mathbb{W}d2$   $\mathbb{E}ba8$   
 112. $\mathbb{E}c1$   $\mathbb{Q}g7$  113. $\mathbb{W}d3$   $\mathbb{E}b8$  114. $\mathbb{E}d1$   $\mathbb{Q}g8$   
 115. $\mathbb{W}d2$   $\mathbb{E}ba8$  116. $\mathbb{W}g2$   $\mathbb{E}b8$  117. $\mathbb{W}da1$   $\mathbb{Q}f7$   
 118. $\mathbb{W}e2$   $\mathbb{Q}g8$  119. $\mathbb{Q}b2$   $\mathbb{Q}f7$  120. $\mathbb{Q}c3$   $\mathbb{Q}g8$



After another 46 moves, it's time for action.

121. $\mathbb{Q}b5!$

Threatening  $\mathbb{Q}c7$ , in time to take the rook before the 50-move rule applies. If White exchanges both rooks for both knights, I think  $\mathbb{E}b5$  will do the trick in the end.

121... $\mathbb{C}xb5$  122. $\mathbb{A}xb5$   $\mathbb{E}aa8$  123. $\mathbb{E}xa5$   $\mathbb{E}xa5$   
124. $\mathbb{E}xa5$

Planning  $\mathbb{E}a7$  followed by  $\mathbb{Q}a5$ .

124... $\mathbb{Q}c8$

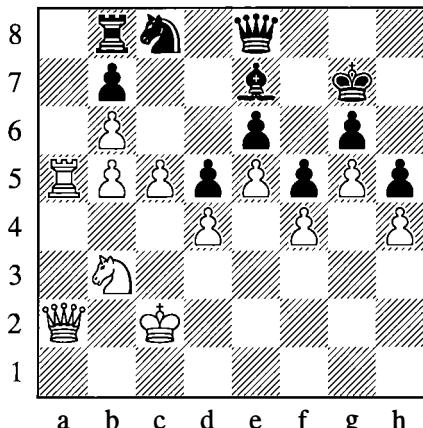
Now I started to wait again.

125. $\mathbb{W}a2$   $\mathbb{W}d7?$ !

125... $\mathbb{Q}xb6$ ! is clearly better for Black.

126. $\mathbb{Q}b2$   $\mathbb{Q}e7$  127. $\mathbb{W}a4$   $\mathbb{Q}f7$  128. $\mathbb{Q}c1$   $\mathbb{W}e8$   
129. $\mathbb{Q}d3$   $\mathbb{W}d8$  130. $\mathbb{W}b3$   $\mathbb{Q}g7$  131. $\mathbb{E}a4$   $\mathbb{Q}f7$   
132. $\mathbb{E}a2$   $\mathbb{Q}g7$  133. $\mathbb{E}a1$   $\mathbb{Q}f7$  134. $\mathbb{E}a4$   $\mathbb{Q}g7$   
135. $\mathbb{Q}b4$   $\mathbb{Q}f7$  136. $\mathbb{Q}a2$   $\mathbb{Q}g7$  137. $\mathbb{W}c3$   $\mathbb{Q}f7$   
138. $\mathbb{Q}d3$   $\mathbb{W}e8$  139. $\mathbb{E}a5$   $\mathbb{Q}f8$  140. $\mathbb{Q}c1$   $\mathbb{Q}f7$   
141. $\mathbb{Q}b3$   $\mathbb{Q}f8$  142. $\mathbb{Q}b1$   $\mathbb{Q}f7$  143. $\mathbb{W}d2$   $\mathbb{Q}f8$   
144. $\mathbb{W}a2$   $\mathbb{Q}f7$  145. $\mathbb{Q}c2$   $\mathbb{Q}g7$

22 moves later:

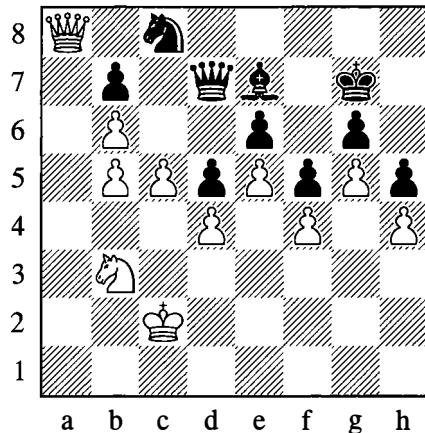


146. $\mathbb{E}a8!$   $\mathbb{E}xa8$

Black can get sufficient counterplay for a draw with 146... $\mathbb{Q}xb6$  147. $\mathbb{E}xb8$   $\mathbb{W}xb8$  148. $\mathbb{C}xb6$   $\mathbb{W}c8\#$  149. $\mathbb{Q}b2$   $\mathbb{Q}b4$ .

147. $\mathbb{W}xa8$   $\mathbb{W}d7$

147... $\mathbb{W}xb5$  148. $\mathbb{W}xb7$  wins.

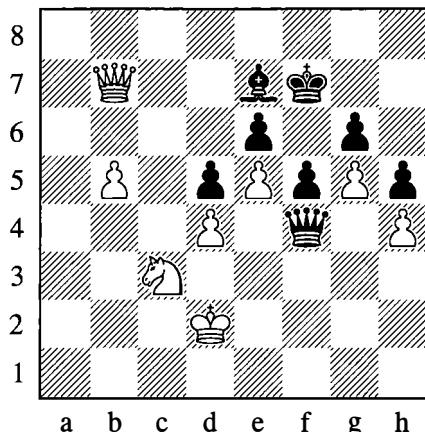


148. $\mathbb{W}a4?$

After this move, the position is about equal. The rest of the game was not funny for me.

148.c6! wins after 148... $\mathbb{Q}xb6$  149. $\mathbb{W}xb7$   $\mathbb{W}xb7$  150. $\mathbb{C}xb6$  151. $\mathbb{Q}d7$  151. $\mathbb{Q}c5$   $\mathbb{Q}b8$  152. $\mathbb{Q}a6$   $\mathbb{Q}d7$  153.b8=.

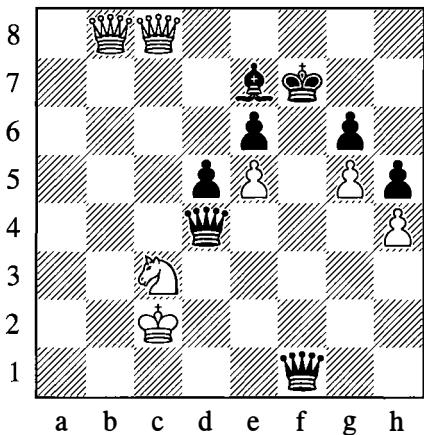
148... $\mathbb{Q}f7$  149. $\mathbb{Q}a5$   $\mathbb{Q}d8$  150. $\mathbb{W}b4$   $\mathbb{Q}xb6$   
151. $\mathbb{C}xb6$   $\mathbb{Q}xb6$  152. $\mathbb{Q}b3$   $\mathbb{W}c7\#$  153. $\mathbb{Q}d3$   
 $\mathbb{W}d7$  154. $\mathbb{Q}c5$   $\mathbb{W}c8$  155. $\mathbb{Q}a4$   $\mathbb{Q}d8$  156. $\mathbb{Q}c5$   
 $\mathbb{W}a8$  157. $\mathbb{Q}a4$   $\mathbb{Q}e7$  158. $\mathbb{W}b3$   $\mathbb{W}a5$  159. $\mathbb{Q}c3$   
 $\mathbb{W}a1$  160. $\mathbb{W}d1$   $\mathbb{W}b2$  161. $\mathbb{W}c2$   $\mathbb{W}a3$  162. $\mathbb{W}a2$   
 $\mathbb{W}c1$  163. $\mathbb{W}a8$   $\mathbb{W}xf4$  164. $\mathbb{W}xb7$   $\mathbb{W}f3\#$   
165. $\mathbb{Q}c2$   $\mathbb{W}f2\#$  166. $\mathbb{Q}d3$   $\mathbb{W}f3\#$  (=) 167. $\mathbb{Q}d2$   
 $\mathbb{W}f4\#$



**168.♔c2**

Having tried to win for 167 moves, it's not so easy to change my mind, but of course it's stupid that I avoided a repetition in a lost position.

**168...♛xd4 169.♕c7 f4 170.b6 f3 171.b7 f2 172.b8=♕ f1=♕ 173.♕cc8**



Four queens!

173...♛dd3† 174.♔b3 ♛c4† 175.♕xc4 ♜xc4† 176.♔b2 d4 177.♔e4 ♜e2† 178.♔b3 ♜xe4 179.♕c7 ♜e3† 180.♔a2 ♜c3 181.♕d7 d3 182.♕b7 d2 183.♕b1 ♜a5† 183...♜a3#

184.♔b2 ♜b4† 185.♔c2 ♜xb1† 186.♔xd2 ♜b2† 187.♔d3 ♜xe5 188.♔c4 ♜g3 189.♔d4 ♜xh4† 190.♔d3 ♜xg5 191.♔e2 h4 192.♔f3 h3 193.♔f2 h2 194.♔e2 h1=♛ 195.♔f2 ♜f4† 196.♔e2 ♜hf1#

White had three seconds left and Black sixteen. To end the game without ill feeling, I had a nice chat with Malte Burwick afterwards and, yes, I think justice was done in the end.

**Principle 2:** Don't show that you are playing on time.

Repetitions should not be made too early,

since that makes the opponent aware of the impact of the chess clock. For the same reason, I never write down my opponent's time on my scoresheet.

**Principle 3:** Don't force the position, but look like you are!

The longer it's possible to keep many options open, the more time the opponent will use, but only if he thinks that you are trying to create something. Harmless threats can also make him nervous, or perhaps he will try an unjustified active defence. Triangulation is one good way of doing nothing but looking like you are. The opponent often thinks that there is something deep going on.

If the opponent only defends passively, which is easy to notice within a few moves, a good positional improvement is to gain space. Often he will continue to stay passive, until he has no choice. The following game is a good example of this.

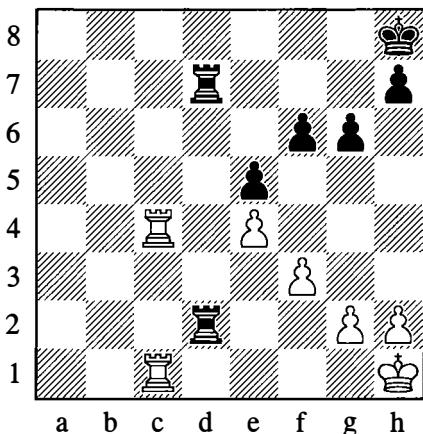
**Robert Anderzén – Axel Smith**

Swedish Team Championship, 14th November 2010

**1.e4 c5 2.♘f3 e6 3.d4 cxd4 4.♘xd4 ♘f6 5.♘d3 ♘c6 6.♗e3 e5 7.♘xc6 bxc6**

This is where I regret that I didn't capture on c6 with the d-pawn. In the game, I didn't manage to create anything.

**8.c4 d6 9.♗d2 ♘e7 10.f3 ♘e6 11.♘c3 0–0 12.0–0 ♜c7 13.♗fd1 ♗fd8 14.♗ac1 ♜b7 15.♗f2 ♗ac8 16.b3 ♗c7 17.♗e2 g6 18.♗d3 ♘d7 19.♗cd1 ♗f8 20.♗h6 ♗e8 21.♗e3 f6 22.♗h1 ♘h8 23.♗h4 ♜b8 24.♗f2 ♗f8 25.♗g1 ♗b7 26.♗a4 ♜c7 27.♗d2 ♘g8 28.♗c1 ♗a5 29.c5 ♘xc5 30.♘xc5 dxc5 31.♗dc2 c4 32.♗xc4 ♘xc4 33.♗xc4 ♜xa2 34.♗xc6 a5 35.♗c5 ♜xb3 36.♗xe7 ♗xe7 37.♗c5 ♜b4 38.♗xb4 axb4 39.♗b6 ♗d8 40.♗xb4 ♗d2 41.♗bc4 ♗ed7**



It has petered out into a drawn rook ending. Can it really be possible to create something out of this, with only four solid pawns on the same wing?

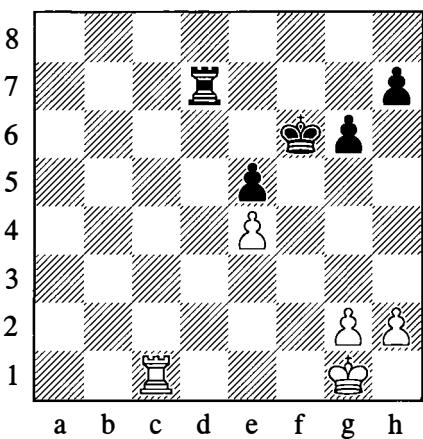
#### 42... $\mathbb{R}c8\#?$

A slight inaccuracy that helps the black king to advance. 42. $\mathbb{R}g1$  was better, and Black can't avoid a rook exchange anyway. This is one of many examples when the player who wants a draw exchanges, even if gives away some tempos.

#### 42... $\mathbb{R}g7$ 43. $\mathbb{R}8c7\#$

If White exchanges on f5, Black will create a passed pawn on the e-file. If not, he will get a weak pawn on e4. Objectively it's unrealistic to win either of those positions, but my feeling is that 44.exf5 is safer for White.

#### 44. $\mathbb{R}g1\#?$ fxe4 45.fxe4 $\mathbb{R}f6$ 46. $\mathbb{R}xd7$ $\mathbb{R}xd7$



#### 47. $\mathbb{R}f2\#?$

47.h4! stops Black's king from advancing, but White had decided against active moves.

#### 47... $\mathbb{R}g5$ 48. $\mathbb{R}e3\#?$

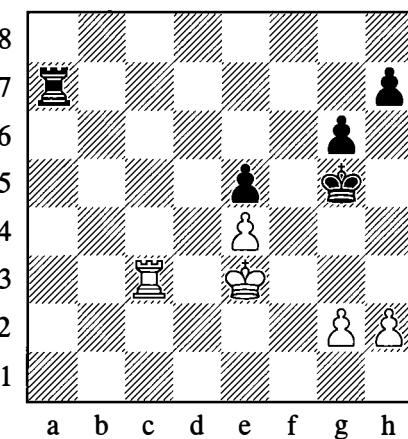
This move was backed up with a draw offer, but it actually gives me some real pressure.

48. $\mathbb{R}c2!$  was best, defending with  $\mathbb{R}e2$  if needed and otherwise playing g2-g3, ( $\mathbb{R}g2$ ) and h2-h3.

#### 48... $\mathbb{R}a7$

Black is threatening ... $\mathbb{R}a3\#$  followed by ... $\mathbb{R}f4$ .

#### 49. $\mathbb{R}c3$



#### 49... $\mathbb{R}g4\#$

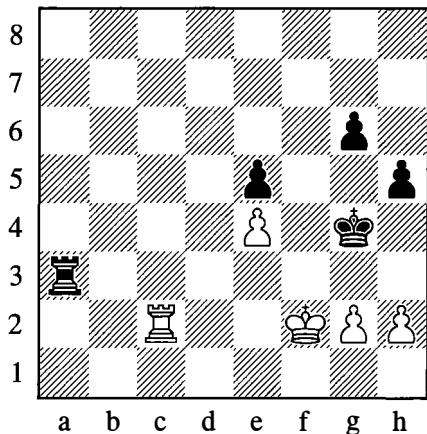
The key move. If Black allows  $\mathbb{R}f3$ , it's (again?) an easy draw. Now ... $\mathbb{R}a2$  is a threat.

#### 50. $\mathbb{R}c2$ $\mathbb{R}a3\#$

It seems more precise to play 50...h5 51. $\mathbb{R}d2$   $\mathbb{R}a3\#$  52. $\mathbb{R}d3$   $\mathbb{R}xd3\#$  53. $\mathbb{R}xd3$ . I had not calculated further. Best play is: 53... $\mathbb{R}f4$  54.h4  $\mathbb{R}g4$  55. $\mathbb{R}c4$  g5! 56. $\mathbb{R}d5!$  gxh4 57. $\mathbb{R}xe5$   $\mathbb{R}g3$  58. $\mathbb{R}f6$   $\mathbb{R}xg2$  59.e5 h3 60.e6 h2 61.e7 h1=  $\mathbb{W}$  62.e8=  $\mathbb{W}$  This is a theoretical draw because White's king is in time to reach the h-file before Black plays ...h2.

**51.♔f2 h5!**

After 51...♔f4 52.♕e2, White is in time for g2-g3.

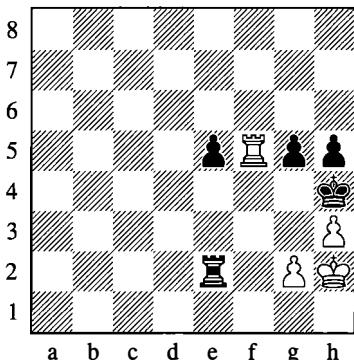
**52.♖c6**

52.g3 allows Black's king to h3, but it's best to start with 52...♜a4!, tying up White's rook.

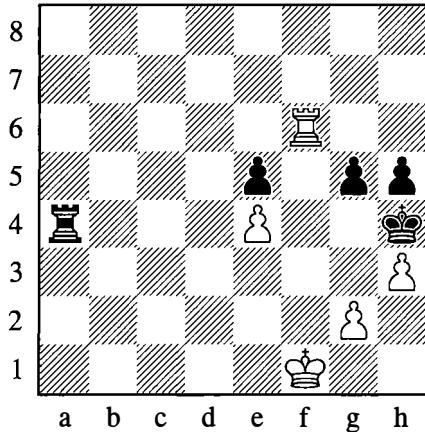
52.♕e2 h4! stops g2-g3. After 53.♔f1 ♔f4 54.♔f2 g5 55.h3 ♜a4, g2-g3 is impossible and the pawn on e4 is lost.

**52...♜a2† 53.♔f1?**

53.♔g1! is a narrow escape. The critical variation runs 53...g5 54.♕f6 ♜e2 55.h3† ♔h4 56.♕f5 ♜xe4 57.♔h2 ♜e2.



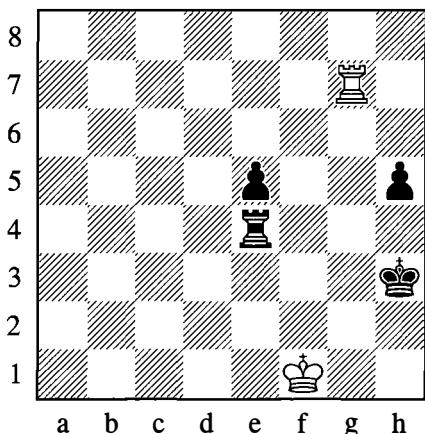
White has a nice save: 58.♕x e5!

**53...g5 54.♕f6 ♜a4 55.h3† ♔h4****56.♕f5??!**

A better try was 56.♔f2 ♜xe4 57.♕e6 to stop ...♜a4 followed by ...e4. I can't see how to proceed.

**56...♜xe4 57.g3†?**

Losing a second pawn. 57.♕f3 was the last chance, even though White faces a tough defence.

**57...♔xg3! 58.♕xg5† ♔h4 59.♕g7  
59.♕f5 ♜f4† wins.****59...♔xh3**

The rest is easy.

60.♔f2 ♕g4 61.♔h7 h4 62.♔f3 ♕f4† 63.♔e3 ♕g3 64.♔h5 e4 65.♕g5† ♕g4 66.♕xg4† ♕xg4

**0–1**

I understand if you think this game looks like an extraordinary exception, but I disagree. It's possible to win surprisingly many positions. What strikes me with this rook ending is that White's position didn't collapse due to one mistake, but due to the sum of many small inaccuracies.

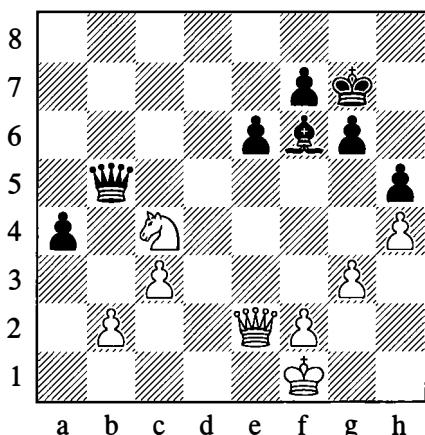
**Principle 4:** Give the opponent possibilities to go for dubious exchanges.

When the precious draw is within reach, everyone wants to end the game as soon as possible. It's an automatic belief to think that piece exchanges are the fastest way to do so. Often the player who wants a draw will go for exchanges without noticing that this also means making a positional concession.

In the following game, I used all four principles in a drawish position.

### Abdulla Muhsen – Axel Smith

Norwegian Team Championship,  
15th October 2010



The position is balanced, with slightly weak pawns on b2 and a4. The a4-pawn is especially weak in case of a queen exchange. Black has the bishop, but has difficulties creating play. Advancing the kingside majority would only open up the black king. I decided to start with some repetitions.

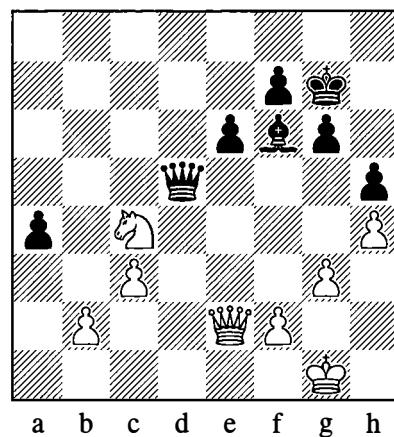
**36...♛d5**

The threat is strong, but not so difficult to spot!

**37.♔g1 ♛b5 38.♔f1**

Going back, defending the queen and breaking the pin.

**38...♛b3 39.♔g2 ♛b7† 40.♔g1 ♛b3  
41.♔g2 ♛b7† 42.♔g1 ♛d5**



I have followed Mragel Vrillestad's 'confusion method', named after a chess legend from Lund. The idea is to triangulate in an unforcing position, in order to confuse the opponent. He may think that something deep is going on. It's a natural thought, since here there is no idea at all behind losing the move! When he is given the move, he might overreact to clarify the position.

I know this method sounds bizarre, but I have used it several times with good results. A player, who before has only had to react to the

opponent's threats, may actually see having the move as a problem in a stressful situation.

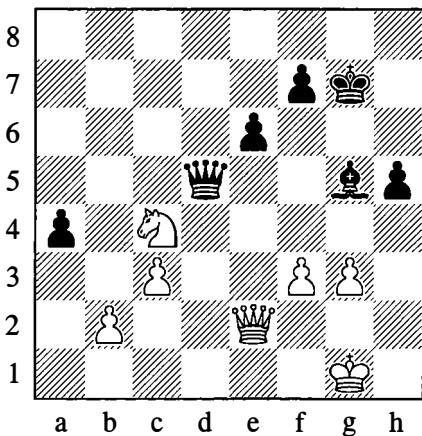
In this game, it was never a threefold repetition but some sort of triangulation. White doesn't want to move the knight and allow ... $\mathbb{W}a2$ , and after 43. $\mathbb{Q}h2$   $\mathbb{W}b5$ , it's no longer possible to break the pin in one move. Thinking for just two more seconds, it's possible to realize that this pin doesn't matter at all. However, those seconds can be unpleasant for many. Instead, White created a slight weakness.

#### 43.f3?! g5

If I am to make progress, I think this pawn break is necessary. It doesn't hurt that it sets a devilish trap.

#### 44.hxg5 $\mathbb{Q}xg5$

I immediately went to the toilet to tempt my opponent to reply without thinking.



#### 45.f4!

He kept calm. 45. $\mathbb{W}e5\#??$   $\mathbb{W}xe5$  46. $\mathbb{Q}xe5$   $\mathbb{Q}c1$  47. $\mathbb{Q}d3$   $\mathbb{Q}xb2!$  was what I kept my fingers crossed for.

#### 45... $\mathbb{Q}f6$ 46. $\mathbb{Q}e5$ $\mathbb{W}a2$

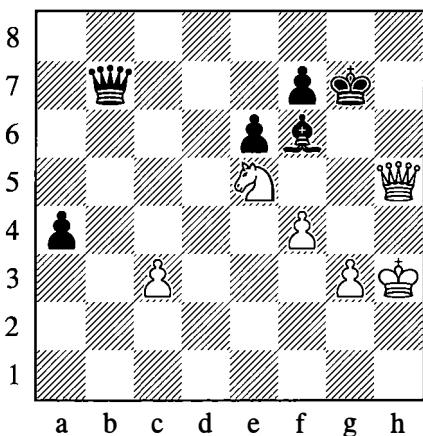
46... $\mathbb{W}x5$  47. $\mathbb{W}xe5\#??$  is a winning pawn ending for Black, but that's really too much to hope for. Instead of the queen exchange, after

47.fxe5 White would draw the queen ending easily.

#### 47. $\mathbb{W}xh5?$

Again the common theme: the player who wants to draw will often exchange pieces or pawns at any cost. 47. $\mathbb{Q}f2$  is still a draw.

#### 47... $\mathbb{W}b1\#$ 48. $\mathbb{Q}h2$ $\mathbb{W}xb2\#$ 49. $\mathbb{Q}h3$ $\mathbb{W}b7!$



This move must have been what he overlooked. Black is winning, but it took me another 60 moves to finish the game (0–1, 109 moves).

One circumstance that actually helps if you want to win very drawish positions is if the opponent wants the draw very badly. In those situations, keep on playing, while you give the opponent possibilities to come "closer" to the draw.

The four principles outlined in this section are:

**Principle 1:** It's not unsportsmanlike to win on time.

**Principle 2:** Don't show that you are playing on time.

**Principle 3:** Don't force the position, but look like you are!

**Principle 4:** Give the opponent possibilities to go for dubious exchanges.

## Bad ways of choosing moves

Humans are not robots (yet). Normally we are grateful for that fact, but it also allows us to have irrational reasons for choosing moves. Ideally, all feelings should be set aside until the tournament is over, but it's not so easy to avoid letting them influence our thoughts. That's a pity, since chess punishes irrelevant thoughts without mercy. This may not be the machines' only advantage in their fight against humans, but it should not be neglected.

However, by being conscious of the possible pitfalls, it's easier to avoid them.

### Trying to make up for previous mistakes

It's very common that a mistake is followed by more mistakes. When feeling uneasy about the situation, it's easy to lose objectivity and set one final cheap trap. In this way, the game is finished as soon as possible, but probably lost.

It's never good to try to make up for previous mistakes. The new situation has to be considered as it is, not through a tinted lens.

### Thinking about others' opinions

"What will they say if I play this stupid-looking move and lose?" is a question that ruins one's self-confidence.

The opposite is also possible – playing a move to impress the spectators. I once noticed that one of my students often made his move when I came to watch his game. After that experience, I always watch friends' games from behind, so they can't see me.

### Not trusting your judgment

The consequence is inconsistent play, alternating between plans. Your own judgment may be wrong, but you have nothing better to trust. If you believe that an attack on the king is strategically justified, it should be played.

When having a good position against a stronger opponent, anxious feelings may arise.

The lower-rated player often becomes cautious to avoid all possible counterplay. Such an attitude must be avoided!

Instead, the same mechanism can be used when the tables are turned: when defending a lost position. In those situations it pays to play a bit more aggressively than is objectively justified. The opponent doesn't want "unnecessary" complications, and he can thus be expected to go for the safe but passive option.

### Falling in love with a move

After having spent a lot of time calculating a move, and maybe even having found some nice tactics, it's easy to get emotionally attached to it. If the calculation ends up with the conclusion that it doesn't work, sometimes it's played anyway! The line of thought, often subconsciously, sounds like: "The opponent will surely not see that much, and if he does, something new may turn up along the way".

No! Never lie to yourself! It's better to throw all emotions away, swallow the frustration and look for a new move.

## Concentration

For me, the main difference between a good and a bad tournament is how well I manage to keep other thoughts away during the games, and I'm quite often dissatisfied with how well I manage. For that reason, I was perplexed and envious when I learned that Viswanathan Anand complained that he had *one* irrelevant thought during his whole match against Vladimir Kramnik in Bonn 2008! It happened after 22 moves in the 10th game. After Kramnik's 23.♘a6! Anand returned to reality (chess!).

The truth may not be that black and white, but I like to think of Anand as a good example (though I try not to think of this during a game!). The closest I have come to Anand's

extraordinary concentration was when I washed the car that picked him up when he visited Kristiansund.

The Norwegian Grandmaster Jon Ludvig Hammer has pointed out that Magnus Carlsen gets more exhausted than his rivals after a game, despite being physically fitter than most of them. Hammer says he would love to learn how Carlsen manages to give everything.

Bobby Fischer, who said he didn't believe in psychology, was nevertheless disturbed by silent cameras. Well, the first step towards good concentration is accepting that external factors have a huge impact. Having come so far, there are several pieces of advice worth following.

### Goals

The most important goals are for the training program. They are discussed in the introduction to the second part of this book. But the goal that's set before a tournament will affect your concentration. Such a goal should be effort-based and short-sighted, not focusing on more than the next game.

It's dangerous to have a results-oriented goal, like 'reaching six points'. If your score is  $4\frac{1}{2}$  points before the final round, it may be hard to find motivation, since the goal is unreachable. The same may happen if your score is already 6 points. Rating performance is also a whimsical goal – it depends so much on chance and the play of your opponents.

All similar goals increase the risk of having irrelevant thoughts. It's better to have an effort-based goal, such as 'concentrating well'. That kind of goal is always relevant, whatever the results in the previous games.

Good concentration depends a lot on your level of motivation. If motivation is a problem, it's a good idea to use one day before the

tournament to prepare mentally. One useful thing is to get rid of all the work that is hanging over your head, but it's also good to use some time to think about how it would feel to lose, and then imagine being fully focused, and winning games.

### Irrelevant thoughts

A common mistake is to think way ahead, beyond the game. It might be about the next round, the prize-giving ceremony or the imminent celebration of your inevitable triumph. Another common mistake is to think backwards, re-calculating moves that are long gone or evaluating the opening choice. All our thoughts should deal with the current position! In particular, many players have problems getting over a loss. They constantly ask themselves why they made such a ridiculous mistake, or something similar. This clearly makes it more difficult to focus on the next game.

I think it's a good habit to avoid analysing games during the tournament, except for the post-mortem and the opening. The post-mortem can't be saved until later, and the opening may be important for forthcoming rounds. Anyway, a game should not be checked with an engine before it has been analysed with a trainer or a training partner, and there is seldom enough time for that between rounds. At first, curiosity demands that you should get 'the answer' immediately, but after some time, you learn to wait. All conclusions and 'blame' are better left until after the tournament.

So how should irrelevant thoughts be avoided? The first step is simply deciding that you want to avoid such thoughts. Afterwards, you will automatically start to scold yourself when you discover your mind thinking of something irrelevant. This helps, but it requires practice, just like everything else.

There is also a lot of truth behind the old

saying “*What you do in practice will carry over into competition.*” So try to be well-focused when solving exercises.

It’s possible to practise concentration at home, for example by trying to keep a focused, blank mind during five minutes every day. It is also a good idea to prepare mentally before a tournament, as mentioned previously.

Meditation is the next step for the ambitious.

### Sleep and food

It’s self-evident that getting enough sleep is important, but how much is enough? Logically, it means waking up before the alarm clock rings. Sleeping time should be planned with some margin. It’s also good to follow Hector’s principle, named after the Swedish Grandmaster Jonny Hector: *In order to get the brain ready, you have to wake up at least two hours before the game.*

In addition, it saves energy to have fixed routines; all energy can be spent on chess instead of taking other decisions.

When I first travelled to a tournament with my Norwegian club, they were stunned to learn that I took sleeping so seriously (boringly!). After that, they could not stop repeating this over and over again, maybe a bit too often. It is not the best idea to tell an eight-year-old kid who is thinking about starting to play chess that he must take great care of his sleep!

In contrast, I only follow the two principles mentioned above during tournaments. At home, I never manage to keep a regular daily rhythm – the day is just too short! Ironically, it’s the middle of the night as I am writing this, and 42 hours since I slept.

The most important thing is, as usual, to take sleep seriously. The game against Teplyi was played in a tournament where the organizer offered titled players “accommodation”.

I wrote to them to make sure this didn’t mean air beds in barracks together with a dozen other players. They answered that it didn’t, which was true. I stayed in a small storeroom in a school, without a shower and without the possibility of being there during the day. It was difficult to sleep, with an alarm triggered in the middle of the night and a security guard coming early in the morning. In addition, the room had two gigantic windows without curtains. One morning I heard a lot of children’s voices, calling: “Come, come and look! There is a man sleeping here!”

I seldom criticize organizers, maybe because I am one myself. That time was a bit over the line, though. Playing seriously in a tournament requires having the chance of a good night’s sleep.

Food is also important, but everything regarding that subject is very individual. An attitude that doesn’t work for some may work well for others. The best method is to use trial and error to find out what works for you. Nevertheless, a few general points can be made.

Digestion will take energy from the brain if it has to work too hard, such as if you eat a heavy meal shortly before a game. Sugar is also dangerous; it heightens the level of blood sugar temporarily and gives a lot of energy, but makes it drop even further later on. The only solution to keep the level of blood sugar steady, if you have started to eat sweets, is to continue eating for the whole game!

When I started to take chess seriously, I found it natural to stop drinking coffee. Therefore, I was surprised to learn the advice Jesper Hall received when he talked to a nutritionist about chess and food: Eat pasta (long carbohydrates) 1½ hours before you start playing, and drink coffee (a psychoactive drug) during the game.

Nevertheless, everyone has to decide what works for him or her, and I think I do better

without coffee. One argument is to avoid having a reason to leave the board.

### Physical preparation

Magnus Carlsen blamed having less physical exercise than usual for his bad results in the autumn of 2010. Physical activity gives surplus energy and helps with focusing. I think it's a good idea to do something every day during a tournament. It doesn't need to take more than 5-10 minutes to go for a short run.

When I learned that Hans Tikkannen practised keeping his breath while swimming underwater, I thought it was too odd. When I learned that Bobby Fischer had done the same, I suddenly became more interested! When the inhalation of oxygen stops for some time, the brain has to make more out of less, and expands the capillaries. Coming back to normal circumstances, blood flow is increased.

The idea is more or less the same as with altitude training, which many athletes do.

### Other disturbances

My greatest hobby is reading books, which is exactly why I have prohibited myself from reading them during tournaments. It's easy for the mind to get excited, and it may occupy your thoughts during the games. However, there are some books that are easy to stop thinking about, such as those with known endings, like biographies.

Personally, earplugs do a great job shutting out all noise during games, and they also remind me that I should be in a competitive mood, focusing as well as possible.

Another thing that may disturb you during games is having any valuable belongings – subconsciously some energy is used to worry about them being stolen. As I am quite extreme, I also get disturbed by opponents clicking their pens. Sometimes I bring non-clickable pens to hand over to them. However, in this case the problem is better found in me! Anyway, I think it's a good idea not to hesitate in letting opponents or spectators know when they are disturbing you. It's much worse to sit and hope that they will stop by themselves.

Lastly, being in love definitely disturbs one's concentration, but I think it's high time I stop before I say something I will regret...

### A final word

The chapter has reached its end and it's time for a final conclusion. External factors are very important, at least for those of us who don't find good moves as easily as we see hidden conspiracies. To keep the summary very brief: *everything matters*. When one game has ended, it's already time to focus on the next game.

This book has also come to an end. As I wrote in the introduction, this project feels like the final goal after five years with chess. It has been a real pleasure to write it – reliving all my tough losses, but also some fantastic moments. It is a coincidence that we end with the words "next game", but they fit very well.

There will always be a next game.

# Appendix – Databases

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## Gigabase

You need a big database to search for your opponent's games. It's good if it contains annotated games, like ChessBase's MegaBase, but there are also free versions. Every week, it's possible to download new games via TWIC [A]. In addition, it's worthwhile pasting pgn-files from local club events or tournaments; those players will be your most regular opponents.

When searching for a specific opponent, it's important to merge the different spellings of his or her name [A]. It is actually a bit tricky with players from some countries, since they mix the first and last names.

## Reference

When studying openings, it's useful to use the flap "Reference" to see played games. To do this, one database has to be marked as a "Reference database" [A]. Since mostly games by strong players are interesting, I recommend creating a smaller database only with games where both players have an Elo of 2450+ (or another limit of your preference). When a new TWIC is downloaded, I search for 2450+ games and copy them to the Reference-database.

For sure, many interesting games will be overlooked, but it's not possible to check everything. Another advantage with a small "Reference database" is that it takes a much shorter time to search. For me, with a powerful PC and an analysis engine running at full pace, the difference is between two seconds and more than two minutes (it never finished, as I lost patience). Such delays are mildly irritating, to say the least.

## My games

The most important database is of course the one with your own games, preferably annotated.

It's also good to know what information your opponents have. That's not possible to check in the Gigabase, since most opponents hopefully don't have access to pgn-files from local tournaments. Instead, I use the variable "Source" to mark all games in "My games" which are saved in public databases such as "TWIC". When I want to know which games my opponent can use in his preparation, it's easy to search for the source "TWIC" [A].

## Working database

It's useful to have a database where on-going work can be saved. In that way, it's easy to remember what you should analyse next. However, the working database also has other purposes. If you have a powerful PC at home and a laptop at tournaments, it might be messy with copies of every file. I think it's easiest to have the original databases at home, and save work done at tournaments in the working database.

Another important reason for having a working database is that it becomes easier to send games or analysis to a training partner [A].

There are also safety reasons. Sometimes, ChessBase replaces the wrong game when saving, thus deleting a game. It is better if that doesn't happen in an opening database.

Twice at tournaments my ChessBase program has announced "Program Error" and then deleted everything in the ChessBase bases-folder. When that happened, I was very happy I had everything saved at another location on the laptop.

This shows the importance of regularly making backup copies.

## Opening databases

It's impossible to get an overview if all the analysis is saved in a single game. It's useful to split it in a lot of different databases and games.

## Appendix – ChessBase

This is a short appendix, explaining the most important functions. For more information – see the ChessBase manual! Words labelled with \* \* refer to labels in the ChessBase program.

### Databases

**Download games:** Visit TWIC at [www.theweekinchess.com](http://www.theweekinchess.com). When the games are copied into Gigabase, mark \*Don't copy single doubles\*. To show which TWIC files are already in your Gigabase, right-click on the Gigabase, choose \*Properties\* and \*Show Protocol\*.

**Remove doubles from databases:** Mark the database, click on \*Tools\*, choose \*Database\* and \*Find Double Games\*. In the box for \*First game\*, type in the number of games the database contained *before* getting new games. It makes the procedure much faster. Click \*OK\*. Afterwards, click on \*Tools\*, choose \*Database\* and \*Remove Deleted Games\*. It takes some time for a big database, so a powerful computer is recommended.

**Merge names:** Open Gigabase, go to the flap \*Players\* and right-click on the name, choose \*Edit\* and type in the correct spelling.

**Mark as Reference database:** Right click on the database, choose \*Properties\* and mark \*Reference-DB\*.

**Search in the Reference-database:** Click on the flap \*Reference\* when a position in a game is open.

**Source:** To align games to a source: open the database, mark one or several games, right-click and choose \*Edit\*, \*More\* and \*Set Source\*. Choose a name for the source. To see games aligned to one source, go to the flap \*Sources\* and choose one of them.

**Fix sort order:** Put the game in the preferred order, click on \*Tools\* and \*Fix Sort Order\*.

**Send games:** With an e-mail client, it's possible to mark one or several games, right-click and choose \*e-mail selected games\*. This command is also useful in another way. Now and then ChessBase refuses to save a game, which can be quite annoying. In those situations, it still works to click \*File\*, \*Send\*, \*Games\* and e-mail it to yourself!

To send a whole database, all 16 ChessBase files (cba, cbc, cbe and so on) have to be transformed into one (cbv). In the main window, mark a database and click on \*Tools\*, \*Database\* and \*Backup database\*. Choose where to save the file, and attach it in an e-mail.

**Search for games with a specific colour:** In the flap \*Players\*, right click on your opponent and choose \*Prepare against White\* (if you are Black). Sort by year by clicking on that column header.

**Create an opening book:** Mark all games, and use the command Shift + Enter.

## Games

**The engine's number of moves:** Click on + or – to increase or decrease the number of shown moves.

**Split games:** It's easiest to copy the game to the "Work database" and copy it back. One variation is kept in the first copy of the game and another in the second. (To see how many half-moves of analysis a game contains, hold the mouse over the column \*VCS\* on the same line as the game.)

**Create coloured squares and arrows:** Press Alt (green), Alt + Control (Yellow) or Alt + Shift (Red) when right-clicking on a square or right-dragging the mouse between two squares.

**Enter a null-move:** Press Ctrl + Alt + 0.

**Merge games:** Save both games in the same database, mark them and press Enter. The last game is incorporated in the first one.

If there are different move orders, they are also merged. It's possible to change the move order in a game. If an opening file starts with 1.d4  $\mathbb{Q}f6$  2.c4 e6 3. $\mathbb{Q}f3$  d5 4.g3, and should be changed to 1.d4  $\mathbb{Q}f6$  2.c4 e6 3.g3 d5 4. $\mathbb{Q}f3$ , the easiest process is as follows:

- 1) Create a new game with the correct move order
- 2) Copy it to the same database as the original game, and place it higher up in the database
- 3) Merge the games

**Training:** Open a game, click on the flap \*Training\*. The board is shown, but not the moves.

**Shortcuts:** Some of the most useful shortcuts in ChessBase are Ctrl R (save/replace the game), Ctrl A (open text annotation), Ctrl K (add engine), Ctrl Y (delete variation), Shift = (set evaluation), Shift 1 (set exclamation mark etc.) and Alt ↑ (promote variation).

# Appendix – List of theoretical endgames

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I have graded the endgames from 1 to 4 stars, based on how difficult they are to learn and how probable it is that they will appear. Those with grade 1 are a must; those with grade 4 are only for the most ambitious.

## Basic mates

- 1) Queen\*
- 2) Rook\*
- 3) Two bishops\*
- 4) Knight and bishop\*\*
- 5) Two knights versus pawn\*\*\*\*

## King and pawn versus king

- 6) Going straight back\*
- 7) Attacking king on the sixth rank\*
- 8) Opposition\*
- 9) Flank pawn\*

## Other pawn endings

- 10) h- and g-pawn vs. h-pawn\*\*
- 11) A fortress\*\*
- 12) Another fortress\*\*\*
- 13) Floating square rule\*\*\*
- 14) Corresponding squares\*\*
- 15) Bähr's rule\*\*\*

## Queen versus pawn

- 16) Winning method\*
- 17) Flank pawn\*
- 18) c-pawn\*
- 19) Draw with h- + g-pawn\*\*\*

## Queen versus rook

- 20) Philidor's position\*\*
- 21) Second rank defence\*\*\*
- 22) Third rank defence, winning and drawing method\*\*\*

## Queen versus rook and pawn

- 23) Winning method\*\*\*
- 24) Pawn on seventh rank\*\*\*
- 25) Rook behind the pawn\*\*\*
- 26) Rook pawn on sixth rank\*\*
- 27) Rook pawn on seventh rank\*\*
- 28) Knight pawn\*\*

## Queen and pawn versus rook and pawn

- 29) f7 vs. g-pawn\*\*\*
- 30) f7 vs. h-pawn\*\*\*
- 31) g7 vs. h-pawn\*\*\*
- 32) g7 vs. f-pawn\*\*\*

## Queen and pawn versus queen

- 33) General rules\*\*
- 34) Knight pawn\*\*\*

## Rook and bishop versus rook

- 35) Cochrane defence\*\*
- 36) Second rank defence\*\*\*
- 37) Philidor's position\*\*\*
- 38) Philidor's position moved one file\*\*\*\*

## Rook versus bishop

- 39) Correct corner\*
- 40) Wrong corner\*

## Rook and pawn versus bishop

- 41) f-pawn on sixth rank\*\*
- 42) h-pawn with a draw\*\*\*
- 43) h-pawn with a win\*\*\*\*

## Rook and pawn versus bishop and pawn

- 44) Same file – win\*\*
- 45) Same file – draw\*\*\*
- 46) h-pawns, non-blocked\*\*\*\*
- 47) g- vs. h-pawn\*\*\*\*
- 48) Blocked h-pawns\*\*\*\*
- 49) Two pawns each – wrong corner\*\*
- 50) Two pawns each – correct corner\*\*

## Rook versus knight

- 51) Draw\*
- 52) Knight on h8\*
- 53) Knight on g7\*\*

**Rook and pawn versus knight and pawn**

- 54) Adjacent files – draw\*\*  
 55) The same file – draw\*\*\*  
 56) The same file – win\*\*\*

**Bishop and pawn**

- 57) Wrong rook pawn\*  
 58) Theoretical fortress\*\*  
 59) Rauzer's line\*\*\*

**Opposite-coloured bishops**

- 60) Two passed pawns\*  
 61) A fortress\*\*

**Centurini's rule**

- 62) General rules, drawn positions\*\*  
 63) Two winning positions\*\*\*  
 64) Two winning positions with b7-pawn\*\*\*  
 65) Pawn on f7 – ♖g8/g6 or ♖e8/e6\*\*\*

**Knight endings**

- 66) Knight versus h-pawn\*  
 67) h-pawn and king in the corner\*\*  
 68) Horwitz's win\*\*\*\*

**Unusual material**

- 69) Rook and knight versus rook\*\*\*  
 70) Queen versus two knights\*\*\*  
 71) Queen versus two bishops\*\*\*  
 72) Queen versus bishop and knight\*\*\*  
 73) Two bishops versus knight\*\*\*\*

**Rook versus pawn(s)**

- 74) h-pawn, cutting off, body-check\*  
 75) Drawing versus second rank pawns\*\*\*  
 76) Three pawns, rook from the side\*\*\*  
 77) Three pawns, rook from behind\*\*\*\*

**Rook and pawn versus rook**

- 78) Philidor's defence\*  
 79) Extra doubled pawn\*\*  
 80) Lucena's position\*  
 81) Go to the short side\*\*  
 82) Last rank defence, knight pawn\*  
 83) Last rank defence, bishop pawn\*  
 84) h-pawn, king in front of\*  
 85) h-pawn, rook in front of\*\*

**Rook and pawn versus rook**

- 86) Pawn crossed central file\*  
 87) King cut off one file\*\*  
 88) King cut off two files\*\*  
 89) Knight pawn, with king cut off three files\*\*  
 90) Rook pawn, with king cut off three files\*\*  
 91) Cut off sixth rank\*\*  
 92) Cut off sixth rank, d-pawn\*\*\*

**Rook endgames**

- 93) Four versus three on the same side\*\*  
 94) Two versus one\*\*  
 95) f + g-pawns versus h-pawn\*\*\*  
 96) h + g-pawn\*\*\*  
 97) f + h-pawns\*\*\*\*  
 98) 3 vs. 3 + a-pawn, defending king caught on f5\*\*\*  
 99) 3 vs. 3 + a-pawn, drawing method\*\*  
 100) 3 vs. 3 + a-pawn, winning method\*\*\*

All of those endgames can be found in various endgame books. In case it is unclear which endgames I am referring to, a list can be downloaded in a pgn database at

[www.qualitychess.co.uk/ebooks/  
PumpUpYourRatingEndgames.pgn](http://www.qualitychess.co.uk/ebooks/PumpUpYourRatingEndgames.pgn)

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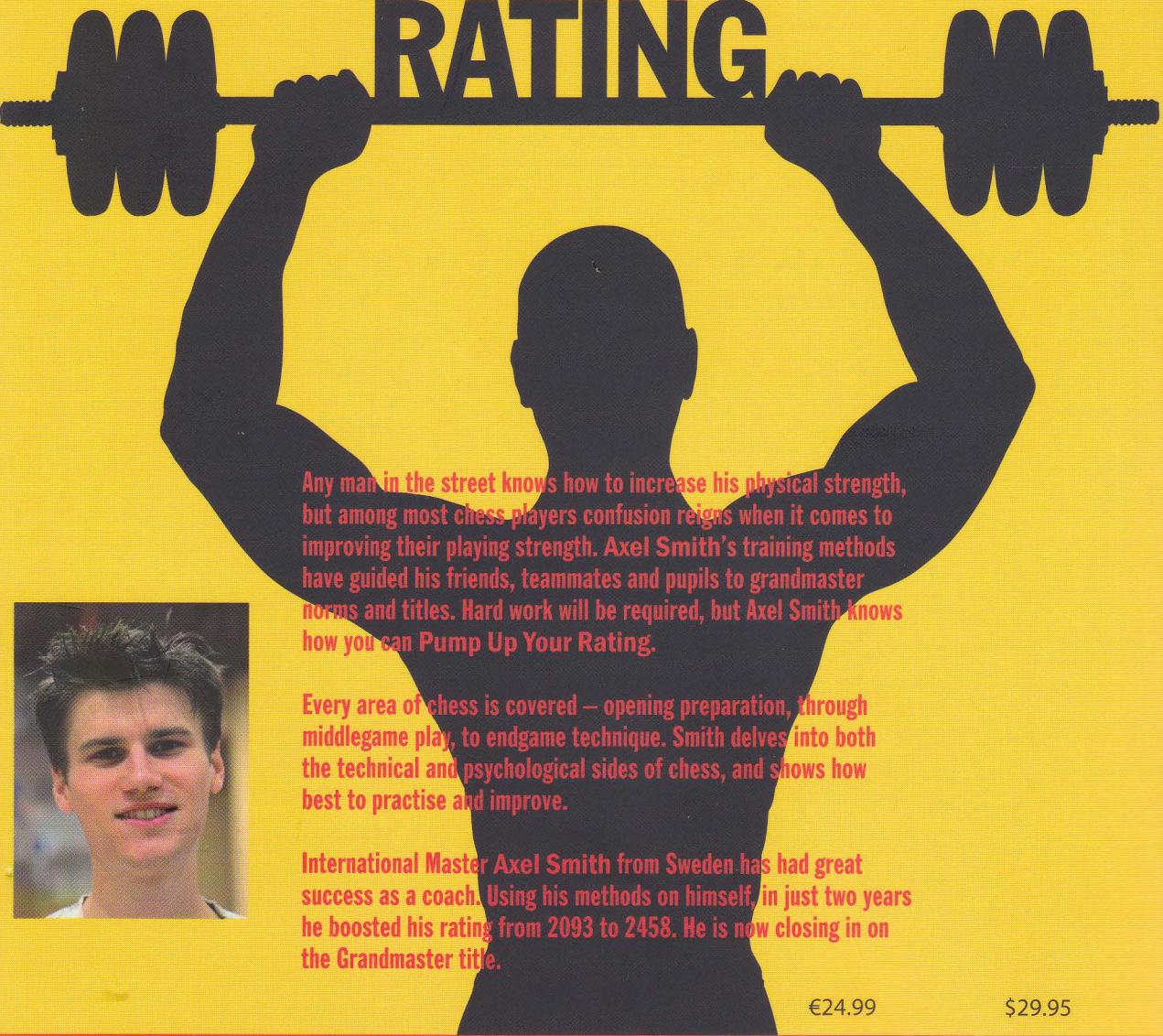
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# Axel Smith

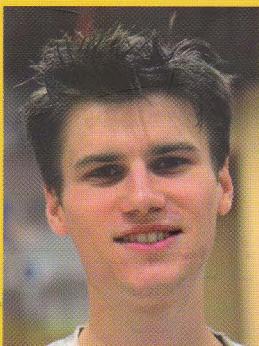
# PUMP UP YOUR RATING



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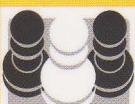
International Master Axel Smith from Sweden has had great success as a coach. Using his methods on himself, in just two years he boosted his rating from 2093 to 2458. He is now closing in on the Grandmaster title.



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